AN INVESTIGATION OF FOREIGN TRADE POLICY AND ITS IMPACT ON ECONOMIC GROWTH: THE CASE OF KAZAKHSTAN (1991 –2008)

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AN INVESTIGATION OF FOREIGN TRADE POLICY AND ITS IMPACT ON ECONOMIC GROWTH: THE CASE OF KAZAKHSTAN (1991 –2008)

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CERTIFICATION

I, Leila Nurtleuovna Salykova, declare that this thesis, submitted in fulfillment of the requirements for the award of Doctor of Philosophy, at the Aberdeen Business School of the Robert Gordon University, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution

Leila Nurtleuovna Salykova

Aberdeen, April, 2012

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Contents

ABSTRACT

With the economic shift of Kazakhstan in 1991 from a centrally planned economy to a democratically independent republic, the country has seen its volume of external trade increase on a global basis. Consequently, Kazakhstan is now engaged in international commercial activities with more than one hundred and seventy countries and has trading and economic agreements with more than fifty other countries under a "Most-Favoured Nations (MFN)" regime. Indeed, Kazakhstan has established a free trade area and continues to work on deepening the integration process within the framework of the Eurasian Economic Community (which now comprises Russia, Belarus and Kazakhstan). Consequently, the main aim of this research is to study the impact of foreign trade policy on economic growth in Kazakhstan since its independence in 1991 until 2008. The conceptual framework adopted for this study is underpinned by a review of extant research on the evolution of foreign trade policy for important developed and developing nations - including former soviet countries. Thereafter, policy practices identifying similarities and differences were examined as a basis for the understanding of the nature of foreign trade policy evolution for the Kazakhstan case. On this note, the study methodology adopted a cross-sectional analysis of twelve nations from the Commonwealth of Independent States (CIS), which was supported by time-series analysis in order to demonstrate implications of key variables which impact economic growth. Hence, the primary approach towards analyzing the major sources of study data was a quantitative analysis to address study hypotheses with a focus on the Kazakhstan case. Results alluded towards:-

1. A better understanding of the evolution of the strategic development of the trade in Kazakhstan and other CIS countries since independence in 1991.
2. A strong correlation coefficient between export and GDP growth for most CIS countries during time series analysis. Consequently, exports were seen as the main source of growth throughout the period from 1992 – 2006 for CIS countries.
3. A number of key variables (such as: government consumption expenditure, private consumption expenditure, gross capital formation, export, agriculture, manufacturing, construction, service- shares in GDP) on both - end use and industrial origin - showed a negative impact on economic growth for some nations, while others showed a positive impact.
4. In the case of Kazakhstan, a positive impact of exports on economic growth resulting from regression results across the period.
5. Changing foreign trade policy from inward orientation (towards CIS States) to an outward oriented strategy (to the global marketplace) of these states (including Kazakhstan) throughout the period 1992 – 2008, increasing economic growth significantly.

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List of Abbreviations

ADB	Asian Development Bank
ADF	Augmented Dickey- Fuller unit root test.
AR	Autoregressive lag model with no lags of the dependent variable as repressors
AUTO	Feasible generalized least squares estimation allowing for first order serial correlation
BD	Bidirectional causality between the export variable &the economic growth variable
CACO	Central Asian Co- Operation Organization
CIS	The Commonwealth of Independent States
CMEA	Council for Mutual Economic Assistance
ECM	Error correction model
ELG	Export- led growth
EAEC	Eurasian economic community
EXP	Export
EP	Export promotion
EU	European Union
FTP	Foreign Trade Policy
FTZ	Free Trade Zones
GDP	Gross Domestic Product
GCF	Gross capital formation
GCE	Gross consumption expenditure
GNI	Gross national income
GNP	Gross national product
GLE	Growth- led export
ILG	Import- led growth
IMF	The Internationally Monetary Fund
IS	Import substitution
IMP	Import
NC	Non- causality between the export & the economic growth variable
NIEs (NICs)	Newly industrialized economies (countries)
MFN	Most-Favoured Nations
LDC	Less developed country
OLS	Ordinary least squares estimation
PEG	Statistically significant, positive, export-economic growth relationship
PP	Phillips- Perron tests
R&D	Research and Development
SEZs	Special economic zones
TFP	Total Factor Productivity
JJ	Johansen and Juselius (1990) maximum likelihood co-integration test.
UN	The United Nations (UN)
USSR	The Union of Soviet Socialistic Republics
UNCTAD	United Nations Conference on Trade and Development
U.N.O	United Nations Organization
WTO	The World Trade Organization
2SLS	Two stage least squares estimation

CHAPTER ONE

INTRODUCTION

1.1 Statement of the problem

Since 1991, the problems of developing the economy of Kazakhstan have become a high priority in terms of governmental thinking, as Kazakhstan goes through a transition phase from a centrally-planned economy towards more of a market-led economy. This period has also been a time for developing the strategic guidelines of economic policy for the country, as Kazakhstan attempted to enter the WTO. When characterizing the modern conditions of the economy, the President of the Republic of Kazakhstan Nazarbayev (1998) stated that,

> *"We live in the period of globalization and growing interdependence from each other where powerful external forces will definitely play a great role in determining our future"* (Nazarbayev, 1998 p.2).

On this note, during this period of globalization, Nazarbayev (1998) suggested that the Kazakh economy should be interrelated with different economic systems within a global context, and that in order to alleviate the problems of foreign trade, there should be significant reforms within Kazakhstan's economic system. Indeed, Williamson (1997) (in Krueger (1997 p.1)), suggested that growth prospects for developing countries can be greatly enhanced through an outer- oriented trade regime, which adopts fairly uniform incentives for production across the exporting and importing of competing goods. Similarly, Sachs (in Avdokushin, 1999 p.98), points towards the importance of economic success of any country being based on partnerships for external trade; while, Adams and Juleff (2003) suggest that globalization is a process which increases the share of trade in terms of global GDP. Hence, it would appear that countries cannot create a healthy economy if they are isolated from the international economic system.

Moreover, following independence, i.e. those countries which were part of the economic consortium of the Soviet Union, experienced a dramatic downturn of trade. During the period 1991- 2008, it became a rapidly increasing trend for former soviet economies to integrate into the world economy along with developing countries. However, economic consequences on such integration have been unequal, in terms of developed nations having greater benefits from international cooperation rather than developing nations. This can be shown when considering such parameters as volumes of overseas debts, economic growth rates, and outflows of capitals from developing countries. On one level, the consequences can be seen as significantly disproportionate in terms of the development of the world economy, particularly where there had been unbalanced international trade between various countries. On another level, the end of the 20th century and the beginning of the 21st century were characterized by an increasing tendency of integration of developing countries into the world economy. Hence, economic

growth in developing countries can be seen to be dependent on increasing export incomes; however, it is important to understand on what basis the economic modeling is chosen for those developing economies as they integrate into the world economy. Consequently, and as indicated by Liang (1992), experiences from countries with export-led economies suggest greater growth rates than those oriented towards an internal market. Indeed, countries that chose the export oriented model of development tend to achieve significant economic success. Here, Liang supports the view of nations with an export orientation being considerably more successful, and this research on the development of East Asia's "newly industrialized countries" (NIC's) alludes to unprecedented success for those nations with an outward orientation strategy. Nevertheless, Kazakhstan is in a new phase of their development within the world economy, where the transition is clearly shifted and pointing towards a market oriented economy.

In historical terms, during the collapse of socialism in the former soviet republics and the subsequent push towards a market-led economy, the global economy appeared not to be ready to provide wise and efficient methods of development for these new independent countries. In real terms, there were many practical problems associated with the reformation of economies; so much so, that there has been a lack of theoretical studies of the problems of transferring social-economic processes and scientific justification of social, political or economic transformation. Thus, the Republic of Kazakhstan entered into the new stage without planned directions for integration into the global economic system and this induced complications during the transition period. This can be partially explained in terms of a lack of organizational management and methodological base for the fulfillment of appropriate foreign trade economic activities and in terms of an absence of a general foreign trade doctrine of transforming a nation's economy. Hence, this lack of knowledge and intervention by developing nations can restrict the development of foreign trade activities and consequently, the creation of appropriate country-specific foreign trade policy.

1.2 Significance of the problem

In terms of the problem for this study, economic theory suggests that cycles exist within internal markets and the specific structures of a nation's economy do indeed play a significant role in economic growth (e.g. Cukierman et. al, 1992; Berg & Lewer, 2007). Additionally, since independence from the Soviet Union in 1991, limited consumer demand, export orientation and the necessities to capitalize on opportunities of participating in the international labor market, have become a significant background for the activation of foreign trade activities of the Republic of Kazakhstan. Further, foreign trade has many economic advantages and this is particularly evident when implementing an appropriate foreign trade model in terms of considering the national peculiarities and the major benefits of competing within the world economy. Against this backdrop, according to Balassa (1977); Krueger (1978); Edwards (1993);

Baldwin and Seghezza (1996); Harrison (1996); Rodriguez and Rodrik (2001); and Yanikkaya (2003), foreign trade policy with an openness towards global trade exchanges, affects the major processes, including long term economic growth, rapid technical development, and in terms of increasing a country's economic efficiency. Notably therefore, nations need to consider various perspectives of increasing the scope of foreign trade, and this directly depends on a country's political climate, also on the dynamics of domestic consumption and volumes of foreign investments in a country. Moreover, many researchers from the CIS countries**,** e.g., Kireev (1998), Avdokushin (1999), Zubchenko (2002), Khasbulatov (2006), etc., focused attention towards a number of issues related to the establishment and development of foreign trade relations with an economic bias. These issues centered on achieving macroeconomic stabilization, through the selection of an appropriate strategy of economic reforms and developing the foreign trade relations of Kazakhstan - which since becoming an independent country, have been reflected in the works of some scientists such as: Sabdenov (1997), Satubaldin (1998), Madiarova (1999), Kenzheguzin (2001), Arystanbekov (2002) and Arystanbekov (2003), Koshanov (2006), Chelekbai (2007) et al. However, in terms of global literature, there remains a gap in the documented research in terms of the evolving nature of the foreign trade policy of Kazakhstan and its impact on the economic growth of the nation since independence.

1.3 Study Aim and Associated Objectives

Against this backdrop, the main aim of this research is to understand the nature of the impact of foreign trade activity on the economic growth of Kazakhstan since independence from the Soviet Union in 1991. Consequently, the study will examine, analyze and critically evaluate Kazakhstan's Foreign Trade and its implications to the country's economic performance since independence. In this case, the thesis is expected to achieve the following five objectives:

Objective 1: To conduct a comparative analysis of the economic development and Foreign Trade evolution of the Republic of Kazakhstan, Mongolia and Kyrgyzstan since 1991 in order to track changes happening since 1991;

Objective 2: To analyze the evolution of trade policy reforms in Kazakhstan since independence and their contribution to its economic performance;

Objective 3: To analyze Kazakhstan's trade activities by geographical and commodity distribution in order to understand their trends and associated impact on economic growth and trade policy reforms since independence in 1991;

Objective 4: To estimate in cross-country and time- series formats, and use bivariate correlation and production function type regressions, in order to understand the relationship between export and GDP growth for CIS countries (including Kazakhstan) since independence;

Objective 5: To estimate the regression equations of trade policy variables in order "to show that outward – oriented trade policies have been more successful in promoting growth" (Sarkar, 2008 p. 765) for CIS countries, including Kazakhstan.

The results from this particular research will be useful in providing a framework for future policy developments in Kazakhstan as well as in other developing countries with similar socio-economic backgrounds to the Kazakhstan case.

1.4 Methodology and Data Collection

In terms of approaches to be adopted, this study will review extant research in terms of focusing on the economic and theoretical approaches towards the impact of trade and industry policies on national economic growth. This will allow an understanding of the key economic variables that are relevant in the analysis of country growth factors. In addition, an examination of specific country case studies of Kyrgyzstan and Mongolia will be undertaken, in order to glean a detailed analysis of their past economic policies – of nations who have similar natural resources and similar initial conditions for conducting reforms. These two countries will be compared to Kazakhstan, by way of contrasting their respective foreign trade turnover capacities, and their similarities, within the spheres of their respective political positions and economic situations. For Kazakhstan's economy, it is important to understand their specific situation, in terms of their focus towards revising their foreign trade policy with consideration of the current conditions of Mongolia and Kyrgyzstan – who are already members of the WTO - considering that Kazakhstan is progressing towards entry into the WTO. Additionally, current thinking of a country's foreign trade strategy requires searching for the exact methods for efficient use of differing comparative advantages in terms of participating in such international economic organizations. Furthermore, based on past experience, the rapid fall of foreign trade turnover, the worsening of commodity patterns and geographical structures of Kazakhstan in the 1990's showed that a lack of attention on foreign trade policy can cause a significant loss to the economy. Hence, this current research critically analyses the results of the foreign trade policy of Kazakhstan in order to demonstrate its influence to the country's economy. Consequently, the study will mainly rely on critical analysis through the use of previously published research and data, governmental data tables, figures and diagrams, which are necessary to clarify facts and support arguments.

In order to gather, examine, analyze and evaluate data for the current research, the author attempted to gather data directly from the various governmental bodies such as: Ministry of Economy and Trade, Ministry of Finance, Ministry of Industry and new Technology. However, due to the historical nature of secrecy in the country (and generally within the region) despite various attempts made by writing to the Ministries, meeting with Governmental Officials and politicians, it was not possible to directly access primary governmental data. Consequently, the major sources of data for this study came from the annual publications of the National Bank of Kazakhstan and the National Agency of Kazakhstan's Statistics such as: Annual Reports, Governmental Economic Review materials, which will focus on a number of important economic data, factual policies and issues. Also, other useful sources of data for this study include: international publications - such as those of the Asian Development Bank (ADB), the World Trade Organization (WTO), the World Bank, The International Monetary Fund (IMF) and the United Nations (UN). Within this framework, the study considered quantitative data as the key conceptual approach in order to achieve the above objectives.

An important matter which requires stating in this early part of the study, is the closely linked issues of secrecy and transparency. These are serious and sensitive issues for people involved in these areas of Kazakh governmental policy and in the gathering of statistical data for studies of this nature, and consequently, the topic of secrecy is out of the scope of this research and therefore is not discussed or touch upon beyond this statement. It is important to have an appreciation of the inherent culture of the former Soviet Union, in terms of being sensitive to the nuances, values, behaviors and the need for discretion, when seeking answers to sensitive questions associated with governmental policy, governmental decisions and governmental behaviors. Hence, in addressing the main study aim and associated study objectives, the researcher attempted to gather empirical data from governmental Departments and Officials; but this was not possible, as access to governmental data – in terms of transparency – was extremely limited, and this researcher was mindful and respectful of this issue throughout the duration of the study. Consequently, based on an examination and analysis of published data on Foreign Trade Policy, this research focused on developing an understanding of the evolution of the strategic development of the export of raw materials from Kazakhstan since independence in 1991. This allowed a critical understanding of the export potential of the country's commodities in terms of maximizing the potential opportunity towards growing the future GDP of Kazakhstan.

1.5 Organization of the Study

This study consists of nine chapters. Figure 1.1 outlines the structure of the thesis and the content of the thesis as follows (see figure 1.1).

Figure 1.1

Organization of the study

Chapter 1 provides an introduction to the study, where the main information focuses on the background to the study, a statement of the problem, an outline of the research objectives, and an indication of a relevant literature and associated research methodology for the study.

Chapter 2 focuses on reviewing extant literature in related fields for this particular research topic. It covers a variety of topics including: international trade policies, strategic trade and industry policies. Also, this chapter includes recent theoretical and empirical studies on trade reforms and related policy changes in countries, with a focus on the varied magnitudes of their impacts on a country's growth.

Chapter 3 discusses the research methodology which was undertaken in order to address the study aim and associated research objectives, and in terms of testing three hypotheses.

Chapter 4 begins by undertaking a comparative analysis of Kazakhstan's economic reforms and some similar Central Asian countries with transition economies, such as Kyrgyzstan and Mongolia. This chapter gives an understanding of the initial stage of the reformation period in

these countries, and this assists understanding of reforms in Kazakhstan (this is described in the following chapters). Finally, this chapter allows a gleaning of how further development of the national economy related to the research hypotheses.

Chapter 5 provides a detailed review of Kazakhstan's economic development and trade policy since 1991. In doing so, this review provides an understanding of the evolution of the economic policy of Kazakhstan since independence, and identifies associated changes in the major macroeconomic variables which were considered as one of the objectives of this thesis. It also critically analyses the make-up of the trade policy of Kazakhstan during this period.

Chapter 6 analyses Kazakhstan's foreign trade activity during this present phase of economic reform, and reveals Kazakhstan's mechanisms of development and problems in this area such as:

- Investigating the structure of Kazakhstan's Foreign Trade and its peculiarities.
- Understanding the formation and operation of the foreign trade system.
- Providing a geographical and natural-substantial structure analysis of Kazakhstan's foreign trade which will uncover changes during Kazakhstan's transition period.

Chapter 7 analyses and discusses the collected data, and in particular, the issues of causality between export growth and other variables - to GDP growth - and examines the effects of trade openness (export plus import) variables to GDP growth. This chapter also tests the hypotheses by means of a quantitative approach. Additionally, this was based on analytical data of Commonwealth of Independent States since 1992, including the case of Kazakhstan.

In this case, the study considers the significance of Kazakhstan's Foreign Trade for economic development and reveals the main goal of Kazakhstan's Foreign Trade Policy and the Republic's current export potential during the transition period.

Chapter 8 provides the conclusions of the thesis by summarizing its major findings. It also discusses policy implications to achieve improved results for Kazakhstan in the future.

Chapter 9 concludes the study by providing recommendations on prospects for further studies in the subject area, and some directions for policy makers in using this developmental approach towards foreign trade policy.

The study now turns towards addressing extant research through the literature review, and to discuss important issues and concepts associated with the study aim in order to clarify the research gap.

CHAPTER TWO

LITERATURE REVIEW: TRADE POLICY AND GROWTH

2.1 Introduction

This chapter considers a review of the literature for this study. The study began by considering many global, international trade definitions and extant research. Indeed, Daniels et al, (2004) suggest that international trade refers to:

> *"An exchange of products or services across national boundaries."* (Daniels et al, 2004 p8)

Here, trade can include any "products (merchandise/tangibles) and/or services (intangibles)". Barter "can be through exporting, an entry strategy involving the sale of products or services to consumers located abroad - from a base in the home country or a third country" (Daniels et al, 2004). This evolution of international trade has been discussed at length, by many authors, for example, Ricardo (1973); Smith (1976); Heckscher-Ohlin (1992); Buckley and Ghauri (1998); Hood et al (2003) and here they discuss numerous theories, approaches and applications - based on context - which have been developed over time and which explain foreign trade opportunities. With this in mind, international trade plays a significant role in the progress of developed and developing countries. All these nations are mutually dependent because they have different resource distributions, and trade is not only desirable but also inescapable because countries have to cater to the growing needs of their economies. On the basis of nineteenth century trade patterns, traditional trade theory termed this period as an 'engine of growth' (Afzal, 2006).

In addition, national economies are not separated from each other, in terms of them being interrelated with the obligations of supply and demand which connects them together. In this respect, each country has specific issues associated with Foreign Trade Policy (FTP). Actually, Findlay (1985a); Ghemawat and Patibandla (1999); Trindade (2005) and Sally (2007) attempted to identify how and why countries trade with each other, and observed their respective desires to obtain more efficiency from developing such international relationships. According to Yanikkaya (2003), trade plays a significant role in the process of country development which allows the nation to grow, and to obtain access to investment and intermediate goods. Indeed, the "engine of growth is the outcome of creating old and new products" (Yanikkaya, 2003), from demanded resource inputs, which shows that trade really does play a significant role in the economic advancement of a country. Hence, it can be seen that it is more beneficial for developing countries to have trade relations with those developed and industrialized nations.

Moreover, they trade with technologically innovative countries rather than countries that are still developing and considered as non-innovating.

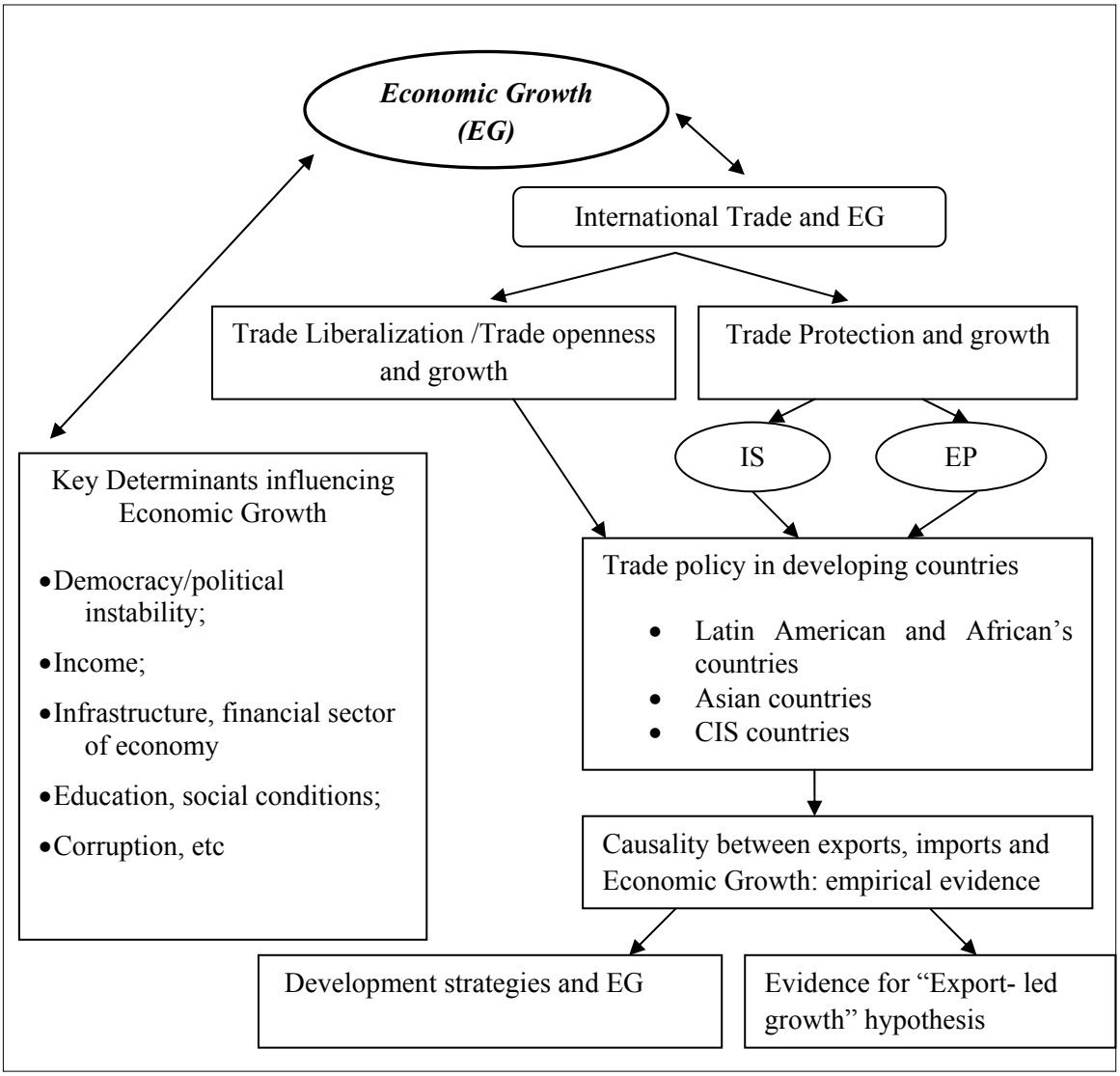
The main purpose of this chapter is to study the plethora of existing literature on the theories and applications related to international and foreign trade of developed and developing countries. Consequently, when studying the different forms of evolving processes of international economic relations, it is necessary to refer to the economic theories which identify the positions of national economies and the division of labor, from an international perspective.

For instance, one of the major problems of international trade theory is revealing the nature of economic benefits of a country, after participating with such trade. In that way, it promotes growth for the national economy and achieves some degree of economic progress. Furthermore, this study focuses on examining the different strategies of international trade and foreign trade policy, e.g. discussions regarding free trade, openness and liberalization of the economy. There is a review of protectionism policy, in terms of considering processes associated with export orientation of the economy and import substitution. When reviewing the different opinions of economists with regards to these strategies of foreign trade policy, the study alludes to how those strategies influence the establishment of the national economy and achievement of economic growth. The current chapter reviews the experience of foreign trade policy of different countries and considers evaluations of the trade- growth link, thus emphasizing the causality between trade policy sources and economic growth.

Figure 2.1 outlines the structure of Chapter two, and here, the issue of economic growth is seen to be influenced by a number of key determinants - which include international trade through import substitution and export promotion. These are now considered in turn.

Figure 2.1

Outline of the Literature Review



Key: EG - economic growth; IS - import substitution; EP - export promotion

Source: Author generated

2.2 Theoretical foundations of international trade

The development of foreign trade allows countries to realize greater specialization in production; it enhances "efficiency in the use of resources", and improves the general welfare (Salvatore, 2005) of the nation. Through liberal transactions between countries, a rational trade - induced division of labor becomes a principal underlying condition for economic growth. Sherlock and Reuvid (2008) emphasized a country's benefits by stating: *"... there is an economic benefit for a nation to specialize in producing those goods for which it had a relative advantage and exchanging them for the products of the nations which had advantages in other kinds of products."* (Sherlock and Reuvid, 2008 p.134)

According to Pomfret (1991 p198), famous trade economist Bertil Ohlin identified the source of comparative advantage as lying in the nature of each country's factor endowments. Here, free trade policies may lead to the best use of a country's factor endowments. Each country has a comparative advantage in the products that intensively use the factor(s) in relative abundance in the specific country. Furthermore, international trade may have powerful indirect effects exposing the populous to new ideas and technology, which can significantly shift the boundaries of production further forward. Thus, different countries have comparative advantages in different goods. For example, Kazakhstan has some comparative advantages that can help it to successfully build and achieve strong economic progress to integrate into the world economic system effectively. So, in the opinion of Arystanbekov (2002), the rich resource potential of the country is the most important channel to secure future economic progress, which today satisfies not only the main portion of the country's domestic needs in raw materials and fuel, but also makes a major portion of its monetary earnings from exports. In addition, the theory of comparative advantage proposed by Yanikkaya (2003) suggests that, the world economy

> *"may reach more efficient allocation of resources and higher level of material welfare" (pp57-89).*

Hence, both imports and exports play one of the most important roles (Castaldi et al, 2004) in the development of an economy. Indeed, Gomes (1987) stressed that specialization based on a usage of comparative advantage principals provides a more efficient allocation of the world's resources, and associated growth of world output of relevant goods. Consequently, free trade tends to minimize the real cost of receiving income and consumption for the world as a whole. In continuing, Ricardo's theory is considered as valuable, as far as it indicates that international trade can become an effective tool for achieving increasing economic efficiency. Furthermore, the domestic economy can benefit from mutual trade among the international trading participants, where according to Sally (2005),

> *"From ancient times to the present, countries and regions that have opened to the world economy have grown faster and become wealthier than those that have not"* (Sally, 2005 p.81)

Moreover, the neo-classical economy has accepted the classical representation concerning editing between trade and growth. Neo-classical trading theory regards specialization according to comparative advantage, which benefits the income of trade thereby increasing the resources accessible to investments. Alfred Marshall, the first neo-classical economist, drew attention to these benefits when he stated,

"the causes which determine the economic progress of nations belong to the study of international trade" (Marshall, 1890, p.225).

According to Marshal's theory, foreign competition through trade can achieve results such as:
(1) enhances the efficiency of domestic industry;
(2) ensures the abilities of capital and labor moving;
(3) shows impact on stability of employment; and
(4) assists in the development of large scale industry (Gomes, 1990 p.42)

Moreover, Rivera- Batiz & Romer (1991b) and Yanikkaya (2003) focused attention on the fact that a new theory of growth provides essential ideas for understanding the links between trade and growth. For instance, if growth is accelerated by means of R&D activities, then trade allows the country to advance from the technological knowledge of its trade models. And consequently, trade allows producers to have access to larger markets and supports development of R&D (Rivera- Batiz & Romer, 1991b; Yanikkaya, 2003), which means increasing returns for further investment in innovation. Here, the principles of comparative advantage and free trade have been widely accepted, although some questions are frequently raised concerning the required underlying conditions which would determine attitudes towards free trade. The study now shifts towards considering development strategies and economic growth.

Summary

Modern international trade has dynamic personality. Moreover, the structure and volume of exports, imports and trade of various countries and regions in the world is constantly changing. Several factors have been influenced for the sustained growth of international trade such as:

a) stabilization of inter-state relations in the world;
b) multinational corporations' activities in the world market;
c) regulation of international trade by international trade agreements adopted under the GATT / WTO;
d) international trade liberalization, transitions of many countries which include the abolition of quantitative restrictions on imports and a substantial reduction of customs duties; as a result, the formation of "free economic zones," etc.

Consequently, theories of International Trade both classical and modern, though they cannot give an answer to all issues arising during the development of trade relations, show the condition of those advantages by which individual countries and companies gain a strong position in the global market.

2.3 Development strategies and economic growth

2.3.1 Trade liberalization

There are a number of differing views on the role of foreign trade (Raihan et al, 2007) in terms of a nations' economic progress, which leads economists to explore policy influences from these different approaches. Consequently, international trade theories and their associated trade policies have historically been classified broadly into the free trade and the trade protection schools. Trade liberalization has been described by several definitions, and Henderson (1992) suggested moving to 'neutrality' of government intervention as between tradable and non-tradable sectors of the economy. On this connection 'getting prices right' by fixing up internal prices with world prices, as per tradable goods, was considered with the assumption that trade allows countries the freedom to be involved in international transactions without discrimination.

Williamson (1993 p. 12) alludes to,

> *"real trade liberalization existing nowhere - not even in Hong Kong".*

Here, the suggestion is that through the maintaining of tight restrictions on immigration, even though a country is fully open to trade in services, non-discrimination is accepted as appropriate criterion, and this points towards countries being far from this interpretation of free trade. Despite this suggestion, Williamson (1993) noticed a distinct liberalization of foreign trade policy trends in the developing countries and that cross-border trade and capital flows - though not of people - have become freer since the early 1970's. Moreover, one of the benefits of liberalization is that of internal prices of tradable goods and services, which became closer to world prices, and this is partially due to import and export quotas, licensing requirements, state trading monopolies and other non-tariff barriers which have been radically reduced, and in some cases tariffs have been simplified. A situation can be evidenced with foreign-exchange controls, unified exchange rates and developing nations can benefit from much greater currency convertibility, particularly in terms of current account transactions. Consequently, foreign direct investment liberalization, the imposition of few governmental limitations on entry, modes of ownership establishment and operation in the domestic economy can assist a developing nation's progress in their respective trading positions. Also, according to Ramasamy & Yeung (2007) the service sector can be opened to international competition by means of FDI liberalization, privatisation and reduction of domestic regulations. This liberalization trend started in Japan in the 1950s, and consequently spread over to South Korea and Taiwan.

During the subsequent period, the most developing countries were strengthening regimes of import substitution and other forms of state intervention. On the other hand, Hong Kong returned to tariff-free trade and after the end of the war, when it opened itself to foreign investment. The north-east Asian tigers recommended performing exports through selective

liberalization, and at the same time supporting considerable import protections and restrictions on inward investment. Later in the late 1970's there was a gradual liberalization of imports and FDI within these tiger economies. In the other South-East Asian tigers (Malaysia, Thailand, Indonesia and the Philippines) the process of liberalization had been taking place significantly on both trade and FDI since 1970 (Ramasamy & Yeung, 2007). In the countries of Indochina, there was more of a step-by-step fluctuating market based reform, which started in the 1980s. Also, Vietnam improved their trade and investment liberalization during their preparation to access the WTO in late 2006 (Abbot et al, 2008).

The reforms of opening the economy in China began in 1978; however the major trade and investment liberalization effects occurred only in the early 1990s. Since that period, China has successfully transferred from extreme protection to relatively liberal trade policies. The most significant moment of China's reforms was its access to the WTO in 2001, where its WTO commitments are much stronger than other developing countries in the WTO. Among South Asian countries, Sri Lanka initiated external liberalization in the 1970s. India's retreat from the 'licence raj'- its equivalent of Soviet-style central planning, began half-heartedly in the 1980s, although its actual opening to the world economy was in 1991, with Pakistan following India in the late 1990s (Parida & Sahoo, 2007).

In addition, Sally (2008) highlighted that, in Latin America, Chile pioneered radical external liberalization in the 1970s. Other Latin American countries followed in the 1980s (notably Mexico) and 1990s (Brazil, Argentina and Peru). African liberalization was slow in the 1980s and became faster in the 1990s. South Africa had a significant opening of their economy in the run-up to and after the end of apartheid. Also, the countries of Central (the former Eastern) Europe and Baltic States, had a 'big bang' transition from central planning to market economy after 1989, which included massive liberalization of trade and capital flows (Sally, 2008). Moreover, the process of liberalization had taken place in Russia and in other parts of the ex-Soviet Union countries. However, liberalization has only recently started in countries such as Romania, Bulgaria, Georgia and parts of the former Yugoslavia (Pomfret, 2002; Awokuse, 2007; and Sally, 2008). Furthermore, trade and investment liberalization in the old OECD countries has taken place with small steps since the 1980s. This is not surprising, since these are largely open economies in which the bulk of liberalization was initiated in the 1950s and 1960s. Furthermore, there are exempted countries regarding liberalization such as Australia and New Zealand, although after over a century of protection they were both opened to the world economy in the 1980s (Sally, 2008).

One of the most serious problems faced by researchers today is that there is no exactness in what is meant by "trade liberalization" or "openness". Here, economists are providing different

perceptions, where, Dean et al (1994) subdivided the major definitions of trade liberalization into four categories. The first category considers that trade liberalization should lead to more reliance on the price mechanism and a reduction in anti-export bias of the trade regime. The next is related to the policy action that reduces the restriction of controls. The third stresses neutrality as the central aspect of liberalization. The last category is an aggregate definition that includes the ingredients of neutrality and liberality. Additionally, this last definition may be a phased liberalization, where trade liberalization is seen to go through the phases of "mild liberalization" (increased reliance on the price mechanism and reduced anti-export bias), "intensive liberalization" (moving to neutrality), and finally the drastic form of liberalization (increased liberality).

After continuous research of this concept, Edwards (1989) stated that the definition close to that of the original Bhagwati-Krueger National Bureau of Economic Research (US) project would be "the most useful one", and on this note Edwards suggests,

> *"Trade liberalisation is a process that makes greater use of the price system, making the trade regime more transparent and bringing domestic prices closer to the world price"*(Edwards, 1989 p. 98).

Moreover, Krueger (1998) proposed a definition according to which liberalization is "the action of making a trade regime less restrictive". There are always benefits from liberalization, although their size may depend on many things. However, one could not expect to achieve an outer oriented trade regime by simply replacing quotas with tariffs or increasing the size of quotas (Krueger, 1998). For this reason, Bhagwati- Krueger (1973) determined,

"trade liberalization as any policy that reduces the degree of anti-export bias" (p.420).

Here, according to Santos- Paulino (2005) the empirical emphasis focuses "on reductions in the import licences premium (PR) as the initial step in liberalization reforms". For evaluating the effect of trade policies, the concepts of premium (PR) and bias (B) were joined together with the definition of several stages in the evolution of trade regimes such as:

(a) It is characterized by across the board assignment of quantitative controls which are as a rule related with a balance of payments crisis;
(b) Control system becomes more complex which leads to increase of the anti-export bias of the regime;
(c) It is the beginning of the liberalization process and it is characterized by the realization of a (nominal) devaluation and relaxation of some quantitative restrictions (QRs);
(d) Promotion of further stages towards liberalization by replacing the quotas with tariffs;

(e) In this stage the economy has become absolutely liberalized, current account transactions are fully convertible, and QRs are not applied any longer.

After determining these phases, Krueger (1978) econometrically tested two hypotheses, and here, the first hypothesis related to the more liberalized regimes as having benefit from a higher rate of growth of exports; the second, related towards the more liberalized trade sector as having a positive effect on aggregate growth. Based on these hypotheses, she concluded that the more liberalized economies have a faster growth of exports based on the fact that there was rapid growth of GNP.

The main goals of trade liberalization according to the International Monetary Fund (IMF, 1998) support ways in order to enhance the economic efficiency of a nation, by establishing transparent and neutral systems of stimulation which could eliminate anti-export bias, and direct barriers to trade and economic deviations caused by the trade regime. Furthermore, Dean et al (1994) and Pritchett (1996) proposed that trade liberalization "has been linked with becoming more 'outward-oriented,' where both terms are generally used synonymously" (see Santos-Paulino, 2005 p.785). In this context, Santos–Paulino (2005) pointed out that states are considered more outward - oriented if their trade reforms attempt to move towards neutrality, liberality or openness. On this note, "an increase in openness can be equated with an increase in the importance of trade in the economy" (Santos-Paulino, 2005 p.785). For instance, Dornbush (1992) determined the following benefits from trade liberalization:

1. classical source of benefits from free trade is steady benefits from improved allocation of resources;
2. accessibility to the variety of products which improves productivity by providing less expensive or high quality goods;
3. availability of imported intermediate goods and technologies;
4. more rational market structure that benefits from liberalization can also result from rise of economy scale in wider markets;
5. transfer of know-how on the lines of growth theory.

With this in mind, the transition towards neutrality involves equalizing and stimulating factors between the exporting and importing competing sectors. A regime is considered as more liberal if the general level of intervention has been reduced.

2.3.2 Trade openness' debate

Rodrik (1999) is adamant that openness per se is,

> *"…not a reliable mechanism to generate sustained economic growth"* (Rodrik, 1999 p.13).

Rodik (1999) suggests openness cannot only cause wider non-compliance income within countries, but it can also expose them to unfavourable effects of external shocks which may lead to socio-political unrest in a nation. Consequently, the definition of openness has considerably developed from one extreme to another. Even today it is not absolutely clear as to what "openness" describes. For example, Krueger (1978) suggested how "trade liberalization can be achieved by applying policies" which can lead to lowering the biases against the export sector. It is even more convincing based on her identification, that one country can have an open economy by applying a sufficient exchange rate policy towards its export sector and at the same time can use trade barriers to protect its import flows. On this connection Krueger (1978 p.89) states that,

> *"a regime could be fully liberalized and yet employ exceedingly high tariffs in order to encourage import substitution"* (Krueger,1978 p. 89).

Nevertheless, Harrison (1996) stated that "the concept of openness of trade policy could be synonymous with the idea of neutrality" (p.420). Here, neutrality indicates that stimulations are neutral between saving a unit of foreign exchange through import substitution and earning a unit of foreign exchange through exports. It is a fact that a highly export-oriented economy may not be neutral in this sense, particularly if it shifts incentives in favour of export production through instruments such as export subsidies. It is also acceptable if the regime would be neutral or average and takes place in specific sectors. A proper limitation of trade policy would capture differences between neutral, inward-oriented and export-promoting regimes.

Moreover Yanikkaya (2003) points out that the definition of "openness" suggests becoming equal to the definition of "free trade," where a trade system is seen as a place where all trade deviations are eliminated. In view of this, it is crucial to understand that there is a potential problem with this explanation because different "openness measures" have various theoretical impacts to the national outcomes, which in turn, have various linkages to growth. On this connection Edwards (1993) considering the country's trade regimes states that:

> *"The literature on the subject has not always been successful in dealing with exact definitions of trade regimes, nor has it been able to handle successfully the difficult issue of measuring the type of trade orientation followed by a particular country"*(Edwards, 1993 p.1365).

On the other hand Chang, et al. (2009) referring to Adam Smith's studies of market specialization point out that "openness promotes the efficient allocation of resources through

comparative advantage, provides the distribution of knowledge and technological progress, and also maintains competition in domestic and internal markets." (Chang et al, 2009 p.33). Indeed, according to Yanikkaya (2003), many studies use diversities of cross-country growth regressions in order to test intra-system growth theory, in terms of underlining the importance of trade policies. Due to the difficulty in measuring openness, different scholars have used various identifications to assess the results of trade openness on economic growth.

2.3.3 Trade protection policy

Balassa (1977) proposed a more dynamic version of the Heckscher-Ohlin theory by arguing that a country's comparative advantage will change over time in response to the accumulation of physical and human capital. And as a result of this, developed nations can lose their comparative advantage over the years, in products where they need cheap and/or unskilled labor. The posted 1945 theory of commercial policy transformed free trade from the previously characterized laissez –faire approach. Sally (2008) notes that

> *"…J. Meade, H. Johnson, J. Bhagwati and others argued about compatibility of free trade with a series of targeted 'first- best' interventions to correct domestic markets failures"* (Sally, 2008 p. 56).

Also, he attempts to show by example that trade protection promotes infant industries inefficiently, with a rather high cost being associated with their respective products and services. On the other hand, according to the theories of Cipollina and Salvatici (2008) a substantial mess between 'openness' and 'protection' measures has taken place. On the basis of studies of Bhagwati & Krueger (1973); Dollar (1992); Heitger (1993); Sachs and Warner (1995); Harrison (1996); Edwards (1993 and 1998); Frankel and Romer (1999); Rodriguez and Rodrik (2000); Baldwin (2003), Yanikkaya (2003), this is especially true for the literature that concentrates on the linkage between trade policy and growth, and this research is fundamentally important and cannot be underestimated. In addition, Cipollina and Salvatici (2008) found that as far as the hypothesis of openness is connected with trade stimulation, one might think that a low degree of openness implies a high degree of protection. However, they revealed that this conclusion was indeed incorrect, as a lack of openness was neither a necessary nor a sufficient condition for protection.

Apparently, modest trade flows may occur due to several factors unrelated to trade policy and to different countries which may be registered on the same level of openness, irrespective of the implementation of different trade policies or of the differing level of openness - even if they implement the same trade barriers. Sally (2008) indicates that a high level of protection with regards to the growth of government intervention was approved to promote new industries,

preserve domestic stability, protect national security and secure better positions in the international political pecking order. In connection with this, Sally also suggested to give preference to the model of the Soviet central planning system instead of the Western market economy. The collapse of Soviet-type economies was seen to deliver the *coup de grace* to command-and-control economics. Furthermore, developing countries and countries in transition witnessed a widespread and radical liberalization of trade and capital flows which was similar to what has been implemented in western economies (Sally, 2008). Sally also concluded that

> *"no matter what, protectionism, even though in muted form, remains popular in the West and in the rest of the world"* (Sally, 2008 p. 46).

Nevertheless, according to the observations of Buckman,

> *"...but the reality is that high-income countries generally have economic histories more described by protectionism rather than by free trade"* (Buckman, 2005 quoted in Sally, 2008 p. 67)

In connection with this finding, he emphasizes that Britain and the United States have historically been considered as the champions of free trade; however, a close study of their economic histories reveals that most of their economic development has been built on protectionism. On this note, Sally (2008) has quoted Sharma who found that even though Britain was the first country which insisted on a full-blooded protectionist new industry strategy, the United States was considered as the most enthusiastic practitioner. In addition to this view, Paul Bairoch described the US as "the mother country and bastion of modern protectionism" (Chang, 2003 p.27).

Sally (2008) concluded that there are still remaining queries for protection that have emerged from within mainstream economics, and several have cropped up over the course of the twentieth century. They tend to justify departures from free trade, primarily due to the incidence of international or domestic market failures, and these have ranged from increasing returns, wage differentials and unemployment - towards more recently, strategic interaction among firms in oligopolistic industries. In some cases, the understanding of protectionism would appear to be an inappropriate solution. For example, it may be better to take serious action with regards to unemployment, through labor-market policies, rather than picking on a specific tariff barrier. In other cases, theoretical considerations can be insufficient and unrealistic when actually applied to real-world conditions. Also what is not less important is that they demand high levels of information, intelligence and competence from government. This tends to be true in 'strategic trade policy'. Moreover, strategic trade policy can be applied towards protecting domestic firms in export markets, as shown by Krugman (1986). According to his arguments, if the domestic

firm can also earn extra income by exporting, then such protection is in the national interest. On the other hand, Cipollina and Salvatici (2008 p.578) identified that "trade protection - as a set of government policies - is applied in order to protect domestic producers against foreign competition from cheaper imported goods and services". Hence, indicators of protection should fulfill some demands and limitations, in that they should be comprehensible, transparent and capable of straightforward expansion.

On this issue, Cipollina and Salvatici (2008) suggest that any protection measures should satisfy the next requirements:
(1) Should be able to indicate if a protectionist policy exists;
(2) Should be able to classify different policies on the basis of their degree of restrictiveness;
(3) Should guarantee a relevant scaling of all degrees of restrictiveness.

In this connection, Stegemann (1989) offered some ways of protection by means of assisting measures such as tariffs and subsidies. Here, government intervention would allow firms to make commitments, and undertake other strategic moves that would otherwise not work as a deterrent device to potential competitors. Krugman et al. (1992) also considered that industry is characterized by economies of scale, whereby unit costs of production fall when output increases. Both domestic and foreign firms can work in any market, even if they produce similar products without protection. Here, the domestic firm can continue to expand its output as this will result in increasing their respective shares in foreign markets. Another benefit from such protection according to Krugman (1986) is company's performance and its effect on output – where the greater the output - the more the firm learns on how to manage further production more efficiently. Such an approach tends to allow the domestic firm to compete with more success and earn higher profits in export markets. Additionally, such protection can also support the firm in investing in R&D, by ensuring that there are benefits from the,

> *"private appropriability of total effects of innovations"* (Krugman, 1992 et al. p.86).

A further view was espoused by Keynes, who concluded that:

> *"[Protectionism] is a changeable tool for the attainment of its obvious objective as far as private interest, administrative incompetence and the real complication of the task may divert it into producing results directly opposed to those intended"* (quoted in Irwin, 1996, op. cit. p.199).

As can be gleaned from these perspectives, protectionism can be a difficult course for governments to deviate from. Indeed, according to Pomfret (1991) tariff tends to open up a

wedge between international and domestic prices with imported good that are more expensive in the domestic market by the size of the tariff. Consequently, the change in relative prices encourages increasing the domestic output of the imported good, thereby reducing specialization, and gaining from trade at the existing world prices (Pomfret, 1991). Notably, Sherlock and Reuvid (2008) outlined the tools of protection which may be classified as either tariff or non-tariff barriers. On theoretical growth, they suggest that,

> "*… there exists a very complex and ambiguous relationship between trade restrictions and growth*" (Sherlock and Reuvid, 2008).

Consequently, the endogenous growth literature can be seen to be relatively diverse in terms of providing an array of patterns in which trade limitations may reduce or raise the worldwide rate of growth (see Romer & Borrow, 1990; Grossman and Helpman, 1990; Rivera- Batiz and Romer, 1991 a,b; Matsuyama, 1992; Yanikkaya, 2003). Moreover, a lot of studies have been directed to the relationship between average tariff rates and the economic growth of a nation, where they concluded mixed empirical results. For instance, Lee (1993), Harrison (1996), and Edwards (1998) report on a significant and negative relationship between tariff rates and growth.

However, Edwards (1992), Sala-i-Martin (1997), and Clemens and Williamson (2001) found that this relationship was relatively weak. An important insufficiency of these investigations suggests that most existing literature tends to neglect the fact that there is no conclusive theoretical evidence on the growth effects of trade restrictions. Consequently, most of these studies hypothesized and tested that trade restrictions are always harmful for growth, regardless of a country's development, level and size. In their critique of Edwards' (1998) work, Rodriguez and Rodrik (2000) indicated that when they tried to imitate those particular results - using average tariffs from the World Bank, they actually identified that average tariff rates had a positive and significant correlation with total factor productivity (TFP) growth for the 1980-1990 periods. The limitations of their results however, was that their sample size was small with only 43 countries and the time period considered was short. When they extended their sample size to 66 countries, import duties became insignificant with a positive coefficient being evident. Furthermore, Rodrik (2001) noted that when observing through graphical evidence for the 1990s, results indicated a positive relationship between import tariffs and economic growth. Here, eighty countries were examined over the period of 1970-1997, where the study focused on examining the linkage between import duties and growth. Results were against the traditional view on the issue and confirmed that trade barriers in the form of tariffs, can actually be favorable for economic growth. It was also noted "that although there exists a near consensus in the literature about the negative growth effects of trade barriers for the Post-War era, a number of studies, such as O'Rourke, 2000; Clemens and Williamson, 2001; and Irwin, 2001) reported

positive correlation links between such variables as: tariffs and growth for the late 19th and the early 20th centuries. Irwin (2001), argued that this positive correlation between tariffs and growth does not say anything about the positive links, and therefore, such outcomes must be interpreted carefully, because several individual countries had inconsistent experiences with hypotheses associated with import substitution, in the late 19th century.

Yanikkaya (2003) suggested that many land-abundant countries tend to use high tariffs in order to increase government earnings. Here, tariffs have a more varied structure than protective tariffs because land-abundant states preferred to impose high taxes for public finance and political reasons. Additionally, Clemens and Williamson (2001) identify, with regards to a decline in trading partners' protection levels - along with changes in partner growth and effective distance to partners after 1950, the primary factors in terms of explaining the causes for the reversal of the direction of the relationship between growth and tariffs after World War II. Furthermore, the effects of growth impact of other forms of taxes on trade are largely neglected in the growth literature.

Consequently, in this investigation export taxes and total taxes on external trade are also used to measure the trade restrictiveness of countries. The assessed outcomes for these variables, as suggested by Yanikkaya (2003), with the exclusion of fixed effect assessment, notice a significant and positive relation between trade barriers and growth, which are equal with those of average tariffs. Besides, due to data limitations, empirical studies tend to ignore the effects of non-tariff barriers (NTB) on growth even though NTB have been frequently applied for the last few decades. However, Edwards (1992) and Edwards (1998) used NTB as a measure of trade restrictions and pointed out the insignificant relationship with growth. He concluded that NTB are weak indicators of trade orientation because broad coverage of NTB does not necessarily mean a higher distortion level.

2.3.4 Varieties of trade protection policy: Import substitution and export promotion

2.3.4 (a) Background of study

The applicability of a nation's foreign economic policy in terms of developing countries, has been researched extensively e.g., Jung and Marshall (1985), Edwards (1992), Greenaway and Milner (1993) and studies of Rahman and Mustafa (1998), Gylfason (2001), etc. These studies suggest that major issues must be resolved by developing countries through international trade and they identify that the following two issues are of vital importance for developing nations to consider:

1. Do the developing countries use the open trade policy with smaller barriers for import, if it really plays any role?

2. Does the Government actively stimulate the trade by means of funding their export sector? Or shall they limit the trade and perform the policy of increased self-sufficiency?

Generally, most countries are focused on dealing with solving these questions. However, the issues that are raised here tend to be more important for developing countries in terms of the types of raw materials and capital equipment that are involved, particularly those which are critically required for advancing the nation, and those that can be obtained only from overseas countries. Since the time when developing countries obtained their independence, there are occurring specific mechanisms of transitions in their respective foreign trade policy reforms, from one model of policy to another model, depending on the nature of their respective economic growth and associated policies. By tradition, trade strategies have been identified along a bipolar spectrum with import substitution (IS) or 'inward-orientation' at one side and export promotion (EP) or 'outward-orientation' at the other (Balassa (1982), World Bank (1987), Liang (1992), Bhagwati, in Balasubramanyam and Greenaway (1996)).
In terms of the nature of this particular research, it is important to understand what the main point is of these models and polices. In reviewing this question, it is noted that EP assumes the development of the national economy with an orientation directed towards foreign markets and exporting. In addition, Laux-Meiselbach (1989) defined export promotion as a "government policy with the affirmative intention towards increasing exports, thereby going further than just a laissez-fair approach". Furthermore, Felder (1986) suggests that "import substitution" means protection applied to goods that are imported under free trade and 'export promotion' meaning protection applied to goods that are exported under free trade.

2.3.4 (b) Effects of Import Substitution and Export Promotion Policy to an economy

In understanding the nature of the effects of import substitution and export promotion policy to an economy, Afzal (2006) points out that most developing countries pass through the stages of import substitution including "new industrialized countries." Additionally, Chenery and Syrquin (1979) suggest that for Latino countries (Brazil, Argentina and Mexico) the strategy of import substitution plays a significantly positive role, by allowing the country to establish a diverse national economy, and to play a main role in the sphere of World production of key products. Nevertheless, in reviewing earlier materials, Balassa (1971) considers that the above named countries could not create more stable assumptions in order to overcome their weaknesses in comparison with other industrialized countries, even though they may have more powerful economic potential than the "new industrial countries" of Asia. Moreover, research in the economic sciences has progressed since the 1960's, and nowadays it is important to note that

the agenda has shifted and that there is a requirement for a distinct understanding of why protectionist measures and other tools of industrial policy can be successful.

Customs and other protection tools of national producers can be supplemented by supporting the nation's exports, whereas in an export oriented industrial policy, without supporting exports, protectionism will ultimately lead to import substitution. Furthermore, protectionism has been used within the internal market, during both import substitution and export orientations. The main difference being that, without stimulation of exports the system can lead towards keeping inefficient production using protection with export stimulation, and this also helps to keep the inefficient production temporary, which subsequently makes the processes efficient. The external version of import substitution is a strategy of protection based on a nation's own capabilities being directed towards producing goods inside the country. On the other hand, export orientation is a policy designed to create new industries, possibly from the very beginning but that absolutely must be competitive not only nationally, but also in the global market. Import substitution strategy development can be considered as the most common method used by the developing world in the post-war period. However, the effect of this strategy was mixed, and two issues appear to emerge as being of significant importance. Firstly, an import substitution strategy may bring about both benefits and damage to an economy, depending on the specific situation in each country. Krueger (1978) indicates that "both import substitution and export promotion, tend to increase capacity utilization, but such an effect under an export strategy is greater than that of an import substitution strategy" (Krueger, 1978 p153). Hence, it should be borne in mind that an import substitution strategy can lead to faster growth - even just for a short period of time. Also, the implementation of this strategy can result in deviations, which can cause reduced efficiency and productivity growth (Syrquin, 1994).

The second significant issue is the variety of experience in different countries, where some countries followed an industrialization process entirely dependent on an import substitution strategy. Consequently, they suffered from the damage caused by the protectionist policies which were connected to this strategy. According to Yanikkaya (2003), strategies in the area of import substitution industrialization dominated during most of the 20th century in developing countries. The author points out that, while developing countries in Latin America that followed IS strategies experienced relatively lower growth rates, when East Asian countries adopted EP policies they outperformed other countries. On the other hand, during the post-war period, a few countries (mainly the Asian economies) have been successful in import substitution and promptly turned towards an outward orientation strategy. This led researchers to question that if import substitution policies were so unfavorable to the economic development of LDCs, how could so many economists get it wrong during the post war period? On this matter, Baldwin (2000) proposed two explanations. The first explanation is related to that of knowledge

acquisition by the protected industry. An import duty does not guarantee that individual entrepreneurs will undertake additional investment in knowledge acquisition for the betterment of firms, particularly as this incurs cost for the said investment. He also proposes that what could have been done here was the introduction of a subsidy to the initial producer in order to support the discovery of new production techniques. The second point is about their lack of concern for macroeconomic implications of a nation's import substitution policies. It was the resultant macroeconomic crisis associated with unsustainable import deficits, unmanageable government budget deficits, and runaway inflation, which caused these Asian countries to abandon their respective import substitution policies, rather than an understanding of the serious resource allocation effects of these policies (Baldwin, 2000 p.8).

2.3.4(c) Influences of Import Substitution and Export Promotion Policies to an Economy and Associated Consequences

Unfortunately, in the opinion of Arystanbekov (2002) many people confuse the definitions of import substitution and export promotion policy, and evidence suggests that the promotion of both import substitution and export promotion in Kazakhstan takes place at the same time over a very long period. Generally, simultaneous implementation of import substitution and export orientation policies is impossible. Greenaway and Milner (1987) and Liang (1992) indicate that a government may attempt to promote both import substitution and export promotion policy activities simultaneously, however the above mentioned policies tend to contradict and offset each other because a country cannot effectively provide a 'true protection' for both import substitution and export orientation activities. In this connection he notes the "protection of import- competing activities in isolation "disprotects" exporters, while the subsidization of exports in isolation "disprotects" import substitution activities" (Greenaway & Milner, 1987 p.208).

In order to understand this, the following example is used where there are two types of products being produced in an economy. One product is being produced and partially used by satisfying domestic demands and partially exported. Another product is produced and partially imported for satisfying the needs. Also, export orientation policy considers that when performing industrial policy, the respective government provides a flow of resources from the import substitution branch to the export orientation branch.
In this connection Hout (1996) cites the research of Edward and emphasizes as follows:

> *"Many scholars have argued that the direct effect of an export- oriented strategy on economic growth is positive, whereas the effect of import substitution is thought to be negative. Export orientation can be seen as an impulse for economic growth*

because it will spur the demand for the goods produced in a developing country. In those cases where import substitution is introduced, growth figures will generally be lower because of the less efficient allocation of production factors that can be expected under such strategy" (see Hout, 1996 p.605*).*

This point of view was shared by Zestos & Tao (2002), who suggest that "one of these reasons is that expansion of the export sector allows countries to attain economies of scale by specializing in production, which is important for smaller countries". Small countries have small national markets and allow small specialization. Also "development of the export sector permits countries to have access to higher levels of technology and technology rich capital". (Zestos and Tao, 2002 p. 860).

In contrast, the import substitution policy assumes that through the involvement of the government in the market allocation of the resources, it stimulates the flow of resources from export-oriented to the import substitution branch. As far as the resources are limited, their flow can be stimulated to either of the branches. Hence, Kusainov (2003) emphasizes that it is impossible to stimulate two trends simultaneously.

On the other hand Jingbo (1998) finds it necessary to combine ingredients of the IS and EP strategies. He cites as an example East Asian countries. So, Korea and Taiwan used government forces to control the process of import substitution and then changed their strategies to the export promotion. According to Jingbo (1998) the main goal of the import substitution strategy is to improve the domestic productivity, to replace imports, to protect domestic infant industries and then to encourage rapid industrialization.

In 1987 the World Bank report discussed the respective successes of import substitution - and export oriented strategies, which highlighted two categories of countries - inward oriented and outward oriented (with two sub-groups in each case). Laux-Meiselbach (1989) suggested that these findings were incomplete and that inward oriented nations showed a significant lower rate of growth in industrial production than outward oriented nations. Additionally, prior to this, Alexander (2001) emphasizes that "sooner or later the import substitution strategy of development reaches a point of exhaustion" (Alexander, 2001 p.305). In view of the following adverse effects:

(a) Corruption, uncertainty and delays which interfere with private initiatives due to excessive bureaucratization associated with government regulations;
(b) Under-utilization of capacity due to lower tariffs on capital goods, and cheaper credits for installing machinery;
(c) Under-utilization of labor due to relatively cheaper capital goods;

(d) Higher import dependence;
(e) Bias against exports due to overvalued exchange rates;
(f) Bias against agriculture because of the relative price advantage for manufactured goods; and
(g) Limited scope for further expansion as LDCs run out of import substitution possibilities soon.

These consequences were relative to the key policy features of the import substitution strategy high tariff rates, strict import quotas and the over-valued exchange rate(s), and the institutional settings associated with these policies. The imposition of tariffs and import quotas tends to reduce the demand for foreign exchange. However, this can cause an appreciation of the domestic currency, which increased the export costs, thereby making imports cheaper. In this connection, Krueger (1985) gives some significant explanations, where, if import barriers remained high for consumer goods but relatively low for intermediate goods, resources would be directed to import-competing sectors. Basically, an import substitution strategy was initially intended to reduce external trade because the ideological belief of self-reliance undermined the role of foreign trade development. Nevertheless, import substitution could take a long period as far as newly expanded industries lacked an appropriate technological basis to rationalize the production; hence, growth of import substitution industries tends to increase as well as the related imports of capital goods.

An alternative explanation given by Todaro (1995) advises that it is important to understand that import substitution or export orientation must be considered as not the type of produced product - but how it is produced, i.e. what tools are supporting the development of the respective sector of the economy. Indeed, with regards to their comparative efficiency, the experience of South-East Asia and other countries showed that an export-oriented policy was the most efficient policy. One of the dominant factors was that, when choosing an export-oriented policy, governments establish high level expectations for national manufacturers who should compete in the foreign market. Such strict competitive conditions encourage them to maintain high efficiency in production, and also, producing companies have some possibilities to reduce their expenses by means of economies of scale.

Alexander (2001) points out that during the promotion of import substitution policy there can be an increase in many of the so-called non-production costs, where funds and efforts are spent for lobbying interests, and this is particularly poignant during the creation of overprotective conditions for specific branches, departments or companies. Here, it causes the following effects:
(a) A decrease of stimulus for improvement and for the implementation of technologies;

(b) To reduce the expenses and production costs and permanent renewal of the product ranges;

(c) An improvement of product quality, based on demands and needs of the consumers, etc.

It is also important to consider that governments use widely indirect methods during promoting an export orientation policy, while direct tools of economic policy are used for promoting an import substitution policy. During promoting a policy of import substitution, resources are usually directed to those branches which are not competitive at that particular time. However, such branches have the potential for further development and can become competitive in the foreign and domestic market. Moreover, Massimo (1993) observed that the level of import protectionism was not too high, and suggested that it was necessary to maintain specific levels of competition, so that any of the branches should not be overprotected and monopolize the market. Unfortunately, such expectations are not always efficiently justified. For example, Clifford and Kohli (1994) noticed that Japan used an import substitution policy to protect and promote certain industries such as steel making and ship building, through trade barrier regulations. However after some period of time, it turned out that those industries did not create any competitive advantage for the country. Consequently, the import substitution stage can be considered as the period of directing the formation of the national producers, especially if the industry has been recently created and cannot stand against foreign professional competitors. In such cases, it is only possible to keep incentives for the development of, and not for lobbying, the interests for supporting monopoly positions. Similarly, if the branches are being supported by implementing higher levels of protectionism at the introductory stage, then it is required to establish a program for each liberalization period. As a result, companies could predict and plan their growth if they have to compete with importing products, and such approaches allow minimizing structural expenses during the liberalization period of the trade regime in regards to that specific branch.

Criticisms

Some economists (Schydlowsky, 1967; James & Fujita, 1989; Zestos & Tao, 2002), do not support the view that import substitution is positive for all conditions and all exports, but only advocate support for exports which give the most externalities and external profits. Furthermore, this tends to occur when public efficiency from investments to the specific type of activities is higher than income for the particular firms, which directly addresses this type of activity. Consequently, for the government, there exist important external effects from the development of education, healthcare and fundamental sciences. Therefore, governments should support such branches, in order to reach their development level to the optimum level. Recent research (Jayanthakumaran, 2000; Manu, 2009) also indicates the existence of externalities from the development of complex high technology exports where they lead towards the growth of the whole economy. If society obtains externalities from technically complicated and high

technological branches, then there is an implication that export specialization in these spheres, will lead towards having maximum efficiency. It also indicates that the idea of import substitution is always a rational kernel and this is true in the following cases:

(a) it is required to develop the progressing industries which absolutely do not exist in non-developing countries and not to rely on natural and already existing comparative advantages;

(b) it is necessary to uninterruptedly increment the level even if the level is successfully high, otherwise it would not be possible to establish new records.

This suggests that if governments do not try to export - and keep working just for the internal market - it would not be possible to establish a competitive sector. But if they try to export only oil and other raw materials, then it would not be possible to continuously maintain high growth perspectives. In this connection, the structure of Kazakhstan's exports must keep improving by making transition from less high-technology goods to more technically advanced and processed products. Moreover, when promoting industrial policy, another difficulty can occur when choosing high priority branches. On this note it is important to understand the nature of the criteria for defining "high priority branches." For stimulation of the economy branches, it is not enough to just provide protection from exported products and different types of subsidies, but it is also important to set up conditions where industry is given a high priority, will be steadily growing and will become competitive in the foreign and internal markets.

2.4 Other determinants influencing economic growth

When studying the impact of governmental expenses in generating economic growth, Landau (1983) used a sample based on 104 countries, and identified the existence of a negative dependence between real GDP per head of population, and portions of governmental expenses in GDP. Similar results as per data for 115 countries from the same sample have been obtained by Grier and Tullock (1989) and Raihan et al (2007), who showed a negative correlation between the growth of income per capita, and the increase in expenses of the government, and this was explained by the existence of a powerful negative dependence between the researching indices in 24 countries of the OECD. Also, the existence of negative dependence in 16 developed countries of the OECD was later demonstrated by the work of Barth and Bradley (1997). However, Kormendi and Meguire (1985) did not reveal any significant connections between government expenses and economic growth in their study of 47 countries. An absence of dependence between studying indices has been also noted by other researchers such as Levine and Renelt (1992); Easterley and Rebelo (1993) and Agell, et al. (1997). Nevertheless, one of the major political factors of economic growth is stability of the ruling regime in the country. If this stability is high, then the economy growth rate is likely to be greater. Political instability relates to the normal development of the economy which can be clearly noticed in the

example of most African countries during the 1960-1990s. It is important to notice that the method of changing the ruling elites of a country is also one of the determinants of economic development. In addition, the change of government which is performed within the frame of governmental constitution assists in rapid economic growth, while a forced change of government can have a disastrous impact. Consequently, one of the major factors which provides strengthening of the political stability is democracy. Indeed, according to Leblang (1997), democracy tends to have a positive influence on economic growth. However, there is also an opposite point of view, where it has been shown that democratization increases the economic growth rate under low level political freedom. Accordingly, when reaching the average level of political freedom, a democracy can begin to interfere with the economic development process, resulting in low negative growth (Barro, 1994). Along with democracy, the stability of the political regime can also be achieved by means of well developed and functioning bureaucratic tools. Indeed, its positive impact may not be considered as positive when there is high level bureaucracy during the process of making decisions and when there is corruption. According to Mauro (1995) corruption has a strong negative influence on economic growth, by decreasing the scope of investments. It not only causes a decrease in foreign investment (Shiels, 2003), but also reduces the efficiency of their usage (Tanzi & Davoodi, 1998). In addition it also complicates the development of small businesses (Dzhandossova et al., 2003) and slows down the process of financial integration of countries (Bardhan, 1997). Moreover, corruption has become the main reason for the long lasting economic crisis during the early 1990s. It also caused a significant delay of economic development in CIS countries, particularly in comparison with other countries with transition economies.

According to Mo (2001) and Barro (2002), a decrease of corruption assists in the activation of economic growth. Consequently, fighting bribery and corruption is one of the main directives in the activities of international organizations who try “to improve the standards of living” (Anaman & Osei-Amponsah, 2007) in developing countries and who are also attempting to provide transition to the stable development of developing economies. The International Monetary Fund and the World Bank are allocating considerable amounts of funds annually, for conducting structural reforms in the less developed nations. Such assistance for the improvement of the economic situation of a nation is one of the difficulties in assessing the influence of foreign aid for the development of the economy (Mo, 2001). Also, the priority directives of spending these funds are determined by donor organizations which may result in assessing the efficiency of usage of allocated funds. The paradox is that in most cases, those supporting programs do not give positive changes to the economy of a country, but only assist in increasing its external debts. Most of the empirical research on this shows that the activities of international organizations do not provide the expected efficiency and their financial aid has little influence on economic growth (Burnside and Dollar, 2000; and Rajan & Subramanian,

2005). Evidence from Barro and Lee (2002) found that over a long period, the support of organizations like the IMF tends to cause a slowing down of the economic growth rate. However, some researchers found a positive influence of financial assistance to the growth of GDP in Asian countries during the 1950-70s, which has implications on the efficiency of using such concepts (see Papanek, 1973). The process of transformation of an economy is complicated, as it causes reformation of the economic structure, reduces the production scope, decreases the investments, increases the corruption level, introduces or exaggerates instabilities of financial systems and brings the decline of the real GDP (Khamfula, 2007). Furthermore, the policy of structural reforms includes a focus on the orientation towards privatization of governmental property, stabilization and liberalization of the economy, and this can lead to the gradual recovery of the financial system and to the creation of new economic growth (Fischer et al, 1996(a) and 1996(b); Havrylyshyn & Gettigan, 1999); according to Cosse (2003) the speed of transformational recovery towards the normal functioning of the economy depends on the availability of a stable institutional system in the country. Therefore, the transitional conditions of these economies produce a very negative influence to the growth of GDP, which is replaced with weak positive impact over a longer term, but this improves the stability of the country and the economy.

When characterizing the influence of system-economic factors it is necessary to underline the evolving nature of a market led economy of the former Soviet Union in the modern world. Indeed, alternative centrally planned-economic systems exist in Cuba and in Korea and peculiarities of political regimes are evident in these countries in terms of their closeness and in terms of the absence of accurate economic statistical information. This lack of empirical data does provide some difficulties in terms of our understanding of these regimes; however, it does provide opportunities for practitioners to conduct further research in areas of interest and where there is a dearth. Similarly, information and research on this area of import and export policies for the USSR and other socialist countries appear to be both limited and hidden from the global community. This is particularly true for the period until the 1990s, although there is a limited amount of research being espoused of late. Consequently, it is currently impossible to compare the dynamics of economic growth of many former soviet states within the global market, and to understand the nature of the systems of former centrally planned economies, as they represent two mutually exclusive models of economic functioning. Moreover, countries with transition economies, e.g. Kazakhstan, Russia, Belarus, Uzbekistan, Azerbaijan, etc., which have recently started their respective economic reforms and market development have peculiarities which influence the dynamics of their respective economies. Through the identification of this research gap, it allows researchers the opportunity to uncover the nature of economic evolution and transitional conditions of these economies through critically examining and analyzing factors of economic growth – which is the focus of this particular study.

Summary and concluding remarks

The foreign trade policy of countries is inseparably linked and oriented towards increasing the competitiveness during fighting for markets with countries or with economic blocks. It should be considered that trade policy can be oriented towards regulation of export and import flows; rationalization of foreign trade structure; provision of the national market with all the required resources; efficiency of the country into the international labour market, and also for regulating the price ratios for the export and import of goods. All these suggest that regulations at the country level can be used in two ways – in terms of liberalization or in terms of protectionist policy. In addition, free trade policy is also expanding its range. Such policy is designated for elimination of any problems which hinder the performance of exporting and importing goods. A protectionist policy aims to protect the national market from foreign competition, and as a rule, protection measures can be fulfilled in three directions:

a) Reducing production costs of specific goods;
b) Implementing limitations or prohibitions in regards to the entrance of goods of competitors to the national market; and
c) Conducting policy of increasing the national costs for the foreign goods or services.

The consequences of these methods may turn out paradoxical. Research performed by international organizations registered many positive and negative results during fulfilling protectionist policy. Here we can mention the fact of import rate decrease which does not guarantee an increase in the employment level in the country and does not assist on opening new work places. Besides, the practice of applying trade limitations leads to decreasing the export rate, and protectionist policy brings a decrease in the foreign investments flow thereby causing low economic growth. Furthermore, it is important to consider the significance of the "role of the country in the market economy" (McAndawire & Soludo, 2002) and its impact and associated interference on the respective economy. There are existing wide ranges of opinions regarding participation of government in the economy, which is controversial. In addition, during the last thirty years, most attention has been focused on issues connected with optimal scope of government consumption in order to maintain economic growth. Firstly, during the short run, the increase of government consumption causes a rise in GDP rates, leading to economic growth. Second, the increased activity of the government may have an indirect negative impact on the activities of other areas of economic activity in a country, which leads to a decrease of the economic growth rate in the short-run period (Amrinto, 2006). The level of economic openness and its involvement in world trade relations also influences the rate of a country's development. Trade liberalization and decrease of trade barriers assist in speeding up the economic growth (Lopez – Cordova and Meissner, 2003; Jones and Olken, 2008). However,

cancellation of restrictions in countries with a transition economy may bring - in the short term - slowing down of GDP growth and may cause disproportion in the development of the regions (Kuiper & van Tongeren, 2005). Similarly, Lustig (2001) noticed that, in the middle of a recession, the Mexican government started a trade liberalization process in 1983 after the foreign exchange crisis in 1982 which was accelerated in 1989. The Mexican economy was rapidly opened after 40 years of being a highly closed economy, and consequently, free market policies were established. On the assumption of some programs on the area of recovery of economy this type of policy was recommended to developing countries as a new strategy. Moreover, Ruiz-Napoles (2001) showed that this new strategy should contain "trade liberalization".

2.5 Experience of trade relations of developing countries

Various countries demand different purposes for their respective varying trade policy reforms. Many reform packages have the same targets but with various levels of priority. The general feature of reforming countries, irrespective of their various initial conditions, is to accelerate the development process. In addition, trade policy reform is considered as a crucial breaking point for further development in an increasingly independent world (Gilies &Williams, 2000). As a result, trade policy reform is in most cases expected to:

(a) Enhance exports;

(b) Improve the efficiency of resource distribution;

(c) Increase the international competitiveness by improving technological capabilities;

(d) Facilitate domestic economic stabilization by increasing export income;

(e) Establish a neutral or free trade regime.

Based on these issues, trade policy reforms involve a large number of policy changes, and Thomas et al (1991) classified the main reform measures into three categories:

- Export policy reform;
- Import policy reform; and
- Correction of trade regime bias.

In this connection, Kazakhstan has many similarities with other reforming countries, and in this respect, many countries tend to liberalize their respective economies under difficult and differing circumstances. Indeed, such liberalisation is associated with a severely distorted price mechanism resulting from government intervention over a long period of time. In this case, trade policy reforms are usually a part of macroeconomic stabilization measures in response to economic crises being faced by these countries. Alternatively, countries that conducted their trade policy reforms in favourable conditions were more likely to move toward a more liberal trade regime. Most newly industrialized economies (NIEs) in trade policy reform were in this group, and their interests are generally focused towards accelerating the pace of economic and

industrial growth. Also, trade policy reform can be regarded as a tool to enhance productivity and competitiveness, enlarge external markets and integrate deeply with the world economy (Elson, 2006).

2.5.1 Trade policy reforms in Latin America and African countries

Against this backdrop, developed and developing nations' experiences show a requirement for a high level of significance of countries' assistance in export development and national exporters' activity. Matallah and Proops (1992) measured the dependency of the Algerian economy on the oil boom, by modeling several variables such as, consumption, exports, imports, government revenue, etc, using a Keynsian multiplier approach. Their results showed that Algerian economic activities as a whole are now more dependent on oil income than before when the oil price was high during the 1970s. Such reforms in LDCs, as in other developing economies, affect the achievement of the main alterations in industrial policies and corresponding protection structures. Some of these reforms were started as early as the 1980s, and the most general factors of trade liberalization in a great number of the countries include:

- Tariffs decreasing and tariff structures improving which includes the novelty structures based on MFN rates, and zero or special rates based on bilateral and regional trade agreements;
- A gradual elimination of quantitative restrictions and prohibitions (see Adam and O'Connell (1999); and Musonda and Adam (1999).

On the other hand, this started a rise in the application of export promotion strategies, and in connection, Santos- Paulino (2007) found that export promotion strategies include:

(a) Duty drawback schemes;
(b) Tax reductions and rebates;
(c) Financial backing to exporters;
(d) Foundation of export promotion agencies; and
(e) Bilateral and regional trade agreements.

Moreover, Columbia presented a valuable case study based on the Latin American political economy. Whereas most other countries in the region have only recently started promoting neoliberal policies in order to improve export diversification and outward orientation, here, various schemes were experimented by Columbians to promote new exports and reorient their development strategy, in another way from full dependence to import substitution industrialization (ISI) during the past twenty-five years. In addition, Juares (1993) observed that Columbia's export was largely dependent on one primary commodity, which is coffee, during the twentieth century.

Morrissey's (2002) study indicates a review of trade policy reforms in 12 Sub-Saharan African (SSA) countries, where the success in various efforts in this direction has been mixed. Also, some African countries have been making significant progress in liberalizing trade, rationalizing tariff structures and removing bias against exports associated with exchange rates and other restrictions. Nevertheless, some countries have been slow and partial in the implementation of reforms. Consequently, when implementing policy reforms, it is complicated to isolate them from other factors either positive or negative, because it affects trade (e.g. price and non-price incentives).

Furthermore, based on the case of Africa, Dean et al. (1994, pp. 14-18) pointed out that many countries had highly limited trade regimes and to begin with, introduced both tariff and non - tariff barriers. In fact, many of the countries accepted trade liberalization in the early 1980s after suffering the adverse effects of commodity price fluctuations. However, in some particular instances, the reform process was reversed (e.g. Zambia) or slowed (e.g. Malawi) which caused a problem of reliability and stability. The significant arguments for such setbacks in LDCs are found as political, namely the planned government commitments, and the lack of institutional resources to fulfill reforms. Hence, African countries tend to suffer from natural barriers which are often underestimated and deprive the effectiveness of policy reform. Santos- Paulino (2007) cited the impact of trade liberalization on government earnings, which interfered with the efforts of reforms when some countries failed to adopt alternative tax reforms. An example of this is the introduction of indirect taxes and compensation of the loss of government revenue. On this note, Oshikoya forecasted the growth prospects of Nigeria for the last decade of the 20th century (see Bienen, 1984). His analysis was based on input- output type models, in relation to different sectors of the Nigerian economy, by establishing a 12-equation model which uses several variables such as exports, imports, GDP, price indices, and sector production. He also estimated his model under five different conditions and found that the expansion of economic activity and the growth prospects of Nigeria were directly related to the growth rate of oil export revenue (Bienen, 1984). In this connection Bienen comments that, in some countries such as Nigeria, Trinidad & Tobago, they followed a pattern of rapid industrialization by increasing the investment in their respective industrial sectors. It was also found that the main pillar of industrialization was petroleum, which has provided between 50% and 90% of their foreign income. However, the richness of natural resources also, as a rule, slackens the pace of GDP in the long- run.

2.5.2 Reforms of trade policies in Asian countries

Openness to trade has been the prime contributor to Malaysia's economic performance since the 1960s, and this is in spite of having a poor economy, although Malaysia is the 20th largest trading nation in the world. In fact, its total trade is larger than that of Indonesia, New Zealand,

Poland and Turkey. As a result, the WTO Trade Policy Review of Malaysia is a significant document, because it supplies an impartial view of its economy and trading policies. If bigger economies do not consider the Trade Policy Review to be of much value, then for Malaysia, it serves as an effective metric to assess an outsider perspective of its trade policies as it provides trade participants with an opportunity to improve policy issues that affect bilateral trade and investment activities. According to Ramasamy & Yeung (2007) analysis on the Trade Policy Review raised several issue with regards to Malaysia's trade and investment policies. These included protection given to local car manufacturers, a high proportion of unbound tariffs, intellectual property rights (IPR), liberalization of the services sector and government procurement issues. Moreover, during the 1960's, in order to progress in industrialization, Malaysia conducted policies related towards import substitution with a change towards an outward-oriented strategy in the 1970's. Such approaches and policies have a significant effect in terms of the commodity composition of Malaysian exports over the last two decades. Consequently, export- oriented industrialization – when used as a tool to achieve the two main objectives towards reducing poverty and the restructuring of employment law (Khalafalla & Webb, 2001) – and the wealth creating properties of the New Economic Policy (NEP) were established in 1971. In the 1968 Investment Incentive Act, incentive policy was launched despite the foundation of an export-oriented policy. Consequently, development became the main factor in Malaysia's industrial growth from the 1970s onwards. Hence, promotion of production exports in Malaysia occurred in two ways. First, different motivation assessments were presented to promote domestic producers to export some of their output, and second, Export Processing Free Zones (EPFZs) were started to increase exports rapidly. In addition, with regards to Malaysia's experience, various procedures were focused on restrictions - depending on qualitative export indicators of commodities, the creation and starting of firms or manufacturing trade entrepreneurs. At the same time, there was a basic significance of selecting the import substitution strategy for efficient trade policy. Similarly, Argentina focused on its import substitution industrialization, and this was seen as an "inward looking" strategy of development that centered on the promotion of local industries oriented towards the domestic market (Mercado, 2001). In terms of Pakistan's economy, Mahmood & Qasim (1992), and Khan (1998) stated that Pakistan's trade regime remained biased in favor of import- substituting production in the 1980s. Throughout this decade, Pakistan launched a comprehensive program of macroeconomic regulation and structural changes which were directed to end the anti-export bias in trade policies, and to liberalize the economy in order to make it more efficient and competitive. Consequently, the seventh Five-Year Plan (1988-1993) was started at the time when the government signed the three-year Structural Adjustment program (1988-1991) with the IMF after the death of General Zia. According to this plan, the major stress was made for competent economic development, assertive promotion of exports, diminishing fiscal and trade deficiency and improving standard of living. Also, the government had taken a number of

measures to transform the economy from a relatively inward – looking, to an open and outward - orientated economy. Licensing requirements for goods on the negative list were abolished in March, 1991, and the maximum import duty was diminished from 225% in 1986-1987 to 90% by 1993- 1994. Tariff rates were also decreased from 17% to 10%. Furthermore, Pakistan implemented exchange and payment reforms, which improved currency convertibility for the subsequent years. In observing an alternative view, during the 1990s the Pakistani government committed itself to export-led growth and achieved their planned goals, and this suggested different motivations to export producers and various export evaluations which were implemented in order to speed up goods exports (Afzal, 2006 p.66-67). Grimwade (1997) points out that in developing countries, "fiscal and monetary policy were strictly implemented in order to hold down domestic costs and prices, and to free-up resources for exporting". Such policies were pursued with better effect in the newly industrializing countries of South – East Asia particularly Hong Kong, South Korea, Taiwan and Singapore. Thus, these Asian countries enjoyed above average rates of economic growth, and the main component of this rapid growth was the fast expansion of manufacturing exports through the pursuit of export- oriented policies.

2.5.3 Trade policy in Countries within the Commonwealth of Independent States (CIS)

The collapse of the USSR[1] made all the post-soviet union countries face the problem of resolving some very complicated tasks connected with border and customs barriers, the absence of price mechanisms, and a requirement to determine mutually beneficial partners. At the same time, measures on liberalization of foreign trade were introduced, such as cancellation and reductions of the highest custom tariffs for imported and exported goods. The former Soviet Union republics' economy – in all areas of the internal market (those fifteen countries within the Soviet Union) – which were in place for many years, were discarded, and this resulted in the eventual breakdown of the USSR's "united national economy." Moreover, Issingarin (1999) notes that the GDP of the Russian Federation during the period from 1991 was comparable with indicators at the end of 1970s and those economic indicators of Kazakhstan's were similar to those of the 1980s.

At the time of transition from centrally planned economies to market-led economies, the commonwealth countries had various transition market models, however not all countries embarked upon market reform simultaneously. On the other hand, Nazarbayev, the president of Kazakhstan (Vidova, 1998) highlighted in his speech in 1993 about CIS countries that they should follow the way of Western Europe. He also mentioned that it was necessary to bring

[1]On December 8th 1991 at Belovezhskaya Pusha, Heads of Belarus, Russia and Ukraine signed an agreement for the establishment of the Commonwealth of Independent states (CIS). On December 21st 1991 in Almaty city, the heads of these countries signed a protocol for this agreement. CIS is acting on the basis of the Chapter which was accepted by the Board of Heads of States on January 22nd 1993.

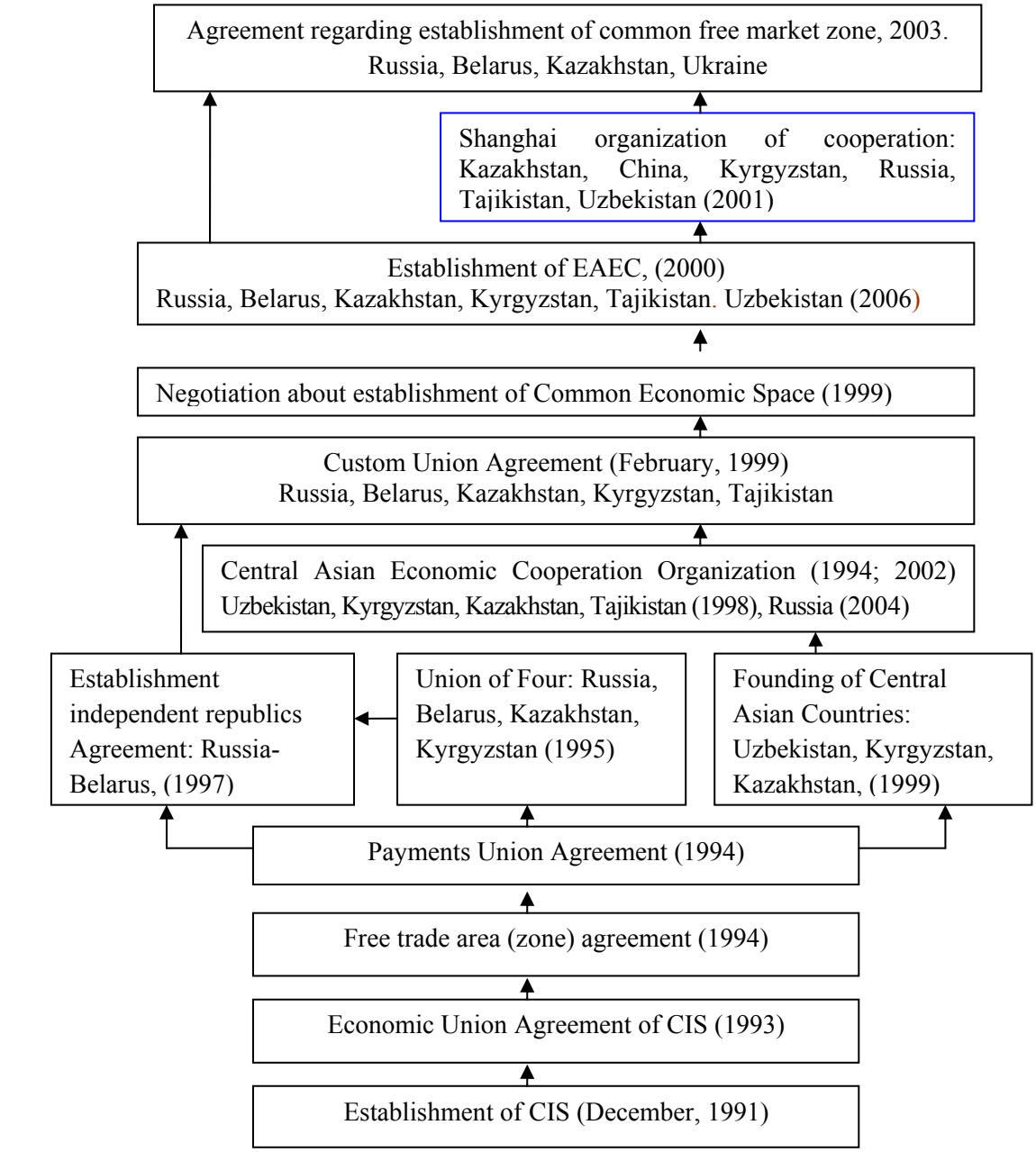
together legislation to create a common parliament and common stationary government, based on the consultative committee of CIS. Here, these countries were considering establishing common customs, bank unions.

During the years from 1991 - 2008, in terms of the Commonwealth of Independent countries, there was the establishment of some integration consolidations through the efforts of the heads of the government of states (see Figure 2.2). Furthermore, multilateral governmental bodies in the different branches, including Eurasian Inter-country Union of coal and metal, had been created in 1993 (Promskyi & Artsishevskyi, 2001). These newly created institutional structures did not work effectively, although they appeared to make significant impacts on their respective economies (Kozik & Kohno, 2001). During the initial stage of development – following independence, the endeavours of the Custom Union establishment completely collapsed. Only in 1992 did the CIS countries start to establish the custom borders, create the custom taxes and nontariff barriers for the mutual export- import activities, which are not accepted in the Custom Union. CACO, "established in 1994 by Kazakhstan, Kyrgyzstan and Uzbekistan, signed a treaty on common economic space in Central Asia and thus created the Central Asian Economic Cooperation (CAEC) organization. In 1998 Tajikistan joined. In 2002, CAEC was transformed into CACO, reflecting the intention of member countries to expand their cooperation agenda to noneconomic matters. In 2004 Russia joined CACO" (UNDP, 2005 p.53)

In December 1998, the Custom Committee Meeting of heads of Belarus, Kazakhstan, Kyrgyzstan and Russia took place. However, during the Custom Union activities, plenty of agreements and negotiations regarding unification, harmonization and coordination of states by custom regimes and tariffs were signed. On the contrary, some countries could not agree with these problems. Kyrgyzstan had put this difficult condition to the rest of the members of the Custom Union, because it sharply changed the rate of duties. Kyrgyzstan was reluctant to change the rate of duties because it became a member of the WTO.

Figure 2.2

Evolution of the Integration Process of the CIS Area



Source: Author Generated From Literature

In addition, Kyrgyzstan was considered as one of the WTO members among CIS countries. According to the opinion of experts of UNDP (2005),

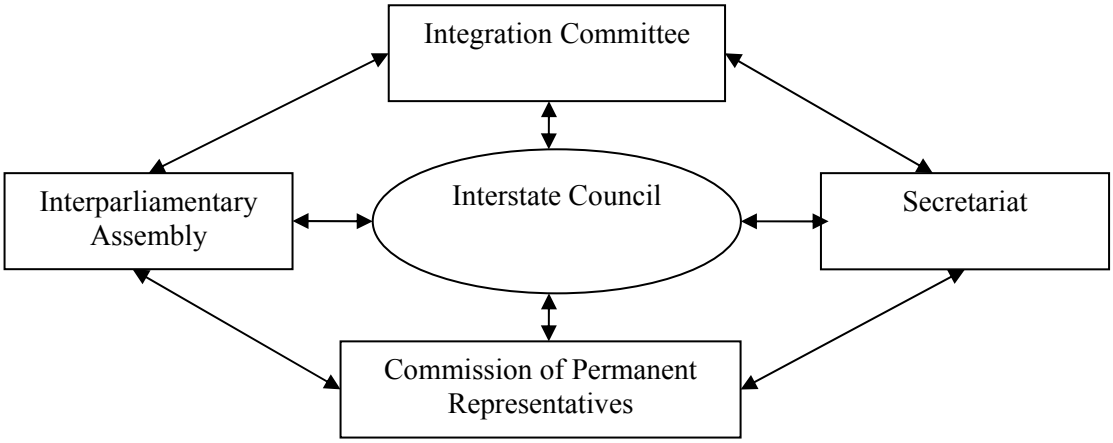
> *"Kyrgyzstan's WTO membership makes its position in EAEC somewhat special, because one important purpose of other participants in this organization is to coordinate activities in the process of WTO accession"* (UNDP, 2005 p.54).

Thus, other Custom Union countries should have to follow the accepted rules of Kyrgyzstan as a member of the WTO as a standard. From the basis of the Custom Union on the 10th of October, 2000 the Eurasian Economic Union was established. The main goal of this organization's agreement is effective for promoting Custom Union and Common free market zone formation on the CIS area. According to Aubakirova (2008), creation of the Eurasian Economic Union positively affected foreign trade volumes and the main macroeconomic indicators of member countries. Also in 2003, the Eurasian Economic Community (EAEC) acquired the status of observer in the General Assembly of the United Nations. Consequently, in relation to the Eurasian Economic Community, membership was between five states - Belarus, Kazakhstan, Kyrgyzstan, Russia and Tajikistan (Pomfret, 2007(b)). Through the leaderships of Moldova and Ukraine they were granted a status of observer at the EAEC in May 2002, and in 2003 a similar request by Armenia was agreed. Also, in January 2006 Uzbekistan became a member of the EAEC.

The governing bodies of the Community are the Interstate Council, the Integration Committee, the Inter-parliamentary Assembly and the Court of Justice of the Community (see figure 2.3).

Figure 2.3

The structure of the Eurasian Economic Community



Source: Author Generated From Literature

The Interstate Council is the superior body of the Eurasian Economic Community, which compounded the Heads of State and Government of the member countries. Next, the Integration Committee is the constant body of the Eurasian Economic Community which is made up from the deputy heads of government of the EAEC countries. The Commission of Permanent Representatives consists of the heads of the Community's member states, and they appointed

permanent representatives to the EAEC. Finally, the Interparliamentary Assembly is the body for parliamentary cooperation within the EAEC that considers matters related to harmonisation (bringing closer together, unifying) of the national legislation, and bringing it into conformity with the treaties concluded in the EAEC framework with a view to implementing the tasks of the Community.

On this note, Barkov (2003) suggested that there are some advantages of participation in the EAEC for real business. Here, business activity which exists within a single economic space is maintained due to the unification of the national legislations of the countries of the Community and the creation of equal conditions for business entities operating within this space. No customs duties are imposed on goods and services produced within the EAEC as they get closer to the internal borders of the Community. The EAEC countries become more competitive in comparison with those of countries outside of the EAEC, due to lower transaction costs of the goods made within their respective territory. Moreover, "on 5 July 2000, the leaders of China, Russia, Kazakhstan, Kyrgyzstan and Tajikistan in Dushanbe" (the capital of Tajikistan) signed the proceeding establishing the Shanghai Cooperation of Organization (Wu & Chen, 2004 p.1064), and later Uzbekistan joined in 2001. This organization was established "to serve regional mechanisms" (Wu & Chen, 2004) for the increasing of multilateral collaboration in different spheres (UNDP, 2005; Pomfret, 2007(b). The head of the country membership agreed to develop investment and trade in their respective economies, and to settle any problems which arise during the working process. Later in chapter seven a discussion regarding trade dynamics between countries is examined in detail.

Furthermore on 28th of February, 2002 Kazakhstan, Uzbekistan, Kyrgyzstan and Tajikistan founded the Central Asian Co-operation Organization (CACO), and this was created from the former 'Central Asian Community' (see Pomfret, 2007(b) p. 338). Later, in 2004 Russia became a member of the above mentioned organization (UNDP, 2005). Due to privileged treatment to one another in different spheres, these countries expected to develop economic collaboration in Central Asia. At the same time, Wu and Chen (2004) point out that these collaborations were a "considerable development in border trade between Xinjiang and the five Central Asian countries" and in the different spheres of economy between Xingjian- based companies and these states.

Summary

Management practice in the last half century has evolved and developed through many types of structural reforms and stabilization programs. The analysis of foreign trade policy of different former Soviet States shows that developing countries should be direct by rationally adding

worldwide ties to their respective national economic policies. In that case, those newly independent states should be determining export policy for their respective economies. Furthermore, in the opinion of Ziyadullaev (2002), the following steps should be complied with:

1. Providing conditions for export branch developing or orientation of branches to produce exports items;
2. Evaluating export branches' development and accepting the strategic programmes;
3. Providing tax securities, finance and fiscal stimulation, and creating other comfortable conditions. Also, submitting some preferences for those branches which have potential for improving perspective.

In addition, this delivers industry policy optimizations whereby it protects branches which are overseeing intensive modernization; produces such goods for output/export; stimulates import goods, without which the priority output branches cannot exist. Also, the methodological techniques in implementing new export and import policies should be thoroughly evaluated depending on which goods are affected, the specific situation, places in the domestic national markets, and perspectives in the international labour market. Hence, such instruments tend to assist or hinder protectionist or liberalization regimes.

2.6 Causality between exports, imports and economic growth: empirical evidence

As was considered earlier, export enhancement and openness to foreign markets can be considered as crucial identifiers of economic growth, as far as it provides positive externalities. For example, Helpman and Krugman (1985) noticed that firms in a prospering export sector can obtain several benefits including: efficient resource allocation, greater capacity utilization, using of economies of scale, and increased technological innovation stimulated by external market competition. They argued that the development of exports promotes economic growth due to better resource allocation and production efficiency. Thus, as economic growth increases its competitiveness in international markets, this results in improving the exports growth. As a result, export promotion and economic growth support each other in the process of economic development. No mutual agreement has emerged with regards to the theoretical appropriateness of this export-led growth hypothesis.

2.6.1 Development strategies and growth: some evidence for closely grouped countries

Various views concerning the role of exports in the literature is matched by mixed empirical evidence. Some empirical investigations on the area of exports and growth links are explained by Edwards (1993); Gilies and Williams (2000); Jin (2002). So, Jin (2002) suggests that "most studies regarding exports' role have been focused on developing economies". Among 37

developing countries, Jung and Marshall (1985) used the Granger test to evaluate a relationship between export and growth. However, there was no strong evidence to support the "export- led growth" hypothesis. In addition, Awokuse (2007) reviewed the causal relationship between trade and economic growth for Bulgaria, Czech Republic, and Poland. He specified an extended production function which tests the effects of both exports and imports on economic growth. He also established empirical results by using a time series model, based on vector error correction models. This indicated a bi-directional causal relationship between export and growth in Bulgaria and causality from imports to economic growth in the Czech Republic and Poland. His extended production function including both exports and imports was expressed as: Y=F[(K,L);X,M].

Here, Y represents real GDP growth; K, L, X and M represent real gross capital, labor, real exports and real imports respectively. The dataset was obtained from the International Monetary Fund Database, and the time series properties of the data were studied by means of two unit-root tests with the results implying the possibility of co-integrating relationships. The result of Granger's causality test, based on the error correction model, provides the following results: in the case of Bulgaria and Czech Republic, the empirical result of export led growth hypothesis is supported by the data at the 5% level of significance. In comparison, only the import led growth hypothesis is supported by the Polish data. Consequently, the results of this study indicate that the exclusion of imports and the concentration of the past studies only on the role of exports as the engine of growth might turn out as misleading or incomplete.

Vohra (2001) investigated the relationship between export expansion and economic performance, and as a result, the role of exports in terms of economic growth, provides additional statistical evidence for the five Asian countries of: India, Malaysia, Pakistan, Philippines and Thailand, on the basis of time series data from 1973 to 1993. These countries were divided into two groups. India and Pakistan being low- income economies based on the GNP per capita of $695(US dollars) or less in 1993, whereas Malaysia, Philippines, and Thailand were seen as middle income economies with GNP per capita of more than $695 but less than $8,696 in 1993 (World Bank, 1995). Additionally, the author used the model among the relationships of real output and labor, capital and exports. In this particular equation instead of the rate of capital of growth for countries he replaced this with *dK/Y*, which approximates the investment-income ratio. By adding a constant and stochastic term he rewrote the equation which finally became, $y=в_0+в_1n+в_2(I/Y)+в_3x+e$,

Here, $в_1$ and $в_3$ denote elasticity of output with respect to labor and export and $в_2$ is the marginal product of capital. Even though the regression coefficient of exports varies across countries, they have the correct signs and are significant for most of the samples. The regression *F*-

statistics are significant at the 5% level in the middle income group. It seems reasonable to conclude that the export- growth connection holds in the middle – income group. At the same time, he referred to the existing literature with a positive and significant coefficient of the growth rate of export, which indicated the positive influence of export expansion on economic growth. Furthermore, the empirical result of his investigations showed that exports have a positive and significant impact on economic growth especially in the middle- income group when the country has achieved a specific level of economic development.

Moreover, the empirical results signify the importance of pursuing liberal and free market policies as in Malaysia, Philippines, and Thailand, by performing assertive export expansion strategies and by attracting foreign investments. This serves as a challenge to less-developed countries such as India and Pakistan, particularly when considering that they need to avoid applying restrictive and regulatory policy measures which may negatively impact on their economic growth. In comparison with the previous studies, Onafowora and Owoye (1998) used the country-specific approach for checking the quantitative aspects of the correlation among real production growth, trade policies and investments rate in 12 SSA countries. The significance of both export and trade policies manifest the influence of export earnings and trade orientations on actual output growth rates.

There are several methods of testing the co-integrating relations in the literature where the methods of Johansen (1988), Johansen and Juselius (1990) were used. Their maximum probability testing procedure was found as the most efficient, as it determined the number of co-integrating vectors between the non-stationary level variables in the context of the vector error-correction model (VECM). It is a fact that this is a vector auto regression model (VAR) in the form of error correction. Furthermore, the methods given by Johansen are being used for the evaluation of a co-integrating relation among real output, trade policies, exports and investments in 12 SSA countries. Moreover, Onafowora and Owoye (1998) analyzed in great detail, the belief that the rapid growth of export increases the economic progress in developing countries. Studies by Balassa (1985), Ram (1985), Ram (1987), Bhagwati (1988), Greenaway and Nam (1988), Alam (1991) and Salvatore and Hatcher (1992) discovered a positive connection between exports and economic growth for some developing countries and regions. They studied the effects of trade policies, exports and investment rates on economic growth in 12 Sub-Saharan African countries over the period 1963-1993. Those studies showed that trade policy, exports and investment rates significantly influence the real output growth in 10 of 12 countries. This signifies that it is possible to stimulate economic growth in SSA countries by means of strategies oriented towards foreign relations. Consequently, a positive link between export growth and real output growth is taken as characteristics of benefits from export-oriented policies for economic growth. Onafowora and Owoye also investigated the studies of Little et al

(1970), Michalopoulos and Jay (1973), Krueger (1978), Feder (1985), Kavoussi (1984), Balassa (1985), Ram (1987) and Singer and Gray (1988) which used a tool for production growth in different developing countries and regions. Hence, export growth can promote economic progress, and recently, studies of export-growth connection in developing countries used the growth rate of exports as substitutes for trade policy. However, Michaely (1977), Bhagwati (1988) and Sheehey (1993a) suggested that such approaches towards trade policy and real output growth may remain undetermined. Furthermore, Onafowora and Owoye used much more direct measures of trade policy generated by the World Bank, in order to understand the short-term dynamics and long-term relations between trade orientations, growth rates of exports, and investment and real output growth in 12 SSA countries over the period 1963-93. Based on Johansen's maximum likelihood tests, it was concluded that the variables were causally linked in the longer-term period. Upon using variance decomposition within the VECM, it was determined that the changes in trade policy and exports had positive and long lasting effects on output of economy in 10 of the 12 SSA countries. The given close relationship among growth rates of real output, trade policy, exports and investments consider that there is a possibility to stimulate real economic growth in sub-Saharan countries by means of a foreign oriented strategy of export expansion. What is more important is that the close investigations showed the importance of export expansion and foreign oriented trade policy in the improvement of economic growth. Also, these studies suggest for the SSA countries, that there is an importance of promoting trade liberalization policies in order to improve the economic growth in the current world economy.

2.6.2 Further evidence for "export- led growth" hypothesis for this study

Piazolo (1995) examined the determinants of economic growth of South Korea using a statistical model and taking into account a wide range of growth factors such as; labor, capital, exports, trade policy, institutional arrangements, and the role of government. He also used a single equation regression in the following form:

$$Y_t = a_0 + a_1X_{1t} + a_2X_{2t} + \ldots + a_kX_{kt} + U_{t,}\text{ , for } t=1,2,3,\ldots T.$$

Where Y is the GDP growth rate and the variables X_1 to X_n represent the following: labor (Population, Education); capital (Gross Investment, Foreign Debt); foreign trade (Exports); trade policy (ISI, EP); institutions (Inflation, Government revenue, Government Consumption, wages). The study showed that human capital, investment and exports increase economic development, while inflation and government consumption develop a negative influence on growth. Besides, considering the growth factors of the South Korean economy, this tends to indicate that it does not directly relate to the results of efficient policies. As per Fountas (2000), he researched the export-led growth hypothesis in Ireland for the last 40 years, by using modern econometric analysis of dynamic time series. According to his findings, from the period of 1950

to 1990, the above mentioned hypothesis did not exist in a long-term relation between real GDP and export volume. Thus, there was no identified hypothesis of export-led growth. In examining the recent 1981-1994 period, this shows distinct evidence in favor of the long-term correlation between industrial production and export volume. Also Granger's causality exists from export to output.

By using the modern econometric methods on Irish data, Fountas (2000) identified some results such as: first, export is not connected with real GDP over the 1950-1990 period. Second, by using Granger-causality test it was found out that exports do not have foreseeable efficiency in explaining further changes in GDP over the same period. Third, exports affect Granger-cause industrial production when the recent data of 1981-1994 was used to recommend that exports should become sufficient in predicting output growth in the Irish economy. Based on these, it was assumed that the results supported the export-led growth hypothesis over the last fifteen years and highlight the significance of export-promoting policies. With this in mind, many studies attempted to establish a causal relation between export expansion and economic growth. Such an attempt was performed in order to determine if structural changes will affect the growth sources which impacted upon export-growth relation.

Furthermore, Khalafalla and Webb (2001) used a country case study approach regarding Malaysia. Malaysia's experience is useful for studying as far as it was considered as a country with the highest growth rates and with a long history of commodity trade. The government policy authority changed from one import substitution during the first 10 years after independence in 1957 to another, which started supporting export expansion effective in 1971. The average 7.5% of annual growth turned Malaysia into a country whose export and growth experience was worth thoroughly researching. The goal of the study was to clarify if there was any link between exports and economic growth in Malaysia. The main task of the study was to empirically test out the export-led hypothesis for the economy which was going through significant structural changes. The existence of such a relationship was analyzed with the frame of co-integration. The findings of the tests for co-integration manifest that economic growth, total exports and total imports, had been connected, and indicated the existence of the steady relation between them. Thus, it found that the relationship between exports, imports and growth, had some changes during the period of the last 20 years. Malaysia's economy still has strong links; however, since 1981 the imports instead of exports have become the major source of growth. Moreover, the export led growth theory became rather weak when the export expansion and export orientation of Malaysian policy was at its greatest level. According to Khalafalla and Webb (2001), since Malaysia widened its export base in order to include a growing proportion of manufacturers, the export-led growth linkage was weakening. The breakdown of the export-led growth in Malaysia, after it transferred to an export-oriented policy, stands alongside structural changes connected with the industrialization of the Malaysian economy. Such

empirical studies provide not only a description of how Malaysian trade growth was developing, but it also showed the conflicting results indicated in the literature, which connected with the export-led growth hypothesis.

Also, further empirical studies of the export-led growth hypothesis should consider how to integrate the export base and variance of the economic structure for the measurement of trade growth relations. In connection with the above-mentioned empirical studies, Emery (1967), Michaely (1977) and Balassa (1978) examined the export-led growth hypothesis by applying the production function type framework, in order to study if export orientation assists with the increasing of total factor productivity (TFP) by means of affecting the efficient allocation of resources, capacity utilization and technological change. Furthermore, Tyler (1981) used a pattern of 55 middle income developing countries, including Malaysia as one of the developing countries, in order to indicate that export performance and capital accumulation were found as essential determinants of differences in GDP growth rates. In addition to this, Feder (1985) used an alternative formulation of the export variable which scales the export as per its value in GNP. Bahmani-Oskooee and Alse (1993) stated that Granger's causal conclusions were insufficient if the applied series had been co-integrated. With this in mind, as far as previous studies are concerned, they did not perform tests for co-integration and could not establish if economic time series were stationary, and as a consequence, the results were seen as unreliable. Similar works have been performed by Ahmad and Harnhirun (1996) by focusing on Asian countries, whereby using a similar methodology, and using data from 1966 to 1988, their results could not find support for the export-led growth theory. Yusoff and Shan (1990) also conducted studies by taking Malaysia as a sample, and they studied data up to 1987, in order to test whether the export-led growth hypothesis was accepted or not. Consequently, their findings supported the hypothesis of an export-led growth strategy. On the other hand, Doraisami (1996) studied the Malaysian case by taking the period from 1963 to 1993, and applied a multivariate methodology. His findings strongly supported the relationship between exports and output of national economy, with a positive correlation between exports and economic growth.

Also, Herzer and Nowak-Lehnmann (2006) attempted to test the diversification-led growth hypothesis on the basis of time series data from Chile. There have been applied statistical procedures in order to test the unit root, and they used an example which looked at the time period from 1962 to 2001. Here, major structural changes were evident and according to the results, all except two series were integrated. In order to check the co-integration between integrated series, they applied the multivariate co-integration methodology proposed by Johansen. In comparison with other time series studies, assumptions propose that export diversification has a significant role in economic growth. Such results are stable against various estimation methods and conform to the hypothesis that export diversification is related to

economic growth through externalities. A curious finding is that the orientation of sectors towards exporting is essential for growth rather than augmentation of the share of industrial exports. Diversifying and increasing exports tend to develop stronger growth effects; however, there is a noticeable conclusion of this work, in export diversification there may play a greater role in the growth process of developing countries which are dependent on agricultural and mining exports. In addition, as far as most of the Chilean exports tend to rely on natural resources, other countries may learn from the Chile experience, particularly with regards to resource-based diversification strategies. Moreover, Chile itself risks the resource-based export diversification which tends to run out after a while. Therefore, it is recommended to establish a non-resource based sector with higher technologies in order to support the process of export diversification and economic growth.

Against this backdrop, Edwards (1993) attempted to review modern empirical literature regarding the relationship between trade orientation and economic performance. His review was based on two points: detailed multi-country studies of protectionist practices and liberalization and analysis of cross-country regression, with regards to linkages between exports growth and economic performance. Also, a country's specific analysis was considered to be helpful in discussing the methods according to various policies which affect a nation's economic performance. Generally, these studies show positive experiences for countries, e.g. Korea and Chile had a significant influence on the ways in which politicians considered trade orientation and commercial policy. For instance, the United Nations Economic Commission for Latin America (De Gregorio, 1992) showed that the comparable performances between successful nations played a great role in making the Commission transfer towards supporting the outward orientation. However, some studies failed to ask important questions regarding the exact mechanism which allows export expansion impact on GDP growth and issues connected to educational preparation. In this context, Romer (1986) and Lucas (1988) performed further studies which proposed more persuasive concepts for the analysis of the relationship between trade policy and growth. According to their model, it is possible to establish a relation between openness and economic growth. In addition, many empirically based research studies concentrated on sources of Total Factor Productivity (TFP) growth. For example, Chenery & Syrquin's (1975) investigations assume that during trade in the liberalization period, TFP growth was amazingly high. Furthermore, Salvatore and Hatcher (1992), Coe and Helpman (1995), and Harrison (1996) provided similar supporting evidence. Likewise, Harrison and Hanson (1999) developed an empirical model which establishes that there are three unsolved issues related to the effect of trade reform. These issues are as follows:

a) the vulnerable results regarding the influence of trade reform on growth,

b) small influence of trade reform on employment rate in the developing countries,

c) relation between trade reform and increase of wage diversity by focusing on the 1985

Mexican trade liberalization.

They examined the measures provided by Sachs and Warner (1995) and showed that it is not able to provide a stable link between more open trade policies and long-term growth due to its nature of composition. In addition, Salvatore and Hatcher (1992) presented both export and industrialization as an additional contribution into general production functions, in order to estimate the correlation between trade strategy and economic development. Hence, results were partially supporting the idea of:

> *"international trade which provides a positive effect for the most developing countries and foreign orientation and leads to more sufficient usage of resources and growth" (*Sachs and Warner, 1995 p.13).

Several investigations have tested the export-led growth hypothesis for both developed and developing countries. Evidence supporting this hypothesis in terms of exports unidirectional cause output growth have been provided by Darrat (1987) for South Korea, by McCarville and Nnadozie (1995) for Mexico and by Darrat et al (2000) for Taiwan. Also, other evidence supports the unidirectional causation from output growth to exports which have been proposed by Hatemi & Irandoust (2000) for Portugal, and by Panas and Vamvoukas (2002) for the long-run in Greece. However, there was also some evidence supporting the bidirectional causation between exports and output growth which were presented by Zestos and Tao (2002) for Canada. Abual-Foul (2004) performed empirical research of the export-led growth hypothesis on the example of Jordan, by taking the period of 1976-1997. During this particular study, the author applied the annual data for Jordan's real exports, with output measured by real gross domestic product (GDP). The empirical study results from free bivariate models of VAR-L, VAR-D, and ECM. It also indicates a unidirectional causation from exports to output. According to these findings, it supports the export-oriented growth strategy in Jordan.

Moreover, Abual-Foul (2004) suggests that in order to promote faster economic growth, such government institutions as Free Zones Corporations, Jordan Investment Board and Jordan Export Development Corporation should keep on performing their activities in involving foreign investments and boosting export. On this note, Jin (1995) and Shan and Sun (1998) reviewed this hypothesis by using a vector autoregressive model (VAR) as a small macro model for the 'four little dragons' in Asia. This suggested that the feedback relationship between exports and growth fits better rather than the export-led growth hypothesis for Hong Kong, Singapore, South Korea, and Taiwan.

Finally, Islam (1998) in connection with the above mentioned hypothesis suggested his estimates on the role of exports for 15 Asian economies through a 'multivariate error-correction model'. However, most Asian states were maintained either by export-led growth or by a feedback connection between exports and growth (Islam, 1998). Hence, it would be relevant to make summaries of a variety of evidence regarding causalities between exports, imports and economic growth (see table 2.1 for a summary of studies showing relationships between exports, imports and economic growth).

Table 2.1 outlines a synthesis of the main findings of a number of other important investigations which were examined and analyzed. According to these studies it can be concluded that not all investigations provide unambiguous results. In compliance with studies of McCarville and Nnadozie (1995), Piazolo (1995), Fountas (2000) and Abual-Foul (2004) findings support the "export-led growth" hypothesis. Moreover, studies of Balassa (1978), Jung and Marshall (1985), Darrat (1987), Islam (1998), Onafowora and Owoye (1998), Awokuse (2007) used pooled data for several countries and their findings support mixed results (export-led growth or growth-led export, and also positively statistically significant export-economic growth relationships). However, the findings of Bahmani-Oskooee and Alse (1993), Doraisami (1996), Hatemi and Irandoust (2000) and Jin (1995) suggest the existence of a bidirectional relationship between export and economic growth.

Table 2.1

Selected Studies on the Relationship between Exports, Imports and Economic Growth

№	Study	Investigating period	Country	Econometric methods	Conclusions/ results
1	Abual-Foul (2004)	1976-1997	Jordan	Granger causality test, bivariate models of VAR-L, VAR-D and ECM (real exports and output measured by real GDP)	ELG
2	Alam (1991)	1965:73& 1973:84	Pooled -41 developing countries	OLS (averaged real GDP growth on averaged real export growth), cross- country studies Other variables: averaged investment as share of real GDP; averaged labour force growth; dummy variables for trade regimes	PEG
3	Awokuse (2007)	Obtained from the IMF database, is quarterly and covers the periods 1994:1-2004:3 (for Bulgaria), 1993:1-2002:4 (for Czech Republic), and 1995:1- 2004:2 (for Poland)	Bulgaria, Czech Republic, Poland	Time series studies, multivariate co-integrated VAR methods, Granger causality test based on error correction models (ECM) (Variables: GDP, Exports, capital, labour, imports) Unit root test: ADF test and Johansen co-integration test based on ECM	Bulgaria- ELG and GLE Czech Republic - ELG and ILG Poland- ILG
4	Bahmani-Oskooee and Alse (1993)	9 LDCs- gtr., 1973 (1):88(4). Logs; real GDP & exports.	Colombia, Greece, South Korea, Pakistan, Philippines, Singapore, South Africa, Thailand	Bivariate Granger (F); VECM for co-integrated countries with constant, time-series studies Unit root test: ADF (general to specific; with constant) 5Co-integration test: CRDW; EG-ADF (general to specific; with constant) Non-co-integration for Malaysia so no further work undertaken. Co-integration for other countries. Lag selection: specific to general	BD: Colombia, Greece, South Korea, Pakistan, Philippines, Singapore, South Africa, Thailand
5	Balassa (1978)	1960: 66& 1966: 73. 4 groups	Pooled - 11 developing countries (Argentina, Brazil, Chile, Colombia, Mexico, Israel, Yugoslavia, India, Korea, Singapore, Taiwan	(a) rank correlation (averaged growth of value added in manufacturing & incremental export- output ratios & also averaged growth of manufactured exports) (b) OLS (averaged growth in real GNP on averaged growth in real exports)	(a) PEG, (b) PEG

№	Study	Investigating period	Country	Econometric methods	Conclusions/ results
6	Balassa (1985)	1973- 1979.	Data pooled for 43 developing countries	OLS (averaged real GDP growth on averaged merchandise export growth &1973 share of manufactured goods in real total exports or averaged % share of changes in exports in GDP), cross- country studies	PEG
7	Chenery & Syrquin (1975)	1955-1973; using variables are Average growth rate, population, exports, manufactured exports, value-added in industry	Korea, Taiwan, Israel, Norway, Yugoslavia, Japan, Colombia, Turkey, Mexico	LR (export shares of GDP controlling for country size and export specialization), mixed country coverage	The growth is higher for outward-oriented countries in all sub-groups: small primary-good exporters, large primary-good exporters, small manufacturing exporters and 8 large manufacturing exporters. Outward orientation growth premium between 0.2 and 1.4 percentage points.
8	Darrat (1987)	Hong Kong, South Korea, Singapore, Taiwan – annual, 1955; 82. Real GDP& export growth	Hong Kong, South Korea, Singapore, Taiwan	AR (GDP growth on lagged & current export growth); AR(export growth on lagged& current GDP growth)	ELG: South Korea. GLE: Singapore, Taiwan. NC: Hong Kong
9	Doraisami (1996)	Malaysia – annual, 1963: 93. Logs; real GDP& exports.	Malaysia	Bivariate Granger (F); VECM with constant. Unit root test: ADF (ACFs; with constant) Co-integration test: CRDW; EG- ADF (ACFs; with constant). Co-integrated.	BD

№	Study	Investigating period	Country	Econometric methods	Conclusions/ results
10	Edwards (1993)	1963-1973 & 1973-1985	Pooled 41 countries among them Argentina, Brazil, Chile, Colombia, Mexico, Peru, Venezuela, Hong Kong, Indonesia, Korea, Malaysia, Singapore, Cameroon, Salvador, Bangladesh, Burundi, India, Tunisia, Yugoslavia, Turkey, Zambia and other	2SLS (deviation between predicted and actual trade)	Less interventionist countries tend to grow faster. Eight out of nine trade policy indicators confirm the result
11	Emery (1967)	1953- 1963	Pooled – 50 countries	OLS (averaged growth in real GNP per capita on averaged growth in exports) Other variables: growth in real current account earnings	PEG
12	Fountas (2000)	Data used for Ireland, 1950- 1990; 1981-1994	Ireland	Two time series using Engle-Granger methodology, ADF and co-integrating regressions, VAR	ELG
13	Greenaway and Nam (1988)	1963-1985; 41 countries, classified according to the orientation of their strategy in two periods, 1963-1973 and 1973-1985	Korea, Singapore, Hong Kong, Thailand, Colombia, Malaysia, Ivory Coast, Cameroon, Indonesia, Brazil Uruguay, Ethiopia, Peru, Chile, Turkey, Bangladesh, Burundi, Zambia, Argentina and other developing countries	Time series analysis for developing countries, Johansen likelihood test for rate of growth of real exports	Results suggest that although exports and growth are positively related, the relationship is not robust

№	Study	Investigating period	Country	Econometric methods	Conclusions/ results
14	Harrison (1996)	Pooled developing countries 1960-84, 1978-88; GDP as dependent variable and capital stock, years of primary and secondary education, population, labor force and technological change as independent variables	GDP growth is calculated as log differences in 1980s price for developing countries, collected by the World Bank	Granger causality test (trade liberalization, black market premium, trade shares, RER distortions, movements toward international prices and bias against agriculture, cross- country studies	All statistically significant indices show a positive relation between a liberal trade regime and GDP growth; there is bidirectional causality between a liberal trade regime and growth (lagged values of growth and openness)
15	Hatemi-Irandoust (2000)	Data pooled 5 countries such as: Greece, Ireland, Mexico, Portugal, and Turkey and cover the period 1960-1997 for each country.	Greece, Ireland, Mexico, Portugal, and Turkey	Granger causality test, VAR model, time series study	NC for Greece and Turkey and BD for Ireland, Mexico, Portugal
16	Harnihirun & Ahmad (1996)	5 ASEAN countries (Indonesia, Malaysia, Philippines, Thailand Singapore,) - annual, 1966:90. Real per capita GDP& exports	Indonesia, Malaysia, Philippines, Thailand, Singapore.	Bivariate Granger (LR)- only examined for Singapore as co-integrated, VECM with constant Unit root test: JJ (preset to 2; Case 1). Co-integration for Singapore only Lag selection: preset to 2	BD for Singapore
17	Herzer and Nowak-Lehnmann (2006)	Chilean economy for 1962-2001, main variables are Export and GDP growth	Chilean economy	Time- series study, Johansen trace test, a multivariative error- correction model and the dynamic OLS procedure	Export diversification plays an significant role in economic growth

№	Study	Investigating period	Country	Econometric methods	Conclusions/ results
18	Islam (1998)	15 South East Asian Countries- annual, 1967:91. Proportion of export earnings in GDP; change in share of non export component in GDP; real GDP	Japan, Sri Lanka, Indonesia, Fiji, Bangladesh, Nepal, Pakistan, Papua New Guinea, Singapore, Hong Kong, South Korea, Malaysia, Philippines, Thailand, India	Bivariate&5- variable Granger (F). VECM for co-integrated, VARD for non-cointegrated, with constant. Unit root test: ADF Co-integration test: JJ (FPE; Case 1). Non – co-integration except for Bangladesh, India, Nepal, Sri Lanka, Fiji Lag selection: FPE Other variables: Share of non- defense expenditures in GDP; imports as a share of GDP; total investment share of GDP.	Bivariate – ELG: Japan, Sri Lanka, Indonesia, Fiji, Bangladesh. BD: Nepal, Pakistan, Papua New Guinea. NC: Singapore, Hong Kong, South Korea, Malaysia, Philippines, Thailand, India. Multivariate - ELG: Japan, South Korea, Indonesia, Thailand, India. GLE: Malaysia. BD: Hong Kong
19	Jin (1995)	Hong Kong, Singapore, South Korea, Taiwan- qtr., seas.adj., 1973 (1): 93 (2). Logs; real GDP& exports	Hong Kong, Singapore, South Korea, Taiwan	5-variable Granger, IRFs& FEVDs- 20 quarter horizon. VARD with constant, time series studies. Unit root test: ADF (preset to 4; with constant & trend). Co-integration test: EG - ADF (preset to 4; with constant & trend) Non- co-integration. Lag selection: Preset to 8 except for South Korea- set to 12 to remove serial correlation. Other variables: Industrial production index; world commodity price level for exports, real exchange rates	BD

№	Study	Investigating period	Country	Econometric methods	Conclusions/ results
20	Jung and Marshall (1985)	37 developing countries – annual, periods within 1950; 81. Real GNP/GDP growth & export growth	Indonesia, Greece, Egypt, Costa Rica, Ecuador, Iran, Nigeria, Kenya, South Africa, Korea, Pakistan, Taiwan, Bolivia, Chile, Peru, Israel, Venezuela, Morocco, Tunisia, India, Philippines, Sri Lanka, Portugal, Turkey, Argentina Brazil, Colombia, Dominican Republic, Salvador, Guatemala, Guyana, Honduras, Jamaica, Mexico, Paraguay, Uruguay	Bivariate Granger (F), VARD& some $VARD^2$ with constant Lag selection: Preset to 2; increased to 3 if residuals correlated.	Singapore, Papua New Guinea, Pakistan, Sri Lanka, Fiji. NC: Philippines, Nepal, Bangladesh.
21	Kavoussi (1984)	1960-1978	Pooled- 73 developing countries	Rank correlation (averaged real GDP growth on averaged merchandise exports growth)PE	PEG
22	Krueger (1978)	1954- 1971	Brazil, Colombia, Egypt, Ghana, Israel, South Korea, Chile, Philippines, Turkey, India.	OLS(log real GNP on log real exports relative to average exports over the entire period) Other variables: Time trend; dummy variables for trade regimes	PEG
23	Khalafalla and Webb (2001)	Malaysian quarterly trade and GDP growth from 1965-1996.	Malaysia	Country case study approach, Granger causality tests based on vector error correction model, VAR analysis	Existence of relation among export, import and economic growth
24	McCarville and Nnadozie (1995)	1926- 1988.	Mexico	Logs; real GDP& exports , Bivariate Granger (Wald &F); VARD with no deterministic terms Unit root test: ADF (SC, AIC; no constant) Lag selection: AIC	ELG
25	Michaely (1977)	1950:1973 & sub-sample of 23 middle- income.	Pooled- 41 countries	Rank correlation (averaged per capita GNP growth and averaged growth of export share)	PEG- minimum threshold of development needed before associated.

№	Study	Investigating period	Country	Econometric methods	Conclusions/ results
26	Michalopoulos and Jay (1973)	1960- 1969	Pooled -39 LDCs,	OLS (averaged growth in real GDP on averaged growth in real exports). Other variables: import to GNP ratio; labour force growth; domestic 7 external real investment	PEG
27	Onafowora and Owoye (1998)	12 sub- Saharan African countries- annual, 1963:91. Logs: real GDP per capita & ratio of merchandise exports to real GDP.	Cameroon, Code d'Ivoire, Ethiopia, Ghana, Madagascar, Senegal, Burundi, Kenya, Sudan, Tanzania, Nigeria, Zambia	4- variable Granger. FEVDS from VECMs, with constant. 12- year horizon with 2 orderings tried. Unit root test: ADF (general to specific; with constant& trend) Co-integration test: JJ(preset to 3) Over variables: Ratio to gross domestic investment to real GDP; various trade policy dummy variables	ELG: Cameroon, Code d'Ivoire, Ethiopia, Ghana, Madagascar, Senegal. GLE: Burundi, Kenya, Sudan, Tanzania. BD: Nigeria, Zambia
28	Panas &Vamvoukas (2002)	Greek economy, 1948-1997	Greece	Error correction modeling and multivariate Granger causality, time series analysis	ELG is not valid in Greece
29	Piazolo (1995)	Indonesia- annual, 1965- 1992. Logs. Real GDP & exports	Indonesia	6- variable Granger (Wald); VECM with constant. Unit root test: ADF, PP (n.s.; with trend & constant testing downwards). Co-integration test: EG- ADF (n.s. with constant & trend) & JJ (preset to 1; Case 1). Co-integration. Lag selection: Preset to 1 Other variables: Real government consumption; population; real fixed capital formation; rate of inflation; real net foreign direct investment	ELG
30	Ram (1985)	1960:70&1970:77; 2 groups	Pooled 73 LDCs. Also as 43(42) primary-oriented countries	OLS averaged real GNP growth on averaged exports growth), cross- country studies Other variables: averaged labor force growth; averaged investment as % of GDP; country dummy variables	PEG but 'strength' varies with external demand
31	Ram (1987)	Data 88 countries- annual, various periods within 1960:82	Afghanistan, Algeria, Angola, Argentina, Bangladesh, Benin, Barbados, Bolivia, Botswana, Brazil, Burma, Burundi, Chad	OLS& AUTO (real GDP growth on real export growth or % share of changes on exports in GDP), time series study Other variables: Population growth; real investment as share of output; dummy variable for 1973 oil crisis	PEG for 41 countries and no PEG for 47 countries

№	Study	Investigating period	Country	Econometric methods	Conclusions/ results
32	Salvatore and Hatcher (1992)	Data 26 developing countries- annual, 1963:85.7 split as 1963:73&1973:85	Chile, Malaysia, Tunisia, Turkey, Uruguay, Colombia, El Salvador, Honduras, Ivory Coast, Peru, Senegal, Argentina, Dominican Rep., India, Nigeria, Zambia, South Korea, Israel, Mexico, Kenya, Nicaragua, Philippines, Pakistan, Bangladesh, Yugoslavia, Singapore	OLS& AUTO (real GDP growth on real export growth. Time series studies. Other variables: Gross fixed capital formation as % of GDP; real industrial production growth	PEG for Chile, Malaysia, Tunisia, Turkey, Uruguay, Peru, Colombia, El Salvador, India, Honduras, Ivory Coast, Senegal, Argentina, Dominican Rep. Nigeria, Zambia. Insignificant for South Korea, Mexico, Kenya, Nicaragua, Philippines, Bangladesh, Pakistan, Israel, Significant negative for Yugoslavia, Singapore
33	Sarkar (2008)	Data for 17 closed and 34 open economies, 1981-2002- panel data analysis and 1961-2002- time series analysis	Argentina, Bangladesh, Bolivia, Burkina Faso, Brazil, Cameroon, Haiti, Peru, Uruguay, Algeria, Chile, Congo, Egypt, Kenya, Korea, Sri Lanka, Malaysia, Nigeria, Tunisia, etc.	Methods: three alternative models between the rate of growth of real GDP per capita(PCGDPG) and trade openness(TRDGDP) index: between- effects (BE) model, the country- fixed effect (FE) model and the random- effect (RE) model	Positive relationship between TRDGDP and growth at the cross- country average level (BE model) and PEG
34	Singer and Gray (1988)	1967- 1973; 1973-1977: & 1977- 1983.	Pooled- 52/51 developing countries	Rank correlation (averaged real GNP growth & averaged real exports growth). Cross- country studies	PEG for most groups; some insignificant

№	Study	Investigating period	Country	Econometric methods	Conclusions/ results
35	Sheehey (1990)	1960-1970	Algeria, Angola, Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Salvador, Greece, Honduras, India, Indonesia, Iran, Iraq, Jamaica, Nigeria, Republic of Korea, Mexico, Morocco, Pakistan, Mozambique, Peru, Nicaragua, Panama, Philippines, Portugal, Senegal, Sierra Leone, Somalia, Thailand, Tunisia, Uruguay, Yugoslavia	Cross country format of bivariate correlations and/or production function- type regressions for demonstrating relationship between exports and GDP growth	
36	Sheehey (1993b)	1960-1981	Pooled – 53 non oil developing countries	OLS averaged real GDP growth on averaged exports to GDP ratio & its average annual growth rate& average growth of exports. Cross- country studies. Other variables: averaged labor force growth; averaged investment share of GDP	Some PEG

№	Study	Investigating period	Country	Econometric methods	Conclusions/ results
37	Tyler (1981)	1960- 1977. 2 groups.	Cross country investigation for 55 countries, 1 time period Cameroon, Central Africa, Chile, Congo, Colombia, Costa Rica, Cyprus, Dominican Republic, Ecuador, Egypt, Salvador, Ethiopia, Fiji, Gambia, Ghana, Greece, Iraq, Guyana, Guatemala, India, Haiti, Honduras, Hong Kong, Indonesia, Iran, Israel, Ivory Coast, Jamaica, Kenya, South Korea, Lesotho, Liberia, Madagascar, Malawi, Malaysia, Mali, Malta, Nigeria, Mauritania, Mauritius, Mexico, Morocco, Niger, Mozambique, Nicaragua, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Portugal, Rwanda, Senegal, Sierra Leone, Singapore, Somalia	Method: rank correlation (averaged real GDP growth on averaged real export growth or averaged real manufactured export earnings). Method: OLS (averaged real GDP growth on averaged real export growth). Other variables: averaged labour force growth, averaged growth in capital formation	Results: PEG
38	Vohra (2001)	Data: pooled – 1973-1993	five Asian countries, namely, India, Malaysia, Pakistan the Philippines and Thailand	Method: time series studies, Engle and Granger two step procedure Unit root test: co-integrated regression of the two step variables in their non stationary form and estimated residuals from the co-integrated equation using ADF test	Results: PEG
39	Zestos and Tao (2002)	Data: pooled - 1948-1996	USA and Canada	Method: Granger causality tests Unit root tests: ADF and PP tests	Results: PEG for Canada, and NC for USA

Source: Author generated from literature sources: Greenaway & Nam, 1988; Gilies & Williams, 2000; Santos- Paulino, 2005

2.7 Quantitative models linking extant research and this study

On this note, Keynesians considered economic growth principally from the "demand side" point of view (Dornbusch et al., 2001). They usually explain low growth rates with inadequate level of aggregate expenditures which do not provide any corresponding increase of GDP. Therefore, they advocate low interest rates ('cheap money' policy) as a measure of capital saving promotion. In this case it would be relevant to envisage private consumption expenditure apart from expenditures of the government sector.

Moreover, Keynesians pay much attention to short-term objectives, precisely to support high levels of real GNP and affecting aggregate expenses. As a result, Keynesians recommend stimulating the growth of all aggregate demand components and consumer expenditures of householders, investments of businesses, and government expenditures. In addition, economists of different theoretical directions are also recommending other possible methods of economic growth stimulation. For example, some practitioners like Agalewatte (2004) support industrial policy where the government should play an active role in the formation of the structure of the industry for achieving economic growth. According to this point of view, it would be relevant to consider links of expenditures for manufacturing, agriculture, construction and the service sectors, in terms of their effects to economic growth. As discussed earlier, there are many investigations which have shown that trade policy is a "robust" contributor to growth, e.g. McNab and Moore (1998). From analyzing literature of trade and growth, we can conclude links between a country's growth rates and its level of economic openness (Greenaway et al., 2002; Santos -Paulino, 2005; Astorga, 2009). Indeed, Benedictis and Tajoli (2007) noticed that the work by Dollar (1992), Sachs and Warner (1995), Edwards (1998), Frankel and Romer (1999) are just a sample of the studies that find a positive relationship between openness indicators and growth rates, thereby amplifying the consensus on the positive effect of trade on growth" (see Benedictis and Tajoli, 2007 p.94).

In terms of a multiplicity of definitions and interpretations of the theoretical literature, many empirical studies were examined to understand the links between trade liberalization and growth. Due to the problems of measuring openness, many investigations have been used as a kind of indicator, in order to evaluate the impact of trade openness on economic growth. In addition, Sarkar (2008) introduced the increasing trade openness, which often shows the success of trade liberalization policies. In this particular study he used trade (export and import indicators) as a percentage of GDP as a measure of trade openness and chose a sample of 51 less developed countries (LDCs) over the period of 1981-2002. Moreover, in a recent study he investigated 3 models between the growth rate of real GDP per capita and trade openness index: between-effects (BE) model, the country fixed-effect (FE) model and the random-effect (RE) model. Additionally, the Breusch-Pagan Langrange multiplier test (LM) was also used in an

attempt to choose an appropriate model. As a result, his estimations showed that the positive links between trade openness and growth at the cross- country average level (BE model) also support the panel data analysis over the period 1981-2002 across the same sample, when he considers 51 countries. However, running separate panel regressions for the groups of 16 "rich" countries and 35 "poor" countries, the author found that the "rich" group has a positive relationship between openness and growth (see Sarkar, 2008 p.769). Furthermore, the same manipulation for the group of 34 "open" and 17 "closed" economies showed a "positive relationship only for the "open" countries" (ibid). Finally, he finds a significant positive relationship between openness and growth running panel regressions for the 11 countries, which pertain to the "open" and "rich" groups. This study is extremely interesting in the light of extant research and moreover, Frankel and Romer (1999) tried to control for endogeneity of trade with geographical variables and found stronger conducive results of trade on growth.

In assessing further research, Awokuse (2007) contributes to the literature of this area "by using a neoclassical growth modeling framework and the multivariate cointegrated VAR methods" (Awokuse, 2007 p. 394) to study the impact of export and import flows on output of the economy in selected countries. In addition, his estimations concentrated on the changes of the causal relationship between real GDP growth, real exports, real imports, gross capital formation as proxy for capital, and the labor (Awokuse, 2008). These outcomes from Johansen's multivariate cointegration test and two unit root tests were evaluated. The given results suggested the existence of a long-run relationship between the variables in the system for all the above named countries. With this in mind, Chow's (2001) investigations regarding the Chinese economy appeared useful for this current study. He tried to find the answer to such questions as: to what extent has capital formation in the economy and in the five productive sectors of agriculture, industry, construction, transportation and commerce all contributed to economic growth? In analyzing his results, he appears to rely on official data provided by the State Statistical Bureau. He also uses a simple multiplier accelerator model of the macroeconomy (see Chow (1985)) and for econometric model of inflation (see Chow (1987)). Moreover, Chow estimated the role of capital formation on economic growth, the effects of main political embarrassments and of economic reform on economic growth, the degree of technological alteration and the marginal productivity of capital in the economy. Likewise, he tried to show how consumption expenditures are regulated and funds are made available for capital accumulation. Taking this into account in this thesis, it would be relevant to consider a correlation coefficient and regression model regarding the case of Kazakhstan. Consequently, Le and Suruga (2005) used 105 developing and developed countries for the period 1970-2001 as a sample which contributed a different approach in the growth study literature, by examining the interrelationships among public expenditures, Foreign Direct Investments (FDI) and economic growth. The econometric model was used based on the studies of Barro (1991), Deverajan et al

(1996) and Borensztein et al (1998), in which the production function depends on the FDI, public capital expenditures, public non-capital expenditures and domestic investment. In addition, the fixed effect model was used to estimate equations with a five-year forward lag structure, i.e. explanatory variables in period *t* would have an effect on growth from period *t+1* through *t+5*. The method of ordinary least squares (OLS) was used to estimate the following equations:

$$Growth_{i(t+1,t+5)} = a + b_1 Pubcap_{it} + b_2 Pubcur_{it} + b_3 Pricup_{it} + b_4 FDI_{it} + \sum_{j=1}^{4} b_i Dm_j + c_1 oda + d_1 edu + e_{it} \quad (2.1)$$

Where i=1, 2,…., N (number of countries) and t = 1970, 1971, ….2001;
$Growth_{i(t+1,t+5)}$ is the five year forward moving average of per capita GDP growth for country I;
$Pubcap_{it}$, $Pubcur_{it,}$ $Pricap_{it}$ and FDI_{it} are the ratios to GDP of annual public capital expenditures, private capital flow, and FDI respectively;
Dm_j is the income level dummy variables, j=1,2,3,4,5 corresponding to countries that fall into five categories: low income, middle- income lower level, middle income upper level, non OECD, and OECD respectively (in the regression, the OECD dummy variable would be used as the benchmark, thus it is dropped);
oda is the ratio of official development assistance to GDP;
edu is the secondary school enrolment ratio; and e_{it} is the error term.

According to the results of regression analysis, all coefficients of these variables are significant, except for that of public current expenditure. Moreover, public capital expenditure and FDI have positive influences on national output, while public non-capital expenditure has a negative impact. The results also showed that the effect of FDI on economic growth becomes less as the public investments ratio exceeds 8-9%. It means that a high level of government intervention may have a negative effect on the national output.

With this in mind, the role of an effective regulatory regime in promoting economic growth and development has generated a wide array of research interests (World Bank, 2004). Moreover, the quality of regulations can be estimated regarding results for good management. In this connection, Parker (1999) suggests that a well-functioning regulatory system is one major factor which balances accountability, transparency and consistency. Jalilian et al (2007) explored the role of state regulation using an econometric model of the impact of regulation on economic growth. By doing this, they tested the hypothesis that the efficiency and quality of regulation affects the economic performance of an economy for 117 countries, for the cross- section regression and 96 for the panel version of the regression. The correlation coefficients between

the indicators of regulatory governance, namely government effectiveness and regulatory quality and gross capital formation, have the expected positive sign. The bivariate correlations between GDP per capita and gross capital formation showed a strong correlation coefficient which comprised of 0.62.

In continuing, Landau (1983) studied the links "between the share of government consumption expenditure in GDP and the rate of growth of real per capita GDP" (see Landau, 1983; p.783). The result of this investigation proposes a negative link between the share of government consumption expenditure in GDP and the growth rate of CDP per capita. Such a relationship was observed for all countries, for all time periods. Consequently, "low per capita income countries have in fact grown slower than the middle or high income countries" (Landau, 1983 p. 790). At the same time the study concluded that due to the negative coefficient for per capita income in the regressions, other variables included in the regressions provide the 'proximate explanations' or 'transmissions channels' for the slow growth of lower income countries. The two variables that are serving are: 'proximate explanations', the share of government expenditure in GDP and investment in education. Accordingly, "lower income countries invest less in education, and government consumption expenditure is a higher share of their GDP" (Landau, 1983 p. 790). Furthermore, Landau (1983) found that the regression results suggested three possibilities:

1. Higher government expenditure and low investment in education explain the slow growth of low income countries;
2. Other factors which are better correlated with government expenditure and investment in education than the low income itself, explain the slow growth; and
3. Reality is a mixture of the above mentioned possibilities.

In addition, Pradhan (2007) endeavored to investigate the causality between economic growth and government expenditure in the seven SAARC countries during 1970-2005. For investigating this, the author used the usual procedure of a Granger causality test which involved a three step procedure. First, test for order of integration (or unit root test); second, investigate the cointegration relationship among the variables (i.e. cointegration test); and third, the construction of Granger causality test. This particular study used the data of seven South Asian Associations of Regional Cooperation (SAARC) countries, which included India, Pakistan, Sri Lanka, Bangladesh, Nepal, Bhutan and the Maldives. The data consisted of annual observation variables of per capita GDP at current prices (in US dollars) and government consumption expenditure at current prices (in US dollars) which covered the period from 1970 to 2005. On the first stage, Augmented Dickey Fuller (ADF) unit root test was applied and he found out that both variables were non-stationary in the first differences, which confirmed that they were integrated of order one. After applying Engle and Granger's two stage residual based

approach, Pradhan (2007) discovered that government's expenditure and economic growth were co-integrated, which denoted an availability of long run equilibrium links between the above named variables. Furthermore, the study investigated the nexus between economic growth and government expenditure with three other model specifications. The direction of causality was very similar in the context of Pakistan, Sri Lanka and Bangladesh, but it was the opposite in the case of India, Nepal, Bhutan and the Maldives. As a result, Pradhan (2007) concluded that government's expenditure is a very relevant outcome of economic growth and it suggested that there was a need for more government expenditure in the economy, which should be a very productive one.

With this in mind, the different sectors of the economy contribute to economic growth itself and vice versa. According to Chandran and Munusamy (2009) the positive contribution of trade openness towards growth, stemmed from the notion that liberalization increases specialization and division of labor. The last one improves productivity and export capability, as well as economic performance. The same opinion was supported by Lloyd and MacLaren (2000) that rapid growth was largely caused by East Asia's economic openness. So, Chandran and Munusamy (2009) tried to investigate the long run relationship between trade openness and manufacturing growth, and further assessed the causal relationship between these variables.

Based on a theoretical framework supported by Harrison (1996), Wadud & Nair (2003), Tsen (2005), Chandran and Munusamy (2009) used Malaysian annual data from 1970 to 2003, which included certain data such as: the relationship between manufacturing value added, capital, labor and openness. The multivariate model was specified by Chandran and Munusamy (2009) as follows:

$$LVA=f(LCA_t, LW_t, LO_t, t) \qquad (2.2)$$

Here, LVA_t, LCA_t, LW_t and LO_t are logarithmic manufacturing value added, fixed capital, and labor and trade openness, respectively. The variable *t* notices the linear trend representing the Hicks neutral technical progress. Also there was included a dummy variable in order to account for the Asian financial crisis in 1997/1998. The testing procedure of this study incorporated three stages. At the first stage, variables were tested for stationarity using the Phillip- Perron (PP) test. The evidence supported that all variables were non-stationary in their level (except LO with time trend), but became stationary after taking the first difference. Hence the authors conclude that all variables to be random walk, indicating that all variables were integrated of order 1.

At the same time, the cointegration test was conducted using the autoregressive distributive lag (ADRL) method offered by Pesaran et al. (2001), which required testing the following Unrestricted Error Correction Models (UECM):

$$\Delta LVA_t = a_{0M} + \partial_{Mt} + D97_M + \sum_{i=1}^{n} B_{iM} + \Delta LVA_{t-1} + \sum_{i=1}^{n} \lambda_{im} \Delta LCA_{t-1} + \sum_{i=1}^{n} \gamma_{iM} \Delta LW_{t-1} + \sum_{i=1}^{n} \xi_i \Delta LO_{t-1} + u_{1M} LVA_{t-1} + u_{2M} LCA_{t-1} + u_{3M} LW + u_{4M} LO_{t-1} + e_{Mt} \quad (2.3)$$

Here, the long run relationship between the manufacturing values added output, capital, labour and openness were tested using the 'bound test'. In accordance with that, the calculated F-statistic was 6.35, and the 5% critical bounds, lower critical bound (LCB) and upper critical bound (USB) were 3.79 and 4.85 respectively. As a result, Chandran and Manusamy's findings regarding the cointegration test supported the existence of a long-run relationship between trade openness and manufacturing growth. Furthermore, the Granger causality test confirms that causality runs from trade openness to manufacturing growth in the long-run period of time, which demonstrated that Malaysia's manufacturing growth was partially the result of the government's open policies.

Of further note, Ahmed (2006) investigated Malaysian productivity on the sphere of the manufacturing sector for the period of 1959-2001. The established analysis used annual time series data for gross value of output, numbers of employment, value of fixed assets, and cost of input. Furthermore, the production of each industry is expressed as a function of capital, labor, raw materials and time. At the same time, the production function for the sector industry was represented by the author as follows: Q=F(K,L,M,T) where output Q is a function of sectoral capital input K, labor input L, and intermediate input M, and time T, that proxies TFP as a technological progress of the manufacturing sector. Significantly therefore, an autoregressive estimator was applied for the two models generated from the above mentioned production function, in order to estimate the shift in the production functions of Malaysia's manufacturing sector. Here two growth theory models were considered: extensive growth theory and intensive growth theory. Besides, an extensive growth theory model was suggested by Jorgenson et al (1987) which explained the decomposition of growth value of output into contribution of changes in capital, labor, material inputs and TFP growth. Also, the intensive growth theory model was used by Dollar and Sokoloff (1990) which expressed the decompositions of labor productivity growth into the contribution of capital deepening, material- labor ratio and TFP per unit of labor growth. As a result, putting together the outcomes of the two models, the author concluded that productivity growth of Malaysia's manufacturing sector was input driven rather than productivity driven. Nevertheless, another vital sector of any economy is construction,

where according to Field and Ofori (1988) the construction industry is regarded as an essential and significant contributor to economic growth. Based on this point of view, Rameezdeen and Ramachandra (2008) studied the construction linkages in developing economies, using input-output tables, which were arranged since the 1970s in Sri Lanka. In order to analyze the sectoral construction linkages, researchers used Leontief's demand side input-output model and Ghosh's and Augustinovics' models. Consequently, this can be expressed as:

$$X_i = \sum_{j=1}^{n} X_{ij} + Y_{i(I,j=\ldots n)} \tag{2.4}$$

where, X_i is the total output of industry *i,* X_{ij} is the inter-industry elements which point out that amount of output of industry *i* goes to industry *j*. *Yi* denotes the final demand of industry *i*.

Thus, the twelve economic indicators were analyzed using the above import-output models of Sri Lanka. The share of construction in national income was computed as a percentage of construction value added to total value added. Therefore, Rameezdeen and Ramachandra (2008) concluded that the Sri Lankan construction sector had a smaller pull effect than most developed countries which indicated a lesser dependency on other economic sectors.

In contrast, Hwa (1988) undertook an empirical analysis of the significance of the contribution of agriculture to economic growth by using cross-section data. The main result of this investigation was that agricultural growth was strongly related to industrial growth over the considered process and contributed to the overall economic growth through its favorable impact on total factor productivity. Moreover, the role of agriculture has no less importance than that of export performance. Hence, this finding boosts the point of view that agriculture and rural development should be given priority and be properly assisted, in any overall government economic policy development strategy. Consequently, according to Hwa (1988) the above named sector of the economy assists industrialization by providing a source of labor, capital and raw materials to other sectors, and by generating requirement for industrial products. Hence, the links between agriculture and industry are seen as interdependence and complementarily.

The statistical association of this relationship was estimated through the Chenery -Syrquin (1975) nonlinear model.

$$I = f\left[A, \ln YN, (\ln YN)^2\right] + u \tag{2.5}$$

Where,

I- rate of industrial growth;

YN- income per capita;

A- rate of agricultural growth;

u- randomly distributed error term.

On the basis of some transformation of equation (2.6) the author rearranged as

$$I= \gamma A +(\alpha_1 - \gamma\alpha_A)lnYN-(\gamma\beta_A-\beta_1)(ln\ YN)^2+u \quad (2.6)$$

The above estimation is carried out using two cross-country samples, one consists of 63 countries for the period of the 1960s and the other has 87 countries for the period of the 1970s. Both samples included developing and developed countries and are based on the ordinary least square method (OLS). Hence, both agriculture and industry are accelerating their respective growth rates in the low to middle-income range, which supposes that development of agriculture should precede that of the development of industry. Furthermore, the study found that the role of agriculture seems to be no less important than that of exports in fostering productivity. Therefore, the development of agricultural growth increases the efficiency of resource transfers (capital and labor) in the spheres of agricultural and non-agricultural sectors. Moreover, Hwa (1988) concluded that the development of agricultural growth itself implies high agricultural productivity. He also confirmed the findings of the positive contribution of export growth for the increase in productivity. In considering a further view, the empirical evidence across countries conduced to show that developing countries with favorable export growth record tended to enjoy higher rates of national income growth (Feder, 1982). The author investigated the sources of growth for the period of 1964-1973, for a group of semi-industrialized less developed countries. Here, Feder (1982) tried to analyze a supply side description of changes in aggregate output and focus on the potential non-optimality of resource allocation between export and non- export sectors. Furthermore, he considers the following externalities which have been written as

$$N=F(K_n,L_n,X),$$

$$X=G(K_x,L_x) \quad (2.7)$$

Where, N- non exports;

X- exports;

K_n, K_x – respective sector capital stocks;

L_n , L_x- respective sector labor forces;

The above named equations the researcher adduces in such a way

$$\dot{N} = F_k \cdot I_n + F_L \cdot \dot{L}_n + F_x \cdot \dot{X}$$

$$\dot{X} = G_K I_X + G_L \dot{L}_X \dot{X} \quad (2.8)$$

Where $I_{n,}$ I_x – sectoral gross investments; $\dot{L}_n, \dot{L}_X$ - sectoral changes in labor force, and F_x depicts the marginal externality effect of exports on the output of non- exports.

Transforming these equations for a cross country regression relating to the rate of growth of GDP (in constant prices), share of investment in GDP, growth of population (proxy for labor growth) and the growth of exports (in constant prices) multiplied by export share in GDP, the equations were set out in the following form:

$$\dot{Y}/Y = \alpha(I/Y) + \beta(\dot{L}/L) + \gamma((\dot{X}/X)(X/Y)) \tag{2.9}$$

Where the parameter γ notices the differential productivities of factors, as the author explained earlier, α- the marginal productivity of capital in non- export sector, and the parameter β- relates to labor growth. According to some transforming of equations adopted by Michalopoulos and Jay (1973), Balassa (1978) and Tyler (1981), the researcher got results of regressions adopting the specification of the following equation

$$\frac{\dot{Y}}{Y} = \alpha\frac{I}{Y} + \beta\frac{\dot{L}}{L} + (\frac{\delta}{1+\delta} - \theta)\frac{\dot{X}}{X}\cdot\frac{X}{Y} + \theta\frac{\dot{X}}{X} \tag{2.10}$$

Furthermore, the estimation shows that there are, on average, substantial differences in marginal factor productivities between the export and non-export sectors. Such results are in part from the lack of entrepreneurs to equate marginal factor productivities and in part due to externalities. The empirical results of this investigation were supported even when entrepreneurs optimize resource allocation, for significant advantages were made due to the externality effects. In addition, an export-oriented strategy was considered in a number of empirical studies. The success of this strategy has been tested by Sheehey (1990) through a cross-country format using bivariate correlations and production function-type regressions to show a strong positive link between exports and GDP growth. Also, Sheehey (1990) applied Balassa and Feder formulations (which we considered in detail earlier) and the same bivariate correlations to each production category of GDP. As a result, agriculture and infrastructure have frequently been noticed as the main sectors in developing countries, which can enhance resource allocation to one of these sectors and finally increase GDP growth according to Sheehey. In this connection he applied Ram's investigative approach, which has been tested in terms of the effectiveness of government expenditure, resulting in a positive effect on GDP growth. The author in his study divides the production sectors into two parts of GDP. The first was founded on the end use - and the other on the industrial origin, which uses data over the 1960-1970 period for 36 countries. Furthermore, with regards to exports, a government consumption expenditure, private consumption expenditure and gross government investment were applied for the end use, based on Sheehey's idea.

The next part was the industrial origin categories such as: agriculture, services and three subcategories like manufacturing, construction and electricity, gas and water. Also, his findings supported the strong empirical ties between exports and GDP growth which is common to all major production categories. Moreover, all correlation coefficients which have been set up by Spearman's rank correlation were positive and significant, at least at the 5 percent level. In addition to each production category, the sectoral growth coefficients were positive and significant at least at the one percent level. Against this backdrop, these works do indeed shed significant light on a variety of approaches and issues associated with government policy and its associated impact on the economy. With this in mind, this study now turns towards designing an appropriate methodology to gather data for analysis, in order to address the study objectives.

Concluding remarks

Thus, a review of the literature cannot provide a clear answer about investigating hypotheses of research, which is required to continue performing further investigation of works in order to resolve the argument. Even though there does exist a sufficient number of studies on this subject, the arguments may be resolved on a country-by-country basis. As can be gleaned from the above review of studies, most countries show mixed results. However, it would be necessary to perform empirical analysis and identify the relationship between export and economic growth for the economy of Kazakhstan since independence in 1991. This study will therefore consider this and test the hypotheses which have been proposed by many researchers by applying it to the case of CIS countries (in particular, to Kazakhstan's economy).

The objective of the aforementioned studies was used as a basis to identify the research gap for this study in terms of examining economic growth analysis of Kazakhstan's economic performance. The main reason for this study is to use free trade activity and economic liberalization in terms of considering its impact on economic growth in Kazakhstan. There are few empirical studies in this area. Therefore, it would be appropriate to test the following hypotheses:

Hypothesis 1:

There is a structural change in the economy associated with outward-orientation strategy for CIS countries since independence in 1991 (particularly for Kazakhstan's economy).

Hypothesis 2:

The positive influence on GDP of lagged exports for the period of 1999-2006 in comparison with 1993-1998 is related to the change of trade policies towards a more outward-orientation within CIS countries (and in particular within the Kazakhstani case) in the second considered period.

Hypothesis 3:

Increasing trade openness is directly related to the outcome of trade policies for Kazakhstan and other selected CIS countries.

Chapter Summary

Based on the above review, it can be concluded that the general accepted statement in the economic literature is that the foreign trade policy free regime leads towards economic growth and to the improvement of a nation's welfare. Indeed, most developing countries who implemented liberalization of foreign trade policies and allowed a reduction of economic disproportions have achieved a significant rate of economic development. In addition, the GDP rate is rapidly growing in countries which have active inter-regional trade and this is particularly poignant when the nation is oriented towards exports. This becomes clear with the sample of South-Eastern Asia countries (Ventura, 1997; Zebregs, 2004). At the same time, the experience of Latin American countries shows that trade liberalization may not produce a considerable impact to the economic growth of a country but it may cause considerable slowing down of the economic growth rate (Rodriguez & Rodrik, 2000). Such a situation can be explained by the fact that "small economies" cannot compete with large trade countries which are more open towards foreign trade (Alesina & Wacziarg, 1998). When analysing growth, we notice that it is practically impossible to reveal and describe all the factors which influence the economic development rate. In order to demonstrate this, several uncommon indices which influence the speed of GDP growth should be analyzed. Traditionally, there are distinguished growth and volatility of random variations in microeconomics; however those indices are interrelated between each other. High levels of volatility of economic growth rate within a short period of time causes a reduction of the development speed, as stated by Ramey and Ramey (1995). The wealth of a country through natural resources also affects the slowing down of the GDP growth rate in the long-run economic cycle.

Additionally, this chapter reviewed the literature on the development strategies pursued by various countries in the past. Free international exchange of goods allows the consumers to have options or to have a wide range of goods filling their stores with various products produced in the different countries of the world. Therefore, it would not be wrong to state that international trade is absolutely vital. According to the world experiences, when entering into the active international economic cooperation, any country starts by attracting foreign investment and with stimulation of foreign trade growth. Consequently, countries pass through all the stages of technological change in the field of structural reforms of their respective economy – starting with production, refinery, export of raw materials and ending with high technology goods. The incomes from export are utilized for modernization and development of the most "profitable" branches in terms of international labor division.

This chapter discussed the positive and negative consequences regarding various strategies of trade policy. Consequently, free trade policy as a development strategy was seen to have a strong theoretical background. In a perfect market, trade plays the role of the engine of growth. As such, free trade policy alone is not sufficient for an economy to achieve growth in the economy. Import substitution, on the other hand, is an inward-looking strategy that has been widely used as an alternative strategy by many developing countries in the past. In terms of this strategy, the Kazakh government has an active role in assisting internal industries through tariffs and non-tariff barriers.

Hereby, for the Republic of Kazakhstan which has a high level openness to the foreign world, achieving success from foreign economic activities will mostly depend on solving the main issue of exports becoming beneficial for the exporters. Fulfillment of this term depends not only on the exporters but also on the wisely planned and targeted policy of the Government in order to support and stimulate export activities.

The knowledge of different policy regimes discussed above is of importance for policy makers of developing countries with a transition economy in order to develop strategies of national policy. However, trade and industry policy may not work successfully without the support of appropriate macroeconomic policy and institutional arrangements.

In order to analyze the main point of foreign trade development and Foreign Trade Policy of the Republic of Kazakhstan and their influences to the national economy it would be relevant to make comparative analysis of the economic reformation experience which is similar in economic development countries such as Kyrgyzstan and Mongolia (Chapter four) and critically evaluate Kazakhstan's economic development and associated trade policy since 1991 (see Chapter five). The study now turns towards considering the nature of the research methodology which was adopted for this study.

CHAPTER THREE

RESEARCH METHODOLODY

3.1 Introduction

One of the main aims of many economies is that economic growth should be continuous and sustainable. In order to understand how this particular goal is realized it is important to understand the internal mechanisms of output expansion in the country to provide additional production. The objective of this chapter was to develop a methodology to gather the required data to address the research gap. Consequently, the following chapters will look at understanding the nature of evolution of Kazakhstan's foreign trade since independence and through the specific data on Kazakhstan. Thus, the study will examine, analyze and critically evaluate Kazakhstan's Foreign Trade and its implications on the country's economic performance since independence. In this case, the methodology is expected to gather data in order to achieve the following objectives:

Objective 1: To conduct a comparative analysis of the economic development and Foreign Trade evolution of the Republic of Kazakhstan, Mongolia and Kyrgyzstan since 1991 in order to track changes happening since 1991;

Objective 2: To analyze the evolution of trade policy reforms in Kazakhstan since independence and their contribution to its economic performance;

Objective 3: To analyze Kazakhstan's trade activities by geographical and commodity distribution in order to understand their trends and associated impact on economic growth and trade policy reforms since independence in 1991;

Objective 4: To estimate in cross-country and time- series formats, and use bivariate correlation and production function type regressions, in order to understand the relationship between export and GDP growth of Kazakhstan since independence;

Objective 5: To estimate the regression equations of trade policy variables in order "to show that outward – oriented trade policies have been more successful in promoting growth" (Sarkar, 2008 p. 765) for CIS countries, including Kazakhstan;

With this in mind, this study not only provides a comprehensive analysis of the development of Foreign Trade activity and the economic development of Kazakhstan since the country's

independence, but it also fills a gap in the trade policy literature by focusing on the next hypotheses. These are:

Hypothesis 1:

There is a structural change in the economy associated with outward-orientation strategy for CIS countries (particularly for Kazakhstan's economy) since independence in 1991.

Hypothesis 2:

The positive influence on GDP of lagged exports for the period of 1999-2006 in comparison with 1993-1998 is related to the change of trade policies towards a more outward-orientation within CIS countries (and in particular within the Kazakhstani case) in the second considered period.

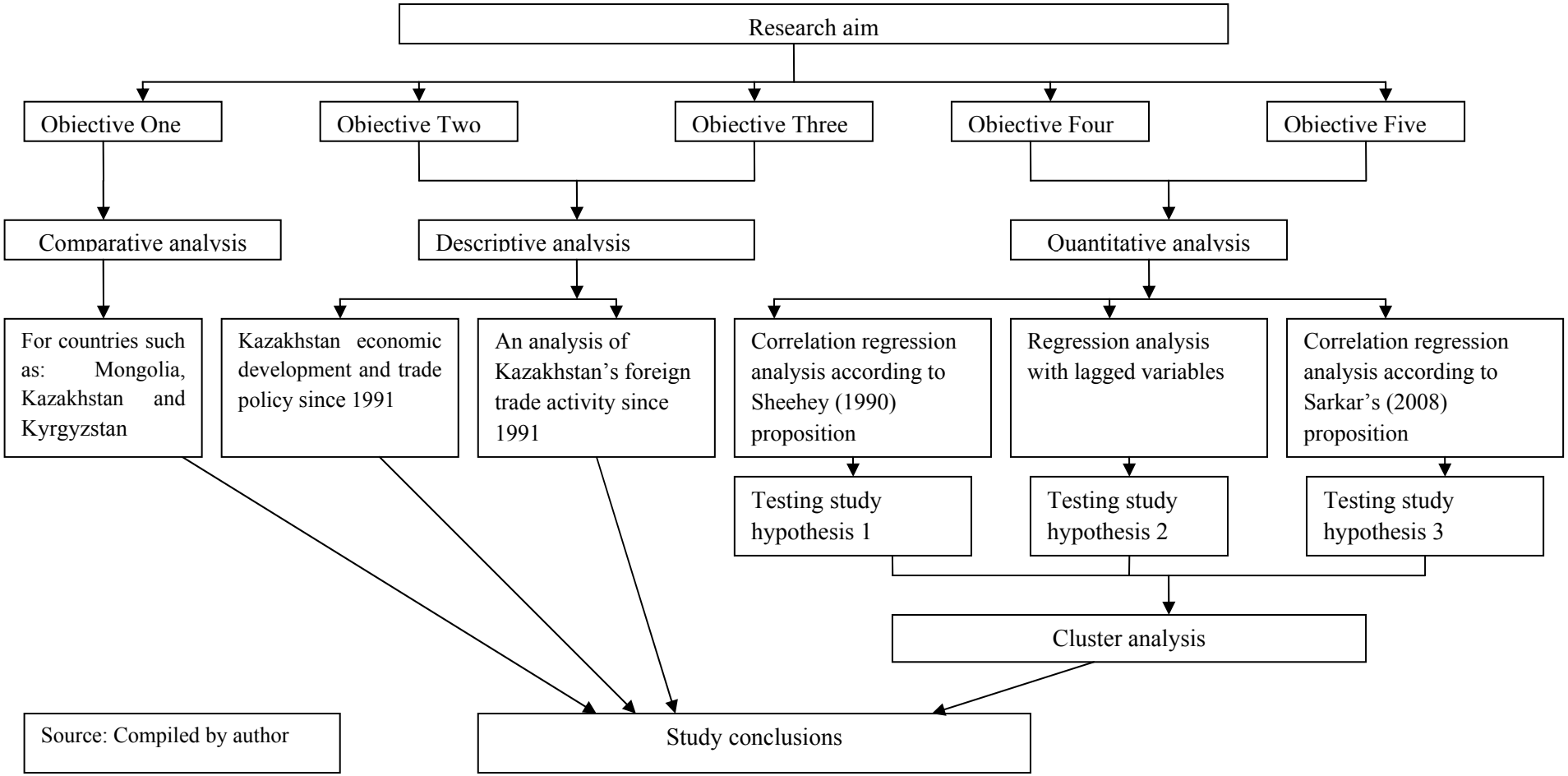
Hypothesis 3:

Increasing trade openness is directly related to the outcome of trade policies for Kazakhstan and other selected CIS countries.

According to the study purpose and above mentioned study objectives the research methodology for the current study was generated from the following diagram (see p.77).

Figure 3.1

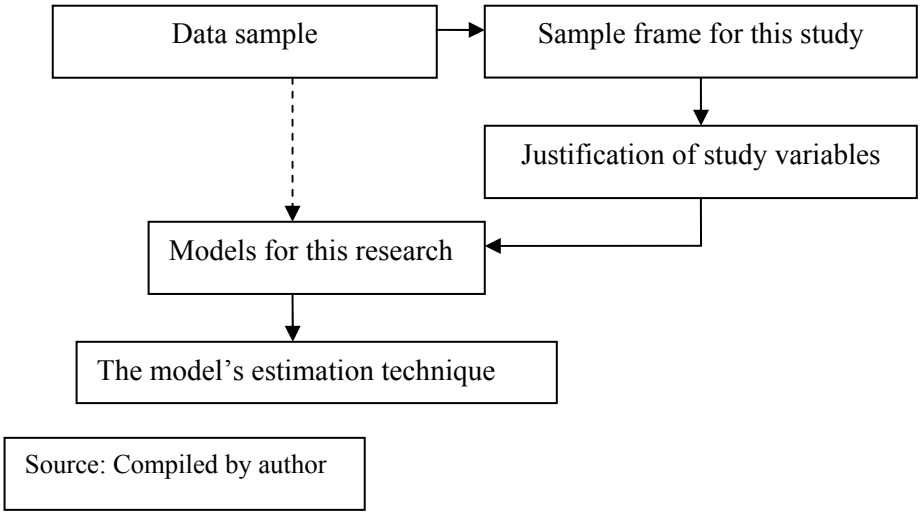
Diagram for Research Methodology



In turn the methodology for this quantitative study was generated as per Figure 3.2.

Figure 3.2

Methodology for quantitative study



3.2 Data Sample

Current research carried out an examination and analysis of the united statistical report of the Former Soviet Union countries. During the times of the centrally planned economy, Moscow centrally directed to other united republics - the "descended" plan targets. At the same time, the other united republics had to perform and sometimes even exceed the plans and targets that they were assigned. Consequently, the republics of the Former Soviet Union carried out separate independence statistical reports since the breaking up of this regime and gaining independence. Therefore, in this current research analysis has been undertaken of statistical data since 1991-1992 (whereby different countries of the Former Soviet Union proclaimed about their independence at that period of time). As we know, the Former Soviet Union countries occupy a huge territory on a geographic scale. In this connection, the author suffered difficulties to use elements of qualitative analysis, for example: to conduct interviews or surveys by questionnaire, etc.

Also the researcher applied to experts of JSC Centre of the Development of Trade Policy of the Republic of Kazakhstan which is an important entity responsible to the Ministry of Economy and Trade. Unfortunately, this company was created only on the 30th of June, 2006 and executive personal admitted that they do not own the full information since independence of Kazakhstan. Therefore, the major sources of data for this particular study came from the annual publications of the National Bank of Kazakhstan and the National Agency of Kazakhstan's Statistics such as: Annual Reports, Governmental Economic Review materials, etc., which focused on a number of important economic data, factual policies and issues. Also, other useful

sources of data for this study include: international publications - such as those of the Asian Development Bank (ADB), the World Trade Organization (WTO), the World Bank, the Internationally Monetary Fund (IMF) and the United Nations (UN). Within this framework, the study used quantitative analysis as the key conceptual approach in order to achieve the research objectives.

Furthermore, the sample frame of this current study includes the data of twelve countries of the former Soviet Union, and also five countries with a transition economy. This was necessary in order to demonstrate the Kazakh way of development and also to make comparative analysis, although all countries have transition economies. Also it should be noted that Kazakhstan and the other countries involved in this study have a rather short timeframe since gaining their respective independence, and this is why it was necessary to consider more widely than just Kazakhstan's economy. According to Pallant (2007) small samples cannot generalize with other samples, and hence, if the results could not generalize with the other samples, then they will have little scientific value. In order to gather necessary information for detailed analysis of the Kazakh economy, and to test for reliability of data, the author conducted internships in:

1) The National Statistical Agency of the Republic of Kazakhstan,
2) Ministry of economy and trade of Kazakhstan,
3) Ministry of Finance, and
4) Ministry of information and new technologies of the Republic of Kazakhstan.

The results from this particular part of the research will be useful in providing a framework for future policy developments in Kazakhstan as well as in other developing countries with similar socio-economic backgrounds. Consequently, in addressing the research objectives tests were conducted on collected data associated with a time series format. Moreover, the author conducted detailed analysis of previously published data, in order to understand the events occurring in the economies of the considered countries including Kazakhstan. Also, a series of tests were conducted to understand the various steps involved in the relationship between subcategories of GDP and economic growth using cross-section data (former Soviet Union countries) and time series data (period of time from 1992 till 2006).

On the basis of panel data of twelve CIS countries for the period of 1992-2008, correlation-regression analysis was conducted. In this case, the variables used were:

- the dependents variable-real GDP per capita in constant prices of 1991

and

- independent variables real export and import share in GDP, which is denoted as trade openness variable.

Also, this study used cluster analysis for seventeen countries with transition economies, in order to search for a relatively homogeneous group of countries. This current empirical analysis on the subject of trade openness and growth adopts a cross-sectional framework and neglects a time- series analysis.

3.3 Sample Frame for this Study

Based on the aforementioned works, various analyses have been conducted in extant research, and this study has provided pooled data. According to Halcoussis (2004), pooled data includes both cross-section and time series data together. He also emphasizes that if data sets contain observations from the same countries over time, then pooled data are termed panel data. For the purposes of this current study, the sample frame will consist of appropriately selected data of twelve post-Soviet countries, namely the Commonwealth of Independent States (CIS): Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Belarus, Moldova, Russia and Ukraine for the period 1992-2006.

The strong economic crisis at the beginning of the 1990s encouraged the team of Gorbachev to accept the marketing approach for economic development of the nation, thereby shifting towards a more market-led approach. This required changing the forms of ownership for the means of production. However, the economic crisis in the former USSR territory had an open form and became the major cause of the political breakup of the USSR. Consequently, since 1990, in terms of the former Soviet countries, the three countries of Lithuania, Estonia and Latvia initiated the setting-up of new states, independent of the Soviet Union. Thus, these three Baltic States declared their independence and officially walked out from the Soviet Union membership and were acknowledged by the International Community, in the capacity of sovereign states.

Following their independence, whereas there were 15 countries, only 12 of these former Soviet countries established the Commonwealth of Independence States. The dynamics of economic growth rates for these newly independent states for the period of 1992- 2008 are outlined in appendix A-3.1. All data regarding this current study relates to 1991 prices and were obtained from the United Nations Conference on Trade and Development online database. The approach of Sheehey (1990) was used for "production sectors which consist of two different divisions of GDP into major components". The first one applies to the end use and the next one on industrial source. Thus, as mentioned above the study applied government consumption, private consumption, gross capital formation and export to the end use categories following Sheehey's approach which was discussed in chapter two. Indeed, all indicators have been taken as a percentage relation on GDP share in constant price. Moreover, the study employed agriculture,

manufacturing, construction and service sectors in the industrial origin categories. All of these variables have been taken as a percentage of GDP share in constant price.

3.4 Justification of Study variables

As seen earlier in the literature review chapter, the empirical literature contains many studies highlighting the significance of the above named variables to economic growth (see Pradhan (2007), Benedictis and Tajoli (2007), Sarkar (2008), Awokuse (2008) etc). Also this study discussed in detail, various indicators in Chapters four and six, when the case of the economic development of CIS countries and particularly Kazakhstan was considered. Based on these discussions, this study now outlines some justifications for selecting these variables while discussing their expected contributions to the overall methodological approach.

3.4.1 Government consumption expenditure (GCE)

Truett and Truett (1982) explain government purchases of goods and services as:

> *"representing the expenditures for newly produced goods and services, including government investment expenditures, by all levels of government"*
> (Truett and Truett, 1982 p. 112)

In addition, Krugman and Wells (2006) demonstrated that the given indicators of the total purchases by federal, state, and local governments, includes everything from the military spending on ammunition, to spending on local public schools, for whatever the need may demand (Krugman and Wells, 2006 p. 162). Accordingly, Ram (1986) and Dowrick (1996) found that GDP growth was commonly uncovered as positively correlated with the growth rate of government, while as discussed in chapter 2.7 (see p. 66), Landau (1983), Barro (1991), Barro (1994) suggested that it is negatively correlated with the size of government consumption. Therefore, Dowrick (1996) displayed a significant positive link between GCE and growth of economy; and the correlation coefficient composed of 0.73. For the current study panel data on GCE and GDP growth has been used in 116 countries over the period 1950-1990. He also found that growth rates were rising in government consumption expenditures up to 12 percent of GDP.

A further study of interest was Mo (2007) who estimated the influences of GCE on real GDP growth rate. He discovered the actions of growth rate via three channels: a) total factor productivity; b) investment; and c) aggregate demand. As a result, his findings showed that all government expenditures have negative marginal effects on productivity and GDP growth except for government investment. In addition the dynamics of the Government consumption expenditure is important for this study and consequently, the data for the period of 1992-2008 are included in appendix A-3.2 for reference.

3.4.2 Private consumption expenditure (PCE)

Private consumption expenditure (PCE) is a significant element of governmental expenditure on GDP. By estimation of the Department of Statistics of Singapore (PCE, Department of Statistics Singapore, 1997), PCE includes the final purchases of goods and services by households.

Likewise, it includes the expenditure of state's residents abroad such as tourist expenditure but excludes the expenditure of non- residents of a country. According to the Department of Singapore Statistics (PCE, Department of Statistics Singapore, 1997 p.3) PCE can be "classified into the main groups of: food and beverages, clothing and footwear, rent and utilities, furniture and household equipment, medical services, transport and communications, recreation and education, other goods and services" which also add to residents' expenditures abroad, and subtracting non- residents' expenditures. This data is significant as it allows governments to include these important factors into GDP forecasting. Also of note, Johnsson and Kaplan's (1999) study generated a better understanding of the factors identifying private consumption in Sweden, and estimated a consumption function for medium term forecasting. Their study was based on the life-cycle hypothesis, and furthermore, the first consumption function was grounded on the life-cycle hypothesis as espoused by Ando and Moldigliani (1963). The significance of this study cannot be underestimated, as Johnsson and Kaplan's (1999) model was based on Hendry's general to specific approach. The model included disposable income, financial assets and the net housing stock as long run variables. Moreover, the results of estimation have shown a reasonable magnitude and long run coefficients of disposable income, financial assets and the net housing stock which comprised of 0.80, 0.16 and 0.04 respectively. Consequently, one percent of growth of disposable income was suggested would increase consumption by 0.80 percent. As a result, the study estimation shows that homogeneity constraint was satisfied. Therefore, growth in disposable income and wealth by one percent will increase the consumption as well.

3.4.3 Export

In terms of exports, this is one of the major trade policy variables used by governments and which have been used in many studies and consequently it will be considered in this study. With this in mind, as discussed in the previous chapters, exports can have a firm effect on economic growth. Krueger (1985), Balassa (1978), Bhagwati (1988), Khalafalla & Webb (2001), and Awokuse (2003) found that export growth has a propitious influence on economic growth because resource allocation and production efficiency can be enhanced by export expansion into foreign markets (see chapter 2.6.2). Similarly, according to Grossman and Helpman (1990) exports are the main body of reaching economies of scale which can enhance benefits through decreasing the cost of production. In addition, Lucas (1988) indicated that exports can evolve

externalities which increase labor productivity, and at least can assist in increasing economic growth. Moreover, Soderling's (1999) empirical investigation on Cameroon shows that exports are highly significant among using production function variables in the considered regression equation. Consequently, he concludes that 'openness improves technical efficiency' and thereby exports positively influence output (Soderling, 1999 p.24). Also he found that exports' efficiency depends on various factors. The author proposes that export performance and productivity complements each other.

At the same time, Helpman and Krugman (1985) confirmed that export growth has a feedback relationship with economic growth. Also, Helpman and Krugman (1985) and Xiao (2007) support that export growth leads economic growth due to better resource allocation and production efficiency. Hence, economic growth can be seen to enhance a country's competitiveness in international markets and consequently promotes export growth. Further evidence from Piazolo (1995) indicated that his work included regression, where he used annual total exports as a growth factor for research on South Korea (see p.47 of current study). Agalewatte (2004) also takes in annual (real) exports in the model as an independent variable to capture the effects of trade reforms on growth with an expected positive relationship. Taking into account these various studies, it is important to examine the case of Kazakhstan with a view to including this variable as an independent indicator which has influence on economic growth. With this in mind, Appendix A-3.2 demonstrates government consumption expenditures and export share in GDP dynamics at constant price for countries under consideration.

3.4.4 Gross capital formation

Capital has a significant place in industrialization as a stabilizer for the economy, and this is particularly true when attempting to achieve sustainable economic growth as a factor of production. Aside from raising economic growth, it can also create positive external effects (Piazolo, 1995). Based on Piazolo's work, this study uses the Post-Soviet countries' annual gross domestic capital formation (GCF) as a proxy of physical capital. This indicator is expected to have a positive effect on the long run timeframe. Hence, the GCF's coefficients in the multiple regressions are expected to demonstrate the contribution of government policy of industrial progress of growth since the independence of these countries.

3.4.5 Agriculture, Manufacturing, Construction and Service sectors

The concept of the economic significance of an industry is traditionally defined by the extent to which associated local industries respond directly and indirectly to changes in export sales by that particularly industry (Kay et al., 2007). On the other hand, as was mentioned in chapter 2.7 of the current study according to Hazari (1970), Sheehey (1990), Hwa (1988) and Hazari et al (2000) key sectors of an economy play an important role in initiating the process of economic

development and diversification of the industrial structure of the economy. So, a substantial part of investment should be made in key sectors of an economy and these investments should be country specific.

In the literature by Beyers (1976), Schultz (1976), Strassert (1968) the "key industries" of an economy are: manufacturing, construction, agriculture and the service sectors. The significance of the agriculture and manufacturing sectors to economic development were explained earlier through scientists' investigations on the current sphere of an economy. However, the construction sector has been recognized as well as being a key engine for economic growth (Wong et al., 2008). In addition, the industry's contribution varies during the economy progress and during the transforming from agricultural economy into urban industrial economy (Pietroforte and Gregori, 2006). Based on this, evidence by Strassmann (1970) showed that as the construction sector of an economy ensures the necessary infrastructure and productive facilities, consequently, it must grow faster than the economy as a whole. Furthermore, recent evidence from Anaman and Osei-Amponsah (2007) used the time series data based on Granger's causality test over the period 1968-2004. Using this data, the causality relations between the growth in the construction sphere and the growth in the macro-economy of Ghana were considered. As a result, they concluded that the construction industry was a major driver of economic growth in Ghana.

In this case, we can conclude that in recent years in the region of the former Soviet Union there has been a remarkable increase in the construction industry and the share of this sector approximately comprised of between 8% and 15% of GDP. Moreover, Fuchs (1965) called the economy of the USA as a 'service economy.' In this connection, he suggests that

> *"we are the first nation in the history of the world in which more than half of the employed population is not involved in the production of food, clothing, houses, automobiles, and other tangible goods" (*Fuchs, 1965 *p344).*

As a result, according to Fuchs' (1965) estimations, this sector (including trade, finance, insurance and real estate, personal, professional, business and repair services and general government) accounts for more than half of total employment and gives more than half of a nation's gross national product. On this note, the share of the service sector in terms of GDP for all post-Soviet countries since the beginning of their respective independence period range from between 30% and 40%, and this is extremely significant for this current study.

3.5 The models for this research

The statistical model to be used for this study includes all of the above types of variables. Consequently, this study uses a regression equation similar to the one used by Sheehey (1990) who studied the sources of export and growth. The common model takes the following form:

$$Y \text{ or GDP growth} = f(GCE, PCE, GCF, EXP, Agr, Man, Constr, Serv) \quad (3.1)$$

Where GDP growth is a dependent variable or regressand and explanatory variables or regressors are a share in GDP. The following relevant indicators are as follows:

GCE - government consumption expenditure share in GDP;
PCE - private consumption share in GDP;
GCF - gross capital formation share in GDP;
EXP - export share in GDP;
Agr - agriculture share in GDP;
Man - manufacturing share in GDP;
Constr - construction share in GDP;
Serv - service share in GDP.

Values for these variables have been collected for 1992-2006, for each of the 12 countries mentioned above (see section Data and Methodology in Chapter 1); this gives us the time–series aspect of the data. Overall, there are 180 values for GDP growth, and shares in GDP of the following variables such as: GCE, PCE, GCF, EXP, Agriculture, Manufacturing, Construction and Service. All used data were outlined in Appendix A-3.3. There are 12 countries for 15 years, and since the 12 countries are the same ones in every time period, these pooled data can be classified according to Halcoussis (2004), and are termed panel data. In addition this study analyses this data by running 12 separate time series regressions, one for each country as follows:

$$(1)\ GDP\ growth\ (Armenia) = в_0 + в_1 GCE + в_2 PCE + в_3 GCF + в_4 EXP + в_5 Agr + в_6 Man + в_7 Constr + в_8 Service + e \quad (3.2)$$

...

...

$$(4)\ GDP\ growth\ (Kazakhstan) = в_{28} + в_{29} GCE + в_{30} PCE + в_{31} GCF + в_{32} EXP + в_{33} Agr + в_{34} Man + в_{35} Costr + в_{36} Service + e \quad (3.3)$$

…

$$(12)\ GDP\ growth\ (Ukraine) = в_{100} + в_{101} GCE + в_{102} PCE + в_{103} GCF + в_{104} EXP + в_{105} Agr + в_{106} Man + в_{107} Costr + в_{108} Service + e \quad (3.4)$$

In Equations (3.2) through (3.4), the coefficients have all been given different subscripts to show that they can have different values. For instance, in Equation (3.3) it is $в_{28,}$ not $в_0$ as in Equation (3.2). Consequently, in Equation (3.4) it is $в_{100}$ not $в_{28}$ as in Equation (3.3). All of these show us that the intercepts can be different in each equation. The same is true with the slope coefficient. So, the slope coefficient for GCE has a different subscript in each equation to show that the slope coefficient can be different for each regression. The coefficients can be varied across space (across countries) since the set-up has a different regression for each country, but the coefficient remains the same across time. Also, it should be noted that each regression has its own error term *e* that has nothing to do with the error terms from the other regressions. As a result, for these particular regressions for the 12 considered countries, each regression is written as a sample size of 15 (there are 15 years of data for each country, and each country is considered separately). By estimating the regressions separately, there is an expectation that the twelve countries have nothing to do with each other. Also, we are undertaking an issue which affects one country to another and they don't influence one another.

The estimation techniques permit the use of all of the information in the countries' data to find the regression estimations. Instead of running separate time-series or separate cross-section regressions, there is a need to unify the data across time and country. The elementary technique was undertaken and it is assumed that the intercept and slope coefficients are the same over time and for all the countries. So, these linear multiple regressions have been explored in equation (3.5)

$$GDP\ growth = в_0 + в_1 GCF + в_2 PCE + в_3 GCF + в_4 EXP + в_5 Agr + в_6 Man + в_7 Constr + в_8 Service + e \quad (3.5)$$

In terms of the above mentioned equation (3.5), the sample size will be equal to 180, so all values of the data should be used in order to estimate the multiple regressions. Where GCF, PCE, GCF, EXP, Agriculture, Manufacture, Construction and Service are independent (explanatory) variables, $в_{0,}$ $в_{1,}$ $в_{3.....}$ $в_{8\ -}$ are parameters of linear multiple regressions and *e*- is a random quantity with some cumulative distribution curve, that corresponds with variety (random quantity) of Y (or GDP growth).

According to Hypothesis One "There is a clear structural change in the economy associated with outward- orientation strategy for CIS countries (including Kazakhstan's economy)". Or in other words, there is the presence of a relationship between GDP growth and the production sector which consists of two different divisions of GDP into the major components such as end use and industrial origin (Sheehey, 1990) associated with the outward - orientation direction of the countries' polices since independence in 1991. In addition, the correlation analysis has 15

observations for each country and this is limited due to a lack of coherent and available data.

There is an assumption that there would be an existence of partial correlation between independent variables. Also, some of these variables can have an effect not exactly in the current year. For instance, spending the government consumption expenditure in this year can affect the economic development in a future period, which shows a delayed effect to any dependent variable. Taking this into account, the study ran other regressions where there may be lagged independent variables regarding the GDP growth rate. In order to avoid a problem with partial correlation among independent variables, the study attempted to reduce the number of variables and take only two independent variables, such as export growth rate and government consumption expenditure share in GDP. In the capacity of the dependent variable, observations focused on previous analyses of gross domestic product growth rate.

Also, the study hypothesized that the positive influence on GDP of lagged exports for the period of 1999- 2006 in comparison with 1993- 1998 associates with the change of trade policies as more outward- oriented in CIS countries (including Kazakhstani case) on the second considered period. Consequently, the general regression model for current investigation is as follows:

$$Y \text{ or } GDP\ growth = f(GCE, EXP) \tag{3.6}$$

where, GDP- gross domestic product rate;

GCE- government consumption expenditure share in GDP;

EXP- export share in GDP

In addition, the study attempted to analyze the current data through running 12 separate time series regressions, one for each country as follows:

$$(1)\ GDP\ growth\ (Armenia) = в_0 + в_1 GCE + в_2 EXP + e; \tag{3.7}$$

$$(2)\ GDP\ growth\ (Azerbaijan) = в_3 + в_4 GCE + в_5 EXP + e; \tag{3.8}$$

$$(3)\ GDP\ growth\ (Georgia) = в_6 + в_7 GCE + в_8 EXP + e; \tag{3.9}$$

$$(4)\ GDP\ growth\ (Kazakhstan) = в_9 + в_{10} GCE + в_{11}\ EXP + e; \tag{3.10}$$

$$(5)\ GDP\ growth\ (Kyrgyzstan) = в_{12} + в_{13} GCE + в_{14} EXP + e; \tag{3.11}$$

$$(6)\ GDP\ growth\ (Tajikistan) = в_{15} + в_{16} GCE + в_{17} EXP + e; \tag{3.12}$$

$$(7)\ GDP\ growth\ (Turkmenistan) = в_{18} + в_{19} GCE + в_{20} EXP + e; \tag{3.13}$$

$$(8)\ GDP\ growth\ (Uzbekistan) = в_{21} + в_{22} GCE + в_{23} EXP + e; \tag{3.14}$$

$$(9)\ GDP\ growth\ (Belarus) = в_{24} + в_{25} GCE + в_{26} EXP + e; \tag{3.15}$$

$$(10)\ GDP\ growth\ (Moldova) = в_{27} + в_{28} GCE + в_{29} EXP + e; \tag{3.16}$$

(11) GDP growth (Russia) $= в_{30} + в_{31}GCE + в_{32}EXP + e;$ (3.17)

(12) GDP growth (Ukraine) $= в_{33} + в_{34}GCE + в_{35}EXP + e.$ (3.18)

In Equations (3.7) through (3.18), the coefficients have all been given different subscripts to show that they can have different values. For instance, in Equation (3.10) it is $в_{9,}$ not $в_{30}$ as in Equation (3.17). Consequently, in Equations (3.8) it is $в_{3,}$ not $в_{18}$ as in Equation (3.13). All of these manifest that the intercepts can be different in each equation. The same is true with the slope coefficient. So, its coefficient for GCE has a different subscript in each equation to show that the slope coefficient can be different for each regression. The coefficients can be varied across space (across countries) since we have set up a different regression for each country, but the coefficient remains the same across time. Also, it should be borne in mind that each regression has its own error term *e* that has nothing to do with the error terms from the other regressions. As a result, for the given regression equations for the 12 considered countries, the study can write each regression a sample size of 14 (there are 14 years of lagged data for each country, and each country is considered separately). Also, by estimating the regressions separately, there is a supposition that the twelve countries have nothing to do with one another.

The study also undertook an issue concerning a particular country which does not affect the others and vice versa. Additionally, according to Sarkar (2008), increasing trade openness often reflects the success of the trade liberalization policies. In that case, the study used trade (export plus import) as a percentage of GDP (TD) as a measure of trade openness.

$$Y \text{ or } GDPPP = f(TD) \quad (3.19)$$

where, GDP PP- Gross domestic product per capita;

TD- export and imports shares in GDP;

The relevant data are collected from the United Nations Indicators published by the United Nations Conference on Trade and Development online database. Based on the availability of data, a chosen sample was selected of twelve transition economies of the Commonwealth of Independent Space countries for the period 1992-2008, which are presented in an Appendix A-3.4. In addition, it was hypothesized that increasing trade openness is directly related to the outcome of trade policies for Kazakhstan and other CIS countries for 1992-2008.

The next step of the analysis was to run cluster analysis for 17 former post socialist countries, including the twelve Commonwealth of Independence States: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Belarus, Moldova, Russian Federation and Ukraine. Further, the other five former post-socialist countries are: Mongolia,

Serbia and Montenegro, Croatia, Bosnia and Herzegovina and Yugoslavia. The current empirical work on the subject of trade openness and growth adopts a cross- sectional framework and neglects time- series analysis. Furthermore, the techniques of cluster analysis in the opinion of Everitt (1986) are useful tools for data analysis in several different situations such as:

- to investigate for natural classification among the data;
- to facilitate the specification of a large data set;
- to compile hypotheses to be tested on future samples and for several other purposes which will come later.

In addition, Manly (1986) proposed two methods of cluster analyses. The first one was a hierarchic technique which produces a dendrogram. This approach begins by estimating the distances of all considered countries in the case of our study. Then, groups are formed by a process of agglomeration. After that, close groups of countries are joined together gradually until such time that all countries are unified as one. There are several ways of assessing the agglomeration and detection of close groups. According to Manly (1986) the primary approaches are as follows:

1. nearest neighbour linkage where groups are joined at the given level of distance if one of the individuals in one group is that distance or closer to at least one individual in the second group;
2. furthest neighbour linkage where two groups unify only if the most distant members of the two groups are close enough together;
3. average linkage where two groups merge if the average distance between them is small enough.

3.6 The model's estimation methodology

3.6.1 Bivariate correlation

Correlation is a key indicator which describes relations between variables. This definition initially was reportedly used by Galton in 1888 (in Eliseeva et al, 2006). The correlation between pair variables was called "pair (bivariate) correlation", and the correlation coefficient varies between the limits from -1 to +1. Correlations demonstrate how corresponding variables can simultaneously be changed in value, in terms of two numerically valued random variables. If the variables change in the same direction, the correlation is termed a direct (or positive) correlation. If variables are in opposite directions, the correlation is called an indirect correlation or negative correlation (Salkind, 2008). In addition, Salkind's view on the interpretation of the value of a correlation coefficient is represented in the following table:

Table 3.1

Interpreting a correlation coefficient

Size of correlation	Coefficient General Interpretation
0.8 to 1.0	Very strong relationship
0.6 to 0.8	Strong relationship
0.4 to 0.6	Moderate relationship
0.2 to 0.4	Weak relationship
0.0 to 0.2	Weak or no relationship

Source: Salkind, N. J., (2008)

Kinnear and Gray (2006) pointed out that, using the Spearman correlation is not only confined to ordinal data but it can be used as a measure of the strength of association between two measured quantitative variables. Thus, in this current study, Spearman's rank correlation is used for estimating the measurement of effect size. According to Kremer and Putko (2008), the advantages of Spearman's correlation coefficient indicate that the coefficient computing does not require any normal probability of variables and linear relationship between them. This is a distinct advantage during data calculations for the data in Table 3.20 below, where Spearman's rank correlation coefficient r_s can be calculated according to the following formula:

$$r_s = \frac{6\sum d^2}{1 - n(n^2 - 1)} \qquad (3.20)$$

Here, *n* is the number of pairs ranked and *d* is the difference between corresponding ranks. The sigma sign ∑ denotes that we should sum the squared differences in rank.

3.6.2 Multiple regressions

According to Hardy and Bryman (2004) regression analysis is frequently used to test the hypothesis concerning the presence of causal effects in order to evaluate the strength of those effects and measure the strength of effects across groups. The main goal of multiple regressions (the term was first used by Pearson, 1908) is to study more about the relationship between several independent variables and a dependent variable. Both of these are important for this particular study as the study hypothesis is seeking to understand the respective nature of the following: there is a clear structural change in the economy associated with outward-orientation strategy for CIS countries (including Kazakhstan's economy). With this in mind, Williams (1997) defined a multiple regression as 'a regression model in which more than one independent variable is used to predict the dependent variable.' Thus, as was mentioned in the previous chapter, it is appropriate to use a multiple regression technique as a tool to explore the

relationship between one dependent variable - GDP growth rate – and a number of independent variables such as: GCE, PCE, GCF, EXP, Agriculture, Manufacturing, Construction and Service sectors.

3.6.3 Appropriateness of sample size in relation to generalizing results

In terms of considering the appropriate size of the data sample, Pallant (2007) suggests that there should be a minimum sample size in order to be able to generalize findings. Here, this would indicate that a small sample's results cannot generalize with other samples. For the purposes of this study, if the study results could not be generalized with the other samples, then they would have little scientific value. Nevertheless, there are different opinions regarding the number of cases which are required for multiple regressions. Pallant (2007) quoted that Stevens, Tabachnick and Fidell focused on the sample size of regression as a comparison for his work. In this connection, it shows that Stevens, Tabachnick and Fidell's (1983) formula was more effective a method for calculating sample size requirements. For the sample size (N), this formula states that:

$N > 50 + 8m$, where m is the number of independent variables.

3.6.4 Multicollinearity

Multicollinearity is a highly independent correlation for explaining variables, and Kvanli et al (1996) noticed that in multiple regression models, it was desirable for each independent variable X, to be highly correlated with Y, but it was not desirable for the X's to be highly correlated with each other. In business applications of multiple linear regressions, the independent variables typically have a certain amount of pair-wise correlation (usually positive). Additionally, extremely high levels of correlation between any pair of variables can cause a variety of problems. Consequently, the sample correlation between X_1 and X_2 can be written in the following form:

$$r = \frac{\sum x_1 x_2 - (\sum x_1)(\sum x_2)/n}{\sqrt{\sum x_1^2 - (x_1)^2/n}\sqrt{\sum x_2^2 - (\sum x_2)^2/n}} \qquad (3.21)$$

It is noticeable in the data set that nearly every time, as X_1 increases, so does X_2, also X_1 and X_2 are highly correlated. As a result, these data are understood to contain a great deal of multicollinearity.

3.6.5 The Durbin-Watson Statistic and Testing of Auto Correlation

According to Halcoussis (2004) auto correlation (also called serial correlation) occurs when the error term observations in a regression are correlated. The most common type of auto correlation is first- order auto correlation, and it is usually present when an observed error tends

to be influenced by the observed error that immediately proceeds in the previous time period. This can be stated as follows:

$$e_t = ce_{t-1} + u_t, \quad (3.22)$$

Where,

e_t - error term from a regression in the current time period;

e_{t-1} - error term from the preceding time period;

c – co-efficient of auto correlation.

Thus, the Durbin-Watson statistic is related to the auto correlation coefficient *c* approximately, the Durbin-Watson statistic is equal to *2-2 c*. If there is no auto correlation, then *c* comprises of *2*. Another possible case of first order positive auto correlation occurs when ***c*** is very close to *+1*, and this would suggest that the Durbin-Watson statistic is equal to zero, and consequently, it provides a positive auto correlation. When c equals -1, the Durbin-Watson statistic will be equal to *4* and here exists the negative auto correlation. On the other hand, the Durbin-Watson test requires two critical values which are referred to as: d_U ('d-upper') and d_L ('d-lower') in the table of Critical values for the Durbin-Watson statistic.

3.6.6 F test for independent variables

The F-test is a useful test when testing for the null hypothesis. For example, where the hypothesis has more than one slope coefficient, the t-test should be used only on the null hypothesis involving one slope coefficient and F-tests should be designed to test the different types of joint hypotheses. In addition, the null and alternative hypotheses can be written as below in order to calculate the F- test.

$$H_0: \quad B_1 = B_2 = B_3 = \ldots = B_k = 0$$

H_A: At least one of these B's is not zero (3.23)

Where, *k*- is the number of independent variables in the regression.

In terms of this current study, we suppose that if the null hypothesis is true, then the dependent variable such as GDP growth rate in relation to all considered variables for the period of 1999-2006 seems the same as the period 1992-1998. So, there is a clear structural change in the economy associated with outward-orientation strategy for CIS countries (including Kazakhstan's economy)

This alteration can be tested through the Chow test which we mentioned earlier. Furthermore, Halcoussis (2004) notes that if the regression is to have any value in explaining why the dependent variable takes the values that it does, then, it should be able to reject the null hypothesis given in equation (3.24). The F-statistic for the null hypothesis can be calculated according to Adams and Juleff (2003) as:

$$F = \frac{R^2/(m)}{(1-R^2)/(n-m-1)} \tag{3.24}$$

Where *m*- number of independent variables and *n*- number of observations.

If *F*- statistic is larger than its critical value, then the null hypothesis is rejected. The critical value is found from *F*-distribution table. If t-statistic has one number for degrees of freedom, so *F*-statistic has two numbers for two different degrees of freedom which are associated with it. The two different degrees of freedom in the F-statistic are as follows:

(1) *m*- number of independent variables in the regression;

(2) *n-m-1*- the regular degrees of freedom for the regression.

3.6.7 R^2 and adjusted R^2

According to Halcoussis (2004), since the null hypothesis where the dependent variable such as GDP growth rate in relation to all considered variables (GCE, PCE, GCF, Agr, Man, EXP, Serv, Constr) for the period 1999-2006 seems the same as the period 1992-1998 when all of the slope coefficients are zero, it is often easily rejected, even at a 1% significance level. Rejecting this particular null hypothesis does not mean the regression fits the data well, and here, the suggestion is to measure the regression's goodness of fit. The most common measure of goodness of fit is a coefficient of determination and is denoted by R^2. On a similar note, Hardy and Bryman (2004) interpreted R^2 as a measure of quality of a multiple regression analysis or the theory that motivates it. The measure of goodness fit, R^2 is then defined as the ratio of regression sum of squares *(RSS)* to the total sum of squares *(TSS)* (Barrow, 2005), i.e,

$$R^2 = RSS/TSS \tag{3.25}$$

The larger the R^2 the better the model's goodness of fit.

As Halcoussis (2004) pointed out, the explained sum of squares can never be larger than the total sum of squares, and both are always positive. So, it can be written as

$$0 \leq R^2 \leq 1 \tag{3.26}$$

According to Barrow (2005) the value of R^2=1 indicates that all sample observations lie exactly on the regression line (equivalent to perfect correlation). If R^2= 0 then the regression line is of no use at all, as X does not influence Y (linearity) at all and it is poor at explaining movement in

the dependent variable. Moreover, based on Halcoussis (2004), R^2 has a serious problem as a goodness of fit measure. According to his opinion, if any new variable is added to a regression, R^2 will increase, even if the new independent variable is a random number that has nothing to do with the dependent variable. For this reason, it is often preferred to measure the 'goodness of fit' by a quantity generally called the 'adjusted R^2, and defined as:

$$\check{R}^2 = R^2\text{-}(\frac{n-1}{n-k})(1\text{-}R^2) \quad (3.27)$$

In addition, the adjusted R^2 gives some idea of how well this model was generalized. In that case, we would also like its value to be the same or very close to the value of R^2

3.6.8 Cluster analysis techniques

The cluster analysis provides a division of objects which is able to move in and out of groups in the various stages of analysis. In other words, countries with similar indicators are joined, scattered to several groups and so on. Based on Manly's (1986) point of view, the process goes on over and over until stability is achieved with a predetermined number of groups. So, in this current study, it has been decided a hierarchic technique should be used which produces a dendrogram with group average linkage. "Dendrogram is a two-dimensional diagram which shows the integration or divisions made throughout each subsequent stage of the analysis" (Everitt, 1993). The average linkage between group methods is termed according to Nourusis (1990) -UPGMA (unweighted pair- group method using arithmetic averages), and he defines it as estimating the distances between two clusters as the average of the distances between all pairs of cases in which one member of the pair is from each cluster. Moreover, Everitt (1993) makes out that the distance between two clusters is defined as the average of the distances between all pairs of considered countries that are made up of one country from each group. This method acts directly on the proximity matrix and does not need access to the original variable values of the countries as we discuss in our case. The analyses of these aforementioned data are presented in chapter four.

Conclusions

To achieve the study objectives, this chapter initially explored various methodologies used in previous studies and then developed a statistical model for the current study for the case of Kazakhstan. Furthermore, the study undertook a justification of each variable by using techniques and approaches outlined in extant research, and various discussions were embarked upon in this chapter. The multiple regression models with 8 independent variables have been used at first, and then in order to avoid the existence of partial correlations between independent variables, the number of variables has been reduced. In addition, estimating the regression equations have been used separately for all countries of the Commonwealth of Independent

States since 1992 to 2006. Thereafter, the overall multiple regression equation for the above mentioned countries was considered. Taking into account that some variables can have an effect not exactly in the current year and they will have an effect on the dependent variable in the future period, the study lagged independent variables regarding the GDP growth rate, and other regression equations were considered and run. Also, in this current study, panel data analysis was undertaken from 1992-2008 in order to identify the relationship between trade openness and growth. Finally, the study considered the methodological approach of cluster analysis for seventeen countries of the post-communist regime, and the results of the above will be discussed further in the chapter seven of this study.

CHAPTER FOUR

AN EXAMINATION & ANALYSIS OF ECONOMIC REFORMS IN CENTRAL ASIAN COUNTRIES SINCE 1991 (Mongolia, Kazakhstan, Kyrgyzstan)

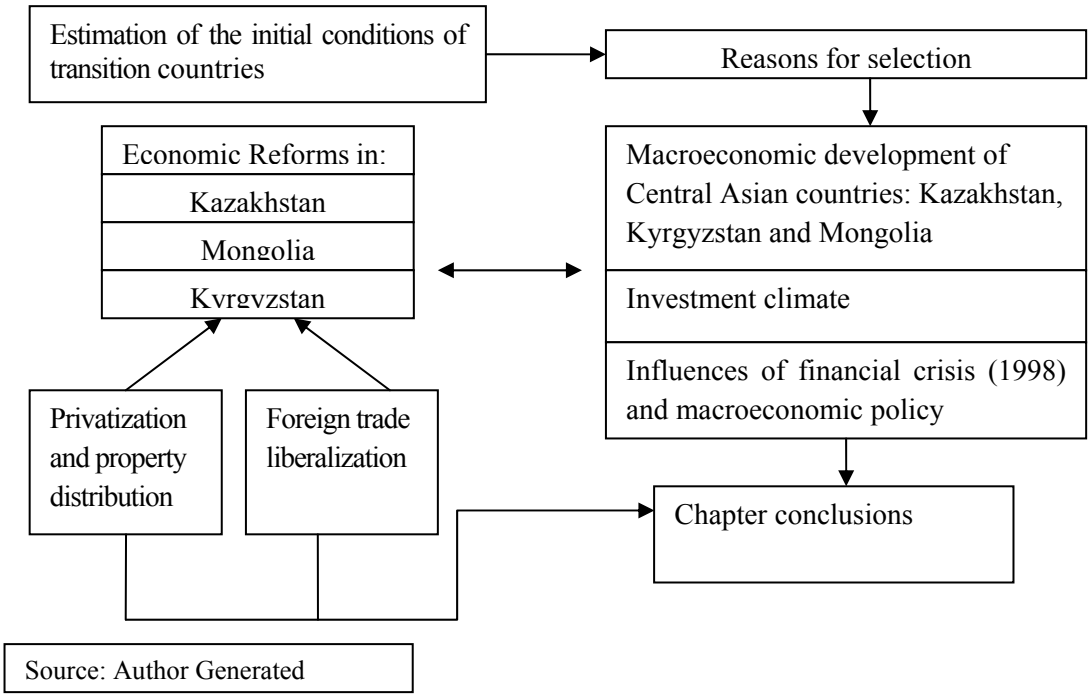
4.1 Introduction

Following perestroika, the 1990s saw a transformation from a centrally planned economic system in the former Soviet Union societies, towards a transition status of a market-based economy. This time was aggravated with many mistakes being made by emerging soviet governments during these economic transformations and this was clearly a period of complex choices for the incumbent governments (Kolodko, 2000). Until now there has been no solution for choosing the most efficient way of development of the former centrally planned economies and it appears rather unclear in terms of which economic model is the most preferable. Indeed, the complexity doesn't stop there, as nations seek direction in achieving appropriate political and economic reforms for the new and changing world. Hence, according to Lockshina (2005) the situation is becoming increasingly stark between rich and poor, developed and developing countries. With this in mind, there is actually no such universal economic, industrial and foreign trade policy that has been designated for the developing countries. From this view, the countries of Mongolia and Kyrgyzstan have been chosen as examples to examine, as they are locationally close, they have similar natural conditions and similar resources as Kazakhstan. Furthermore, these countries were in a similar situation and were exposed to similar political and economic conditions prior to and at the initial stage of the reformation process. Consequently, the structure of this section is outlined in Figure 4.0

From Figure 4.0, this chapter describes the initial stage of the reformation period in the three countries of Kazakhstan, Kyrgyzstan and Mongolia, in order to examine and assess the stages of reforms in Kazakhstan (this will be described in the following sections). Furthermore, this examination and analysis will develop an understanding of the development of the Kazakh national economy during the testing of the hypotheses for this study.

Figure 4.0

Outline of Results and Discussion for Research Objective (1)



4.2 Estimation of the initial economic conditions

At the beginning of the 1990s, many of the former soviet countries (transition economies) were experiencing an economic crisis within their respective borders. These countries were going through a reform process, which was unprecedented for socialist countries and it included drastic decreases in GDP, high unemployment rates and uncontrollable inflation (Lee & Jeong, 2006). Market reforms and a breakdown of the command-control system of economic management was being experienced by many of the post socialist countries as the main condition of reconditioning of social life and overcoming the economic lag from Western countries. The desire to rapidly liberate these economies and to break free from the centralized planning stimulated the new authorities to start a large-scale liberalization of prices and the development of foreign and domestic trade. In addition, the effects of economic reforms turned out to be not completely adequate. Single stage liberalization and decentralization of economic activity - without developed market infrastructure, was causing regression of production and reduced standards of living of the general population. It also complicated the financial stabilization of the national economy during this early liberalization period. This impact caused apprehension from the respective populations of these former Soviet States from excessive radicalism and there was limited acceptance of revised governmental policies. Hence, the pace of change, market relations and institutional reforms were country specific, which resulted in the process of transition and progress of each market being different in each transition economy (Nuti, 2010).

Notably, when comparing the initial stage of reforms of some of these countries with transition economies, we can notice that the economic regression in Central and Eastern Europe countries did not last long and was comparatively, not too deep. Lee & Jeong (2006) suggested that the economic situations of transition countries vary, and the impact is not fully felt for up to ten years later. On the other hand, countries including Czech Republic, Hungary and Poland were seen to be achieving substantial success in their respective market reforms after overcoming their initial transitional instability. Moreover, De Melo et al (1997) and Berg et al (1999) highlighted that, in order to achieve economic growth, it was essential to carry out market reforms while supporting a macroeconomic stability. In addition, Fischer and Sahay (2000) and Falcetti et al (2000) stressed the significance of stabilization of policy during the transition period, while the IMF (2000) emphasized that countries with low inflation rates tended to achieve higher growth rates. In this connection, Lee and Jeong (2006) estimated that initial conditions and economic policy influenced economic growth. Thus, they believed that if the initial conditions were progressive, then market reforms would likely succeed, and the conditions would provide a stable foundation for economic growth. The following mathematical model was created:

$$EG = f(IC, EP)$$
$$EP = g(IC)$$

Here, *EG* - economic growth, *EP*- economic policy, *IC*- an initial condition and economic growth stands as a dependent variable, where the other two are independent variables (Lee& Jeong, 2006). In observing these estimations, initial conditions are represented by variables such as repressive inflation (RI), CMEA trade dependency (CMEA-TD), duration of planned economy (DPE), urbanization ratio (UR), pre-reform industrial distortion (PRID), economic growth rate of five years prior to reform (GRBR), pre-transition foreign debt (FDPT), dominance of agriculture (DA), openness (OE) and secondary education enrolment rate (see the works of De Melo et al (1997) and Fischer and Sahay (2000); quoted in Lee and Jeong, 2006 p.244). Furthermore, the given research carried out a cluster analysis, where grouping variable is the initial conditions of transition economies. According to this grouping of cluster analysis, the first group indicated higher urbanization ratios, lower repressed inflation rates, lower CMEA trade dependency rates, lower dominance of agriculture, and higher income per head before reform than the countries belonging to group two. So, by estimation of Lee and Jeong (2006 p.245) the first group countries were: Belarus, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Poland, Russia, Slovak, Slovenia, which had better initial conditions than the countries in the second group: Albania, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Lithuania, FYR Macedonia, Moldova, Romania, Tajikistan, Turkmenistan, Ukraine, Uzbekistan.

4. 3 Reasons for selection of study countries

Against this backdrop, this chapter analyses the initial stages of reforms in the economies of Kyrgyzstan and Mongolia. So, Kyrgyzstan and Mongolia were chosen to be compared to Kazakhstan due to the following reasons:

1. All these countries were located in the Central Asian continent.
2. These countries were close to each other, Kyrgyzstan is in the south-east of Kazakhstan and Mongolia is in the east. Besides, they have similar mentalities and social cultural development.
3. They have similar climatic conditions and they have agricultural orientation (Mitrofanskaya, 1999; Pomfret, 2007(a,b)) in the development of the economy during the period of the Soviet Union.
4. They supply similar exportable raw materials. Kazakhstan exports hydrocarbon products, ferrous and nonferrous metals, minerals and agricultural products, while Kyrgyzstan also exports nonferrous metals and non-metal mineral products, cotton, products of export (Dabrowski & Antczak, 1995, Mogilevski & Tochitskaya, 2005, Pomfret, 2009) and in turn Mongolia exports mineral products and agricultural products (Lghava, 1994).
5. All the above-mentioned countries are also similar as per their initial stage of reforming their respective economies (Mogilevski & Tochitskaya, 2005; UNDP, 2005; Minton, 2006; Pomfret, 2007(b); Nuti, 2010). However, after several years of development, each of these countries achieved different results in their economic growth which will be reported on.

It should be pointed out that none of the central-eastern European countries experienced such a regression of production and population income as the CIS countries including Kazakhstan, Kyrgyzstan and Mongolia. These countries had officially recognized programs on economic reforms as per those outlined in the "Washington consensus."[2]

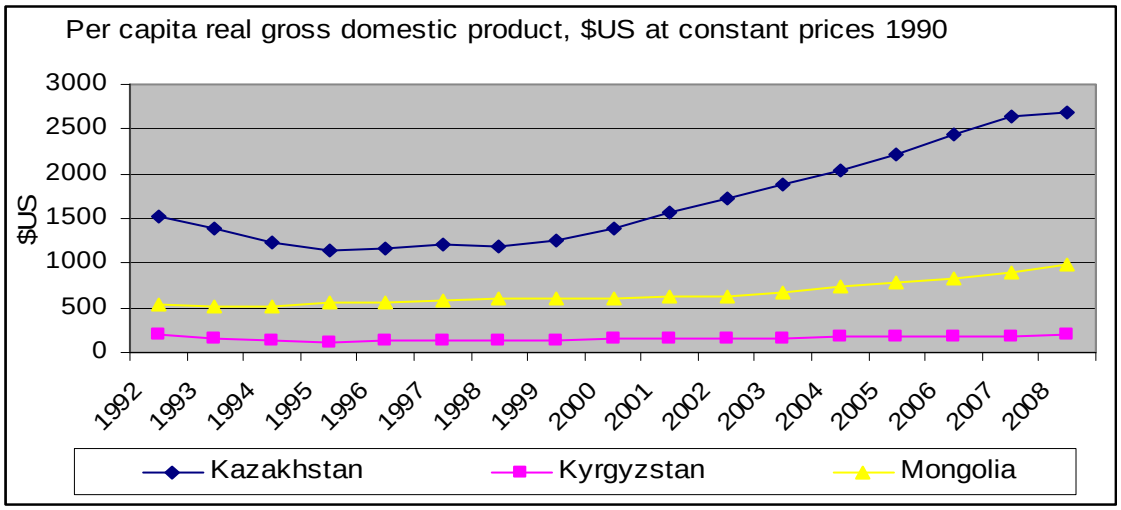
[2] The Washington consensus- it is a type of macroeconomic policy. The number of economists recommends it to accept countries which suffer financial and economic crisis. The given type of consensus includes 10 recommendations (http://en.wikipedia.org/wiki)

4.4 Macroeconomic Development

The orientation of practical reforms in transition economies has become gradual, in terms of shifting from a transition to a mixed market economy, as many hang-on to the historical systems of the country within its respective economy. During the early stage of reforms, all the countries weakened the role of the state regulation. Figure 4.1 illustrates the per capita real gross domestic products (in US dollars) at a constant price of 1990.

Figure 4.1

Per Capita Real GDP, at Constant 1990 Prices ($US)



Source: Compiled from United Nations database, 2009 (a)

Here, Mongolia and Kazakhstan demonstrate significant growth; however, Kyrgyzstan is clearly lagging behind in their GDP per capita real growth figures. In addition, according to the monetarism concept, the concept did not consider the peculiarities of the impact on former socialist countries. As a result, when reviewing the exact transformation actions at the national level, it can be noted that there are specific differences in the level of economic liberalization, in the privatization processes, and in the conditions and approaches for attracting foreign capital. There are also differences in the depth of the regression and in the time of recovering from crisis. Based on the statistical data of table 4.1, we can conclude that the economy started growing in 1994 in Mongolia, while other CIS countries did not show any signs of economic improvement. The situation was even worse in Kazakhstan and Kyrgyzstan over this period. Nevertheless, macroeconomic stabilization policies directed at limiting inflation, reducing the government deficit, and maintaining a stable real exchange rate also contributed to an improved investment climate (UNDP, 2005 p.46). In relation to Mongolia, the real GDP in Kazakhstan and Kyrgyzstan reduced by more than double in comparison with 1990. The steady recovery of the economy in Kazakhstan was noticeable and significantly grew from 1999, which was mainly achieved through agriculture and the production rate was increased by 28.9% (Smailov, 2000). Indeed, the agricultural sector is a major part of Kazakhstan's economy with between a

quarter and a half of the population depending upon it (Pomfret, 2009). During the economic reforms in Kazakhstan since independence in 1991, the agricultural policy of the country was reoriented towards a market based economy. There were legal and organizational conditions created, for the functioning of agricultural organizations which existed with various forms of ownership. It was understood that the development of the agricultural sector was being considered as a high priority sector for the country and significant resources were made available and policies developed, to assist producers in production and exporting. Therefore, there have been developed and approved programs as per the order of the President, e.g.

> "*State agricultural program of development of rural territories of Kazakhstan during 2004-2010."(Strategic initiatives, 2004*)

Also, there was a further program initiated to promote the agricultural sector through the:

> *"Support of the rural formations during 2003-2005."(ibid)*

On this note, table 4.1 outlines the changing levels of GDP of these three developing nations throughout the period from 1991 to 2008. Here, the levels of growth vary significantly, with Kazakhstan leading the charge with a significant positive shift over this important transition period.

Table 4.1

Dynamics of the gross domestic products (gain in addition to the previous year)

	Years																	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Kazakhstan	-11.8	-5.3	-9.2	-12.6	-8.2	0.5	1.7	-1.9	2.7	9.8	13.5	9.8	9.3	9.6	9.7	10.6	8.5	3.3
Kyrgystan	-5.0	-15.3	-16.4	-26.0	-5.7	-6.6	-9.0	2.1	3.5	5.2	5.3	0.02	7.0	7.0	-0.2	2.7	8.2	7.6
Mongolia	-9.2	-11.6	-3.0	2.1	6.3	2.4	4.0	3.5	3.2	1.1	1.1	4.2	6.1	10.8	7.0	8.6	9.9	8.9

Source: Compiled from United Nations database, 2009(a)

4.5 Investment climate

In order for a country to have sustainable economic growth, it is necessary to establish a favorable investment climate. This section of the study compares the investments and savings indicators of Kazakhstan, Kyrgyzstan and Mongolia, and on examining the data outlined in Table 4.2, it can be gleaned that Kyrgyzstan has the lowest indicators of gross capital formation among these countries. The gross capital formation average rate for the eleven year period is 18.2% as a percentage of GDP. Mongolia has the highest investment rate of 34.5%, which is striking, as Kyrgyzstan and Mongolia are countries which have the same resources and they have similar problems regarding water transportation (table 4.2).

Table 4.2

Gross capital formation (as % from GDP)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Average between 1996-2005
Mongolia	29.9	28.1	35.2	37.0	36.2	36.1	32.2	38.0	36.5	35.5	34.7	34.5
Kazakhstan	16.1	15.6	15.8	17.8	18.1	26.9	27.3	25.7	26.3	27.5	31.0	21.7
Kyrgyzstan	25.2	21.7	15.4	18.0	20.0	18.0	17.6	11.8	13.8	20.4	17.4	18.2

Source: World Bank databases (see Light, 2007)

Several issues should be borne in mind here; firstly, both of these countries have comparatively small and relatively open economies; secondly, they are members of the WTO and thirdly, they have comparatively small populations.

An unattractive investment situation in Kyrgyzstan led to low savings rate in the banks and the other financial institutions. Table 4.3 shows that Kyrgyzstan's lowest domestic savings are comparatively similar with other countries of the CIS. The Kyrgyz saving rate was minus 8.3% in 2007, and it sharply ascertains differences comparing with Mongolia or even with Kazakhstan's indicator, where this indicator is 23.0 and 28.5 respectively.

Table 4.3

Gross domestic savings (as % from GNI)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Mongolia	22.2	33.7	22.3	23.2	21.0	18.6	11.3	18.1	24.7	25.9	28.2	23.0
Kazakhstan	15.1	13.3	11.4	19.8	25.9	26.3	27.1	24.8	27.1	29.1	30.8	28.5
Kyrgyzstan	-1.2	13.5	-6.0	3.4	14.1	17.9	14.3	5.2	4.2	0.3	- 9.7	-8.3

Source: Compiled from IMF, 2009; UN, 2009(a); and World Bank, 2011

Such a savings rate is approximately half the level of the average rate of developed countries. For example in the USA, this indicator reached 13%, in the UK 15%, and in Japan 28% (IMF, 2008). Also, it is noticeable that these indicators are calculated as a percentage of GDP, and not of GNP in developed countries.

Emphasizing the importance of considering the foreign direct investments (FDI) experts Atamanov, Bondarets, Hasanov, Kuklin, Makenbayeva, Mogilevsky, etc state (UNDP, 2005),

> *"Nevertheless, new trends in regional FDI are apparent: Kazakhstani investments to Kyrgyzstan are growing rapidly. Kazakhstan has become the fourth largest source of investments going mainly into the banking sector and tourism" (UNDP, 2005 p.27).*

4.6 Influences of financial crisis and the Macroeconomic policy

The Russian financial crisis in 1998 significantly influenced the economic development of Kazakhstan and Kyrgyzstan. According to Pomfret (2009), the macroeconomic level of 1998 was the nadir of Kazakhstan's transitional recession, as was the incipient recovery during 1996-1997, which was obliterated by the fallout from the 1998 Russian Crisis. This particular crisis also caused inflation in Kazakhstan, which occurred with abrupt increases in prices for the producing and importing goods. Furthermore, there was a devaluation of the national currency – Tenge - and transition to the practice of a floating exchange rate. Hence, the impact of this crisis decreased: industrial production, trade, GDP, which resulted in a worsening of the trade and payment balances of Kazakhstan.

Although Kazakhstan followed on the initial stage to recommendations of the IMF its macro-economic policy was tightly coordinated with the representatives of this Fund. Also created and realized were plenty of short terms programs for reforming the economy. Particularly, in the signed programs, there are indicated quantitative variables – currency assets of the National bank, deficit of the state budget, obligations on receiving net loans, and waiver from accumulation of the overdue payments as per foreign payments and accounts payable of the republican budget of Kazakhstan. Here, the rates of fulfilling the above indicators have been assessed by experts from international credit rating agencies, and they indicated that the rate of Kazakhstan increased with a prognosis of "stable" (Pomfret, 2007a). Such assessment indicated political stability, strict controls over financial and budget policy, strict monetary control, structural reforms, recovery of gold currency reserves, reducing of the foreign trade deficit (less than 1% GDP) and advance payment of international loans (Sinelnikov, 2001). Comparing Kazakhstan to Kyrgyzstan and Mongolia, Kazakhstan has a more developed economy and is significantly richer in natural resources, although it does require strong effort to have economic growth. Moreover, transition to a restricting monetary policy as in Kazakhstan and Kyrgyzstan, is connected with the implementation of national currency restrictions and the requirements to prevent or to stop the process of depreciation. Such a situation occurred in Mongolia when it transformed to free currency in terms of foreign trade. The collapse of the USSR and radical changes caused rampant poverty in Kyrgyzstan. As a result, their national economy was affected and domestic economic relations worsened, and according to Bogomolov (1997)

unemployment levels increased, which led to an increase in the nation's poverty. Also in this period, the social security system collapsed and over 80% of the population had been officially identified as living in poverty. So, in "order to address the increasing scale of poverty and the changing patterns of depravation the Kyrgyz government has initiated a number of reforms in the welfare system"(Howell, 1996 p.56)

During this transition period, Kazakhstan experienced a property collapse and average income decreased in relation to the average wage rate, which impacted upon uncontrollable socio-political processes. Sinelnikov (2001) suggested that as per official statistics in 2000, 63% of the population (among them 44% of the population in cities, and 83% in the countryside) had incomes lower than the minimum living wage. These market reforms brought an increase of differential incomes and a similar situation was observed in all countries which experienced transition to a market-led economy.

Financial experts from developed nations consulted the governments of Kyrgyzstan and Mongolia and they failed to consider how important it was to support the production potential of these countries (Tiyapyshev, 2001, Fritz, 2002; Weitz, 2006). These countries had foreign investments; however, those investments had been in the form of loans, but not on the basis of any grant aid program. The provision of loans to Kyrgyzstan and Mongolia was through an agreement between the governors, to follow the market-led transformation model developed in the West. After losing the constant support from Russia, Kyrgyzstan's government had to accept the recommendations of the IMF and the World Bank (IMF, 1996). Consequently, in May 1993, the Government of Kyrgyzstan accepted the economic program of the IMF and the World Bank. Thereafter, in July 1994, Kyrgyzstan effectively started structural transformation, which was developed in cooperation with these organizations. The program was named, "Enhanced structural adjustment facility" (ESAF). The ESAF program was started in order to reduce inflation rates. The measures of economic policy which were developed with the IMF included a decrease in state budget deficit, strict monetary policy and expansion of liberalization programs. Also, similar measures were initiated in Mongolia. Kyrgyzstan has since established a two-level banking system, the independent National Central Bank with the other being the commercial banks network. Along with the IMF and the World Bank, the European Community financed the project entitled "Technical assistance" through the TACIS program in 1994-1995 (Koichuev, 1994). Moreover, the opening up of the economy was followed by comprehensive democratization of political life in Central Asia, which was very close to the western standards of democracy. Kyrgyzstan improved much earlier in the way of democratization of society and in March 2000, Osland, an employee of the Carnegie Fund, wrote in the Independent Newspaper, that Kyrgyzstan was the most independent and democratic country in Central Asia (Tiapyshev, 2001).

4.7 Kazakhstan and State Reforms

With this in mind, at the beginning of Kazakh reforms in 1991, the governors of Kazakhstan only followed the basic recommendations of the IMF and the state did not lose control or public confidence, during liberalization or the subsequent privatization process. Hence, there were a number of different short-term programs on economic reform within the periods of 1990-1992, 1993, 1994-1995, 1996-1998, 2003-2015 (Strategic Projects of the Republic of Kazakhstan, 2008). The distinctive features of the initial stage of transition towards a market economy in Kazakhstan, was in stark comparison with Kyrgyzstan and Mongolia, and they were developed in order to specifically control radical reforms. In terms of negative consequences of "shock therapy" (Kolodko, 2000), the governors of Kazakhstan and partially of other central Asian countries were rather cautious with regards to the various approaches to the reformation processes. In addition, the government of Kazakhstan used some measures to weaken the impact of crisis tendencies to the national economy. These included preserving political stability, taking unpopular actions, implementing a combination of liberalizing the national economy and protectionism, development of a competitive environment and preserving natural monopolies, which were seen to be in the public and national interest. As a result, these reforms were seen to underpin the economic complexity of Kazakhstan and the emerging market-led economy. However, the initial conditions of starting reforms in Kyrgyzstan and Kazakhstan were seen to be complicated, in terms of development, and this was primarily due to the historical complexity of their respective roles within the former USSR, where Kazakhstan had played a significant role. The Soviet Union period legacy of Kazakhstan includes a range of complexities including: mixed population which comprised the same level of Russian people (36%) as Kazakh people (44%) during the pre-reformation period (Shokamanov, 1996). Also, Kazakhstan developed the energy industry (coal, oil), however it has many infrastructural deficiencies. Also, Kazakhstan inherited from the USSR the metallurgy enterprises, production of minerals and a powerful military. In 1991, 43% of industrial forces were under the control of Moscow, and during the independence period, the rapid reduction of production levels (the peak of fallout occurred during 1992-1994) can be explained through reducing the demand of Kazakhstan's goods from Russia, which was considered as a major consumer of Kazakhstan's goods. However, due to an increase of cheap energy production and the comparatively low price of oil (for instance in the Mangystau region (west Kazakhstan) thirty-five to forty US$ per barrel, and with delivery to the Black sea port of seventy to seventy-five US$, this was made up of a cost of approximately ten US$ per barrel (Panorama, 1999 p.2)) the efficiency of oil exporting from Kazakhstan comprised of 1.8 so oil export costs were increasing the domestic prices of producers by 1.8 times, due to inefficiencies – compared with global average costs. As a result, under a rapid decrease of world prices (for example 32% as in 1998), Kazakhstan's firms in the oil industry were still able to compete in the global marketplace.

4.8 The economy of Mongolia

The withdrawal of former Soviet Union assistance and the collapse of CMEA left the Mongolian economy in an extremely difficult situation at the beginning of the 1990s. In addition, during the period 1990-1992, GDP decreased by more than twenty percent. The level of national savings rapidly declined from about thirty-five percent of GDP in 1990 to twenty-six percent in 1995. Imports also decreased substantially, falling from US$924 million in 1990 to US$ 388.4 million in 1992. Inflation reached its peak of 325.5 percent in 1992, accompanied by growing unemployment. Moreover, the number of unemployed actively seeking jobs reached 54 thousand. Hence, multi-million rouble loans and assistance from the former Soviet Union abruptly ended in 1991(World Bank, 2004). While having excessive centralization of management, and an absence of a competitive environment for the economy, all the "cosmic" (unrealistic) measures could not recover the economy from depression to the pre-crisis condition. Foreign and domestic changes showed the weak efficiency of cooperation of the Mongolian Republic with the USSR and other countries (Fritz, 2002; Minton, 2006). The major reasons which caused the crisis of the socialistic economic integration system were seen as:

- weak coordination of the assistance within the frame of CMEA, practically non-usage of a versatile form of cooperation;
- dissipation of financial resources to many facilities, incomplete usage of capacities of building companies, low quality of producing goods which is explained with insufficient preparation of national staff;
- inability to apply the CMEA proposals to the realities of post Soviet Union countries, ignorance of national specifics of the country which is under socialistic international integration terms.

By means of loans and grant aid, the USSR was providing 75% of investments for the national economy of Mongolia, and 50% of industrial products were manufactured in plants which were built with soviet technical support (Tumen, 1996). At the same time, it was impossible to ignore some errors in industrialization policy. Mongolia was trying to target the creation of large industrial companies even with an out-dated infrastructure. Moreover, according to Lghava (1994), the crisis of the socialist labor system led to managing the Mongolian Republican Party which admitted the incorrectness of the socialist orientation at the end of the 1980s. Such admittance of the party was based on Mongolia still remaining a weak country (World Bank, 2008); there was regression in the major branches of the country's economy; there was a weakening of the animal breading; low natural indices in the industry and delay of development of the scientific-technical potential. At this time, all contacts with neighboring Asian countries were forcefully ended. After summarizing the results of the developing Mongolian economy

and its relations with socialist countries, it was impossible to give a single evaluation for the pre-reconstruction period of the country's development. Also, it was impossible to ignore the achievements of Mongolia which were supported by CMEA, connected with the setting-up of the banking-financial industrial system in the country. Likewise, the volume of investments increased 4.7 times during 1981-1985 in comparison with the 1970-1975 period (Tumen, 1996).

As a result, Mongolia became a debtor of the USSR and those debts also impacted on the problems of the transition period. These debts were around five thousand roubles per person, at the beginning of the 1990s, and the total amount of debts comprised of 10.5 billion roubles (Zargonts, 2002). The economy of the country was in a critical period, and in order to recover from this situation in the opinion of Hashikawa (1998), Mongolia obtained loans from the IMF, the World Bank, Asian Banks, and developed western countries including the USA, Japan and others. The country started paying off their debts to their northern neighbor. In addition, Molomzhants (2004) pointed out that, only in the middle of 2003 when the Mongolian Prime-Minister, Enkhbayar visited the Russian Federation, did the parties agree the plan for debt settlement. At the end of December, 2003 the remaining debt was written-off (98% of debts) which comprised of US$300 million. This ending of the Mongolian problem by Russia, became a significant event in the further expansion of Mongolian – Russian trade and economic cooperation (Lhagvasuren, 2000; Sumiyabazar, 2004).

4.9 Reforming the agricultural sector and territorial questions of Kyrgyzstan

Agriculture remains the largest sector, producing roughly one- third of the country's GDP (UNDP, 2005). However, reforms in the agricultural sector of Kyrgyzstan were conducted without considering the major factors of reformation stability such as: virgin and irrigated land, and cattle-breeding which were supported by governmental interference. Development of such systems required powerful technologies, a centralized supply of equipment and staff. However, from the early 1990's, small-scale farming did not have such capacities. Furthermore, over two thousand farmers went bankrupt each year, and their farms fell into disrepair, so they had great difficulty in supporting their farm workers (Dabrowski & Antczak, 1995). The agriculture of Kyrgyzstan could preserve the collective farms if under the control of the state. The privatization process was slow (the land could be received for rent for a period of 49 years), most farm workers returned to subsistence farming. Land reforms began after the adoption of "Law about farmers" which was authorizing the local bodies to allocate land for those who need to establish farms. During the early stages of privatization, such landowners were exempt from taxes and were awarded other privileges. According to a UNDP (2005) report, large farms became uneconomical under the new conditions and broken up into many small family farms, which had a semi- subsistence orientation. By the middle of 1994, there were 16,400 farms created, with 419 thousand hectares of land. During 1994-1996 several orders were issued by

the President in order to speed up the reforms and the land market settled down (Kuznetsova, 2002). During 1995-1996, Wisconsin University carried out research on about forty-seven farms of Kyrgyzstan, by questioning the heads of farms and the local administration. Here, the reforms were being implemented and everyone was concerned about financing problems, absence of land demarcation, and the legal registration of the rights for the land. More than half of the farm owners were satisfied with independence; however less than 20% of them found any increase in labor productivity. At the same time, half of the collective farms only changed their names into agricultural cooperative societies. Kuznetsova (2002) also noted that, as of January 1996, over one half of irrigated land had been passed over to farmers, and the pastures remained as state property.

By October 1998, the Kyrgyz government conducted a referendum regarding ownership of land and most of the population voted for privatization. However, during the last ten years, the growth rate in the agriculture sector has decreased. According to Koichuev (1994), it mostly depended on the fact that the resources required for the maintaining of efficient farming were reducing. Due to the low financial provision of farmers and the increase in everyday prices, access to fuel and lubricants was getting more complicated which caused non-development of large areas of crop land and pastures, and this led to irregular numbers of sheep (Koichuev, 1994). On the other hand, during the 1990s the sheep stock in Kyrgyzstan was reduced to approximately one third of its 1990 level. As a result of this, there was a rapid decrease of wool production, and this was significant as Kyrgyzstan was formerly the 3rd placed country in the USSR in terms of wool production. Kyrgyzstan's worsened-wool enterprises had to buy wool from Russia in the second half of the 1990s. Likewise, it was necessary to consider that both Kazakhstan and Kyrgyzstan's major problem was the establishment of the statehood. Here, territorial borders were determined by the former administrative division of the Soviet Union Republics, and consequently, following the collapse of the USSR, Kyrgyzstan remained face to face with China. Both these countries have been separated with not exactly a demarked border of around one thousand kilometers (Howell, 1996). During 1964, USSR and China exchanged land maps, but there were 25 areas of borders that did not coincide with the maps. Before the breakdown of the USSR, Mikhail Gorbachev and Deo Syaopin had officially admitted the existence of disputable land and they decided to take mutually acceptable decisions for some countries such as Russia, Kazakhstan, Tajikistan and Kyrgyzstan. Furthermore, Kyrgyz negotiators and diplomats achieved separation of disputable areas on a 70:30 ratio, where 70% of disputable land was passed to Kyrgyzstan, and 30 % to China. Also, the Kyrgyz sector used to own the smallest part of Khan Tengri mountain peak, which was usable for alpine activities. Nowadays, alpine and mountain tourism have become one of the most profitable branches for Kyrgyzstan during the reorganization period (Plyshevskii, 1993; UNDP, 2005).

4.10 Privatization: property redistribution

The major benefits of conducting reforms became denationalization and privatization in the economy, which stimulated the development of the private sector and attracted foreign investment. In 1992, Kyrgyzstan started a massive program of privatization by using a special means of payment allocated for the population. In addition, in 1994, due to insufficiency and many violations, special means of payment were introduced into privatization coupons which represented marketable securities. As a result of massive privatization (which was followed by many corruption scandals) in Kyrgyzstan, the most specific ratio of private and mixed sectors in production of GDP (70%) was achieved. State facilities have been privatized since 1991, and these included energy, telecommunications, and mining enterprises, and these comprised of 13 billion soms in 1998 (Kuznetsova, 2002).

The three year supporting program was approved by IMF- EASF for Kyrgyzstan and according to this program the republic was allocated US$ 99.1 million. In November 1999 the EASF (Enhanced Structural Adjustment Facility) program was renamed the PRGF (Poverty Reduction and Growth Facility) (IMF, 2003). In addition, foreign aid has played a very important role in Kyrgyzstan's development since independence. The main donors to the economy of Kyrgyzstan have been the World Bank, ADB, IMF, and the governments of Japan, the USA, Germany, European Union, etc. However, from the other side this aid brings some negative phenomena such as: (a) rapid external debt accumulation, (b) undermining of the government's tax efforts and (c) lack of proper monitoring of aid use (UNDP, 2005) So, "in 2000, the government of Kazakhstan repaid external debts to IMF in full, seven years ahead of schedule". Contrarily, by the early 2000s the external debt of Kyrgyzstan's government amounted to the country's GDP (IMF and World Bank, 2006; quoted in Junisbai, 2010).

Consequently, Kazakhstan started a large-scale privatization initiative in 1991 and during the period of 1991-1992, there were five thousand facilities that were privatized. In April 1992, liberalization of prices was declared, and in 1993, the National Bank was established in the country. In November 1993, Kazakhstan implemented a national currency – tenge, which helped to regulate the money turnover during 1994-1995. In addition, these measures had been fulfilled within the frame of "Strategies of establishment and development of Kazakhstan as an independent country" for the period of 1992-1994 (Akimov & Dollery, 2008). Moreover, in 1993, Kazakhstan concluded a contract for development of Tengiz oilfield with the "Chevron" corporation, by opening up access of the oil and gas sector to foreign investors. In 1997, the policy of attracting foreign investment also affected the oil refinery, construction of the new capital - Astana, agriculture and other sectors of industry. The attraction of foreign investors was seen as a mechanism for recovering from the crisis. For instance, "Karmetcombinat" was sold to the Lakshmi Mittall group because "Karmetcombinat" could not maintain production

levels and did not have working assets. Consequently, they could not pay employee salaries. "Zhezkazgansvetmet" was sold to the Korean firm "Samsung" in 1996 when it was in a state of bankruptcy (Zhamishev, 2009). Under the pressure of economic difficulties in the middle of the 1990s, and due to mass bankruptcies of firms in Kazakhstan, there were sufficiently developing privatization processes, and through privatization, not only small and medium sized enterprises but also part of large scale and significant industrial branches. In addition, the program of privatization and restructuring of state property in the Republic of Kazakhstan during 1996-1998 was adopted in February 1996 (Mitrofanskaya, 1999). The sector programs of privatization were targeted and privatization processes impacted electrical–energy, oil and gas, oil and chemical, metallurgy and mining, transportation and communications. Thus, since the first days of privatization, Kazakhstan's government have had a considerable part of the property.

In the first stages of privatization during 1991-1992, the control stock of privatizing enterprises (not less than 31%) remained with the government.

At the second stage during the turning of enterprises into stock companies, 51 % of shares were transferred to the State Property committee, 39% to State holding and 10% to the workforce. Likewise in 1995, occurred a peak in the crisis period, when the state had clearly declared about ownership rights. The President of Kazakhstan ordered "About privatization" (Kazakhstan truth, 1996; Sarabekova, 2009) which was adopted on 23rd of December 1995. The statement suggested:

> *"Privatization means sales of the state properties to the ownership of physical, non-state legal and foreign legal entities which is performed as per the preference of the state wherein the state is considered as the owner within the frame of special procedures*"(Sarabekova,2009 p.38).

According to the data of Ministry of Finance of the Republic of Kazakhstan, the third stage of privatization, during 1996-1999, was privatization of the separate sectors of the economy which were under the control of the state. At this stage, in the opinion of Zhamishev (2009) the government performed the concentration of state actives by establishing large enterprises from separate organizations like "Kazzink" which was established in 1997 and by combining the Ust Kamenogorsk lead-zinc company, Leninogorsky polymetal plant and Zyryanov lead plant. Also the government launched privatization of strategic properties of the economy. So, in 1997 in the oil and gas industry purchase agreement, 60% of state-owned shares of JSC"Mangystaumunaigaz" and 60% shares of JSC "Aktobemunaigaz" to the Indonesian company "Central Asia petroleum" and "CNPC**"** Chinese national petroleum company were signed.

The fourth stage of privatization was settling the state actives management system. Here, there were allocations of authority between state bodies which were connected with the management of state properties. Also, state holdings had been established and a general state holding company "Samruk" had been formed, where all government owned firms were lodged under the one umbrella. According to Mitrofanskaya (1999 p.1399)

> *" Privatization in Kazakhstan changed the system of the national economy. It was the engine of industrial, legislative, organizational and social change"*

Furthermore, the issue of attracting foreign investment was very important during the transition period of the economy (Dabrowski & Antczak, 1995; Pomfret, 2007(a); Akimov & Dollery, 2008). The regime of foreign investments played a significant role within the investment climate in terms of supporting a combination of economic activities in the country. All countries with transition economies tend to try and set favorable conditions for attracting foreign investments to their economy (UNDP, 2006). Due to this, countries establish various privileges for foreign investors, and in Kazakhstan, foreign investments into the raw materials sectors have been allowed on the basis of licensed contracts. The scale of transfer of Kazakhstan's state industrial enterprises to the ownership of foreign investors is significant, where approximately 80% of enterprises on production of chrome and uranium minerals, oil and gas, ferrous and non-ferrous metallurgy have been passed over to foreign companies (Marchenko, 1999). However, foreign management is not always efficient. Generally, active interference of the government is only in terms of the processes of denationalization and the strengthening of processes for the development of the economy of the republic. Regarding such attempts of the state, they created large production enterprises such as "Kazakhoil", "Kazzinc" and etc.; however, this activity practically does not exist in the mechanical engineering industry, or in the electricity and food industries.

The republic was experiencing a deficit in their own finances, and most enterprises were lacking in terms of significant working assets. In addition, the state activated its activities on controlling the process of inflow of direct foreign investments and this was reflected in the adoption of several legal acts: Law of the Republic of Kazakhstan "About foreign investments", "About state support of direct investments," etc. Furthermore, the state regulated not the market itself, but the conditions which influence the market such as: development and allocation of productive forces, rational usage of natural and human resources; specialization of enterprises; formation and usage of incomes; etc. Such an approach complied with the regulation stated by Nazarbayev (1998 p.1):

> *"While the economy itself exists in the transition stage of unstable development, the regulatory role of the state and its intervention should be adequate".*

Here, Nazarbayev identified two types of economy: centralized planned economy, and a market driven economy with some state interference. The categorical shift from a centrally planned economy became the main point of Nazarbayev's speech regarding economic strategy. Here he stated that:

> "*The key criterion of efficiency of society systems is an economic efficiency. As per this criterion, the centralized planned economy finally could not beat the market economy"* (Nazarbayev, 1998 p.1).

However, he also considered that the market economy should play an active role in the state, and that this would lead to success. The following statement was also emphasized in his speech,

> "*Our strategy of healthy economic growth is based on strong market economy, on active role of the state and attraction of considerable foreign investments,"* (Nazarbayev, 1997(b) p.41).

The main concern during the reforms in Mongolia was privatization. It started after adopting the law concerning amendments in the civil codex of Mongolia in December, 1990. During the same year, two more legal acts were adopted, the Law about privatization and the Law on economic units. The privatization process was performed in two stages. There were prevailing opinions of radical liberals which considered that privatization should provide additional income to the deficit budget. Therefore, privatization should have been large scale and rapid. The first stage of privatization (small privatization) covered the period 1991-1996. At this time, a voucher system was chosen in order to let each citizen have a chance of participating in the privatization process. The result of "small privatization" in 1994 was that 70% of small-scale enterprises became private (Mitrofanskaya, 1999).

The second stage of privatization (large-scale privatization) covered the period 1996-2000. It characterized that privatization was performed by the usage of financial income which comprised of 70-75%. According to calculations by Mongolia's economist Lghava (1994), the total cost of activities was estimated as 20 billion tugriks. However, at the beginning of privatization, the financial capabilities of buyers for vouchers were estimated to be less than one billion tugriks. In addition, the government became the major shareholder with approximately half of the stock companies and particularly with large and influential companies. Nevertheless, some of them ended up bankrupt, and their funds depreciated, although they still found buyers of unprofitable enterprises.

Privatization involved part of the population in commercial activities and it led to social shocks, and rampant unemployment. Also, at the end of 2002, the number of officially registered unemployed people in the country reduced to 30.8 thousand in comparison with 40.3 thousand people registered in 2001. This suggested that the unemployment rate decreased by 24.1 %. On

the contrary, despite such positive moments of growth in the economy, the living standards worsened. In Kyrgyzstan, as per estimations of Koichuev (2003), 84% of the population during this period was referred to as the poor class. Indeed, 13% was the middle class and 3% of the population was in the rich class. Hence, most of the population was in poverty, a very low number of middle class people, and even fewer numbers of rich people. The most complicated elements for supporting the reforms were the reformation of the currency system. By conducting legal and organizational measures on improving the functioning of the currency market, and on simplification of access of foreign economic relations, the government was faced with the inevitable process of "dollarization" of the economy. Also, the systems of currency regulation in these transition economies have found very different benefits from one another although they initiated similar legal acts (Akimov & Dollery, 2008). This can be explained in practice, where regulation is performed by means of many special subordinate acts, instructions and immobilization, which are regularly updated. Generally, currency systems of all reviewing countries have the following specifics: comparatively low volumes of currency operations, considerable disproportions of demands and proposals, instability of national currency and state regulatory activity in the domestic currency circulation. However, in 1998 the Kazakhstani state budget alone received US$17.6 million in contributions from foreign investors, while the total amount of foreign direct investment reached US$184.9 million (Mitrofanskaya, 1999)

4.11 Foreign trade liberalization

While recovering from the crisis the national economy was stabilizing and the state's activities focused on industrial and foreign trade policy (Satubaldin, 1998). Following market reformation, all the former Soviet Union countries practically made significant steps towards reform in foreign trade policy. The main direction of these reforms became liberalization of foreign trade. According to Madiarova (1999), liberalization can be explained as:

1. cancellation of foreign trade monopoly, liberalization of registration of participants of foreign trade activities;
2. liberalization of prices;
3. liberalization of currency – exchange operations, development of currency market, step-by-step transition to the uniform rate;
4. limitations of quoting and licensing as measures on regulation of export, reduction of the centralized import and implementation of tariff regime.

In addition, on the basis of economic transformation, there were processes of consistent dismantling of the system of state foreign trade unions, dilution of product and geography specialization, decentralization of imports, liberalization of price and currency mechanisms, implementation of partial convertibility of the national currency, and a significant role of

economic and tariff methods of regulation of foreign trade. On another note, in the former socialist countries, the traditional centrally planned tools of trade policy were not sufficient. In particular, these countries did not need a developed system of tariff regulations, quotas or licenses; they could rely on the more powerful tools of direct state control over export and import.

Therefore, the process of trade liberalization in these countries was considered not like a simple overview of trade policy tools, but they were actually created from the beginning in the new conditions (Arystanbekov, 2002). Furthermore, liberalization of foreign trade made it possible to resolve some current problems, but despite theories and many examples from worldwide experiences, the liberalization process was not noticeable and did not become a breaking factor of economic growth. Nevertheless, liberalization of foreign trade decreased the ideological and political impact of the foreign economic relations and was reviewed as one of the major principals and key elements of reformation in the countries with transition economies. During the liberalization period, there were significant improvements in the dynamics and geographical structure of foreign trade in countries such as Kazakhstan, Kyrgyzstan and Mongolia. Also, during the process of transition to the open market economy in Kyrgyzstan, the liberalization of foreign economic activities and the modernization of a legal base of foreign trade regulations were conducted. In addition, there were 150 laws adopted within 15 years, and this was on the order of Kyrgyzstan's President, with the resolutions of the Kyrgyz Government which have been related to basic, regulatory mechanisms such as: antidumping regulation, protective measures, subsidies and compensations.

The policy of foreign trade liberalization preserves low import tariffs with a focus on economic agents to freely export and import goods. This was supported by Kyrgyzstan joining the World Trade organization in 1998 (UNDP, 2005). Within the frame of membership in the WTO, there was harmonization of national legislation by foreign trade, with WTO regulations such as: improvement of normative legal base of foreign trade, which determined foreign trade, industrial – innovation, investment policies, exact environment, interrelation of national economy within the world economy, and a level of participation of the republic in world trade. Indeed, liberalization of these economies to reduction of the importance of import substitution and even more provided a motivational foundation of orientation of complex production for the export market.

4.12 Establishment of foreign trade policy in Asian countries with transition economies

Macroeconomic stabilization of Kyrgyzstan during the period of 2000-2005 did not significantly influence exports (UNDP, 2005). The dynamics of this period were mostly dependent on several world and regional products and market, than from a real exchange rate of the som. However, the exchange rate of the som showed a significant impact to imports. The

effects of devaluation which occurred during 1998-1999 were ended by 2005, and the nominal and real stability of the som against the US dollar was accompanied by a noticeable growth in imports. A serious obstacle in solving the issues connected with an increase of export potential was seen as excessive concentration and dependence on export supplies from a limited list of goods. The major volume in export supplies comprised of precious metals, mineral products, electrical incandescent lamps and agricultural products. In addition, noticeable changes in the geographical structure of exports and imports have been observed since 1999. On the basis of a reduced ratio for CIS countries as per export supplies, the ratio of countries outside of the CIS, increased. Additionally, in terms of imports, the volume of goods delivered from outside of the CIS countries were decreasing annually, and the volumes from CIS countries – members have been growing. Despite an occurrence of new trade partners, only 8 of them – Russia, Kazakhstan, Switzerland, China, Uzbekistan, USA, Arabic Emirates and Turkey – comprised the major part of sales turnover in the country after 2003 (about 80%) (Nuti, 2010). Based on table 4.4, during economic reformation, the foreign trade turnover of Kazakhstan was significantly increased. Furthermore, the financial crisis in 1998 influenced foreign trade turnover, and as a result, it reduced in 1999 with subsequent growth. On the other hand, in 1998 Kyrgyzstan's products turnover rate increased by 10 times in comparison with 1992. And during the following years, the goods turnover started to increase and the export surplus was changing intermittently by having either positive or negative export surpluses. The same situation was observed in Mongolia, where it was very important to consider making reliable estimates of changes, which occurred in the foreign trade of each country during reforms – and this was complicated for several reasons:

1. Real changes in the volumes of goods from foreign countries were connected with considerable fluctuation of exchange rates of national currencies;
2. It is important to note the existence of illegal exports and large-scale non-registered imports in all countries;
3. The breakage of traditional relations between enterprises due to collapse of sole economic area of USSR and CMEA worsened the production fallout. Consequently, it caused macroeconomic instability, high rates of inflation, and seriously complicated the foreign economic activities, and
4. An absence of the developed transport infrastructure and inadequate foreign trade policy, usage of strict foreign trade and currency restrictions which caused the reduction of foreign trade operations at the initial stage of liberalization of foreign trade relations.

Table 4.4

Foreign trade turnover in specific countries (In millions of US$)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Kazakhstan																	
Turnover	1866	7164	6792	9031.9	10135.4	10785.2	9500.1	9510.5	13822.1	15050	16254	21334.9	32554.1	45201.3	61907.5	80511.6	109072.5
Export	1398	3277	3231	5226.7	5896.8	6486.6	5206.9	5871.3	8788.8	8610.9	9669.9	12926.6	19922.3	27849.1	38244.4	47755.3	71183.5
Import	468	3887	3561	3805.2	4238.6	4298.6	4293.2	3639.2	5033.3	6439.1	6584.0	8408.3	12631.8	17352.2	23663.1	32756.3	37889.0
Balance	930	- 610	-330	1421.5	1658.2	2188.0	913.6	2232.1	3755.5	2171.8	3085.9	4518.3	7290.5	10496.9	14581.3	14999.0	33294.5
Kyrgyzstan																	
Turnover	146	224	657	934.4	1345	1216.2	1357.8	1053.6	1058.6	943.4	1039.7	1298.6	1659.6	1779.9	2512.3	3551.2	5700
Export	76	112	340	412.0	507.1	507.0	513.7	453.8	504.5	476.2	460.3	581.7	718.7	672.0	794.1	1134.2	1642
Import	70	112	317	522.4	837.9	709.2	844.1	599.8	554.1	467.2	579.4	716.9	940.9	1107.9	1718.2	2417.0	4058
Balance	6	0	23	-110.4	-330.8	-202.2	-330.4	-146	-49.6	9.0	-119.1	-135.2	-222.2	-435.9	-924.1	-1282.8	-2416
Mongolia																	
Turnover	807	762	615	888.0	875.2	919.2	834.0	868.5	1080.4	1078.6	1110.6	1416.9	1877.1	2247	3027.9	35639.2	34367.9
Export	388	382	356	473.0	424.3	451.4	345.1	358.2	465.9	448.5	480.5	615.9	856.0	1064.4	1542.3	34948.9	33298.1
Import	419	380	259	415.0	450.9	467. 8	488.9	510.3	614.5	630.1	630.1	801.0	1021.1	1182.6	1485.6	690.3	1069.8
Balance	-31	2	97	58.0	-26.6	-16.4	-143.8	-152.1	-148.6	-181.6	-149.6	-185.1	-165.1	-118.2	56.7	34258.6	32228.3

Source: compiled from UN database, 2009(b)

Foreign trade policy which was developed by Kazakhstan's government during the last few years was based on an application of periodic restricting measures in order to protect the interests of national manufacturers. For instance, from January to July 1999 there was limited import of most food products from Russia (Statistical Bulletin, 1999). This situation occurred due to the Asian crisis which also covered Russia, and later, there was a devaluation of the national Kazakh currency. Further, Kazakhstan, Kyrgyzstan and Tajikistan signed an agreement on the 20th of January, 1995 in order to set up a Customs Society, which stipulated dismantling custom tariffs and other restrictions, with regards to each other, with a sole customs policy related to third countries (Shnitkova & Menzyul, 2006). During this period, through the bordering cities of the Russian Federation the inflow of "cheaper" food products and consumer goods into the domestic market of Kazakhstan took place. As a result, the government of Kazakhstan attempted to protect the domestic market and they decided to limit the import rate of consumer goods from customs territories of Russia by means of establishing customs duties and quotes. Moreover, at the beginning of 2003 Kazakhstan implemented restrictions for importing meat products. The results of such a policy have been evaluated positively, as they offered the possibility to considerably increase the domestic production rate by almost double (Sagadiev, 2006). In addition, implementation of quotas and duties were used as economic measures which did not show efficiency immediately. In some cases, the government of Kazakhstan used strict administrative measures even for exporting oil and chemical products. Also, regularly new projects have been created which were oriented for import substitution. Nowadays, according to Davletova (2005), the world trade market has formed a system which can be analyzed at three levels.

1. The upper level of the world market represents the sphere of tough competition between post industrialised countries which have been involved in a non-stop race for scientific and technical innovations and those which are not interested on occurrence of new competitors for any portion of the market.
2. The middle level is characterized with competing industrialized countries which follow the way of "overtaking development" (Silverstovs & Kholodilin, 2006). Furthermore, the numbers of competitors within this market are increasing by means of post socialistic countries, and here the competition may portray an even more assertive character.
3. The lowest level is the market of the mining industry where some countries such as: Latin American countries, African and developing Asian countries, including post Soviet Union states, sold the major parts of their operations.

Such a structure of world trade markets and the competition character which is typical for each of the levels define the foreign trade policy of states. On the other hand, the commodity

structure of foreign trade in the reviewing countries during many years - did not change just like not changing the list of goods which provides the highest currency returns. The structure of their foreign trade is mostly expressed by primary goods. In entering the world market, countries require to have products which can be competitive, both from the view of price and quality. At the end of the 1990s, the declining production base, low scope of investments into the real economy, and long lasting structural reorganization of the economy led to the commodity structure of exports of the considered countries. In addition, if the commodity structure of exports will change, unfortunately then, they will be changed for the worse, for example an increase in the portion of fuel products with low refining quality. Likewise, at the early stage of economic reformation in 1991, the economic complex of Kyrgyzstan was not oriented to the world market. Its industrial and agricultural goods have been in demand in countries within the USSR, but not many outside countries have been aware of it. Thus, in 1990 only 2.6 % of the total volume of Kyrgyzstan's goods used to be exported outside of the USSR. (Akeneev, 1999).

Also, the foreign trade activity of Kyrgyzstan plays an important role in the development of the national economy. It also helps to maintain the financial stability, establish profitable government revenues, develop production and occupation of people in the export oriented branches of economy, and sufficiently provide the domestic market with consumer goods. Manufacturing of imported products makes it possible not only to decrease the import scope but it also gives an opportunity to reduce the cost of goods which support national producers. High levels of correlation between export and volumes of industrial production, indicates the dependence of diversification of an export structure from expansion of industrial production.

The important indicator of the export condition is the export capacity of production – portion of export in the total volume of exports of industrial production. In 2005, this indicator comprised of 36.6 % (Statistical development of CIS, 2007). Moreover, foreign economic relations of Kyrgyzstan at the moment are settled with 105 countries, but the main exporting countries include ten countries: Russia, Kazakhstan, Tajikistan, Uzbekistan, Turkey, Afghanistan, Arabic Emirates, India and Switzerland (UNDP, 2005). The supply of Kyrgyzstan's products to these countries comprised of about 90% of the whole export rate in the republic. The export of Kyrgyzstan to countries far away, have a stable tendency of growth. Reorientation of the export market in Kyrgyzstan has taken place from the increased favour within the frame of the WTO. Also, according to the data from the National statistical committee of Kyrgyzstan, 55.4% of Kyrgyzstan turnover is referred to the portion of CIS countries in 2005, and 44.6% to the portion of countries further afield. Among these countries are members of the WTO which comprise of 43.1 % (Smailov, 2008).

On the contrary, in the commodity structure of imports in Mongolia, the producer's goods play the major role. Thus, 45% of total costs are referred to the portion of vehicles, equipment and transportation means, 20% for mineral products, 5% for chemical industry products, 30%

comprises of specific weight of purchasing consumer goods. In addition, at the start of the millennium, the commodity structure of exports and imports in Mongolia was typical for the foreign trade of economically undeveloped countries. This means that the government cannot satisfy the interests of the national producers neither at the domestic nor at the foreign markets. (Statistical Yearbook for Asia and the Pacific, 2002).

The stable tendency of growth of imports into Kyrgyzstan is the primary reason for the trade balance deficits. The import structure is diversified enough where the specific weight of strategic import comprises of 78%. There are three groups which were identified in the program of export development and import substitution of the Kyrgyz Republic for 2007-2010 (Kyrgyz Republic's Parliament, 2007). In the strategic import structure of the program, the following subgroups were highlighted: critical imports, investing imports and socially vital imports. Reduction of this structure may affect the whole economy. The above mentioned groups are as follows:-

1. The critical imports (28%) mainly include oil and gas condensate, natural gas, and black coal which are required for the functioning of the economy. In the view of resource intensity of the Kyrgyz economy, the lack of resources may lead the country to economic crisis. The stable tendency of growth of prices assists on increasing their supply rate.
2. The investing imports (20%) include some types of machines, equipment and mechanisms, land and air transport and some parts of other goods produced in the chemical industry, precious metals and products made of them. The expansion of the investment import has a positive character and it affects the expansion of the production which provides additional growth of export-oriented goods.
3. The socially vital imports (30%) – goods required for the living of the population of our country such as: grain crops, flour, sugar and other food products including baby foods, tools used in medicine; diagnostic chemicals. The stable demand for the plant products will control the growth of imports.

Indeed, such a high dependence on importing the products apart from negative financial consequences creates some level of risk for the economic safety of the country.

Conclusion

The first results of developing of the foreign trade economic sector in the reviewed countries which started conducting economic reforms are difficult to consider as positive. Liberalization of foreign trade allowed some routine problems to be solved. However, we cannot directly connect the liberalization policy with negative tendencies in the development of foreign trade which was generated before in the centralized planning economy. The peculiarity of trade policy in all these countries during the initial stage of reforms was anti export orientation. In addition, there were implemented many restrictions on exports which have been directed for keeping the

goods in the country. However, there were no existing clear restrictions for the imports which protect the national producers. Most of the countries did not use licensing or quoting of the imports and as a result, the import tariffs have been low. Therefore, according to Tumen (1999), in Mongolia after the start of liberalization, the import tariff did not exist at all and became the average level with further tendency for slow reduction. As discussed in the second chapter, even though there were great tendencies for liberalization in the world, the pure free trade does not exist. Moreover, governments are actively using both tariff and non-tariff forms of protectionism in order to achieve different goals such as: protection of national industry, preserving of the work places and support of the occupation of population, creation of new competitive branches and raising of the state budget revenues etc. Therefore, when performing a course on integration to the world economy and agreeing their foreign trade regime with generally accepted rules of game on the world market, the countries with transition economies should not miss the fact that liberalization of foreign trade is not a goal in itself but is a vital means of achieving strategic goals of economic growth. However, the deeper the process of transition to the market economy, the priority goals of the government related to the regulation of the foreign trade should keep changing. Indeed, the reform of the foreign trade policy definitely assists in improving the economic efficiency if it is performed not like a forced measure for achieving the short term goals but only if it has a long-term strategic character. As we considered before in the literature review chapter, the reforms of FTP should not be conducted as a reluctant measure for achieving the short term objectives of stabilization, but have long term strategic character which assists to increase the effectiveness of the economy. However, in order to improve the efficiency of the reform of trade policy by studying the reformation economies of Mongolia, Kyrgyzstan and Kazakhstan the study also reviewed extant literature, particularly on the experience of the economy reformation in three neighboring countries to Kazakhstan, and hence, it was necessary to focus on the following problems:

- first, in order to stimulate the competition and improve the economic efficiency, it is necessary to have liberalization of trade and to decrease the level of protectionism in regard to the national producers by preserving temporarily selective protection of specific branches;
- second, significant attention must be given to the impact of foreign trade reforms to the budget and microeconomic stability. Reforms of the trade policy will not be productive in the conditions of serious and steady microeconomic instability. Also, countries which have economies with typically high and rapidly changing rates of inflation should stabilize their economy before attempting to perform a large-scale trade liberalization process;
- third, in order to increase the efficiency of results of reforms, it is necessary to perform the reformation at the institutional spheres along with liberalization in order to establish

the required infrastructure and normative base which should meet the requirements of the country related to the market economy, and should assist on integration to the world economy;

- finally, the fourth point is a requirement to develop the national-wide program of export stimulation. The orientation to the expansion of the export opens wide opportunities for structural reorganization of the economy, providing economic growth.

Analysis of the development of economic reforms in the former Soviet Union states of Kazakhstan, Kyrgyzstan and Mongolia during the period since 1991 allows us to conclude that despite the unstable condition of the economy in the countries, there was established an institutional structure of market relations. Two-level banking system was also set up. At the same time, privatization was performed and the social class of beneficial owners occurred. Also, the fund market was established and foreign economic relations were liberalized. However, along with positive results, the reorganization brought a number of complicated problems such as: fallout of production, non-payments, reduced beneficial parts of the budget, high inflation rates, an increase of interest rates which were obstacles to the investments into the economic sector, growth of state debts and a reduction of the living standard level of the majority of the population. These problems have been typical for other former Soviet Union countries. Now, the author tries to consider in detail the economy of Kazakhstan in order to understand clearly the development of the economy and the undertaking of trade policies since independence in the following chapter five.

CHAPTER FIVE

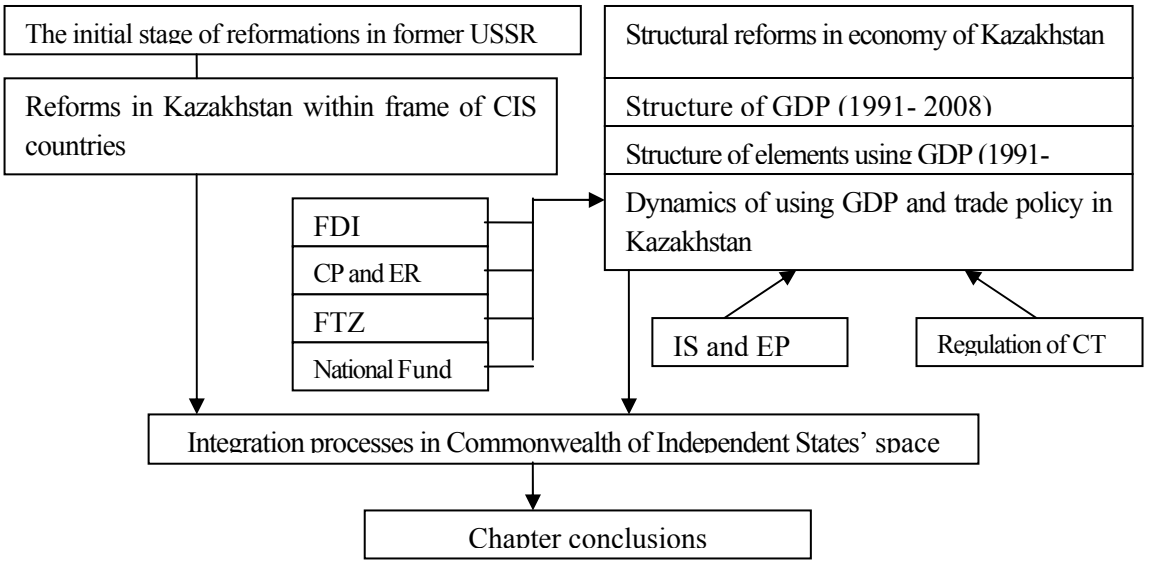
KAZAKHSTAN'S ECONOMIC DEVELOPMENT AND TRADE POLICY SINCE 1991

5.1 Introduction

The purpose of this chapter is to provide the background information about Kazakhstan's economy which is useful for the formulation of a development model for Kazakhstan and the associated analytical work in the sections which follow. A considerable part of this chapter will be used to examine the evolution of various policy regimes in Kazakhstan since independence, and their contribution to its macroeconomic performance in the light of the knowledge gained from the previous chapters. Accordingly, this section will address research objective two, and it will cover the following major items which are necessary for the subsequent analysis such as: general information; socio- economic conditions, historical background; structural changes in the economy of Kazakhstan, evolution of economic policy regimes and associated outcomes since independence in 1991 and their effects on the base macroeconomic indicators and gross domestic products. Moreover, integration processes on the CIS space have played a significant role during the time when Kazakhstan became a sovereign state. In the given chapter a survey of the main proceedings will be carried out. Also, the main benefits for Kazakhstan from integration on the CIS space will be analyzed. In order to consider the second research objective of study this section was outlined by the following structure.

Figure 5.0

Outline of Results and Discussion for Research Objective (2)



KEY: FDI- Foreign Direct Investment; CP&ER- currency policy & exchange rate; FTZ- Foreign trade Zones; IS&EP- Import substitution and Export promotion; CT-Custom tariff

Source: Author Generated

5.2 Kazakhstan's Overview

Kazakhstan is situated in the north of the Central Asian republics and is bounded by the Russian Federation in the north (with a border stretching 6,467 km), China in the east (with a Kazakh border of 1,460 km), and Uzbekistan (with a Kazakh border of 2,300 km), Turkmenistan (with a Kazakh border of 380 km) and Kyrgyzstan (with a Kazakh border of 980 km) in the south. Its territory extends from the Volga and the Caspian Sea in the west to the Altai Mountains in the east, and from the West Siberian Plains in the North and Southern Urals to the Tien Shien Mountains in the south.

Kazakhstan is richly endowed with oil, gas, and mineral resources, including gold, iron ore, coal, copper, aluminum, silver and zinc. Of all the one hundred and five elements in the periodic table, at least ninety-nine can be found in abundance in Kazakhstan. Deposits of seventy elements have been explored, sixty of which are extracted. Large-scale commercial exploitation began only in the 1960s and 1970s. The 16,400 million inhabitants today, belong to more than a hundred different ethnic groups. According to the 2009 data, the largest ethnic groups were the Kazakhs with 63.1 percent, followed by the Russians 23.7 percent, the Uzbeks 2.85 percent, the Ukrainians 2.08 percent, the Germans 1.1 percent, the Uigurs 1.4 percent and the Tatars 1.28 percent (Smailov, 2010). Over the past 10 years, the ethnic Russian population has fallen by 26 percent, the Ukrainian population by 37 percent, the Tatar population by 22 percent, and the ethnic German population by 63 percent.

5. 3 Historical Background

5. 3. 1 The initial stage of reformations in the former USSR

In the Soviet Union, all economic operations were subordinated to the central plan and were executed by the corresponding ministers setting obligatory tasks for production and delivery from each nation and associated region. The union republics played a particular role, only in administering enterprises of a few industries, which produced goods for local consumption (Asadov, 2007). Towards the end of the 1980's, the former USSR initiated reforms for the political and economic keystones of society. These reforms were described as "perestroika" which caused chaos and stagnation for the national economy, and at the same time, it caused uncertainty among people in understanding the communist party policy (Nuti, 2010). The idea of "perestroika" was that the economy started developing with commercial practice implemented since 1988, and this was difficult to accept by the socialist republics. There was a significant economic crisis at the beginning of the 1990s and this encouraged the team of President Gorbachev, to accept the marketing way of development. It required changing the forms of ownership of most industries, in terms of production. By the end of the 1980s, the inefficiency and economic distortions generated by central planning had led to a deep economic

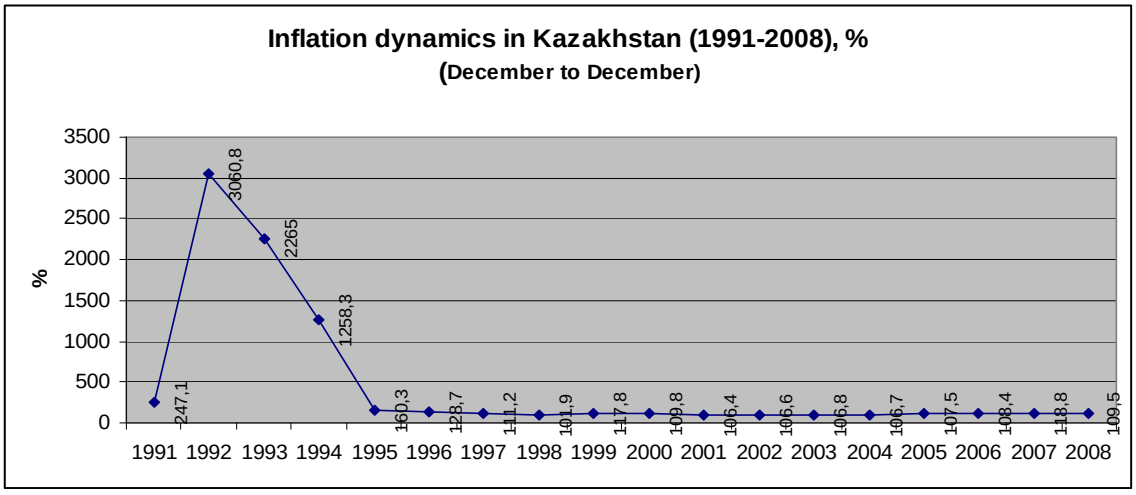
crisis in the republics of the Soviet Union, which brought in its wake a political crisis in the socialist world and the subsequent appearance of new forces on the world political scene (Asadov, 2007). In 1991, Kazakhstan supplied 42% of consumer goods in its territory, with 58% being imported, and this suggested that Kazakhstan was important in terms of providing commodities to the USSR's economy. Hence, Kazakhstan remains a country with a primary economy i.e. rich in minerals with mining and agriculture at the core. Additionally, during this period of Soviet rule, Kazakhstan became a vast industrial and agrarian region with a focus on being a centre for energy, metallurgy, fuel, chemistry and with machine-building industries having been created. It is a large producer of 'ferrous and non-ferrous metals, uranium, coal, oil, grain and animal products' (Zardykhan, 2002; Wu and Chen, 2004). Its enterprises after Soviet rule were favorable for developing the whole economy of Kazakhstan; as well as industrial activities of its separate enterprises, it manufactures a number of commodity based products which considerably predominated the current levels of production. However, the implementation of partial measures did not support the deep and complex economic reforms, and this caused an increasing fall in production levels. Also, it caused the initiation of an inflation mechanism and destabilization at the macroeconomic level. According to opinions of Kolodko (2000), Lockshina (2005) and Nuti (2010) the economic crisis within the former USSR territory had been the major cause of the political breakup.

5.3.2 Reforms in Kazakhstan within the frame of common economic space of the CIS

In December 1991, Kazakhstan declared its independence from the USSR and the course for denationalization, privatization and constitution of the Republic of Kazakhstan was announced for the first time, which accepted the rights for private ownership. Furthermore, there was a condition which was established for the development of market relations in the economy. However, at that time, Kazakhstan did not have its own currency, and this provided an opportunity to create an independent monetary policy, instead of being part of the common monetary system of the USSR. At the same time, a lack of monetary levels was restricting the possibilities for macroeconomic stabilization; furthermore, preservation of the newly formed sovereign states in the rouble zone, caused problems which impacted on the processes involved in inflation in the economy. Inflation rates in Kazakhstan also started increasing, after Russia in its sole discretion, created a new rouble in July, 1993. Besides, Kazakhstan was literally "pushed out" from the rouble zone which consequently caused the creation of the Kazakh national currency. It became the starting point on the way towards independent economic development. Similarly, a shortage of cash and occurrence of cash and cashless costs led to the creation of a national currency in Kazakhstan, where on November 15, 1993, the "Tenge" was put in place (Kenzheguzin, 2001).

An economic slowdown in the country during 1991 to 1995 showed that it was significant in terms of a comparison with the most dramatic depression in world history, which occurred in the USA. The collapse of interstate trading and expansionary demand management policies, in the opinion of Akimov & Dollery (2008), resulted in high inflation and decreased economic intensiveness. A soft monetary policy and liberalization of prices were used as incentives to increase prices to the level of world prices. As a result, it led to hyper inflation of 3,060% and this happened in 1992 (see Figure 5.1). Through the activities of the National Bank of Kazakhstan, a tough monetary policy was introduced during the subsequent seventeen years, whereby the level of inflation was successfully reduced and stabilized. According to Pomfret (2007(b), in 1996-1997 Kazakhstan's economy began to grow, but it was hard-hit by the 1998 Russian crisis (Pomfert, 2007(b) p.326). The lowest value of inflation was marked in 1998 at 5.9%. In comparison with many of the other transition economies, the level of inflation in Kazakhstan has remained relatively low between 1998 until 2007. However, the inflation level started growing during the last few years and reached 9.5% in 2008 (see Figure 5.1). Currently, in 2010, inflation in Kazakhstan sits around 8.4% (Statistical Bulletin, 2010).

Figure 5.1



Source: Generated by author on the basis of Republic of Kazakhstan National Statistics Agency and based on the National Bank of Kazakhstan, various issues.

Neo-liberals considered that the main cause of inflation was in the sphere of monetary demand, however, this was not in accordance with the government's view whereby the source of inflation was seen to rest in the peculiarities of replenishment of the infrastructure of the national economy – technological underdevelopment and extreme monopolization (Avdokushin, 1999). The competition mechanism was practically insufficient in Kazakhstan, and internal prices were oriented towards prices of imported goods. Additionally, one of the causes of inflation in the country, like in many other CIS countries, was not due to the growth of the stock of money, but it was due to an endless chase of internal money after increasing the prices of

imports (Uzagalieva, 2005). Thus, the cause of inflation growth in Kazakhstan was connected with a lack of competitiveness of national manufacturers, which had a negative impact in terms of the inflation rate which was continuing to cause the importing of large amounts of non-food products.

In addition, high prices for services tended to influence the dynamics of inflation growth, although the quality of such services does not conform to international standards. Unfortunately, it is necessary to note that such a situation was common for many CIS countries.

5.3.3 Economy liberalization

Kazakhstan's state stabilization program was implemented for the liberalization of the economy, here, state control for all spheres of the economic operation was gradually reduced. Initially, at the start of this program, directive planning and state monopoly of foreign trade were cancelled, as were all the business units which had been allowed to deal with foreign trade activities. And as mentioned earlier, Grossman and Helpman (1990) and Edwards (1992) pointed out that free trade and economic liberalization tend to lead towards technical progress and strong competition within the nation. On this note, the President of the Republic of Kazakhstan, Nursultan Nazarbayev signed a Decree "About liberalization of prices" on January 12, 1992. Since this time, liberalization of prices for the majority of goods and services started, and the government could not further control and keep the prices at the domestic market level. All these measures were created for the elimination of the product shortages and achieving a balance in consumer markets.

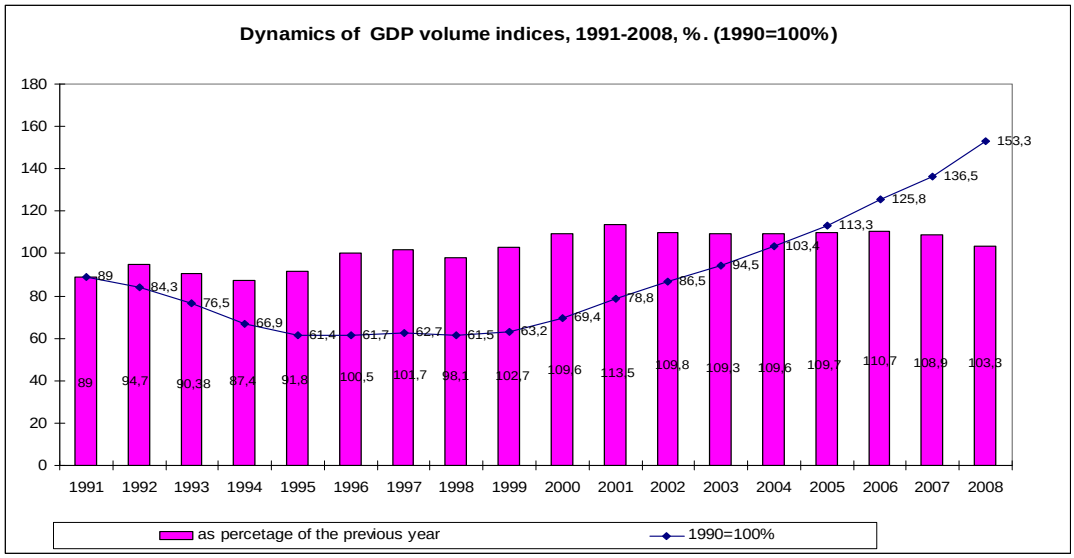
5.4 Dynamics of changing of GDP index since 1991

5.4.1 Structural reforms in the economy

The economic reforms initiated in Kazakhstan during the period 1991-2008 were implemented in order to make the transition from the previously centrally planned to a market economy. However, these were implemented following the crisis events which earlier occurred during 1992-1995. As a result, anti-crisis measures were performed in 1995 and these significantly improved the macroeconomic situation in the republic. During 1996 to 1997, there were noticeable signs of economic stabilization; however, this process was seen to fail, due to the impact of the world financial crisis during 1998-1999. Since 2000, the national economy demonstrated a 'positive dynamic of growth' (Akimov & Dollery, 2008), and hence, the production level and structural improvements in the economy of the country during the indicated periods can be observed as changes in the macroeconomic indices, with the major index being GDP. As per Figure 5.2, the economic potential of the country in 2007 increased beyond the indices of 1990.

From figure 5.2, effective 1991, the real GDP was annually decreasing by 10% and in 1995 the lowest level of this index (61.4%) was registered in comparison with 1990. Worsening of the real GDP dynamics was explained by a serious crisis in the general economic situation of the country, which was accompanied with a drop of production in the industrial sector. Therefore, there was a need to recover the pre-reformation potential of the economy and this was the focus, for the subsequent fourteen years.

Figure 5.2



Source: National statistical Agency of the Republic of Kazakhstan, 2009

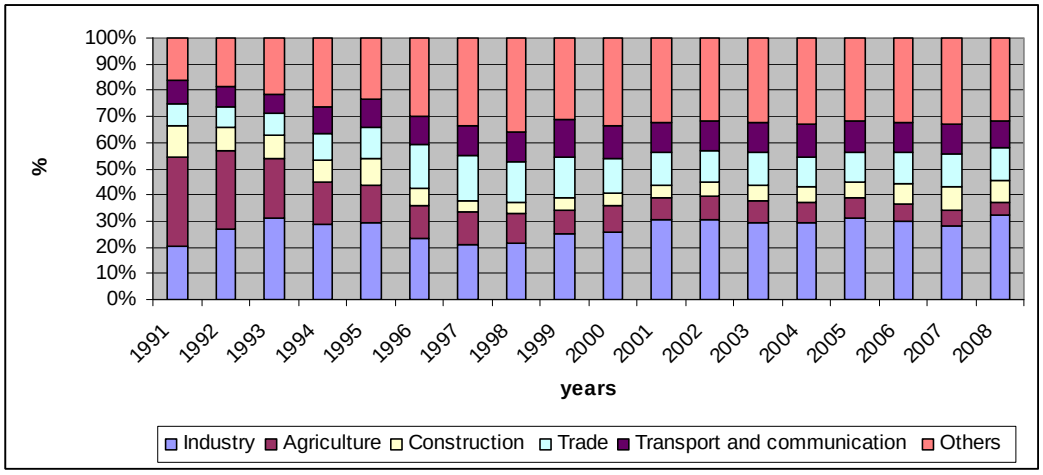
5.4.2 Structure of GDP

During the reforms in Kazakhstan, some significant changes in the structure of GDP occurred which are shown in Figure 5.3. During the pre-reformation period, Kazakhstan used to be an agrarian country (specific density of agriculture 34%, industry 20.5%) and in 2008 the agriculture rate decreased to one sixth of its output level. According to Shokamanov (2003), the changes in the structure of GDP occur not only due to the changes in the indices of the physical volumes, but also it is impacted by different dynamics of prices in the various industrial sectors.

In addition, Figure 5.3 suggests that for the price factor, the reasons for such a drop were: breakages of trade relations with former USSR countries, failures in lending, an absence of the vital elements of fuel, fertilizers, spare parts, bad weather conditions during specific periods and weak economic operations as well.

Figure 5.3

Structure of GDP in current prices, in % to the result



Source: Compiled from Abutalipova, eds., 2005; Smailov, ed., 2010

According to Pomfret (2009), after proclaiming independence the agricultural branch had a rapid decline. He points out that the annual growth rate of agricultural value added in 1990-2001 was- 3.22%. According to this Pomfret (2009) states that

> *" one reason for the decline was a policy vacuum, which saw the rapid switch in the early 1990s from support for farmers to a market situation reserved in the early 2000s as the government responded to the oil boom by promoting economic diversification, which included generous support for agriculture"* (Pomfret, 2009 p.182)

Further, reductions in the construction sector were mostly connected with a lack of investments, and it was necessary to note the root of the resolution of President Nursultan Nazarbayev, in 1998, the capital of Kazakhstan was transferred from Almaty (south part of Kazakhstan) to Akmola (northern region of republic) which was further renamed as Astana (in translation means – capital). Also, due to the construction of the new capital, the construction sector began to develop. Moreover, the country accepted the different step-by-step state programs on home constructions which were supported and are still being supported by medium-term state programs for the periods of 2003-2005, 2005-2007, and for 2007-2009. In addition, with the purpose of overcoming the economic problems associated with primary materials, Kazakhstan developed a strategy of industrial-innovative development of the Republic of Kazakhstan over the period 2003 to 2015.

The main objective of this strategy was submitted by Bakhyt Sultanov- Minister of economic development and budget planning of the Republic of Kazakhstan on the International Conference

"Promoting Innovation-Based Entrepreneurial Opportunities in the UNECE[3] Region" which was conducted in Geneva, 28-29 September 2009 (Sultanov, 2009). Furthermore, the strategy was directed towards diversification of the economy and provided a diversion from the primary commodities development model. The main purpose of this document was limited in terms of the risks for long term growth, which were connected with dependence on unstable world prices for energy resources. However, according to the opinions of some economists, this strategy was practically non- performable (Bopieva, 2007). Among the sectors which produce goods, only the industrial branch increased to 32.1% in the general structure of GDP against 20.5% in 1991. Nevertheless, there are noticeable progressive changes in the structure of GDP, specifically, in terms of the provision of services being increased, which was in-line with the worldwide trend. However, the economy of Kazakhstan was seen to be similar to some developed nations, in terms of a growing demand for services. However, the level and quality of providing services in Kazakhstan does not come close to that of developed nations.

The economic structure of Kazakhstan has a particular peculiarity which requires a little attention. As mentioned earlier, the agriculture share of output comprised of 34% in 1991 and 5.3% in 2008. During the beginning of independence, these indices were shown in terms of the structure of Kazakhstan's economy being close to the structure of developed countries where the share of agriculture is not great. Also, the share of those who are involved in this sector comprised approximately one third of the total number of those who were employed in the economic sector of the country (in 2008 – 30%). It is clear that such correlation of the economy's structure and employment structure cannot be considered as a progressive change. In addition, the development of a service provision culture, is explainable mostly by growth of costs for the services in comparison with growth of costs for goods. This may also be explained by the rapid development of financial and other intermediary services which are typical for a market-led economy (Sagadiev, 2006).

5.4.3 Structure of usage elements

The structure of the Kazakh economy in terms of using GDP as a major figure of output, had significantly been transformed during market reforms, and this is shown in Table 5.1.

[3] UNECE- United Nations Economic Commission for Europe

Table 5.1

Structure of elements using GDP during 1991-2008 in percentage result

Years	Total GDP	Costs for the final consumption total	Including household economy	Including public administration	Non-commercial organizations which render services for household economies	Gross saving	Export of goods and services	Import of goods and services
1991	100	91.4	72.4	16.0	3.2	26.2	31.5	49.3
1992	100	82.6	66.5	13.1	3.0	31.8	87.9	102.3
1993	100	88.3	71.1	14.5	2.8	20.9	39.5	48.7
1994	100	82.6	69.9	10.0	2.7	26.8	34.6	44.0
1995	100	81.9	67.3	13.1	1.4	22.5	37.7	42.1
1996	100	83.9	69.3	13.5	1.1	16.9	36.9	37.7
1997	100	86.4	72.8	12.9	0.6	16.3	36.4	39.0
1998	100	86.7	74.8	11.4	0.5	18.0	31.9	36.6
1999	100	84.0	71.8	11.5	0.7	13.6	42.5	40.1
2000	100	73.4	60.6	12.0	0.8	18.1	56.8	48.2
2001	100	73.3	58.5	13.8	1.0	27.6	47.5	48.4
2002	100	66.2	52.8	11.6	1.8	27.2	47.0	47.0
2003	100	65.8	52.8	11.3	1.7	25.6	48.4	43.0
2004	100	65.1	52.0	11.6	1.5	26.4	52.2	43.5
2005	100	61.5	48.9	11.2	1.3	27.1	53.5	44.6
2006	100	55.9	44.5	10.2	1.2	33.4	51.2	40.5
2007	100	56.2	43.9	11.1	1.2	37.2	49.4	42.8
2008	100	53.4	41.7	10.5	1.2	26.3	57.6	37.3

Source: Compiled from Smailov, 2009

Here, the major factors which impact on the dynamics and structure using GDP are the rates of change of the final consumption and accumulation of fixed assets. The portion of expenses for the final consumption of GDP during 1991-2008 varies from 91.6% to 53.4%. Such indices were periodically changing from increases to reductions from 1991 until 1998. According to table 5.1, such changes occurred due to the cyclic variation of expenses for the household consumption and state institutions.

Moreover, the portion of non-market services provided by non-commercial organizations for the domestic economies had a tendency towards reducing until 2000. Similar factors were happening in the 1990's in the sphere of final consumption of domestic economies, which included consumption of goods and services obtained by domestic economies and social transfers in their initial form. Likewise, during 1991- 2008 the portion of expenses for the final consumption by state authorities in GDP experienced noticeable changes, which were connected with the performance of the reforms and with aggravation of budget problems which in turn caused a decrease of budget expenses. As a result, this led to a decrease of state expenses for the final consumption, and also, the expenses of the public administration comprised of 16% in

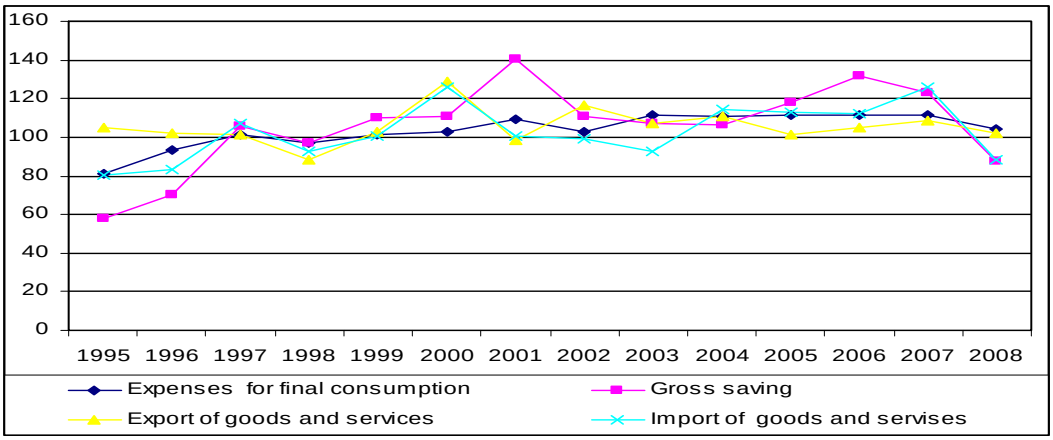
1991, and 10.5% in 2008 – thereby demonstrating an increase in efficiency. Bopieva (2007) found that there was a redistribution of general expenses, and here, the relative volume of overall expenses of the institutions, which render individual services (healthcare, education, culture, social provision) from the expenses of public administration, had reduced from 72.5% in 1991 to approximately 48.9% in 2005. Indeed, the portion of collective services (sciences, management, defense, social order and security) had doubled during this period. Finally, in 2000, the tendency of decreasing the gross savings ratio in the structure of using GDP, which was caused by a reduction of investments to the fixed assets during 1995-1996, was overcome, and this in turn, caused a drop of production and in particular, uncertainty in the perspectives of the national economic development.

5.4 4 Dynamics of using GDP and trade policy of Kazakhstan.

According to figure 5.4, effective 1999, there was a noticeable increase of the fixed assets rate, which reached a maximum amount of 140.5% during the reformation period in 2001. These numbers are explained with stability in the investment sphere and with growth of volumes of capital expenses. As per the official statistics, a structure of using GDP is characterized with a low rate of change of the current material assets. This index comprised of 2.5% from GDP in 2004, and it suggests that while the enterprises have been expecting high prices, they have been trying to have a large amount of raw stocks and materials. Therefore, the tendency of reducing stock has been a primary focus since 1998.

Figure 5.4

Indices of physical amount of elements using GDP



Source: UN, 2009(a), Smailov, ed., 2009

Net exports in the republic were negative until 1995 during the observing period (1991-2008); Kazakhstan was typical for countries which have a more open economy and more dependent on others as well. In accordance with Ovchinnikov (2001), in order to facilitate the market

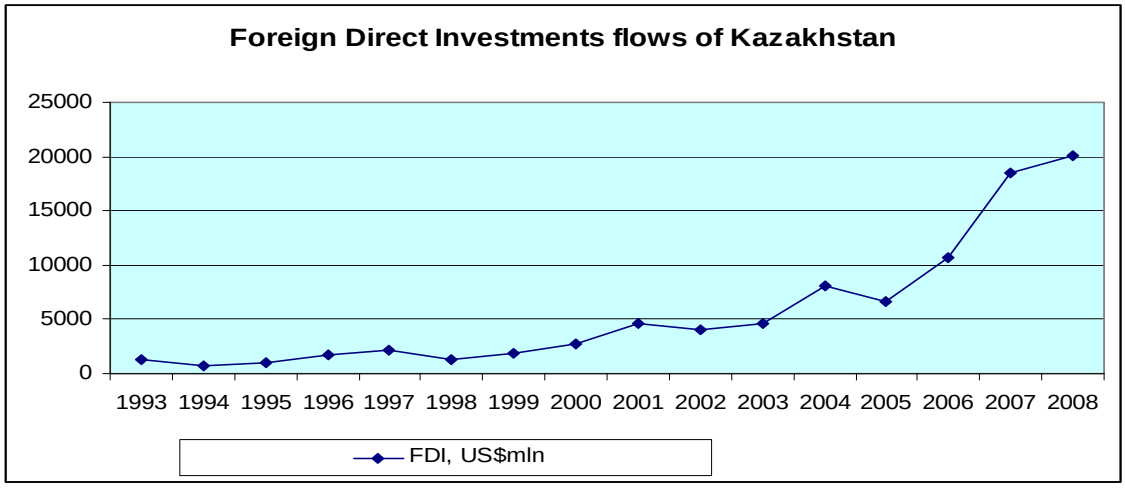
economy in the sphere of foreign trade relations, import-export licensing was cancelled during the reforming period. Based on the accepted resolutions, since 1995 some requirements were cancelled for licensing as per export and import of all goods. But as in many other countries, exceptions were made for weapons, drugs, precious metals, wild animals and other goods. Simultaneously in 1995, Kazakhstan cancelled export quotas and partial restrictions which covered only export infrastructure. Moreover, there are some factors which slowed the economic growth such as: export registration, pre-shipping inspection, inadequate custom procedures and export tariffs.

Similarly, according to Madiarova (1999), export tariffs in 1996 decreased from 5.3% to 4.1%, and the quantity of goods used to be taxed by similar tariffs reduced from 733 to 259 during the same period. However, even such a list of category of goods and services disturbed the process of liberalization. All the export tariffs among Customs union countries were cancelled in the middle of 1996 (Madiarova, 1999). In addition, in 1998 in comparison with the previous year, the real volume of export and import of goods and services had reduced 11.9% and 7.2% which is connected with the reduction of physical volume of trade and export-import operations between the CIS countries. In this regard, according to the European Bank for Reconstruction and development (EBRD) by the first half of 1995 Kazakhstan achieved substantial trade liberalization, following the abolition of all export quotas and the elimination of most export and import licenses (Akimov & Dollery, 2008 p. 83). Effective 2003, there was a noticeable significant tendency of export increase, in comparison with imports, and this was mostly connected with favorable world demand for Kazakhstan's mineral stock (Mudi, 2006).

5.4.5 Dynamics of GDP, industries and investments

During reforms especially at the initial period of reforms, there were obvious tendencies of a rapid falling of investments against the fact of general falling of GDP. Also, there were changes in the vital economic proportions during the process of transition into new conditions. Between 1993 and 1994, the investments of major stock in the economy of Kazakhstan had reduced by 50% (Figure 5.5). However, in the following period it is noticeable that a significant increase of foreign direct investment flowed into the Republic of Kazakhstan. The analytical report "Assessment of the market reform process and social-economic development of Kazakhstan during 1990-1999" was prepared by the Institute of economic researches of the Economy Ministry of the Republic of Kazakhstan which underlines the attraction of the foreign investments and played a great role in the shortage of the internal investment resources.

Figure 5.5



Source: Data from Ministry of Economy and Budget Planning of the Republic of Kazakhstan

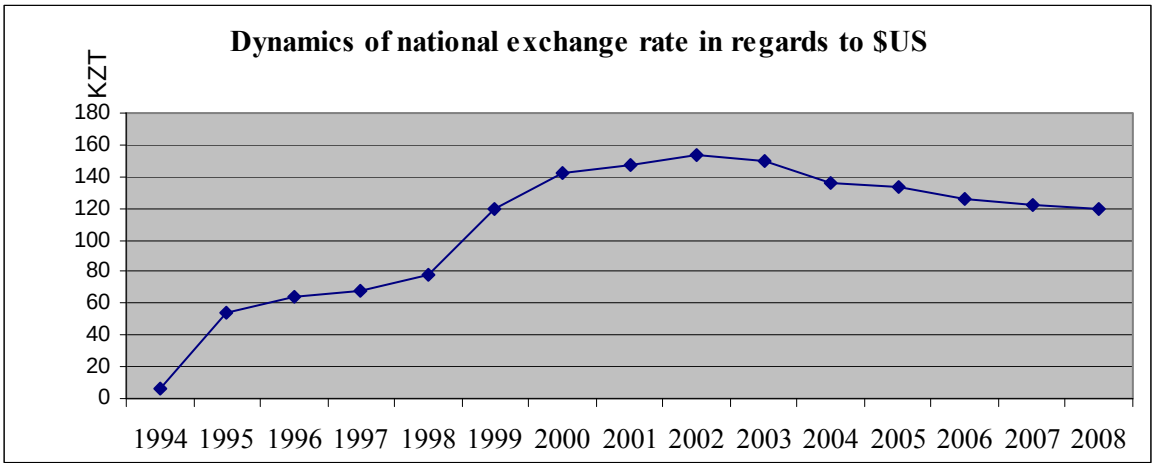
In addition, during 1993 to 1994, according to the information of Kazakhstan's Ministry of Economy and Trade there was 1,931 million USD involved in the form of foreign direct investments, export loans, and as official support for the development of Kazakhstan. Lately, the main forms of attracting foreign direct investments have become joint ventures and enterprises which have been under the complete ownership of foreign investors. The low loan rating in Kazakhstan was a factor which was constraining the process of attracting the foreign investments during the above mentioned periods. According to the information in the "Institutional Investor" magazine published in 1994, Kazakhstan was 99th place among 130 countries of the world, being ahead of all CIS countries except Russia in the index. Furthermore, since 2001, the international rating agencies have started focusing on the strengthening of the potential capabilities of Kazakhstan's economy. In September 2002, "Moodys" Investors Service awarded Kazakhstan a - BAA3 loan rating - which is considered as an investment category. The emerging investment climate of Kazakhstan is very attractive in relation to other developing CIS markets. It has been shown that Kazakhstan was the first republic among CIS countries which obtained a loan rating at investment level. Also, as stated by Krugman (1986), an international investment is a highly visible and growing influence in the world economy. Indeed, Kazakhstan has been fairly successful in attracting foreign direct investment (FDI). Kalyuzhnova et al (2004 p. 256) noticed that Kazakhstan had "attracted around 75 per cent of all FDI into Central Asia, and about 10 per cent of all FDI into the former communist bloc". Hence, according to Kaser (2003) Kazakhstan is one example of the highest inflow of FDI since independence amounting to some $11 billion, or $741 per capita, against the $4.1 billion flow into Azerbaijan ($501 per capita) and $1 billion into Turkmenistan ($189 per capita). According to a UNDP report (2005) Kazakhstan has "managed to attract really large investments only in the energy and mining sectors, but not in manufacturing, agriculture, or

services (apart from banking, which again, mainly serves the extractive industries)" (UNDP, 2005 p.47-48; Akimov & Dollery, 2008 p. 91). Consequently, FDI in Kazakhstan remains concentrated in the oil and gas sector which has so far accounted for 67 % of the cumulative total of US$9.5 billion over the period 1993-2000. Western Kazakhstan is a site with the most oil and gas fields with the highest investment after "Central Kazakhstan which is rich in copper, iron ore, coal and manganese" (see Kalyuzhnova et al., 2004 p.256). Also, the East Kazakhstan oblast (region) has gold and mineral deposits and is third (Kalyuzhnova et al., 2004 p.256). Furthermore, according to Kalyuzhnova et al (2004), there is some evidence that FDI has generated spillovers to the domestic economy regarding improving the balance of payments position and the development of new export capabilities in various industrial sectors. Thus, "FDI should continue to be a major source of economic growth in Kazakhstan" (Kalyuzhnova et al, 2004 p. 256) and a current UNDP project (2005) underway with seven oil and gas multinationals is looking to invest in excess of US$20 billion over the next seven years.

5.4.6 Currency policy and exchange rate

World experience shows that the main priority of economic policy for many countries is the stability of the national currency which depends on the foreign exchange rate position. According to von Hagen and Zhou (2005) the choice of an exchange rate regime is affected by macroeconomic developments, and it also impacts on the economy. The Real Effective Exchange Rate (REER) of the national currency is given by the IMF or by calculating the real exchange rates of major trading partners, against national currency, weighted by their participation. REER can therefore be seen as a measure of competitiveness. A decline of REER (overvaluation) has negative effects on competitiveness and vise versa (Kemme and Roy, 2006). The choice of this variable was established by Kaminsky et al. (1998), where accordingly, the real exchange rate is overvalued relative to its equilibrium level or its average level during tranquil times, in periods preceding the currency crash. Furthermore, Masson and Ruge-Murcia (2005) established a negative relationship between this variable and the incidence of a crisis. Indeed, the National Bank of Kazakhstan - on the basis of legislation – carries out currency controls, keeps records of countries' external and internal debts by assets and liabilities, and implements restrictions. Also the National Bank of Kazakhstan manages the official gold and foreign exchange reserves of the Republic of Kazakhstan, and the crucial point in the formation of exchange rates was in 1995. Here, the rapid reduction of the inflation rate from 1258% in 1994 to 60.3% in 1995 (see figure 5.1 in chapter 5.3.2) led to decreasing devaluation of the national currency – tenge rates with regards to the US dollar, from 759.9% in 1994 to 17.9% in 1995. As a result, stabilization began to appear on the foreign exchange markets, and figure 5.6 demonstrates the dynamics of the Kazakh national currency – tenge with respect to the US dollar.

Figure 5. 6



Source: Statistical Yearbook of Kazakhstan for 1993- 2008; and The National Statistical Agency of the Republic of Kazakhstan, 2009

The significant devaluation of the national currency of the partners of Kazakhstan, first of all in Russia and also unfavorable conjuncture of oil and nonferrous materials' world prices, led to a rise in the national currency's prices- tenge. This change decreased the competitiveness of Kazakh commodities on the external and domestic markets, increased the negative balance of payment by foreign- trade activities and also affected adversely the economic growth. The specifics of Kazakhstan's economy: raw materials orientation (accordingly, dependency on world markets), close integration with Russian economy, underdeveloped financial market led to the depreciation of the national currency – tenge. The significant dependence of growth of Kazakhstan's GDP from oil prices led to a gradually decreasing growth rate. And GDP decreased as regards the previous year level in the second half of 1998. The currency intervention for stabilization of national currency- tenge was obliged to be conducted by the National Bank of Kazakhstan. This bank's activity has led to the reduction of gold and foreign currency reserves. Thereby, the Kazakhstan's default condition in 1999 is a consequence of two main factors: reducing of price to the main commodities of Kazakhstan's export commodities and the rapid devaluation of Russian rubles which has been reducing Russian exports and replacing the national manufacturers from the domestic market with Russians. This fact reinforced the output falling. The Kazakh Government and National Bank of Kazakhstan accepted the joint declaration "About further policy of national currency" on the 4th of April, 1999 in order to avoid the negative effects of an overrated currency to the national economy. Since then it has been proclaimed a free float exchange rate regime. Nowadays, the Republic of Kazakhstan uses regulated 'dirty' floating where exchange rate is floating with some intervention of the National Bank during formation of the exchange rate. During analysis of economic

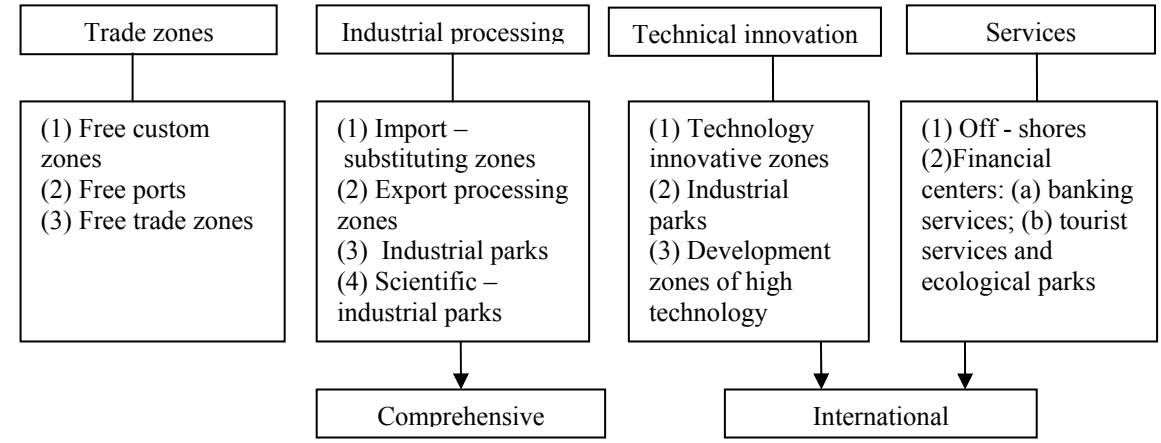
development of Kazakhstan we can conclude that the understated exchange rate of national currency- tenge is a main macroeconomic instrument for the realization of the export-oriented models of economic growth. According to world experience the countries' main task of economic policy is stabilization of the national currency which mainly depends on exchange rate conditions.

5.4.7 Free Trade Zones

Free economic zones are enclaves within a country where foreign and domestic goods may enter in order to be stored, distributed, combined with other foreign and or domestic products or used in manufacturing operations (Tansunaj and Gentry, 1987). Romero (1995 p.280) suggests that free trade zones are "an isolated, enclosed, and policed area, in or adjacent to a port of entry without resident population, furnished with the necessary facilities for loading and unloading, for supplying fuel and ships' stores, for storing goods and for reshipping them by land and water". Additionally, he adds that "it is an area within which goods may be landed, stored, mixed, blended, repacked, manufactured, and reshipped without payment of duties and without the intervention of customs officials" (Thoman, 1956 p.7). The important questions for governments are why do we create free economic zones, and why are they being expanded in the world? According to McNtyre et al. (1996), many developing countries have employed EPZ to foster economic development and integration into international trade. Generally, these zones have been considered by many developing countries as a good starting block to reorient their policies toward resolutely export-looking strategies after the relative failure of import substitution experiments. In addition, these authors highlighted the benefits to states through creating the export processing zones (or free economic zones). Thus, creation of free economic zones in the opinion of Kazhyken (2008) is considered by their founders as an important way of realizing the principles of an open economy. Their function is connected with liberalization and activation of foreign economic activity. Also, according to the practice of economy, a free economic zone leads to a high level of openness to the outside world. And during this time, customs tax and investment regimes are favored for home and foreign investments. So, apart from attracting foreign capital, foreign economic zones activate the economic process within countries by stimulating the industrial export and getting some currency funds; promoting employment growth; and by turning into testing areas the new methods of farming and growth of the national economy. Furthermore, the main reason for forming a free economic zone is that the country does not want to open completely its economic foreign capital flow and use of a specific investment climate. Thus, they use partial and local openness through special economic zones. The organizational and functional structure of free economic zone is sufficiently diverse. It can be difficult to classify a free economic zone, as they are not identical, since they possess features of many zones. Russian experts developed a classification of zones on the profile of farming activities (Figure 5.7).

Figure 5.7

Varieties of Free Economic Zones



Source: Semenov, 1996

The general features of the different types of free economic zone are favorable investment climate including customs, financial, tax reliefs and advantages in comparison with the general regime.

In June 2005 the Russian government adopted Federal Law no.117 "On special economic zones in the Russian Federation". This new legislation led to the creation of special economic zones and to diversify and modernize the economy.

First, SEZs for industrial production can be established on a territory of up to 20km^2. The value of each project should be at least €10 million (€1 million in the first year) and in the form of green- field investment in activities other than mining and processing of natural resources and processing of ferrous and non- ferrous metallurgy products. Second, technology- innovative zones can be established on territories up to 2 km^2 and there are no minimum investment criteria for such projects. According to Engman et al (2007), Russian or foreign- controlled companies based in SEZs are eligible for various tax incentives including exemptions of regional taxes (property and land taxes). By their opinions, companies in technology- innovative zones also enjoy reductions (from 26 to 14 percent) of the federal unified social tax. Furthermore, industrial companies are allowed to accelerate depreciation of their fixed capital investment, carry over losses and include their R&D spending in current expenditures. SEZ- based companies also have some custom privileges such as remissions of custom duties and import VATs; and exemptions of excise taxes on Russian goods.

Regarding exports of goods from SEZs, it will not be caused by payments of customs taxes, VAT and excise duties. In addition, in the view of Engman et al. (2007), Russia's recent experience with SEZs particularly in Kaliningrad has been mixed. Such zones have tended to establish enclaves rather than become the engine of a general economic development.

According to this point of view, the main purpose of the special economic zones is to decrease the administrative barriers (Kazhyken, 2008). Hence, the authorities hope SEZs to be particularly attractive to foreign investors which often notice these barriers as the main hindrance to their establishment and activities in Russia. Nevertheless, free economic zones in Kazakhstan are determined as territories with clearly defined administrative borders i.e.: special juridical regime by legislation.

The aim of creating free economic zones is to attract foreign capital, progressive foreign technology and managing experience for the acceleration of social and economic development. In 1996, through the President of the Republic of Kazakhstan's decree and at the same time a statutory called "About special economic zone" the new stage in standard legal regulation of the given sphere was started. The main point here was the definition of the Special Economic Zone was accepted in the above mentioned decree in order to represent itself as a small limited territory with a special juridical regime. Moreover, the first free economic zones appeared in Kazakhstan in 1993. These are: Zhairem- Atasuiskaya in Zhezkazgan oblast; Alakulskaya and Zharkentskaya in Taldykurgan oblast; sub zone on the base of enterprise "Taldykorganvneshervice" in Taldykorgan city; Lissakovskaya in Kostanai oblast and free trade zone "Atakent" in Almaty. And some other oblasts (Atyrau, East Kazakhstan, Karagandinskaya and Mangystauskaya) were declared as free economic zones. In the opinion of Kazhyken (2008), the first experience of forming FEZs did not achieve its aim because of imperfect legal and arranging functioning mechanisms. In addition, there was not enough independence in solving financial, tax and other problems. Nowadays, there are 5 FEZs in the territory of Kazakhstan: First, "Astana is a New City" was created to develop a new capital for Kazakhstan. Primarily its territory totaled 1053 ha and later it was extended to 5440ha. During the period of 2001-2007 investment volume in FEZ territories exceeded over 718 billion tenge (Nesterenko, 2008), 60% of them private investments. The second FEZ "Morport Aktau" is located in the territory of sea trade ports and adjoining to it territories within administrative and territorial borders of Aktau. The FEZ will exist until 2015. Primarily FEZ territory was 227ha. Later it was extended to 982.3ha. For additional areas the plan was to form special structures such as: "Industrial City" "Aktau Industries"; Centre of developing infrastructures of the Kaspian shelf centre of boundary trade "Aktau"; and Multi-model transport logistic centre. At the beginning of 2008, the members of 4 companies realized their activities in FEZ territory "Morport Aktau" and these are:

a) Republican national enterprise "Aktau International Sea Trade Port"
b) "AZST Partnership" which finished the construction of the plant of sand fibrous pipes with annual capacity of 400 thousand tons in 2005. 14.2 million US dollars were invested into this project.

c) "Arsellor Metall Aktau" completed the construction of oil pipe production plant, with a capacity of 60 thousand tons per year and 35 million was invested into this project.
d) "Keppel Kazakhstan" is a subsidiary enterprise of a Singapore company named, "Keppel left shore and Marine". The company is building a plant of sea metal constructions through foreign investment.

Third, "Ontustik" FEZ was created based on the conception of developing cotton and textile clusters in South Kazakhstan. The FEZ territory makes up 200 ha which is located close to Shymkent city. At the present time, some engineering infrastructures like railroads, electric lines, water pipelines, gas pipelines are being built. In order to develop the present FEZ in the future, private investments should be attracted with the sum of 1 billion US dollars. It is set to build not less than 15 spinning weaving, sewing manufactures where 150 thousand tons of cotton will be processed (Trade Mission of Kazakhstan, 2008).

Fourth, "Information Technology Park" FEZ is located in the territory of Alatau settlement of Medeu region in Almaty. This zone is created to develop the information technology field, activate the entering of Kazakhstan's economy into the world's communication system. Also to create highly effective and technological and export-oriented production of modern information technology, mastering new types of products of information technology, and to attract some investments. Furthermore, it is assumed that this FEZ will become an original regional centre of IT industry for Central Asia and Siberia. Finally, "Burabai" FEZ is located in the territory of Borovoe in Akmola oblast and occupies an area of 370 ha. In 2008, more than 3 billion tenge was invested from the national budget to develop this FEZ. Most funds were spent to build a highway on the program "Road map".

5.4.8 The National Fund of Kazakhstan

Through foreign investments and creation of technologies, the exporting sector of products of Kazakhstan is developing, and based on a partial attraction of foreign manpower, it is possible to conclude that Kazakhstan is almost isolated from the national capital and labor market. As a result, in the opinion of Chelekbai (2007) it leads Kazakhstan to the syndrome of "Dutch disease". In addition, a National Fund was established within the economy of Kazakhstan in order to prevent the "Dutch disease" syndrome. "Samruk Kazyna", is the name of the national fund consisting of stabilized portfolio (32.1%) and of savings portfolio (67.9%). Furthermore, stabilized portfolio (of the fund) means overcoming the negative consequences of volatility of oil prices in the world market. The fund should support the budget expenses in case of rapid decrease of prices for the primary resources. It should also stimulate a steady spending of the state funds despite variations in the world prices. Indeed, savings portfolio is the fund of future

generations which should be passed over to the descendants and provide justified usage of the natural resources rent (Algozhina, 2006).

5.4.9 Import substitution and export promotion

Import substitution and export orientation programs are comprehensively supported by the Government of the Republic of the Kazakhstan. As we mentioned before, the "Strategy of development of Kazakhstan until 2030" was developed on November 12, 1999. With the purpose of developing this strategy, there was a Resolution called, "About further measures on fulfilment of the Kazakhstan's development Strategy until 2030", which was signed by the President of Kazakhstan on February 17, 2000 where the major orientation was made for "provision of development of the real sector of the economy especially export oriented and import substitution branches". Regarding this strategy, Kazakhstan adopted a program of development and supported the most prospective industries of "30 Corporate Leaders". The main goal of this program was to consolidate the business and government attempts to create new and modernize existing productions which provide diversification and growth of the non-primary sector export potentials (Sultanov, 2009).

Generally, all the countries wanted to develop the innovative branches of the economy at a fast pace where there is an opportunity to set high added value. Consequently, when the world prices for the energy carriers are high, then there is a chance to increase the investment in scientific-research, construction developments and high technology productions in order to provide a stock for long-term and efficient growth. In addition, this stock is required not for the end of resources because the growth based on export of the resources is less efficient than the growth based on export of goods of high technology. In other words, for two countries which have similar characteristics, only one of them will succeed with export products of electronics and bio technologies, but not oil. In this connection, the "Strategy of industrial-innovative development of the Republic of Kazakhstan" based on the well-considered policy of government was accepted. It was designated for the establishment of state economic policy of the Republic of Kazakhstan till the year 2015. It is also made for the achievement of the stable development of the country by diversifying the economic branch and quitting the development of raw materials to transit the refinery industry. The major goals of the Strategy of industrial-innovative development of the Republic of Kazakhstan (Delovaya pressa, 2003) are as follows:

(1) provide growth of industry of 8-8.4%, increase of labor productivity till the year 2015 in comparison with the year 2000 for not less than 3 times and reduce the GDP energy intensity 2 times;

(2) increase of productivity of the major funds of the manufacturing industry;

(3) set-up business atmosphere, structure and maintain public institutes which will stimulate the private sector and improve the competitive advantages. It will also

assimilate the elements within the chain of added value costs with the specific productions by achieving the highest added values;

(4) stimulate and establish high technology and export oriented production;

(5) diversify the export potentials of the country for the benefit of goods and services with high added values; transition to the world quality standards;

(6) Develop the integration of the economy both regional and world by including into the world scientific-technical and innovative processes.

5.4.10 Custom tariff regulation

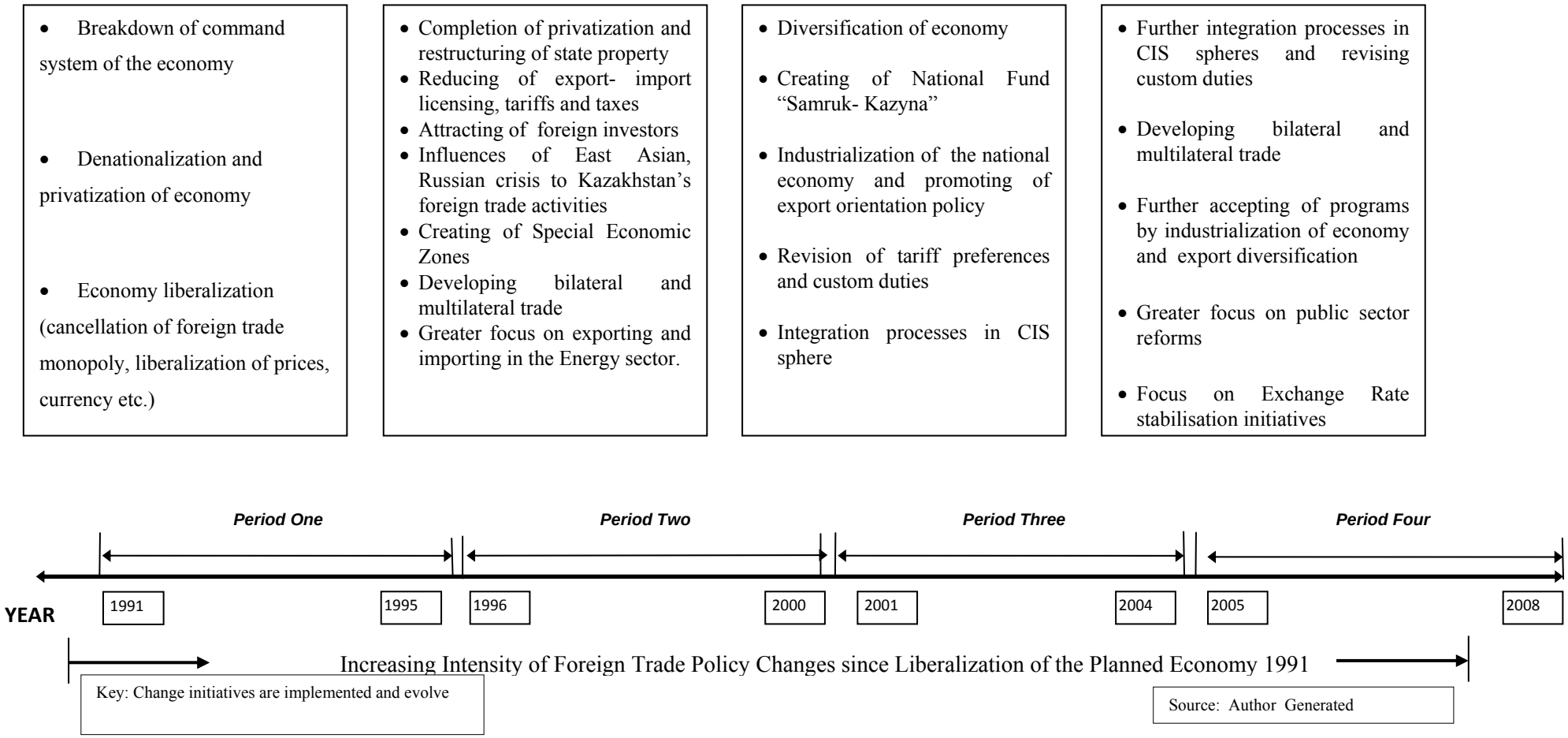
Major standard acts were accepted in the 1990s which have been directed for regulation of currency operations in the country such as: Law of the Republic of Kazakhstan "About currency regulation", Resolution of the President of the Republic of Kazakhstan "About immediate measures on development of currency market", "About measures on regulation and development of currency market " etc. The state regulation of foreign economic activities was connected with the application of tariff and non-tariff measures of regulation. As a result, the indicated measures rapidly developed for several years after Kazakhstan's independence. In addition, there were no available legal acts designated for supporting the export issues by the government. Development of the country's exports during 1991-1998 was occurring for both domestic and foreign economic reasons (the economic crisis which is characterized by the falling of the industrial production level, uncontrolled export of Kazakhstan's primary goods abroad etc.). The following years are characterized with liberalization tendency in regulation of the foreign trade such as: cancellation of the export quota, reduction of list of licensing products, simplification of order of obtaining licenses etc. In figure 5.8 the author tried to summarize the main evolving trade policy change initiatives in Kazakhstan in place since 1991.

During the performance of the foreign economic activities, there were identified classifications of goods as per 10-digit commodity code listings which are based on the international convention of harmonized system of describing and coding products. Moreover, during the performance of trade-political relations of Kazakhstan with foreign countries, the tariff preferences were considered which are being provided by Kazakhstan in the form of exemption from payment of duties, reduction of duty rates or establishment of quotas for the goods which have been produced in the developing or less developed countries through the use of Kazakhstan's national system of preference. Most goods imported to Kazakhstan from less developed countries are exempted from being imposed with custom duties. Also, there are applied custom duty rates to the amount of 75% as indicated in the attachment to the resolution of Kazakhstan's Government "About custom tariff and foreign economic activity commodity classification of the Republic of Kazakhstan" (with amendments dated February 6, 2008) for the goods which are imported to Kazakhstan from the developing countries. Furthermore, the products which are imported and exported from CIS

countries – participants of multilateral agreement about free trade zone – and from members of the European Union are also exempted from the payment of custom duties, taxes and fees. Also, the regulation of other types of foreign economic activities is performed on the basis of other legal acts of the Republic of Kazakhstan.

Figure 5.8

Evolving Foreign Trade Policy Change Initiatives in Kazakhstan since 1991



5.5 Integration processes on the CIS space

As discussed in the second chapter, all positive steps on the way of liberalization were achieved through the independence of Kazakhstan and becoming a member of CIS which was formed from the former republics of the Soviet Union. During the transition period to the market relations, there was a different national economic development of the member states of CIS in the integration process and different evaluation of economic and political consequences of these acceleration processes.

According to Issingarin (1998), the total effect from realization of integration of economic interaction is expressed by reducing of inflation, budget deficit, stabilization of macroeconomic indices of each state which creates reasons further steps of economic and political integration right up to the making of financial, economic and currency policy. Moreover, the member-states should give or take something from each other and at the same time they should lose or find something in order to have normal and healthy integration activities. However, the total balance undoubtedly must be positive otherwise integration loses. Such balance may be achieved by more stable security. Also, by means of acquiring more intensive and solvent markets for their own goods and sources of cheaper and more qualitative goods through entering into broader cultural and civilized space, and promising new technical and fundamental knowledge. Considering the above mentioned statement, we can outline the main benefits for Kazakhstan using the accepted steps of integration processes on the CIS space. On the other hand, in the opinion of Zhukov and Reznikova (2007), all of the post- Soviet states, belong to the group of economies with low or moderate per capita income levels. Also, it was highlighted that if countries are not highly developed then, they usually do not integrate well with one another. Taking into account this point of view, the author tried to extract some benefits from integration process on the CIS space for Kazakhstan (Table 5.2 and Table 5.3). These tables highlight a number of key studies which have been used as a basis for identifying the research gap for this study. The main stages of the integration process were analyzed in chapter 2.5.3, and according to the information of the CIS commission, the unification of integration on the Commonwealth of Independent States, Kazakhstan adopted around 296 documents on inner state procedures. Generally, the same situation is observed in neighbouring countries.

Table 5.2

Benefits for Kazakhstan from the following integration agreements on the CIS space

Integration agreements	Coordination of foreign-policy activity and military-technical cooperation	Property's problem solving on the CIS space	Innovation cooperation	Harmonized policy of protection of consumers' rights	Regional and transregional collaboration	Establishing of financial and industrial groups	Upgrading of tariff policy and customs' duty canceling, quantitative restrictions at the mutual trade	Creating the common information space (telecommunication systems)	Labor market formation and regulation of labors force migration	Development of common market of individual kinds of products
1.Establishment of CIS (December, 1991)	+	+	+	+	+		+	+	+	
2.Economic Union Agreement of CIS (1993)	+			+	+					
3.Free trade area (zone) agreement (1994)					+	+	+			+
4.Payments Union Agreement (1994)					+		+			
5.Establishment independent republics Agreement: Russia-Belarus, 1997					+					
6.Union of 4: Russia, Belarus, Kazakhstan, Kyrgyzstan (1995	+		+		+			+	+	
7.Founding of Central Asian Countries: Uzbekistan, Kyrgyzstan, Kazakhstan, 1999	+		+		+		+			+
8.Central Asian Economic Cooperation (2002) Uzbekistan, Kyrgyzstan, Kazakhstan, Tajikistan					+	+	+	+	+	

Table 5.2 continued

Integration agreements	Coordination of foreign-policy activity and military-technical cooperation	Property's problem solving on the CIS space	Innovation cooperation	Harmonized policy of protection of consumers' rights	Regional and transregional collaboration	Establishing of financial and industrial groups	Upgrading of tariff policy and customs' duty canceling, quantitative restrictions at the mutual	Creating the common information space (telecommunication systems)	Labor market formation and regulation of labors force migration	Development of common market of individual kinds of products
9.Custom Union Agreement (February, 1999) Russia, Belarus, Kazakhstan, Kyrgyzstan, Tajikistan					+	+	+			+
10.Negotiation about establishment of Common Economic Space (1999)			+		+	+	+			
11. Establishment of EAEC, 2000 Russia, Belarus, Kazakhstan, Kyrgyzstan, Tajikistan. Uzbekistan (2006)	+		+		+					+
12.Shanghai organization of cooperation: Kazakhstan, China, Kyrgyzstan, Russia, Tajikistan, Uzbekistan (2001)	+		+		+			+	+	
13. Agreement regarding establishment of common free market zone, 2003. Russia, Belarus, Kazakhstan, Ukraine	+		+		+	+	+			

Source: Author Generated

In addition, Russia also adopted around 296 documents, but 8 of them were not signed or not coordinated for some reason. As a result, this comprised of 2.8% in all considered documents. On the other hand, some CIS countries such as: Ukraine, Uzbekistan and Turkmenistan are completely different by quantity of considering, accepting and not adopting documents. For instance in accordance with Usov (2000); Nuti (2010) and CIS web site statistics, Turkmenistan approved and signed only 44 documents among 296 considered documents which comprised of 14.8%. Also, three of these documents are completely realized and the other 93.2% are partially fulfilled. Moreover, in the above mentioned countries, all 296 considered documents of the inner state procedures were not generally signed. For example, 252 documents in Turkmenistan, 155 in Uzbekistan, and 118 documents in Ukraine were partially realized and respectively comprised in percentages of 93.2%; 50.4%; 43%. Nevertheless, the Commonwealth of Independent States is the entity of the higher share of mutual trade in the post Soviet space. According to Zhukov and Reznikova (2007) in 2002-2004, the share of intraregional exports in the CIS was 20-21 percent which is similar to the intraregional trade share for the ASEAN group of developing nations.

Conclusion

This examination and analysis shows that Kazakhstan's economy since independence in 1991 has evolved "from a centrally planned economy to one going through a transition towards a market-led economy" (Madiarova, 1999; Zhukov & Reznikova, 2007; Pomfret, 2009). Since 2000 world prices for the exporting of goods, such as oil, have been increasing (detailed analysis of export development will be reviewed in the following chapter). The rates of GDP growth until 2008 have been varying between 9-10%, and at the same time, slowed down in the manufacturing industry. Furthermore, the gross production of agricultural goods had low rates of development and high rates of real GDP with decreasing volumes of production in the manufacturing industry and low rates of growth of products in the agrarian sector the reasons for the increase of inflation rate which was varying between 7-8%. Generally, that is a relatively high rate of inflation, however the Kazakh Government was planning to reduce the inflation rate to around 4% per year, and this was outlined in the program of reforms. Moreover, the integration processes on the CIS space have played a significant role during the time when Kazakhstan was becoming a sovereign state. In this chapter, a survey of the main proceedings was carried out which was signed by the head of CIS for the strengthening of integration processes. Also, the main benefits for Kazakhstan from integration on the CIS space were examined with a close look at GDP, free trade zones, FDI, evolving foreign policy change initiatives, and the importance of foreign exchange.

Table 5.3

Total statistical indicators about carrying out of interstate procedures regarding documents, which was accepted on the frame of the CIS within 1991- 2008

Events	Azerbaijan		Armenia		Belarus		Kazakhstan		Kyrgyzstan		Moldova		Russia		Tajikistan		Turkmenistan		Uzbekistan		Ukraine	
	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%
Signed from them:	174	58.7	288	97.2	287	97	283	95.6	294	99.3	211	71.2	288	97.2	295	99.7	44	14.8	141	47.6	178	60.1
Realized interstate procedures	107	61.5	161	56.0	269	93.7	199	70.3	226	76.8	130	61.5	229	79.5	233	79.0	3	6.8	70	49.6	93	52.2
No realized interstate procedures	67	38.5	126	43.7	18	6.3	84	29.6	68	23.2	81	38.4	38	19.0	62	21.0	41	93.2	71	50.4	77	43.2
Notified about withdrawal from the negotiations			1	0.3			3	0.1			2	0,1	21	7.5							8	4.6
Not signed	122	41.3	8	2.8	9	3	13	4.4	2	0.7	85	28.8	8	2.8	1	0.3	252	85.2	155	52.4	118	39.9

Source: CIS statistics

CHAPTER SIX

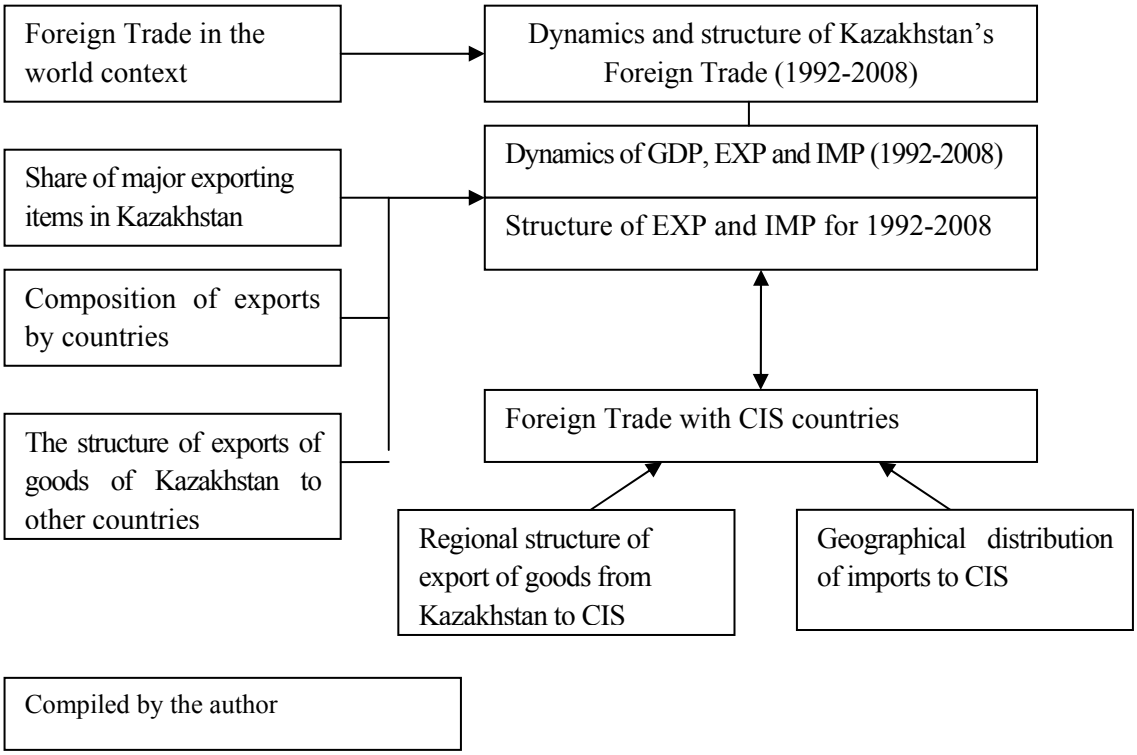
AN ANALYSIS OF KAZAKHSTAN'S FOREIGN TRADE ACTIVITY

6.1 Introduction

This chapter of the study is structured as outlined in Figure 6.0 below.

Figure 6.0

Outline of Results and Discussion for Research Objective (3)



6.2 Foreign trade in the world context.

One of the most vital economical spheres in Kazakhstan is foreign trade which is dynamically developing and differs with its active orientation; consequently, this chapter examines the case of Kazakhstan in the world economy.

Kazakhstan is actively participating in the world integration processes, where in this case, economic integration significantly influences the development of their foreign economic activities.

According to Greenaway et al. (2002 p.230), "if openness is indeed positively related to growth, then it follows that liberalization is a requirement for growth". Moreover, liberalization of the foreign trade allowed many enterprises and business units to perform independent foreign trade operations since Kazakhstan obtained its independence.

Integration of Kazakhstan's economy into the world business influenced the development of the foreign trade turnover. Consequently, the process of active entrance of Kazakhstan into the global market started when Kazakhstan obtained its independence in 1991. At the same time, the portion of Kazakhstan with 0.33% in the world export of goods and services is not significant and the rate of 0.378% is only slightly higher in the world export of goods in 2005. To some extent, this is connected with the fact that exports from the country have been directed for developing feedstock. Furthermore, in observing the shared indices, it is possible to highlight two key periods of foreign trade activity. The portion of Kazakhstan's export of goods and services was falling during the 1990s until 1999 and it started growing rapidly in 2000. For instance, the share indices of national goods and services export, which was calculated in current prices, had practically doubled in 2004. In addition, if the world export is 100%, then the portion of CIS countries in the world export comprised of 3.7% (WTO, 2009). In 2007, the export of goods and services of Kazakhstan comprised some US$47.8 billion and US$71.1 billion in 2008. Also, world exports during 2007 comprised of US$1, 3950 billion and US$1, 4244 billion for world imports, while Kazakhstan's imports comprised of US$32.8 billion.

Based on the WTO (2009) data, if excluding 27 countries of the European Union among the other 50 countries, Kazakhstan is in 35th place and the portion of its export comprises of 0.5%. Furthermore, it is in 38th place among 50 countries except the countries of the European Union and Kazakhstan's import portion is 0.3%. Consequently, the major factors for increasing exports are:

1. Favorable investment climate stimulated the inflow of the considerable volumes of direct foreign investments. Most of the foreign direct investments were oriented for the development of oil producing branches of the country. As a result, this caused the rapid development of oil and gas condensate production.
2. Conducive condition of world markets and high prices of hydrocarbon resources assist in the development of the export potentials of the country.
3. The increase of Kazakhstan's export of goods and services branch during the last periods in the worldwide market was affected by higher rates of export volume growth in comparison with the rate of the world trade growth.

Moreover, the dynamics of export growth in Kazakhstan still demonstrates high rates of growth in comparison with other countries and regions of the world (see table 6.1). Effective 1999, the export of Kazakhstan's goods increased 6.5 times, and the import rate increased by 4.3. The highest rates of Kazakhstan's export growth have been noticed during the last 4 years, and with the comparative analysis of indices of cumulative export as per person within the world,

Kazakhstan and Russia show the following results: in 1995, this index in Kazakhstan was at the 60% level in comparison with similar index in Russia and 33.5% from average world level (Statistical database, IMF, 2009). In addition, the export of goods and services per person in Kazakhstan has a tendency for growth during the last ten years. This index increased during the last 3 years which is connected mainly with price factors in the hydrocarbon sphere.

Considering the data of export and import growth rates for 1995-2008 in table 6.1, we can make some conclusions. In 2001, we can see a negative growth rate of export which is common not only to Kazakhstan's economy but to all other developing countries including the Commonwealth of Independence States. This negative growth could be explained with such factors as: weak domestic demand in advanced economies, also events which happened in the USA on 11th of September, 2001 reflected negatively on developing economy exports. In the same period, the growth rate of exports in Kazakhstan is comprised of 1.9% with reference to 2000. This slowdown mainly resulted from reversal factors that had previously boosted on the previous period. However in 2002, we can observe the highest growth rate of exports in Kazakhstan with reference to the previous period which comprised of 11.9% and 6.3% in CIS and 3.6% in the developed countries.

On the other hand, considering the dynamics of change of export growth rate with reference to the previous period including the period 1995-2008, we can conclude then that the highest growth rate in Kazakhstan compared with the previous period was observed in 2004 which comprised of 55.4% while the average world growth rate of export comprised of 10.6% and 36.7% in the CIS countries.

Table 6.1

Rates of growth of the world trade, 1995-2007, in percentage to the previous year

Indices	Years								
	1995	2000	2001	2002	2004	2005	2006	2007	2008
World trade – total	9.7	12.3	0.2	3.4	10.6	7.4	9.2	14.4	15.0
Export									
Developed countries	19.7	7.8	-3.9	3.6	18.1	9.24	12.5	13.7	11.2
Developing countries and other emerging markets	19.9	25.6	-6.6	7.3	27.6	21.9	19.3	15.2	19.3
CIS		36.9	-0.9	6.3	36.7	28.8	26.1	19.5	34.8
Kazakhstan	62.5	50.1	-1.9	11.9	55.4	38.6	45.3	15.9	48.7
Import									
Developed countries	19.0	10.9	-3.6	3.1	19.1	11.6	12.8	11.7	12.0
Developing countries and other emerging markets	20.5	20.8	-4.7	5.4	27.7	18.1	16.9	16.5	22.3
CIS		14.6	15.0	9.6	29.5	23.7	28.4	34.2	32.1
Kazakhstan	6.89	37.8	27.9	2.2	52.0	35.7	43.8	38.3	15.9

Source: Compiled from United Nations database, 2010. IMF, 2005

Moreover, some changes of export and import growth rates were observed in the developed and developing countries, compared to the previous years. This index of imports is positive in Kazakhstan and the other CIS countries which are equal to 27.9% and 15% respectively in 2001. For the analyzed period of 1995-2008, the highest growth rate of imports in Kazakhstan is observed in 2004 while the lowest growth rate was noticed in 1995 during the reforming period of Kazakhstan's economy. In addition the author concludes that in 2008 in the developed countries decreasing indicators of export growth in terms of previous periods comprised of 11%, while in Kazakhstan this indicator increased to 49%, whereas in CIS it comprised of 35% comparatively with 2007. Also some reduction of import flow rates were noticed in CIS countries of 32% against 34.2% in 2007, while in Kazakhstan this decrease was 38.3% in 2007 to 16% in 2008.

6.3 Analysis of the dynamics and structure of foreign trade links

6.3.1 Kazakhstan's foreign trade activity at the start of the reformation period

The economic crisis which occurred in Kazakhstan had negatively affected the situation with regards to foreign trade, and a sudden reduction of exports and imports started in 1991 (figure 6.1), where the state monopoly on foreign trade was cancelled, and all business units were allowed to deal with foreign trade activities. According to Mundell (1997), a fluctuation of trade can have a variety of impacts towards output, and therefore imports are seen as necessary in order to maintain production, resulting in a forced reduction in imports which creates a

restriction which can decrease potential production. Furthermore, the Kazakh government used the Soviet broad command system to hold the levels of production and product flows for greater output during the Soviet era. Hence, a high degree of economic specialization was formed through the efforts of central planners, in order to fully indulge Kazakhstan into the Soviet system. These were: raw materials production; heavy industry and agriculture in particular; a strong dependency on inter-republican supplies of raw materials and technical inputs.

Based on the observations of Economic Bulletin for Europe (1994); Mogilevski & Tochitskaya (2005) noticed that in 1990, inter-republican imports were over 75 percent of total imports, and around 90 percent of exports remained within the Union. In addition, the Soviet production pattern and transport infrastructure made Kazakhstan heavily dependent on Russia, particularly for its oil trade and consumption. We can make a conclusion that the tendency of stylistic changes of the above mentioned indexes are observed from 1992 to 1999 through analyzing the dynamics of exports, imports and Gross Domestic Product. Even if GDP was falling up to 1995 (this was mentioned in chapter 5.4 in the given study), the indices of exports and imports were gradually increasing. Some reductions of growth dynamics of export and import flows were observed in 1998. In addition to this, the effect of the Asian Economic Crisis was the main reason for these reductions, which had initially influenced Russia and then the other countries of the former Soviet Union. Moreover, this crisis reflected in the indicatory of 1999, and we can observe a favorable tendency of export growth, import and GDP in 2000. The specific size of GDP in terms of average real prices, increased from 2.7% to 9.6% in this period. This indicator reached the highest growth of GDP in 2001, which comprised of 13.5% compared to the previous year. From figure 6.1 we can see that the entire index has been increasing since 2002. Hence, in 1992, Kazakhstan's GDP per capita comprised of US$1,522 and after 10 years it comprised of US$1,719 in 2002 (see Appendix 3.4.1- 3.4.5). Also, this indicator rapidly increased to US$ 2696 in 2008. In addition, the lowest point of reduction of indices of Total Gross Domestic Product and Gross Domestic Product per capita comprised of US$ 1, 6781 million and US$ 1,244 respectively, in 1999. We can observe a tendency towards GDP increasing, just like export and import dynamics at a constant price. Comparing the dynamics of exports and imports, we can conclude that export growth is considerably higher than the growth of import flows. Generally, the main reason for the growth of export flows from Kazakhstan is due to the growth of world price for oil. Therefore, Kazakhstan as an oil exporter in the world market, succeeded in increasing the export receipts from crude oil.

Figure 6.1

Source: United Nations database, 2009 (b)

Indeed, the standard propositions of the neoclassical type according to Ram (1987) emphasized that good export performance and "outward orientation" made a great contribution to economic growth through the use of the following ways:

1. Increasing of specialization and widening the efficiency- raising benefits of comparative advantages;
2. Offering the greater economies of scale owing to expanding the effective market size;
3. Granting a major capacity utilization and causing more in shifting to technological change (Ram, 1987 p.51).

Consequently, Edwards (1992) concluded that, trade positively affects growth, because it exposes the developing country to new ideas and techniques that can be used to improve production methods. From table 6.2 (see p. 159) it can be concluded that the export rate of goods and services of Kazakhstan during 1995-2008 increased in real prices by 3.5 times, and in nominal prices by 29.7 times. It is noticeable that there is a significant difference between changes of nominal and real prices through comparing the above mentioned statistical data. Thus, the main cause of increasing the nominal price of the export rate of goods and services is the high domestic inflation rate. It was pointed out in the previous chapter (see p.129), that the average inflation rate during the previous years comprised of 11-13%, although this indicator reached up to 3060% at the start of the transition period, particularly in 1992.

6.3.2 Analysis of Kazakhstan's external trade turnover

As discussed in chapter four, some significant improvements in the dynamics and geographical structure of foreign trade in the reviewing countries of Kazakhstan, Kyrgyzstan and Mongolia (see chapter 4.11) were observed during the liberalization period. In this case, according to the

data from the statistical agency of the Republic of Kazakhstan, foreign trade turnover in 2008 comprised of 24.5 trillion tenge (increased by 34.7%) imports – 60.9 trillion tenge (increased by 10.9%). Analyzing the percentage changes of exports with previous years, the author could conclude that in 1998 and 2001 the exports reduced to 17.9% and 8% respectively (see Table 6.2). The export decreasing tendency concerning the previous period in 1998 could be explained by overall reduction of export growth rates influenced by the financial crisis which is considered in chapter five. Furthermore, the most export growth occurred in 2004 compared to 2003, and such phenomenon happens according to import flows. Import growth in 2004 compared to 2003 comprised of 52%. In 1999, imports decreased in comparison to the previous year and this indicator comprised of 15.3%.

Table 6.2

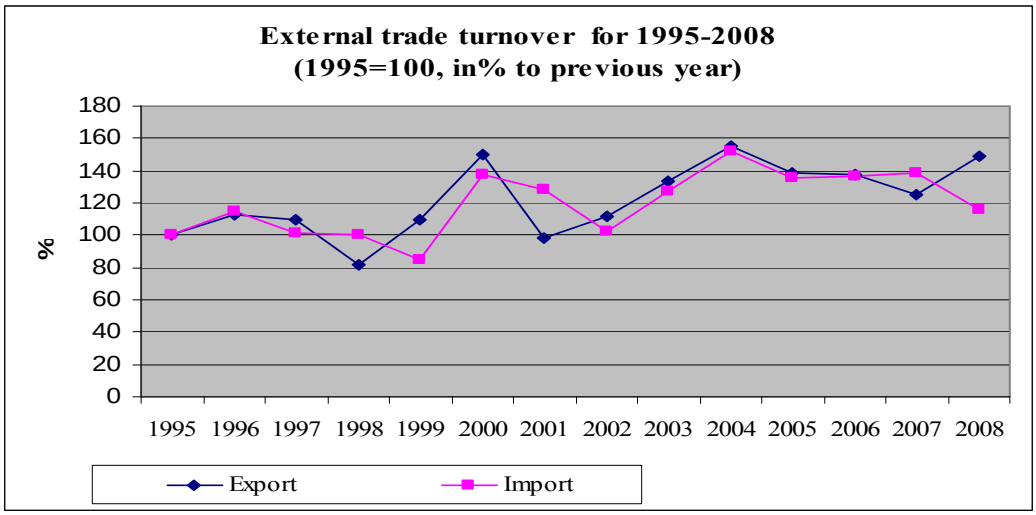
Foreign trade of Kazakhstan in current prices, billions of tenge

	Foreign trade turnover	Export	Import	Balance amount
1991	62753,9	24461,7	38292,2	-13830,5
1992	2027444,7	937137,7	1090307	-153169
1993	24902,1	11150	13752,1	-2602,1
1994	356483,6	156957,8	199525,8	-42568
1995	836934	395269	441665	-46396
1996	1009055	499318	509737,4	-10419,4
1997	1209955	583859,6	626095,2	-42235,6
1998	1130160	525945	604215,3	-78270,3
1999	1665173	856229,6	808942,9	47286,7
2000	2748088	1471607,4	1276480,6	195126,8
2001	3018146	1491860,4	1526285,5	-34425,1
2002	3550897,2	1774496,9	1776400,3	-1903,4
2003	4218266,1	2577504,9	1985285,2	247695,9
2004	5659350,5	3081844,6	2577504,9	504339,7
2005	7459159,5	4064191,1	3394967,4	669223,7
2006	9358786,5	5224446,9	4134338,6	1090108
2007	11846297	6352917,0	5493379,6	859537,4
2008	14499915	8563387,1	6094879,6	7373141

Source: Compiled from Smailov, 2009

Figure 6.2 shows the existence of export and import growth in 1995. Also during the periods of 1995-2002, the cyclical fluctuations of export and import flows are evident, as are indications that more dynamic growth was relatively fixed after 2003.

Figure 6.2



Compiled from Khustitdinova, 1998; Tortayev, ,2004; Smailov, 2008; and Smailov, 2010

At the same time, during 1995-2002, the rate of export services was growing, and increased from 9.0% to 13.3% Such a tendency occurred due to the fact that the export of goods in terms of their costs, had rapidly increased during the previous years; however, export of services was growing slower, but in 2006 and 2007 the export flows had grown and reached 26% and 26.5% respectively (see figure 6.3)

Figure 6.3

Source: United Nations database, 2009 (a) and 2009 (b), Smailov, ed., 2010

The dynamics of changes in the growth rate of exports for 1995-2007 are extremely interesting and in particular, considering 1995 as 100%, we can observe non homogeneous changes. For example, the trend has the lowest rate in 1998 which comprised of 85.1% (reduction of 14.9%) and the highest level is 156.1% (growth for 56.1% to 1995 level's rate) point in 2000.

Also in 2001, the export growth rate of goods decreased to 96.2% and thereafter, it was slowly but smoothly increasing until 2004. The index of changes of export growth rate of service is more favorable compared with the export growth rate of goods. Here, it is noticeable that the changes of fluctuations are insignificant as can be seen in figure 6.3. Furthermore, the dynamics of the export growth rate of goods is higher than the export growth of service. Hence, the main reason for such sharp fluctuations of export growth rate of goods - in the author's opinion - is the change in the international price for oil and other raw materials, which affects the domestic market of goods and services. At the same time, as was mentioned before, Kazakhstan is the main exporter of raw materials in the international arena, and this is confirmed in the following table 6.3.

Table 6.3

Structure of export of goods from Kazakhstan as per major commodity groups

Commodity group	1996	2008
Cost ($millions)		
All the products	5896.8	71 183,6
Mineral products	2175.9	51964.0
Base metals and products made of them	1845.7	10748.8
Precious metals	23.7	854.2
Products of chemical industry, including plastic, rubber and other	507.1	2491.4
Other products	1344.4	5125.2
Specific density (in percentage)		
All the products	**100**	**100**
Mineral products	36.9	73.0
Base metals	31.3	15.1
Precious metals	0.4	1.2
Products of chemical industry, including plastic, rubber and other	8.6	3.5
Other goods	22.8	7.2

Source: Compiled from Smailov, ed. (2000) and Smailov, ed. (2010)

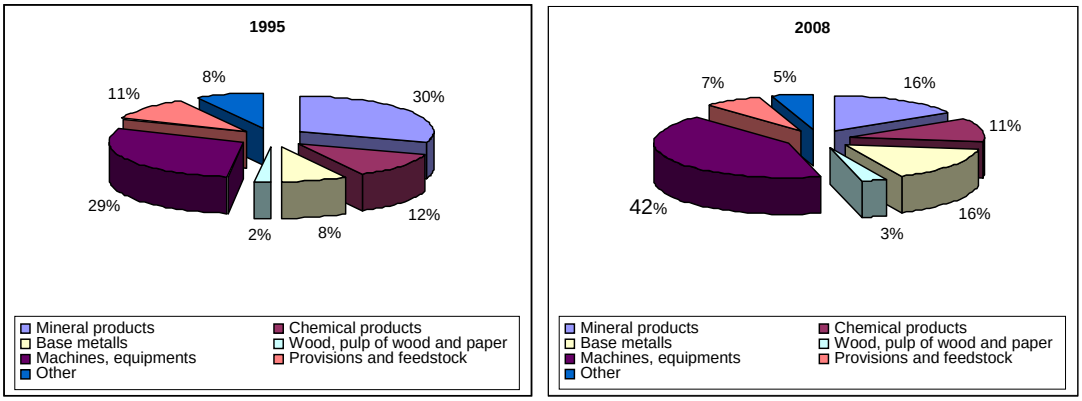
It is widely known that the exports from Kazakhstan consist mostly of feedstock. During previous years, the portion of mineral products varied within the limits of 73% in 2008 while in 1996 it comprised 36.9%, so the export of mineral resources has increased twice. In the same period, according to National Statistical database of the Republic of Kazakhstan the portion of mineral products in Kazakhstan's export of goods had increased to 3.3% comparatively with 2007. And during these years, reducing black metals portion among the total volume of exporting goods was at 16.2% in 2008 and there was a reducing percentage of products of the chemical industry, including plastic, rubber and other materials of 3.5% in 2008 against 8.6% in 1996 (in 2008 the black metals export was 2 times lower compared with 1996) (see table 6.3). Kalyuzhnova et al (2004) pointed out that the notable structural changes which have occurred in

Kazakhstan's "economy since 1990 have had a significant impact on the pattern of industrial development" (see Kalyuzhnova et al, 2004 p.254). The structure of Kazakhstan's economy shifted as we noted in chapter 6 towards raw materials, mainly in the hydrocarbon sector. In addition, Kalyuzhnova et al (2004) concluded that, a significant increase in net oil exports, and the smaller but still significant increase in net gas exports, is reflected in the overall pattern of Kazakhstan's exports. According to IMF statistics (2000) they summarized that during 1996-1999 the share of oil and gas in total exports (measured in US dollars) rose between 4 and 6 percentage points each year, from 20 percent in 1996 to 34.1 percent in 1999. Hence, it can be concluded that the share of mineral products exports was 73% in 2008. In understanding the imports of Kazakhstan during 1995-2008, there were practically the same items of imported goods. For instance, if the chemical industry products were imported at 12% in 1995 then this index was equal to 11% in 2008. Therefore, it changed by 1% only. Furthermore, reduction of mineral products importing rate from 30% to 16% occurred and on the contrary there was an increased base metals delivery rate from 8% to 16%, import of vehicles, equipment and other details from 29% to 42% during the same periods. All of these changes are shown in figure 6.3. In considering the trade relations of Kazakhstan and Russia in the context of imports compared to exports, non-commodity products predominate trade. In addition, the share of non-commodity products comprised of 76.4% (in 2007 it was 81.76%) and as a result, importing was more diversified. Indeed, more than 30% of Russian imports are oil products, gas, engine oil, kerosene, reactive fuel and electric power. We can further enumerate the following imports of goods such as: centrifugal load pumps, combine harvesters, gas and oil pipes, new rails, railway and train carriages tank cargo and others.

In the structure of the total exports of Kazakhstan to the Russian Federation, the share of fuel and energy goods comprises of 27% ore and concentrates of iron, chromium, manganese, copper, zinc (26 groups) is 23.4%, ferrous metals (72 groups) is 11.4%, aluminum oxide and uranium naturally proceeded (28 groups) is 8.5%. Additionally, the main exports from Kazakhstan to the Russian Federation were gas condensate (code TN VED270900100), ores and iron concentrates (TN VED 2601120000) and coal (TN VED 2701190000) among others. The major exporting product of Kazakhstan is oil and gas condensate, and their share increased from 14.29 to 73% during 1995-2008 (see figure 6.4).

Figure 6.4

Structure of import of goods into Kazakhstan



Source: Compiled from: Khusnitdinova, 1998; Smailov, 2009

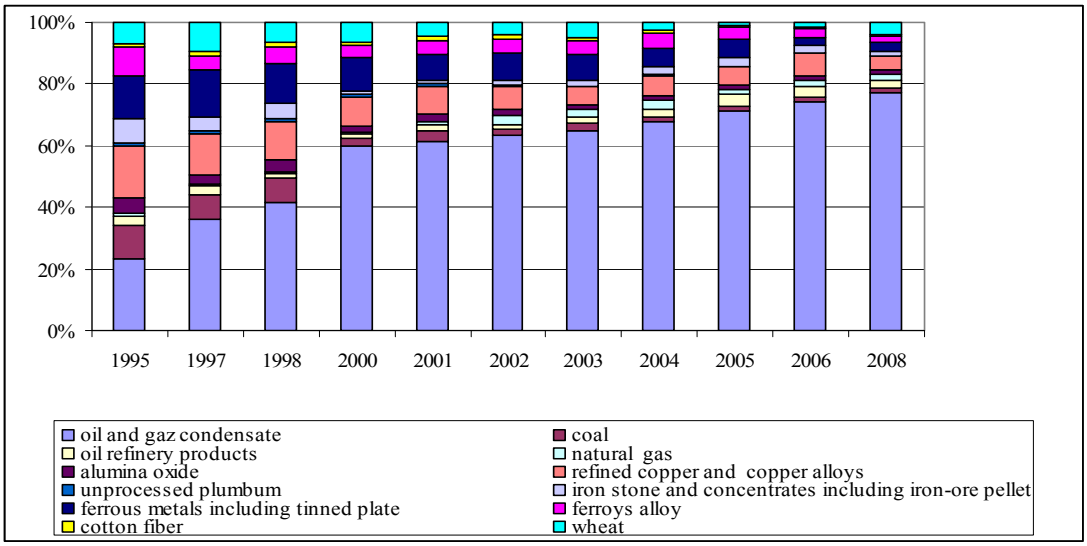
Consequently, the government prudently built up an oil fund. Foreign currency assets in the fund peaked at $28 billion in January 2009 and currently stand at $23 billion (22 percent of GDP). These assets are largely invested in debt securities (IMF, 2009). Nowadays, the second position among exporting supplies is given to base metals including ferrous metals, refined copper and alloys which comprise approximately 15.1%. In general, the decrease of share of major exports of the republic is explained with considerable growth of the oil supply rate. And the volumes of oil production comprise approximately 62-63 million tons during the last few years. As a result, it is explained through a significant increase of world prices for hydrocarbon goods in the same period.

The commodity structure of foreign trade in Kazakhstan had not changed for many years, just like the list of goods which provides the highest currency returns.

From figure 6.5 the structure of foreign trade is mostly expressed by primary goods. The trade partners of Kazakhstan are primarily: Europeans, Asian countries, the USA, Africa and Australia.

Figure 6.5

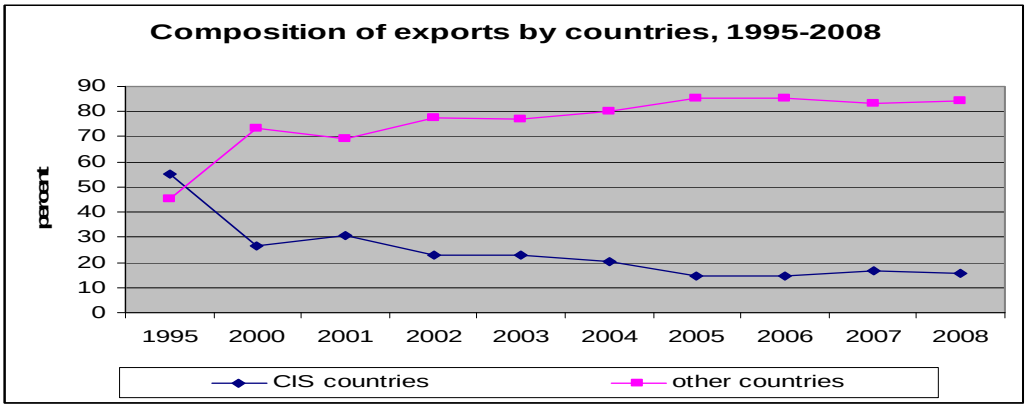
Share of major exporting items in Kazakhstan, 1995-2008



Source: Smailov. 2000; UN, 2009(a) and Smailov, 2010

Since 1997, there has been a noticeable re-orientation of foreign trade of Kazakhstan (like in all CIS countries) to the expansion of the connections with non-CIS countries. In addition, during 1995-2008 the portion of CIS countries in the volume of Kazakhstan's exports, reduced from 54.9% to 15.5% and the portion of the outside CIS countries increased from 45.4% in 1995 to 84.5 % in 2008 respectively (see figure 6.6).

Figure 6.6



Source: Compiled from Khusnitdinova, 1998; Tortayev, 2004 and Smailov, 2009

Consequently, the peak of export activity in foreign trade with non-CIS countries occurred in 2005 and 2006. The cost of exports for this group of countries comprised of US$3,276.3 million which is 25.4 times more than in 1995. Considering the above indicated information on the export of goods during 2008, it was possible to state that according to the results of the previous

year, the cost volumes of export supplies to non-CIS countries had increased. Also, the largest part of exports (in terms of cost) was allocated to European countries and it increased almost double, from 30.4% to 58.9%. The tendency of Kazakhstan's export growth rate was also typical for the flow of goods to Asian and American continents, where during this period there was a decrease of Kazakhstan's export deliveries to Eurasian countries from 48.3% to approximately 11.8%. Also, the countries which are not included in this integration formation decreased from 6.6% to 3.8 % (see table 6.4).

Furthermore, the major part of exports to non-CIS countries was allocated in the European countries and this portion was increased from 30.4% to 58.9 % during the analyzed period. The share of exports to European Union countries increased from 21.3% in 1995 to 42.9% in 2008. In addition, the portion of exports from Kazakhstan to the Asian continent had increased from 12.3% to 22.9 % during the estimation period.

Table 6.4

The structure of export of goods of Kazakhstan to other countries, group of countries and continents, 1995-2008

	1995	*2000*	*2002*	*2003*	*2005*	*2006*	*2007*	*2008*
Export – total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
CIS countries	54.92	26.52	22.69	23.06	14.60	14.57	16.73	15.63
Eurasian countries	48.29	21.36	17.21	17.12	11.96	12.06	13.24	11.77
Non-Eurasian countries	6.63	5.16	5.48	5.94	2.65	2.52	3.49	3.86
Non CIS countries	45.08	73.48	77.31	76.94	85.40	85.43	83.27	84.37
Europe	30.43	31.14	30.32	32.36	61.41	62.83	56.86	58.89
European union countries	21.26	23.41	15.89	15.32	39.50	43.23	40.67	42.87
Non-European union countries	9.17	7.73	14.43	17.04	21.91	19.60	16.19	16.02
Asia	12.33	13.74	22.19	21.74	17.55	20.00	23.80	22.85
America	2.07	28.36	24.30	22.59	6.35	2.34	2.03	1.57
Africa	0.24	0.22	0.48	0.25	0.06	0.24	0.57	1.04
Australia & Oceania	0.01	0.02	0.00	0.01	0.03	0.02	0.01	0.02

Source: Compiled from: Smailov, 2000; Smailov, 2010

Against this backdrop, the portion of exports from Kazakhstan to the American continent was rather unpredictable, which varied from 1.6% to 24 %, and it comprised of 1.6% in 2008. The increasing rate of Kazakhstan's exports to the American continent was observed in 2000-2003. Deep analysis of export composition for the American continent showed that such a situation is connected to deliveries of hydrocarbon products to the offshore zones. In terms of cost, the export volume to America had increased by 8.2 times during the period from 1995-2005. There was a rather insignificant portion of exports to the African continent, which occurred in 2005 and comprised of 0.06% therefore the export costs increased by more than double in 2008

comparatively with the above mentioned period of time. The lowest share of exports to Australia and Oceania consisted of 0.01-0.03 % (see table 6.4).

Moreover, the main parts of Kazakhstan's exports go to European countries. During the period, this indicator increased from 30.4% to 58.9%. In addition, the portion of exports to EU countries increased from 21.3% in 1995 to 42.9% in 2008. The above mentioned changes were promoted by signing an agreement on partnership and cooperation between the Republic of Kazakhstan and the European Union and its member states on January 23, 1995. Consequently, this particular agreement was ratified by Parliament in May of 1997, and came into force on July 1, 1999. The agreement on partnership and cooperation was the basic bilateral agreement directed to the development of political, economic and cultural relations between the Republic of Kazakhstan and the European Union. Nonetheless, the turnover between Kazakhstan and the European Union countries in 2003 comprised of US$4.04 billion which was 31% higher than in 2002. Also, exports in 2003 were in the region of US$1.985 billion and US$2.056 billion for imports. The main consumers of Kazakhstan's exports were Italy (7.9%), France (2.2%), Netherlands (1.4%), Great Britain and Germany (1.1% each). At the same time, it should be noted that Kazakhstan was considered by EU countries as the supplier of energy and minerals to countries in the West. With this in mind, the structure of Kazakhstan's exports to EU countries, included products such as: oil and oil products, non precious metals, agricultural, chemical and mineral products and textiles. Nowadays, Kazakhstan remains a great partner to EU countries and those in Central Asia. Of note, another strategic partner in trade for Kazakhstan has been China. Their geographical vicinity is close and this allows them to collaborate in the economic sphere and in the political arena (this point was mentioned in chapter two).

According to Wu & Chen (2004) "trade between Kazakhstan and China comprised of US$369 million in 1992, accounting for 20% of Kazakhstan's total foreign trade" (see Wu and Chen, 2004 p.1065 and table 6.5). This shows that since 1999, bilateral trade had increased rapidly, and in particular, exports comprised 38% of the total bilateral trade between Kazakhstan and China in 1992 and this indicator doubled to 69% in 2002.

Table 6.5

Bilateral trade between Kazakhstan and China

	Years										
	1992	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**
Export	141.2	263.0	197.0	315.6	364.6	432.9	430.9	644.4	958.2	960.7	1354.7
Import	227.9	171.7	138.7	75.4	95.3	94.6	204.7	494.4	598.8	327.7	600.0
Trade volume	369.1	434.7	335.7	391.0	459.9	527.5	635.6	1138.8	1556.0	1288.4	1954.7

Source: Kazakhstan's statistics, 1992-2003; and Wu and Chen (2004)

In addition, according to table 4.4 in chapter 4 (see p. 117) the total turnover of Kazakhstan's trade comprised of US$1,6254 mln, so the unit weight of bilateral trade between the above mentioned countries was equal to 12.5% from all of Kazakhstan's trade turnover in 2002. The structure of bilateral trade between China and Kazakhstan is outlined in table 6.6.

Table 6.6

Kazakhstan's exports and imports to and from China in 2002 (US$ million and %)

	Export			**Import**		
	Description	US$	%	Description	US$	%
1	Iron and steel	546.95	40.38	Machinery	64.42	74.23
2	Copper and articles thereof	448.07	33.08	Vehicles, not railway	4.86	5.61
3	Mineral fuel, oil, etc	170.46	12.58	Iron, steel products	4.60	5.30
4	Aluminum	44.83	3.31	Electrical machinery	3.01	3.47
5	Zinc and articles thereof	32.01	2.36	Knit apparel	3.00	3.45
6	Ores, slag, ash	31.33	2.31	Footwear	2.08	2.39
7	Inorganic chemistry products	30.18	2.23	Spices, coffee and tea	1.82	2.09
8	Hides and skins	13.16	0.97	Other of animal origin	0.47	0.54
9	Fertilizers	8.82	0.65	Furniture and bedding	0.45	0.52
10	Lead	6.67	0.49	Stone, plaster, cement, etc	0.45	0.52
11	Totally	1354.64	100	Totally	86.78	100

Source: China Custom Statistics, 1996, 2003; and Wu and Chen (2004)

From table 6.6, China's "exports to Kazakhstan were mostly basic consumption goods, particularly labor-intensive products, with high-tech and high value added products accounting for a relatively small proportion of total exports" (see Wu & Chen , 2004 p.1065). Based on their statements, the major imports of Kazakhstan from China were: shoes, clothing, machinery, electrical machinery, plastics, iron and steel products. It is really an interesting fact that Kazakhstan was exporting some primary products such as steel and iron, and aluminum to China, and importing products made from China's primary products. In addition, Kazakhstan's export products to China were raw materials, including iron and steel, fertilizers, ores, copper,

aluminum, cowhide and other. Wu & Chen (2004) point out that according to China's Almanac of China Foreign Economic Relations and Trade, at the end of 2002, the overall Chinese investment in Kazakhstan comprised of US$39,601,300 which was encouraged by the Chinese government with the number of enterprises equaling 51. Furthermore, the base branches of Chinese investments in Kazakhstan have been petroleum and natural gas, banking, food processing, construction materials and car assembly products. Indeed, according to Abutalipova (2008) and Wu & Chen (2004 p.1072) Chinese share of foreign direct investments for Kazakhstan's economy comprised 4.4% among of all foreign direct investment in Kazakhstan, putting it in sixth place behind the US, the UK, South Korea, Italy and Canada. Also, they highlighted the significance of Chinese affiliated companies in Kazakhstan's economy such as: "China National Petroleum Corporation, The Kazakh-China Bank, and the Almaty–China Commercial Bank, the representative office of Xinjiang Airlines, the Nikar joint venture tobacco-rolling plant and the Xinkang tomato sauce factory" (see Wu and Chen, 2004 p.1072)

6.4 Foreign trade with CIS countries

In 2008, the cost of exports with all countries comprised US$11,078.4 against US$2,883.5 in 1995. In this group of countries, the greatest part of exports was allocated for the Eurasian economic union with US$8376.7 or equal to 75.6%. It is obvious that the high portion of EAEC countries is connected to Russia, since it is a member of the above mentioned integration organization and a main partner of Kazakhstan's export commodities. The share of Russia in Kazakhstan's export commodities among countries of the EAEC comprised of 82% in 1995, and it equaled 56.22% in 2008 (see table 6.7).

Ukraine was in second place in terms of export deliveries among CIS countries, although the export rate to this country reduced during 2004-2005; however, this index had considerably increased, consisting of 2.8% of the total of Kazakhstan's exports in 2008. In addition, Uzbekistan is in third place among CIS and Eurasian countries.

Table 6.7

Regional structure of export of goods from Republic of Kazakhstan to CIS countries, 1995-2008 in percentage

	1995	2000	2005	2006	2007	2008
CIS countries	100	100	100	100	100	100
Eurasian union	87.92	80.55	81.88	75.84	79.02	75,61
Byelorussia	1.88	0.85	0.65	1.27	1.62	1,54
Kyrgyzstan	2.60	2.49	5.54	4.80	4.46	3.95
Russia	82.05	74.95	71.98	66.94	58.49	56.22
Tajikistan	1.40	2.25	3.70	2.82	3.50	2.42
Uzbekistan					10.95	11.48
Non-Eurasian countries	12.08	19.45	18.12	24.16	20.98	24.39
Azerbaijan	0.80	2.00	3.17	4.06	4.00	1.89
Armenia	0.01	0.18	1.06	0.30	0.07	0.06
Georgia	0.01	0.33	1.28	0.80	0.76	0.45
Moldova	0.09	0.05	1.29	0.56	1.92	1.95
Turkmenistan	1.65	0.30	0.43	0.37	0.98	1.97
Uzbekistan	5.31	5.71	5.97	6.90		
Ukraine	4.21	10.88	4.93	11.17	13.97	18.08

Note: [1] – as far as Uzbekistan is a member of the Eurasian union since 2006, statistical calculations as per Eurasian membership have been made since 2007.

Source: compiled from Abutalipova, 2008; Smailov, 2009

The export deliveries of the total of Kazakhstan's export comprised of 1.8% in 2008 and 11.8% from the total of exports of CIS countries. Moreover, Kyrgyzstan is in fourth place, where the export deliveries rate was increased from 2.6% to 5.5% during 1995-2005, and it consisted of 3.9 % in 2008. It is important to note that the same tendency was noticed in export deliveries to Tajikistan, where the portion of export deliveries increased from 1.4% to 3.7 %, and then it reduced towards 2.4%. Kazakhstan's exports led to the number of countries which are not members of the Eurasian union growing and their number doubled from 12.1% to 24.4% (see table 6.7). Also, the growth of export costs for this group of countries had increased by 2.8 times during the analyzed period. Import deliveries to Kazakhstan increased almost 10 fold, based on the table information (table 6.8) during 1995-2008. Here, the import rate from distant countries comprised of 30.4% in 1995, and 53.8% in 2008. Also, the rate of importing goods from CIS countries had rapidly reduced from 69.6% to approximately 46.2%. Hence, the Eurasian countries play a major role in the geographical distribution of imports, and they covered around 39.2% of Kazakhstan's entire import portion in 2008. If to consider the imports from CIS countries as 100% then the imports from Eurasian countries consists of 84.8%.

According to table 6.8, Russia used to be and still remains as the main partner of Kazakhstan among other CIS and Eurasian countries. If 49.9% of the total imports came from Russia in

1995, then this index comprised 36.3% in 2008. This suggests that over one-third of the import products had been delivered from the Russian Federation to Kazakhstan in 2008. Therefore, Russia has been Kazakhstan's strategic partner. In this case, we can notice the essential increase of export supply into countries such as Uzbekistan and Ukraine.

Furthermore, it is noticeable that a significant increase in exporting to some countries such as Uzbekistan and Ukraine was underway. If at the start of the transition period, the export indicators were comprised of 5.31% and 4.21%, so these indicators amounted to 11.48% and 18.08% of Kazakhstan's export respectively in 2008. Generally, if Kazakhstan's export of goods and services to EAEC countries in 2005 was compared with that of 1995, and these were reduced from 87.92% to 75.61% in 2008 comparatively within the same analyzing period, its indicators would show a reduction of 12%. The author is making such a comparison regarding countries which are not members of EAEC countries. If we consider the regional structure of Kazakhstan's export of goods to the countries which are non members of EAEC, we can conclude that the exports flow to the above mentioned countries increased to 50% in 2005 compared with 1995 and this indicator increased to 20% in 2008 compared with 1995.

The data of the National Statistic Agency confirms the above statements with statistical indicators which are equal to 12.08% in 1995 and 18.12% in 2005 respectively. If compared to the statistical data of Kazakhstan's National Agency over the above mentioned years, we can notice that export of Kazakhstan's goods to the countries which are not members of EAEC countries increased more than 2 times during the analyzing period. In addition, the main part of Kazakhstan's exports of goods and services directs to the countries who are members of EAEC countries as noticed in table 6.8.

If Kazakhstan imported some products from other countries in 1995 which comprised of 30.4%, then this indicator would consist of 53.8% in 2008. Accordingly, imports from the above mentioned countries increased to 76.9% during the analyzed period. In addition, the author considers that this increase is due to Kazakhstan getting independence and participating in trade and economic relations on an international arena as an independent authority with full rights.

Table 6.8

Kazakhstan: Geographical distribution of imports, $US.mln

	1995		2008	
	$US.mln	As % of Total	$US mln	as % of total
Total	380.7	100	37889.0	100
Other far abroad countries	115.2	30.4	20392.2	53.8
CIS countries	264.5	69.6	17504.7	46.2
The EAEC countries	2021.4	53.1	14852.4	39.2
Uzbekistan			530.4	1.4
Belarus	79.9	2.1	378.8	1.0
Kyrgyzstan	30.5	0.8	189.5	0.5
Russia	1899.6	49.9	13753.7	36.3
Tajikistan	11.4	0.3	8.6	0.02
Non- EAEC countries	628.1	16.5	2652.2	7.0
Azerbaijan	26.6	0.7	265.2	0.7
Turkmenistan	239.8	6.3	227.3	0.6
Ukraine	87.5	2.3	2121.8	5.6
Uzbekistan	270.4	7.1		
Other countries	3.8	0.1	29.3	0.08

Note: [1] –as far as Uzbekistan is a member of the Eurasian union since 2006, statistical calculations as per Eurasian membership have been made since 2007

Source: compiled from Smailov, 2010

This is confirmed by the following statistic indices, where prior to this period, Kazakhstan as a member of the USSR had relationships with the former Soviet Union countries, then due to gaining independence and transferring to the market economy, Kazakhstan's relationships to other countries have been enhanced. According to the above data, we notice a decrease from 69.6% to 46.2% respectively. As a result, we can observe the lowering of 33% during the analyzing period of 1995-2008. On the other hand, imports from EAEC countries were cut from 53.11% to 39.2%, and this shortening consisted of 26.2% during the analyzed period. Also, imports from non EAEC countries were cut by more than half with 16.5% and 7% in 1995 and 2008 respectively. Consequently, on analyzing Kazakhstan's import by country, then we can conclude that further reductions of deliveries would be demonstrated by some countries (see table 6.8) such as:

- In Tajikistan (lowering to 93.3%) these data are represented with 0.3% in 1995 and 0.02% in 2008 respectively;
- In Turkmenistan (lowering to 90.5%), the statistic indices are 6.3% in 1995 and 0.6% in 2008 respectively based on the above given table;
- In Uzbekistan (lowering to 80.3%) this lowering corresponds to data from 7.1% in 1995 to 1.4% in 2008 in the above given table;

- In Belarus (lowering is more than half and makes 52.4%) these indicators are characterized by 2.1% in 1995 and 1.0% in 2008 respectively.

Therefore, by reducing Kazakhstan's imports from Russia and the Republic of Kyrgyzstan it can be observed with 27.3% and 37.5% respectively. On the other hand, import supplies from Azerbaijan to Kazakhstan were not changed and this indicator consisted of 0.7% in 1995 and in 2008. Furthermore, goods and service imports to Kazakhstan from Ukraine were increased to 43.5% which confirms the data of table 6.8 with 2.3% in 1995 and 5.6% in 2008. Indeed, we can make some conclusions in that the main reason for reducing imports from CIS countries is due to the entering of Kazakhstan to the international arena as an independent authority.

Summary

In summarizing this particular chapter, it is noted that in terms of Kazakhstan, since gaining independence, the country has started to enter into trade and the development of economic relations with other countries as competent members of the world economy. Regarding this point of view, the author attempted to focus on the following:

– to define the place of Kazakhstan in the world context;

– to analyze the dynamics and structure of foreign trade links in terms of the structure of exports and imports of goods and services as well by the main trading groups.

Through the above analysis, it can be concluded that the structure of Kazakhstan's exports mainly consist of mineral resources (73%), metals (16%), chemical goods (4.2%), food commodities (2.8%) and only 1.8% - mechanical engineering productions. On the contrary, for the structure of Kazakhstan's imports, the parts of machinery and equipment comprised of 45%, mineral products-14.3%, chemical goods-10.8%, and food commodities-7%. Additionally, it is noticeable the significance of inter sectoral trade such as importing and exporting of food commodities, chemical products etc. Furthermore, the geographical structure of export and imports services of Kazakhstan has been analysed as part of CIS and EAEC countries and also the main trade country –partners. Therefore, it is important to notice that the main importers of goods from Kazakhstan were the West countries particularly Italy and Switzerland which comprised of 35.6% of all imports, also France Germany, England etc. For the exports of Kazakhstan, the part of Russia is comprised of 10% and China-9.4%. Moreover, in the structure of Kazakhstan's imports, the part of Russia is comprised of 38.3%, China's is 8%, Germany-7.6%, the USA-4.7% and Ukraine-4.2%. On the other hand, the main significant group of the country's competitive advantages relate with availabilities of huge hydrocarbon and mineral raw materials. They are enough to satisfy the long time domestic consumption and also to export them. However, the orientation of exports on the resource of obtaining branches and sectors of fuel and energy complex cannot remain as the main strategy of Kazakhstan's safe stable

development. The other main group of competitive advantages of Kazakhstan according to Strategy 2030 are possibilities of organizing high technology and science intensive productions. In addition, this provides a high gross value added growth based on effective usage of significant science and technical achievements in the area of nuclear technologies, geophysics, biotechnologies, metallurgies, chemical industries, petro chemistries etc. At the present time, some improvements are carried out in the given direction according to the accepted programs of Kazakhstan's Industrial Innovation policy for 2003-2015. Such structure of economy should correspond to the requirements of the world market and allow the development of highly stable tendencies.

Against this backdrop, the central focus of this study suggests that there is limited understanding of the nature of Kazakhstan's evolving foreign trade policies between 1991 and 2008. The study now looks at analyzing appropriate data in order to address this main study aim.

CHAPTER SEVEN
SOURCES OF GROWTH: EMPIRICAL INVESTIGATION OF STUDY VARIABLES

7.1 Introduction

Most empirical work on trade policy and growth in developing countries uses export growth as a proxy for trade policies. Largely independent of the sources of growth literature on exports, parallel literature has appeared which examines similar questions for the government sector and economic growth (e.g., Sheehey (1993(a), Lin (1994) Samimi et al (2010). On this note, the government sector is where the government creates policy and strategic programmes for the improvement of economic growth of the nation. Here, Jung and Marshall (1985) pointed out that the "hypothesis of export promotion has typically been tested by looking at some form of regression of real output growth variable (economic growth of a country) on a real export growth variable" (growth of a country's exports). Many investigations have uncovered complementary supply side indicators, while others focus on foreign exchange variables within demand side indicators. Nevertheless, according to Sheehey (1990) such researchers as Emery (1967), Maizelz (1968) and Kravis (1970) have tested a strong positive correlation between export and GDP growth as at least suggestive for the benefits of export promotion. With this in mind, the purpose of this chapter is to present and analyze collected data in terms of addressing the main aim of the study and the associated research objectives. Consequently, the findings will be discussed in relation to extant research.

Hence, the current section begins by looking at how the production sectors, which are based on end use and on industrial origin contributed to economic growth of the Commonwealth of Independent States (CIS) during the period 1992–2006, i.e. since the introduction of independence in the region. In addition, following on from Sheehey's (1990) work regarding exports, this study applies government consumption, private consumption and gross capital formation variables as the end use categories. The industrial origin categories used are the agriculture, manufacturing, construction and service sectors. Thereafter, the scheme of this section is as follows. First, a bivariate correlation between the above mentioned variables is analyzed. Second, the production function linear multiple regressions for 12 CIS countries for the period of 1992-2006 are critically analyzed and subsequently, this sample is subdivided into 2 periods of time using the Chow test[4]. Third, data are analyzed in order to define time series

[4] This test for structural change is famous as a Chow test. It is based on two approaches. In the current study the first is used, which subdivides the sample into two (or more) groups. Then the model evaluates separately for each period and with the entire sample taken as a single period.

analysis for each country, which is comprised of a full sample. Also, other regressions were run, where lagged independent variables (such as government consumption expenditure's share in GDP and export's share in GDP) regarding GDP growth rate were used. All of these steps were addressed for objective one, and also to demonstrate that exports are one of the significant variables of economic growth among analyzing variables in CIS countries since independence.

Subsequently, another overall correlation and regression analysis for the period of 1992-2008 was generated. Here, trade was used in terms of export plus imports - as a percentage of GDP as a measure of trade openness and real GDP per capita for CIS countries. The purpose of this being addressed was in terms of assessing data associated with study objective two. Lastly, a critical analysis was conducted of the study's empirical findings regarding cluster analysis for the seventeen post-socialist countries **in order to show Kazakhstan's place among transition countries by degree of economic openness.**

7.2 Analytical review

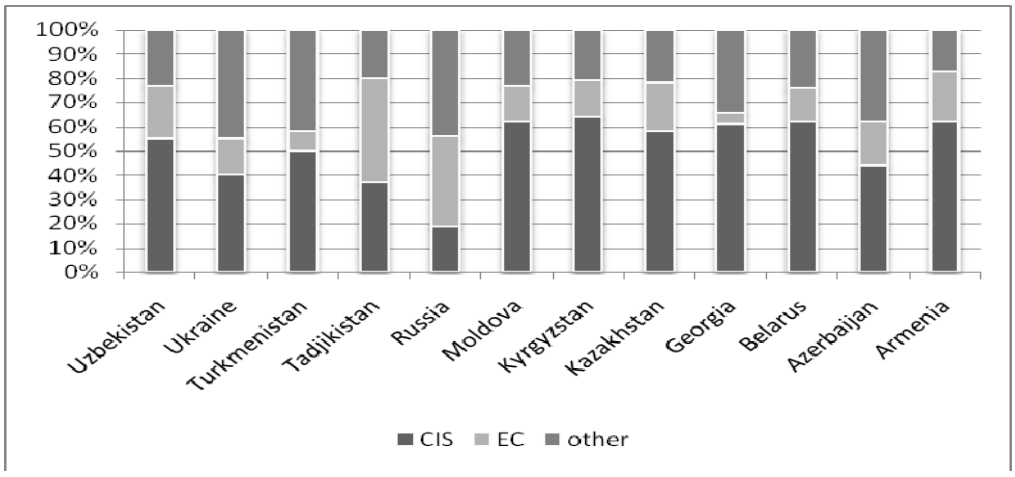
The states which emerged within the territory of the CIS experienced a rapid recession of trade following independence, and this was discussed earlier in chapter two –(Chapters four and five for the Kazakhstani case). Trade is not the only factor enabling growth, as Odling - Smee (2003) pointed out; where the relatively low level of trade of CIS countries was seen to restrict the opportunities for economic growth. On the other hand Dollar and Kraay (2002) argued that changes in trade policy have much stronger effects on growth. Based on these points of view, it is necessary to analyze the factors which have had a greater effect on economic growth. In contrast, Mogilevski and Tochitskaya (2005) emphasized three important time periods. The first was during 1991-1993, and this period characterized the conditions of trade following the collapse of the USSR, the second period was during 1994-1998, with the third period covering 1999 -2008 representing periods before and after the Russian crisis in 1998 when analyzing the dynamics of foreign trade flows.

As mentioned in chapter 2.5.3, the collapse was caused by the breakdown of the USSR, by divergence from a centrally planned economy, via a collapse of economic ties, and this was followed by a rapid decrease of both export and import levels. At the same time, there was a reduction in trade levels inside the CIS countries of approximately 83%-84% (Frienkman et al, 2004). Then, as mentioned by Mogilevski &Tochitskaya (2005), the foreign trade conditions started improving in 1993, when during the period of 1993-1997, export of CIS countries had increased to 54 %, and the import rate increased to 64 %. Consequently, in examining the foreign trade turnover, it is noted that it was growing faster in Belarus and Kazakhstan - ahead of most other countries of CIS. Indeed, in Georgia, Azerbaijan and Armenia, the process of recovering export-import flows was happening slower than in other countries in the region

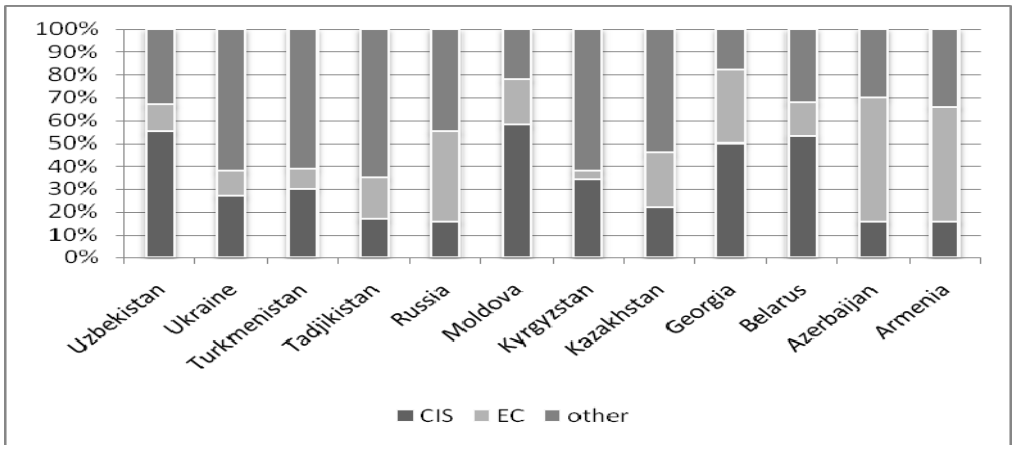
(Popov, 2000). Nevertheless, the Russian crisis in 1998 caused another drop in the foreign trade of CIS countries. The rate of transnational circulation of commodities had rapidly reduced, and export flows had been reoriented outside of the region. In examining the trade flows of Kazakhstan, these show that during the analysis of the econometric model of the CIS - it is important to examine the dynamics of development by separating periods into two subgroups (1992-1998 and 1999-2006) and then, to look at this within the context of one period from 1992 to 2006. Mogilevski and Tochitskaya (2005) showed that trade with other countries became more dominant for most CIS countries except Belarus, Uzbekistan and Moldova (see figures 7.1 and 7.2). Such a tendency was especially noticed in exports. Additionally, in countries such as Armenia, Azerbaijan, Russia and Tajikistan, the export rate inside CIS countries comprise of 16%-17% and for Kazakhstan, Ukraine and Turkmenistan the levels of exports reached between 22%-30% in 2003.

Figure 7.1

Geographical structure of exports



1995



2003

Source: CIS external trade. Mogilevski & Tochitskaya, 2005

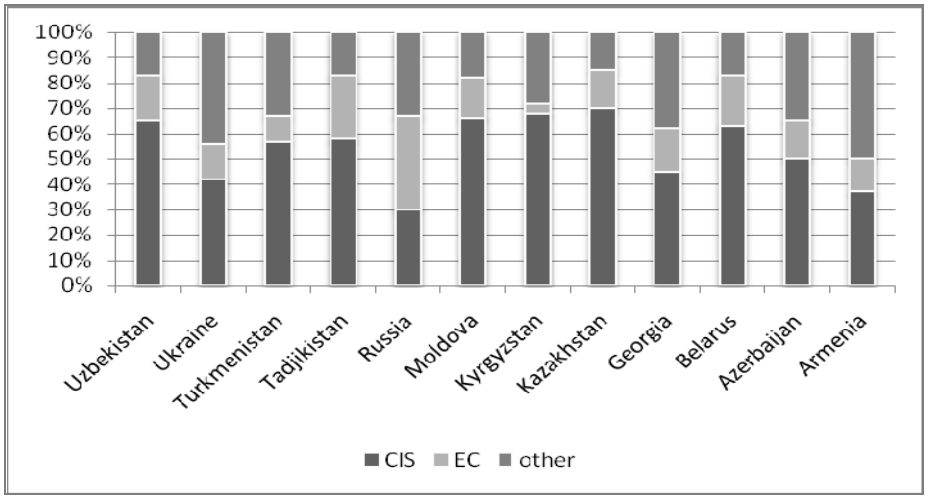
Shishkov (2007) notices that, in 1990 inter-republic trade amounted to about 60% of total exports. However, by 1995 this share reduced to 29.8%, in 2000 to 20% and in 2004 this indicator comprised 17.7%. In this connection, the author concludes that after proclaiming independence, all post soviet countries' trade rapidly decreased as a result, the inter-republic turnover was reduced as well. The main reason for trade reducing in CIS countries was liquidation of centralized resource delivering system and new independent trade policy of the CIS states. According to Wagener and van Selm (1993), this process was intensified additionally by spontaneous erection of various types of trade barriers among the former republics of the USSR. The growth of transaction costs and trade risks; the poor acting of trade account- settlement systems and also unpredictable inflation rates in the rouble area led to the loss of potential markets.

The geographical structure of imports has also experienced changes in reducing the specific weight of CIS countries with an increasing of European Union proportion and other countries. This is mentioned during the analysis of foreign trade of Kazakhstan in chapter seven.
Moreover, the process of reorientation of import flows was occurring at a slower speed in comparison with export flows. Also, the specific density of intra-regional imports into Kazakhstan and Ukraine was close to 50% while in Kyrgyzstan, Tajikistan, Turkmenistan and Belorussia, the percentage level was higher in 2003.

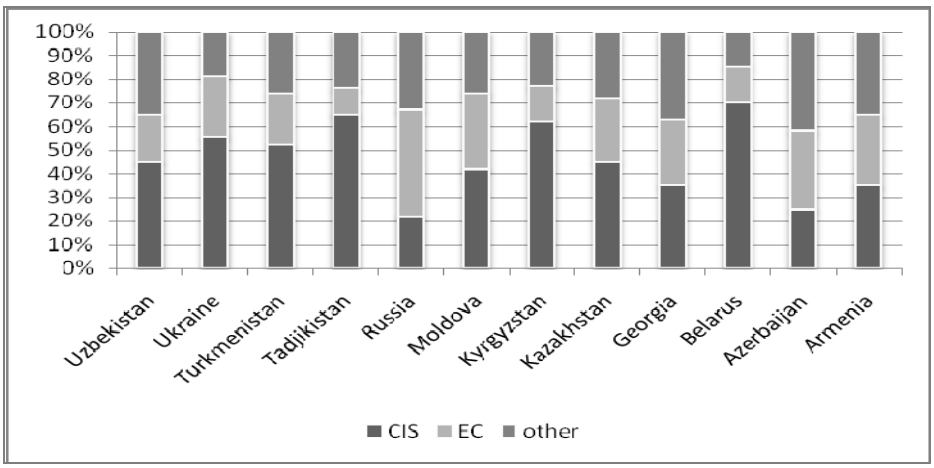
Besides, it is interesting to consider the vulnerability and dependence of CIS markets from the Russian market. For example in 2003, almost 90% of exports from Belarus, 72% from Moldova, Ukraine and Armenia and from 35% to 50% of export of other countries were sent to

Figure 7.2

Geographical structure of imports



1995



2003

Source: CIS external trade. Mogilevski & Tochitskaya, 2005

Russia (Mogilevski & Tochitskaya, 2005). Indeed, the Russian Federation has been the main trade partner for all former Soviet Union states. As analysis of this investigation shows (see chapter seven), it is important to note that Russia has taken the same position for Kazakhstan's economy.

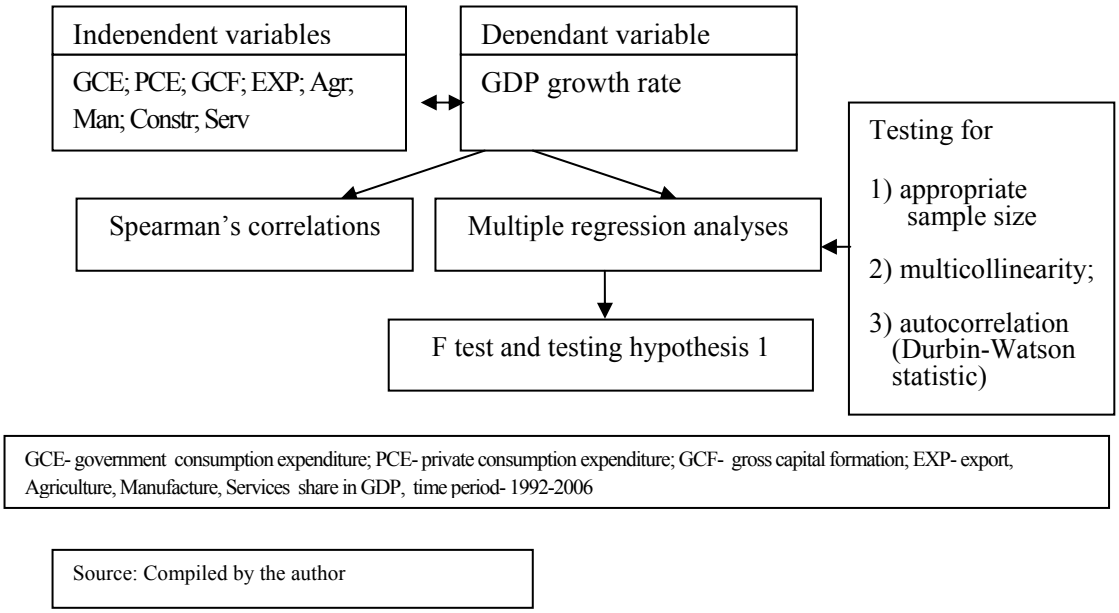
In summarizing the above, Mogilevski and Tochitskaya (2005) stated that the main reason which is slowing down intra-regional trade is a high concentration of exports and imports which mostly consists of mineral products, ferrous metals, and chemical industry products. For example, the export rate in Russia is 64.8 % including the above mentioned goods, in Ukraine - 63.2%, in Tajikistan-67.3%, and in Kazakhstan it reached 45% in 2005. **From all of these analyses, the author concludes that Kazakhstan's focus for greater trade switched from CIS areas to the EU and other countries since gaining independence.**

7.3 Study correlation –regression analyses

In order to consider contributions of production sectors on economic growth of the Commonwealth of Independent States (CIS) during the period 1992 - 2006 and test appropriate study hypothesis one is now examined (see figure 7.3 for correlation regression analysis).

Figure 7.3

Model of correlation- regression analysis for testing study hypothesis 1



7.3.1 Correlation analysis

In this connection, correlation analysis was run using SPSS software. From table 7.1 it is noticeable that the positive correlation between GDP has such variables as Exports and the Construction industry - in terms of these three periods of time (see appendices A-4.1; A-4.2 and A-4.3). Indeed, the overall Export correlation coefficient during the period of 1992-2006 has $r_{EXP,\ GDP}$=200** and the correlation coefficient is significant at the 0.01 level or at 1%. In this case, it can be explained that from the beginning of independence, all of the Commonwealth of Independent States began to diversify their exports and increase respectively. Also the main reason for the significance of exports was turning to trade liberalizing of CIS countries. Moreover, the correlation coefficient of the period from 1992-1998 is 0.082 (the Spearman's rho correlation coefficient) against 0.185 in the period of 1999-2006. This can be explained by- until 1991 almost all countries of the CIS had closed economies and since gaining independence, these states started to enhance their trade partners, which was mentioned by Mogilevski and Tochitskaya (2005), Pomfret (2007,b).

In analyzing the correlation coefficients of GCE (table 7.1), findings suggest that this coefficient is increasing comparatively in the second period of time. Consequently, at the first observation period, this indicator comprised of -0.283**, on the next observation period Spearman's correlation coefficient was equal to -0.374** and the overall coefficient comprised of $r_{GCE,\ GDP}$ -.475.

Table 7.1

Spearman rank correlation coefficients

for different time periods for CIS countries

	1992-1998	1999-2006	1992-2006
Production	GDP growth	GDP growth	GDP growth
Exports	.082	.185	.200**
PCE	.162	-.162	-.180*
GCE	-.283**	-.374**	-.475**
GCF	-.172	.234*	-.171*
Agriculture	.007	-.338*	-.271**
Manufacture	-.275*	-.119	-.300**
Construction	.054	.432**	.091
Services	.246*	-.196	.208**
Number of observations	84	96	180

Source: Author generated from analyzed data. The data has been extracted from UN (2009a,b)

Levels of significance are as follows: ** Correlation is significant at the 0.01 level (2 tailed).

*Correlation is significant at the 0.05 level (2 tailed).

Empirical findings of Landau (1983), suggest a negative relationship exists between the share of government consumption expenditure in GDP and the rate of growth per capita GDP for full samples of 96 countries. Also Landau concludes that, government expenditure - even if it decreases the GDP growth per capita - could assist in enlarging economic welfare. It is noticeable that the governments focus on growing their respective economies and the achievement of growth through increasing spending - and consequently – increasing the respective country's expenditure costs. In addition, according to Sheehey, (1993a) "government contributes to economic growth by providing basic public goods, including a stable framework of law and security" (p. 323). The negative correlation coefficient from table 7.1 is significant at the 1% level, and correlation coefficient interprets as moderate the negative relationship between GDP growth rate and GCE for the period 1992-2006. This negative correlation in this current case, suggests that the increasing of GCE leads to a decreasing of the GDP growth rate and vice versa. In this case the findings support Landau's opinion that government expenditure - even if it decreases the GDP growth - could assist to enlarge economic welfare.

Also, in terms of correlation coefficient of the Service sector, Spearman's correlation coefficient during the first period was equal to 0.246*, and this coefficient is significant at the 5% level. Based on this result, one explanation is that all former Soviet countries from the beginning of independence initiated programmes to build new forms of properties within their respective

economies. Additionally during this period, various kinds of service industries within the private sector were created and these included: banking, insurance, different kinds of services in medicine, education, etc. On this point, as mentioned by Kalyuzhnova et al (2004), "Kazakhstan's service sector grew significantly compared with the pre-1990s" (Kalyuzhnova et al., 2004 p.253)

In observing the overall correlation coefficient for the PCE, GCF and Construction share in GDP, there is a suggestion that all of these coefficients are near to zero. As can be seen from the analyzed data, the GCF and Construction share in GDP on the second period (1999-2006) have positive coefficients and have significance at 1% and 5% levels respectively. Indeed, these periods of time characterized as economic growth for almost all CIS countries. For example, according to Kalyuzhnova et al. (2004) Kazakhstan's GDP fell by 40 % in the first four years of transition, 1991-1995. This was also analyzed in detail earlier (see figure 7.1).
Additionally, it is noticeable that FDI increases among Central Asian countries, so according to Kaser (2003), Kazakhstan had the highest inflow of FDI since independence amounting to some $11 billion, or $741 per capita, against the $4.1 billion flow into Azerbaijan ($501 per capita) and $1 billion into Turkmenistan ($189 per capita). In this connection, according to Kalyuzhnova et al (2004), Kazakhstan had attracted around 75 per cent of all FDI into Central Asia, and about 10 per cent of all FDI into the former communist block.

Consequently, following the collapse of the USSR during the first period of development, the construction sector of the economy showed little signs of influence on the growth of GDP. In analyzing the data from Table 7.1, a correlation coefficient (r) comprises of 0.054 for the construction sector. However, on observing the second period, it is noticeable that this particular indicator significantly increased to 0.432** and this result has a 1% level of significance. This level of growth cannot be underestimated in terms of its respective importance on developing the economy and indeed in terms of economic growth for the respective nations. In observing the trend of this collected data for the first period, it is noted that it concurs with Nolan (2005), who pointed out that a value of *r* which is near zero and not significant does not necessarily indicate that the two variables are unconnected, but there is no linear relationship between them. Furthermore, he suggested that there will be a curvilinear or other complex relationship between the variables, which Spearman's rather blunt instrument will not detect. Indeed, correlation coefficients of GCF and PCE are significant at the 5% level although they are close to zero, and it can be concluded that there is a significant relationship between Gross Capital formation and GDP growth rate. Also, there is a significant relationship between Private consumption expenditure and economic growth respectively. As a result, the value of N (see appendix A-4.3) corresponds to a number of observations that we were made. If it does not, then the data may have been excluded for some reason.

7.3.2 Types of multiple regressions and appropriateness of size in relation to generalizing results

As was mentioned in the Methodology chapter 3 (see p.91) there are various types of multiple regression analyses that can be applied to research of the nature of this current study. The three fundamental types of multiple regression analyses are: standard or simultaneous; hierarchical or sequential; and stepwise. From these, the stepwise multiple regression was selected to test. According to Hayat (2008)

> *"The stepwise method is a well-established statistical approach to search for the features that can enhance the performance of a classifier," (p.328).*

This form of regression was appropriate for SPSS, for analyzing the independent variables mentioned above, and then letting the software select which variable should be entered and in which order should its variables go into the equation based on a set of statistical criteria**.** Consequently, in this current study there are 8 independent variables, therefore, it was important to have more than 114 cases. Fortunately, the number of cases for this study is 180 cases (see appendix A-4.3), which confirms the high degree of accuracy of selection of the study sample size, and this directly impacts positively on the validity of the number of variables required for studies of this nature and indeed, the appropriateness of the sample size for this study.

7.4 Model's estimation for multicollinearity

The model's multicollinearity has been discussed previously in chapter 3.6.4. According to the sample for this current study, SPSS also performs 'collinearity diagnostics' when considering variables as part of a multiple regression procedure. All of the results are presented in the table labeled Excluded variables (Appendix A-4.4).

From this table, the value of tolerance is an indicator of how much the variability of the specified independent is not explained by the other independent variables in the model. This is also calculated using the formula *1-R* squared for each variable. "If this value is small (less than 0.10), it indicates that the multiple correlation with other variables is high suggesting the possibility of multicollinearity" (Pallant, 2007).

Table 7.2

Coefficients of Collinearity statistics

Model	1992-2006
EXP	0.985
PCE	0.990
GCF	0.995
Agriculture	0.998
Manufacture	0.975
Construction	0.999
Service	0.999

* Dependent variable: GDP: Also, Predictors in the Model: GCE (constant)

Source: Author generated from analyzed data

As can be seen in table 7.2, all coefficients of collinearity statistics are close to 1. As a result, it can be concluded that by using this model, this particular data does not contain any significant level of multicollinearity.

7.5 Estimating and interpreting a multiple regression model

7.5.1 Evaluating each of the independent variables

In terms of using the SPSS technique for analysing data, the Stepwise method was selected for analyzing a multiple regression, and it was therefore important to understand which of the variables should be included in the model – in terms of those which contribute to the prediction of the dependent variable. This was decided from the information in the table "*Excluded variables*" (see Appendix A-4.50.1). During this process, all independent variables were entered into the equation. The value of each variable was checked in the column marked *Sig*. This information shows whether this variable is making a statistically significant unique contribution to the equation. According to Pallant (2007 p.159), "the result of the significance is very dependent on which variables are included in the equation and how much this significance overlaps among the independent variables". In the case of this particular study, it is noted that, if the *Sig.* value is less than 0.05 (0.01, 0.0001, etc.), then the variable makes a significant unique contribution to the prediction of the dependent variable. Also, if it is greater than 0.05 then it can be concluded that the variable does not make a significant unique contribution to the prediction of the dependent variable. In addition, Nourusis (1990) points out that, "the highest partial correlation coefficient should be taken into consideration, and if it passes entry criteria, it also enters the equation" (Nourusis, 1990 p.174). Consequently, using the SPSS software, seven independent variables were chosen through the stepwise method over the period 1992 -2006, and these were: EXP, PCE, GCF, GCE, Manufacture, Construction, and Service sectors. One indicator, agriculture, was removed as the following results suggested that it was inappropriate to use due to data for this variable being: Sig. -0.275, Partial correlation coefficient -0.83 and collinearity coefficient -0.229 (see appendix A-4.4). Hence, agriculture was not included in the

regressions. Against this backdrop, the overall regression equation of the model used in this current study can be written as:

23.17 - 0.95GCE + 0.15 Service - 0.21PCE - 0.32Manuf+ 0.15 EXP+0.71Constr-0.25GCF*
(3.215) (-6.939) (2.145) (-4.386) (-4.383) (3.155) (3.733) (-3.076)

*Figures in parentheses are t-values.

The regression results for the current model with pooled cross-sectional and time-series data are shown in Table 7.3 (which was taken from Appendix A-4.5):

Table 7.3

Dependent Variable – GDP Growth Rate

Variable	Coefficient	Standard error	t- statistic	Sig.
Constant	23.171	7.208	3.215	0.002
GCE	-0.950	0.137	-6.939	0.000
Service	0.149	0.70	2.145	0.033
PCE	-0.214	0.049	-4.386	0.000
Table 7.3 (continued)				
Manufacture	-0.320	0.073	-4.383	0.000
EXP	0.151	0.048	3.155	0.002
Construction	0.714	0.191	3.733	0.000
GCF	-0.252	0.082	-3.076	0.002

Key: Observations: 180; R^2=0.502; Adjusted R^2= 0.481; F- Statistic = 24.747; DW 1.640

Source: Author's estimates from data analysis

7.5.2 The Durbin-Watson Statistic and Testing of Auto Correlation

As discussed in chapter 3, the Durbin-Watson test requires two critical values which are referred to as: d_U ('d-upper') and d_L ('d-lower') in the table of Critical values for the Durbin-Watson statistic. With this in mind, in terms of this current study, a regression with sample size of 180 and 7 independent variables has a Durbin-Watson statistic of 1.640 (see appendix A-4.6). The table of critical values for the Durbin-Watson statistic (5% significant level) gives us d_L=1.7 and d_U=1.84. Then 4- d_L=2.3 and 4- d_U=2.16, since 1.640< 2.16 and 1.640<2.3, the Durbin-Watson statistic is less than 4- d_U and 4- d_L. So, the null hypothesis was not rejected and we assume that there is no auto correlation.

7.5.3 F test for all independent variables

The F-test is a useful test when testing for the null hypothesis. For example, where the hypothesis has more than one slope coefficient, the t-test should be used only on the null

hypothesis involving one slope coefficient and F-tests should be designed to test the different types of joint hypotheses. So, in this particular case, F- statistic for the model is 24.747 (see appendix A-4.7). The current model has 7 degrees of freedom in the numerator and 172 in the denominator.

From the table of F-distribution, a critical value for $F_{7,172}$ is 2.64 at the 1% significance level. Since the F-statistic from the regression results is 24.747, this value is greater than its critical value which comprised of 2.64, the null hypothesis is rejected at the 1% significance level. **Since the observed F-value of 24.747 is above the critical value, we reject the hypothesis that the relationship between GDP growth and the analyzing variables for these considered periods (1992-1998 and 1999-2006) is the same.** This test supports the expectation that there is a clear structural change in the economy of the production sector which consists of two different divisions of GDP of industrial origin and end use, (Sheehey, 1990) which are associated with the outward- orientation direction in the periods 1992-1998 and 1999-2006.

7.5.4 R^2 and adjusted R^2

The most common measure of goodness of fit is a coefficient of determination - and this is denoted by R^2. In terms of this current study, in using this model, the coefficient of determination of R^2 comprised of 0.502 (see table 7.3 and also in appendix A-4.6). Against this backdrop, for the purposes of this current study, this statement is tested. Hence, if we take into account the model results, we can observe the changes. When we include one independent variable, government consumption expenditure share in GDP, we have got R^2 equal to 0.208 (see appendix A-4.6). This indicator gradually increases when additional variables are added, and consequently the results show that the coefficient of determination with 7 independent variables comprised of 0.502. On a similar note, Hardy and Bryman (2004) interpreted R^2 as a measure of quality of a multiple regression analysis or the theory that motivates it. In our current model, the difference for the final model is equal to 0.021 (in fact the difference between the values R^2 and adjusted R^2 is 0.502- 0.481= 0.021, this is to say about 2.1%). This result means that if the model was derived from the population rather than a sample it would account approximately to 2.1% less variance in the outcome. Thus, as mentioned in the Methodology chapter, the regression for each country under consideration should be analyzed in this manner.
The results of the 12 Spearman correlation coefficients (where GDP growth rate is a dependent variable) for the period of 1992-2006 are summarized in table 7.4. As can be seen from the results of table 7.4, correlations between export share in GDP and gross domestic product growth rate have a high coefficient in some countries such as: Kazakhstan, Russia and Ukraine and they are equal to 0.869; 0.740 and 0.714 respectively (see appendices A-4.8 – A-4.19), which demonstrate the strong and significant relationship between export share in GDP and GDP growth rate particularly for Kazakhstan and the Russian Federation.

Among the CIS countries of Kyrgyzstan and Moldova they have negative correlation coefficient between GDP growth and export, and this indicator is equal to -0.082 and -0.173 respectively. The relationship between analyzing dependent variable GDP growth and Export share in GDP is weak, and consequently, the increase of Export's share in GDP leads to a decrease of GDP growth rates. The results show that except for Turkmenistan and Moldova, almost all countries of the CIS have a negative correlation coefficient between GDP growth rate and government consumption expenditure share in GDP. Indeed, correlation is significant at the 1% level.

Table 7.4

Spearman correlation coefficients of Commonwealth of Independence States

for the period of 1992-2006

Variables	**GDP Growth Rates**											
Production	Armenia	Azerbaijan	Georgia	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	Belarus	Moldova	Russia	Ukraine
Exports	0.512	.340	.620*	.869**	-.082	.155	.173	.569*	.627*	-.173	.740**	.714**
PCE	-0.828**	-.756**	-.558*	-.840**	-.552*	.736**	.004	-.488	-.758**	.636*	-.186	-.250
GCE	-0.854**	-.817**	.145	-.630*	-.529*	-.293	.107	-.823**	-.612*	-.608*	-.731**	-.426
GCF	0.691**	.507	-.272	-.129	.181	-.925**	-.427	-.283	-.252	-.621*	-.797**	-.629*
Agriculture	-0.725**	-.925**	-.599*	-.763**	-.152	-.134	.305	-.411	-.678**	-.711**	-.376	-.270
Manufacture	-0.796**	-.771**	.513	-.604*	-.306	.114	-.648**	-.189	.525*	-.411	-.462	-.579*
Construction	0.850**	.286	.381	-.257	-.170	-.470	.004	-.658**	.469	-.395	-.605*	-.758**
Services	0.338	-.486	.454	.025	.152	.346	.483	.616*	.023	.775**	.596*	.418
N	15	15	15	15	15	15	15	15	15	15	15	15

*Correlation is significant at the 0.05 level (2-tailed)

**Correlation is significant at the 0.01 level (2-tailed)

Source: Author's Estimates from Analyzed Data

Also analysis was undertaken on the regression equations for twelve countries separately (see Appendices A-4.20.3- A-4.31.3). The results are summarized in table 7.5

Table 7.5

Regression Analysis Results,

1992-2006 * for each observed country in the study

	Country	Regression equation	Model summary
1	Armenia	-89.08+0.67EXP-0.25PCE-0.98GCE+1.43GCF+1.31Agr- (-2.12) (1.72) (-2.03) (-.74) (2.36) (3.65) 0.18Man+0.22Constr+1,51Serv (-.63) (.35) (3.39)	R^2=.991 Adjusted R^2=.979 RSS=24.536
2	Azerbaijan	80.52- 0.41EXP+0.24PCE-0.27GCE-0.23GCF-1.57Agr- (10.07) (-2.32) (.77) (-.65) (-2.28) (-2.45) 1.38Man+0.62Constr-0.91Serv (-4.56) (1.73) (-2.19)	R^2=.991 Adjusted R^2=.978 RSS=37.262
3	Georgia	-461.7+3.13EXP-0.75PCE-0.26GCE- (-1.88) (1.56) (-1.41) (-.12) 0.33GCF+4.60Agr+9.53Man-0.03Constr+4.98Serv (-.59) (2.03) (2.83) (-.01) (1.92)	R^2=.931 Adjusted R^2=.840 RSS=248.38
4	Kazakhstan	120.15+0.25EXP-0.56PCE-0.14GCE-0.50GCF- (4.14) (-1.06) (-5.34) (-.22) (-.14) 1.61Agr+0.49Man-3.93Constr-0.83Serv (-2.14) (1.40) (-3.26) (-3.57)	R^2=.979 Adjusted R^2=.950 RSS=21.484
5	Kyrgyzstan	64.76+1.88EXP+0.19PCE-4.14GCE+0.59GCF-0.43Agr- (1.36) (4.09) (.98) (-4.92) (2.38) (-0.81) 1.32Man-0.93Constr- 0.68Serv (-1.69) (-0.51) (-1.02)	R^2=.967 Adjusted R^2=.922 RSS=38.972
6	Tajikistan	45.84+0.15EXP-0.20PCE+0.19GCE-0.41GCF-1.38Agr- (1.65) (1.36) (-.78) (.32) (-.94) (-3.05) 3.21Constr+0.43Serv (-1.89) (1.03)	R^2=.956 Adjusted R^2=.913 RSS=101.371
7	Turkmenistan	-18.67+0.01EXP+0.17PCE-2.08GCE-0.11GCF- (-.67) (.03) (.62) (-1.02) (-.16) 0.25Agr+1.28Constr+1.02Serv (.44) (1.04) (1.55)	R^2=.608 Adjusted R^2=.215 RSS=605.483
8	Uzbekistan	0.80+0.17EXP-0.54PCE-0.95GCE- (.06) (.89) (-2.49) (-2.89) 0.63GCF+0.61Agr+3.30Constr+0.20Serv (-3.12) (1.56) (2.85) (0.58)	R^2=.973 Adjusted R^2=.946 RSS=10.240
9	Belarus	-396.14+0.45EXP+0.91PCE+0.18GCE+0.41GCF+ (-2.19) (2.62) (.91) (.06) (.68) 5.03Man+4.63Constr+2.83Serv (2.58) (0.88) (2.54)	R^2=.894 Adjusted R^2=.788 RSS=101.038

Table 7.5 continued

10	Moldova	-46.85+1.44EXP+0.098PCE+0.04GCE+0.97GCF- (-.11) (1.21) (.08) (.03) (1.07) 1.46Agr+0.06Man-7.89Constr+0.80Serv (-.32) (.01) (-1.50) (.16)	R^2=.701 Adjusted R^2=.303 RSS=621.173
11	Russia	15.71+0.05EXP-0.87PCE-0.60GCE-1.15GCF+3.42Agr- (.39) (.31) (-1.81) (-59) (-2.93) (1.85) 0.19Man+2.38Constr+0.28Serv (-.64) (1.42) (.47)	R^2=.922 Adjsted R^2=.819 RSS=68.491
12	Ukraine	66.50+0.43EXP-1.91PCE+2.86GCE+0.51GCF- (1.29) (1.41) (-2.52) (1.76) (.63) 0.93Agr+0.01Man-5.59Constr-0.08Serv (-.85) (.03) (-1.37) (-.13)	R^2=.918 Adjusted R^2=.808 RSS=82.923

* The figures in parentheses are t-statistics

Source: Author's Estimates from Analyzed Data

From table 7.5 the analyzed results of regression analysis for CIS countries are presented. Here, countries such as Armenia, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Belarus, Moldova, Russia and Ukraine have a positive coefficient of Export share in GDP growth which comprised of 0.67; 3.13;0.25;1.88;0.15;0.01;0.17;0.45;0.43, respectively. The coefficient of export share in GDP growth variable suggests that export shares in GDP growth of 1% leads to an increase in the GDP growth to 0.67% for Armenia, 0.3% for Georgia, 0.25% for Kazakhstan, 0.1% for Kyrgyzstan, 0.15% for Tajikistan, 0.01% for Turkmenistan, 0.17% for Uzbekistan, 0.45% for Belarus, 0.14% for Moldova, 0.05% for Russian Federation and 0.43% for Ukraine economies. According to investigations reported by Landau (1983), Ram (1986), Barro (1991), Dowrick (1996), and Le and Suruga (2005), these all provide different influences of government consumption expenditure to the GDP growth rate. So based on current regression analysis the author concludes that influences of GCE to GDP growth rate varies in CIS countries too. Furthermore, for the countries of CIS such as: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Turkmenistan, Uzbekistan, Russia, the indicator of GCE share in GDP has a negative impact to GDP growth, where for Tajikistan, Belarus, Moldova and Ukraine the GCE share in GDP positively relates to GDP growth. In this connection according to Kazakhstan's case the GCE coefficient comprised of -.14 which shows that government consumption expenditure share in GDP growth of 1% leads to reduction of the GDP rate until 0.14%. Consequently, the GDP growth regarding GCE has negative elasticity which is equal to -0.14 (see appendix A-23.3). Furthermore, according to Jalilian et al. (2007 p.75) GCF showed a strong positive correlation coefficient, whereas the indicator for gross capital formation (GCF) share in GDP growth has doubled for CIS countries.

According to table 7.5 the bivariate correlations between GDP growth and gross capital formation share in GDP for Armenia has a strong positive correlation coefficient which

comprises of 0.691**. This correlation coefficient is significant at the 0.01 level which means a risk of probability of only 1 in 100 that the results could not have arisen by chance. In terms of Armenia's regression equation from table 7.5, the GCF coefficient approximates to 1.43, which means that GCF share in GDP growth of 1% leads to a GDP growth of 1.43%. Also for countries such as Kyrgyzstan, Uzbekistan, Belarus, Moldova, Ukraine the gross capital formation indicator shows a positive influence towards GDP growth. In analyzing the Spearman correlation coefficient between GCF share in GDP and GDP growth rate for the above named countries, this study observes a double meaning of these coefficients. Hence, for the Kyrgyzstan economy - the bivariate correlations between GDP growth and gross capital formation (GCF) share in GDP shows a weak positive correlation coefficient of 0.181, whereas for Ukraine and Moldova this coefficient has a negative link and equates to -.621* and -.629* respectively, which according to Salkind (2008) shows a moderately negative (indirect) correlation and for Uzbekistan and Belarus indicates weak indirect correlation between GCF share in GDP and GDP growth rates.

As was noticed by Byers (1976), Schultz (1976), and Strassert (1968), the manufacturing, construction, agriculture and service sectors were called "key industries" of an economy. Accordingly, the above named variables appear to contribute differently to GDP growth in CIS. Here, for instance, for Armenia, Azerbaijan, Kyrgyzstan, Russia, the manufacturing sector negatively contributes towards GDP growth, whereas for Georgia, Kazakhstan, Belarus, Moldova and Ukraine this indicator has a positive contribution towards the GDP growth rate. Such different meanings have contributions of agriculture and service sectors significantly influencing GDP growth in CIS. In addition, according to Adams and Juleff (2003) this regression analysis for CIS has limitations of weaknesses and strengths of methodology. Consequently, from table 7.5 the coefficient of determination (R^2) for most countries close to 1 tends to indicate that regression equations better describe the dependence between the above named analyzed variables such as: PCE, GCE, Exp, GCF, Agriculture, Construction, Manufacturing, Services sectors and GDP growth rate for CIS. Hence, for all of these countries $R^2 \succ \bar{R}^2$ which shows the accuracy of the equation. Moreover less standard error of regression equations were observed in regression models for the countries of Kazakhstan and Uzbekistan. The opinions of Adams and Juleff (2003) suggest that smaller error notices of equation accuracy and accuracy related to predictions - permit a closer estimate of regression line. Also according to their opinion, during an analysis of t tests demonstrating reliability of the regression equation, this t test should be equal to 2 or more. Unfortunately on occasion, CIS regression equations did not satisfy such requirements.

In examining the regression results of table 7.5, there are fifteen observations for each country. In terms of this study the author suggests that if the null hypothesis is true, then the dependent

variable such as GDP growth rate in relation to all considered variables for the analyzing period (1992-2006) is the same and there is not a clear structural change in the economy associated with an outward –orientation strategy for CIS countries (including Kazakhstan's economy). Therefore for countries such as Ukraine, Russia, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, and Kyrgyzstan, from the table of F distribution - a critical value for $F_{8,6}$ is 4.15 at a 5% significance level, whereas for the above named countries respective F statistics are as follows: 8.375; 8.920; 1.762; 82.803; 79.003; 10.196; 34.352; 21.735 (see Appendices A-4.21.2- A-4.24.4 and A-4.27.2; A4-31.2). Furthermore for the countries of Uzbekistan, Belarus and Tajikistan, from the table of F distribution, a critical value for $F_{7,7}$ is 3.787 at the 5% significance level and F statistic for these respective countries are: 35.844; 8.450 and 21.874 (see Appendices A4.25.2; A-4.29.2 and A4-30.2).

Hence, according to these results (excluding Moldova) the observed F values are above the critical value and the author rejects the null hypothesis that the relationship between GDP growth and the analyzing variables for these countries is the same at the 5% significance level. **Consequently, this test supports the expectation that there is a clear structural change in the economy associated with an outward-orientation strategy**. Concerning the Moldova case, as analyzed further in cluster analysis (see chapter 7.8) Moldova has a low level of GDP growth which can be associated with a low level of GDP per capita and other considered variables in the correlation-regression model. This event characterized Moldova as a country lagging behind most other CIS.

In addition, from tables 7.4 and 7.5, it is noted that correlation and regression analyses have fifteen observations for each country. Observations suggest the existence of a partial correlation between independent variables. For example, the manufacture share in GDP in countries such as Tajikistan, Turkmenistan and Uzbekistan are partially correlated with other variables. The partial correlation coefficients are -0.432; -0.125 and 0.573 respectively. Also, the agriculture share in GDP was excluded from the Belarus regression equation, as it has a partial correlation coefficient equal to 0.222.

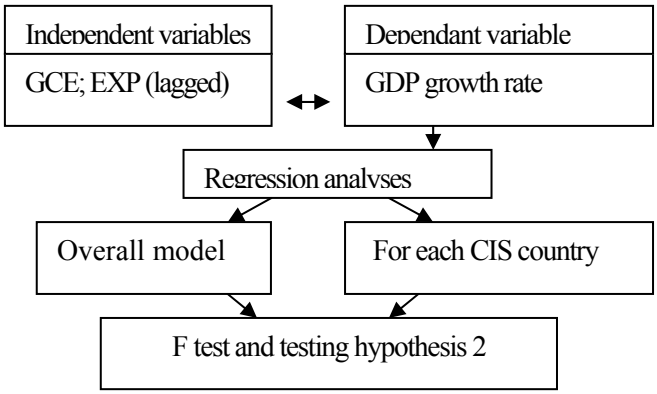
7.6 Regression analysis with lagged variables for CIS countries

Moreover, in the author's opinion, some of these variables can have a significant effect not exactly in the current year. For example, spending government consumption expenditure in this year can affect the economic development in the future period, thereby showing a delayed effect to the dependent variable. Taking into account this finding, other regressions were run, where a lagged independent variable regarding GDP growth rate was used. In order to avoid a problem with partial correlation between independent variables, it was important to reduce the number of variables and to take only two independent variables such as export share in GDP and

government consumption expenditure share in GDP. In terms of the dependent variable, the gross domestic product growth rate was used as in the previous analyses. This current analysis runs according to the following technique (see figure 7.4).

Figure 7.4

Model of regression analysis for testing study hypothesis 2



GCE- government consumption expenditure; EXP- exports share in GDP; these variables lagged to GDP; time period- 1993-2006

Compiled by the author

Furthermore, analysis was conducted to understand the positive influence on GDP of lagged exports for the period of 1999- 2006 in comparison with 1993-1998 associated with the change of trade policies as more outward-oriented in CIS countries (including the Kazakhstani case) on the second considered period.

The results of three regressions for the periods (a) 1993-1998, (b) 1998-2006, and (c) 1993-2006 are summarized in table 7.6 below (these data were taken from appendices A-4.32; A-4.33 and A-4.34).

Table 7.6

Exports, GCE & Growth in CIS: 1993-2006

	Eq.(a):1993-2006	Eq.(b):1993-1998	Eq.(c): 1999-2006
Dependent variable	GDP growth	GDP growth	GDP growth
Constant	12.227 (4.927)	-5.362 (-1.372)	10.854 (5.055)
EXP	-056 (-2.059)	-092 (-2.716)	.043 (1.755)
GCE	-.831 (-4.695)	-.063 (-.257)	-.430 (-2.597)
R^2	.141	.102	.134
RSS	17683.94	8743.03	1749.332
Df	165	69	93

(Figures in parentheses are t values)

Source: Author's Estimate of Results of Analyzed Data

Furthermore, comparing the results of Equation 2 with Equation 3, it is noticeable that the coefficients for the period of 1993-1998, differ from the period 1999-2006. This change was tested using the Chow test. The observed F value for this test is 56.54[5]. This result was generated by adding the two residual sums of squared (RSS) of equation (b) and (c), it was deduced that the gaining results from RSS of equation (a) and used the formula for F value under Chow test (Agalewatte, 2004).

The critical $F_{2,165}$ (at the 1% level) is 4.61. Since the observed F significance is 56.54 (also this result can be tested by another way, since the F-test is equal to 13.52 (see appendix A-4.32) higher than $F_{2,165}$ (at the 1% level) is 4.61). **The propositions that the influence on GDP of lagged exports for the periods of 1999- 2006 and 1992-1998 is the same in CIS countries (including the Kazakhstani case) were rejected.**

Thus, the given test encourages the positive influence on GDP of lagged exports for the period of 1999- 2006 in comparison with 1993- 1998 associated with the change of trade policies as more outward- oriented in CIS countries (including the Kazakhstani case) on the second considered period. Hence, foreign trade policies of transition economies were changed from centrally planned system towards to liberalizing of trade. With regards to the Tajikistan economy, Pomfret (2007b) points out that, since 1997 government policy seems to be fairly liberal. The government of Tajikistan has largely followed the international financial institutions' policy recommendations. Particularly, according to Akimov and Dollery (2008) in this period of time Kazakhstan achieved substantial trade liberalization, following the abolition of all export quotas and the elimination of most export and import licenses. Also the other countries of the former Soviet Union exhibited the reorientation of foreign trade from CIS states to others further abroad, especially to European Union countries. So, according to Shishkov (2007) in 2005 Kazakhstan's trade with the EU was 3.3 times greater, than Russia, Armenia's -3.8; Tajikistan's -5.4; and Azerbaijan's 6.8 times greater than with the Russian Federation. This is evidence for the altering of trade policies towards greater liberalization.

This finding also demonstrates the export coefficients for considering two periods 1993-1998 and 1999-2006 which respectively produced results of -.092 and .043. Consequently the

[5] Using data in the table 4.4 above, F value is computed as follows: $S_4 = (S_2+S_3) = 10492.36$; $S_5 = (S_1-S_4) = 7191.58$. Also according to the formula for F value: $F = (S_5/2)/ (S4/165) = 56.54$

elasticity of GDP growth regarding exports for CIS countries in the periods of 1993-1998 and 1999-2006 are equal to -.092 and .043 respectively. These findings suggest that the period of 1993-1998 had a relatively negative elasticity of coefficients than the next period of time for Commonwealth of Independent States. Furthermore, the study analyzed the correlation coefficients and regression equations for twelve countries separately, using lagged variables for economic growth rate, and the results are presented in table 7.7 (all data were taken from appendices A-4.35- A-4.46). On considering Kazakhstan's EXP coefficient which comprised of 0.22 it can be concluded that export shares in GDP growth of 1% leads to GDP growth with 0.22%. Consequently, the elasticity of GDP growth regarding exports is equal to 0.22 (see appendix A-4.37.2).

Notably, Russian export growth coefficient is 0.03 (for the same period) which suggests that the export shares in GDP growth of 1%, leads to an increase in GDP growth to 0.03% and the elasticity of GDP growth regarding exports is equal to 0.03. Similarly, such conclusions can be suggested for other countries in the sample (see Appendix A-4.45).

In examining the results of table 7.7, correlation and regression analyses have 14 observations for each country, and in order to avoid a problem with partial correlation between independent variables, the number of variables was reduced. Also, the two independent variables of export growth rate and government consumption expenditure share in GDP were considered. In the capacity of dependent variable, the gross domestic product growth rate was taken as in the previous analyses; furthermore, it was hypothesized that lagged export share in GDP had significantly explained GDP growth for the Commonwealth of Independent States (including the Kazakhstani case) and trade policy was changed for the years under consideration in each country. The null and alternative hypotheses were as follows:

$$H_0: B_1=B_2= B_3=\ldots = B_k =0$$

$$H_A: \text{ At least one of these B's is not zero}$$

With this in mind, if the null hypothesis is true, then the influence on GDP of lagged exports for the periods of 1999- 2006 and 1992- 1998 is the same in CIS countries (including the Kazakhstani case). Also, in terms of trade policy, this has been unaffected for these periods of time for CIS countries.

Table 7.7

Regression analysis results,

1993-2006[6] for each observing country with lagged variables

	Country	Regression equation	Model summary
1	Armenia	56.88- 0.116EXP-5.145GCE (10.33) (-2.24) (-8.52)	R^2=.931 Adjusted R^2=.919 RSS=2461.048
2	Azerbaijan	21.86+0.173EXP-1.913GCE (3.67) (2.12) (-4.68)	R^2=.702 Adjusted R^2=.648 RSS=2085.347
3	Georgia	-60.73+0.111EXP+7.166GCE (-4.54) (.69) (4.42)	R^2=.654 Adjusted R^2=.592 RSS=2304.310
4	Kazakhstan	35.76+0.22EXP-3.372GCE (3.09) (0.43) (-2.93)	R^2=.455 Adjusted R^2=.356 RSS=399.969
5	Kyrgyzstan	51.68-0.195EXP-3.303GCE (4.24) (-1.58) (-4.22)	R^2=.648 Adjusted R^2=.584 RSS=749.664
6	Tajikistan	10.84-0.69EXP-0.986GCE (.92) (-0.79) (-0.79)	R^2=.337 Adjusted R^2=.216 RSS=757.406
7	Turkmenistan	-4.42-0.121EXP+0.62GCE (-.28) (-1.14) (0.40)	R^2=.162 Adjusted R^2=.009 RSS=236.147
8	Uzbekistan	22.65-0.024EXP-1.23GCE (7.43) (-1.02) (-6.73)	R^2=.821 Adjusted R^2=.788 RSS=288.225
9	Belarus	73.14-0.035EXP-4.178GCE (4.63) (-0.72) (-4.46)	R^2=.660 Adjusted R^2=.598 RSS=593.192
10	Moldova	12.83-0.35EXP-0.925GCE (1.10) (-0.17) (-1.38)	R^2=.152 Adjusted R^2=.002 RSS=309.281
11	Russia	29.61+0.03EXP-2.02GCE (3.51) (0.38) (-3.68)	R^2=.555 Adjusted R^2=.474 RSS=466.400
12	Ukraine	39.98+0.003EXP-2.50GCE (-3.75) (0.03) (-4.01)	R^2=.610 Adjusted R^2=.539 RSS=581.478

Source: Author's estimates by using SPSS software

On another note, with regards to the current case for Kazakhstan's economy, the F-statistic for the model was calculated at 4.596 and there are 2 degrees of freedom in the numerator and 11 in the denominator (see Appendix A-4.37).

From the table of F distribution a critical value for $F_{2, 11}$ is 3.98 at the 5% significance level. Here, the F- statistic from the regression results is 4.596, which is greater than its critical value of 3.98 then the null hypothesis is rejected at the 5 % significance level.

[6] The figures in parentheses are t-statistics

Consequently, as the observed F value is 4.596, which is above the critical value, the relationship between GDP growth and analyzing variables for the period 1993- 2006 is the same for Kazakhstan and the hypothesis is rejected.

In addition, it is appropriate to test this null hypothesis that the influence on GDP of lagged exports for the periods of 1999- 2006 and 1992- 1998 is the same for the Russian economy. The results of the analysis show that the F-statistic for the model is 6.852 and there are 2 degrees of freedom in the numerator and 11 in the denominator. From the results, it can be seen that a critical value for $F_{2, 11}$ at the 5% significance level is 3.98, and the F-statistic exceeds the above critical value, so the hypothesis that the relationship between GDP growth and analyzing variables for the period 1993- 2006 is the same for Russia is rejected.

Such evaluation can be undertaken for all countries in the sample of Commonwealth of Independent States. So, almost all these countries have 2 degrees of freedom in the numerator and 11 in the denominator. Consequently, the critical value for $F_{2, 11}$ at the 5% significance level is comprised of 3.98. Furthermore, the F-statistic of Armenia is equal to 74.274, Azerbaijan -12.952; Georgia -10.413; Kyrgyzstan -10.107; Uzbekistan -25.221; Belarus -10.681and Ukraine -8.608 (see appendices A-4.35- A-4.46). **Therefore, it can be gleaned from these results that the relationship between GDP growth and analyzing variables for the periods is the same for these countries and the hypothesis is rejected.**

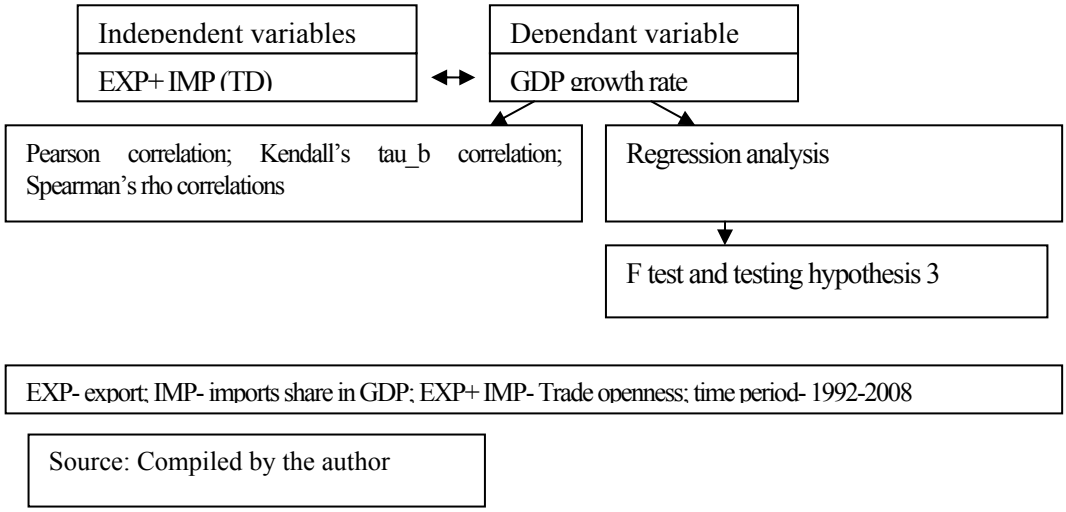
According to these rejections the author states the positive influence on GDP of lagged exports for the period of 1999- 2006 in comparison with 1993- 1998 associates with the change of trade policies as more outward- oriented in CIS countries (including Kazakhstani case) on the second considered period.

7.7 Trade Openness and Growth

The study attempted to run another overall correlation and regression analysis for the period of 1992-2008 in order to address study objective 5 and for the testing of hypothesis 3 (see Figure 7.5 for an overview of the analysis).

Figure 7.5

Model of correlation- regression analysis for testing study hypothesis 3



From Figure 7.5, trade was used (export plus imports) as a percentage of GDP as a measure of trade openness (see methodology chapter 3.5). The link between trade openness in trade policy and economic growth remains debatable; however, it was mentioned earlier (see chapter 2, p 23.) where Rodriguez & Rodrik (2000) found little conclusive evidence that open trade policy in the sense of lower tariff and non- tariff barriers to trade is emphatically related with economic growth. Many scholars such as Krueger (1978), Harrison (1996), Yanikkaya (2003), Wang et al. (2004), Chang et al. (2009) suggest that open economies tend to grow more rapidly than closed economies. In this connection, empirical findings of Sachs & Warner (1995) suggested that countries with open door policies grew by 4.5% a year in the 1970-1980s while relatively closed economies grew by only 0.7% a year. In this case it would be interesting to estimate the link between trade openness variables (export and import share in GDP) and economic growth in CIS countries. Against this backdrop, there is a supposition that if the null hypothesis is true, then the dependent variable of real GDP per capita in relation to trade openness variables for the period 1992-1998 would be the same with the period of 1999-2008. Also, the trade policy was not changed for these periods of time. When as an alternative hypothesis it is supposed that increasing trade openness is directly related to the successful outcome of trade policies for Kazakhstan and other CIS countries.

In order to consider this hypothesis the sample was divided into two study periods (a) 1992-1998, (b) 1999-2008 – plus - the overall period was taken, 1992-2008. Firstly, a correlation

analysis for the above mentioned periods of time for twelve CIS countries was conducted, where the dependent variable was real GDP per capita and the independent variable was trade openness (export and imports) for CIS countries. The results of this analysis are summarized in table 7.8 (all data was considered from appendices A-4.47.1; A-4.48.1 and A-4.49.1).

Table 7.8

Correlation Analysis of CIS countries for the period 1992- 2008

	Eq. (a) 1992-1998 (GDP PP)	Eq.(b) 1999-2008 (GDP PP)	Eq.(c) 1992-2008 (GDP PP)
Pearson correlation, TD(exp+imp)	.325**	.355**	.584**
Kendall's tau_b, TD(exp+imp)	.218**	.329**	.466**
Spearman's rho, TD (exp+imp)	.320**	.469**	.637**
N	84	120	204

** Correlation is significant at the 0.01 level (2-tailed)

Source: Author Generated from Data

In examining the results of the correlation analyses in table 7.8, it can be concluded that correlation coefficients between trade openness indicators and real GDP per capita comparing two periods of time, increase from the weak to a moderate relationship (based on table 7.8) and comprised of 0.320** (1992-1998) and 0.469**(1999-2008) respectively. Consequently, the overall correlation coefficient for the period of 1992-2008 is 0.637** which according to Salkind (2008) demonstrates a strong relationship between analyzing variables. Moreover, the general regression model for the variables (trade openness and GDP per capita for CIS countries) for the period 1992-2008 has been written in the following equation:

$$Y= a_0 + a_1 TD_t, \text{ where}$$

Y- real GDP per capita,

TD- real trade openness (export+ import) share in GDP

and subscript *t*- denotes the current values of the variables

In terms of this equation conclusions can be drawn that trade openness growth with 1% leads to growth of GDP per capita of 0.2% and the elasticity of GDP per capita growth regarding trade openness variables is equal to 0.20. In addition, the results of three regressions for the periods (a) 1992-1998, (b) 1998-2006 and (c) 1992-2008 are summarized in table 7.9 below (all data were taken from the appendices A-4.47.2; A-4.48. and A-4.49.2).

Table 7.9

Trade openness indicators (exp+imp) & GDP growth in CIS: 1992-2008

	Eq. (a) 1992-2008	Eq. (b) 1992-1998	Eq.(c) 1999-2008
Dependent variable	GDP growth	GDP growth	GDP growth
Constant	-12.938 (-8.295)	-13.560 (-5.465)	1.190 (.735)
TD (exp+imp)	.202 (10.235)	.136 (3.112)	.073 (4.129)
R^2	.342	.106	.126
RSS	16024.037	10034.832	2426.227
Df	202(1)	82(1)	118(1)
N	203	83	119

Figures in parenthesis are t-values

Source: Author's estimates by using SPSS

In relation to table 7.9, trade openness (export plus imports) coefficients for the two periods 1992-1998 and 1999-2008 are 0.136 and 0.073 respectively. Consequently the elasticity of real GDP per capita growth regarding trade openness variables, are equal to 0.136 and 0.073 respectively. This can be interpreted where throughout the period 1992-1998, the coefficients were more elastic than the next period of time, although from earlier, the correlation coefficient of the period of 1999-2008 was higher, at 0.469** (the Spearman's rho correlation coefficient) against 0.320** during the overall period (1992-1998). In addition, by Pallant (2007) the significance of coefficients of variables less than 0.05 makes a significant unique contribution to the prediction of the dependent variable. Therefore, according to the current model's equations the Significance value for the considered periods of time 1992-1998; 1999-2008 and for the overall analyzing period are .000; 003 and .000 respectively (see appendices A- 4.47.2- A-4.49.2). Furthermore, comparing the results of Eq. 2 and Eq. 3, conclusions suggest that the coefficient for the period of 1992-1998 differs from the period of 1999-2008, where this change was tested using Chow test, and this analysis produced an F-value of 6.76[7].

Hence, the critical $F_{1,202}$ (at the 1% level) consists of a value of 6.76 since the observed F-significance was 57.7 and consequently, the hypothesis that the relationship between GDP growth and trade openness for the two periods is the same for the Commonwealth of Independent States (including the Kazakhstani case) is rejected.

Therefore, the given test supports the suggestion that an increasing of trade openness relates to the outcome of trade policies for Kazakhstan and other CIS countries.

[7] F value was computed according to Agalewatte (2004) through using the Chow test. $S_4=(S_2+S_3)=$ 12461.139; $S_5=(S_1-S_4)=$ 3562.998. Also according to the formula for the F value: $F=(S_5/1)/(S_4/202)=$ 57.7

Furthermore, it would be appropriate to examine the given results from another perspective. Here, from the F-distribution, a critical value for $F_{1,202}$= 6.76 at the 1 % significance level can be seen, since F-statistic from the regression results consists of 104.758 (see appendix A-4.47.2) for the general regression for the period 1992-2008, and this was greater than its critical value of 6.76. According to these results, the null hypothesis is rejected at a 1 % significance level. Consequently the observed F-value of 104.8 exists above the critical value and so the hypothesis that the relationship between GDP growth and trade openness variables (export plus imports) for the considered periods is the same can be rejected. Moreover, according to the estimating model's equations, there is a significant positive correlation between trade shares and GDP per capita for CIS countries (including Kazakhstan's case). However, this study observed that various measures of trade barriers undertaken in CIS countries since independence (see chapter 2.5.3) are positively associated with growth of GDP per capita in CIS countries (including Kazakhstan's case). In this connection, the outward oriented trade policy according to Sarkar's (2008) opinion is more successful in promoting growth than inward- oriented trade policies. Furthermore Sarkar highlights that, "the East Asian Miracle" was often shown as a success of free trade and export- oriented policies"(Sarkar, 2008 p.766)

Therefore, the author can state that increasing trade openness is directly related to the successful outcome of trade policies for Kazakhstan and other CIS countries.

7.8 Cluster Analysis for Transition Economies

In undertaking a cluster analysis, the main purpose was to determine the homogeneous groups or clusters. All of the seventeen countries were characterized in terms of economic openness, where the question posed was, "Is it possible to determine some well- defined subgroups of countries from these variables such as: GDP growth rate, export and import share in GDP?" The current empirical work on the subject of trade openness and growth adopts a cross-sectional framework and neglects time-series analysis. In hierarchical cluster analysis, each observation was formatted as a separate cluster itself at first. At the first stage, two neighbor clusters merged as one and this process was continuous as long as the two clusters remained. In SPSS's method between groups linkage, the distance between two clusters can be interpreted where the value of all distances between all of the possible pairs points to both clusters. Here, in the given example the interval dates were established when considering the Squared Euclidean distance for it. In order to define the optimal quantity of clusters, it was important to pay attention to coefficients. The coefficient here was the distance between two clusters defining on the base of choosing distance measures with a glance of meaning transformation.

In the case of this current study, the distance between two clusters was the Squared Euclidean Distance which defines through standardized meanings. Here, if the distance measures between two clusters are abruptly increasing, the process of unifying the new clusters is stopped.

Otherwise they would be classed as merged clusters which exist distantly from each other. In the given case, there was a sudden change from 285.513 to 526.313. This result suggests that after the foundation of 5 clusters, there is no need to make other subsequent mergers, and the result of five clusters was therefore seen as optimal. The number of optimal clusters is the quantity of clusters which is equal to the residual number of observations (in the given sample of 17). Also, the number of steps after the coefficient is abruptly increasing at the 12th stage (see appendix A-4.50.1).

Moreover, in explaining the other following columns of the table (appendix A-4.50.3) which reflect the agglomeration order, the column is corresponding to the 12th step which is merger clusters 2 and 4. Prior to that, cluster 2 took part in the unifying on the 4th step, hence, the column named "Stage Cluster First Appears" which means a step where the clusters 1-4 appear for the first time is mistaken. Instead, focus should be on column cluster 2, the last appearance of the given cluster. Also, the new cluster 2 takes part in merger clusters on step 14 further**.** At the next stage, calculation of the mean value and standard deviations of 5 clusters results using dependent variables of export share in GDP, import share in GDP, and the real GDP growth rate (see table 7.10, appendix A-4.50.4).

Table 7.10

Average means of variables by 5 clusters*

	Cluster1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Total
GDP growth	10.55	9.240	7.48	6.87	3.30	8.37
Export share in GDP	18.00	31.00	29.58	52.17	22.00	30.81
Import share in GDP	44.58	28.10	60.98	60.93	80.80	48.61

*SPSS estimation results

Source: Author's estimates

In analyzing the data of table 7.10, it can be concluded that the first and second clusters unify some countries which have significant levels of economic growth more than other countries in the study sample. The first cluster countries are: Armenia, Georgia, Ukraine and Serbia and the second cluster of countries are: Azerbaijan, Kazakhstan, Uzbekistan, Mongolia and Russia.

Kazakhstan is located between Uzbekistan and Kyrgyzstan where the openness of the economy and the radical nature of reforms are concerned. These countries appear to attempt to balance between economic openness and protectionism policies, competition and support for its industry (Koychumanov, 2003). Moreover, Pomfret (2007b) points out that, by initial condition of conducting reforms in the economy Kazakhstan ranked behind both Kyrgyzstan and Uzbekistan, according to the EBRD transition indices. Indeed, according to Pomfret (2007b), since the beginning of the 21st century, Kazakhstan, as a significant oil producer, which by

coincidence also had major oil and gas discoveries coming on line, experienced an economic boom, and its position as the richest Central Asian country was accentuated. In addition, the recovery from the 1998 crisis was driven by market forces and by good fortune. A sharp real depreciation of the currency stimulated exports and helped to validate policymakers' understanding of market mechanisms. Recovery of world oil prices from their low of less than US$10 per barrel in 1998 reinforced the positive trade developments (Pomfret, 2007b p. 326). At the same time, new offshore oil discoveries, including the largest new oilfield to be found in the world for over thirty years, and new pipeline routes have created unbounded wealth for the nation. Also as was mentioned in previous chapters Kazakhstan's oil deposits attract foreign investors, which is good for increasing economic growth and the national welfare.

Particular countries of the first clusters, Armenia, Georgia and Ukraine are members of the WTO and Serbia which is an observer country in the WTO, where according to Manaseryan (2007) Armenia boosted its crop production after entering the WTO, raising it to 32.7% in 2003-2006. Also, the import and export of crop productions were raised. Furthermore, this change positively influenced the contribution of the country's economic position in the region.

Manaseryan (2007) also highlights that the country's GDP increased to 42.6%, capital investments to 111%, exports to CIS countries to 64.4% and for other countries to 41.1%, imports to CIS countries to 97% and for other countries to 61% after the entry of Armenia to the WTO in the period 2003-2006

Likewise, the second and fourth clusters' countries have high levels of export rates comparatively with other countries of post communist regimes. The second cluster countries as was mentioned above are countries that are mostly exporting oil resources and natural gas except for Mongolia.

Moreover, in the opinion of Zhukov and Reznikova (2007) "oil exporters as Azerbaijan, Kazakhstan and Russia are most reoriented to markets outside the post Soviet space". Also, the anticipated growth of oil and natural gas production and exports will secure Azerbaijan's and Kazakhstan's focus on international markets. According to CIS Statistical Abstract, Kaser (2003) the rational reaction of CIS members was to seek export markets outside the group where demand was strong, and all their currencies had devalued with respect to the US dollar, and the west European currencies, essentially now sterling and the euro. Thus between 1995 and 2001, Azerbaijan switched its non-CIS exports from 55% to 90%, Kazakhstan from 45% to 70%, Kyrgyzstan from 34% to 64%, Turkmenistan from 51% to 71% and Uzbekistan from 61% to 75%.

Also, Elborgh-Woytek (2003) notes that the main part of export of the above mentioned countries are raw materials, e.g. he made some statistical evidence that export of oil and oil products of Azerbaijan is comprised of 88.8% and Kazakhstan and Russian Federation's exports of such products are equal to 60% and 30% respectively in 2002. Besides, Uzbekistan and Mongolia have export products in the agriculture sphere.

In 2006, more than 60% of Uzbekistan's exports comprised of cotton, gold and energy. Mongolia's export products were copper molybdenum concentrate, fluorite and live-stock production such as leather and textile goods. Nonetheless, Turkmenistan, Croatia and Yugoslavia entered the fourth cluster. According to Pomfret (2007, b p.330), the "data for Turkmenistan were the least reliable of any economy in transition and were manipulated for political impact". Furthermore, Turkmenistan provides the strongest evidence that non-reform, autocracy, and poor economic management was a recipe for economic decline. Indeed, it can be concluded that the degree of openness of the economy with the above mentioned negative factors leave much to be desired. Also, in highlighting the countries of the third and fourth clusters which have a higher rate of import growth comparing with other countries, these countries are: Kyrgyzstan, Tajikistan, Belarus and states of the fourth clusters which were mentioned above. In addition to this, the above mentioned countries have properly high import arrivals and their economy is more dependent on import products.

Increasing of exports and imports mainly depends on the rate of duties. According to Yanikkaya (2003), in the research of Lee (1993), Harrison (1996) and Edwards (1998) it was demonstrated that there was a significant and negative relationship between tariff rates and growth. According to the Ministry of Economic regulation (1998), the rate duties of Kyrgyz Republic comprised of 10% until entering into the WTO. Consequently, Kyrgyzstan's rate of duties became more protectionist. So, output tariffs for imports and goods which were not produced in the country were accepted at the 10% level. At the same time, other goods were accepted over 10% levels of custom tariffs. Moreover, accepting the rate duties is significantly lower than incurred obligations of the country. For example, in accordance with WTO obligations, the average tax rate of agriculture output comprises of 12.2% (but it really uses the 8.1 % level) to the industrial goods- 6.5%, however it actually accepts the 4.1% level. Indeed, this is due to the fact that export production output directly depends on the import of raw materials which are not produced in the republic. The unit weight of these raw materials in the total import is high and takes place around 68-70% (UNDP, 2005).

At the same time Pomfret (2007b) noticed that the Economic conditions in Kyrgyzstan had been arduous to examine. "Its role as the reform leader in Central Asia led to anticipation of healthy growth. That this was not realized can be ascribed to poor initial conditions, poor

implementation of reforms, or not staying the course after 1998. It may also be the case that the GDP figures understate actual performance" (Pomfret, 2007(b) p.328). Also unattractive investment situation in Kyrgyzstan led to low savings rate in the banks and the other financial institutions which negatively influenced achieving social and economic progress.

On the other hand, Tajikistan's economy was strongly oriented toward trade and highly dependent on other Soviet republics until 1991. According to Asadov (2007), most industrial and consumer goods as well as materials and energy (with the exception of electricity) consumed in Tajikistan were imported. Also, the main export goods were cotton and aluminum and still remain nowadays. The current account of Tajikistan's balance of payments during the Soviet time was an insignificant deficit which was financed by transfers from the union government. Since 1992, this deficit grew and it led to a reduction in exports at the end. These include breakdowns in production caused by the domestic political situation, a restrictive policy in the sphere of trade and payments and inadequate access to external finance (Asadov, 2007). In addition, in the opinion of Pomfret (2007b, p.323), "Tajikistan is even worse placed in relation to other CIS countries; the economy has recovered but slowly from a very deep trough, and Tajikistan now ranks among the world's poorest nations".

Furthermore, Moldova is anomalous. As we glance at the statistical development indicator, this country has relatively low level of GDP growth and high import level (UNDP, 2006). It is also considered as a small country on the CIS territory with a population of 3.6 million inhabitants. According to a UNDP report, 2006 was a difficult year for Moldovan exports. Export to the Russian federation decreased by 47.6%, to US by 56.7% and to Italy by 12.4% (UNDP, 2006). In reference to Database of the CIS Statistical Committee and United Nations database per capita income comprised of 800 US dollars in 2006, while in Russia and Kazakhstan this indicator is equal to 5400 and 3700 US dollars respectively (Appendices A-3.4.1-A-3.4.5). Moreover, Moldova is a neighbor of EU countries and it is most likely uncompetitive on EU markets; that's why Moldova still demonstrates a high level of import to opposite low level of economic growth.

To sum up the cluster analysis, we can conclude that among transition countries Kazakhstan by openness degree and GDP growth is included in the second cluster, characterized as a most outward - oriented country, e.g. export growth higher than import growth. This fact also is mentioned in chapter 6.2 **(**see p.124**).** Generally, as the author mentioned in chapter six, the main reason for the growth of export flows from Kazakhstan is due to the growth of world price for oil. Therefore, Kazakhstan as an oil exporter in the world market, succeeded in increasing the export receipts from crude oil. The government of Kazakhstan at the beginning stage of reforming of the Kazakhstan economy initiated positive conditions for attracting foreign

investors to this sphere. Consequently, according to a UNDP report (2005) "Kazakhstan has managed to attract really large investments only in the energy and mining sectors, but not in manufacturing, agriculture, or services (apart from banking, which again, mainly serves the extractive industries)" (UNDP, 2005 p.47-48; Akimov & Dollery, 2008 p. 91). Furthermore, due to an increase of cheap energy production and the comparatively low price of oil (for instance in the Mangystau region (west Kazakhstan) thirty-five to forty US$ per barrel, and with delivery to the Black sea port of seventy to seventy-five US$, this was made up of a cost of approximately ten US$ per barrel (Panorama, 1999(3) p.2). The efficiency of oil exporting from Kazakhstan comprised of 1.8 which means that oil export costs were increasing the domestic prices of producers by 1.8 times, due to inefficiencies – compared with global average costs. It would be relevant to notice the case of Trinidad and Tobago, which is similar to Kazakhstan's case, as Trinidad and Tobago enjoyed strong economic growth "over the period 1999-2004 due mainly to high international petroleum prices and other developments in the country's hydrocarbons sector" (see Henry, 2007 p.1222).

Summary

In this chapter, data has been analyzed for the CIS countries data with multiple regression tests being carried out to establish the extent of the contribution to growth through the use of different variables identified by model 1. Even though a lot of variables considered in the current model have not been able to explain the past growth of CIS countries, only a few variables showed some positive contribution to growth. Among those variables, export was found to be a significant variable which reflects a positive and significant correlation coefficient for most CIS countries in terms of GDP growth.

Also, in order to avoid the problem of partial correlation, some of the independent variables have been reduced, with multiple regression equations being generated for the whole of the CIS countries and for each country separately. The analyses rejected the hypothesis that the relationship between GDP growth and analyzing variables for the considered periods is the same for all these countries. On the assumption of this hypothesis, it can be concluded that for trade policy reforms since independence of the countries in the sample frame, most of the CIS countries have played a significant role and gave opportunities to create a new strategy on the international sphere for the above mentioned countries.

Finally, empirical findings were taken up for seventeen post soviet countries with regards to cluster analysis. In this study, the variables analyzed included, export, import and GDP growth rates. Consequently, from the analyses, findings have confirmed that through subdividing the countries into clusters, conclusions were generated for each cluster. The study now progresses

towards focusing on examining and analysing the economic reforms in the Central Asian countries of Kyrgyzstan, Mongolia and Kazakhstan since 1991.

CHAPTER EIGHT
CONCLUSIONS AND SUMMARY

8.1 Conclusions

In this chapter there is a brief summary of theoretical and empirical literature and reflection on the main study aim and associated study objectives, including the three hypotheses. The conclusions allude to the implications of foreign trade policy of Kazakhstan, towards economic growth. Furthermore, in order to test the research hypotheses, the author aimed to address important study objectives.

Hence, in terms of the research hypothesis

> "There is a clear structural change in economy associated with the outward- orientation for CIS countries (including Kazakhstani case)."

results allude towards estimating in cross-country and time-series formats, the use of bivariate correlation and production function type regressions to demonstrate a relationship between export and GDP growth. On this note, Chapter seven analyzed the above by way of correlation and regression analyses.

During the analyses of regression equations of trade variables for twelve CIS countries, the next conclusions were alluded to, where exports were found to be a significant variable which reflects a positive and significant correlation coefficient for most CIS countries.

This finding was developed in the subsequent chapter of the study, which covers the research objective :

> "To conduct a comparative analysis of the economic development and Foreign Trade evolution of the Republic of Kazakhstan, Mongolia and Kyrgyzstan since 1991".

Consequently, results described the initial stage of the reformation period in these three countries in order to examine and assess the stages of reforms in Kazakhstan. Furthermore, this examination and analysis developed an understanding of the development of the Kazakh national economy during testing of the hypotheses for this study. This objective was considered in chapter five of this study. Here, discussions centered on Kazakhstan's experience (comparatively with similar post-socialist Central Asian countries such as Kyrgyzstan and Mongolia) with trade liberalization and political economy issues of transition from an inward-looking economy to a more open market economy where the central discussions were around stimulating economic growth through enhancing export flows and creating nation-wide programs on the area of export expansion.

In this case the orientation of exports expands the opportunities for structural reorganization of the economy and provides economic growth, which confirms the above mentioned study hypothesis.

In order to show the relevance of structural change in Kazakhstan's economy, analysis considered the evolution of trade policy reforms in Kazakhstan since independence and their contribution to its economic performance. In addressing this particular objective, a considerable part of chapter six was devoted to this, in order to examine the evolution of various trade policy regimes in Kazakhstan since independence, and their contribution to its macroeconomic performance in the light of the knowledge gained from the previous chapters. Furthermore, data was examined and analyzed in order to investigate the evolution of economic policy regimes and associated outcomes since independence in 1991. At the same time, structural change in the economy of Kazakhstan since 1991 and its contributions to GDP growth rate were studied in that chapter. Moreover, integration processes on the CIS space have played a significant role during the time when Kazakhstan became a sovereign state. Results of the analyzed data alluded towards the main benefits for Kazakhstan from integration on the CIS space.

The analysis and results of Chapter six considered Kazakhstan's trade activities by geographical and commodity distribution, in order to understand their trends and associated impact on export growth and trade policy reforms. Results contributed towards testing the above mentioned study hypothesis, through using a stability test on time series data for the period 1991-2008.
In summary, conclusions point towards Kazakhstan since gaining independence starting to enter trade economic relations with other countries as a member of the world economy. Regarding this issue, the author attempted to focus on (a) defining the place of Kazakhstan in the world context; (b) analyzing the dynamics and structure of foreign trade links and the structure of export and import of goods and services by premier main trade groups. **The given analysis of Kazakhstan's trade activity shows that exports have grown faster than import flows and the country's positive trade balance confirms such finding.**

Additionally, the results of study analysis supported the expectation that there is a clear structural change in the economy of CIS countries (including Kazakhstani case) associated with the outward orientation during 1992-2006, which was hypothesized in this study. In other words, analyses and results permitted a rejection of the hypothesis that the relationship between GDP growth and analyzing variables for the considered periods is the same for all these countries. On the assumption of this hypothesis, it can be concluded that trade policy reforms since gaining independence for most of the CIS countries have played a significant role and generated opportunities to create a new strategy on the international sphere for the above mentioned countries. Thus, the given test encourages the anticipation that there exists a

structural change in the economy of CIS states related to a more outward-oriented direction, particularly after 1998. Additionally, foreign trade policies of transition economies were changed from a closed economy towards trade liberalization.

Consequently, spending in terms of government consumption expenditure in any year can affect the economic development in future years and results alluded towards a delayed effect to the dependent variable. Taking into account this finding, other regressions were run in chapter four, where the lagged independent variables regarding the GDP growth rate were used. In addition, in order to avoid a problem with partial correlation between independent variables, it was important to reduce the number of variables and to take only two independent variables such as export share in GDP and government consumption expenditure share in GDP. In terms of the dependent variable, the gross domestic product growth rate was used as in the previous analyses. The a**nalysis concluded that a positive influence on GDP of lagged exports for the period of 1999-2006 in comparison with 1993-1998 associates with the change of trade policies as more outward-oriented in CIS countries (including the Kazakhstani case) on the second considered period.** In comparison in this current study, a null hypothesis was used for the proposition that the influence on GDP of lagged exports for the periods of 1999-2006 and 1992-1998 is the same in CIS countries (including the Kazakhstani case). Consequently, in terms of trade policy, this has been unaffected for these periods of time for CIS countries. So, on the basis of conducting these analyses, the result showed that the critical $F_{2,165}$ (at the 1% level) is 4.61. **Since the observed F significance is 56.54, the propositions that the influence on GDP of lagged exports for the periods of 1999-2006 and 1992-1998 is the same in CIS countries (including Kazakhstani case) were rejected. Contrary to this, the given test encourages the positive influence on GDP of lagged exports for the period of 1999-2006 in comparison with 1993-1998 and this associates with the change of trade policies as more outward-oriented in CIS countries (including the Kazakhstani case) on the second considered period.**

According to Kazakhstan's economy,

- the reducing and sometimes the cancellation of export tariffs with regards to other trade partners,
- substantial trade liberalization,
- "abolition of all export quotas and the elimination of most export licenses"(Akimov & Dollery, 2008) on the second considered period led to increasing export flows. These trade policy changes were connected with a positive influence on GDP of exports for the respective period, which were confirmed during analyzing in Chapter five.

The next research hypothesis

> "Increasing of trade openness reflects the success of the trade liberalization policies for Kazakhstan and other CIS countries,"

was considered during the investigation. **Moreover, to test this hypothesis, the sample was divided into two study periods (a) 1992-1998; (b) 1999-2008; additionally, then was an analysis using the overall period 1992-2008. Here, it was supposed that if the null hypothesis were true, then the dependent variable GDP growth in relation to trade openness variables for the period of 1992-1998 would appear the same within the period of 1999-2008.** Also, the trade policy was not changed for these periods of time**. Results of the study rejected this hypothesis, and according to this, increasing trade openness directly related to the successful outcome of trade policies for Kazakhstan and other CIS countries.**

In order to determine that outward–oriented trade policies have been more successful in promoting growth for CIS countries, including Kazakhstan, the author observed that t**he results of this analysis showed that trade openness variables (export and import) have a positive contribution to the growth.** Furthermore, the overall correlation coefficient for the period of 1992-2008 comprised of .637**, which according to Salkind (2008) demonstrates a strong relationship between analysing variables. This was confirmed during the analysis of Kazakhstan's foreign trade activity (see chapter seven). According to this a) favorable investment climate stimulated the inflow of considerable volumes of direct foreign investments; b) conducive condition of world market and high prices of hydrocarbon resources assist in the development of the export potentials of the country; c) the increase of Kazakhstan's export of goods and services branch during the last periods in the world wide market was affected by higher rates of export volume growth in comparison with the rate of the world trade growth. This last point was confirmed by cluster analysis, which was undertaken in order to show the levels of openness of economic activities for transition economies and determine Kazakhstan's place among the above named countries.

In summary, cluster analysis, concluded that among transition countries – in terms of degree of openness, and GDP growth, Kazakhstan was a member of the second cluster, which was characterized as a most outward-oriented country, e.g. export growth higher than import growth. This was also demonstrated in chapter four, which supports the study hypothesis "Increasing of trade openness reflects the success of the trade liberalization policies for Kazakhstan and other CIS countries".

The following sub-sections attempt to summarize the main contribution to knowledge and findings of the current research, in order to prepare the way towards outlining recommendations for future research.

8.2 Contribution to knowledge

This study contributes to understanding the evolution of Foreign Trade Policy and associated changes in foreign trade activity in the Republic of Kazakhstan and its impact on economic growth since independence in 1991. Hence, the following contributions to knowledge can be gleaned from this study:

1. The study identified a gap in extant literature. In this case, the current study fills a gap in the trade policy literature by focusing on research hypotheses regarding Commonwealth of Independent States (in particular Kazakhstan's case).
2. The study enhances knowledge in terms of comparative analysis for Central Asian countries from the initial stage of the transition period following independence from the USSR and revealed common problems in the area of formation of Foreign Trade.
3. The study provides useful data on the evolution of GDP by end use and industrial origin for Kazakhstan for the period from 1991-2008.
4. The study provides an understanding of the evolving foreign trade policy initiatives in Kazakhstan and analyzed the evolution of foreign trade of Kazakhstan for the period 1991-2008.
5. The study provides correlation and regression analyses which offer a clear understanding of the relationship between GDP growth and other independent variables (such as EXP, GCE, GCF etc.) for CIS countries, where exports had a positive influence on economic growth for all CIS countries (including the Kazakhstan case).
6. The study provides a number of analyses demonstrating the increasing correlation relationship between GDP per capita and trade openness variables (export+ import). Additionally, there was an associated positive impact of trade openness variables on GDP per capita in the regression equation, which proposed that increasing trade openness directly impacted the outcome of trade policies for Kazakhstan and other CIS countries.
7. During cluster analyses the study revealed the place of Kazakhstan by degree of openness among 17 countries with transition economies. Furthermore, results alluded towards Kazakhstan having more export orientation than import orientation, where export share in GDP was much higher that import share in GDP.

8.3 Theory and evidence

International trade has played a significant role in the progress of both developed and developing countries (Yanikkaya, 2003). All CIS countries were inter-dependent (Madiarova, 1999) because of different distributions of resources. According to the considerations of Yanikkaya (2003), "trade plays an important role in the process of development which allows developing countries" to obtain access to investment and intermediate goods. Indeed, the engine of growth (Afzal, 2006) is the outcome of implementing the new products and inputs which

proves that trade really plays a significant role in the advancement of a certain country. Moreover, trade has been supposed as favorable and indispensable because some countries have to cater to the growing needs of their economies. Consequently, traditional trade theory termed it as an 'engine of growth' (Afzal, 2006).

In a dynamic sense, trade provides material means of growth; it is a means of assimilation of technical knowledge; it is a vehicle for international movement of capital; and it provides competition to the domestic economy leading to a greater production effort. Briefly, trade leads to a better performance for productivity.

In view of modern economic theory, development means full utilization of the comparative advantages of each country in the international trade. Nowadays, none of the countries can isolate from external factors of development. On this point, Kazakhstan has some advantages in the area of producing oil, metals and grains. Therefore, their full utilization in the international trade is the main task of the state's economic policy. Hence, in order to achieve it, the Kazakhstan government refused to close borders, allowed entrance of high custom duties and accepted export quotas including oil etc. Furthermore, the domestic economy can benefit from mutual trade among plenty of international trade participants. According to Sally (2005), "The countries and regions which are open to the world economy have grown more rapidly and have become wealthier than those that are not". On the other hand, failures in the foreign economic policies which took place in the previous years also affect the development of Kazakhstan's Foreign Economic Relations. As analysis shows, the state structures have focused in the main on economic liberalization to establish relations with integrated communities and international economic organizations. In this case, the main perspective questions regarding the optimization of domestic integration of economy to world economy have been left in the second plan.

The main pitfalls of foreign economic policy in the 1990s are the underestimation of necessity of comprehension evaluation through the creation and conducting of interests by foreign economic entities. During the export and import regulation, the government misses the tasks of structural reorganization of production. The nontariff measures of import limitations have been accepted. If their implementation does not meet the active disagreements from foreign providers' side, then, low-quality import products flows are increased in Kazakhstan. Considering the case of Kazakhstan, import growth does not measure the negative phenomenon in the economy. But, the import substitution policy protectors tried to draw against this from the stated statement.

However, we have to consider some reasons in order to prove our statement. These are as follows:

(1) GDP growth leads to import growth. This is a law of economy;
(2) Any country has a group of consumers (enterprisers, citizens) who likes to consume only import goods. About 40% of import goods compile commodity turnover of any even advanced developed country;
(3) Kazakhstan has a relatively high degree of depreciation in manufacturing (productive) resources and it needs to renew these with the advanced high technology and indeed, even breakthrough technology. At the same time, the domestic commodity producers have no means to produce such vehicles and equipment for most branches. Therefore, the import growth of such commodities is necessary in renewing the obsolete equipment and responding to the country's needs. Without these aforementioned goods, Kazakhstan cannot produce a competitive and scientifically intensive production with high value added.

Consequently, this current study attempted to highlight the advantages of export orientation strategy for Kazakhstan's economy. Indeed, the adopted strategy has huge advantages in terms of import substitution strategy in achieving the country's stable economic growth. Also, the above mentioned strategy compelled domestic producers to develop only economically effective production and to produce competitive productions. In addition, export orientation strategy provides a great possibility to earn income outside the country and supply a capital inflow for the country which leads to an increase of manufacturing, to create new working places, to improve the country's payment balance, etc. Moreover, world experience shows that export orientation is more effective than import orientation strategy. Export orientation strategy is fully equipped with the interests of small countries with a "narrow" domestic market including Kazakhstan. Such a manner of achieving economic growth has been chosen by Hong Kong, Singapore, Taiwan and other countries.

However, import and export are interdependent and interrelated processes. Particularly, according to Hume law, the export growth leads to import growth. In addition, the country's export growth provides the growth of currency earnings. This condition supports an increase of import commodity purchasing. And at the same time, the exchange rate declined which leads to an increased demand for it and stimulates imports.

8.4 Comparative analysis findings

The conceptual framework adopted for this study is underpinned by a review of extant research on the evolution of foreign trade policy for developed and developing nations - including former soviet countries. Thereafter, conclusions were drawn from policy practices identifying similarities and differences regarding the use of comparative analysis for Kazakhstan,

Kyrgyzstan and Mongolia. In addition, these have been used as a basis for understanding the nature of foreign trade policy evolution in the case of Kazakhstan.

Moreover, De Melo et al (1997), and Berg et al (1999) also highlighted that for attaining the growth of economy, it is necessary to maintain the reforms while conducting the stability on the macroeconomic sphere. Indeed, the reform of the foreign trade policy definitely assists in improving the economic efficiency if it is performed not like a forced measure in achieving not only the short term goals but also the long-term strategic character. On the other hand, as we considered before in the literature review chapter, if the reforms of FTP are conducted not as a reluctant measure in achieving the short term objectives of stabilization, but as a long term strategic character this helps to increase the effectiveness of the economy. However, in order to improve the efficiency of the reform of trade policy by studying the reformation economies of Mongolia, Kyrgyzstan and Kazakhstan and by reviewing the literature particularly on the experience of the economic reform in other countries, it is necessary to focus on the following problems:

First, in order to stimulate the competition and improve the economic efficiency, it is necessary to have liberalization of trade and to decrease the level of protectionism with regards to the national producers by preserving the selective protection of specific branches temporarily;

Second, significant attention must be given to the impact of foreign trade reforms to the budget and microeconomic stability. Reforms of the trade policy will not be productive in the conditions of serious and steady microeconomic instability. Moreover, countries which have economies with typically high and rapidly changing rates of inflation should stabilize their economy before attempting to perform a large-scale trade liberalization process.

Third, in order to enhance the efficiency of the outcomes of reforms, it is necessary to conduct the reform in the institutional spheres along with liberalization in order to establish the required infrastructure and normative base which should meet the requirements of the country related to the market economy and should assist with the integration to the world economy;

Finally, the fourth point is a requirement to develop the national-wide program of export stimulation. The orientation to the expansion of the export expands the opportunities for structural reorganization of the economy and provides economic growth.

8.5 Trade activity analysis findings

The performed analysis showed that the stable development of Kazakhstan's economy started in 2000 when the world prices for the major exporting goods such as oil were increased. As was

examined and analyzed, the rates of GDP growth until 2008 had been fluctuating between 9-10% and at the same time, a slow down in the manufacturing industry occurred. Gross production of agricultural goods had low rates of development. High rates of real GDP, decreased volumes of production in the manufacturing industry and low rates of growth of products in the agrarian sector had become the reasons for the increase of inflation rate which was varying between 7-8%. Surely that is a relatively high rate of inflation; however the government was planning to reduce the inflation rate to 4% per year. And this was clearly stated in "Kazakhstan's development strategy till 2030" program.

Moreover, integration processes on the CIS space have played a significant role during the time when Kazakhstan became a sovereign state. In the given chapter, a survey signed by the head of CIS of the main proceedings was carried out reinforcing the integration processes. Also, the main benefits for Kazakhstan derived from integration on the CIS space have been analyzed. So Kazakhstan, as a competent member of the world economy, has started to secure the economic trade relations with other countries. Regarding this point of view, the author attempted to focus on the following:

- To define the place of Kazakhstan in the world context;
- To analyze the dynamics and structure of foreign trade links and the structure of exports and imports of goods and services by main trade groups.

Through the above analysis, it was concluded that the structure of Kazakhstan's exports is mainly subdivided into the following: mineral resources (72%), metals (16%), chemical goods (4.2%), food commodities (2.8%) and only 1.8% - mechanical engineering productions. On the contrary, for the structure of Kazakhstan's imports, the part of machinery and equipment comprised 45%, mineral products- 14.3%, chemical goods-10.8%, and food commodities-7%. In addition to that, we can observe the significance of inter-sectoral trade such as import and export of food commodities, chemical products etc.

Furthermore, the geographical structure of export and import of goods and services of Kazakhstan has been analyzed as part of CIS and EAEC countries and also the main trade country –partners. Therefore, it is important to note that the main importers of goods from Kazakhstan were the Western countries, particularly Italy and Switzerland, also France, Germany, England etc comprising 35.6% of all imports. In the export of Kazakhstan, Russia comprised 10% and China-9.4%. Moreover, for the structure of Kazakhstan's imports, Russia's part comprised of 38.3%, China's is 8%, Germany - 7.6%, the USA - 4.7% and Ukraine - 4.2%. The main significant group of the country's competitive advantages relate to availabilities of huge hydrocarbon and mineral raw materials. They are enough to satisfy the long term domestic consumption and also to export. However, the orientation of exports on the resource of

obtaining branches and sectors of fuel and energy complex cannot remain as the main strategy of Kazakhstan's safe stable development.

The other main group of competitive advantages of Kazakhstan according to Strategy 2030 has possibilities of organizing high technology and science intensive productions. In addition, this provides a high gross value added growth based on the effective usage of significant science and technical achievements in the area of nuclear technologies, geophysics, biotechnologies, metallurgies, chemical industries, petro chemistries, etc. The present research outlined some improvements carried out in the given direction according to the accepted programs of Kazakhstan's Industrial Innovation policy for 2003-2015. Such structure of economy should correspond to the requirements of the world market and allow development with highly stable tendencies.

8.6 Empirical findings of study

This study has attempted to analyze the CIS countries' data according to an appropriate methodology, which has been conducted in chapter four. In addition, multiple regression tests were carried out to establish the extent of the contributions to growth through the use of different variables identified by using several approaches and models. Similarly, there are a lot of variables considered by theorists, which are not able to explain the past growth of CIS countries as expected, and there are only few variables which showed some positive contribution to growth. Among those variables, export was found to be a significant variable which reflects a positive and significant correlation coefficient for most CIS countries. While exports played an essential role in the overall evaluated equation, we cannot avoid the fact that the growth of the Kazakh economy had no possibility to develop rapidly without focusing on the significance of exports.

At the same time increased profitability of exports can generate larger surpluses for investment and growth. And since exports have to compete in the international market, the export sector is likely to be more productive, and it is also likely to have spillover effects in the rest of the economy through better techniques and better management practices (Feder, 1983). In order to avoid the problem of partial correlation, some of the independent variables have been reduced and run the regression equation again for the whole CIS countries and for each country separately. Furthermore, analysis was conducted to understand the relationship between GDP and lagged export and government consumption expenditure shares in GDP for the 1993-2006 associates with changing of trade policies in CIS countries (including the Kazakhstani case). In accordance to this we concluded that trade policy reforms since getting independence in most of the CIS countries have played a significant role and provided opportunities to create a new strategy on the international sphere for the above mentioned countries.

Furthermore, as was discussed earlier, the government was considered all pervasive in Kazakhstan through the years with the aims of managing (engineering) an economic growth in Kazakhstan. Thus, we included the GCE (government consumption expenditure) variable in the current model and tried to analyze formally through the use of regression analysis to evaluate the contribution of the government consumption expenditures to economic growth for all CIS countries. As a result, this study concluded that there is a negative correlation relationship between real government spending share in GDP and real GDP growth. Therefore, in the periods when government consumption expenditure (or government investment) declined, the rate of growth of GDP increased. Nonetheless, the reasons for the government being unfavorable to growth needs measurements and further research which was beyond the area of the current study.

In addition, the present study examines the relationship between trade liberalization/ trade openness and real GDP per capita for all CIS countries. The share of total trade (export plus imports) in GDP is taken as the measure of trade openness. For our panel regression and correlation analyses, we have considered the relevant data for a sample of 12 transition economies of CIS over a uniform time period, 1992-2008. The results show that for all CIS countries including Kazakhstan, GDP per capita growth positively strongly correlates with trade openness variables. And during the considered period increasing trade openness reflects the success of trade liberalization policies for all the Commonwealth of Independent States. Using the above mentioned variables such as: export, import shares in GDP and real GDP growth rate, we undertook a cluster analysis for seventeen post soviet countries including Kazakhstan. The results of this analysis show that Kazakhstan has a significant level of economic growth and is the most reoriented to markets outside the post Soviet space.

CHAPTER NINE
RECOMMENDATIONS

This chapter considers the recommendations for further study, and as a consequence, as can be noticed from the analysis and discussions chapter, Kazakhstan's oil industry currently plays the main and growing role in Kazakhstan's economic development. Based on the findings of this study, the following recommendations are suggested for furthering knowledge on the evolving nature of the Kazakh economy and governmental policy.

Recommendation 1

This study observed that export was discovered as a significant variable which shows a positive and significant correlation coefficient for most CIS countries. Hence, the government consumption expenditure variable is unfavorable to contribute for economic growth in CIS countries (as noticed according to SPSS analyses in chapter 7.4). Such a statement requires analysis for it to include the current financial crisis.

Recommendation 2

In terms of the implications of this study's findings, it can be argued that some of the governmental expenditures, particularly on infrastructure, investments to education and health may lead to facilitate the economic growth. Therefore, a detailed time-series and cross-section study could be conducted in order to determine the exact role of government expenditures on the above named sectors of the economy. This is another area in which further studies can be effective.

Recommendation 3

To consider the implications of this study's findings to empirically estimate the contributions of other trade policy variables such as: foreign direct investment flows and free trade zones influences to economic growth, reductions to poverty and creating new job vacancies for CIS, including Kazakhstan's citizens. The complexity of the social, economic and political factors of the CIS countries involved and the non-availability of suitable quantitative data was limited when conducting this analysis in the current study.

Recommendation 4

To consider the implications of this study's findings to assist empirical techniques such as: descriptive, comparative and quantitative (relational) analyses. In this connection it can assist policy makers in qualitative analyses in policy making.

Recommendation 5

The study concludes that exports are a main contribution for economic growth for most CIS countries (including the Kazakhstani case). It would be appropriate to empirically estimate for the Kazakhstani case, how export diversification could increase economic growth and how it can influence towards improving the social economic conditions of the nation.

Recommendation 6

To consider the implications of this study's findings on Kazakhstan's economy observing relatively high rates of economic growth during the last decade. Changes in the economy have impacted on the economic structure of the nation. Here, disproportionate industrial branches (particularly towards increasing oil and gas and the mining sectors – when compared with other sectors of the economy) lead to the threat of 'Dutch Disease'. In this case, it may be important to investigate the reasons for economic growth and create a distinct policy by policymakers and economists for redistribution of oil income to alternative sectors of the economy, as this may assist in further economic growth of developing or important industrial sectors in the country.

Recommendation 7

To consider the implications of this study's findings on policy changes and investment into the Kazakhstani tourism industry in terms of economic growth for the nation.

REFERENCE LIST

1. ABBOT, Ph., BENTZEN, J. & TARP, F., 2008. Trade Development: Lessons from Vietnam's Past Trade Agreements. *World Development,* 37(2), pp.341-3531993,

2. ABUAL-FOUL, B., 2004. Testing the export- led growth hypothesis: evidence from Jordan. *Applied Economics Letters*,11, pp. 393-396

3. ABUTALIPOVA, G., eds., 2008. *Kazakhstan: reformy i razvitiye (1992- 2007).* [translated]. *Kazakhstan: reforms and development (1992- 2007).* The National Statistical Agency of the Republic of Kazakhstan, Astana, 111p.

4. ADAM, C. S. & O'CONNEL, S. A., 1999. Aid, Taxation and Development in Sub-Saharan Africa. *Economics and Politics*, 11(3),pp. 225-29

5. ADAMS, J. & JULEFF, L., 2003. *Managerial Economics for Decision Making.* Palgrave, Macmillan, 360p.

6. AFONSO, O., 2001. The impact of International trade on Economic growth. *FEP working Paper, 106*, 33p.

7. AFZAL, M., 2006. Causality between exports, world income and economic growth in Pakistan. *International Economic Journal,* 20(1),pp. 63-77

8. AGALEWATTE, T. B, 2004. *Competitive Industry Policy for economic development in Sri Lanka: Lessons from East Asia*. [online]. PhD thesis, University of Wollongong, School of Economic and Information Systems. Available from: http:www. ro.uow.edu.au/cgi/viewcontent.cgi?filename=0&article=1210. [Accessed 9 March, 2008]

9. AGELL, J., LIDH, T. & OHLSSON, H., 1997. Growth and the Public Sector: A Critical Review Essay. *European Journal of Political Economy*, 13, pp. 33-52

10. AHMAD, J. & HARNHIRUN, S., 1996. Co- integration and causality between exports and economic growth: evidence from the ASEAN countries, *Canadian Journal of Economics,* 29(2), pp.413

11. AHMED, E. M., 2006. Is Malaysia's Manufacturing Productivity Growth Input Driven? *Journal of American Academy of Business*, 9(2), pp.223-229

12. AIMURZINA, B. T., 2003. Finansovye rychagi podderzhki i razvitia sel'skogo hoziaistva v respublike Kazakhstan. Finance instruments of supporting and develoment of Kazakhstan's agriculture sector [translated]. *Finansy Kazakhstana. Kazakhstan's Finances,* 2, pp. 71-78.

13. AKENEEV, Z., 1999. Problemy reformirovania agrarnogo sectora. Reforming problems of the agriculture sector. *Obshestvo i economica (The society and Economy*) translated, 7-8, pp.34-45

14. AKIMOV, A. & DOLLERY, B., 2008. Financial System Reform in Kazakhstan from 1993- 2006 and its socioeconomic effects. *Emerging Markets Finance and Trade,* 44(3), pp. 81-97

15. ALAM, S. M., 1991. Trade orientation and macroeconomic performance in LDCs: an empirical study. *Economic Development and Cultural Change*, 42, pp.839-848

16. ALESINA, A. & WACZIARG, R., 1998. Openness, Country Size and the Government. *Journal of Public Economics, 69(3),* pp.305-322

17. ALEXANDER, J. R., 2001. The import- substitution strategy of economic development. *Journal of Economic Issues*, 1(4), pp. 297-308

18. ALGOZHINA, A., 2006. Inflation Consequences of "Dutch Disease" in Kazakhstan: The Case of Prudent Fiscal Policy. [online]. Available from: http://www.sloc.cafe24.com.[Accessed 23 June, 2007]

19. AMRINTO, L., 2006. *A semiparametric assessment of export- led growth in the Philippines*. Thesis for Msc. Lousiana State University and Agricultural and Mechanical College, 162p.

20. ANAMAN, K. & OSEI-AMPONSAH, C., 2007. Analysis of the causality links between the growth of the construction industry and the growth of the macro- economy in Ghana. *Construction Management and Economics*, 25(9), pp. 951-961

21. ANDO, A. & MOLDIGLIANI, F., 1963. The 'life cycle' hypothesis of saving: aggregate implications and tests. *The American Economic Review*, 3(1), pp.55-84

22. ARYSTANBEKOV, K., 2002. Analiz exportnyh vozmozhnostei Kazakhstana. Analysis of Kazakhstan export possibilities. [translated]. *Al- Pari*,1

23. ARYSTANBEKOV, K., 2003. Kazakhstan i VTO: economicheskie ozhidania. Kazakhstan and WTO: economic expectations. *Kazakhstan truth,* 15.04. 2003, 8p.

24. ASADOV, P., 2007. Foreign Investment and Economic Growth in Tajikistan. *Problems of Economic Transition*, 50(6), pp.32-84

25. ASLUND, A.., BOONE, P. & JOHNSON, S., 1996. How to stabilize: Lessons from post-Communist countries. *Brookings Papers on Economic Activity,* 1, pp. 217-314

26. ASTORGA, P., 2009. A century of economic growth in Latin America. *Journal of Development Economics,* doi: 10.1016/j.jdeveco. 2009.01.008, 12 p

27. AUBAKIROVA, Z. Y., ed. 2008. *Osnovnyie zadachi I napravlenia razvitia regionalnoi integratsii na Post Svietscom prostranstve. The main tasks and directions of development of the regional integration on the Former Soviet space* [translated] 1st ed. Almaty: Kazakh National University

28. AUTY, R. M. & GELB, A., 1986. Oil Windfalls in a Small Parliamentary Democracy: Their Impact on Trinidad & Tobago. *World Developmnet*,14, pp.1161-1175

29. AUTY, R. M., 1993. Sustaining *Development in Mineral Economies* [The resource Course Thesis] London: Rutledge.

30. AVDOKUSHIN, E., 1999. *Mezhdynarodnyie Economicheskie Otnoshenia. International Economic Relations* (translated). Moscow: Marketing, 345p.

31. AWOKUSE, O. T., 2003. Is the export- led growth hypothesis valid for Canada? *Canadian Journal of Economic,* 36(1), pp. 126-136

32. AWOKUSE, O. T., 2007. Causality between exports, imports and economic growth: Evidence from transition economies. *Economics Letters*, 94(3), pp.389-395

33. AWOKUSE, O. T., 2008. Trade openness and economic growth: is growth export- led or import led? *Applied economics*, 40(2), pp.161-173

34. BAHMANI-OSKOOEE, M. & ALSE, J., 1993. Export growth and economic growth: an application of co-integration and error correction modeling. *The Journal of Developing Areas*, 27, pp. 535-542

35. BALASSA, B., 1971. Trade Policies in Developing Countries. *American Economic Review*, 61(2), pp.178-187

36. BALASSA, B., 1977. A stage approach of Comparative Advantage. *Staff Working Paper. No. 256. The World Bank,* Washington DC, (256)

37. BALASSA, B., 1978. Export and Economic Growth: further evidence. *Journal of Development Economics,* 5, pp.181-189

38. BALASSA, B., 1982. *Development strategies in Semi- Industrial Economies.* John Hopkins University Press: Baltimore

39. BALASSA, B., 1985. Exports, policy choices and economic growth in developing countries after the 1973 oil shock. *Journal of Development Economics*, 5, pp.181-189

40. BALASUBRAMANYAM, V. & GREENAWAY, D., eds. 1996. *Trade and Development: Essays in Honor of Jagdish Bhagwati.* London and Basingstoke: Macmillan

41. BALDWIN, R. & MURRAY, T., 1977. MFN tariff reductions and developing country trade benefits under the GSP. *Economic Journal,*87(345), pp.30-46

42. BALDWIN, R. & MURRAY, T., 1986. MFN tariff reductions and developing country trade benefits under the GSP: a reply. *Economic Journal,*96(382), p.3

43. BALDWIN, R. & SEGHEZZA, E., 1996. Trade- induced investment- led growth. *CERP Discussion Papers,* vol. 1420

44. BALDWIN, R., 2000. Trade and Growth: still disagreement about the relationships economics department. Working Paper No 264. ECO/ WKP (2000), 37p.

45. BALDWIN, R., 2003. *Openness and growth: what's the empirical relationship?* NBER Working Paper

46. BARDHAN, P., 1997. Corruption and Development: a review of issues. *Journal of Economic Literature,* 35(3), pp.1320-1346

47. BARKOV, A. V., 2003. Harmonization problems of Eurasian Economic Community. *Journal of Russian Law,* 8, pp. 28-32

48. BARRO, R. J., 1991 Economic growth in a cross section of countries. *Quarterly Journal of Economics,* 106(4), pp. 407-443

49. BARRO, R. J., 1994. *Democracy and Growth.* NBER Working Paper. Washington DC.: IMF

50. BARRO, R. J., 2002. *Quantity and Quality of Economic Growth.* Chile: Central Bank of Chile

51. BARRO, R. J. & LEE, L-W., 1993. Losers and winners in economic growth. *Proceedings of the World Bank Annual Conference on Development Economics.* World Bank, pp. 267-303

52. BARRO, R. J. & LEE, J., 2002. *Who is Chosen and What are the Effects*.(IMF Programs) Washington, DC.: NBER Working Paper

53. BARROW, M., 2005. *Statistics for Economics, Accounting and Business Studies.* Financial Times Prentice Hall, 416p.

54. BARTH, J. & BRADLEY, M., 1997. *The Impact of Government Spending on Economic Activity.* Departments of Economics ed. Washington DC: National Chamber Foundation and George Washington University

55. BENEDICTIS, L. & TAJOLI, L., 2007. Openness, Similarity in Export Composition and Income Dynamics. *Journal of International Trade and Economic Development,* 16 (1), pp 93-116

56. BERG, A., BORENSZTEIN, E., SAHAY, R. & ZETTELMEYER, N., 1999. The evolution of output in transition economies: explaining the differences, *IMF Working Paper*, WP/99/73

57. BERG, V. & LEWER, J., 2007. *International trade and economic growth.* Library of Congress Cataloging-in- Publication Data, printed in the USA.

58. BEYERS, W. B., 1976. Empirical identification of key sectors: Some further evidence. *Environment and planning, 17,*pp. 73-99

59. BHAGWATI, J. & KRUEGER, A., 1973. Exchange control, Liberalization and Economic Development. *American Economic Review,* 63(2), 419-427

60. BHAGWATI, J., 1978. *Anatomy and Consequences of Exchange Control Regimes.* Cambridge: Mass

61. BHAGWATI, J., 1988. Export promoting trade strategy: issues and evidence. *The World Bank research observer,* 3(1), pp.27-57.

62. BIENEN, H., 1984. Oil Revenues and Policy Choices in Nigeria. *World Bank staff working paper, 92*

63. BOGOMOLOV, O. T., 1997. *Opyt rynochnyh reform v stranah tsentalnoi i vostochnoi Evropy i SNG. The experiences of market reform in the Central and East Europe Countries and CIS (*translated). Yekaterinburg

64. BOPIEVA, Zh. K., 2007. Otsenka strukturnyh preobrazovanii economiki Kazakhstana. Assessment of the structural changes in the economy of Kazakhstan [translated]. *Collection materials of international scientific –practical conference "Vital issues of education and sciences at the modern stag*e , part 1, Kokshetau University named after A. Myrzahmetov, 45p.

65. BORENSZTEIN, E., GREGORIO, J. D. & LEE, J-W., 1998. How does FDI affect economic growth? *Journal of International Economics,*45(1), pp. 115-159

66. BRADFORD, C., 1987. Trade and structural change: NIC and next tier NICs as transitional economies. *World development,* 15(3), pp.299-316

67. BURNSIDE, C. & DOLLAR, D., 2000. Aid, Policies and Growth. *American Economic Review,* 90 (4), pp.123-145

68. BUCKLEY, P. J. & GHAURI, P. N., 1998. *The Internationalization of the Firm.* 2nd ed. International Thomson Business Press

69. CAIRNS, J., 1873. Postscript. *In Essays in Political Economy.* Reprinted in Tausig, FW (Compiler) (1921) ed. Boston, MA: Ginn and Co., 345p

70. CASTALDI, C., CIMOLI, M., CORREA, N., DOSSI, G., 2004. Technological learning, Policy Regimes and Growth in a 'Globalized Economy: general patterns and the Latin American experience. *LEM Working paper*, 65p

71. CHANDRAN, V.G.R. & MUNUSAMY, A., 2009. Trade openness and manufacturing growth in Malaysia. *Journal of Policy Modeling,* 31, pp.637-647

72. CHANG, H-J., 2003. *Kicking away from Ladder.* Development strategy in historical perspective. Anthem press. London, 187p.

73. CHANG, R., KALTANI, L. & LOAYZA, N. V., 2009. Openness can be good for growth: The role of policy complementarities. *Journal of Development Economics,90(1),* pp. 33-49

74. CHELEKBAI, A., 2007. Economicheskii peregrev I resursnoie prokliatie: problemy i znachenia snizhenia. Economy overheating and resource damnation: problems and means of regress. *Karzhy karazhat, 2,* pp. 3-9

75. CHENERY, H.B. & SYRQUIN, M, 1975. *Patterns of Development, 1950-1970* .Oxford University Press for the World Bank, London

76. CHENERY, H.B. & SYRQUIN, M, 1979. A comparative analysis of industrial growth. *Economic growth and resources,* ed. By Mathews, R. New York.

77. CHENERY, H., 1980. Interactions between industrialization and exports. *American Economic Review,* 70 (2), pp. 281-287

78. CHENERY, H., ROBINSON, S., SYRQUIN, M., 1986. *Industrialization and growth: A comparative study.* Oxford University Press, 387p

79. CHOW, G.C., 1985. A model of Chinese National Income Determination. *Journal of Political Economy,* XCIII(6), pp. 782-792

80. CHOW, G.C., 1987. Money and Price Level Determination in China. *Journal of Comparative Economics,* XI(3), pp. 319-333

81. CHOW, G.C., 2001. Capital formation and economic growth in China. *Quarterly Journal of Economics,* 108(3), pp. 809-842

82. CIPOLLINA, M. & SALVATICI, L., 2008. Measuring protection: Mission Impossible? *Journal of Economic Surveys,* 22(3), pp.577-616

83. CLEMENS, M. A. & WILLIAMSON, J. G., 2001. A tariff-growth paradox? Protection's impact the world around 1875-1997. *NBER Working Papers, (8549)*

84. CLIFFORD, M. L. & KOHLI, A., 1994. Where do high Growth Political Economies Come From? The Japanese Linkage of Korea's Development State. *World Development,* 22(9), pp. 269-293

85. COE, D. T. & HELPMAN, E., 1995. North- South R&D Spillovers. *Economic Journal,* 107, pp.134-149

86. COSSE, S., 2003. The Energy Sector Reform and Macroeconomic Adjustment in a Transition Economy: The Case of Romania. *IMF Policy Discussion Paper, 2*

87. CUKIERMAN, A., HERCOWITZ, Z., LEIDERMAN, L., eds., 1992. *Political Economy, growth and business cycles.* Massachusetts Institute of Technology. Library of Congress Cataloging – in- Publication Data. 397p.

88. DABROWSKI, M. & ANTCZAK, R., 1995. Economic reforms in Kyrgyzstan. *Russia and East European Finance and Trade,* 31 (6), 26p.

89. DANIELS, J. D., RADEBAUGH, L. H & SULLIVAN, D. P., eds., 2004. *International Business: environments and operations.* 10th edition ed. Prentice Hall

90. DARRAT, A.F., 1987. Are exports an engine of growth? Another look at the evidence. *Applied Economics,* 19(2), pp. 277-283

91. DARRAT, A. F., HSU, M-K. & ZHONG, M., 2000. Testing export exogeneity in Taiwan: further evidence. *Applied Economics Letters*, 7., pp. 563-567

92. DAVLETOVA, G., 2005. *Mezhdunarodnyi bisness.* International Business [translated]. Almaty, Economica, 2nd edition, 235p.

93. DEAN, J. M., DESAI, S. & RIEDEL, J., 1994. Trade Policy Reform in Developing Countries since 1985: A review of the Evidence. *World Bank Discussion Papers,* No. 267, pp. 14-18

94. DE GREGORIO, J., 1992. Economic growth in Latin America. *Journal of Development Economics,* 39(1), pp. 59-84

95. DELOVAYA PRESSA, 2003. *The strategy of Innovation- Industrial Development of Kazakhstan for 2003-2015* [translated]. №20 (171), 20.05.2003. [online]. Available from: http://www.businesspress.ru/newspaper/article_mId_21960_aId_263710.html

96. DE MATTEIS, A., 2004. International trade and economic growth in the global environment. *Journal of the International Development*, 16(4), pp. 575- 588.

97. DE MELO, M., DENIZER, C., GELB, A. & TENEV, S., 1997. Circumstances and choice: the role of initial conditions and policies in transition economies. *World Bank Policy research Working Paper. 1886*

98. DEVERAJAN, S., SWAROOP, V. & ZOU, H, 1996. The composition of public expenditure and economic growth. *Journal of Monetary Economics,* 37(3), pp. 313-344

99. DOLLAR, D., 1992. Outward- oriented developing countries really do growth more rapidly: Evidence from 95 LDCs 1976-1985. *Economic Development and Cultural Change,* 40 (iv), pp. 523-544

100. DOLLAR, D. & KRAAY, C., 2002. *Institutions, Trade and Growth.* Mimeo: World Bank

101. DOLLAR, D. & SOKOLOFF, K., 1990. Pattern of productivity growth in South Korean manufacturing industries, 1963- 1979. *Journal of Development Economics,* 33, pp.309- 327

102. DORAISAMI, A., 1996. Export growth and economic growth: - examination of some time-series evidence of the Malaysian experience. *The Journal of Developing Areas,* 3, pp. 223

103. DORNBUSCH, R., 1992. The Case for Trade Liberalization in Developing Countries. *Journal of Economics Perspectives,* 6, pp. 69-85

104. DORNBUSCH, R., FISHER, S. & STARTZ, R., 2001. *Macroeconomics.* 8th ed. New York, USA: McGraw-Hill Companies Inc.

105. DOWRICK, S., 1996. Estimating the impact of Government consumption on Growth: Growth Accounting and endogenous Growth Models. *Empirical Economics,* 21, pp. 163-186

106. DZHANDOSSOVA, Zh., BAITUGELOVA, N. & DZHANDOSSOVA, F., 2003. Korruptsia v Kazahstane. Corruption in Kazakhstan [translated]. *Karzhy- karazhat*, No 6(32) Almaty, 30p

107. EASTERLEY, W., REBELO, S., 1993. Fiscal Policy and Economic Growth: An Empirical Investigation. *Journal of Monetary Economics,* 32 (3), pp. 417-459

108. ECONOMIC BULLETIN for Europe, 1994. Foreign Trade to other CIS countries, part 2 Intra- CIS trade, vol.46, p.83

109. EDWARDS, S., 1989. Openness, Outward orientation. Trade Liberalization and Economic Performance in developing countries. *Policy, planning and research working Papers No 191.* Washington DC, the World Bank.

110. EDWARDS, S., 1992. Trade orientation, distortions and growth in developing countries. *Journal of Development Economics,* 39(1), pp. 31-57

111. EDWARDS, S., 1993. Openness, trade liberalization, and growth in developing countries. *Journal of Economic Literature, 31,* pp.1358-1393.

112. EDWARDS, S., 1998. Openness, productivity and growth: what do we really know? *Economic Journal,* 108 (447), pp.383-398

113. ELBORG- WOYTEK, K., 2003. Openness and distance: trade developments in the Commonwealth of Independent States, 1993-2002. (IMF Working Paper). Washington: Internationally Monetary Fund.

114. ELISEEVA, I. I., KURYSHEVA, S. V., KOSTEEVA, T. V., PANTINA, I. V., MIHAILOV, B., 2006. *Econometrica. Econometrics.* ed. [translated] Moscow, Finance and Statistics, 574 p.

115. ELSON, E., 2006. What Happened? Some lessons for economic policies. *Finance and Development*, 3 (2), pp. 33-40

116. EMERY, R. F., 1967. The relation of exports and economic growth.*Kyklos,*20, pp. 470-486

117. ENGMAN, M., ONODERA, O. & PINALI, E., 2007. Export processing zones: past and future role in trade and development. *OECD Trade Policy Working Paper,* No. 53. France: Trade Directorate. Trade Committee

118. EAEC today, 2011. Brochure of Eurasian Economic Community. Moscow, Available from: http://www.evrazes.com/i/other/evrazes-segodnya-web.pdf. Accessed: 17 April, 2011.

119. EVERITT, B., 1986. *Cluster analysis.* 2nd ed. USA: Halsted Press

120. EVERITT, B., 1993. *Cluster analysis.* 3rd ed. New York: Halsted Press

121. ERIXON, F. & SALLY, R., 2006. Policy forum: Economic Development: Trade or Aid? *The Australian Economic Review*, 39, p. 69-77

122. FALCETTI, E., RAISER, M. & SANFEY, P., 2000. Defying the odds: initial conditions, reforms and growth in the first decade of transition. *EBRD Working Paper,*55

123. FEDER, G., 1982. On exports and economic growth. *Journal of Development Economics,* 12(2), pp. 59-74

124. FEDER, G., 1985. Growth in semi- industrial countries: a statistical analysis, in Chenery, H. et al. (1985) eds*., Industrialization and Growth,* Oxford, Oxford University Press.

125. FELDER, J., 1986. Protectionism, Domestic Monopoly and the Levels of Domestic Production and Consumption. *Quarterly Journal of Business and Economics,* 25(4), pp.77-100

126. FIELD, B. & OFORI, G., 1988. Construction and economic development: a case study. *Third World Planning Review,* 10(1), pp. 41-50

127. FINDLAY, R., 1985 (a). *Primary Exports, Manufacturing and Development*, ed. By Lundahi M., Croom Helm, London, pp. 219-233

128. FINDLAY, R. 1985 (b). Growth and development in trade models, in Jones, R.W. and Kenen, P (eds) *Handbook of International Economics*, vol.1, Amsterdam, North- Holland, pp. 185-236

129. FISCHER, S., SAHAY, R. & VEGH, C., 1996 (a). Economies in Transition: the Beginnings of Growth. *The American Economic Review*, 86(2), pp.229-233

130. FISCHER, S., SAHAY, R. & VEGH, C., 1996 (b). Stabilization and Growth in Transition Economies: the Early Experience. *Journal of Economic Perspectives, 10*(2), pp. 45-66

131. FISCHER, S. & SAHAY, R., 2000. The transition economies after ten years, *IMF Working Paper,* 00/30/2000

132. FOUNTAS, S., 2000. Some evidence on the export- led growth hypothesis for Ireland. *Applied Economics,* 7, pp.211-214

133. FRANKEL, J. A. & ROMER, D., 1999. Does trade cause growth? *American Economic Review,* 89(3), pp.379-399

134. FREINKMAN, L., POLYAKOV, E., REVENCO, C., 2004. Trade Performance and Regional Integration of the CIS countries, The World Bank working paper, 38; Washington DC, The World Bank

135. FRITZ, V., 2002. Mongolia: Dependent Democratization. *Journal of Communist Studies and Transition Politics, 18(4),* pp.75-100

136. FUCHS, V., 1965. The growing importance of the service industries. *Journal of Business,* 38(4), pp.344-373

137. GANZORIG, A., ed. 2000. Vneshneekonomicheskie factory ekonomicheskogo razvitia Mongolii v 90-h godah. *Foreign economical factors of economy development in Mongolia during 90s(translated).*Moscow

138. GHEMAWAT, P. & PATIBANDLA, M., 1999. India's exports since the reforms three analytic industry studies. In: J.D. SACHS, A.VARSHNEY & N. BAJPAI, ed. *India in the Era of Economic Reforms*. New Delhi: Oxford University Press

139. GILIES, J. A. & WILLIAMS, C.L., 2000. Export- led growth: a survey of the empirical literature and some non- causality results. Part 1. *journal of International Trade and Economic Development,* 3, pp. 261-337

140. GLASURE, Y. U. & LEE, A-R., 1999. The export- led growth hypothesis: The Role of the Exchange Rate, Money and Government Expenditure from Korea. *Atlantic Economic Journal,* 27(3), pp. 260-11

141. GOMES, L., 1987. *Foreign trade and the National Economy: Mercantilist and Classical Perspectives.* Macmillan: Basingstoke

142. GOMES, L., 1990. *Neo-classical International Economics: A Historical Survey.* Macmillan: Basingstoke

143. GOVERNMENT PROGRAMM OF POVERTY REDUCTION IN KYRGYZSTAN, 2004. Available from: http://www.gov.kg/index.php?option=com_content&task=view&id=1073&Itemid=97 Accessed: 23 March, 2007.

144. GREENAWAY, D., 1991. Fiscal dependence on Trade Taxes and Trade Policy Reform. *Journal of Development studies,* 27(3), pp. 98-138

145. GREENAWAY, D. & MILNER, C., 1987. "True Protection" Concepts and Their Role in Evaluating Trade Policies in LDCs. *Journal of Development studies,* 23(2), pp.200-220

146. GREENAWAY, D. & MILNER, C., 1993. *Trade and Industrial Policy in developing Countries*. Macmillan, London, 269p.

147. GREENAWAY, D., MORGAN, W. & WRIGHT, P., 1997. Trade Liberalization and Growth in Developing Countries: Some New Evidence. *World Development,* 25 (11), pp. 1885-1892

148. GREENAWAY, D., MORGAN, W. & WRIGHT, P., 2002. Trade liberalization and growth in developing countries. *Journal of Development Economics,* 67, pp.229-244

149. GREENAWAY, D. & NAM, C. H., 1988. Industrialization and macroeconomic performance in developing countries under alternative trade strategies. *Kyklos,* 41(3), pp.419-435

150. GRIER, K. & TULLOCK, G., 1989. An Empirical Analysis of Cross- National Economic Growth, 1951-1980. *Journal of Monetary Economics,* 24 (2), pp. 259-276

151. GRIMWADE, N., 1997. *International Trade Policy. A contemporary analysis.* London: Rutledge

152. GROSSMAN, G. M. & HELPMAN, E., 1990. Comparative advantage and long-run growth. *American Economic Review,* 80(4), pp.796-815

153. GYLFASON, T., 2001. Natural resources, education and economic development. *European economic review,* 45, pp. 847- 859

154. von HAGEN, J. & ZHOU, J, 2005. The choice of exchange rate regime. An empirical analysis for transition economies. *Economics of Transition,* 13(4), pp. 679-703

155. HALCOUSSIS, D., 2004. *Understanding econometrics.* Cincinnati, Ohio: South-Western, 2004: Thomson

156. HARDY, M. & BRYMAN, A., 2004. *Handbook of data analysis*. 1st ed. UK, London: Sage Publications Ltd.

157. HARRISON, A., 1996. Openness and growth: a time- series, cross- country analysis for developing countries. *Journal of Development Economics,* 48(2), pp. 419-447

158. HARRISON, A., & HANSON, G., 1999. Who gains from trade reform? Some remaining puzzles. *Journal of Development Economics, 51,* pp.315-324

159. HASHIKAWA, B., 1998. Japanese Perspectives on Asia: From Dissociation to Coprosperity, in Akira Iriye. *The Chinese and the Japanese: Essays in Political and Cultural Interactions,* 346.

160. HATEMI, J. A. & IRANDOUST, M., 2000. Time- series evidence for Balassa's export-led growth hypothesis. *Journal of International Trade and Economic Development,* 9(3), pp.355-365

161. HAVRYLYSHYN, O. & GETTIGAN, D., 1999. Privatization in Transition Countries: Lessons of the First Decade. *IMF Economic Issues, 18*

162. HAYAT, L., 2008. *Cancer imaging: Lung and breast carcinomas.* Elsevier Academic Press, vol.1, 602 p.

163. HAZARI, Bh., 1970. Empirical identification of key sectors in the Indian economy. *Review of Economics and Statistics,* 52(3), pp. 301- 305

164. HAZARI, Bh., CHYAU, T. & NG, L., 2000. A trade theoretic analysis of outward capital flows with special reference to Hong Kong. *Journal of International Trade and Economic Developmen*t, 9(1), pp. 69-81

165. HECKSHER, Y. & OHLIN, B., 1992. *Hecksher- Ohlin Trade theory*. Edited by Flam, H. & Flanders, J ed. Cambridge, MA: MIT Press

166. HEITGER, B., 1993. Comparative economic growth. *ASEAN Economic Bulletin,* 10(1), pp.68-83

167. HELPMAN, E. A. & KRUGMAN, P., 1985. *Market Structure and Foreign Trade.* Cambridge, MA: MIT Press

168. HENDERSON, D., 1992. International economic integration: progress, prospects and implications. *International Affairs,* 64(4), pp.635

169. HENRY, M., 2007. Formulating trade policy in a small hydrocarbon-dependent economy: the case of Trinidad & Tobago. *The World Economy,* pp. 1222-1251

170. HERZER, D. & NOWAK- LEHNMANN, D. F., 2006. What does export diversification do for growth? An econometric analysis. *Applied Economics,* 38, pp. 1825-1838

171. HOLZMANN, R., THIMANN, C. & PETZ, A., 1993. Pressure to Adjust: Consequences for the OECD countries from reforms in Eastern Europe. *Empirical Economic policy Forum on "Consequences of Eastern European Reform: Are the OECD countries ready for their economic adjustments?* Vienna, October, 1993, 62p.

172. HOOD, N., YOUNG, S. & LAL, D., 2003. *Strategic evolution within Japanese manufacturing plants in Europe: UK evidence*. In Hood, N. eds. The Multinational subsidiary: management, economic development and public policy. Palgrave, pp79-108

173. HOWELL, J., 1996. Coping with transition: insights from Kyrgyzstan. *Third World Quarterly, 17(1),* pp.53-68.

174. HOUT, W., 1996. Development strategies and economic performance in Third World countries, 1965-92. *Third World Quarterly,* 17(4), pp. 603-624

175. HSING, Y., 2004. Impact of income inequality on economic growth: the case of Taiwan and Policy implications. *Journal of Social and Economic Development, 6(2),* pp. 194-205

176. HWA, J., 1988. The contribution of agriculture to Economic Growth: some empirical evidence. *World Development,* 16(11), pp. 1329-1339

177. IMF, 1996. *Kygyzstan- staff report for the 1995*, Washington, DC

178. IMF, 1998. Trade Liberalization in IMF Supported Programs, World Economic and Financial Surveys, Washington, DC

179. IMF, 2000. *Transition economies: An IMF Perspective on Progress and Prospects.* IMF

180. IMF, 2003. Expanding the country's capacities. National Poverty Reduction Strategy of Kyrgyz Republic. [online]. Available from: http://www.imf.org. Accessed 12 January, 2007.

181. IMF, 2005. *World economic outlook,* Washington DC. [online] Available from: http:// www.imf.org. Accessed: 18 January, 2010

182. IMF, 2008. *World Economic and Financial Surveys. World Economic Outlook Report.* Available from: http://www.imf.org/external/pubs/ft/weo/2008/02/weodata/index.aspx. Accessed: 25 November, 2008

183. IMF, 2009. *Direction of Trade Statistics Yearbook*. Transition Economies. Kazakhstan. Washington DC.

184. IRWIN, D. A., ed., 1996. *Against the Tide: An Intellectual History of Free Trade.* Princeton NJ: Princeton University Press

185. IRWIN, D. A., 2001. Tariff and Growth in the late Nineteenth Century America. *World Economy,* 24(1), pp.15-30

186. ISLAM, M. N., 1998. Export expansion and economic growth: testing for Co- integration and causality. *Applied Economics,* 30, pp.415-425

187. ISSINGARIN, N. K., 1998. *Problemy integratsii v SNG. Problems of integration in CIS* [translated]. Almaty: Atamura

188. ISSINGARIN, N. K., 1999. *Put' razvitia, formy I mechanizmy integratsionnyh protsessov stran* SNG. *Path of development, forms and mechanisms of CIS' integration processes* [translated].Doctor of Economic Science thesis, Moscow State University. Available from: 71:00-8/214-4

189. JALILIAN, H., KIRKPATRICK, C. & PARKER, D., 2007. The impact of regulation on Economic growth in developing countries: a cross- country analysis. *World development,* 35(1), pp. 87-103

190. JAMES, W. E. & FUJITA, N., 1989. Import Substitution and Export Promotion in the Growth of the Indonesian Industrial sector. *ASEAN Economic Bulletin,* 6(1), pp. 59-70

191. JAYANTHAKUMARAN, K., 2000. Industrialization: Import Substitution to Export Promotion. *Working Paper,* Department of Economics, University of Wollongong, 34p. Available from: http://ro.uow.edu.au/commwkpapers/30. [Accessed 13 June, 2008]

192. JIN, J. C., 1995. Export led growth and the four little dragons, *Journal of International Trade and Economic Development, 4, pp. 203- 215.*

193. JIN, J. C., 2002. Export and growth: is the export- led growth hypothesis valid for provincial economies? *Applied economics,* 1(1), 6p.

194. JINGBO, H., 1998. *Foreign trade policy reform in China*. [online] PhD thesis, University of London, School of Oriental and African Studies, 225pp.

195. JOHANSEN, S., 1988. Statistical analysis of co- integration vectors. *Journal of Economic Dynamics and Control*, 12, pp.231-254

196. JOHANSEN, S. & JUSELIUS, K., 1990. Maximum likelihood estimation and inference on co- integration with application to the demand for money. *Oxford Bulletin of Economics and Statistics,* 52, pp. 169-210

197. JOHNSSON, H. & KAPLAN, P., 1999. *An econometric study of private consumption expenditure in Sweden.* [online] Stockholm: National Institute of E*conomic Research, Working Paper.* Available from: http//www.konj.se/download/18.2f48 1999 [Accessed 23 January, 2007]

198. JONES, B., 2005. The anatomy of start- stops growth. *NBER Working Papers,*11528

199. JONES, B. & OLKEN, B., 2008. The anatomies of start- stop growth. Review of Economics & Statistics, 90(3), pp. 582-587.

200. JORGENSON, D., GOLLOP, F. & FRAUMENRI, B., 1987. *Productivity and US Economic Growth*. Amsterdam, North Holland

201. JUARES, E. C., 1993. Trade Development Policies in Columbia: Export Promotion and

202. Outward Orientation, 1967-1992. *Studies in Comparative International Development*, 28(3), pp. 31- 67

203. JURGEN von HAGEN & ZHOU, J., 2005. The choice of exchange rate regime. An empirical analysis for transition economies. *Economics of Transition*, 13(4), pp. 679-703.

204. JUNG, S. W. & MARSHALL, P. J., 1985. Exports, Growth and Causality in Developing Countries. *Journal of Development Economics, 18(1),* pp. 1-12

205. JUNISBAI, A., 2010. Understanding Economic Justice Attitudes in two countries: Kazakhstan and Kyrgyzstan. *Social Forces*, 88(4), pp. 1677-1702

206. KALYUZHNOVA, Y., PEMBERTON, J. & MUKHAMEDIEV, B., 2004. Natural resources and economic growth in Kazakhstan. In: OFER, G. & POMFRET, R., ed. *The economic prospects of the CIS. Sources of Long term growth.* Cheltenham, UK: Edward Elgar, pp. 249-267

207. KAMINSKY, G., LIZONDO, S. & REINHART, C., 1998. Leading indicators of currency crisis. Washington, DC *IMF staff papers.*

208. KASER, M., 2003. The economic and social impact of systemic transition in Central Asia and Azerbaijan. *Perspectives on Global Development and Technology,* 2(3-4), pp.459-473

209. KAVOUSSI, R. M., 1984. Export expansion and estimating long-run equilibrium relationships. *Journal of Development Economics,* 14(3), pp. 241- 250

210. KAY, D. L., PRAT, J. E. & WARNER, M. E., 2007. Role of services in Regional Economy Growth. *Growth and Change,* 38 (3), pp. 419- 442

211. KAZAKHSTAN TRUTH, 1996(a). *About Privatization* Law of the Republic of the Kazakhstan.[translated]. 4.01.1996. № 24/163

212.KAZAKHSTAN TRUTH, 1996(b). About *Free Economical Zones at the Republic of Kazakhstan*. Decree of the Republic of Kazakhstan. No. 67 (1123) 1996

213. KAZHYKEN, M. Z., 2008. Regionalnyie infrastructury Kazakhstana: economicheskie zony. Kazakhstan's regional infrastructures: economic zones. *Journal about Innovation activity, 7*(117), pp. 19-22

214. KEMME, P. & ROY, S., 2006. Real exchange rate misalignment: Prelude to crisis? *Economic systems,* 30(2006), pp. 207-230

215. KENZHEGUZIN, M., 2001. The market economy of Kazakhstan: problems of conditions and development. *Kazakhstan truth,* 1864, pp 2-3

216. KHALAFALLA, K. Y. & WEBB, A. J., 2001. Export led growth and structural change: evidence from Malaysia. *Applied Economics, 33*(13), pp. 1703-1715

217. KHAMFULA, Y., 2007. Foreign direct investment and economic growth in EP and IS countries: the role of corruption. *The World Economy.* doi: 10.1111/j.1467-9701.2007.01055.x, pp. 1843-1854

218. KHAN, A. H., 1998. The experience of trade liberalization in Pakistan. *The Pakistan Development Review,* 37(4), pp. 661-685

219. KHASBULATOV, R., 2001. Mirovaya economica. World economy. [translated]. Moscow: Economics.

220. KHASBULATOV, R., 2006. Mirovaya economica I mezhdunarodnyie economicheskie otnoshenia. World economy and international economic relations. [translated]. Moscow: Gardariki

221. KHASBULATOV, R., 2009. *Economicheskaya degradatsia v 90h godah XX veka i narushenia ravnovesia. Economic degradation in the 90's of XX century and disequilibrium.* Moscow: [translated][online]. Available from: http:// www.regions.ru.[accessed 18.01.2005]

222. KHUSNITDINOVA, R. A., ed., 1998. *Natsional'nyie scheta Respubliki Kazakhstan*. [translated] *The National accounts of the Republic of Kazakhstan*. The National Statistical Agency of the Republic of Kazakhstam. Almaty, 379 p.

223. KINNEAR, P. R. & GRAY, C. D., 2006. *SPSS 14 Made Simple.* 1st ed. New York: Psychology Press

224. KIREEV, A., 1998. *Mezhdunarodnaya economica. International* economy. [translated] in 2 part. Moscow: International relations.

225. KOICHUEV, T., 1994. Kyrgyzstan: kakov budet shag v budushee? Kyrgyzstan: "What will be the step to the future?" [translated]. *Kyrgyzstanskie novosti, 348*

226. KOICHUEV, T., 2003. Economica nezavisimogo Kyrgyzstana v sravneniah. Economy of sovereign Kyrgyzstan in comparison. Proceedings of international scientific- practical conference "*Upravlenie regional'noi economikoi* i *podgotovka spetsialistov: vzgliad v 21 vek*" 15-17. 05. 2003, [translated] Shymkent

227. KOLODKO, G. W., 2000. From Shock to Therapy. *The Political Economy of Postsocialist Transformation*, Oxford- New York; Oxford University Press

228. KORMENDI, R. & MEGUIRE, P., 1985. Macroeconomic determinants of Growth: cross-country evidence, *Journal of Monetary Economics*, 16(2), pp. 141-163

229. KOSHANOV, A., 2006. Economicheskie reformy Kazakhstana: rezyltaty I problemy. Kazakhstan's economic reforms: results and problems. [translated]. *Obshestvo I economica/ Society and economy, 4*, pp. 12-19

230. KOYCHUMANOV, T., 2003. Economic interests of Central Asian States: Identification problems. Central Asia and the Caucasus. *Journal of Social and Political Studies,3*(21), pp. 11-17

231. KOZIK, L. & KOHNO, P., 2001. SNG: realii i perspektivy. CIS: realities and prospects [translated].*Russian economic Journal,* no10, pp. 47-61

232. KRAVIS, R., 1970. Trade as Handmaiden of Growth Similarities between the Nineteenth and Twentieth Centuries. *Economic Journal,* 80(320)

233. KREMER, N. SH. & PUTKO, B. A. ed. 2008. *Econometrica/ Econometrics*. [translated] 2nd ed. Moscow: Unity.

234. KRUEGER, A. O., ed. 1978. *Foreign Trade Regimes and Economic Development: Liberalization Attempts and Consequences.* Cambridge, MA. For National Bureau of Economic Research, New York: Ballinger, p.310

235. KRUEGER, A. O., 1985. The experiences and lessons of Asia's super exporters. In: CORBO, V., OSSA, F. & KRUEGER, A., O., eds., *Export oriented Development Strategies: The Success of the Five Newly Industrialized Countries.* Westview: Boulder, pp. 8-111

236. KRUEGER, A. O., 1997. Trade Policy and economic development: how we learn. *The American Economic review, 87 (1), pp. 1-22*

237. KRUEGER, A. O., 1998. Why trade liberalization is good for growth? *The Economic Journal,* 108, September (450), pp. 1513-1322

238. KRUGMAN, P. R., ed., 1986. *Strategic Trade Policy and the New International Economics.* Cambridge, MA: MIT Press

239. KRUGMAN. P. R., HARRISS, M. & MOORE, C. E., 1992. *Technology and International Competition: A Hospital Perspective*. Washington, DC: National Academy of Engineering, pp. 86

240. KRUGMAN, P. & WELLS, R., 2006. Macroeconomics. I ed. USA: Worth Publishers

241. KUIPER, M. & van TONGEREN, F., 2005. Growing together or growing apart? A village level study of the Impact of Doha Round on rural China. *World Bank Policy Research Working Paper,* 3696

242. KUSAINOV, H., 2003. Reformy i bariery v economike. Reforms and barriers in the economy [translated]. *Al' Pari,* no 6, p.21- 33

243. KUZNETSOVA, S. I., 2002. Zemelnyie reformy v Kyrgyzstane, Uzbekistane I Tadjikistane. The land reform in Kyrgyzstan, Uzbekistan and Turkmenistan [translated]. *Central Asia. Abstract collection,* Moscow

244. KVANLI, A. H., GUYNES, S., S. & PAVUR, R., J., 1996. *Introduction to business statistics: a computer integrated approach.* 2nd edition ed. USA: West Publishing Company.

245. KYRGYZ REPUBLIC PARLIAMENT, 2007. *The Program of the export development and import substitution of the Kyrgyz Republic for 2007-2010.* (Approved the Government Regulation from 9.02.2007). Bishkek: Kyrgyz Republic Parliament

246. LANDAU, D., 1983. Government expenditure and economic growth: a cross- country study. *Southern Economic Journal*, 46(9), pp.783-792

247. LAUX- MEISELBACH, W., 1989. A Note of Import Substitution versus Export Promotion as Strategies for Development. *Kyklos,* 49(2), pp. 211- 219

248. LE, M. V. & SURUGA, T., 2005. Foreign direct investment, public expenditure and economic growth: the empirical evidence for the period 1970-2001. *Applied economics letters,* 12, pp. 45-49

249. LEBLANG, D., 1997. Political Democracy and Economic Growth: Pooled Cross-Sectional and Time- Series Evidence. *British Journal of Political Science,* 27 (3), pp. 453-466

250. LEE, J-W., 1993. International trade, distortions and long- run economic growth. *IMF Staff Papers,* 40(2), pp.299-328

251. LEE, Y-S. & JEONG, H-G., 2006. The determinants of economic growth of transition economies: Economic reform versus initial conditions. *International Economic Journal,* 20(2), pp. 241-252

252. LEE, J-J., ZU, L., WANG, M- CH, 2009. Competitive investors, trade timing and price discovery. *Applied Financial Economics, 19 (20),* pp. 1661-1474

253. LEVINE, R. & RENELT, D. A., 1992. Sensitivity Analysis of Cross- Country Growth Regressions. *American Economic Review, 82(4),* pp. 942-963.

254. LGHAVA, S., 1994. Liberalizatsia tsen i rynochnoie razvitie Mongolii. Liberalization of prices and development of market in Mongolia [translated].*International trade and World relations,* 18, pp. 33-48

255. LHAGVASUREN, N., 2000. Russia seeks to restore position in Mongolia as Most Favored Neighbor. *Eurasia Insight, Nov, 17., http:// eurasianet. org*

256. LIANG, N., 1992. Beyond Import Substitution and Export Promotion: A New Typology of Trade Strategies. *The Journal of Development Studies,* 28 (3), pp. 447-472

257. LIGHT, M., 2007. Agriculture in Kyrgyzstan: Growth engine or safety net? *Commission of Economic Growth.* University of Colorado

258. LIN, S., 1994. Government spending and economic growth. *Applied Economics,* 26(1), pp. 83-94

259. LITTLE, I., SCITOVSKY, T. & SCOTT, M., 1970. *Industry and Trade in Some Developing Countries.* London: Oxford University Press

260. LLOYD, P. J. & MacLAREN, D., 2000. Openness and growth in East Asia after the Asian crisis. *Journal of Asian Economies,* 11(1), pp. 89-105

261. LOCKSHINA, A. M., 2005. Neravenstvo v stranah SNG: regionalnyi aspect. CIS' inequality: regional aspect [translated].*E- bulletin, Population and Society,* http:// demoscope.ru

262. LOPEZ- CORDOVA, J., & MEISSNER, C., 2003. Exchange rate regimes and International Trade: Evidence from classical Gold Standard Era. *American Economic Review*, 93(1), pp. 344-353.

263. LUCAS, R. E., 1988. On the mechanisms of economic development. *Monetary Economy Journal, 22,* pp.3-42

264. LUSTIG, N., 2001. Life is not Easy: Mexico's Quest for Stability and Growth, *Journal of Economic Perspectives*, 15(1), pp. 85-106

265. MADIAROVA, D., 1999. *Strategia formirovania vneshne torgovoi politiki Kazakhstana. The strategy of formation Kazakhstan foreign trade policy* [translated]. Almaty: Economica, 248 p.

266. MAHMOOD, Z. & QASIM, M. A., 1992. Foreign Trade regimes and savings in Pakistan. *The Pakistan Development Review,* 31 (4), pp. 883-893

267. MAIZELZ, A., 1968. *Exports and Economic Growth in Developing Countries*. London: Cambridge University Press

268. MANASERYAN, T., 2007. Necessary to classify the main obstacles of Armenia Economic Development. [translated]. Armenia's Economic Weekly, 87(3), p. 33-45.

269. MANLY, B. F., 1986. *Multivariate Statistical Methods.*1st (ed). Great Britain: Chapman and Hall Ltd.

270. MANU, F. A., 2009. Import Substitution and Export Promotion: a continuing dilemma for developing countries? *Journal of International Business and Economics,* Jan, 2009

271. MARCHENKO, G., 1999. FDI in Kazakhstan: opportunities and risks. *Kazakhstan Economic trends*, issue 2, pp 17-25

272. MARSHALL, A., 1890. *Principles of economics*. London: Macmillan, 8st ed., 1920 [repr. in 1974].

273. MASSIMO, M., 1993. Endogenous Quality Choice: Price vs. Quantity Competition. *Journal of Industrial Economics*, pp.113-132

274. MASSON, P. & RUGE-MURCIA, J., F., 2005. Explaining the transition between exchange rate regimes. Scandinavian *Journal of Economic,* 107 (2), pp. 261-278

275. MATALLAH, K. & PROOPS, J. L. R., 1992. Algerian economic developments, 1968-1979: A multiplier and Linkage Analysis. *Economic Systems Research,* 4 (3), pp. 257

276. MATSUYAMA, K., 1992. Agricultural productivity, comparative advantage and economic growth. *Journal of Economic Theory,* 58 (2), pp. 317-334

277. MAURO, P., 1995. Corruption and Growth. *Quarterly Journal of Economics,* 110 (3), pp. 632-681

278. McANDAWIRE, Th. & SOLUDO, Ch., (eds.) 2002. *African voices on structural adjustment a companion of our continent.* CODESRIA, Africa World Press, IDRC, 280p.

279. McCARVILLE, M. & NNADOZIE, E., 1995. Causality tests of export- led growth: the case of Mexico. *Atlantic Economic Journal,* 32 (2), pp.140-145

280. McNAB, R., M. & MOORE, R., E., 1998. Trade policy, export expansion, human capital and growth. *The journal of International Trade & Economic Development,* 7(2), pp. 237-256

281. McNTYRE, R. J., NARULA, R. & TREVINO, L. J., 1996. The role of export processing zones for host countries and multinationals: a mutually beneficial relationship? *The International Trade Journal,* 10(4), pp. 435-466

282. MERCADO, P. R., 2001. Macroeconomic voluntary during Argentina's Import Substitution Stage. *International Review of Applied Economics,* 15(2), pp.151-161

283. MICHAELY, M., 1977. Exports and growth: an empirical investigation. *Journal of Development Economics, 4*, pp.49-53

284. MICHALOPOULOS, C. & JAY, K., 1973. Growth of Exports and Income in the Developing World: A Neoclassical View. *Discussion Paper No. 28, Agency for International Development, Washington DC,* 28

285. MINTON, M., 2006. 20th Anniversary of Diplomatic relations, *The World Affairs* (Ulaanbaatar), 2:274(13), pp. 145-149.

286. MITROFANSKAYA, Y., 1999. Privatization as an International Phenomenon. Available from: http://www.auilr.org/pdf [Accessed 23 April, 2009]

287. MO, P. H., 2001. Corruption and Economic growth. *Journal of Comparative Economics,* 29(1), pp. 66-79.

288. MO, P. H., 2007. Government Expenditures and Economic Growth: the Supply and Demand sides. *Fiscal studies, 28* (4), pp. 497- 522

289. MOGILEVSKI, R. & TOCHITSKAYA, I., 2005. CIS' external trade. 1st ed. West LB Bank Polska, Warsaw: Center for Social and Economic Research [translated]

290. MOLOMZHANTS, D., 2004. Mongolia na poroge XXI veka. Mongolia at the turn of 21st century [translated]. *Business and Banks,* 20

291. MORRISSEY, O., 2002. Trade Policy Reforms in Sub- Saharan Africa: Implementation and Outcomes in the 1990's. In BELSHAW, D. & LIVINGSTONE, I., eds., *Renewing Development in Sub- Saharan Africa: Policy, Performance and Prospects.* London: Routledge, pp. 339-353

292. MUDI, S. S., 2006. Temporary structure of interest rates in Kazakhstan. *Economic survey of the National Bank of Kazakhstan*. Available from: http:// www. nationalbank.kz. [Accessed 28 January, 2009]

293. MUNDELL, R., 1997. Optimum 'Currency Areas' Extended version of speech at Tel Aviv University, dec.5, 1997.

294. MUSONDA, A. & ADAM, C., 1999. Trade liberalization in Zambia, 1970-1995. In: NDULU, O., B. & GUNNING, J. W., ed. *Regional Integration and Trade Liberalization in Sub-Saharan Africa. Country Case Studies*. London: Macmillan

295. NAZARBAYEV, N. A., 1997(a). Kazakhstan -2030. Problemy bezopasnosti I blagososto yania naroda. KAZAKHSTAN- 2030. The problems of safety and well- being the wealth of all.(translated) *Kazakhstan truth,* 1318, pp. 1-2

296. NAZARBAYEV, N. A., 1997(b). Strategia nezavisimosti. The strategy of Independence. Almaty: Atamura.

297. NAZARBAYEV, N. A., 1998. On the situation in the Country and major directions of domestic and foreign policy: democratization, economic and political reform for the new century (translated). *Kazakhstan truth,*1143, the 1st of November, pp.1-2

298. NAZARBAYEV, N. A., 2003. Strategia industrialnogo i innovatsionnogo razvitia Kazakhstana na periody 2003- 2015. The strategy of industrial and innovative development of Kazakhstan for the periods of 2003-2015 [translated]. Almaty: Zhety Zhargy

299. NESTERENKO, S., 2008. Napravlenia razvitia "Astana- novyi gorod" [translated] The direction of the development of "Astana- new city" [online]. Available from: http://www.astana.kz/ru/node/8580

300. NOLAN, D., 2005. *Statistics: a guide to the unknown.* Eds. in Peck, R., Casella, G et. al. Duxbury Press, 464p.

301. NOURUSIS, W., 1990. *SPSS Advanced Statistics. Users Guide.* SPSS Inc. Chicago

302. NUTI, M. D., 2010. The Former Soviet Union after dis- integration and transition. *TIGER Working Paper Series*, No 117, Warsaw

303. ODLING- SMEE, J., 2003. *Economic performance and Trade in the CIS.* IMF External relations department. USA: International Monetary Fund

304. ONAFOWORA, O. A. & OWOYE, O., 1998. Can Trade Liberalization Stimulate Economic Growth in Africa? *World Development,* 26 (3), pp. 497- 506

305. ORESHKIN, V. P., ed., 1996. *Organizatsia svobodnyh economicheskih zon v Rossiskoi Federatsii: Analiz politico- pravovoi bazy I vozmozhnyh perspectiv. Organization of Free Trade Zones in Russian Federation: the analysis of political and legal base and possible perspectives* [translated]. Scientific explanatory of Institute of Central Bank of Russian Federation. Moscow: Central Bank of Russian Federation.

306. OVCHINNIKOV, N. V., 2001. Tamozhenno- tarifnoie regulirovanie v Respublike Kazakhstan,[translated], Info- T, p.92

307. O' ROURKE, K. H., 2000. Tariffs and growth in the late nineteenth century. Economic Journal, 110, pp. 456-483

308. PALLANT, J., 2007. *SPSS Survival Manual. A step – by – step guide to Data Analysis using SPSS version 15.* 3rd ed. Ed. England: Open University Press

309. PANAS, E. & VAMVOUKAS, G., 2002. Further evidence on the export- led growth hypothesis. *Applied Economic Letters, 9*, pp. 731-735

310. PANORAMA, 1999, NO.3, pp.2 [online]. Available from: http://www.panorama.kz. [Accessed 17 April, 2008]

311. PAPANEK, G., 1973. Aid, Foreign Private Investments, Savings and Growth in Less Developed Countries. *Journal of Political Economy, 81* (1), pp. 120- 130

312. PARIDA, P. Ch. & SAHOO, P., 2007. Export –led Growth in South Asia: A Panel Cointegration Analysis. *International economic Journal,*21(2), pp.155-175

313. PARKER, D., 1999. Regulation of privatized public utilities in the UK: performance and governance. *International Journal of Public sector management, 12* (3), pp. 213- 235

314. PESARAN, M. H., SHIN, Y. & SMITH, R. J., 2001. Bounds testing approach to the level relationship. *Journal of Applied Econometrics,* 16, pp. 289-329

315. PIAZOLO, M., 1995. Determinants of South Korean Economic Growth, 1950-1990. *International Economic Journal,* 9, pp. 109- 133

316. PIETROFORTE, R. & GREGORI, T., 2006. Does volume follow share? The case of the Danish construction industry. *Construction Management and Economics,* 24 (7), pp. 711-715

317. PLYSHEVSKII, B. P., 1993. Reformirovanie economic gosudarstv SNG: Kyrgyzstan and Tajikistan. Reforming the Economies of the CIS: Kyrgyzstan & Tajikistan [translated] *Rosisskii ecomomicheskii zhurnal,* 11 pp. 24-30, no12, pp. 11-18

318. POMFRET, R., 1991. *International Trade: An Introduction to Theory and Policy.* Blackwell: Basil.

319. POMFRET, R., 2002. Trade and Exchange Rate Policies in Formerly Centrally Planned Economies. *Conference paper in honour of W. Max Corden held at the John Hopkins University,* School of Advanced International Studies (SAIS) in Washington DC on 04/19/ 2002

320. POMFRET, R., 2007 (a). Distortion to Agricultural Incentives in Kazakhstan. *World Bank Working Paper,* 61p.

321. POMFRET, R., 2007 (b). Central Asia since the dissolution of the Soviet Union economic reforms and their impact on state- society relations. *Perspectives on Global development and Technology,* 6(1-3), pp.313-343.

322. POMFRET, R., 2009. Using Energy Resources to Diversify the Economy: Agricultural Price Distortions in Kazakhstan. *Comparative Economic Studies,* 51 (181), pp. 212

323. POPOV, V., 2000. Shock therapy versus gradualism:" explaining the magnitude of the transformational recession. *Comparative Economic Studies,* 1, pp. 3-59

324. PRADHAN, R. P., 2007. Causal nexus between government expenditure and economic growth: evidence from SAARC countries. *Decision,* 34 (2), pp. 27- 50

325. PRIVATE CONSUMPTION EXPENDITURE. 1997. *Department of Statistics Singapore.* Concepts and trends. 16 p., http://www.singstat.gov.sg/pubn/papers/economy/op-e5.pdf Accessed on: 25 of May, 2008

326. PRITCHETT, L., 1996. Measuring outward orientation: Can it be done? Journal of Development Economics, 49(2), pp. 307- 335

327. PROMSKYI, N. & ARTSISHEVSKYI, L., 2001. Ekonomicheskaya integratsia SNG: problemy i reshenia/ CIS's economic integration: problems and solutions [translated]. *Economist,* no9, pp. 67-85

328. PRUSA, T. J., 2005. Trade policy review. The United States. *The World economy,* 28 (9), pp. 1263-1276

329. RAHMAN, M. & MUSTAFA, M., 1998. Dynamics of real exports and real economic growth in 13 selected Asian countries. *Journal of Economic Development*, 22(2), pp. 81-95

330. RAIHAN, S., ADHIKARI, R. & ADHIKARI, K., eds., 2007. Export diversification for human development in the post- ATC era. Perspectives from Asian LDCs. UNDP regional centre in Colombo, 268 p.

331. RAJAN, R. & SUBRAMANIAN, A., 2005. Aid and Growth: What does the cross-country evidence really show? *NBER Working Papers, 11513*

332. RAM, R., 1985. Exports and Economic growth: some additional evidence. *Economic Development and Cultural Change*, 33(5), pp. 415- 425

333. RAM, R., 1986. Government size and economic growth. A new framework and some evidence from cross- section and time – series data. *American Economic Review*, 76(1), pp. 191-203

334. RAM, R., 1987. Exports and economic growth in developing countries: evidence from time series and cross- section data. *Economic Development and Cultural Change,* 36, pp.51-72

335. RAMASAMY, B. & YEUNG, M., 2007. Malaysia- Trade Policy Review, 2006. *World economy, 30* (8), pp. 1193- 1208

336. RAMEEZDEEN, R. & RAMACHANDRA, T., 2008. Construction linkages in a developing economy: the case of Sri Lanka. *Construction Management and Economics, 26, pp.499-506*

337. RAMEY, G. & RAMEY, V., 1995. Cross- country evidence on the link between Volatility and Growth. *American Economic Review, 85* (5), pp. 1138-1151

338. RICARDO, D., ed., 1973. The works and Correspondence of David Ricardo. Edited by Piero Srafa ed. UK, Cambridge: Cambridge University Press.

339. RIVERA- BATIZ, L., A. & ROMER, P., M., 1991(a). International trade with endogenous technological change. *European Economic Review,* 35(4), pp. 971- 1004

340. RIVERA- BATIZ, L., A. & ROMER, P., M., 1991(b). Economic integration and endogenous growth. *Quarterly Journal of Economics*, 106 (2), pp. 531-555.

341. RODRIGUEZ, F. & RODRIK, D., 2000. Trade Policy and Economic Growth: a Skeptic's Guide to the Cross- National Evidence. *NBER Working Papers, Macroeconomics Annual,* 15(1), pp. 261- 325

342. RODRIK, D., 1999. The new global economy and developing countries: Making openness work. *Policy Essays,* 24, pp.11-43

343. RODRIK, D., 2001. Trading in illusions. *Foreign Policy*, 123, pp.54-63

344. ROMER, P. M., 1986. Increasing returns and long- run growth. *Journal of Political Economy*, 94, pp.1002-1037

345. ROMER, P. & BORROW, R. J. ed., 1990. *Capital Accumulation and long- run Growth. Modern Business Cycle Theory.* Cambridge Mass: Harvard University Press

346. ROMER, P., 1994. The origins of Endogenous Growth. *Journal of Economics Perspectives, 1,* pp. 3-22

347. ROMERO, A.T., 1995. Labor standards and Export Processing Zones: situation and pressures for change. *Development Policy Review,*13, pp. 278-293

348. RUIZ-NAPOLES, P., 2001. Liberalization, Exports and Growth in Mexico 1978-1994: a structural analysis. *International Review of Applied Economics,* 15(2), pp. 163-180

349. SABDENOV, O., 1997. Economichaskaya politica perehodnogo perioda XXI veka. Economic policy of transforming period of the XXI century [translated]. Almaty: Kazakhstan

350. SACHS, D. & WARNER, A. M., 1995. Economic reform and the process of global integration. *Booking Papers of Economic Activity,* 1, pp. 1-118

351. SAGADIEV, K., 2006. Reformy: analiticheskii obzor (nauchnoie izdanie) Reforms: analytical overview, scientific issue [translated]. Almaty: Gauhar

352. SALA-I-MARTIN, X., 1997. I have just run two million regressions. *American economic review,* 87, pp.178-183

353. SALKIND, N. J., 2008. S*tatistics for people who hate statistics.* 3rd ed. United Kingdom, London: Sage Publications

354. SALLY, R., 2005. Free Trade, New Century. *Economic Affairs*, 25(4), p.81

355. SALLY, R., 2007. Thai Trade Policy: From Non discriminatory Liberalization to FTAs. *The World Economy* ,doi:10.1111/j.1467-9701.2007 pp.1594- 1620

356. SALLY, R., 2008. *Trade policy, New Century. The WTO, FTAs and Asia rising.* The Institute of Economic Affairs. Great Britain, 229p.

357. SALVATORE, D., 2005. *Introduction to International Economics*. 1st edition. Fordham University, John Wiley& Sons, Inc, 465p.

358. SALVATORE, D. & HATCHER, T., 1992. Inward oriented and outward oriented trade strategies. *Journal of Development studies,* 27(1), pp. 7-25

359. SAMIMI, A., NADEMI, Y., ZOBEIRI, H., 2010. Government size & Economic Growth: a threshold regression approach in selected Islamic countries. *Australian Journal of Basic and Applied Sciences,* 4(8), pp. 2247-2249

360. SANTOS-PAULINO, A. U., 2005. Trade liberalization and Economic performance: Theory and evidence for Developing Countries. *World economy,* 28(6), pp.783-821

361. SANTOS-PAULINO, A. U., 2007. Aid and Trade Sustainability under Liberalization in Least Developed Countries. *World Economy,*30(6), pp. 972- 998

362.SARABEKOVA, T. C., 2009. Zakonodatel'nyi fundament privatizatsii. [translated] [online] Available from: http://www.minfin.kz/index.php?uin=1146020107&chapter=1146020175&lang=rus. Accessed: 12 January, 2009

363. SARKAR, P., 2008. Trade openness and Growth: Is there any link? *Journal of economic issues,* 42(3), pp. 764-785

364. SATUBALDIN, S., 1998. 'Drakony' I 'tigry' Azii: smozhet li Kazakstanskii 'bars' proiti poi h tropam. 'Dragons' and 'tigers' of Asia: whether there can pass the Kazakhstan's 'leopard' their tracks [translated]. Almaty: Gylym, 467 p.

365. SCHULTZ, S., 1976. Intersectoral comparisons as an approach to the identification of key sectors. In: POLENSKE, K. R. & SKOLKA, J., V. ed. *Advances in input- output analysis.* Ballinger: Cambridge, MA., pp. 137- 159

366. SCHYDLOWSKY, D. M., 1967. From Import Substitution to Export Promotion for semi-grown – up industries: a policy proposal. *Journal of Development Studies,* 3(4), pp.405-413

367. SEMENOV, A. V., 1996. Osobennosti investitsionnogo klimata svobodnyh economicheskih zon v Rossii.[translated]. The peculiarities of investment climate of FTZ in Russian Federation. Informational-analytical proceedings of the Central Bank of Russia, 13(89), pp. 345-356

368. SHAN, J. & SUN, F., 1998. On the Export- led Growth hypothesis for the Little Dragons: An Empirical Reinvestigation. *Atlantic Economic Journal,* 26(4), pp. 353-371

369. SHARMA, D., 2004. *WTO accord: Faulty frame, crude reality.* debtf@webone.com.au, 13 August, 2004 (№ 268)

370. SHEEHEY, E. J., 1990. Exports and Growth: A Flawed framework. *Journal of development studies,* 27(1), pp. 111-117

371. SHEEHEY, E. J., 1993(a). The effect of government size on economic growth. *Eastern Economic Journal,* 19(3), pp. 321-328

372. SHEEHEY, E. J., 1993(b). Exports as a factor of production: a consistency test. *World Development,* 21, pp.155-160

373. SHERLOCK, J. & REUVID, J., 2008. *The handbook of International Trade: a guide to the principles and practice of export.* 2nd ed. London: GMB, 402p.

374. SHIELS, C., 2003. FDI and the Investment Climate in the CIS Countries. *IMF Policy Discussion Paper,* 5

375. SHISHKOV, I., 2007. The Commonwealth of Independent States. A decade and a half of futile efforts. *Problems of Economic Transition,* 50(7), pp. 7-23

376. SHOKAMANOV Y. K., 1996. *Statistical Yearbook of Kazakhstan*, National Statistical Agency of Kazakhstan, Almaty, 220p.

377. SHOKAMANOV Y. K, 2003. Dinamicheskie i structurnyie izmenenia v economicheskom razvitii kazakhstana I ego regionov. Dynamics and structural improvements of the Kazakhstan and its' regions Economic development. [translated]. Economica i Statistica. Economics and Statistics, 3, pp. 38-39

378. SHNITKOVA, E. Y. & MENZYUL, G. A., 2006. Unifikatsya zakonodatelstva v mezhdunarodnom sotrudnichestve stran SNG. Harmonization of legislation in the international cooperation of CIS countries. [translated]. *Vestnik KACU*, no3, 13p

379. SHLEIFER, G., & TREISMAN, O., 2003. A Normal Country. *NBER Working Paper* No 10057.

380. SILVERSTOVS, B. & KHOLODILIN, K., 2006. On the forecasting properties of the alternative leading indicators for the German GDP: recent evidence. *Jahrbucher fur Nationalokonmic and Statistik, 226*, pp. 234-259

381. SINELNIKOV, S. Y., 2001. Spetsificheskie osobennosti economicheskoi politiki Kazakhstana v 1999- 2000 godah. Specific features of the economic policy in Kazakhstan during 1999- 2000 [translated]. *Asia – economy, policy, crisis, 15*

382. SINGER, H. W. & GRAY, P., 1988. Trade policy and growth of developing countries: some new data. *World Development,* 16(4), pp. 395-403

383. SMAILOV, A., 2000. *Statisticheskii ezhegodnik Kazakhstana* [translated]. *Statistical Yearbook of Kazakhstan.* The National Statistical Agency of the Republic of Kazakhstan, Astana, pp 45-48

384. SMAILOV, A., 2008. *Natsional'nyie scheta Respubliki Kazakhstan.* [translated]. *National accounts of the Republic of Kazakhstan* [online].The National Statistical Agency of the Republic of Kazakhstan. Available from: http://www.stat.kz/publishing/Documents/.pdf. Accessed: 2 March, 2008

385. SMAILOV, A., 2009. *Kazakhstan za gody nezavisimosti*. [translated]. *Kazakhstan's Statistics since independence.* The National statistics agency of Kazakhstan. Astana. [online]. Available from: http:// http://www.stat.kz/publishing/2010/web.pdf. Accessed: 10 January, 2010

386. SMAILOV, A., 2010. *Natsional'nyi statisticheskii ezhegodnik Kazakhstana.* [translated]. *National Statistical Yearbook of Kazakhstan*. The National Statistical Agency of the Republic of Kazakhstan. Astana. 503p.

387. SMITH, A., ed., 1976. *An inquiry into the Nature and Causes of Wealth of Nations.* Chicago: IL, University of Chicago Press

388. SODERLING, L., 1999. Structural policies for international competitiveness in manufacturing: the case of Cameroon. *The OECD Development Centre.* Working Paper, 146

389. STATE-RUN PROGRAM OF RURAL TERRITIRIES DEVELOPMENT. 2003. Kazakhstan's Presidential Decree, July 10. [translated].

390. STATISTICAL BULLETIN, 1999. *Export and import flows of the Republic of Kazakhstan.* National Statistical Agency of the Republic of Kazakhstan, Bulletin №3(92)

391. STATISTICAL BULLETIN, 2010. Inflation in Kazakhstan & currency rates. *National Statistical Agency of the Republic of Kazakhstan, №2* (157)

392. STATISTICAL DEVELOPMENT OF CIS. 2002. *Statistical Agency of CIS,* various issues. Available from: http// www. cis. stat.ru

393. STATISTICAL YEARBOOK FOR ASIA AND THE PACIFIC, 2002. *United Nations economic and social commission for Asia and the Pacific.* Bangkok, Thailand: United Nation

394. STEGEMANN, K., 1989. Policy rivalry among industrial states: what we can learn from models from models of strategic trade policy? *International organization,* 43(1), pp. 28- 73

395. STRASSERT, G., 1968. Zur bestimmung straegischer sektoren mit hilfe von input- output modellen. *Jahrbucher fur Nationalokonomie und Statistick [translated],* 182(3), pp. 211-215

396. STRASSMANN, P., 1970. The construction sector in economic development. *Scottish Journal of Political Economy,* 17(3), pp. 390- 410

397. STRATEGIC INITIATIVES, 2004. *State agricultural program of development of rural territories of Kazakhstan during 2004-2010.* [online]. Available from: *http://en.government.kz/resources* Accessed on: 21 February, 2008

398. STRATEGIC PROJECTS of the Republic of Kazakhstan, 2008. [online]. Available from: http://en.government.kz/resources/docs. Accessed: 13 February, 2008

399. THE STRATEGY OF INDUSTRIAL-INNOVATIVE DEVELOPMENT OF THE REPUBLIC OF KAZAKHSTAN FOR 2003- 2015. [online]. [translated] Available from: *http://www.e.gov.kz/wps/portal/* [Accessed 14April, 2008]

400. SYRQYIN, M., 1994. Growth and Industrialization since 1965: A Comparative Study of Fourteen Countries. In: HELLEINER, G. K., ed. *Trade policy and Industrialization in Turbulent Times.* London: Rutledge

401. SULTANOV, B., 2009. *Industrial and Innovative development of Kazakhstan under conditions of global challenges*. UNECE International Conference, 28- 29 September, 2009, Geneva, Palais des Nations

402. SUMIYABAZAR, Ch., 2004. Mongolia: Forgiven the Mongolian government hails record Russian debt write- off. But was there really anything to be forgiven? *Week in review*, 13-19 January, 2004, Transition online

403. TABACHNICK, B. & FIDELL, L. S., 1983. *Using multivariate statistics.* 1st edition. New York: Harper & row

404. TANSUHAJ, P. S. & GENTRY, J. W., 1987. Firm Differences in Perceptions of the Facilitating Role of Foreign Trade Zones in Global Marketing and Logistics. *Journal of International Business Studies,* 18(1), pp.19-33

405. TANZI, V. & DAVOODI, H., 1998. Roads to Nowhere: How Corruption in Public Investments Hurts Growth. *IMF Economic Issues, 12*

406. THE DECREE OF THE PREZIDENT OF KAZAKHSTAN "On state program of tourism development in the Republic of Kazakhstan for 2007-2011". 29.12.2006, № 231. Available from: http:// kazakhstan.news-city.info/docs. [Accessed 28May, 2008]

407. THE MAIN MACROECONOMIC INDICATORS OF CIS. *1991-1999. Moscow. The statistical Agency of CIS, 2000*

408. THOMAN, R. S., 1956. *Free ports and Foreign Trade Zones.* Cambridge, England, Cornell Maritime Press, p. 357

409. THOMAS, V., NASHS, J. & ASSOCIATES, 1991. *Best Practices and Trade Policy Reform.* World Bank Publication. Oxford: Oxford University Press.

410. TIAPYSHEV, V. A., 2001. Strategia I programma – osnova economiki upravlenia Kyrgyzstana. The strategy and program is base of economy management of Kyrgyzstan [translated].Obshestvo i economica. Society and economy, 8 (341)

411. TODARO, M. P., 1995. *Reflection on economic development: The selected essays of Michael Todaro. Economists in the Twentieth Century.* Ashgate, Brookfield: Aldershot, UK Elgar

412. TORTAYEV, B. K., ed., 2004. *Vneshnyiaya torgovlia i sovmestnoiye predprinimatel'stvo Kazakshatana*.[translated] *Foreign trade and joint enterprise of Kazahstan.* Statistical Yearbook, Almaty, 226p.

413. TRADE MISSION of the Republic of Kazakhstan, 2008. Svobodnyie economicheskie zony v Kazakhstane.[translated]. Foreign economic zones of Kazakhstan [online]. Available from: http://www.kaztrade.ru/economic/export_production/economic_zones/. Accessed: 12 February, 2008

414. TRINDADE, V., 2005. The big push, industrialization and international trade: The role of exports. *Journal of Development Economics*, 78, pp. 22-48

415. TRUETT, J. & TRUETT, D. B., 1982. *Macroeconomics.* 1st ed. USA, Minnesota: West Publishing co.

416. TSEN, W. H., 2005. Openness, financial development and economic growth in Malaysia. *International Journal of Business and Society,* 6 (1), pp. 93-121

417. TUMEN, B., 1996. Mongolia: vchera, segodnia i zavtra. Mongolia: yesterday, today and tomorrow (translated). *Publication in Journal Mongolia Today*

418. TYLER, W. G., 1981. Growth and export expansion in developing countries: some empirical evidence. *Journal of Developing Economics,* 9, pp. 121-130

419. UNDP, 2005. Regional Cooperation in Central Asia. A view from Kyrgyzstan. Report published in *Problems of Economic Transition,* 48(8), pp.5-61

420. UNDP, 2006. Annual evaluation report of the implementation of the Economic growth and poverty reduction strategy paper. Government of the Republic of Moldova. Available from: http://particip.gov.md/files/EGPRSP Report 270307 en.pdf. [Accessed 13 May, 2008]. 248 p.

421. UNITED NATIONS database, 2009(a). *National accounts. Nominal and real GDP, total & per capita, annual, 1970- 2009. Real GDP growth rates, total and per capita, 1970- 2009.* Available from: http://stats.unctad.org/handbook/ tableview.aspx [online].[Accessed 12April, 2008; 25May, 2008; 18 September, 2009; 13 December, 2010

422. UNITED NATIONS database, 2009(b) Values and shares of merchandise export and imports, annual, 1948-2009.[online]. Available from: http://www. stats.unctad.org/Handbook/Table Viewer

423. USOV, A. S., 2000. Institutsional'naya sistema SNG: napravlenia dal'neishego sovershenstvovania. In eds. Shumskii, N. et al. Institutional system of CIS countries: the direction of further improvements [translated]. *Mirovaya economica and Mezhdunarodnyie otnoshenia,* pp110-116

424. UZAGALIEVA, A., 2005. Fiscal consequences of monetary integration within a Common Economic Area: the case of Belarus, Kazakhstan and Russia. *Post- Communist Economie,* vol 17(4), pp.399-423.

425. VENTURA, J., 1997. Growth and Independence. *Quarterly Journal of Economics*, 112(1), pp. 57-84

426. VIDOVA, O., 1998. *Portret cheloveka i politika.* The portrait crisis of person and politics [translated]. Almaty, Bilim, 319p.

427. VOHRA, R., 2001. Export and Economic Growth: Further Time Series Evidence from Less- Developed Countries. *International advances in Economic Research,* 7(3), pp.345-351

428. WADUD, I. K-M. & NAIR, M., 2003. Impact of liberalization on the competitiveness of the Australian clothing industry: an empirical study. *International Journal of Management,* 20(3), pp. 325-334

429. WAGENER, H-J. & van SELM, G., 1993. Soviet Regional Disintegration and Monetary Problems. *Communisy Economies and Economic Transformation,* 5(4), p. 411-426

430. WANG, Ch., LIU, X. & WEI, Y (2004). Impact of openness on Growth in different country groups. *World Economy,* 27 (4), pp. 567- 585

431. WEITZ, R., 2006. Averting a New Great Game in Central Asia. *The Washington Quarterly, 29(3),* pp.155-167

432. WILLIAMS, A. S., 1997. *Student workbook of Accompany Statistics for Business and Economics.* 4th ed., ed. USA: West Publishing Company

433. WILLIAMSON, J., 1993. In search of a manual for technopols. In Williamson, ed. *The political economy of policy reform.* Washington, DC, Institute for International Economics, pp.9-28

434. WILLIAMSON, J., 1997. *The Washington Consensus Revisited* in Emmerij, ed., Economic and Social Development into XXI century. Washington DC: International Development Bank

435. WONG, J. M., CHIANG, Y. H. & THOMAS, S., 2008. Construction and economic development: the case of Hong Kong. *Construction Management and Economics,* 26, pp. 813-824

436. WORLD BANK, 1987. *World Development Report.* New York: Oxford University Press

437. WORLD BANK, 1995. *World Development Report.* New York: Oxford University Press

438. WORLD BANK, 2004. *Doing Business in 2004: Understanding regulation.* Washington DC: World Bank

439. WORLD BANK, 2008. *Project appraisal Document on a Proposal Grant* / Credit in the Amount of SDR 5.72.mln dollars to Mongolia for mining sector. Institutional Strengthening technical Assistance Project

440.WORLD BANK, 2011. Kyrgyz Republic at a glance. [online]. Available from: http://devdata.worldbank.org/AAG/kgz_aag.pdf Accessed: 11September, 2007

441. WORLD TRADE ORGANIZATION, 2009. *International Trade Statistics, Geneva, printed in Switzerland, 262p.*

442. WU, H-L. & CHEN, CH-H., 2004. The prospects for Regional Economic Integration between China and the Five Central Asian Countries. *Europe- Asia Studies,* 56(7), pp. 1059-1080

443. XIAO, Q., 2007. Export and production growth: evidence from three major wheat exporters of Australia, Canada and the United States. *Applied Economics, 2*.

444. YADAEVA, K., 2002. *Globalization and Inequality in CIS Countries: Role of Institutions. On: Centre for Economic & Financial Research (CEFIR) and Carnegie Endowment for International Peace*, ed. 19- 21 January, 2003. Cairo: GDN, pp. 22-57

445. YANIKKAYA, H. P., 2003. Trade openness and economic growth: a cross- country empirical investigation. *Journal of Development Economics*, 72, pp. 57-89

446. YUSOFF, M. B., SHAN, M., 1990. *Export and economic growth: a case of Malaysian on Trade and Development in Malaysia.* Malaysia: University Pertanian Malaysia

447. ZAKARIYANOV, D., 2006. Neftiyanyie perspektivy Kazakhstana. The oil perspectives of Kazakhstan [translated]. *The society,* 1(13), pp. 18-33.

448. ZARDYKHAN, Z., 2002. Kazakhstan and Central Asia: Regional Perspectives. *Central Asia Survey,* 21(2), pp. 167-183.

449. ZARGONTS, Z., 2002. Regulirovanie dolga Mongolii. Debt regulation of Mongolia (translated). *Mongolia today, 16.03., p.4*

450. ZEBREGS, H., 2004. Intraregional trade in Emerging Asia. *IMF Policy Discussion Paper, 1*

451. ZESTOS, G. & TAO, X., 2002. Trade and GDP growth: causal relations in the United States and Canada. *Southern Economic Journal, 68, pp. 859-874*

452. ZIYADULLAEV, N., 2002. Sovremennaya ekonomicheskaya situatsia v SNG/ The modern economic situation in CIS countries [translated]. *Economist,* no1, p.13-28

453.ZHAMISHEV, B. B., 2009. The main features and outcomes of property reformation stages. Available from: http://www.minfin.kz/index.php?uin=1146020107&chapter=1146020302&lang=rus. Accessed: 28 February, 2010.

454. ZHUKOV, S. & REZNIKOVA, O., 2007. Economic integration in the Post- Soviet Space. *Problems of Economic Transition,* 50 (7), pp. 24-36

455. ZUBCHENKO, L. A., 2002. Vlianie globalizatsii na finansovuiu stabilnost'. Globalization impact to the finance stability [translated]. *Journal of Russian Academy of Science,* pp. 61-66

BIBLIOGRAPHICAL LIST

1. ABHAYARATNE, A., 1996. Foreign trade and economic growth evidence from Sri Lanka, 1960-1992. *Applied Economics Letters*, Vol. 3 Issue 9, p567, 4p.

2. ANDY, K., KWOK, B., 1996. Exports, economic growth and exogeneity: Taiwan 1953-1988 *Applied Economics*, Vol. 28 Issue 4, p467-471.

3. BALDWIN, R., 1975. International Trade and Economic Growth: A Diagrammatic Analysis. *American Economic Review*, Vol. 65 Issue 1, p187-193, 7p

4. BLESSING, H., GROTE, G., LUFT, Ch., 1988. Foreign Trade, Growth of the socialist National Economy and comprehensive intensification. *Soviet & Eastern European Foreign Trade***,** Vol. 24 Issue 3, p71, 25p

5. BLUDOVA, S. N., 2005. On the Role of Regional Government in the Development of Trade relations between Russian regions and CIS member countries. *Problems of Economic Transition,* Vol 47, issue 12, p. 35-44, 10 p.

6. CLARK, D., SAWYER, CH., SPRINKLE, R., 1999. Openness and industrialization in developing countries. *Applied economics Letters,* vol., 6, pp. 161-164.

7. DOWRICK, S., GOLLEY, J., 2004. Trade openness and Growth: who benefits? *Oxford Review of Economic Policy*, Vol. 20 Issue 1, p38-56, 19p, 6

8. FARDMANESH, M. & LI, T., 2010. Structural Change in Transition Economies: Does Foreign aid matter? *Working Papers, Yale School of Management's Economics Research Network,* p1-23, 24p.

9. FEDORSTOV, V., IAKOVLEV, A., 2004. Russia's Exchange Rate Policy and Foreign Trade. *Problems of Economic Transition*, Vol. 47 Issue 5, p32-44, 13p

10. FUNKE, M., RUHWEDEL, R., 2005. Export variety and economic growth in east European transition economies. *Economics of Transition*, Vol. 13 Issue 1, p25-50.

11. GUJARATI, D. N., 1995. *Basic Econometric.* Third edition, McGraw- Hill, Singapore

12. HIBBERT, E. P., 1998. Trade promotion in transition economies. *Journal of* E*uromarketing,* Vol. 7 Issue 2, p67, 22p

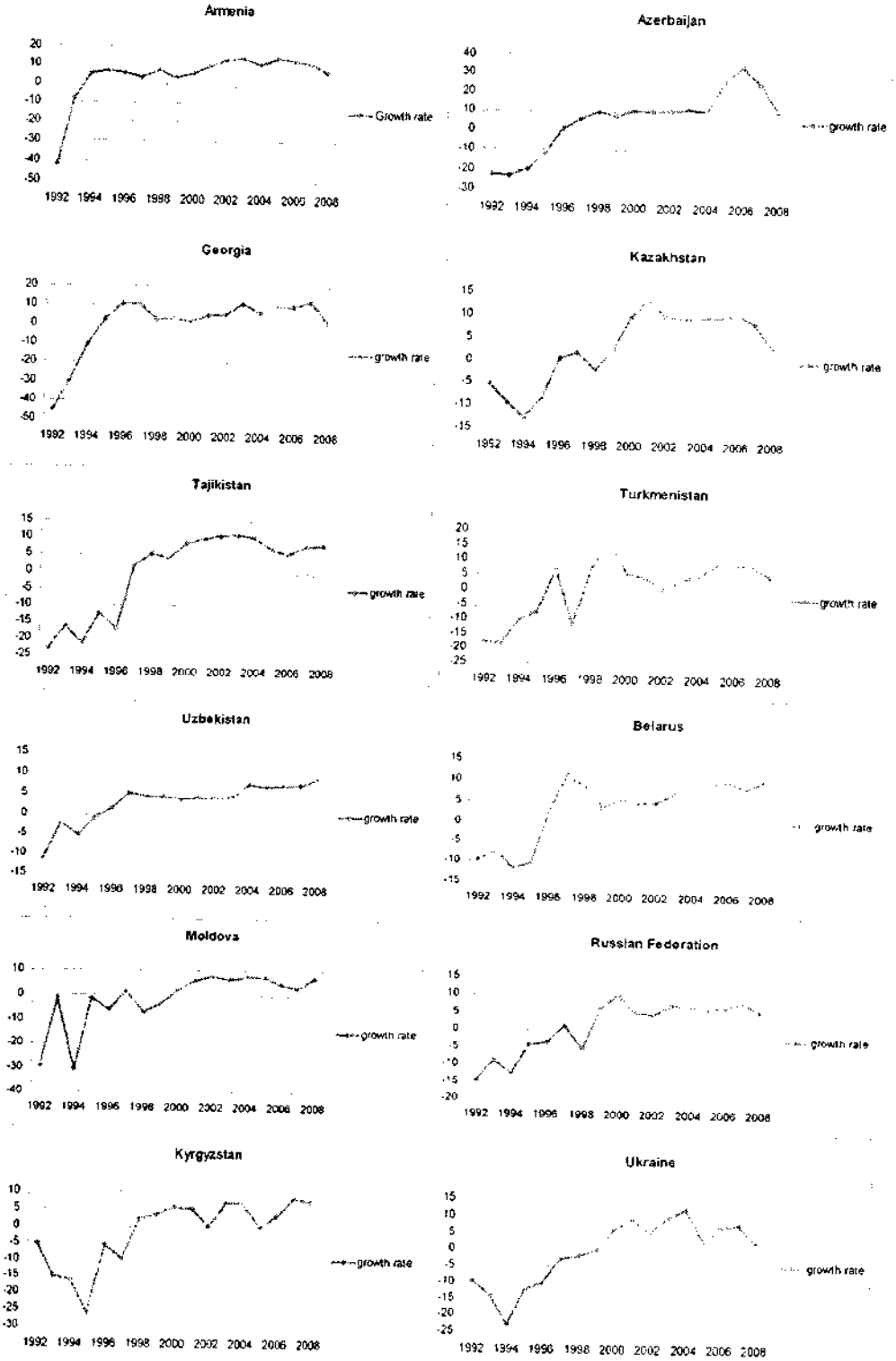
13. HUGHES, J. R. T., 1959. Foreign trade and balanced growth: the historical framework. *American Economic Review*, Vol. 49 Issue 2, p330, 8p

14. KENZHEGUZIN, M., eds., 2005. *Economica Kazakhstana v usloviah globalizatsii: mehanizm modernizatsii i funktsionirovania*. Kazakhstan's economy in a globalized world: a mechanism for upgrading and operation [translated]. Almaty, 392p.

15. KOHLMEY, G., 1966. Economic growth and Foreign Trade. *American Review of Soviet & Eastern European Foreign Trade***,** Vol. 2 Issue 3, p3, 22p

APPENDICES

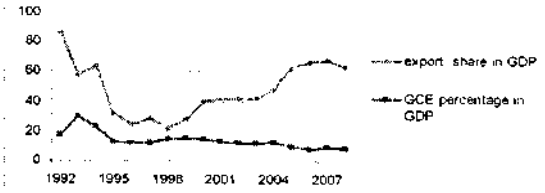
CIS countries' growth rate for 1992-2008[1]



[1] All statistical data was taken from United Nations website: www.unctad .org

CIS countries' export and Government Consumption Expenditure percentage in GDP;1992-2008[1]

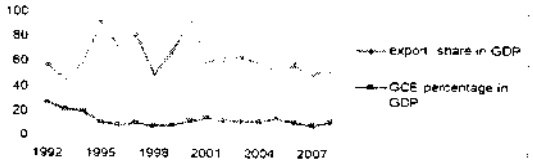
Azerbaijan's export and GCE percentage in GDP



Georgia's export and GCE percentage in GDP

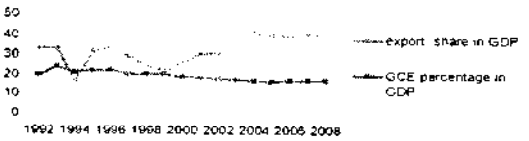
Kazakhstan's export and GCE percentage in GDP

Tajikistan's export and CGE percentage in GDP

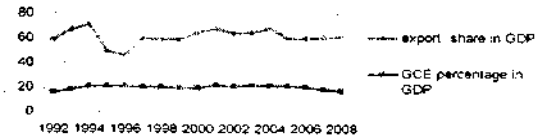


Turkmenistan export and GCE percentage in GDP

Uzbekistan's export and GCE share in GDP



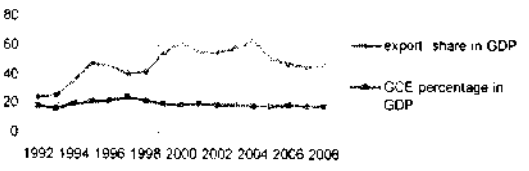
Belarus's export and GCE share in GDP



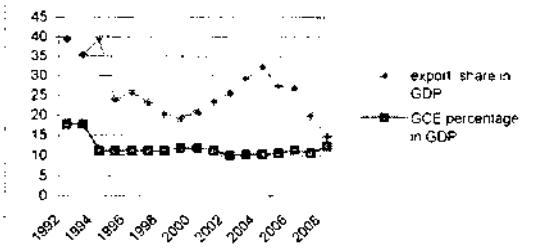
Moldova's export and GCE percentage in GDP

Russian Federation's export and GCE percentage in GDP

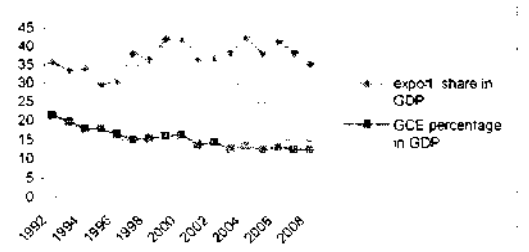
Ukraine's export and GCE percentage in GDP



Armenia's export and GCE percentage in GDP



Kyrgyzstan's export and GCE percentage in GDP



[1] All statistical data was taken from United Nations website: www.unctad .org

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	year	country	GDP	EXP	PCE	GCE	GCF	agriculture	manufacture	construction	services	PRE_1
1	1992	Armenia	-42	39.5	94.5	17.7	1.6	30.0	32.6	6.1	31.3	-14.63
2	1992	Azerbaij	-23	86.2	63.8	17.7	-.7	28.3	23.3	7.7	32.8	.03612
3	1992	Georgia	-45	59.5	109	15.6	25.2	55.1	14.5	6.8	23.6	-17.32
4	1992	Kazakhst	-5.3	77.0	60.9	11.5	27.8	22.9	30.6	8.6	37.8	-5.012
5	1992	Kyrgyzsa	-14	35.6	70.8	21.4	19.9	39.0	36.0	4.1	20.9	-17.45
6	1992	Tajikist	-23	57.4	49.5	27.3	33.5	25.9	37.1	8.7	28.3	-22.41
7	1992	Turkmeni	-18	100	51.9	9.3	42.6	10.6	74.4	4.6	10.4	-21.32
8	1992	Uzbekist	-11	33.9	45.3	20.1	43.9	34.8	27.8	9.3	28.1	-13.33
9	1992	Belarus	-9.6	59.3	51.1	15.7	31.8	23.2	39.9	7.1	29.8	-10.93
10	1992	Moldova	-29	38.1	41.1	16.0	59.8	37.5	29.8	4.9	27.8	-14.90
11	1992	Russia	-15	65.9	34.5	13.9	34.6	7.3	35.5	6.3	50.9	-4.117
12	1992	Ukraine	-9.9	23.9	46.0	17.6	34.5	19.6	42.4	7.1	30.9	-14.43
13	1993	Armenia	-8.8	35.4	90.2	17.2	9.5	50.7	23.1	4.0	22.2	-14.02
14	1993	Azerbaij	-23	57.4	63.8	29.2	21.2	27.0	17.6	7.2	41.3	-15.35
15	1993	Georgia	-29	19.3	106	4.3	1.1	69.7	9.0	.9	20.4	-2.611
16	1993	Kazakhst	-9.2	37.9	68.8	13.5	19.5	16.4	28.6	8.3	46.8	-3.584
17	1993	Kyrgyzsa	-16	33.5	73.5	19.7	11.3	40.0	27.5	5.5	27.0	-10.36
18	1993	Tajikist	-16	46.1	37.0	21.3	38.1	22.2	37.7	9.5	30.6	-12.30
19	1993	Turkmeni	-18	57.5	31.8	10.5	35.8	19.2	51.2	12.0	17.6	-2.466
20	1993	Uzbekist	-2.3	33.7	56.0	23.8	14.2	29.9	25.2	9.6	35.4	-9.551
21	1993	Belarus	-7.6	83.4	54.6	18.0	39.8	16.8	27.7	7.7	47.9	-10.16
22	1993	Moldova	-1.2	51.3	39.2	15.1	54.3	30.3	33.5	3.2	28.7	-14.54
23	1993	Russia	-8.7	32.6	43.6	16.8	26.2	8.2	35.5	7.9	48.4	-5.812
24	1993	Ukraine	-14	25.9	46.6	15.5	35.2	20.0	28.5	6.4	45.0	-6.589
25	1994	Armenia	5.4	39.2	89.5	10.7	22.2	43.5	29.2	6.7	20.6	-10.63
26	1994	Azerbaij	-20	63.9	72.4	22.3	14.5	31.7	12.3	7.1	41.5	-7.115
27	1994	Georgia	-10	23.4	93.6	6.2	15.9	65.1	8.5	1.7	24.7	-3.732
28	1994	Kazakhst	-13	37.1	73.5	10.1	27.2	15.2	29.7	9.8	45.3	-2.659
29	1994	Kyrgyzsa	-20	33.8	74.2	17.9	8.5	39.9	22.1	3.5	34.4	-7.795
30	1994	Tajikist	-21	60.8	47.9	18.6	34.6	21.5	26.0	11.7	40.8	-2.237
31	1994	Turkmeni	-9.8	145	47.9	6.6	41.5	32.9	40.6	6.9	19.6	4.3400
32	1994	Uzbekist	-5.2	16.8	60.8	20.1	17.3	36.2	19.0	7.6	37.1	-5.691
33	1994	Belarus	-12	71.3	56.2	19.4	31.2	14.0	27.9	5.7	52.4	-9.820
34	1994	Moldova	-31	56.4	50.1	21.3	27.3	28.1	29.4	4.6	35.1	-11.01
35	1994	Russia	-13	29.4	44.2	21.2	24.2	6.5	33.9	9.1	50.6	-6.957
36	1994	Ukraine	-2.3	35.4	45.9	18.3	33.5	15.3	37.1	7.8	39.9	-10.10
37	1995	Armenia	6.9	23.9	97.8	10.3	16.9	40.8	24.4	6.5	28.2	-7.872
38	1995	Azerbaij	-12	32.5	77.6	11.8	21.9	26.8	12.2	3.9	40.3	-2.410
39	1995	Georgia	2.6	13.9	76.6	7.3	22.1	44.4	10.3	2.3	43.0	-.2048
40	1995	Kazakhst	-8.2	38.9	65.5	12.5	21.5	12.8	24.4	6.7	56.0	.74201
41	1995	Kyrgyzsa	-5.7	29.5	69.0	18.0	16.9	43.1	13.6	6.5	36.8	-3.360

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	year	country	GDP	EXP	PCE	GCE	GCF	agriculture	manufacture	construction	services	PRE_1
42	1995	Tajikist	-12	112	55.6	10.0	26.4	35.9	33.3	3.1	27.7	-.7147
43	1995	Turkmeni	-7.2	142	55.8	7.7	30.9	16.9	58.6	6.1	18.3	-3.205
44	1995	Uzbekist	-.9	31.6	46.6	20.5	22.3	31.4	20.2	7.9	40.5	-3.132
45	1995	Belarus	-10	49.7	54.4	18.9	22.8	16.8	30.0	5.8	47.4	-5.742
46	1995	Moldova	-1.4	60.1	52.4	23.8	22.9	32.2	25.1	3.9	36.4	-10.42
47	1995	Russia	-4.1	29.3	48.0	17.6	23.4	7.6	27.9	9.1	55.5	-.9930
48	1995	Ukraine	-12	47.1	50.8	19.6	24.6	15.0	34.2	7.5	43.2	-7.897
49	1996	Armenia	5.9	23.2	89.8	10.0	17.9	35.9	24.3	7.6	32.2	-5.157
50	1996	Azerbaij	1.3	24.9	78.4	10.8	25.9	27.4	11.5	10.2	33.9	.93471
51	1996	Georgia	10.5	13.3	94.2	6.9	17.5	34.0	17.3	2.5	42.4	-4.527
52	1996	Kazakhst	.5	35.2	60.2	11.5	14.4	12.7	22.1	4.6	60.6	4.7638
53	1996	Kyrgyzsa	6.6	30.7	73.4	16.6	22.5	49.4	12.3	6.4	31.9	-4.863
54	1996	Tajikist	-17	73.1	52.8	8.1	19.9	38.8	27.7	2.8	30.8	5.3031
55	1996	Turkmeni	6.7	106	44.0	6.3	44.7	13.1	59.4	10.8	16.7	-.7089
56	1996	Uzbekist	1.7	34.2	49.4	19.8	20.6	25.6	21.3	9.4	43.7	-.9124
57	1996	Belarus	2.8	46.3	53.7	18.4	21.0	16.7	32.8	5.2	45.3	-5.857
58	1996	Moldova	-5.9	55.3	61.2	23.2	21.7	29.8	22.8	4.1	41.1	-9.115
59	1996	Russia	-3.6	26.1	46.5	17.4	21.2	7.6	29.7	9.0	53.7	-.5887
60	1996	Ukraine	-10	45.7	52.0	19.5	20.3	13.6	31.2	6.6	48.6	-5.250
61	1997	Armenia	3.3	20.3	90.5	9.8	16.7	31.2	24.0	8.6	36.3	-3.970
62	1997	Azerbaij	5.8	29.0	65.1	11.0	30.0	21.6	9.0	12.5	38.6	5.6338
63	1997	Georgia	10.5	15.6	89.2	8.9	15.6	29.1	16.0	3.8	47.4	-2.744
64	1997	Kazakhst	1.7	34.9	61.6	10.8	13.6	11.9	22.3	4.4	61.4	5.3213
65	1997	Kyrgyzsa	9.0	38.3	60.3	15.1	19.0	44.2	18.2	4.8	32.8	-1.849
66	1997	Tajikist	1.7	81.8	52.4	9.3	17.1	35.1	24.1	3.0	37.7	9.5429
67	1997	Turkmeni	-11	51.3	59.8	11.6	42.5	21.0	37.0	11.8	30.2	.02084
68	1997	Uzbekist	5.2	29.8	53.1	17.9	16.6	31.7	18.4	8.2	41.7	.23790
69	1997	Belarus	11.4	59.8	49.9	17.8	23.5	15.1	34.4	6.2	44.2	-3.474
70	1997	Moldova	1.6	53.2	59.9	25.2	20.8	28.9	20.4	5.3	43.3	-9.028
71	1997	Russia	1.4	24.7	47.9	18.4	19.2	6.8	29.7	8.4	55.1	-1.791
72	1997	Ukraine	-3.0	40.6	50.4	20.9	15.2	14.2	29.0	5.9	50.9	-5.033
73	1998	Armenia	7.3	19.0	86.2	9.5	16.5	33.4	21.7	8.7	36.3	-2.277
74	1998	Azerbaij	10.0	22.7	68.9	13.0	28.7	18.8	8.6	13.4	45.0	4.1257
75	1998	Georgia	3.1	16.5	72.4	9.5	23.4	27.3	13.8	4.9	50.0	-.0300
76	1998	Kazakhst	-1.9	30.3	63.1	9.3	13.6	9.1	12.7	5.2	60.0	9.1260
77	1998	Kyrgyzsa	2.1	36.5	76.0	15.4	13.3	39.2	18.2	4.9	37.7	-3.705
78	1998	Tajikist	5.3	49.7	59.3	6.7	13.3	27.1	21.7	4.2	47.1	9.7579
79	1998	Turkmeni	7.1	32.6	65.8	14.0	39.2	25.9	31.2	13.4	29.5	-.1545
80	1998	Uzbekist	4.4	25.0	51.3	17.7	18.0	31.3	17.4	8.8	42.5	.96302
81	1998	Belarus	8.4	59.1	49.8	17.1	23.0	13.6	33.4	6.6	46.3	-2.552
82	1998	Moldova	-6.5	45.0	65.6	21.3	22.3	28.8	15.6	3.5	49.0	-6.977

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	year	country	GDP	EXP	PCE	GCE	GCF	agriculture	manufacture	construction	services	PRE_1
83	1998	Russia	-5.3	31.2	49.5	16.1	12.9	6.0	30.0	7.4	56.7	1.7709
84	1998	Ukraine	-1.9	41.9	51.6	18.6	17.9	14.1	30.4	5.5	50.0	-4.476
85	1999	Armenia	3.3	20.8	81.2	10.0	15.5	28.9	22.9	8.9	39.3	-1.121
86	1999	Azerbaij	7.4	28.0	63.8	13.1	22.3	19.1	6.3	11.3	40.4	6.1051
87	1999	Georgia	2.9	19.1	68.3	9.0	22.3	26.0	13.4	3.9	51.7	1.6589
88	1999	Kazakhst	2.7	42.5	61.0	9.7	15.0	10.4	14.8	5.0	55.0	8.5905
89	1999	Kyrgyzsa	3.5	42.2	65.4	16.1	15.2	37.6	23.9	3.3	35.2	-5.376
90	1999	Tajikist	3.7	67.9	60.6	7.3	14.5	27.3	23.3	5.8	43.6	10.861
91	1999	Turkmeni	16.5	56.1	63.8	10.0	33.4	24.8	31.4	12.2	31.5	2 5108
92	1999	Uzbekist	4.4	54.3	52.3	17.4	14.4	33.5	16.5	7.8	42.2	79689
93	1999	Belarus	3.4	59.2	49.4	16.4	20.0	14.3	31.8	6.5	47.3	-.2988
94	1999	Moldova	-3.4	52.3	62.9	12.9	19.3	26.2	13.8	3.5	52.4	3.6287
95	1999	Russia	6.4	43.2	45.1	12.3	12.5	7.6	31.1	6.1	55 2	6.2343
96	1999	Ukraine	-.2	54.3	48.2	16.7	14.7	14.1	33.4	4.9	47.5	-2.149
97	2000	Armenia	5.9	23.4	79.1	9.6	15.2	25.2	23.9	11.2	39.8	1.4788
98	2000	Azerbaij	11.1	40.2	52.5	12.3	16.8	17.0	5.6	6.9	37.9	8.8705
99	2000	Georgia	1.8	23.0	73.7	7.0	21.7	21.7	12.9	3.9	56.1	3.6075
100	2000	Kazakhst	9.8	56.6	50.4	9.8	14.8	8.6	17.5	5.5	51.3	11.268
101	2000	Kyrgyzsa	5.2	41.8	53.5	16.4	16.3	36.6	19.4	4.5	32.1	-1.640
102	2000	Tajikist	8.3	92.4	71.4	9.5	7.7	27.3	36.1	2.3	34.3	3.3060
103	2000	Turkmeni	5.5	95.5	28.8	11.8	28.9	22.9	35.0	6.8	35.2	4.8695
104	2000	Uzbekist	4.0	21.7	50.5	15.2	16.0	34.9	15.8	7.0	42.3	2.6735
105	2000	Belarus	5.8	64.7	46.4	15.9	20.7	13.9	31.1	7.4	47.6	4.0148
106	2000	Moldova	2.1	49.6	72.0	12.0	19.6	28.3	15.8	3.0	50.6	.57552
107	2000	Russia	10.0	36.9	37.6	12.3	15.2	6.7	31.4	6.6	55.4	7.5346
108	2000	Ukraine	5.9	62.4	46.1	15.2	16.1	16.8	21.3	3.9	45.5	3.3143
109	2001	Armenia	9.6	25.5	74.1	8.9	15.7	27.9	22.1	10.6	39.4	3.2045
110	2001	Azerbaij	9.9	41.5	48.7	10.8	16.4	16.0	6.7	6.3	37.2	11.112
111	2001	Georgia	4.8	24.5	63.0	7.6	22.5	22.2	13.0	4.1	56.0	5.1001
112	2001	Kazakhst	13.5	45.9	45.9	10.6	18.8	9.3	17.5	5.8	52.4	9.5661
113	2001	Kyrgyzsa	5.3	36.7	51.4	13.9	14.3	37.0	16.9	4.0	34.3	1.0187
114	2001	Tajikist	9.6	66.1	66.8	11.0	7.7	26.1	36.7	3.0	34.2	-.7920
115	2001	Turkmeni	4.3	81.4	40.4	9.3	25.8	24.7	36.6	5.7	33.0	3.7541
116	2001	Uzbekist	4.3	31.2	48.8	14.6	16.7	34.0	16.0	6.6	43.4	4.1763
117	2001	Belarus	4.7	68.4	45.6	17.1	18.8	11.7	30.2	6.6	51.5	2.3762
118	2001	Moldova	6.1	50.1	68.7	11.4	18.4	24.8	17.5	3.4	51.1	2.0317
119	2001	Russia	5.1	36.9	39.1	13.0	17.4	6.8	28.3	7.4	57.5	6.8948
120	2001	Ukraine	9.2	56.5	45.1	15.5	17.3	16.1	19.4	4.0	49.7	3.6245
121	2002	Armenia	13.2	29.4	69.5	7.8	16.9	25.7	20.8	13.8	39.7	8.2435
122	2002	Azerbaij	10.6	42.8	49.1	9.7	27.0	15.1	8.0	9.4	35.1	10.134
123	2002	Georgia	5.5	29.2	60.7	7.6	19.9	20.4	13.6	5.4	55.5	6.9349

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	year	country	GDP	EXP	PCE	GCE	GCF	agriculture	manufacture	construction	services	PRE_1
124	2002	Kazakhst	9.8	46.9	42.6	9.1	21.2	8.5	15.4	6.7	53.5	12.517
125	2002	Kyrgyzsa	.0	39.6	52.6	14.5	13.8	37.3	14.2	3.7	39.5	2.2219
126	2002	Tajikist	10.8	62.9	63.0	10.0	7.4	24.6	36.6	2.3	36.6	-.0125
127	2002	Turkmeni	.3	69.0	35.6	8.7	21.5	22.0	36.0	6.3	35.6	7.5806
128	2002	Uzbekist	4.2	31.6	47.0	14.0	16.5	34.5	16.6	5.6	43.4	3.7971
129	2002	Belarus	5.0	65.1	46.4	16.4	17.3	11.6	29.9	6.7	51.9	2.7413
130	2002	Moldova	7.8	52.5	64.8	15.8	16.9	23.5	16.6	3.3	53.8	-.1902
131	2002	Russia	4.7	35.2	39.8	13.8	15.5	6.6	17.3	5.4	60.4	9.4973
132	2002	Ukraine	5.2	55.1	44.5	14.3	15.8	14.5	19.8	3.7	51.5	5.0665
133	2003	Armenia	14.0	32.2	63.5	7.8	18.5	23.4	21.2	17.1	38.4	11.470
134	2003	Azerbaij	11.2	42.0	45.7	9.4	40.5	13.4	9.3	12.1	34.4	9.1330
135	2003	Georgia	11.1	31.8	55.1	7.5	21.1	20.4	13.7	6.7	54.2	8.7404
136	2003	Kazakhst	9.3	48.4	41.5	8.6	19.6	8.3	15.0	6.3	54.7	13.874
137	2003	Kyrgyzsa	7.0	38.7	59.4	12.8	9.0	36.7	14.5	3.2	41.2	3.3051
138	2003	Tajikist	11.1	63.9	60.0	9.3	7.6	27.0	33.8	3.2	36.0	2.3360
139	2003	Turkmeni	3.3	62.3	43.3	9.2	19.4	20.3	36.9	4.3	38.4	6.0232
140	2003	Uzbekist	4.5	36.9	42.4	13.3	15.8	33.1	18.3	5.2	43.4	5.4121
141	2003	Belarus	7.0	65.1	43.6	16.3	19.0	10.0	31.1	7.1	51.7	2.8115
142	2003	Moldova	6.6	53.3	69.1	15.0	17.7	20.9	17.6	3.4	55.6	-.6436
143	2003	Russia	7.3	35.2	38.5	13.4	15.9	6.7	16.7	6.0	60.4	9.7804
144	2003	Ukraine	9.6	57.8	43.0	14.5	16.8	11.9	20.3	4.2	54.1	5.8385
145	2004	Armenia	10.5	29.7	67.3	8.3	20.3	24.4	14.6	16.7	35.1	10.709
146	2004	Azerbaij	10.2	48.8	41.5	9.6	43.1	11.7	8.9	13.3	34.0	10.703
147	2004	Georgia	6.3	31.6	54.4	10.4	21.0	17.8	13.2	8.8	56.0	8.1867
148	2004	Kazakhst	9.6	52.5	39.8	8.6	19.5	7.4	13.9	6.3	55.7	15.148
149	2004	Kyrgyzsa	7.0	42.6	56.5	13.5	10.8	32.8	16.8	2.7	43.4	2.2042
150	2004	Tajikist	10.3	58.8	55.0	8.8	9.1	21.5	29.8	4.8	44.0	6.1651
151	2004	Turkmeni	5.0	61.7	45.7	9.6	17.4	19.9	36.5	4.3	39.3	5.5625
152	2004	Uzbekist	7.7	40.6	38.4	12.7	17.8	31.1	19.9	5.3	43.7	6.3527
153	2004	Belarus	11.4	67.8	39.9	15.3	21.3	10.2	33.0	7.4	49.4	3.5050
154	2004	Moldova	7.4	51.2	66.1	11.1	19.6	19.9	16.5	3.9	56.8	3.7461
155	2004	Russia	7.1	34.4	37.3	12.4	15.5	6.0	17.7	5.7	57.5	9.9575
156	2004	Ukraine	12.1	63.6	39.8	13.0	15.7	11.7	20.1	4.5	55.7	9.0813
157	2005	Armenia	13.9	28.8	64.0	8.9	24.9	20.3	14.2	23.4	33.2	14.310
158	2005	Azerbaij	26.4	62.9	30.3	7.5	29.8	9.8	7.0	10.1	27.0	14.607
159	2005	Georgia	9.6	33.7	48.9	9.0	20.5	16.5	13.5	9.0	57.0	11.050
160	2005	Kazakhst	9.7	53.5	35.8	8.1	22.3	6.6	12.5	8.2	54.2	17.439
161	2005	Kyrgyzsa	-.2	38.3	60.7	12.6	11.8	31.3	14.1	3.0	46.7	2.7901
162	2005	Tajikist	6.7	54.3	58.3	10.5	8.4	23.8	25.6	5.1	45.6	5.1230
163	2005	Turkmeni	9.0	65.0	33.3	9.5	16.5	20.7	36.5	5.0	37.8	9.6359
164	2005	Uzbekist	7.1	39.7	36.5	11.8	16.5	28.1	23.2	5.5	43.2	6.6773

correlateregressresult1992-2006.sav

	year	country	GDP	EXP	PCE	GCE	GCF	agriculture	manufacture	construction	services	PRE_1
165	2005	Belarus	9.4	59.8	37.3	14.9	20.5	9.6	33.4	7.9	49.0	3.8851
166	2005	Moldova	7.5	51.2	67.1	11.8	22.2	19.1	15.5	3.9	58.7	2.5504
167	2005	Russia	6.4	35.2	35.8	12.0	14.5	5.4	18.8	5.4	56.1	13.887
168	2005	Ukraine	2.7	51.5	41.9	13.1	16.3	10.3	21.9	4.1	55.3	6.1377
169	2006	Armenia	13.3	23.4	60.7	9.6	27.6	19.2	11.3	28.7	33.5	17.976
170	2006	Azerbaij	34.5	66.5	24.8	5.6	22.0	7.5	5.7	8.0	23.2	17.729
171	2006	Georgia	9.4	32.9	51.5	11.4	19.4	12.8	12.6	7.8	62.5	8.6357
172	2006	Kazakhst	10.6	51.1	34.1	6.9	21.4	7.5	13.8	6.9	54.9	18.154
173	2006	Kyrgyzsa	2.7	41.7	67.6	13.2	14.7	33.0	12.9	3.1	46.9	.50407
174	2006	Tajikist	7.0	58.2	54.2	9.0	7.9	24.1	29.7	4.3	41.8	6.0677
175	2006	Turkmeni	9.0	63.0	38.2	8.9	16.7	20.3	36.6	4.5	38.5	8.9298
176	2006	Uzbekist	7.3	41.2	37.3	12.0	16.0	30.7	20.5	5.3	43.4	7.0164
177	2006	Belarus	9.9	60.1	36.4	13.9	21.2	9.2	32.4	9.1	49.3	5.9524
178	2006	Moldova	4.0	45.3	66.2	12.7	23.8	17.6	14.1	4.6	61.0	2.1204
179	2006	Russia	6.7	33.8	33.9	12.2	14.1	4.8	18.9	5.8	56.8	10.595
180	2006	Ukraine	7.1	46.6	41.5	13.1	16.9	8.4	20.0	4.9	58.1	6.9382
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Trade development and growth 1992-2008.sav

	years	country	GDPPP	TD	PRE_1
1	1992	Armenia	321.6	100.30	7.96584
2	1992	Azerbaij	671.8	140.80	3.70137
3	1992	Belarus	1630.0	117.10	4.91402
4	1992	Georgia	693.8	93.30	11.01767
5	1992	Kazakhst	1522.0	166.50	11.50273
6	1992	Kyrgyzst	196.8	83.20	6.40962
7	1992	Moldova	530.6	93.00	3.82264
8	1992	Russia	3112.0	117.40	9.52207
9	1992	Tajikist	342.8	105.30	10.49219
10	1992	Turkmeni	641.2	203.60	1.88241
11	1992	Ukraine	1438.0	45.80	9.05722
12	1992	Uzbekist	604.5	77.00	9.68376
13	1993	Armenia	300.2	95.50	5.45971
14	1993	Azerbaij	508.4	133.30	6.47025
15	1993	Belarus	1506.0	151.00	9.60292
16	1993	Georgia	499.1	64.30	11.26020
17	1993	Kazakhst	1393.0	84.60	7.13720
18	1993	Kyrgyzst	165.2	74.70	5.41929
19	1993	Moldova	524.9	90.90	3.28514
20	1993	Russia	2841.0	73.10	9.48165
21	1993	Tajikist	282.0	116.30	5.50013
22	1993	Turkmeni	632.8	95.40	6.12584
23	1993	Ukraine	1236.0	52.10	7.32587
24	1993	Uzbekist	577.3	64.20	9.66355
25	1994	Armenia	324.1	112.30	2.69084
26	1994	Azerbaij	402.6	143.10	4.69170
27	1994	Belarus	1332.0	155.40	5.68203
28	1994	Georgia	455.6	51.90	-9.15828
29	1994	Kazakhst	1231.0	84.20	6.85425
30	1994	Kyrgyzst	131.0	73.90	3.62053
31	1994	Moldova	363.7	117.10	2.79189
32	1994	Russia	2481.0	54.20	7.01594
33	1994	Tajikist	218.7	128.10	2.38206
34	1994	Turkmeni	510.2	289.00	3.07484
35	1994	Ukraine	955.5	74.00	5.50013
36	1994	Uzbekist	535.7	37.40	5.33845
37	1995	Armenia	353.7	85.10	1.55342
38	1995	Azerbaij	350.5	85.90	4.71191
39	1995	Belarus	1195.0	103.80	2.40789
40	1995	Georgia	475.6	46.30	8.99659
41	1995	Kazakhst	1143.0	82.40	4.44917
42	1995	Kyrgyzst	122.6	71.90	4.38854

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Trade development and growth 1992-2008.sav

	years	country	GDPPP	TD	PRE_1
43	1995	Moldova	360.6	128.00	4.46377
44	1995	Russia	2382.0	55.20	5.58097
45	1995	Tajikist	188.8	233.30	.38120
46	1995	Turkmeni	463.1	287.30	2.84691
47	1995	Ukraine	843.5	97.30	2.45798
48	1995	Uzbekist	520.6	60.30	3.84285
49	1996	Armenia	380.6	79.20	1.16942
50	1996	Azerbaij	351.1	80.80	3.23653
51	1996	Belarus	1231.0	96.70	3.79682
52	1996	Georgia	533.6	55.40	7.23826
53	1996	Kazakhst	1164.0	71.20	3.78222
54	1996	Kyrgyzst	128.6	87.20	1.33111
55	1996	Moldova	341.9	129.20	8.64740
56	1996	Russia	2299.0	74.90	4.89381
57	1996	Tajikist	154.9	136.50	11.29501
58	1996	Turkmeni	485.2	212.70	9.39520
59	1996	Ukraine	763.9	93.90	3.15568
60	1996	Uzbekist	519.9	68.80	.64955
61	1997	Armenia	397.9	78.60	.56310
62	1997	Azerbaij	368.1	82.00	5.41929
63	1997	Belarus	1377.0	125.50	8.86972
64	1997	Georgia	597.9	52.70	6.28835
65	1997	Kazakhst	1202.0	72.30	3.84285
66	1997	Kyrgyzst	140.2	84.50	1.20984
67	1997	Moldova	350.9	127.60	7.47518
68	1997	Russia	2336.0	472.20	5.11613
69	1997	Tajikist	155.4	167.20	17.78266
70	1997	Turkmeni	423.4	133.70	7.35391
71	1997	Ukraine	747.4	84.30	1.01334
72	1997	Uzbekist	537.9	59.90	2.89294
73	1998	Armenia	430.5	71.80	1.27608
74	1998	Azerbaij	401.6	77.20	5.68203
75	1998	Belarus	1501.0	123.00	.02302
76	1998	Georgia	624.3	56.40	7.07657
77	1998	Kazakhst	1197.0	65.10	4.81297
78	1998	Kyrgyzst	140.8	94.50	1.15482
79	1998	Moldova	331.7	116.80	1.79595
80	1998	Russia	2216.0	55.80	3.35779
81	1998	Tajikist	161.4	107.20	5.71684
82	1998	Turkmeni	447.6	103.40	6.92949
83	1998	Ukraine	739.8	86.90	2.63020
84	1998	Uzbekist	553.1	51.00	4.36854

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Trade development and growth 1992-2008.sav

	years	country	GDPPP	TD	PRE_1
85	1999	Armenia	447.2	70.60	1.33111
86	1999	Azerbaij	428.1	69.90	1.18963
87	1999	Belarus	1560.0	88.80	5.00946
88	1999	Georgia	650.1	58.80	1.05376
89	1999	Kazakhst	1244.0	82.60	3.75640
90	1999	Kyrgyzst	143.6	48.30	3.17589
91	1999	Moldova	324.8	54.00	2.02388
92	1999	Russia	2364.0	69.40	1.08858
93	1999	Tajikist	165.2	84.30	4.09998
94	1999	Turkmeni	514.9	128.30	12.99271
95	1999	Ukraine	745.9	48.00	3.23653
96	1999	Uzbekist	569.3	54.10	2.00367
97	2000	Armenia	475.9	68.70	.94710
98	2000	Azerbaij	472.1	88.30	4.90841
99	2000	Belarus	1658.0	67.30	.66415
100	2000	Georgia	670.2	47.80	3.27695
101	2000	Kazakhst	1377.0	105.70	8.42508
102	2000	Kyrgyzst	149.3	60.40	.73039
103	2000	Moldova	336.6	90.10	5.27220
104	2000	Russia	2611.0	72.00	1.61406
105	2000	Tajikist	176.8	102.50	7.77834
106	2000	Turkmeni	535.9	86.60	4.56483
107	2000	Ukraine	797.4	78.90	3.00860
108	2000	Uzbekist	584.0	53.70	2.08451
109	2001	Armenia	523.3	78.10	2.84691
110	2001	Azerbaij	515.1	91.40	5.53494
111	2001	Belarus	1745.0	93.40	5.93916
112	2001	Georgia	711.2	49.30	-2.97379
113	2001	Kazakhst	1569.0	92.90	5.83810
114	2001	Kyrgyzst	155.4	55.30	-1.76114
115	2001	Moldova	363.3	90.70	5.39347
116	2001	Russia	2756.0	65.30	.25993
117	2001	Tajikist	191.5	123.40	12.00239
118	2001	Turkmeni	551.3	98.90	7.05075
119	2001	Ukraine	878.8	110.30	9.35478
120	2001	Uzbekist	602.3	62.60	.28576
121	2002	Armenia	593.3	118.10	10.93122
122	2002	Azerbaij	565.3	92.80	5.81789
123	2002	Belarus	1842.0	105.20	8.32403
124	2002	Georgia	759.5	54.20	1.98346
125	2002	Kazakhst	1719.0	94.00	6.06042
126	2002	Kyrgyzst	153.7	60.20	-.77081

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Trade development and growth 1992-2008.sav

	years	country	GDPPP	TD	PRE_1
127	2002	Moldova	398.8	109.90	9.27393
128	2002	Russia	2900.0	53.50	-2.12493
129	2002	Tajikist	210.0	138.90	15.13505
130	2002	Turkmeni	540.1	82.40	3.71597
131	2002	Ukraine	932.8	75.00	2.22038
132	2002	Uzbekist	619.8	62.50	-.30597
133	2003	Armenia	676.5	82.20	3.67555
134	2003	Azerbaij	623.6	107.50	8.78888
135	2003	Belarus	1980.0	134.00	14.14473
136	2003	Georgia	853.7	80.00	3.23092
137	2003	Kazakhst	1871.0	91.50	5.55515
138	2003	Kyrgyzst	162.9	84.00	4.03935
139	2003	Moldova	433.2	101.20	7.51560
140	2003	Russia	3129.0	68.20	.84605
141	2003	Tajikist	230.8	137.60	14.87231
142	2003	Turkmeni	549.5	110.50	9.39520
143	2003	Ukraine	1030.0	113.00	9.90047
144	2003	Uzbekist	639.4	50.10	-2.81210
145	2004	Armenia	747.1	83.30	3.89787
146	2004	Azerbaij	681.2	121.50	11.61838
147	2004	Belarus	2216.0	132.80	13.90220
148	2004	Georgia	918.3	75.30	2.28101
149	2004	Kazakhst	2037.0	95.10	6.28274
150	2004	Kyrgyzst	172.7	83.70	3.97871
151	2004	Moldova	473.4	102.90	7.85918
152	2004	Russia	3370.0	68.50	.90668
153	2004	Tajikist	251.6	127.10	12.75018
154	2004	Turkmeni	568.5	112.80	9.86005
155	2004	Ukraine	1165.0	119.50	11.21417
156	2004	Uzbekist	680.5	73.80	1.97785
157	2005	Armenia	850.8	81.20	3.47345
158	2005	Azerbaij	853.5	115.80	10.46637
159	2005	Belarus	2437.0	109.90	9.27393
160	2005	Georgia	1019.0	68.60	.92689
161	2005	Kazakhst	2220.0	65.40	.28015
162	2005	Kyrgyzst	170.6	54.60	1.90262
163	2005	Moldova	517.0	102.30	7.73792
164	2005	Russia	3603.0	71.30	1.47256
165	2005	Tajikist	265.1	112.70	9.83983
166	2005	Turkmeni	614.1	123.60	12.04281
167	2005	Ukraine	1205.0	82.10	3.65534
168	2005	Uzbekist	721.2	73.10	1.83637

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Trade development and growth 1992-2008.sav

	years	country	GDPPP	TD	PRE_1
169	2006	Armenia	963.7	83.80	3.99893
170	2006	Azerbaij	1136.0	69.80	1.16942
171	2006	Belarus	2694.0	97.60	6.78801
172	2006	Georgia	1128.0	66.30	.46204
173	2006	Kazakhst	2438.0	91.50	5.55515
174	2006	Kyrgyzst	173.9	57.30	1.35693
175	2006	Moldova	549.2	83.60	3.95850
176	2006	Russia	3862.0	72.20	1.65446
177	2006	Tajikist	275.8	102.10	7.69749
178	2006	Turkmeni	660.2	117.30	10.76953
179	2006	Ukraine	1303.0	96.10	6.48485
180	2006	Uzbekist	765.4	74.20	2.05869
181	2007	Armenia	1069.0	67.80	.76520
182	2007	Azerbaij	1405.0	101.30	7.53581
183	2007	Belarus	2927.0	128.10	12.95229
184	2007	Georgia	1283.0	89.10	5.07010
185	2007	Kazakhst	2631.0	111.50	9.59731
186	2007	Kyrgyzst	185.9	107.00	8.68782
187	2007	Moldova	571.9	92.80	5.81789
188	2007	Russia	4192.0	76.30	2.48312
189	2007	Tajikist	292.9	117.20	10.74932
190	2007	Turkmeni	706.7	121.10	11.53754
191	2007	Ukraine	1412.0	95.40	6.34337
192	2007	Uzbekist	813.2	72.60	1.73532
193	2008	Armenia	1140.0	63.20	.16449
194	2008	Azerbaij	1539.0	88.20	4.88820
195	2008	Belarus	3235.0	131.00	13.53840
196	2008	Georgia	1326.0	75.80	2.38206
197	2008	Kazakhst	2696.0	94.90	6.24232
198	2008	Kyrgyzst	197.5	93.70	5.99979
199	2008	Moldova	618.9	132.20	13.78093
200	2008	Russia	4444.0	62.90	.22512
201	2008	Tajikist	310.9	113.80	10.06215
202	2008	Turkmeni	732.3	115.80	10.46637
203	2008	Ukraine	1451.0	96.70	6.60611
204	2008	Uzbekist	676.9	81.90	3.61492
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Nonparametric Correlations

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Correlations

			GDP	EXP	PCE	GCE
Spearman's rho	GDP	Correlation Coefficient	1.000	.082	.162	-.283**
		Sig. (2-tailed)	.	.004	.142	.009
		N	84	84	84	84
	EXP	Correlation Coefficient	.082	1.000	-.281**	.087
		Sig. (2-tailed)	.004	.	.010	.434
		N	84	84	84	84
	PCE	Correlation Coefficient	.162	-.281**	1.000	-.314**
		Sig. (2-tailed)	.142	.010	.	.004
		N	84	84	84	84
	GCE	Correlation Coefficient	-.283**	.087	-.314**	1.000
		Sig. (2-tailed)	.009	.434	.004	.
		N	84	84	84	84
	GCF	Correlation Coefficient	-.172	.058	-.550**	.012
		Sig. (2-tailed)	.119	.602	.000	.911
		N	84	84	84	84
	agriculture	Correlation Coefficient	.007	-.112	.541**	-.105
		Sig. (2-tailed)	.951	.311	.000	.341
		N	84	84	84	84
	manufacture	Correlation Coefficient	-.275*	.297**	-.631**	.112
		Sig. (2-tailed)	.011	.006	.000	.309
		N	84	84	84	84
	construction	Correlation Coefficient	.054	-.118	-.295**	.185
		Sig. (2-tailed)	.624	.287	.006	.092
		N	84	84	84	84
	services	Correlation Coefficient	.246*	-.096	-.150	.195
		Sig. (2-tailed)	.024	.385	.172	.075
		N	84	84	84	84

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NONPAR CORR
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Nonparametric Correlations

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Correlations

			GDP	EXP	PCE	GCE
Spearman's rho	GDP	Correlation Coefficient	1.000	.185	-.162	-.374**
		Sig. (2-tailed)	.	.001	.114	.000
		N	96	96	96	96
	EXP	Correlation Coefficient	.185	1.000	-.375**	.145
		Sig. (2-tailed)	.001	.	.000	.160
		N	96	96	96	96
	PCE	Correlation Coefficient	-.162	-.375**	1.000	-.087
		Sig. (2-tailed)	.114	.000	.	.397
		N	96	96	96	96
	GCE	Correlation Coefficient	-.374**	.145	-.087	1.000
		Sig. (2-tailed)	.000	.160	.397	.
		N	96	96	96	96
	GCF	Correlation Coefficient	.234*	-.086	-.132	-.281**
		Sig. (2-tailed)	.022	.405	.199	.006
		N	96	96	96	96
	agriculture	Correlation Coefficient	-.338**	-.241*	.566**	.057
		Sig. (2-tailed)	.001	.018	.000	.581
		N	96	96	96	96
	manufacture	Correlation Coefficient	-.119	.646**	-.171	.216*
		Sig. (2-tailed)	.246	.000	.095	.035
		N	96	96	96	96
	construction	Correlation Coefficient	.432**	-.206*	-.233*	-.233*
		Sig. (2-tailed)	.000	.044	.023	.022
		N	96	96	96	96
	services	Correlation Coefficient	-.196	-.148	-.111	.168
		Sig. (2-tailed)	.056	.150	.283	.102
		N	96	96	96	96

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Nonparametric Correlations

[DataSet3] H:\correlatregressresult1992-2006.sav

Correlations

			gdp growth rate	export share in GDP
Spearman's rho	gdp growth rate	Correlation Coefficient	1.000	.200**
		Sig. (2-tailed)	.	.007
		N	180	180
	export share in GDP	Correlation Coefficient	.200**	1.000
		Sig. (2-tailed)	.007	.
		N	180	180
	private consumption expenditure share in GDP	Correlation Coefficient	-.180*	-.384**
		Sig. (2-tailed)	.016	.000
		N	180	180
	government consumption expenditure share in GDP	Correlation Coefficient	-.475**	-.030
		Sig. (2-tailed)	.000	.685
		N	180	180
	gross capital formation share in GDP	Correlation Coefficient	-.171*	-.059
		Sig. (2-tailed)	022	.429
		N	180	180
	agriculture share in GDP	Correlation Coefficient	-.271**	-.210**
		Sig. (2-tailed)	.000	.005
		N	180	180
	manufacture share in GDP	Correlation Coefficient	-.300**	.400**
		Sig. (2-tailed)	.000	.000
		N	180	180
	construction share in GDP	Correlation Coefficient	.091	-.223**
		Sig. (2-tailed)	.222	.003
		N	180	180
	services share in GDP	Correlation Coefficient	.208**	-.027
		Sig. (2-tailed)	.005	.717
		N	180	180

Excluded Variables[h]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics: Tolerance
1	export share in GDP	.109[a]	1.632	.001	.122	.985
	private consumption expenditure share in GDP	-.312[a]	-4.960	000	-.349	.990
	gross capital formation share in GDP	-.161[a]	-2.438	.016	-.180	.995
	agriculture share in GDP	-.306[a]	-4.869	.000	-.344	.998
	manufacture share in GDP	-.244[a]	-3.748	.000	-.271	.975
	construction share in GDP	.125[a]	1.879	.003	.140	.999
	services share in GDP	.314[a]	5.019	.000	.353	.999
2	export share in GDP	.165[b]	2.626	.009	.194	.959
	private consumption expenditure share in GDP	-.249[b]	-3.998	.000	-.289	.929
	gross capital formation share in GDP	-.070[b]	-1.056	.292	-.079	.899
	agriculture share in GDP	-.186[b]	-2.439	.016	-.181	.656
	manufacture share in GDP	-.151[b]	-2.252	.026	-.167	.854
	construction share in GDP	.183[b]	2.944	.004	.217	.970
3	export share in GDP	.071[c]	1.047	.297	.079	.775
	gross capital formation share in GDP	-.190[c]	-2.845	.005	-.210	.774
	agriculture share in GDP	.002[c]	.021	.983	.002	.395
	manufacture share in GDP	-.274[c]	-4.129	.000	-.298	.751
	construction share in GDP	.156[c]	2.586	.011	.192	.956
4	export share in GDP	.206[d]	2.969	.003	.220	.661
	gross capital formation share in GDP	-.166[d]	-2.564	.011	-.191	.767
	agriculture share in GDP	-.184[d]	-1.844	.067	-.138	.329
	construction share in GDP	.123[d]	2.087	.038	.156	.935
5	gross capital formation share in GDP	-.131[e]	-2.003	.047	-.151	.731
	agriculture share in GDP	-.211[e]	-2 163	.032	-.162	.326
	construction share in GDP	.169[e]	2.894	.004	.215	.890
6	gross capital formation share in GDP	-.202[f]	-3.076	.002	-.228	.669
	agriculture share in GDP	-.085[f]	-.741	.460	-.056	.232
7	agriculture share in GDP	-.123[g]	-1.094	.275	-.083	.229

a. Predictors in the Model: (Constant), government consumption expenditure share in GDP

b. Predictors in the Model: (Constant), government consumption expenditure share in GDP, services share in GDP

c. Predictors in the Model: (Constant), government consumption expenditure share in GDP, services share in GDP, private consumption expenditure share in GDP

d. Predictors in the Model: (Constant), government consumption expenditure share in GDP, services share in GDP, private consumption expenditure share in GDP, manufacture share in GDP

e. Predictors in the Model: (Constant), government consumption expenditure share in GDP, services share in GDP, private consumption expenditure share in GDP, manufacture share in GDP, export share in GDP

f. Predictors in the Model: (Constant), government consumption expenditure share in GDP, services share in GDP, private consumption expenditure share in GDP, manufacture share in GDP, export share in GDP, construction share in GDP

g. Predictors in the Model: (Constant), government consumption expenditure share in GDP, services share in GDP, private consumption expenditure share in GDP, manufacture share in GDP, export share in GDP, construction share in GDP, gross capital formation share in GDP

h. Dependent Variable: gdp growth rate

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.726	2.277		6.907	.000
	government consumption expenditure share in GDP	-1.102	.161	-.456	-6.842	.000
2	(Constant)	2.164	3.444		.628	.531
	government consumption expenditure share in GDP	-1.120	.151	-.464	-7.410	.000
	services share in GDP	.324	.065	.314	5.019	.000
3	(Constant)	15.619	4.718		3.310	.001
	government consumption expenditure share in GDP	-1.177	.146	-.487	-8.070	.000
	services share in GDP	.261	.064	.252	4.068	.000
	private consumption expenditure share in GDP	-.178	.044	-.249	-3.998	.000
4	(Constant)	30.138	5.724		5.265	.000
	government consumption expenditure share in GDP	-1.088	.141	-.451	-7.705	.000
	services share in GDP	.138	.068	.134	2.035	.043
	private consumption expenditure share in GDP	-.243	.045	-.341	-5.350	.000
	manufacture share in GDP	-.291	.070	-.274	-4.129	.000
5	(Constant)	23.210	6.067		3.826	.000
	government consumption expenditure share in GDP	-.982	.143	-.407	-6.879	.000
	services share in GDP	.160	.067	.155	2.393	.018
	private consumption expenditure share in GDP	-.197	.047	-.276	-4.183	.000
	manufacture share in GDP	-.376	.075	-.354	-5.038	.000
	export share in GDP	.143	.048	.206	2.969	.003
6	(Constant)	14.063	6.731		2.089	.038
	government consumption expenditure share in GDP	-.951	.140	-.394	-6.779	.000
	services share in GDP	.213	.068	.206	3.123	.002
	private consumption expenditure share in GDP	-.165	.047	-.232	-3.497	.001
	manufacture share in GDP	-.364	.073	-.343	-4.974	.000
	export share in GDP	.174	.049	.250	3.593	.000
	construction share in GDP	.542	.187	.169	2.894	.004
7	(Constant)	23.171	7.208		3.215	.002
	government consumption expenditure share in GDP	-.950	.137	-.393	-6.939	.000
	services share in GDP	.149	.070	.145	2.145	.033
	private consumption expenditure share in GDP	-.214	.049	-.300	-4.386	.000
	manufacture share in GDP	-.320	.073	-.301	-4.383	.000
	export share in GDP	.151	.048	.217	3.155	.002
	construction share in GDP	.714	191	.223	3.733	.000
	gross capital formation share in GDP	-.252	.082	-.202	-3.076	.002

a. Dependent Variable: gdp growth rate

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
6	construction share in GDP	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
7	gross capital formation share in GDP	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a Dependent Variable: gdp growth rate

Model Summary[h]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.456[a]	.208	.204	9.9795	
2	.554[b]	.307	.299	9.3636	
3	.604[c]	.365	.354	8.9907	
4	.649[d]	.421	.408	8.6068	
5	.670[e]	.449	.433	8.4208	
6	.689[f]	.474	.456	8.2478	
7	.708[g]	.502	.481	8.0532	1.640

a. Predictors: (Constant), government consumption expenditure share in GDP

b. Predictors: (Constant), government consumption expenditure share in GDP, services share in GDP

c. Predictors: (Constant), government consumption expenditure share in GDP, services share in GDP, private consumption expenditure share in GDP

d. Predictors: (Constant), government consumption expenditure share in GDP, services share in GDP, private consumption expenditure share in GDP, manufacture share in GDP

e. Predictors: (Constant), government consumption expenditure share in GDP, services share in GDP, private consumption expenditure share in GDP, manufacture share in GDP, export share in GDP

f. Predictors: (Constant), government consumption expenditure share in GDP, services share in GDP, private consumption expenditure share in GDP, manufacture share in GDP, export share in GDP, construction share in GDP

g. Predictors: (Constant), government consumption expenditure share in GDP, services share in GDP, private consumption expenditure share in GDP, manufacture share in GDP, export share in GDP, construction share in GDP, gross capital formation share in GDP

h. Dependent Variable: gdp growth rate

ANOVA[h]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4662.134	1	4662.134	46.813	.000[a]
	Residual	17727.113	178	99.591		
	Total	22389.247	179			
2	Regression	6870.516	2	3435.258	39.181	.000[b]
	Residual	15518.731	177	87.676		
	Total	22389.247	179			
3	Regression	8162.709	3	2720.903	33.661	.000[c]
	Residual	14226.538	176	80.833		
	Total	22389.247	179			
4	Regression	9425.703	4	2356.426	31.810	.000[d]
	Residual	12963.544	175	74.077		
	Total	22389.247	179			
5	Regression	10050.857	5	2010.171	28.348	.000[e]
	Residual	12338.390	174	70.910		
	Total	22389.247	179			
6	Regression	10620.605	6	1770.101	26.021	.000[f]
	Residual	11768.642	173	68.027		
	Total	22389.247	179			
7	Regression	11234.378	7	1604.911	24.747	.000[g]
	Residual	11154.869	172	64.854		
	Total	22389.247	179			

a. Predictors: (Constant), government consumption expenditure share in GDP

b. Predictors: (Constant), government consumption expenditure share in GDP, services share in GDP

c. Predictors: (Constant), government consumption expenditure share in GDP, services share in GDP, private consumption expenditure share in GDP

d. Predictors: (Constant), government consumption expenditure share in GDP, services share in GDP, private consumption expenditure share in GDP, manufacture share in GDP

e. Predictors: (Constant), government consumption expenditure share in GDP, services share in GDP, private consumption expenditure share in GDP, manufacture share in GDP, export share in GDP

f. Predictors: (Constant), government consumption expenditure share in GDP, services share in GDP, private consumption expenditure share in GDP, manufacture share in GDP, export share in GDP, construction share in GDP

g. Predictors: (Constant), government consumption expenditure share in GDP, services share in GDP, private consumption expenditure share in GDP, manufacture share in GDP, export share in GDP, construction share in GDP, gross capital formation share in GDP

h. Dependent Variable: gdp growth rate

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```

Nonparametric Correlations

[DataSet6] H:\Armenia data.sav

Correlations

			gdp growth rate	export share in GDP
Spearman's rho	gdp growth rate	Correlation Coefficient	1.000	.512
		Sig. (2-tailed)	.	.051
		N	15	15
	export share in GDP	Correlation Coefficient	.512	1.000
		Sig. (2-tailed)	.051	.
		N	15	15
	private consumption expenditure share in GDP	Correlation Coefficient	-.828**	-.223
		Sig. (2-tailed)	.000	.423
		N	15	15
	government consumption expenditure share in GDP	Correlation Coefficient	-.854**	-.270
		Sig. (2-tailed)	.000	.331
		N	15	15
	gross capital formation share in GDP	Correlation Coefficient	.691**	.629*
		Sig. (2-tailed)	.004	.012
		N	15	15
	agriculture share in GDP	Correlation Coefficient	-.725**	-.032
		Sig. (2-tailed)	.002	.909
		N	15	15
	manufacture share in GDP	Correlation Coefficient	-.796**	-.138
		Sig. (2-tailed)	.000	.625
		N	15	15
	construction share in GDP	Correlation Coefficient	.850**	.179
		Sig. (2-tailed)	.000	.524
		N	15	15
	services share in GDP	Correlation Coefficient	.336	-.261
		Sig. (2-tailed)	.221	.347
		N	15	15

```
NONPAR CORR
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  /PRINT=SPEARMAN TWOTAIL NOSIG
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Nonparametric Correlations

[DataSet4] H:\Azerbaijan data.sav

Correlations

			gdp growth rate	export share in GDP
Spearman's rho	gdp growth rate	Correlation Coefficient	1.000	.340
		Sig. (2-tailed)	.	.216
		N	15	15
	export share in GDP	Correlation Coefficient	.340	1.000
		Sig. (2-tailed)	.216	.
		N	15	15
	private consumption expenditure share in GDP	Correlation Coefficient	-.756**	-.585*
		Sig. (2-tailed)	.001	.022
		N	15	15
	government consumption expenditure share in GDP	Correlation Coefficient	-.817**	-.469
		Sig. (2-tailed)	.000	.078
		N	15	15
	gross capital formation share in GDP	Correlation Coefficient	.507	-.057
		Sig. (2-tailed)	.054	.840
		N	15	15
	agriculture share in GDP	Correlation Coefficient	-.925**	-.413
		Sig. (2-tailed)	.000	.126
		N	15	15
	manufacture share in GDP	Correlation Coefficient	-.771**	-.147
		Sig. (2-tailed)	.001	.602
		N	15	15
	construction share in GDP	Correlation Coefficient	.286	-.243
		Sig. (2-tailed)	.302	.383
		N	15	15
	services share in GDP	Correlation Coefficient	-.486	-.599*
		Sig. (2-tailed)	.066	.018
		N	15	15

```
NONPAR CORR
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```

Nonparametric Correlations

```
[DataSet5] H:\Georgia data.sav
```

Correlations

			GDP growth	export share in GDP
Spearman's rho	GDP growth	Correlation Coefficient	1.000	.620*
		Sig. (2-tailed)	.	.014
		N	15	15
	export share in GDP	Correlation Coefficient	.620*	1.000
		Sig. (2-tailed)	.014	.
		N	15	15
	private consumption expenditure share in GDP	Correlation Coefficient	-.558*	-.886**
		Sig. (2-tailed)	.031	.000
		N	15	15
	government consumption expenditure share in GDP	Correlation Coefficient	.145	.243
		Sig. (2-tailed)	.606	.382
		N	15	15
	gross capital formation share in GDP	Correlation Coefficient	-.272	-.111
		Sig. (2-tailed)	.327	.694
		N	15	15
	agriculture share in GDP	Correlation Coefficient	-.599*	-.926**
		Sig. (2-tailed)	.018	.000
		N	15	15
	manufacture share in GDP	Correlation Coefficient	.513	-.043
		Sig. (2-tailed)	.051	.879
		N	15	15
	construction share in GDP	Correlation Coefficient	.381	.642**
		Sig. (2-tailed)	.161	.010
		N	15	15
	services share in GDP	Correlation Coefficient	.454	.895**
		Sig. (2-tailed)	.089	.000
		N	15	15

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```

Nonparametric Correlations

```
[DataSet1] H:\Kazakhstan data.sav
```

Correlations

			GDP growth	export share in GDP
Spearman's rho	GDP growth	Correlation Coefficient	1.000	.869**
		Sig. (2-tailed)	.	.000
		N	15	15
	export share in GDP	Correlation Coefficient	.869**	1.000
		Sig. (2-tailed)	.000	.
		N	15	15
	private consumption expenditure share in GDP	Correlation Coefficient	-.840**	-.821**
		Sig. (2-tailed)	.000	.000
		N	15	15
	government consumption expenditure share in GDP	Correlation Coefficient	-.630*	-.726**
		Sig. (2-tailed)	.012	.002
		N	15	15
	gross capital formation share in GDP	Correlation Coefficient	-.129	-.089
		Sig. (2-tailed)	.648	.752
		N	15	15
	agriculture share in GDP	Correlation Coefficient	-.763**	-.871**
		Sig. (2-tailed)	.001	.000
		N	15	15
	manufacture share in GDP	Correlation Coefficient	-.604*	-.670**
		Sig. (2-tailed)	.017	.006
		N	15	15
	construction share in GDP	Correlation Coefficient	-.257	-.234
		Sig. (2-tailed)	.355	.401
		N	15	15
	services share in GDP	Correlation Coefficient	.025	.125
		Sig. (2-tailed)	.929	.657
		N	15	15

```
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Nonparametric Correlations

```
[DataSet2] H:\Kygyzstan data.sav
```

Correlations

			GDP growth	export share in GDP
Spearman's rho	GDP growth	Correlation Coefficient	1.000	-.082
		Sig. (2-tailed)	.	.771
		N	15	15
	export share in GDP	Correlation Coefficient	-.082	1.000
		Sig. (2-tailed)	.771	.
		N	15	15
	private consumption expenditure share in GDP	Correlation Coefficient	-.552*	.198
		Sig. (2-tailed)	.033	.478
		N	15	15
	government consumption expenditure share in GDP	Correlation Coefficient	-.529*	.722**
		Sig. (2-tailed)	.043	.002
		N	15	15
	gross capital formation share in GDP	Correlation Coefficient	.181	.513
		Sig. (2-tailed)	.520	.051
		N	15	15
	agriculture share in GDP	Correlation Coefficient	-.152	.474
		Sig. (2-tailed)	.589	.075
		N	15	15
	manufacture share in GDP	Correlation Coefficient	-.306	.680**
		Sig. (2-tailed)	.268	.005
		N	15	15
	construction share in GDP	Correlation Coefficient	-.170	.572*
		Sig. (2-tailed)	.545	.026
		N	15	15
	services share in GDP	Correlation Coefficient	.152	-.767**
		Sig. (2-tailed)	.589	.001
		N	15	15

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DATASET NAME DataSet2 WINDOW=FRONT.
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Nonparametric Correlations

[DataSet2] H:\Tajikistan data.sav

Correlations

			GDP growth	export share in GDP
Spearman's rho	GDP growth	Correlation Coefficient	1.000	.155
		Sig. (2-tailed)	.	.580
		N	15	15
	export share in GDP	Correlation Coefficient	.155	1.000
		Sig. (2-tailed)	.580	.
		N	15	15
	private consumption expenditure share in GDP	Correlation Coefficient	.736**	.492
		Sig. (2-tailed)	.002	.063
		N	15	15
	government consumption expenditure share in GDP	Correlation Coefficient	-.293	-.425
		Sig. (2-tailed)	.289	.114
		N	15	15
	gross capital formation share in GDP	Correlation Coefficient	-.925**	-.268
		Sig. (2-tailed)	.000	.334
		N	15	15
	agriculture share in GDP	Correlation Coefficient	-.134	.816**
		Sig. (2-tailed)	.634	.000
		N	15	15
	manufacture share in GDP	Correlation Coefficient	.114	-.238
		Sig. (2-tailed)	.685	.394
		N	15	15
	construction share in GDP	Correlation Coefficient	-.470	-.768**
		Sig. (2-tailed)	.077	.001
		N	15	15
	services share in GDP	Correlation Coefficient	.346	-.164
		Sig. (2-tailed)	.206	.558
		N	15	15

```
NONPAR CORR
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```

Nonparametric Correlations

```
[DataSet3] H:\Turkmenistan data.sav
```

Correlations

			GDP growth	export share in GDP
Spearman's rho	GDP growth	Correlation Coefficient	1.000	.173
		Sig. (2-tailed)	.	.537
		N	15	15
	export share in GDP	Correlation Coefficient	.173	1.000
		Sig. (2-tailed)	.537	.
		N	15	15
	private consumption expenditure share in GDP	Correlation Coefficient	.004	.418
		Sig. (2-tailed)	.990	.121
		N	15	15
	government consumption expenditure share in GDP	Correlation Coefficient	.107	-.354
		Sig. (2-tailed)	.703	.196
		N	15	15
	gross capital formation share in GDP	Correlation Coefficient	-.427	.168
		Sig. (2-tailed)	.112	.550
		N	15	15
	agriculture share in GDP	Correlation Coefficient	.305	.132
		Sig. (2-tailed)	.269	.638
		N	15	15
	manufacture share in GDP	Correlation Coefficient	-.648**	.141
		Sig. (2-tailed)	.009	.615
		N	15	15
	construction share in GDP	Correlation Coefficient	.004	.166
		Sig. (2-tailed)	.990	.554
		N	15	15
	services share in GDP	Correlation Coefficient	.483	-.071
		Sig. (2-tailed)	.068	.800
		N	15	15

```
NONPAR CORR
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```

Nonparametric Correlations

```
[DataSet4] H:\Uzbekistan data.sav
```

Correlations

			GDP growth	export share in GDP
Spearman's rho	GDP growth	Correlation Coefficient	1.000	.569*
		Sig. (2-tailed)	.	.027
		N	15	15
	export share in GDP	Correlation Coefficient	.569*	1.000
		Sig. (2-tailed)	.027	.
		N	15	15
	private consumption expenditure share in GDP	Correlation Coefficient	-.488	-.601*
		Sig. (2-tailed)	.065	.018
		N	15	15
	government consumption expenditure share in GDP	Correlation Coefficient	-.823**	-.510
		Sig. (2-tailed)	.000	.052
		N	15	15
	gross capital formation share in GDP	Correlation Coefficient	-.283	.287
		Sig. (2-tailed)	.307	.299
		N	15	15
	agriculture share in GDP	Correlation Coefficient	-.411	-.567*
		Sig. (2-tailed)	.128	.028
		N	15	15
	manufacture share in GDP	Correlation Coefficient	-.189	.134
		Sig. (2-tailed)	.499	.634
		N	15	15
	construction share in GDP	Correlation Coefficient	-.658**	-.457
		Sig. (2-tailed)	.008	.087
		N	15	15
	services share in GDP	Correlation Coefficient	.617*	.764**
		Sig. (2-tailed)	.014	.001
		N	15	15

```
NONPAR CORR
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```

Nonparametric Correlations

```
[DataSet6] H:\Moldova data.sav
```

Correlations

			GDP growth	export share in GDP
Spearman's rho	GDP growth	Correlation Coefficient	1.000	-.173
		Sig. (2-tailed)	.	.537
		N	15	15
	export share in GDP	Correlation Coefficient	-.173	1.000
		Sig. (2-tailed)	.537	.
		N	15	15
	private consumption expenditure share in GDP	Correlation Coefficient	.636*	-.030
		Sig. (2-tailed)	.011	.914
		N	15	15
	government consumption expenditure share in GDP	Correlation Coefficient	-.608*	.560*
		Sig. (2-tailed)	.016	.030
		N	15	15
	gross capital formation share in GDP	Correlation Coefficient	-.621*	-.434
		Sig. (2-tailed)	.013	.106
		N	15	15
	agriculture share in GDP	Correlation Coefficient	-.711**	.229
		Sig. (2-tailed)	.003	.412
		N	15	15
	manufacture share in GDP	Correlation Coefficient	-.411	-.059
		Sig. (2-tailed)	.128	.835
		N	15	15
	construction share in GDP	Correlation Coefficient	-.395	.108
		Sig. (2-tailed)	.145	.702
		N	15	15
	services share in GDP	Correlation Coefficient	.775**	-.088
		Sig. (2-tailed)	.001	.756
		N	15	15

```
NONPAR CORR
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  /PRINT=SPEARMAN TWOTAIL NOSIG
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Nonparametric Correlations

```
[DataSet5] H:\Belatus data.sav
```

Correlations

			GDP growth	export share in GDP
Spearman's rho	GDP growth	Correlation Coefficient	1.000	.627*
		Sig. (2-tailed)	.	.012
		N	15	15
	export share in GDP	Correlation Coefficient	.627*	1.000
		Sig. (2-tailed)	.012	.
		N	15	15
	private consumption expenditure share in GDP	Correlation Coefficient	-.758**	-.579*
		Sig. (2-tailed)	.001	.024
		N	15	15
	government consumption expenditure share in GDP	Correlation Coefficient	-.612*	-.329
		Sig. (2-tailed)	.015	.231
		N	15	15
	gross capital formation share in GDP	Correlation Coefficient	-.252	-.614*
		Sig. (2-tailed)	.365	.015
		N	15	15
	agriculture share in GDP	Correlation Coefficient	-.678**	-.441
		Sig. (2-tailed)	.005	.099
		N	15	15
	manufacture share in GDP	Correlation Coefficient	.525*	.175
		Sig. (2-tailed)	.045	.532
		N	15	15
	construction share in GDP	Correlation Coefficient	.469	.086
		Sig. (2-tailed)	.078	.761
		N	15	15
	services share in GDP	Correlation Coefficient	.023	.125
		Sig. (2-tailed)	.934	.657
		N	15	15

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Nonparametric Correlations

```
[DataSet1] H:\Russia data.sav
```

Correlations

			GDP growth	export share in GDP
Spearman's rho	GDP growth	Correlation Coefficient	1.000	.740**
		Sig. (2-tailed)	.	.002
		N	15	15
	export share in GDP	Correlation Coefficient	.740**	1.000
		Sig. (2-tailed)	.002	.
		N	15	15
	private consumption expenditure share in GDP	Correlation Coefficient	-.433	-.186
		Sig. (2-tailed)	.107	.508
		N	15	15
	government consumption expenditure share in GDP	Correlation Coefficient	-.745**	-.731**
		Sig. (2-tailed)	.001	.002
		N	15	15
	gross capital formation share in GDP	Correlation Coefficient	-.644**	-.797**
		Sig. (2-tailed)	.010	.000
		N	15	15
	agriculture share in GDP	Correlation Coefficient	-.376	-.376
		Sig. (2-tailed)	.167	.168
		N	15	15
	manufacture share in GDP	Correlation Coefficient	-.594*	-.462
		Sig. (2-tailed)	.019	.083
		N	15	15
	construction share in GDP	Correlation Coefficient	-.592*	-.605*
		Sig. (2-tailed)	.020	.017
		N	15	15
	services share in GDP	Correlation Coefficient	.636*	.596*
		Sig. (2-tailed)	.011	.019
		N	15	15

```
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```

Nonparametric Correlations

```
[DataSet1] H:\Ukraine data.sav
```

Correlations

			GDP growth	export share in GDP
Spearman's rho	GDP growth	Correlation Coefficient	1.000	.714**
		Sig. (2-tailed)	.	.003
		N	15	15
	export share in GDP	Correlation Coefficient	.714**	1.000
		Sig. (2-tailed)	.003	.
		N	15	15
	private consumption expenditure share in GDP	Correlation Coefficient	-.750**	-.250
		Sig. (2-tailed)	.001	.369
		N	15	15
	government consumption expenditure share in GDP	Correlation Coefficient	-.742**	-.426
		Sig. (2-tailed)	.002	.114
		N	15	15
	gross capital formation share in GDP	Correlation Coefficient	-.575*	-.629*
		Sig. (2-tailed)	.025	.012
		N	15	15
	agriculture share in GDP	Correlation Coefficient	-.466	-.270
		Sig. (2-tailed)	.080	.331
		N	15	15
	manufacture share in GDP	Correlation Coefficient	-.750**	-.579*
		Sig. (2-tailed)	.001	.024
		N	15	15
	construction share in GDP	Correlation Coefficient	-.761**	-.758**
		Sig. (2-tailed)	.001	.001
		N	15	15
	services share in GDP	Correlation Coefficient	.686**	.418
		Sig. (2-tailed)	.005	.121
		N	15	15

```
GET
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   /DEPENDENT GDP
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Regression

[DataSet1] H:\Armenia data.sav

Descriptive Statistics

	Mean	Std. Deviation	N
gdp growth rate	4.127	13.9731	15
export share in GDP	14.207	3.4173	15
private consumption expenditure share in GDP	79.860	12.4647	15
government consumption expenditure share in GDP	10.407	2.9860	15
gross capital formation share in GDP	17.051	6.0730	15
agriculture share in GDP	30.700	8.8666	15
manufacture share in GDP	22.020	5.4586	15
construction share in GDP	11.907	6.9242	15
services share in GDP	33.700	6.0771	15

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	services share in GDP, gross capital formation share in GDP, export share in GDP, private consumption expenditure share in GDP, manufacture share in GDP, agriculture share in GDP, government consumption expenditure share in GDP, construction share in GDP[a]		Enter

a. All requested variables entered.

b. Dependent Variable: gdp growth rate

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.996[a]	.991	.979	2.0222	2.590

a. Predictors: (Constant), services share in GDP, gross capital formation share in GDP, export share in GDP, private consumption expenditure share in GDP, manufacture share in GDP, agriculture share in GDP, government consumption expenditure share in GDP, construction share in GDP

b. Dependent Variable: gdp growth rate

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2708.913	8	338.614	82.803	.000[a]
	Residual	24.536	6	4.089		
	Total	2733.449	14			

a. Predictors: (Constant), services share in GDP, gross capital formation share in GDP, export share in GDP, private consumption expenditure share in GDP, manufacture share in GDP, agriculture share in GDP, government consumption expenditure share in GDP, construction share in GDP

b. Dependent Variable: gdp growth rate

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-89.079	42.003		-2.121	.078
	export share in GDP	.667	.387	.163	1.724	.136
	private consumption expenditure share in GDP	-.252	.124	-.224	-2.027	.089
	government consumption expenditure share in GDP	-.982	1.329	-.210	-.739	.488
	gross capital formation share in GDP	1.428	.606	.621	2.358	.056
	agriculture share in GDP	1.307	.359	.830	3.644	.011
	manufacture share in GDP	-.178	.283	-.069	-.628	.553
	construction share in GDP	.221	.639	.109	.345	.742
	services share in GDP	1.509	.445	.656	3.393	.015

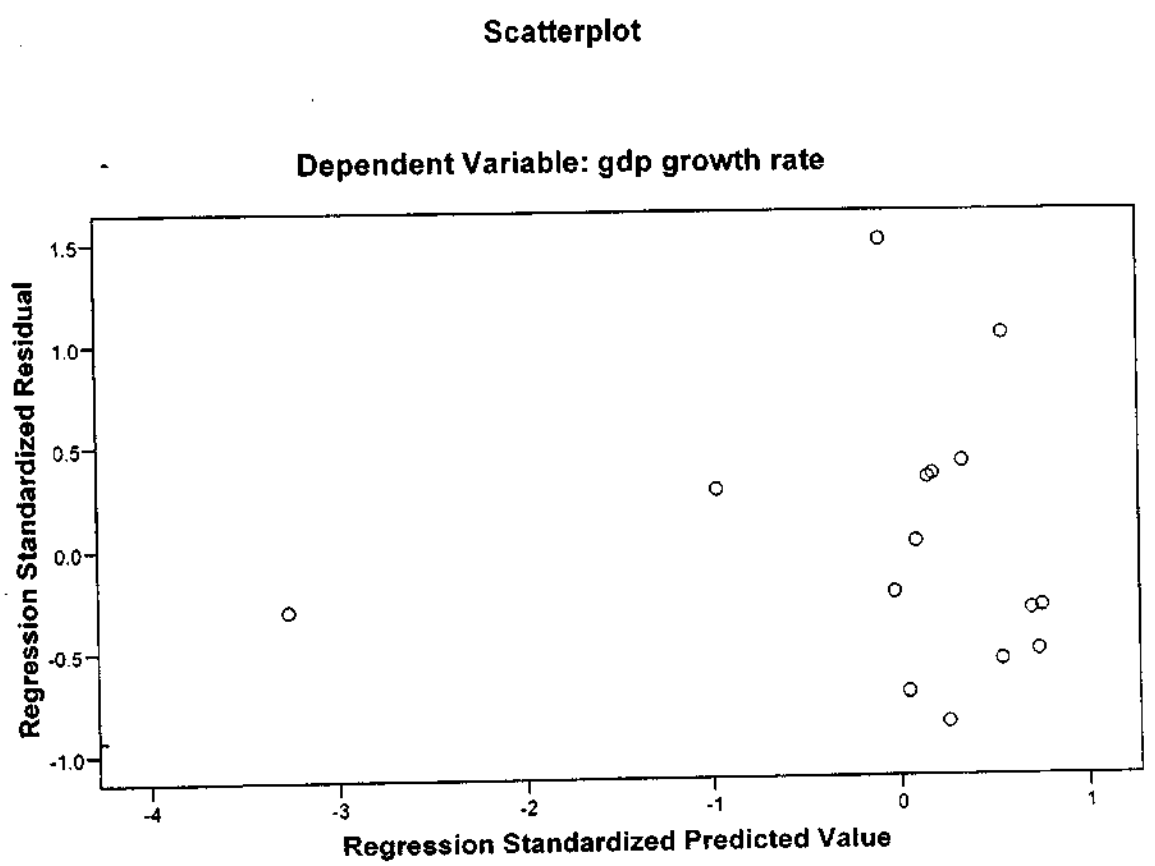
a. Dependent Variable: gdp growth rate

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-41.187	14.624	4.127	13.9102	15
Std. Predicted Value	-3.258	.755	.000	1.000	15
Standard Error of Predicted Value	1.021	1.997	1.524	.374	15
Adjusted Predicted Value	-24.117	19.359	5.125	11.6784	15
Residual	-1.7757	3.0262	.0000	1.3239	15
Std. Residual	-.878	1.496	.000	.655	15
Stud. Residual	-1.944	1.742	-.084	1.118	15
Deleted Residual	-25.2118	15.3175	-.9983	8.4129	15
Stud. Deleted Residual	-2.917	2.261	-.107	1.349	15
Mahal. Distance	2.633	12.726	7.467	3.890	15
Cook's Distance	.004	16.851	1.691	4.473	15
Centered Leverage Value	.188	.909	.533	.278	15

a. Dependent Variable: gdp growth rate

Charts

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  /DEPENDENT GDP
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  /SCATTERPLOT=(*ZRESID ,*ZPRED )
  /RESIDUALS DURBIN
  /SAVE PRED ZPRED MCIN RESID ZRESID .
```

Regression

[DataSet2] H:\Azerbaijan data.sav

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	services share in GDP, construction share in GDP, manufacture share in GDP, export share in GDP, gross capital formation share in GDP, government consumption expenditure share in GDP, agriculture share in GDP, private consumption expenditure share in GDP[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: gdp growth rate

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.995[a]	.991	.978	2.4921	2.821

a. Predictors: (Constant), services share in GDP, construction share in GDP, manufacture share in GDP, export share in GDP, gross capital formation share in GDP, government consumption expenditure share in GDP, agriculture share in GDP, private consumption expenditure share in GDP

b. Dependent Variable: gdp growth rate

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3925.102	8	490.638	79.003	.000[a]
	Residual	37.262	6	6.210		
	Total	3962.364	14			

a. Predictors: (Constant), services share in GDP, construction share in GDP, manufacture share in GDP, export share in GDP, gross capital formation share in GDP, government consumption expenditure share in GDP, agriculture share in GDP, private consumption expenditure share in GDP

b. Dependent Variable: gdp growth rate

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	80.520	7.994		10.072	.000
	export share in GDP	-.413	.178	-.149	-2.321	.059
	private consumption expenditure share in GDP	.235	.306	.228	.767	.472
	government consumption expenditure share in GDP	-.268	.416	-.096	- 645	.543
	gross capital formation share in GDP	-.231	.101	-.145	-2.284	.062
	agriculture share in GDP	-1.570	.642	-.695	-2.446	.050
	manufacture share in GDP	-1.378	.303	-.396	-4.555	.004
	construction share in GDP	.615	.356	.104	1.728	.135
	services share in GDP	-.905	.414	-.307	-2.187	.071

a. Dependent Variable: gdp growth rate

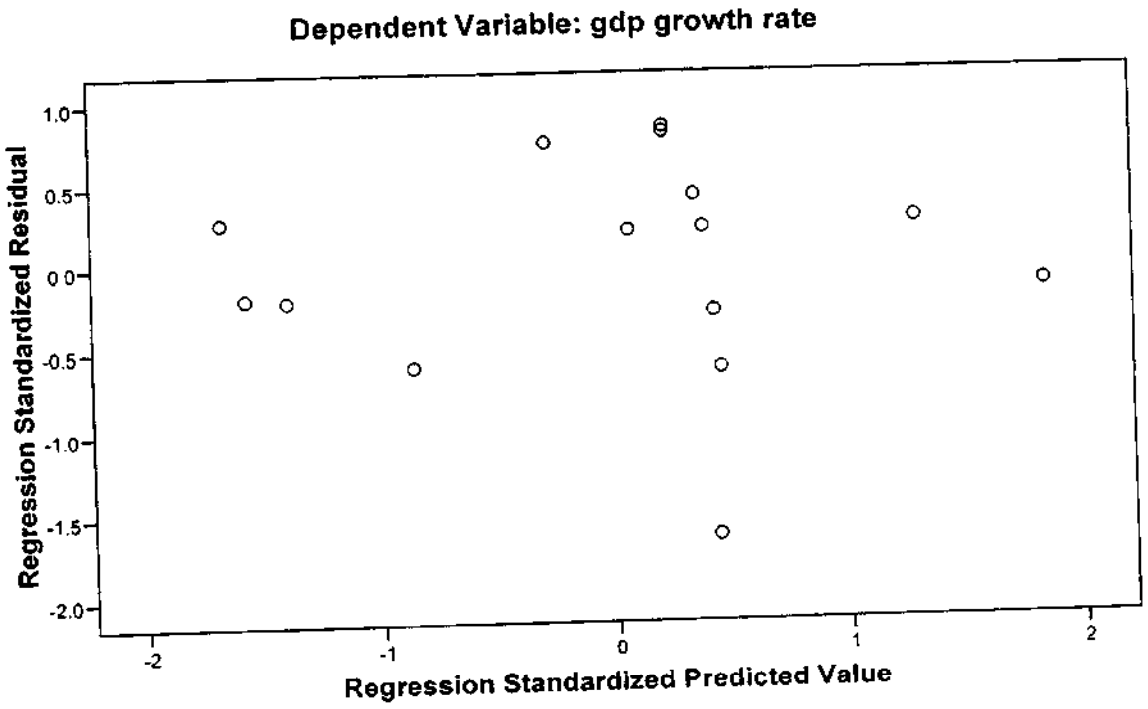
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-23.772	34.872	4.080	16.7441	15
Std. Predicted Value	-1.663	1.839	.000	1.000	15
Standard Error of Predicted Value	.911	2.471	1.879	.456	15
Adjusted Predicted Value	-32.364	35.697	5.539	16.6199	15
Residual	-4.1107	2.0855	.0000	1.6314	15
Std. Residual	-1.650	.837	.000	.655	15
Stud. Residual	-2.150	2.184	-.035	1.275	15
Deleted Residual	-29.1987	15.9528	-1.4587	10.8293	15
Stud. Deleted Residual	-4.094	4.404	-.125	2.096	15
Mahal. Distance	.938	12.835	7.467	3.728	15
Cook's Distance	.002	15.001	1.828	3.993	15
Centered Leverage Value	.067	.917	.533	.266	15

a. Dependent Variable: gdp growth rate

Charts

Scatterplot

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   /DEPENDENT GDP
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```

Regression

```
[DataSet3] H:\Georgia data.sav
```

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	services share in GDP, government consumption expenditure share in GDP, manufacture share in GDP, gross capital formation share in GDP, construction share in GDP, export share in GDP, private consumption expenditure share in GDP, agriculture share in GDP[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.965[a]	.931	.840	6.4340	1.630

a. Predictors: (Constant), services share in GDP, government consumption expenditure share in GDP, manufacture share in GDP, gross capital formation share in GDP, construction share in GDP, export share in GDP, private consumption expenditure share in GDP, agriculture share in GDP

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3376.695	8	422.087	10.196	.005[a]
	Residual	248.379	6	41.396		
	Total	3625.073	14			

a. Predictors: (Constant), services share in GDP, government consumption expenditure share in GDP, manufacture share in GDP, gross capital formation share in GDP, construction share in GDP, export share in GDP, private consumption expenditure share in GDP, agriculture share in GDP

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-461.698	246.175		-1.875	.110
	export share in GDP	3.134	2.015	.481	1.556	.171
	private consumption expenditure share in GDP	-.745	.529	-.913	-1.409	.208
	government consumption expenditure share in GDP	-.264	2.273	-.043	-.116	.911
	gross capital formation share in GDP	-.334	.568	-.118	-.588	.578
	agriculture share in GDP	4.604	2.266	5.162	2.032	.088
	manufacture share in GDP	9.534	3.367	1.375	2.832	.030
	construction share in GDP	-.025	3.650	-.004	-.007	.995
	services share in GDP	4.978	2.595	4.158	1.918	.103

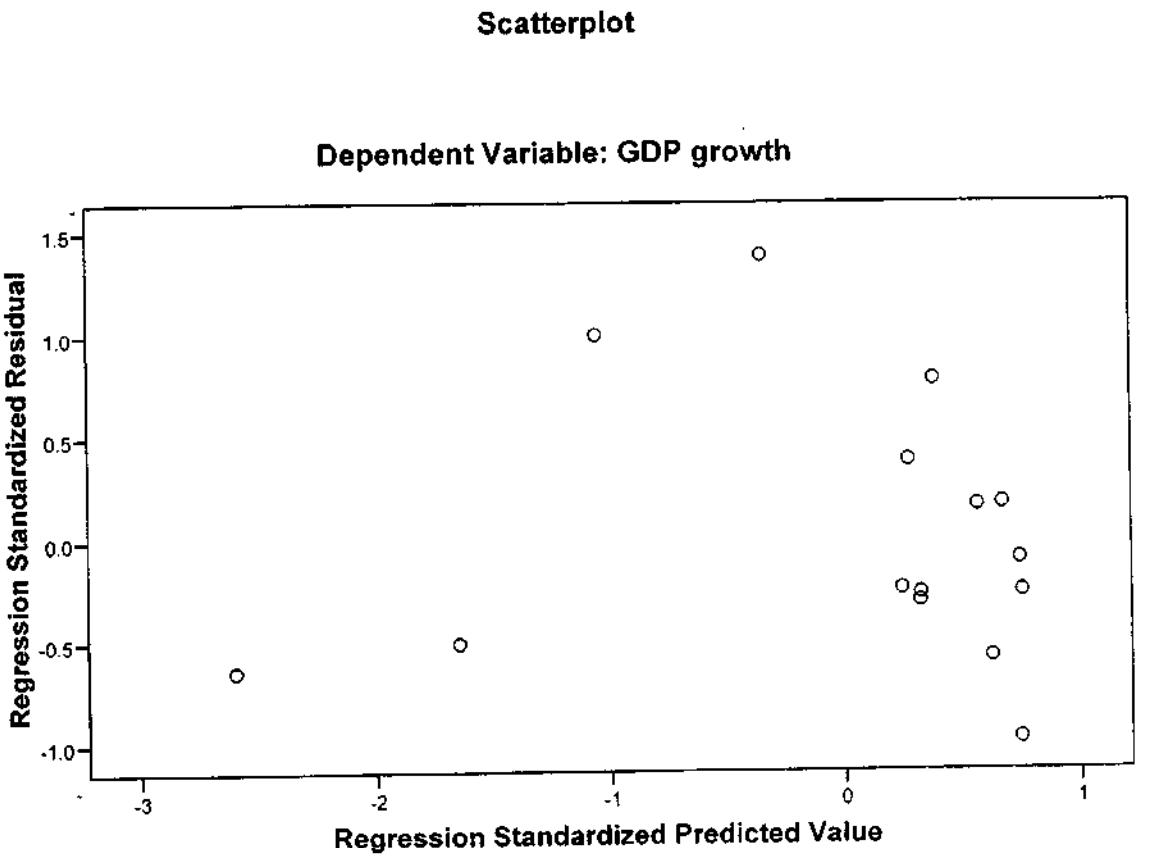
a. Dependent Variable: GDP growth

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-40.736	11.245	-.433	15.5304	15
Std. Predicted Value	-2.595	.752	.000	1.000	15
Standard Error of Predicted Value	2.631	6.212	4.853	1.176	15
Adjusted Predicted Value	-35.171	22.018	5.610	15.0302	15
Residual	-6.3338	8.9020	.0000	4.2120	15
Std. Residual	-.984	1.384	.000	.655	15
Stud. Residual	-2.225	2.213	-.160	1.258	15
Deleted Residual	-49.2154	24.7706	-6.0437	21.1670	15
Stud. Deleted Residual	-4.858	4.716	-.164	2.206	15
Mahal. Distance	1.407	12.115	7.467	3.626	15
Cook's Distance	.003	5.951	1.054	2.012	15
Centered Leverage Value	.101	.865	.533	.259	15

a. Dependent Variable: GDP growth

Charts

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```

Regression

[DataSet4] H:\Kazakhstan data.sav

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	services share in GDP, private consumption expenditure share in GDP, government consumption expenditure share in GDP, gross capital formation share in GDP, export share in GDP, construction share in GDP, manufacture share in GDP, agriculture share in GDP[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.989[a]	.979	.950	1.8923	2.854

a. Predictors: (Constant), services share in GDP, private consumption expenditure share in GDP, government consumption expenditure share in GDP, gross capital formation share in GDP, export share in GDP, construction share in GDP, manufacture share in GDP, agriculture share in GDP

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	984.049	8	123.006	34.352	.000[a]
	Residual	21.484	6	3.581		
	Total	1005.533	14			

a. Predictors: (Constant), services share in GDP, private consumption expenditure share in GDP, government consumption expenditure share in GDP, gross capital formation share in GDP, export share in GDP, construction share in GDP, manufacture share in GDP, agriculture share in GDP

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	120.149	28.782		4.174	.006
	export share in GDP	.248	.235	.284	1.055	.001
	private consumption expenditure share in GDP	-.562	.105	-.850	-5.339	.002
	government consumption expenditure share in GDP	-.138	.626	-.028	-.220	.833
	gross capital formation share in GDP	-.050	.355	-.026	-.140	.893
	agriculture share in GDP	-1.610	.752	-.828	-2.140	.076
	manufacture share in GDP	.493	.353	.373	1.399	.211
	construction share in GDP	-3.931	1.206	-.735	-3.260	.017
	services share in GDP	-.830	.232	-.606	-3.571	.012

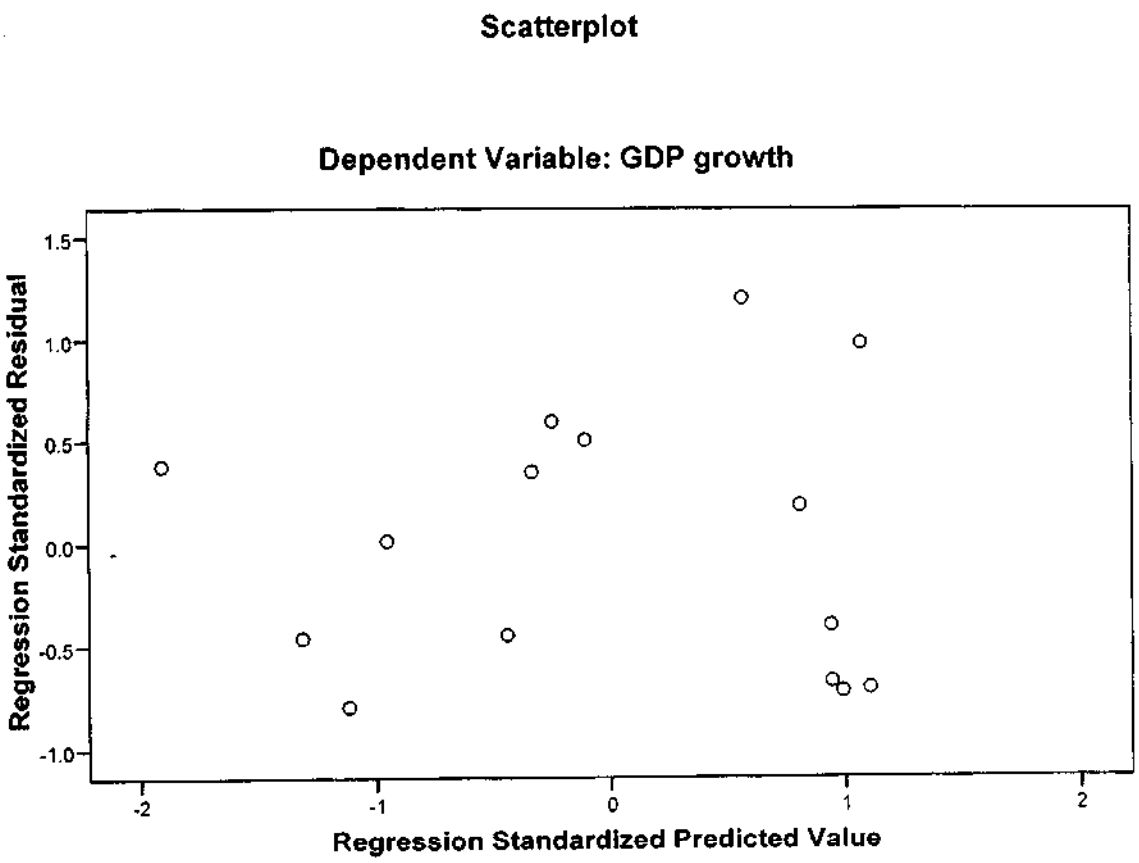
a. Dependent Variable: GDP growth

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-13.315	11.939	2.667	8.3839	15
Std. Predicted Value	-1.906	1.106	.000	1.000	15
Standard Error of Predicted Value	.764	1.845	1.426	.350	15
Adjusted Predicted Value	- 3.954	13.035	2.398	9.6452	15
Residual	-1.5069	2.2755	.0000	1.2388	15
Std. Residual	-.796	1.203	.000	.655	15
Stud. Residual	-1.798	2.062	.023	1.159	15
Deleted Residual	-7.6847	11.3538	.2690	4.8724	15
Stud. Deleted Residual	-2.418	3.487	.106	1.477	15
Mahal. Distance	1.346	12.370	7.467	3.610	15
Cook's Distance	.002	3.748	.550	.980	15
Centered Leverage Value	.096	.884	.533	.258	15

a. Dependent Variable: GDP growth

Charts

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  /DEPENDENT GDP
  /METHOD=ENTER EXP PCE GCE GCF agriculture manufacture constuction services
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```

Regression

```
[DataSet5] H:\Kygyzstan data.sav
```

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	services share in GDP, private consumption expenditure share in GDP, gross capital formation share in GDP, construction share in GDP, agriculture share in GDP, export share in GDP, government consumption expenditure share in GDP, manufacture share in GDP[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.983[a]	.967	.922	2.5486	2.583

a. Predictors: (Constant), services share in GDP, private consumption expenditure share in GDP, gross capital formation share in GDP, construction share in GDP, agriculture share in GDP, export share in GDP, government consumption expenditure share in GDP, manufacture share in GDP

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1129.402	8	141.175	21.735	.001[a]
	Residual	38.972	6	6.495		
	Total	1168.373	14			

a. Predictors: (Constant), services share in GDP, private consumption expenditure share in GDP, gross capital formation share in GDP, construction share in GDP, agriculture share in GDP, export share in GDP, government consumption expenditure share in GDP, manufacture share in GDP

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	64.763	47.645		1.359	.223
	export share in GDP	1.877	.459	.908	4.085	.006
	private consumption expenditure share in GDP	.193	.197	.180	.982	.364
	government consumption expenditure share in GDP	-4.139	.841	-1.175	-4.924	.003
	gross capital formation share in GDP	.588	.247	.256	2.381	.055
	agriculture share in GDP	-.433	.537	-.220	-.805	.451
	manufacture share in GDP	-1.318	.779	-.928	-1.691	.142
	construction share in GDP	-.925	1.799	-.122	-.514	.625
	services share in GDP	-.676	.662	-.519	-1.021	.347

a. Dependent Variable: GDP growth

Residuals Statistics[a]

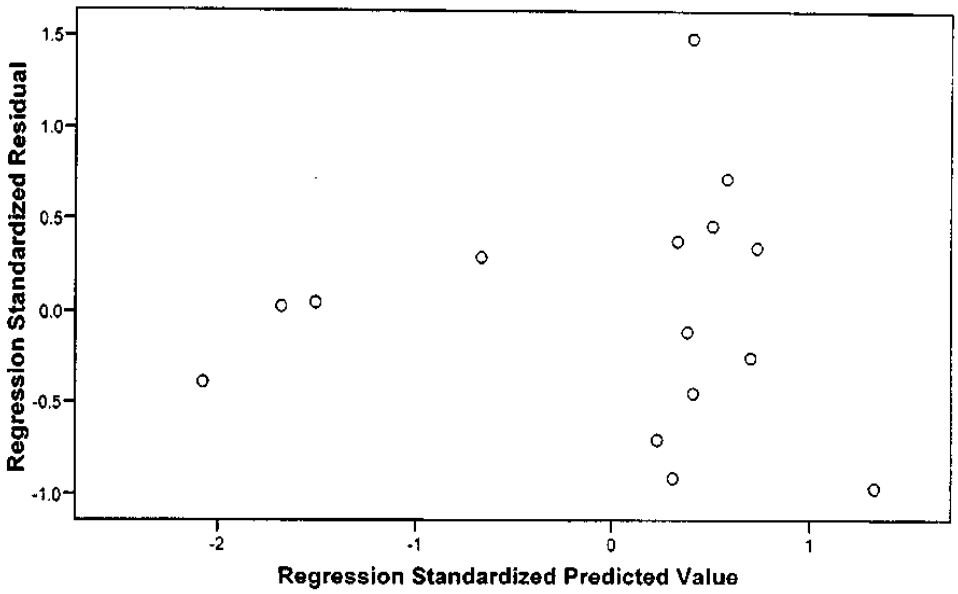
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-19.111	11.463	-.467	8.9817	15
Std. Predicted Value	-2.076	1.328	.000	1.000	15
Standard Error of Predicted Value	1.357	2.330	1.952	.307	15
Adjusted Predicted Value	-15.689	14.608	-.573	9.1639	15
Residual	-2.4633	3.7981	.0000	1.6684	15
Std. Residual	-.967	1.490	.000	.655	15
Stud. Residual	-1.458	1.761	.008	.967	15
Deleted Residual	-5.6075	8.3380	.1060	4.1082	15
Stud. Deleted Residual	-1.657	2.312	.046	1.089	15
Mahal. Distance	3.035	10.773	7.467	2.513	15
Cook's Distance	.000	.927	.173	.234	15
Centered Leverage Value	.217	.769	.533	.180	15

a. Dependent Variable: GDP growth

Charts

Scatterplot

Dependent Variable: GDP growth

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Regression

```
[DataSet6] H:\Tajikistan data.sav
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Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	services share in GDP, construction share in GDP, export share in GDP, private consumption expenditure share in GDP, agriculture share in GDP, government consumption expenditure share in GDP, gross capital formation share in GDP[a]	.	Enter

a. Tolerance = .000 limits reached.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.978[a]	.956	.913	3.8055	2.996

a. Predictors: (Constant), services share in GDP, construction share in GDP, export share in GDP, private consumption expenditure share in GDP, agriculture share in GDP, government consumption expenditure share in GDP, gross capital formation share in GDP

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2217.358	7	316.765	21.874	.000[a]
	Residual	101.371	7	14.482		
	Total	2318.729	14			

a. Predictors: (Constant), services share in GDP, construction share in GDP, export share in GDP, private consumption expenditure share in GDP, agriculture share in GDP, government consumption expenditure share in GDP, gross capital formation share in GDP

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	45.839	27.777		1.650	.143
	export share in GDP	.153	.113	.216	1.355	.217
	private consumption expenditure share in GDP	-.204	.260	-.131	-.784	.459
	government consumption expenditure share in GDP	.188	.588	.085	.319	.759
	gross capital formation share in GDP	-.406	.431	-.350	-.942	.378
	agriculture share in GDP	-1.379	.452	-.568	-3.049	.019
	construction share in GDP	-3.206	1.698	-.713	-1.888	.101
	services share in GDP	.432	.420	.213	1.031	.337

a. Dependent Variable: GDP growth

Excluded Variables[b]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	-manufacture share in GDP	-9.826[a]	-1.172	.286	-.432	8.44E-005

a. Predictors in the Model: (Constant), services share in GDP, construction share in GDP, export share in GDP, private consumption expenditure share in GDP, agriculture share in GDP, government consumption expenditure share in GDP, gross capital formation share in GDP

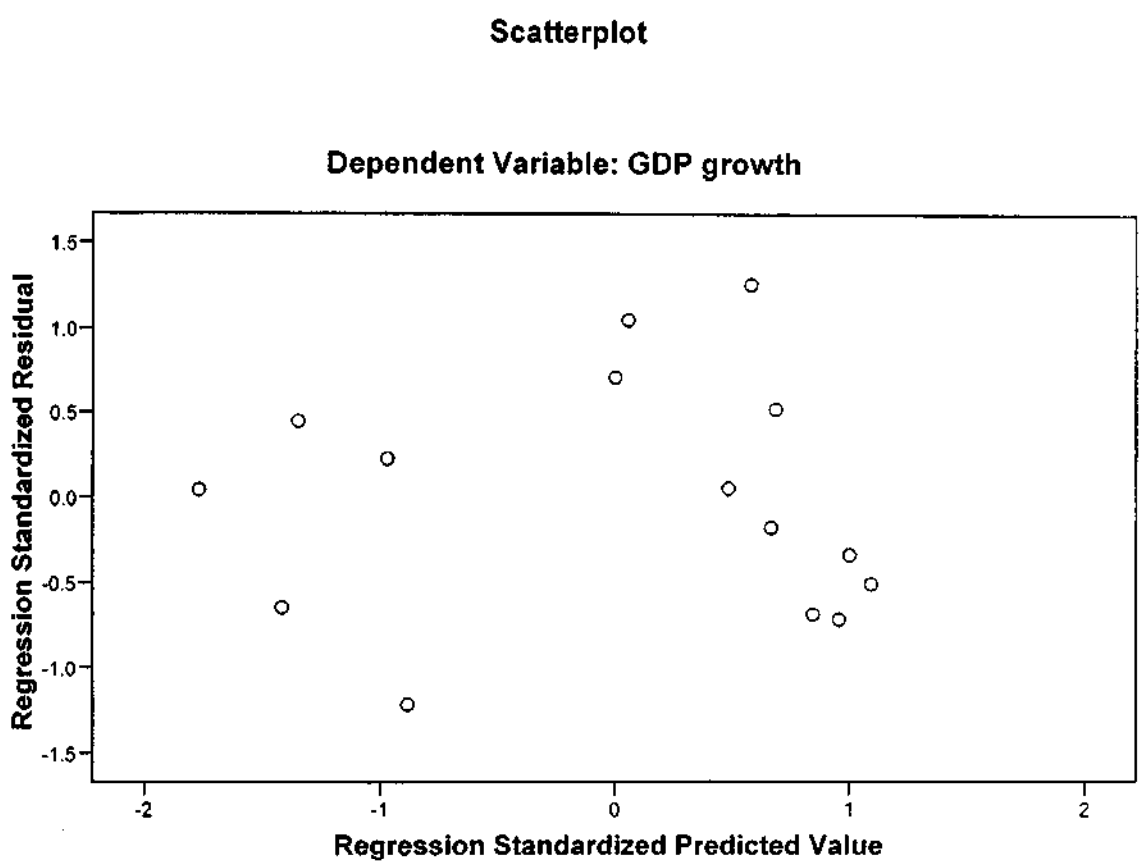
b. Dependent Variable: GDP growth

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-23.263	12.733	-1.027	12.5850	15
Std. Predicted Value	-1.767	1.093	.000	1.000	15
Standard Error of Predicted Value	2.047	3.585	2.722	.582	15
Adjusted Predicted Value	-24.554	16.051	-1.835	14.0483	15
Residual	-4.6398	4.7873	.0000	2.6909	15
Std. Residual	-1.219	1.258	.000	.707	15
Stud. Residual	-1.939	2.019	.038	1.110	15
Deleted Residual	-11.7400	21.9180	.8080	8.0294	15
Stud. Deleted Residual	-2.640	2.891	.064	1.352	15
Mahal. Distance	3.117	11.495	6.533	3.099	15
Cook's Distance	.003	3.637	.381	.923	15
Centered Leverage Value	.223	.821	.467	.221	15

a. Dependent Variable: GDP growth

Charts

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Regression

[DataSet7] H:\Turkmenistan data.sav

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	construction share in GDP, export share in GDP, manufacture share in GDP, private consumption expenditure share in GDP, government consumption expenditure share in GDP, agriculture share in GDP, gross capital formation share in GDP[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.780[a]	.608	.217	9.2926	2.293

a. Predictors: (Constant), construction share in GDP, export share in GDP, manufacture share in GDP, private consumption expenditure share in GDP, government consumption expenditure share in GDP, agriculture share in GDP, gross capital formation share in GDP

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	939.048	7	134.150	1.554	.288[a]
	Residual	604.469	7	86.353		
	Total	1543.517	14			

a. Predictors: (Constant), construction share in GDP, export share in GDP, manufacture share in GDP, private consumption expenditure share in GDP, government consumption expenditure share in GDP, agriculture share in GDP, gross capital formation share in GDP

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	82.807	53.763		1.540	.167
	export share in GDP	.006	.225	.008	.025	.981
	private consumption expenditure share in GDP	.172	.280	.191	.615	.558
	government consumption expenditure share in GDP	-2.078	2.037	-.390	-1.020	.342
	gross capital formation share in GDP	-.101	.677	-.100	-.149	.886
	agriculture share in GDP	-1.270	1.022	-.640	-1.243	.254
	manufacture share in GDP	-1.017	.656	-1.212	-1.550	.165
	construction share in GDP	.256	1.521	.082	.168	.871

a. Dependent Variable: GDP growth

Residuals Statistics[a]

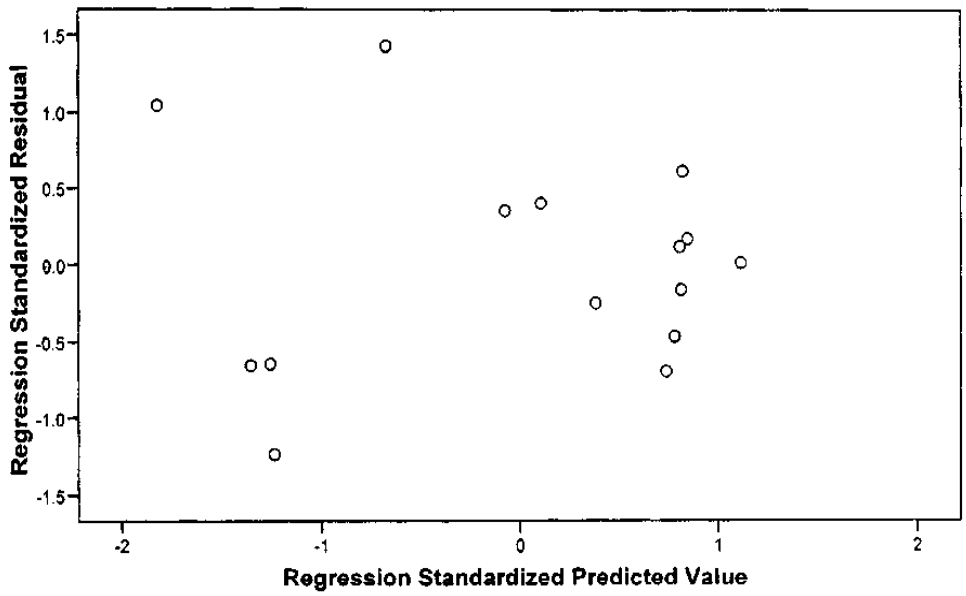
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-19.628	9.600	.147	8.1899	15
Std. Predicted Value	-2.414	1.154	.000	1.000	15
Standard Error of Predicted Value	4.205	8.912	6.547	1.851	15
Adjusted Predicted Value	-40.562	24.859	-1.354	18.9564	15
Residual	-15.1994	7.8319	.0000	6.5709	15
Std. Residual	-1.636	.843	.000	.707	15
Stud. Residual	-2.298	2.028	.052	1.223	15
Deleted Residual	-43.1591	45.7227	1.5003	23.0874	15
Stud. Deleted Residual	-4.291	2.923	-.056	1.751	15
Mahal. Distance	1.933	11.943	6.533	3.881	15
Cook's Distance	.001	2.512	.548	.794	15
Centered Leverage Value	.138	.853	.467	.277	15

a. Dependent Variable: GDP growth

Charts

Scatterplot

Dependent Variable: GDP growth

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Regression

```
[DataSet10] H:\Russia data.sav
```

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	services share in GDP, private consumption expenditure share in GDP, export share in GDP, agriculture share in GDP, construction share in GDP, manufacture share in GDP, gross capital formation share in GDP, government consumption expenditure share in GDP[a]		Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.960[a]	.922	.819	3.3786	3.036

a. Predictors: (Constant), services share in GDP, private consumption expenditure share in GDP, export share in GDP, agriculture share in GDP, construction share in GDP, manufacture share in GDP, gross capital formation share in GDP, government consumption expenditure share in GDP

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	814.606	8	101.826	8.920	.008[a]
	Residual	68.491	6	11.415		
	Total	883.097	14			

a. Predictors: (Constant), services share in GDP, private consumption expenditure share in GDP, export share in GDP, agriculture share in GDP, construction share in GDP, manufacture share in GDP, gross capital formation share in GDP, government consumption expenditure share in GDP

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.714	40.620		.387	.712
	export share in GDP	.046	.150	.056	.306	.000
	private consumption expenditure share in GDP	-.872	.481	-.577	-1.814	.120
	government consumption expenditure share in GDP	-.598	1.007	-.215	-.594	.574
	gross capital formation share in GDP	-1.147	.392	-.882	-2.927	.026
	agriculture share in GDP	3.419	1.848	.388	1.850	.114
	manufacture share in GDP	-.194	.305	-.169	-.635	.549
	construction share in GDP	2.379	1.678	.413	1.418	.206
	services share in GDP	.284	.607	.120	.467	.657

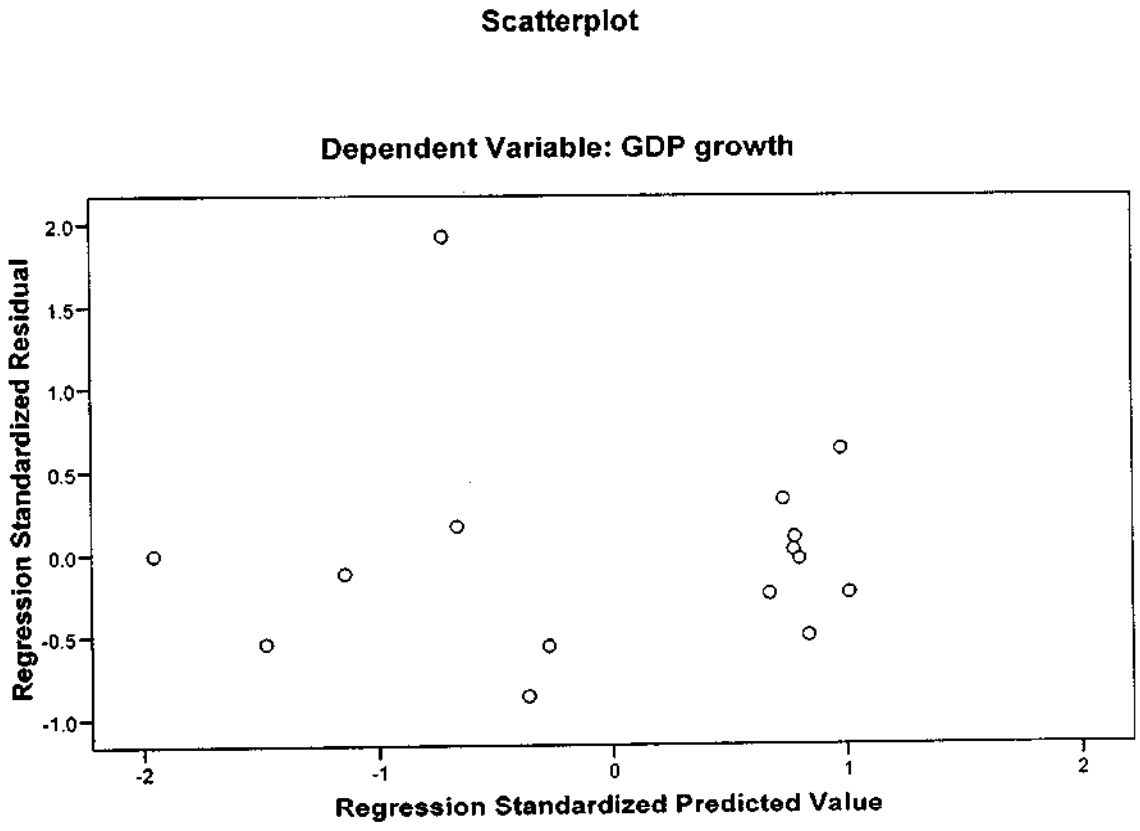
a. Dependent Variable: GDP growth

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-14.483	8.130	.413	7.6280	15
Std. Predicted Value	-1.953	1.012	.000	1.000	15
Standard Error of Predicted Value	1.670	3.298	2.578	.466	15
Adjusted Predicted Value	-14.136	8.807	1.507	7.2995	15
Residual	-2.9441	6.4876	.0000	2.2118	15
Std. Residual	-.871	1.920	.000	.655	15
Stud. Residual	-1.721	2.209	-.097	.911	15
Deleted Residual	-11.4830	8.5857	-1.0932	4.8363	15
Stud. Deleted Residual	-2.208	4.666	.035	1.476	15
Mahal. Distance	2.488	12.405	7.467	2.895	15
Cook's Distance	.000	.954	.137	.277	15
Centered Leverage Value	.178	.886	.533	.207	15

a. Dependent Variable: GDP growth

Charts

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Regression

[DataSet11] H:\Ukraine data.sav

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	services share in GDP, private consumption expenditure share in GDP, export share in GDP, agriculture share in GDP, construction share in GDP, government consumption expenditure share in GDP, manufacture share in GDP, gross capital formation share in GDP[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.958[a]	.918	.808	3.7176	2.376

a. Predictors: (Constant), services share in GDP, private consumption expenditure share in GDP, export share in GDP, agriculture share in GDP, construction share in GDP, government consumption expenditure share in GDP, manufacture share in GDP, gross capital formation share in GDP

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	926.026	8	115.753	8.375	.009[a]
	Residual	82.923	6	13.821		
	Total	1008.949	14			

a. Predictors: (Constant), services share in GDP, private consumption expenditure share in GDP, export share in GDP, agriculture share in GDP, construction share in GDP, government consumption expenditure share in GDP, manufacture share in GDP, gross capital formation share in GDP

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	66.501	51.713		1.286	.246
	export share in GDP	.427	.302	.433	1.412	.208
	private consumption expenditure share in GDP	-1.913	.760	-.856	-2.517	.045
	government consumption expenditure share in GDP	2.859	1.626	.875	1.758	.129
	gross capital formation share in GDP	.505	.802	.445	.629	.552
	agriculture share in GDP	-.931	1.091	-.341	-.853	.426
	manufacture share in GDP	.014	.535	.012	.025	.981
	construction share in GDP	-5.588	4.079	-.919	-1.370	.220
	services share in GDP	-.077	.600	-.063	-.128	.902

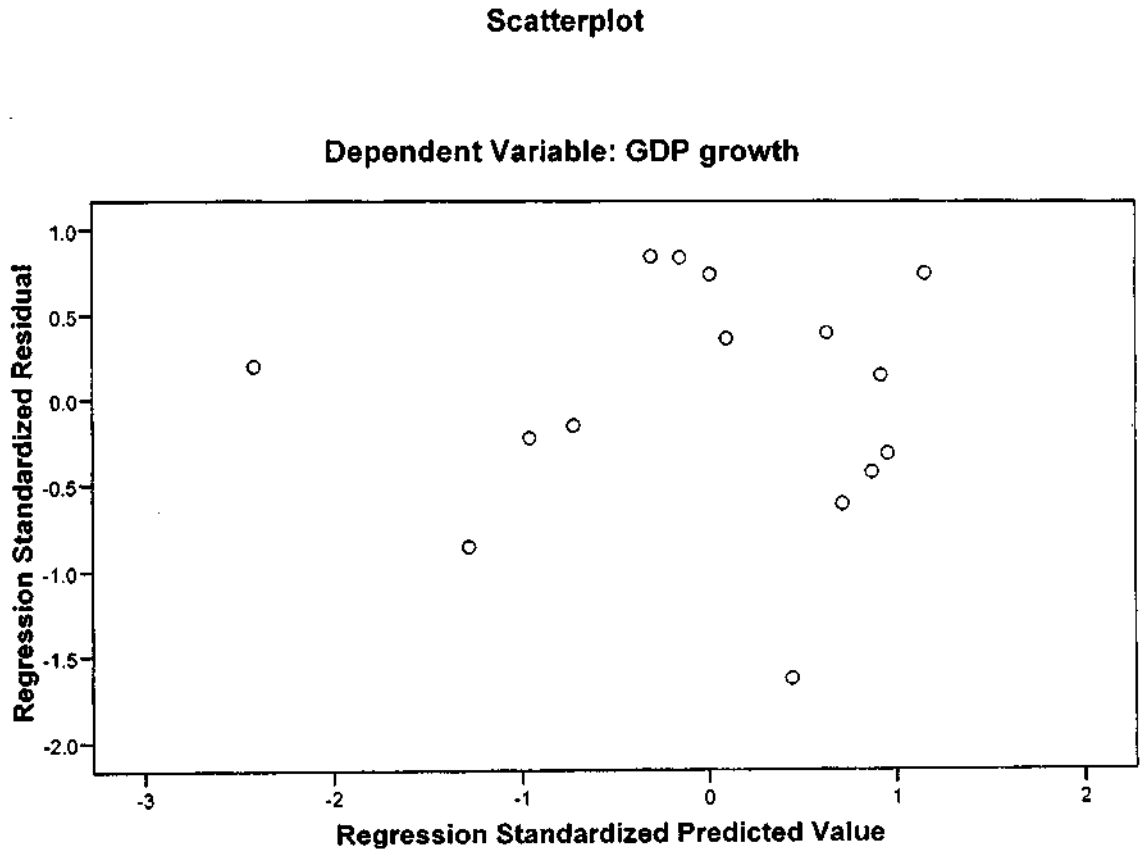
a. Dependent Variable: GDP growth

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-13.321	11.367	-.127	8.1329	15
Std. Predicted Value	-1.622	1.413	.000	1.000	15
Standard Error of Predicted Value	1.747	3.624	2.828	.565	15
Adjusted Predicted Value	-9.629	15.121	1.025	8.5892	15
Residual	-4.9921	4.3040	.0000	2.4337	15
Std. Residual	-1.343	1.158	.000	.655	15
Stud. Residual	-1.687	1.903	-.029	1.066	15
Deleted Residual	-18.1206	15.4144	-1.1519	8.9576	15
Stud. Deleted Residual	-2.124	2.761	.012	1.271	15
Mahal. Distance	2.158	12.370	7.467	3.169	15
Cook's Distance	.004	2.441	.495	.862	15
Centered Leverage Value	.154	.884	.533	.226	15

a. Dependent Variable: GDP growth

Charts

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Regression

```
[DataSet8] H:\Uzbekistan data.sav
```

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	services share in GDP, private consumption expenditure share in GDP, agriculture share in GDP, gross capital formation share in GDP, export share in GDP, government consumption expenditure share in GDP, construction share in GDP[a]	.	Enter

a. Tolerance = .000 limits reached.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.986[a]	.973	.946	1.2095	2.837

a. Predictors: (Constant), services share in GDP, private consumption expenditure share in GDP, agriculture share in GDP, gross capital formation share in GDP, export share in GDP, government consumption expenditure share in GDP, construction share in GDP

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	367.057	7	52.437	35.844	.000[a]
	Residual	10.240	7	1.463		
	Total	377.297	14			

a. Predictors: (Constant), services share in GDP, private consumption expenditure share in GDP, agriculture share in GDP, gross capital formation share in GDP, export share in GDP, government consumption expenditure share in GDP, construction share in GDP

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.799	13.982		.057	.956
	export share in GDP	.168	.189	.179	.891	.002
	private consumption expenditure share in GDP	-.539	.216	-.720	-2.492	.041
	government consumption expenditure share in GDP	-.944	.327	-.667	-2.890	.023
	gross capital formation share in GDP	-.626	.201	-.873	-3.118	.017
	agriculture share in GDP	.608	.389	.331	1.564	.162
	construction share in GDP	3.296	1.155	1.026	2.854	.025
	services share in GDP	.196	.337	.163	.580	.580

a. Dependent Variable: GDP growth

Excluded Variables[b]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	manufacture share in GDP	8.600[a]	1.712	.138	.573	.000

a. Predictors in the Model: (Constant), services share in GDP, private consumption expenditure share in GDP, agriculture share in GDP, gross capital formation share in GDP, export share in GDP, government consumption expenditure share in GDP, construction share in GDP

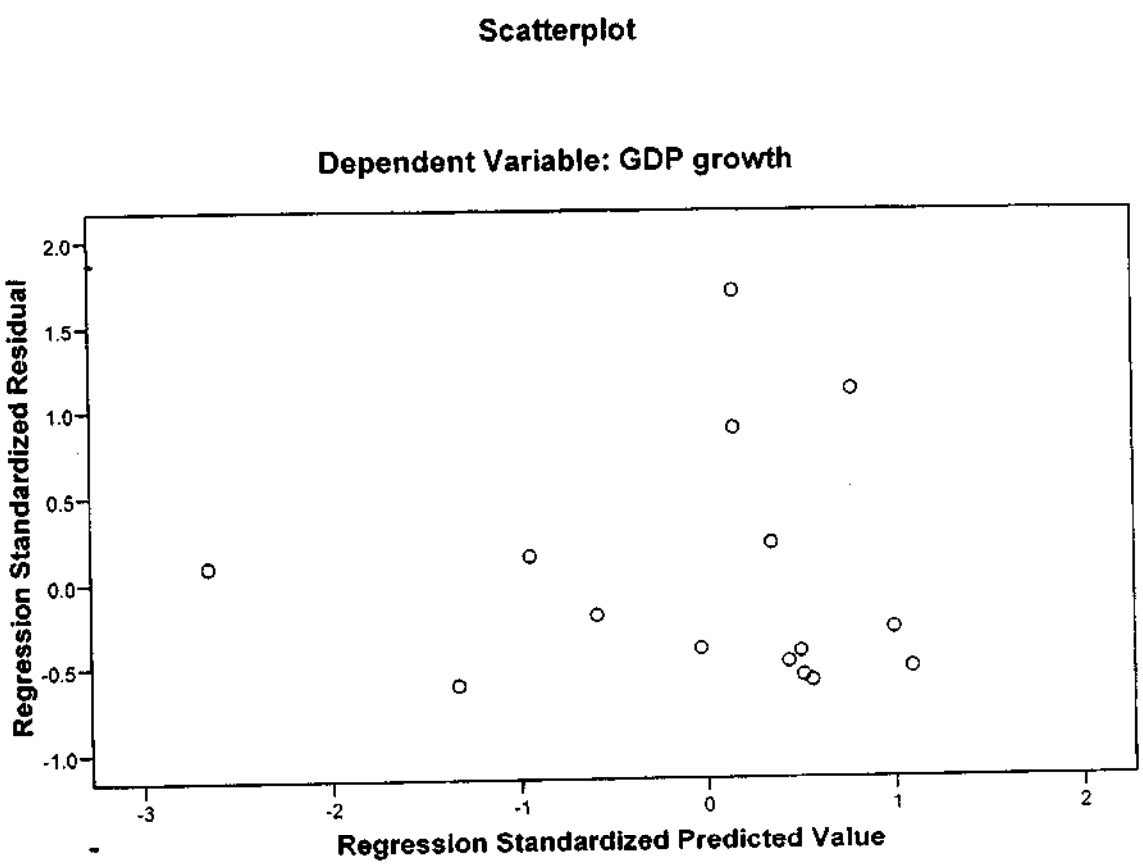
b. Dependent Variable: GDP growth

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-11.208	7.934	2.353	5.1204	15
Std. Predicted Value	-2.648	1.090	.000	1.000	15
Standard Error of Predicted Value	.556	1.204	.854	.232	15
Adjusted Predicted Value	-21.997	8.234	1.926	7.4009	15
Residual	-.7451	2.0466	.0000	.8553	15
Std. Residual	-.616	1.692	.000	.707	15
Stud. Residual	-1.450	2.087	-.007	1.040	15
Deleted Residual	-4.1308	10.8969	.4278	3.5788	15
Stud. Deleted Residual	-1.606	3.145	.080	1.246	15
Mahal. Distance	2.030	12.928	6.533	3.904	15
Cook's Distance	.004	10.046	.911	2.556	15
Centered Leverage Value	.145	.923	.467	.279	15

a. Dependent Variable: GDP growth

Charts

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Regression

```
[DataSet9] H:\Belatus data.sav
```

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	services share in GDP, construction share in GDP, export share in GDP, gross capital formation share in GDP, manufacture share in GDP, government consumption expenditure share in GDP, private consumption expenditure share in GDP[a]	.	Enter

a. Tolerance = .000 limits reached.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.946[a]	.894	.788	3.7992	2.427

a. Predictors: (Constant), services share in GDP, construction share in GDP, export share in GDP, gross capital formation share in GDP, manufacture share in GDP, government consumption expenditure share in GDP, private consumption expenditure share in GDP

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	853.778	7	121.968	8.450	.006[a]
	Residual	101.038	7	14.434		
	Total	954.816	14			

a. Predictors: (Constant), services share in GDP, construction share in GDP, export share in GDP, gross capital formation share in GDP, manufacture share in GDP, government consumption expenditure share in GDP, private consumption expenditure share in GDP

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-396.139	181.196		-2.186	.065
	export share in GDP	.454	.173	.684	2.619	.034
	private consumption expenditure share in GDP	.909	.995	.688	.914	.391
	government consumption expenditure share in GDP	.179	3.251	.033	.055	.958
	gross capital formation share in GDP	.409	.600	.302	.681	.518
	manufacture share in GDP	5.027	1.947	1.800	2.582	.036
	construction share in GDP	4.631	5.240	.550	.884	.406
	services share in GDP	2.825	1.114	1.866	2.536	.039

a. Dependent Variable: GDP growth

Excluded Variables[b]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	agriculture share in GDP	5.892[a]	.559	.596	.222	.000

a. Predictors in the Model: (Constant), services share in GDP, construction share in GDP, export share in GDP, gross capital formation share in GDP, manufacture share in GDP, government consumption expenditure share in GDP, private consumption expenditure share in GDP

b. Dependent Variable: GDP growth

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-11.572	11.366	2.660	7.8092	15
Std. Predicted Value	-1.823	1.115	.000	1.000	15
Standard Error of Predicted Value	1.595	3.565	2.726	.536	15
Adjusted Predicted Value	-25.858	14.312	3.595	9.8782	15
Residual	-4.7025	5.4328	.0000	2.6864	15
Std. Residual	-1.238	1.430	.000	.707	15
Stud. Residual	-1.966	2.242	-.063	1.200	15
Deleted Residual	-20.5451	18.2581	-.9351	9.0030	15
Stud. Deleted Residual	-2.720	3.907	-.020	1.653	15
Mahal. Distance	1.535	11.396	6.533	2.728	15
Cook's Distance	.000	3.219	.494	.953	15
Centered Leverage Value	.110	.814	.467	.195	15

a. Dependent Variable: GDP growth

Charts

```
GET
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DATASET NAME DataSet1 WINDOW=FRONT.
REGRESSION
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  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10) CIN(95)
  /NOORIGIN
  /DEPENDENT GDP
  /METHOD=ENTER EXP PCE GCE GCF agriculture manufacture constuction services
  /SCATTERPLOT=(*ZRESID ,*ZPRED )
  /RESIDUALS DURBIN
  /SAVE PRED ZPRED MCIN RESID ZRESID .
```

Regression

[DataSet1] H:\Moldova data.sav

Descriptive Statistics

	Mean	Std. Deviation	N
GDP growth	-2.347	12.1914	15
export share in GDP	30.340	7.1106	15
private consumption expenditure share in GDP	60.427	10.1267	15
government consumption expenditure share in GDP	16.573	4.9981	15
gross capital formation share in GDP	25.767	13.0051	15
agriculture share in GDP	26.393	5.4535	15
manufacture share in GDP	20.267	6.3579	15
construction share in GDP	3.900	.6793	15
services share in GDP	46.760	10.7477	15

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	services share in GDP, export share in GDP, construction share in GDP, government consumption expenditure share in GDP, agriculture share in GDP, private consumption expenditure share in GDP, gross capital formation share in GDP, manufacture share in GDP[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.838[a]	.701	.303	10.1749	3.246

a. Predictors: (Constant), services share in GDP, export share in GDP, construction share in GDP, government consumption expenditure share in GDP, agriculture share in GDP, private consumption expenditure share in GDP, gross capital formation share in GDP, manufacture share in GDP

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1459.644	8	182.456	1.762	.253[a]
	Residual	621.173	6	103.529		
	Total	2080.817	14			

a. Predictors: (Constant), services share in GDP, export share in GDP, construction share in GDP, government consumption expenditure share in GDP, agriculture share in GDP, private consumption expenditure share in GDP, gross capital formation share in GDP, manufacture share in GDP

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-46.849	413.345		-.113	.913
	export share in GDP	1.439	1.194	.839	1.205	.274
	private consumption expenditure share in GDP	.098	1.269	.082	.077	.941
	government consumption expenditure share in GDP	.039	1.256	.016	.031	.976
	gross capital formation share in GDP	.970	.911	1.035	1.065	.328
	agriculture share in GDP	-1.455	4.497	-.651	-.324	.757
	manufacture share in GDP	.057	4.778	.030	.012	.991
	construction share in GDP	-7.886	5.257	-.439	-1.500	.184
	services share in GDP	.797	5.053	.703	.158	.880

a. Dependent Variable: GDP growth

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-26.027	9.505	-2.347	10.2108	15
Std. Predicted Value	-2.319	1.161	.000	1.000	15
Standard Error of Predicted Value	5.225	9.955	7.752	1.475	15
Adjusted Predicted Value	-79.111	40.410	1.691	28.8032	15
Residual	-12.0982	11.6038	.0000	6.6610	15
Std. Residual	-1.189	1.140	.000	.655	15
Stud. Residual	-2.343	2.105	-.098	1.314	15
Deleted Residual	-69.4099	77.9108	-4.0379	34.9887	15
Stud. Deleted Residual	-7.329	3.760	-.337	2.478	15
Mahal. Distance	2.759	12.467	7.467	3.038	15
Cook's Distance	.001	6.022	1.064	1.878	15
Centered Leverage Value	.197	.891	.533	.217	15

a. Dependent Variable: GDP growth

Charts

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	government consumption share in GDP, Export growth[a]		Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.375[a]	.141	.130	10.3526	1.069

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2898.099	2	1449.050	13.520	.000[a]
	Residual	17683.940	165	107.175		
	Total	20582.039	167			

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.227	2.482		4.927	.000
	Export growth	-.056	.027	-.149	-2.059	.041
	government consumption share in GDP	-.831	.177	-.339	-4.695	.000

a. Dependent Variable: GDP growth

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	government consumption share in GDP, Export growth[a]		Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.319[a]	.102	.076	11.2566	1.457

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	993.950	2	496.975	3.922	.024[a]
	Residual	8743.030	69	126.711		
	Total	9736.980	71			

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-5.362	3.908		-1.372	.175
	Export growth	-.092	.034	-.314	-2.716	.008
	government consumption share in GDP	-.063	.246	-.030	-.257	.798

a. Dependent Variable: GDP growth

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	government consumption share in GDP, Export growth[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.366[a]	.134	.115	4.3371	1.533

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	270.566	2	135.283	7.192	.001[a]
	Residual	1749.332	93	18.810		
	Total	2019.898	95			

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.854	2.147		5.055	.000
	Export growth	.043	.025	.179	1.755	.083
	government consumption share in GDP	-.430	.166	-.265	-2.597	.011

a. Dependent Variable: GDP growth

Regression

[DataSet2] H:\Armenia laggedregress data.sav

Descriptive Statistics

	Mean	Std. Deviation	N
GDP growth	3.471	14.2594	14
Export growth	22.046	26.6839	14
government consumption share in GDP	9.886	2.2843	14

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	government consumption share in GDP, Export growth[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.965[a]	.931	.919	4.0703	1.651

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2461.048	2	1230.524	74.274	.000[a]
	Residual	182.240	11	16.567		
	Total	2643.289	13			

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	56.880	5.504		10.334	.000
	Export growth	-.116	.052	-.216	-2.237	.047
	government consumption share in GDP	-5.145	.604	-.824	-8.520	.000

a. Dependent Variable: GDP growth

Regression

[DataSet3] H:\Azerbaijan laggedreress data.sav

Descriptive Statistics

	Mean	Std. Deviation	N
GDP growth	1.907	15.1172	14
Export growth	23.754	30.4671	14
government consumption share in GDP	12.579	6.0921	14

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	government consumption share in GDP, Export growth[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.838[a]	.702	.648	8.9724	1.252

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2085.347	2	1042.673	12.952	.001[a]
	Residual	885.543	11	80.504		
	Total	2970.889	13			

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	21.855	5.949		3.674	.004
	Export growth	.173	.082	.350	2.123	.057
	government consumption share in GDP	-1.913	.409	-.771	-4.682	.001

a. Dependent Variable: GDP growth

Regression

[DataSet3] H:\Kazakhlaggedregress data.sav

Descriptive Statistics

	Mean	Std. Deviation	N
GDP growth rate	1.393	8.2211	14
Export growth rate	29.738	38.1915	14
government consumption expenditure share in GDP	10.386	1.7293	14

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	government consumption expenditure share in GDP, Export growth rate[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth rate

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.675[a]	.455	.356	6.5966	.970

a. Predictors: (Constant), government consumption expenditure share in GDP, Export growth rate

b. Dependent Variable: GDP growth rate

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	399.969	2	199.984	4.596	.035[a]
	Residual	478.660	11	43.515		
	Total	878.629	13			

a. Predictors: (Constant), government consumption expenditure share in GDP, Export growth rate

b. Dependent Variable: GDP growth rate

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	35.745	11.580		3.087	.010
	Export growth rate	.022	.052	.104	.429	.006
	government consumption expenditure share in GDP	-3.372	1.153	-.709	-2.925	.014

a. Dependent Variable: GDP growth rate

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-8.351	9.298	1.393	5.5468	14
Std. Predicted Value	-1.757	1.425	.000	1.000	14
Standard Error of Predicted Value	2.035	5.502	2.923	.917	14
Adjusted Predicted Value	-12.867	9.193	.955	6.4474	14
Residual	-10.8581	9.8401	.0000	6.0680	14
Std. Residual	-1.646	1.492	.000	.920	14
Stud. Residual	-1.760	1.612	.026	1.019	14
Deleted Residual	-12.4078	12.6668	.4375	7.5331	14
Stud. Deleted Residual	-1.979	1.758	.029	1.087	14
Mahal. Distance	.309	8.114	1.857	2.035	14
Cook's Distance	.000	.438	.083	.118	14
Centered Leverage Value	.024	.624	.143	.157	14

a. Dependent Variable: GDP growth rate

Charts

Regression

[DataSet7] H:\Moldovalaggedregressdata.sav

Descriptive Statistics

	Mean	Std. Deviation	N
GDP growth	-2.800	12.5197	14
Export growth	7.479	17.5319	14
government consumption share in GDP	16.614	5.1841	14

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	government consumption share in GDP, Export growth[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.390[a]	.152	-.002	12.5350	1.773

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	309.281	2	154.641	.984	.404[a]
	Residual	1728.379	11	157.125		
	Total	2037.660	13			

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.829	11.654		1.101	.294
	Export growth	-.035	.199	-.048	-.174	.865
	government consumption share in GDP	-.925	.672	-.383	-1.376	.196

a. Dependent Variable: GDP growth

Regression

[DataSet6] H:\Belaruslaggedregressdata.sav

Descriptive Statistics

	Mean	Std. Deviation	N
GDP growth	2.143	8.3143	14
Export growth	16.911	30.4258	14
government consumption share in GDP	16.843	1.5683	14

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	government consumption share in GDP, Export growth[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.812[a]	.660	.598	5.2697	1.478

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	593.192	2	296.596	10.681	.003[a]
	Residual	305.462	11	27.769		
	Total	898.654	13			

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	73.107	15.789		4.630	.001
	Export growth	-.035	.048	-.128	-.721	.486
	government consumption share in GDP	-4.178	.938	-.788	-4.455	.001

a. Dependent Variable: GDP growth

Regression

[DataSet5] H:\Uzbekistanlaggedregressdata.sav

Descriptive Statistics

	Mean	Std. Deviation	N
GDP growth	2.000	5.1967	14
Export growth	13.526	29.1522	14
government consumption share in GDP	16.486	3.6786	14

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	government consumption share in GDP, Export growth[a]		Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.906[a]	.821	.788	2.3904	1.423

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	288.225	2	144.113	25.221	.000[a]
	Residual	62.855	11	5.714		
	Total	351.080	13			

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	22.651	3.048		7.432	.000
	Export growth	-.024	.023	-.132	-1.018	.017
	government consumption share in GDP	-1.233	.183	-.873	-6.733	.000

a. Dependent Variable: GDP growth

Regression

[DataSet4] H:\Turmenistanregresslaggeddata.sav

Descriptive Statistics

	Mean	Std. Deviation	N
GDP growth	-.486	10.5959	14
Export growth	16.733	29.7497	14
government consumption share in GDP	9.550	2.0418	14

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	government consumption share in GDP, Export growth[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.402[a]	.162	.009	10.5460	1.153

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	236.147	2	118.074	1.062	.379[a]
	Residual	1223.390	11	111.217		
	Total	1459.537	13			

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4.423	15.867		-.279	.786
	Export growth	-.121	.107	-.340	-1.136	.280
	government consumption share in GDP	.624	1.554	.120	.402	.695

a. Dependent Variable: GDP growth

Regression

[DataSet3] H:\Tajikistanlaggedregressdata.sav

Descriptive Statistics

	Mean	Std. Deviation	N
GDP growth	-1.600	13.1550	14
Export growth	27.994	58.7061	14
government consumption share in GDP	10.671	4.1329	14

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	government consumption share in GDP., Export growth[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.580[a]	.337	.216	11.6475	.324

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	757.406	2	378.703	2.791	.105[a]
	Residual	1492.294	11	135.663		
	Total	2249.700	13			

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.843	11.848		.915	.380
	Export growth	-.069	.087	-.306	-.786	.449
	government consumption share in GDP	-.986	1.239	-.310	-.796	.443

a. Dependent Variable: GDP growth

Regression

[DataSet2] H:\Kyrgyzlaggedregress data.sav

Descriptive Statistics

	Mean	Std. Deviation	N
GDP growth	-.693	9.4365	14
Export growth	7.626	13.6750	14
government consumption share in GDP	15.407	2.1596	14

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	government consumption share in GDP, Export growth[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.805[a]	.648	.584	6.0900	1.590

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	749.664	2	374.832	10.107	.003[a]
	Residual	407.965	11	37.088		
	Total	1157.629	13			

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	51.682	12.205		4.235	.001
	Export growth	-.195	.124	-.283	-1.580	.142
	government consumption share in GDP	-3.303	.782	-.756	-4.223	.001

a. Dependent Variable: GDP growth

Regression

[DataSet2] H:\Georgialaggedregressdata.sav

Descriptive Statistics

	Mean	Std. Deviation	N
GDP growth rate	-1.136	16.4585	14
EXPORT growth rate	17.566	18.1118	14
government consumption expenditure share in GDP	8.043	1.8093	14

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	government consumption expenditure share in GDP, EXPORT growth rate[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth rate

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.809[a]	.654	.592	10.5191	.863

a. Predictors: (Constant), government consumption expenditure share in GDP, EXPORT growth rate

b. Dependent Variable: GDP growth rate

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2304.310	2	1152.155	10.413	.003[a]
	Residual	1217.162	11	110.651		
	Total	3521.472	13			

a. Predictors: (Constant), government consumption expenditure share in GDP, EXPORT growth rate

b. Dependent Variable: GDP growth rate

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-60.727	13.364		-4.544	.001
	EXPORT growth rate	.111	.162	.123	.688	.506
	government consumption expenditure share in GDP	7.166	1.620	.786	4.423	.001

a. Dependent Variable: GDP growth rate

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-29.750	22.588	-1.136	13.3137	14
Std. Predicted Value	-2.149	1.782	.000	1.000	14
Standard Error of Predicted Value	3.157	7.343	4.693	1.347	14
Adjusted Predicted Value	-17.975	29.446	-.255	13.1323	14
Residual	-15.9078	10.3534	.0000	9.6761	14
Std. Residual	-1.512	.984	.000	.920	14
Stud. Residual	-1.920	1.072	-.036	1.077	14
Deleted Residual	-26.9252	12.2818	-.8803	13.4700	14
Stud. Deleted Residual	-2.245	1.080	-.080	1.151	14
Mahal. Distance	.242	5.406	1.857	1.658	14
Cook's Distance	.001	.955	.151	.256	14
Centered Leverage Value	.019	.416	.143	.128	14

a. Dependent Variable: GDP growth rate

Charts

```
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10) CIN(95)
  /NOORIGIN
  /DEPENDENT GDP
  /METHOD=ENTER EXP GCE
  /SCATTERPLOT=(*ZRESID ,*ZPRED )
  /RESIDUALS DURBIN
  /SAVE PRED ZPRED MCIN RESID ZRESID .
```

Regression

[DataSet8] H:\Russialaggedregressdata.sav

Descriptive Statistics

	Mean	Std. Deviation	N
GDP growth	-.036	8.0420	14
Export growth	16.704	19.5851	14
government consumption share in GDP	14.921	2.9491	14

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	government consumption share in GDP, Export growth[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.745[a]	.555	.474	5.8337	2.011

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	466.400	2	233.200	6.852	.012[a]
	Residual	374.352	11	34.032		
	Total	840.752	13			

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	29.607	8.442		3.507	.005
	Export growth	.031	.083	.076	.376	.012
	government consumption share in GDP	-2.021	.549	-.741	-3.684	.004

a. Dependent Variable: GDP growth

Regression

[DataSet9] H:\Ukrainelaggedregressdata.sav

Descriptive Statistics

	Mean	Std. Deviation	N
GDP growth	-.643	8.5620	14
Export growth	12.725	15.9481	14
government consumption share in GDP	16.271	2.6722	14

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	government consumption share in GDP, Export growth[a]		Enter

a. All requested variables entered.

b. Dependent Variable: GDP growth

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.781[a]	.610	.539	5.8116	1.476

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	581.478	2	290.739	8.608	.006[a]
	Residual	371.516	11	33.774		
	Total	952.994	13			

a. Predictors: (Constant), government consumption share in GDP, Export growth

b. Dependent Variable: GDP growth

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	39.985	10.669		3.748	.003
	Export growth	.003	.104	.005	.025	.981
	government consumption share in GDP	-2.499	.623	-.780	-4.009	.002

a. Dependent Variable: GDP growth

```
CORRELATIONS
  /VARIABLES=growth TD
  /PRINT=TWOTAIL NOSIG
  /MISSING=PAIRWISE .
```

Correlations

```
[DataSet2] h:\Trade development and growth 1992-2008.sav
```

Correlations

		GDP PP	exp+imp
GDP PP	Pearson Correlation	1	.584**
	Sig. (2-tailed)		.000
	N	204	204
exp+imp	Pearson Correlation	.584**	1
	Sig. (2-tailed)	.000	
	N	204	204

**. Correlation is significant at the 0.01 level (2-tailed).

```
NONPAR CORR
  /VARIABLES=growth TD
  /PRINT=BOTH TWOTAIL NOSIG
  /MISSING=PAIRWISE .
```

Nonparametric Correlations

```
[DataSet2] h:\Trade development and growth 1992-2008.sav
```

Correlations

			GDP PP	exp+imp
Kendall's tau_b	GDP PP	Correlation Coefficient	1.000	.466**
		Sig. (2-tailed)	.	.000
		N	204	204
	exp+imp	Correlation Coefficient	.466**	1.000
		Sig. (2-tailed)	.000	.
		N	204	204
Spearman's rho	GDP PP	Correlation Coefficient	1.000	.637**
		Sig. (2-tailed)	.	.000
		N	204	204
	exp+imp	Correlation Coefficient	.637**	1.000
		Sig. (2-tailed)	.000	.
		N	204	204

**. Correlation is significant at the 0.01 level (2-tailed).

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10) CIN(95)
  /NOORIGIN
  /DEPENDENT growth
  /METHOD=ENTER TD
  /SCATTERPLOT=(*ZRESID ,*ZPRED )
  /RESIDUALS HIST(ZRESID) NORM(ZRESID)
  /SAVE PRED ZPRED MCIN RESID ZRESID .
```

Regression

[DataSet2] h:\Trade development and growth 1992-2008.sav

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	exp+imp[a]		Enter

a. All requested variables entered.

b. Dependent Variable: GDP PP

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.584[a]	.342	.338	8.9066

a. Predictors: (Constant), exp+imp

b. Dependent Variable: GDP PP

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8310.150	1	8310.150	104.758	.000[a]
	Residual	16024.037	202	79.327		
	Total	24334.188	203			

a. Predictors: (Constant), exp+imp

b. Dependent Variable: GDP PP

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-12.938	1.560		-8.295	.000
	exp+imp	.202	.020	.584	10.235	.000

a. Dependent Variable: GDP PP

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-11.503	17.783	1.695	6.3982	204
Std. Predicted Value	-2.063	2.514	.000	1.000	204
Standard Error of Predicted Value	.624	1.691	.853	.224	204
Adjusted Predicted Value	-11.667	18.384	1.711	6.4021	204
Residual	-33.8823	33.3306	.0000	8.8846	204
Std. Residual	-3.804	3.742	.000	.998	204
Stud. Residual	-3.851	3.752	-.001	1.003	204
Deleted Residual	-34.7280	33.4959	-.0157	8.9887	204
Stud. Deleted Residual	-3.991	3.880	-.003	1.017	204
Mahal. Distance	.000	6.322	.995	1.131	204
Cook's Distance	.000	.185	.006	.018	204
Centered Leverage Value	.000	.031	.005	.006	204

a. Dependent Variable: GDP PP

```
CORRELATIONS
  /VARIABLES=growth TD
  /PRINT=TWOTAIL NOSIG
  /MISSING=PAIRWISE .
```

Correlations

```
[DataSet1] h:\Trade development and growth1992-1998.sav
```

Correlations

		GDP PP	exp+imp
GDP PP	Pearson Correlation	1	.325**
	Sig. (2-tailed)		.003
	N	84	84
exp+imp	Pearson Correlation	.325**	1
	Sig. (2-tailed)	.003	
	N	84	84

**. Correlation is significant at the 0.01 level (2-tailed).

```
NONPAR CORR
  /VARIABLES=growth TD
  /PRINT=BOTH TWOTAIL NOSIG
  /MISSING=PAIRWISE .
```

Nonparametric Correlations

```
[DataSet1] h:\Trade development and growth1992-1998.sav
```

Correlations

			GDP PP	exp+imp
Kendall's tau_b	GDP PP	Correlation Coefficient	1.000	.218**
		Sig. (2-tailed)	.	.003
		N	84	84
	exp+imp	Correlation Coefficient	.218**	1.000
		Sig. (2-tailed)	.003	.
		N	84	84
Spearman's rho	GDP PP	Correlation Coefficient	1.000	.320**
		Sig. (2-tailed)	.	.003
		N	84	84
	exp+imp	Correlation Coefficient	.320**	1.000
		Sig. (2-tailed)	.003	.
		N	84	84

**. Correlation is significant at the 0.01 level (2-tailed).

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10) CIN(95)
  /NOORIGIN
  /DEPENDENT growth
  /METHOD=ENTER TD
  /SCATTERPLOT=(*ZRESID ,*ZPRED )
  /RESIDUALS HIST(ZRESID) NORM(ZRESID)
  /SAVE PRED ZPRED MCIN RESID ZRESID .
```

Regression

[DataSet1] h:\Trade development and growth1992-1998.sav

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	exp+imp[a]		Enter

a. All requested variables entered.

b. Dependent Variable: GDP PP

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.325[a]	.106	.095	11.0624

a. Predictors: (Constant), exp+imp

b. Dependent Variable: GDP PP

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1185.103	1	1185.103	9.684	.003[a]
	Residual	10034.832	82	122.376		
	Total	11219.936	83			

a. Predictors: (Constant), exp+imp

b. Dependent Variable: GDP PP

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-13.560	2.481		-5.465	.000
	exp+imp	.136	.044	.325	3.112	.003

a. Dependent Variable: GDP PP

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-12.596	7.079	-6.813	3.7787	84
Std. Predicted Value	-1.530	3.677	.000	1.000	84
Standard Error of Predicted Value	1.207	4.625	1.612	.564	84
Adjusted Predicted Value	-12.901	8.218	-6.775	3.8598	84
Residual	-32.6302	20.2306	.0000	10.9955	84
Std. Residual	-2.950	1.829	.000	.994	84
Stud. Residual	-3.006	1.846	-.002	1.006	84
Deleted Residual	-33.8850	20.6243	-.0378	11.2745	84
Stud. Deleted Residual	-3.167	1.875	-.006	1.023	84
Mahal. Distance	.000	13.517	.988	1.848	84
Cook's Distance	.000	.174	.013	.028	84
Centered Leverage Value	.000	.163	.012	.022	84

a. Dependent Variable: GDP PP

```
CORRELATIONS
  /VARIABLES=growth TD
  /PRINT=TWOTAIL NOSIG
  /MISSING=PAIRWISE .
```

Correlations

```
[DataSet2] h:\trade development and growth1999-2008.sav
```

Correlations

		GDP PP	exp+imp
GDP PP	Pearson Correlation	1	.355**
	Sig. (2-tailed)		.000
	N	120	120
exp+imp	Pearson Correlation	.355**	1
	Sig. (2-tailed)	.000	
	N	120	120

**. Correlation is significant at the 0.01 level (2-tailed).

```
NONPAR CORR
  /VARIABLES=growth TD
  /PRINT=BOTH TWOTAIL NOSIG
  /MISSING=PAIRWISE .
```

Nonparametric Correlations

```
[DataSet2] h:\trade development and growth1999-2008.sav
```

Correlations

			GDP PP	exp+imp
Kendall's tau_b	GDP PP	Correlation Coefficient	1.000	.329**
		Sig. (2-tailed)	.	.000
		N	120	120
	exp+imp	Correlation Coefficient	.329**	1.000
		Sig. (2-tailed)	.000	.
		N	120	120
Spearman's rho	GDP PP	Correlation Coefficient	1.000	.469**
		Sig. (2-tailed)	.	.000
		N	120	120
	exp+imp	Correlation Coefficient	.469**	1.000
		Sig. (2-tailed)	.000	.
		N	120	120

**. Correlation is significant at the 0.01 level (2-tailed).

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10) CIN(95)
  /NOORIGIN
  /DEPENDENT growth
  /METHOD=ENTER TD
  /SCATTERPLOT=(*DRESID ,*ZPRED )
  /SAVE PRED ZPRED MCIN RESID ZRESID .
```

Regression

```
[DataSet2] h:\trade development and growth1999-2008.sav
```

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	exp+imp[a]		Enter

a. All requested variables entered.

b. Dependent Variable: GDP PP

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.355[a]	.126	.119	4.5344

a. Predictors: (Constant), exp+imp

b. Dependent Variable: GDP PP

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	350.607	1	350.607	17.052	.000[a]
	Residual	2426.207	118	20.561		
	Total	2776.814	119			

a. Predictors: (Constant), exp+imp

b. Dependent Variable: GDP PP

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.190	1.618		.735	.464
	exp+imp	.073	.018	.355	4.129	.000

a. Dependent Variable: GDP PP

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	4.687	11.353	7.651	1.7165	120
Std. Predicted Value	-1.727	2.157	.000	1.000	120
Standard Error of Predicted Value	.414	.988	.567	.146	120
Adjusted Predicted Value	4.766	11.381	7.656	1.7145	120
Residual	-8.5411	28.2028	.0000	4.5153	120
Std. Residual	-1.884	6.220	.000	.996	120
Stud. Residual	-1.909	6.262	-.001	1.003	120
Deleted Residual	-8.7718	28.5905	-.0054	4.5832	120
Stud. Deleted Residual	-1.931	7.631	.014	1.093	120
Mahal. Distance	.000	4.652	.992	1.076	120
Cook's Distance	.000	.270	.008	.029	120
Centered Leverage Value	.000	.039	.008	.009	120

a. Dependent Variable: GDP PP

Charts

```
CLUSTER  GDP Exp Imp
  /METHOD BAVERAGE
  /MEASURE= SEUCLID
  /PRINT SCHEDULE
  /PLOT VICICLE.
```

Cluster

```
[DataSet1] H:\clustersopenesecondata_2010.sav
```

Case Processing Summary[a,b]

Cases					
Valid		Missing		Total	
N	Percent	N	Percent	N	Percent
17	100.0	0	.0	17	100.0

a. Squared Euclidean Distance used

b. Average Linkage (Between Groups)

Average Linkage (Between Groups)

Agglomeration Schedule

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	6	9	7.730	0	0	6
2	4	13	20.210	0	0	8
3	12	17	30.540	0	0	10
4	2	8	35.300	0	0	12
5	1	3	56.910	0	0	10
6	6	15	108.095	1	0	9
7	14	16	153.690	0	0	11
8	4	11	220.335	2	0	12
9	5	6	237.203	0	6	13
10	1	12	244.435	5	3	14
11	7	14	254.955	0	7	15
12	2	4	285.513	4	8	14
13	5	10	526.313	9	0	15
14	1	2	597.087	10	12	16
15	5	7	792.601	13	11	16
16	1	5	1367.031	14	15	0

Vertical Icicle

Number of clusters	Case	
1	X	X
2	X	X
3	X	X
4	X	X
5	X	X
6	X	X
7	X	X
8	X	X
9	X	X
10	X	X
11	X	X
12	X	X
13		X
14		X
15		X
16		X

```
CLUSTER  GDP Exp Imp
  /METHOD BAVERAGE
  /MEASURE= SEUCLID
  /ID=country
  /PRINT SCHEDULE CLUSTER(5)
  /PLOT DENDROGRAM VICICLE
  /SAVE CLUSTER(5) .
```

Cluster

```
[DataSet1] H:\clustersopenesecondata_2010.sav
```

Case Processing Summary[a,b]

Cases					
Valid		Missing		Total	
N	Percent	N	Percent	N	Percent
17	100.0	0	.0	17	100.0

a. Squared Euclidean Distance used

b. Average Linkage (Between Groups)

Average Linkage (Between Groups)

Agglomeration Schedule

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	6	9	7.730	0	0	6
2	4	13	20.210	0	0	8
3	12	17	30.540	0	0	10
4	2	8	35.300	0	0	12
5	1	3	56.910	0	0	10
6	6	15	108.095	1	0	9
7	14	16	153.690	0	0	11
8	4	11	220.335	2	0	12
9	5	6	237.203	0	6	13
10	1	12	244.435	5	3	14
11	7	14	254.955	0	7	15
12	2	4	285.513	4	8	14
13	5	10	526.313	9	0	15
14	1	2	597.087	10	12	16
15	5	7	792.601	13	11	16
16	1	5	1367.031	14	15	0

Cluster Membership

Case	5 Clusters
1:Armenia	1
2:Azerbaij	2
3:Georgia	1
4:Kazakhst	2
5:Kyrgyzst	3
6:Tajikist	3
7:Turkmeni	4
8:Uzbekist	2
9:Belarus	3
10:Moldova	5
11:Russia	2
12:Ukraine	1
13:Mongolia	2
14:Croatia	4
15:Bosnia	3
16:Yougosla	4
17:Serbia	1

```
/CELLS MEAN COUNT STDDEV  .
```

Means

```
[DataSet1] H:\clustersopenesecondata_2010.sav
```

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
gdp growth * Average Linkage (Between Groups)	17	100.0%	0	.0%	17	100.0%
export growth * Average Linkage (Between Groups)	17	100.0%	0	.0%	17	100.0%
import growth * Average Linkage (Between Groups)	17	100.0%	0	.0%	17	100.0%

Report

Average Linkage		gdp growth	export growth	import growth
1	Mean	10.550	18.000	44.575
	N	4	4	4
	Std. Deviation	3.1565	8.2684	3.2305
2	Mean	9.240	31.000	28.100
	N	5	5	5
	Std. Deviation	4.1687	7.6066	5.9351
3	Mean	7.475	29.575	60.975
	N	4	4	4
	Std. Deviation	1.1983	7.9290	3.6954
4	Mean	6.867	52.167	60.933
	N	3	3	3
	Std. Deviation	1.2055	8.3859	6.2308
5	Mean	3.300	22.000	80.800
	N	1	1	1
	Std. Deviation	.	.	.
Total	Mean	8.365	30.812	48.606
	N	17	17	17
	Std. Deviation	3.2123	13.4034	16.8868