**Czech University of Life Sciences Prague** 

**Faculty of Economics and Management** 

**Department of Economics** 



### **Diploma Thesis**

### **Balance of Payments – Case study of Kazakhstan**

Toghzan Toksanbaeva

© 2018 CULS Prague

## CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

# **DIPLOMA THESIS ASSIGNMENT**

Toghzan Toksanbaeva

**Economics and Management** 

Thesis title

Balance of payments – Case study of Kazakhstan

#### **Objectives of thesis**

The main aim of the diploma thesis is to analyze the development of the balance of payments and external economic balance of Kazakhstan in period from 2005 to 2015. The work will include both the analysis of the individual accounts and the total balances. Also will be conducted the analysis of the international investment position and external debt of Kazakhstan.

#### Methodology

The theoretical part of the thesis is based on literature review, processed on a basis of the studied literature and available Internet sources on the issue of balance of payments, external debt and international investment position. Practical part of the diploma thesis is based on the secondary research.

#### The proposed extent of the thesis

ххх

#### Keywords

balance of payments, current account, financial account, external economic balance, international investment position, external debt, Kazakhstan

#### **Recommended information sources**

BURDA, M. C. a WYPLOSZ, Ch. Macroeconomics: European text. Seventh edition. Oxford: Oxford University Press, 2017. ISBN 9780198737513.

ČESKÁ ZEMĚDĚLSKÁ UNIVERZITA V PRAZE. KATEDRA EKONOMIKY, – MAITAH, M. Macroeconomics.

V Praze: Česká zemědělská univerzita, Provozně ekonomická fakulta, 2009. ISBN 978-80-213-1904-2. DURČÁKOVÁ, J. – MANDEL, M. Mezinárodní finance a devizový trh. Praha: Management Press, 2016. ISBN 978-80-7261-287-1.

Expected date of thesis defence 2017/18 SS – FEM

The Diploma Thesis Supervisor

doc. Ing. Mansoor Maitah, Ph.D. et Ph.D.

Supervising department Department of Economics

Electronic approval: 12. 3. 2018

prof. Ing. Miroslav Svatoš, CSc.

Head of department

Electronic approval: 12. 3. 2018

Ing. Martin Pelikán, Ph.D. Dean

Prague on 20. 03. 2018

#### Declaration

I declare that I have worked on my diploma thesis titled "Balance of payments – Case study of Kazakhstan" by myself and I have used only the resources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that the thesis does not break copyrights of any third person.

In Prague on 26<sup>th</sup> of March

Toghzan Toksanbaeva

### Acknowledgement

I would like to thank Assoc. prof. Ing. Mansoor Maitah, Ph.D. et Ph.D. for his support and his useful comments.

### **Balance of Payments – Case study of Kazakhstan**

#### Abstract

This diploma thesis deals with the development of the balance of payments of Kazakhstan in a period from 2005 until 2015. The modern life of any country is inconceivable without multiple interrelations with other states and international organizations. The totality of all transactions made by the nation with the rest of the world for a certain period forms a balance of payments of the country. The theoretical part is focused on the description and explanation of concepts and terms that are important to clarify the issue of balance of payments. The practical part is focused on the analysis of the development of Kazakhstan's balance of payments and examining the causes of this development. Increased attention is paid to the study of the individual accounts of the balance of payments and interconnected links between them. Also, will be analyzed the international investment position and external debt of Kazakhstan. The source for the practical part was the data issued by the National Bank of Kazakhstan.

**Keywords:** balance of payments, Kazakhstan, current account, financial account, net balance of payments, foreign direct investment, international investment position, external debt.

### Platební bilance – Případová studie Kazachstánu

#### Abstrakt

Tato diplomová práce se zabývá vývojem platební bilance Kazachstánu v období od roku 2005 do roku 2015. Moderní život každé země je nemyslitelný bez několika vzájemných vztahů s jinými zeměmi a mezinárodními organizacemi. Celková částka všech transakcí uskutečněných zemí se zbytkem světa za určité období tvoří platební bilanci zemi. Teoretická část práce je zaměřena na popis a vysvětlení pojmů platební bilance, které jsou důležité pro objasnění problematiky platební bilance. Praktická část je zaměřena na analýzu vývoje platební bilance Kazachstánu a zkoumání příčin tohoto vývoje. Zvýšená pozornost je věnována analýze jednotlivých účtů platební bilance a vzájemně propojeným vazbám mezi nimi. Dále bude provedena analýza mezinárodní investiční pozice a zahraničního dluhu Kazachstánu. Zdrojem praktické části byly údaje vydané Národní bankou Kazachstánu.

**Klíčová slova**: platební bilance, Kazachstán, běžný účet, finanční účet, saldo platební bilance, přímé zahraniční investice, investiční pozice, zahraniční zadluženost.

### **Table of content**

1	Intro	duction	. 12		
2 Objectives and methodology					
	2.1	Objectives	. 13		
	2.2 Methodology				
3	Balar	nce of payments	. 15		
	3.1	Principles of the balances of payments	. 15		
	3.1.	1 Residence status	. 15		
	3.1.	2 Classification of transactions	. 16		
	3.1.	3 Structure of the balance of payments	. 16		
	3.1.	4 Accounting principles	. 17		
	3.2	Accounts of the balance of payments	. 17		
	3.2.	1 Current account	. 18		
	3.2.	2 Capital account	. 21		
	3.2.	3 Financial account	. 21		
	3.2.	4 Net errors and omissions	. 23		
	3.3	Net borrowing and lending position	. 24		
	3.4	Balance of payments identity	. 24		
	3.5	Exchange rate and its links to the balance of payments	. 25		
	3.6	Balancing mechanisms of balance of payments	. 26		
	3.7	International investment position and external debt	. 31		
	3.7.	1 International investment position	. 31		
	3.7.	2 External debt	. 34		
4	Anal	ysis of balance of payments of Kazakhstan	. 37		
	4.1	Current account	. 37		
	4.1.	1 Trade balance	. 39		
	4.1.	2 Balance of services	. 44		
	4.1.	3 Primary income balance	. 45		
	4.1.	4 Secondary income balance	. 47		
	4.2	Capital account	. 47		
	4.3	Factors stimulating the inflow of foreign investments to Kazakhstan	. 48		
	4.4	Financial account	. 49		
	4.4.	1 Direct investments	. 50		
	4.4.	2 Portfolio investments	. 52		
	4.4.	3 Financial derivatives	. 53		
	4.4.	4 Other investment	. 53		

	4.4.	5 Reserve assets	.54
	4.5	Net errors and omissions	55
5	Kaza	khstan's external debt and international investment position analysis	. 56
	5.1	International investment position	56
	5.2	External debt	61
	5.3	Statistical analysis	67
6	Conc	lusion	71
7	' References		
8	Appe	ndix	. 76

### List of tables and charts

Table 1: Balance of payments structure	. 18
Table 2: International investment position structure	. 32
Table 3: Development of ToT of Kazakhstan in 2005-2015, (annual changes in %)	.41
Table 4: Investment income by types of instruments, (in USD million)	. 46
Table 5: External debt per capita in 2005-2015, (in USD)	. 65
Table 6: External debt to GDP (%)	. 65
Table 7: External debt to exports (%)	. 66
Table 8: Ratio of debt service to exports (%)	. 66
Table 9: Reserve assets of the NBK to a short-term external debt (%)	. 66
Table 10: Calculation of the correlation coefficient between GDP and ED	. 67
Table 11: Calculation of the correlation coefficient between GDP and IIP	. 69
Chart 1: L-curve	28
Chart 7: Development of Kazakhstan's BoP in 2005-2015 (in USD hillion)	. 20
Chart 2: Structure of current account in 2005-2015 (in USD billion)	38
Chart 4: Development of current account in % to GDP in 2005-2015	39
Chart 5: Development of trade balance in 2005-2015 (in USD billion)	40
Chart 6: Development of oil prices in 2005-2015, (in CSD official)	. <del>4</del> 0
Chart 7: Structure of exports and imports of goods in 2015 (ratio %)	42
Chart 8: Geographical structure of foreign trade in 2015 (ratio %)	43
Chart 9: Development of balance of services in 2005-2015 (in USD billion)	. 13 44
Chart 10: Geographical structure of services in 2005 (ratio %)	45
Chart 11: Development of primary income account in 2005-2015. (in USD billion)	46
Chart 12: Development of secondary income balance in 2005-2015. (in USD million)	.47
Chart 13: Development of capital account in 2005-2015. (in USD billion)	.48
Chart 14: Development of FA in 2005-2015. (in USD billion)	. 50
Chart 15: Development of direct investments in 2005-2015. (in USD billion)	. 51
Chart 16: Development of portfolio investments in 2005-2015, (in USD billion)	. 52
Chart 17: Development of other investments in 2005-2015, (in USD billion)	. 53
Chart 18: Development of reserve assets in 2005-2015, (in USD billion)	. 54
Chart 19: Development of net errors and omissions in 2005-2015, (in USD billion)	. 55
Chart 20: Development of IIP of Kazakhstan in 2005-2015, (in USD billion)	. 56
Chart 21: Development of IIP by economic sectors in 2005-2015, (in USD billion)	. 57
Chart 22: NFK assets and NBK reserve assets by financial instruments, as of 31/12/2015	558
Chart 23: IIP of Other sectors by types of financial instruments, as of 31/12/2015	. 59
Chart 24: IIP of Banks sector by types of financial instruments, as of 31/12/2015	. 59
Chart 25: IIP by types of financial instruments, as of 31/12/2015	. 60
Chart 26: IIP of Kazakhstan by countries, as of 31/12/2015, (in USD billion)	. 61
Chart 27: External debt of Kazakhstan in 205-2015, (in USD billion)	. 62
Chart 28: Structure of ED by sectors in 2005-2015, (in USD billion)	. 63
Chart 29: Structure of ED by countries in 2005-2015, (in USD billion)	. 64
Chart 30: The correlation graph and regression function f (ED) = GDP	. 68
Chart 31: The relationship between ED and GDP in 2005-2015, (in USD billion)	. 68
Chart 32: The correlation graph and regression function f (IIP) = GDP	. 70
Chart 33: The relationship between IIP and GDP in 2005-2015, (in USD billion)	. 70

### List of abbreviations

BoP	Balance of Payments
IMF	International Monetary Fund
SDR	Special drawing rights
ТоТ	Terms of trade
CA	Current account
FA	Financial account
NBK	National bank of Kazakhstan
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
IIP	International Investment Position
NFK	National Fund of Kazakhstan
CIS	Commonwealth of Independent States
EEU	Eurasian Economic Union
ED	External Debt

#### **1** Introduction

Nowadays, the need and practice of accounting for international payments are increasing as a consequence of the strengthening of the role of the state in the formation and settlement of balance of payments. The role of state economic institutions - treasury, budgetary and other institutions, whose activities include the collection and analysis of data on international payments, is growing. Today all countries are participants of the modern world economy. The activity of this participation, the degree of integration of individual states into the world economy are different. Foreign economic relations in their development go through certain stages, the change of which characterizes the strengthening of the integrity of the world economy and the complexity of the content of international economic relations. In addition to economic relations, there are political, military, cultural and other relations between countries that generate cash payments and income. The multifaceted complex of the country's international relations is reflected in the balance sheet of its international operations, which is traditionally called the balance of payments.

The analysis of the individual accounts of the balance of payments and its partial and cumulative balances provides an idea of the country's economic stability. Through the balance of payments, information can be obtained on the state of the economy, its external performance, the success of the economic policy, the country's investment position vis-à-vis foreign countries and the external debt of the economy. Therefore, the balance of payments is heavily monitored by financial managers and decision-makers.

The subject of the diploma thesis is the analysis of the balance of payments of Kazakhstan in 2005-2015. The reason for choosing the topic is the interest and the relevance of the issue. The favorable balance of payments development for Kazakhstan should be important as Kazakhstan is a young developing country with an open economy for which relations with the outside world are essential. To understand how a country's economy is structured and how it interacts with the rest of the world, one must know its external balance.

### 2 Objectives and methodology

#### 2.1 Objectives

The aim of the thesis is to analyze the structure and development of Kazakhstan's balance of payments in the period from 2005 to 2015, and then to assess the sustainability of the external economic equilibrium. The partial aim of my thesis is to investigate the causes and factors affecting the development of individual accounts and the balance of payments sub-accounts. Based on the made analysis the author seeks to answer the following research questions:

- How is Kazakhstan's external balance structured?
- How should we assess Kazakhstan's external balance?
- What are the underlying factors that drive Kazakhstan's external balance?

#### 2.2 Methodology

The thesis is divided into the theoretical part and practical part, which are comprised of three chapters. The first chapter focuses on explaining the theoretical bases of the balance of payments and its interaction with the international investment position and some related concepts. This part is based on the literature review, processed based on the studied literature and available internet sources on the issue of balance of payments, external debt and international investment position.

The practical part of the thesis is based on the secondary research. Firstly, the second chapter describes the basic trends of the development of individual accounts and balance of payments sub-accounts, also focuses on analyzing and investigating the causes of these developments and trends. The third chapter deals with the analysis of external debt and international investment position and its indicators. Also, there is conducted the statistical analysis (correlation and regression) of the relationship between the international investment position, external debt, and gross domestic product.

The main source of practical part of the work will be the data and annual reports of the National Bank of Kazakhstan. The timeframe from 2005 to2015 is selected due to the availability of data. Kazakhstan's balance of payments issued according to the methodology of the Intranational Monetary Fund since 1995 and in connection with the publication of the sixth edition of the Balance of Payments manual on the pages of the National Bank of

Kazakhstan have published data since 2005. The computations are done through the statistical formulas, matrices and statistical applications offered in MS Excel. All charts and tables are also created by the applications in MS Excel.

### **3** Balance of payments

The balance of payments and its structure are one of the key macroeconomic indicators of the country. The balance of payments indicates the country's international economic relations with foreign partners and represents the success of the economic policy.

It reflects all the external relations associated with the movement of goods, services, money, and capital between the national economy and the rest of the world. The balance of payments defines the development of foreign trade, the level of production, employment and consumption. Its data provides detailed information concerning the forms of foreign investments, which flow to the country; the demand and supply of country's currency; and the state of fiscal and monetary policy. According to the International Monetary Fund (IMF), *"the balance of payments is a statistical statement that systematically summarizes, for a specific period, the economic transactions of the economy with the rest of the world."* (IMF, 2009). Also, the BoP provides detailed information concerning the demand and supply of foreign exchange rate. The balance of payments is mostly often monitored by managers and decision-makers in trade, industry and banking areas.

It is important to note that the balance of payments is a flow-oriented balance as it captures the flow of economic transactions over a given period.

As the economic variable, the BoP affects other key macroeconomic variables. There is also an inverse relationship, key macroeconomic variables such as gross domestic product, employment, interest rate and foreign exchange rates; price levels and commodities have an impact on the development of BoP.

#### **3.1** Principles of the balances of payments

#### 3.1.1 Residence status

An important concept in the balance of payments is the notion of a *resident* of the country. An economic unit is a resident of a state if it has a major center of interest in the economic territory of that state. It is important to know to determine the degree of integration of the unit into the economy of the country. Residents are the inhabitants of the country who live on the territory of that nation for a long time, which means more than one year (IMF, 2009). These entities are the residents of the state where they have their seat. However, when

a corporation or financial institution has branch abroad or affiliate for a balance of payment purposes, that abroad unit is a non-resident (Maitah, 2009).

There are also some exceptions as diplomats, tourists, students, aircraft and ships crews, cross-border workers who are considered as residents in their country of origin (IMF, 2009).

#### **3.1.2** Classification of transactions

Balance of payments records all economic transactions between the residents of reporting country and the residents of foreign countries during a given period time. An economic transaction connected to a receipt or payment of money in exchange for the goods, services, and assets. In the balance of payments classification of each transaction is based on the payment or receipts that it generates. Receipt transaction is one that gives rise to the receipt of funds by a resident, and a payments transaction is one that results in payment of funds by a resident (Maitah, 2009).

Receipt transactions are credit items and represent the supply of exchange, including the export of good and services, imports of income and capital inflows. On the contrary, payments transactions are debit items and represent demand for exchange, including imports of goods and services, exports of income and capital (Maitah, 2009).

#### **3.1.3** Structure of the balance of payments

The concept of balance of payments structure in different countries and institutions is different. The most used structure of the BoP is based on the International Monetary Fund methodology. Currently in force the sixth edition of the Balance Payments and International Investment Position Manual. As the member of IMF, Kazakhstan prepares the balance of payments by IMF's recommendations. The balance of payments is divided into vertical and horizontal structures (Neumann, 2010).

The balance of payments within the horizontal structure consists of the four basic categories: current account, capital account, financial account and net errors and omissions. Each of these accounts is divided into subaccounts. A more detailed division provides deeper analysis of the balance of payments.

Another division of the balance of payments is a vertical division, where the BoP is divided into credit, debit, and balance. Each of these items is a single column. Credit transactions are those transactions, which lead to the inflow of money to domestic economy from abroad. The second column is a debit item. Debit transactions lead to the outflow of money from the domestic economy to abroad. The third column is a balance, the difference between credit and debit transactions. Each transaction is recorded on two different accounts, once as credit and once as a debit, so that to preserve the system of double-entry bookkeeping. The resolution on credit and the debit transactions is called vertical structure of the balance of payments (Mandel, 2016).

#### **3.1.4** Accounting principles

As was mentioned above, the accounting principle of the balance of payments is based on the system of double-entry bookkeeping. Each transaction is recorded twice, for both the current and the capital account; it is once a credit item and the other as a debit entry. Credit transactions are captured with a + (plus) sign and influence a supply of foreign exchange and a demand for the country's currency. For example, export of goods, export of services, unilateral transfers to a home country, income from investments abroad and import of capital (Maitah, 2009).

Debit transactions are captured with a - (minus) sign and influence demand for foreign exchange and supply for the country's currency. It is, for example, the import of goods, import of services, unilateral transfers sent abroad, export of capital and income from investment sent abroad (Maitah, 2009).

In case of a financial account, transactions are not divided into credit and debit. The terms "net acquisition of financial assets" and "net incurrence of liabilities" are used. There is a distinction on the one side, the acquisition and disposal of the financial asset and on the other, the acquisition and disposal of liabilities. For example, the inflow of foreign investment is recorded with a positive sign as the creation of foreign liabilities, while foreign investment of residents abroad is also recorded with a positive sign such as the creation of foreign sets (Neumann, 2010).

#### **3.2** Accounts of the balance of payments

The balance of payments is compiled and published according to the needs of the economic analysis. Balances that are rather informative are structured and include around 20 items. More detailed analytical balances compiled by central institutions generally have more than 100 items. Despite the different types of a compilation of the balance of payments,

the structure remains the same and consists of the three basic accounts such as current account, capital account, and financial account. The basic structure of the balance of payments according to IMF is shown in the following table.

Table 1: Balance of payments structure

Balance of payments				Credits	Debits
1	Current account				
	Current	t account ba	alance		
	1.A	Goods ar	d services		
		Balance of	on good and services		
		1.A. a	Goods		
		1.A. b	Services		
	1.B	Primary	income		
		Balance of	on primary income		
	1.C	Secondar	y income		
		Balance of	on secondary income		
2	Capita	l account			
	Capital	account ba	lance		
	Net lending (+) /net borrowing (-) (balance from current and capital accounts)			ccounts)	
				Net acquisition of financial assets	Net Incurrence of liabilities
3	Financ	ial accoun	t		
	Net lending (+) /net borrowing (-) (from financial account)				
				Credits	Debits
	Net err	ors and on	ussions		

Source: IMF, 2009, compiled by the author

#### 3.2.1 Current account

The current account of the balance of payments includes the export and import of goods and services, the revenues and costs associated with the international movement of capital and labor, and unilateral transfers. It consists of the four following subaccounts: balance of trade, balance of services, balance on primary income and balance on secondary income.

The current account is considered to be the key balance due to the fact that it is directly related to the net investment position of the country. An active balance of the current account leads to an improvement in the country's investment position, there is an increase in foreign receivables, decrease in foreign liabilities and increase in foreign exchange reserves. The opposite occurs in the case of a passive current account balance. The current account deficit

can be considered unsafe and unsustainable for a long time. For this reason, the generally accepted maximum limit for maintaining the current account deficit is the ratio of the current account deficit to the GDP which should not be higher than 5%. In addition to the actual current account deficit, it is necessary to monitor how this deficit is financed. If the passive balance is financed by the inflow of short-term capital, foreign borrowing or the reduction of foreign exchange reserves, the long-term unsustainable situation occurs. If the deficit is not eliminated in the near future, the domestic currency is likely to be subject to depreciation pressures (Kubišta, 2009). A more stable balance of payments situation is financing the current account deficit with long-term non-debt capital because the risk of weakening the domestic currency is much lower. With the zero balance, the investment position of the country does not change, so the balance of the current account is most commonly regarded as the economic balance of the BoP (Mandel. 2009).

**Balance of trade** - is the most key component of a current account, represents a movement of goods. The trade balance, therefore, shows a comparison between the value of the export and import of goods over a given period. The difference between import and export of goods is the balance of trade balance. The positive trade balance means that the country in a given period has exported more value than imported, and the negative trade balance means that the country has imported more goods than it exported. Balance of payments statistics, in addition to export and import of goods, include re-exports and merchanting. Re-exports it is an import of goods by a resident of the domestic economy from abroad with subsequent export. Merchanting is a goods purchased by a resident of the domestic economy abroad from a non-resident with subsequent resale to another non-resident without import of goods into the domestic economy (IMF, 2009).

Goods are divided into the commodity groups according to the SITC (Standard International Trade Classification. Export and import of goods are divided into the following groups: food, beverages and tobacco, raw materials, fuels, fats and oils, chemicals, market products, machinery, and transport equipment, industrial products, and unclassified goods.

The trade balance records all trade in goods, i.e., exports and imports of physical goods that crossed the state border, i.e., material flows regardless of whether the respective payment was followed in the reporting period. In the territorial structure, exports and imports are generally tracked into industrial and developing countries. IMF statistics include exports and imports of developing countries further broken down into countries in Africa, Asia and Europe, the Middle East and the Western Hemisphere countries (most of the Latin American countries). The international movement of goods is further specified in the countries of the European Union, EFTA (European Free Trade Association) and other advanced market economies (IMF, 2009).

**Balance of services** - is another important part of the current account of the balance of payments and includes exports and imports of services. Among the most important items in this balance are usually international transport, foreign tourism, and international insurance. It also includes communications, construction, financial, computer and information services, personal, cultural and recreational services and government services (Burda, 2017).

**Primary income balance -** reflects the revenues and costs associated with investing abroad. Types of the primary income include the following: compensation of employees, dividends, interest and reinvested earnings. It also includes wages of non-residents in the domestic economy and wages of domestic workers working abroad. Credit items reflect primary income receivable by the domestic economy and debit items reflects primary income payable by the domestic economy (Burda, 2017).

*Compensation of employees* is a compensation for the contribution of labor to the production process produced by an individual who is in a relationship with the employer and the enterprise. In the accounts of foreign economic activity, the compensation of employees is reflected when the employer and employee are residents of different countries. The remuneration of employees consists of three main components:

- 1. wages and salaries in cash;
- 2. wages and salaries in kind;
- 3. employer's social contributions.

Investment income is the profit from the provision of financial assets, including dividends, reinvested earnings and interest, that is, revenues from direct, portfolio, other investments and reserve assets (IMF, 2009).

*Dividends* are distributable profits that are transferred to owners of the shares of capital for the provision of funds to the disposal of the organization.

*Reinvested earnings* represent the proportion of a direct investor that is proportional to its share of capital, in the income of foreign subsidiaries and associates, which they do not distribute as dividends. Reinvested earnings in some cases may be negative, for example, in case of losses of the direct investment enterprise, or when dividends payable in the period under review exceed net income for that period. Similarly, to positive reinvested earnings, which are treated as an infusion of capital into a direct investment enterprise by a direct investor, negative reinvested earnings are a withdrawal of funds from the capital (IMF, 2009).

*Interest* is a form of investment income to be received by the owners of certain types of financial assets represented by deposits, debt securities, loans and borrowings and other receivables or payables, for making them available to another institutional unit. Interest is reflected on the accrual basis, that is, they are reflected as continuously credited to the lender over the outstanding amount (IMF, 2009).

**Secondary income balance** – represents current transfers between residents and nonresidents. Current transfers are unilateral transfers that do not lead to foreign debts and liabilities in relation to foreign countries. These transfers are divided into governmental and private, financial and material. Typical examples of current transfers are economic aid between countries, contributions to international organizations, gifts, inheritance, and maintenance (Burda, 2017).

#### 3.2.2 Capital account

The second account of the BoP is the capital account and includes remaining transfers of a capital nature, which are not included in the current transfers. This account comprises capital transfers and transfers of nonproduced nonfinancial assets between residents and nonresidents. These transfers include capital transfers related to population migration, debt relief and property rights to basic means. It also records acquisitions and disposals of nonproduced nonfinancial assets, such as land sold to embassies and sales of leases and licenses (IMF, 2009).

Other capital transactions are recorded in the following account balance of payments, i.e., in the financial account.

#### 3.2.3 Financial account

The financial account captures all transactions associated with the movement of financial capital between residents and non-residents. It can be divided regarding the type of investment as well as regarding the time (long-term and short-term). Flows in financial account are recorded on a net basis. Assets and liabilities are divided by their functional

category and consist of the following five components: direct investments, portfolio investments, financial derivatives, other investments and reserve assets.

*Direct investments* are categories of cross-border investments where a resident of one country participates in control or has a significant influence on the management of a foreign enterprise. Investment is considered to be a direct investment when the investor owns equity, which entitles in to 10% or more of the voting rights of an enterprise. Direct investments are classified into subcategories such as equity capital, reinvested earnings, and other capital (Mandel, 2016).

Direct investments on the principle of assets and liabilities are reflected in the statistical reports of the balance of payments and the international investment position. At the same time, this principle does not take into account the direction of control and influence of the direct investor. Therefore, the structure of direct investments by countries and by types of economic activity is additionally formed by the principle of investment orientation.

*Portfolio investments* include transactions in debt securities and equity securities and participation that do not fall under the category of direct investment (share of the company's share capital is less than 10%, and investor has a short-term interest) or reserve assets.

*Financial derivatives* mainly include financial instruments such as forwards, futures, swaps, and options. These trades are often used to hedge risks and for speculation operations.

*Other investments* include granted and received loans and deposits of long-term and short-term nature. Also, comprise other equity, insurance, and pension programs. Other equity is included on the assumption that it is not a direct investment or reserve assets. They are divided into long-term and short-term and also by entities that receive or provide a loan such as central banks, commercial banks, governments, and businesses act here as lending and lending entities (IMF, 2009).

*Reserve assets* are foreign highly liquid assets of the country that are under the direct control of the central banks and can be used to achieve economic-political goals. These assets can be used at any time to finance the balance of payments deficit and intervene in the foreign exchange market to provide an impact on the exchange rate. International reserves can also be used to maintain confidence in the national currency and as a basis for external borrowing. They consist of the foreign exchange assets of the central banks and other official monetary institutions (McConnel, 2012).

An asset is considered as a reserve if it meets the following criteria: the asset has the form of a claim to non-residents (except for gold bullion), the asset is denominated in freely convertible foreign currency, the asset actually exists and is under the control of monetary authorities, the asset can be converted into freely convertible foreign currency with minimal costs and in a minimum period. Reserve assets include monetary gold, special drawing rights (SDRs), a reserve position in the IMF and other assets in a foreign currency that meet the criteria for reserve assets (IMF, 2009).

*Monetary gold* is gold of the test not less than 995/1000, belonging to the official bodies of the country, which at any time can be sold for foreign currency in world markets or international organizations (IMF, 2009).

*Special Drawing Rights* are international reserve assets created by the International Monetary Fund to replenish the reserves of IMF member countries that are distributed among countries in proportion to their quotas. The value of such assets is estimated based on the dollar value of the basket of the five leading currencies: the US dollar, the euro, the Chinese yuan, the yen and the pound sterling (IMF, 2009).

*The reserve position in the IMF* is the amount of foreign currency that the member state is entitled to withdraw from the IMF with a short notice (a reserve tranche is 25% of the country's contribution to the IMF's capital) and the IMF's debt to the member state (if the country provides resources to the IMF to maintain credit activity of the Fund in other countries) (IMF, 2009).

*Reserves in foreign currency* - cash foreign currency, foreign currencies on current and deposit accounts in foreign banks, securities

*Other reserve assets* are foreign assets that are liquid and are freely usable by monetary authorities but are not included in other categories of reserve assets.

#### 3.2.4 Net errors and omissions

Net errors and omissions is the imbalance account of the balance of payments. This account represents the balance of unregistered flows in the current, capital and financial accounts. It has a specific role in the balance of payments because it is calculated only after the compiling of the balance of payments itself as the difference between the sums of credit and debit items so that the balance of payments as a whole is always balanced. This account

of the balance of payments offsets the differences that occurred due to methodological problems, inaccuracies in the bookkeeping, exchange rate differences (Burda, 2017).

#### **3.3** Net borrowing and lending position

The overall balance on the financial account is called country's net lending or net borrowing position. An overall positive balance on the financial account indicates net lending to the rest of the world; a negative balance corresponds to net borrowing. When a country is a net lender, it means that the economy supplies funds to the rest of the world acquires financial assets or gets rid of some of its foreign liabilities by repaying some of its debt. Net borrower increases its financial liabilities and disposes of some its financial assets (Burda, 2017). The net lending or net borrowing can be obtained from either the balance of the financial account or the sum of the current and capital accounts balances. In concept, the values should be equal. The difference between net lending/borrowing on a financial account, on the one hand, and net lending/borrowing in the current account and capital account, on the other hand, is reflected in the balance of payments in the account "Net errors and omissions." For a surplus of credits over debits in the current and capital accounts, there is a balancing net acquisition of financial assets or reduction of liabilities, which is shown in the financial account (IMF, 2009).

#### 3.4 Balance of payments identity

The balance of payments must always be balanced. The balancing item is change in foreign exchange reserves. The combined balance of the current account and capital account must be equal to the non-official financial account plus official interventions, on condition that the balance of payments accounts are recorded correctly. It means that CA+KA = NOFA + CA, where NOFA is defined as the financial account excluding change in foreign exchange reserves held by the central bank. Changes in foreign exchange reserves – sometimes called 'official interventions by monetary authorities'- occur when the central bank also get involved in the financing of international transactions (Burda, 2017).

Balance of payments identity indicates that a country can run a balance of payments surplus or deficit by increasing or decreasing its official reserves (Maitah, 2009). If the overall balance of payments is in surplus, the foreign exchange reserves also grow. Otherwise, if there is the deficit of the balance of payments, the foreign exchange reserves decrease. However, foreign exchange reserves cannot be used for the balancing of BoP in the long term. If the country's balance of payments eventually ended in a deficit, it would soon have exhausted its foreign exchange reserves. The balance of payments equilibrium thus can be achieved by balancing mechanisms.

#### **3.5** Exchange rate and its links to the balance of payments

The development of the balance of payments is inherently connected with the development of the exchange rate. It is a significant economic variable, which represents the price of one currency expressed in units of the other currency. There are two types of currency quotation on the foreign exchange market. Direct quote expresses the price of a foreign currency unit in the number of domestic currency units (25 CZK / EUR). The second type of currency quotation is indirect quote, which expresses the price of the domestic currency unit in a number of foreign units (0.04 EUR / CZK). This price is formed on the foreign exchange market, which means that the price is naturally given by market forces (Krugman, 2015).

Movements of exchange rates on the foreign exchange market can result in depreciation or appreciation of the currency. The loss in the value of the currency concerning another currency called currency depreciation. And the increase in the value of the currency in the same context is currency appreciation. These market changes can occur in floating and fixed exchange rate regimes. There are also terms as devaluation and revaluation, which occurs because of a decision of the central bank or other authority in a fixed exchange regime. Devaluation is an official decrease in the value of the domestic currency and revaluation is an official growth in the value of domestic currency (Krugman, 2015).

The importance of the exchange rate lies in the ability to influence both macroeconomic and microeconomic variables. Its value has a significant impact on the financial results of companies, individuals and on the country's position vis-à-vis other countries. From a macroeconomic point of view, the exchange rate can affect the competitiveness of domestic export products and thus the real GDP of the economy. The competitiveness of domestic exporters is affected by changes in the price level induced by changes in the exchange rate. From a microeconomic point of view, changes in the exchange rate influence the decision-making of economic entities that decide on their export activities or holdings of foreign currency assets and liabilities.

The balance of payments and exchange rate are closely interrelated, depending on the foreign exchange rate regime. There are two main exchange rate regimes: fixed exchange rate regime and floating exchange rate regime.

*Fixed exchange rate* - the exchange rate that government fixes to the value of another single currency and maintains as the official exchange rate. This official rate can be expressed directly by the fixed relationship of that currency to the other currencies, or it can be calculated through the basket of selected currencies against which the fixed rate is determined. As was mentioned above, changing this official rate is referred to devaluation or revaluation of the exchange rate. The central bank intervenes in foreign exchange markets by buying or selling foreign exchanges to keep domestic exchange rate stable. The central bank must hold high foreign exchange reserves and carry out forced interventions if the course tends to deviate from the declared one (Neumann, 2010).

*Floating exchange rate (pure)* - it is market-determined exchange rate, where exchange rates are determined by the unregulated forces of demand and supply. In that case, the economy dictates the exchange rate and the central bank doesn't intervene in the foreign exchange market. There is also a *managed floating*, the modification of the pure floating, here is the exchange rate to a certain extent influenced by supply and demand, but also influenced by government interventions. The central bank intervenes in foreign exchange markets maintaining the exchange rate in the required specified band (the oscillation band), preventing significant fluctuations in the exchange rate (Mandel, 2016).

#### **3.6 Balancing mechanisms of balance of payments**

Balancing mechanism takes into account the exchange rate regime of the country. In the countries applying the fixed exchange rate regime, there will be a different balancing mechanism of balance of payments than for countries with a floating exchange rate regime. The process of balancing within the floating exchange rate is referred to the exchange rate adjustment mechanism. In the case of a fixed exchange rate, balancing mechanisms are price-specie flow mechanism, mechanism of absorption and monetary approaches.

#### Exchange rate adjustment mechanism

The fundamental principle of the exchange rate adjustment mechanism is the change in relative prices in foreign trade due to change in the exchange rate. Therefore, Terms of Trade play a crucial role here. Terms of trade represent the ratio of the export prices expressed in local currency (PX), and import prices import prices expressed in foreign currency (PM) subsequently converted by the nominal exchange rate (ED / F) (Mandel, 2008):

#### TT = PX / (ED / F \* PM)

In case of a non-zero current account balance, there is a currency imbalance and a change in the exchange rate. The change in the exchange rate affects exports and imports of goods and services. Due to the depreciation of the exchange rate, there is a relative decline in export prices and a relative increase in import prices. Exporters collect more domestic currency at the same prices of goods and services denominated in foreign currency. Exports of goods and services are on the rise, with a decline in imports of goods and services. There is, therefore, a rebalancing process that balances the foreign exchange market and balances the trade and services balance (Mandel, 2008). This process is called the rebalancing by changing the exchange rate and is based on the assumption of a floating exchange rate (it may also be used for fixed exchange rate regimes with wider oscillation bands).

However, this mechanism where the devaluation of the domestic currency ensures a return to balance does not apply automatically but requires the fulfillment of the so-called Marshall-Lerner condition. The Marshall-Lerner condition states that the devaluation will lead to an improvement in the balance of trade only if the absolute sum of the elasticity of domestic demand for imports and the elasticity of foreign demand for domestic exports is greater than one. Furthermore, this condition assumes the infinitely flexible supplies of domestic export and foreign import. From a statistical point of view, most countries have no problem with meeting this condition, although there may be limitations in the short term. If the sum of elasticity is equal to one, the current balance of payments account will not change. Otherwise, the depreciation will lead to a deepening of the balance of payments deficit. Positive impacts of depreciation occur only over a long period, and in the short term, there may be a temporary worsening of the trade balance deficit (Gandolfo, 2016). This phenomenon explains the so-called J-curve (chart 1).

The J-curve shows the evolution of the trade balance related to the development of the domestic currency exchange rate and Marshall-Lerner condition. Before the depreciation, the balance of the trade balance is deficient. After the depreciation, the deficit is rising, because foreign exchange rates are not changing, while foreign exchange revenues are temporarily decreasing. This period is therefore exactly when the Marshall-Lerner condition

is not met. It lasts for as long as the "J-curve" is found in negative numbers than before reaches zero. Changes in the development of the balance of the performance balance occur when the Marshall-Lerner condition is met. Demand functions in foreign trade are sufficiently flexible, and net exports are increasing (Gandolfo, 2016).



Source: https://peofdev.wordpress.com/2016/10/10/brexit-the-pound-and-the-j-curve-effect/ *Price-specie flow mechanism* 

The price-specie flow mechanism is a concept based on a quantitative theory of money and considered as one of the oldest processes for balancing the balance of payments. The essence of the concept is that the growth of currency in the domestic economy will result in an increase in the price level, while the decline in currency in the country leads to a lower price level. The concept is based on certain assumptions such as the fixed exchange rate regime, price and wage flexibility, the economy is at its potential, the interest rates are stable, and the velocity of circulation of money is constant.

This model assumes the automaticity of corrections of the trade balance. If a country has an active trade balance, there is an increase in the amount of money in circulation, and as a result of greater exports than imports and there is also a reduction in the supply of goods and services on the domestic market. The resulting inflation gap is offset by the rise in the domestic price level. Higher domestic prices will worsen the export of the country and, on the contrary, encourage domestic interest in imports. The trade balance will either settle for a time or become passive (Gandolfo, 2016).

The basic problem of the price-specie mechanism is the way and the speed of the reaction of the domestic price level to changes in the money supply. The principle of the price equalization mechanism is quite similar to the rebalancing mechanism, but the balance of payments does not change the real income but change the price level.

If the balance of payments deficit arises per this theory, the flow of money abroad is followed. The outflow of money means a fall in domestic price levels. This fall in domestic price level leads to the increase in domestic exports and reduction in imports. As a result, money flows abroad, thus balancing the balance of payments or even exposing its surplus. Analogously, this works with a surplus of the balance of payments. The surplus of the balance of payments causes an inflow of money to the domestic economy and consequently a rise in domestic price levels. However, due to the rise in the domestic price level, the price competitiveness of domestic entities will be reduced, resulting in a decrease in exports and an increase in imports. Then, the balance of payments due to the outflow of money is in equilibrium or in deficit (Lewis, 2016).

#### Mechanism of absorption approach

The absorption approach to the balance of payments is based on the Keynesian national income relationships. This balancing process draws its attention to the links between trade balance and real income. There is a presumption that the rise in real income will also increase import expenditure. An important role in this process plays the marginal propensity to import, which tells you how much domestic import expenditure will increase if the real income increases with an additional unit. In Keynesian models, domestic currency exports are insensitive to changes in income. The fundamental difference between the absorption approach and price-specie flow mechanism is that the change in demand due to the trade balance leads to changes in the real income rather than price changes. There are the following assumptions for the functioning of that mechanism: fixed wages and prices; the fixed exchange rate, the economy below potential, the existence of involuntary unemployment, a stable interest rate and zero savings (Gandolfo, 2016).

If the trade balance is shifting from its equilibrium position, for example, due to lower foreign demand for domestic products get to the deficit, it means that economic entities will have a lower disposable income. However, the part of the import depends on the amount of disposable income:

#### $\mathbf{M} = \mathbf{M}\mathbf{a} + \mathbf{m}^*\mathbf{Y}\mathbf{D}$

Where: Ma = autonomous import, m = marginal propensity of import (Gandolfo, 2016). It follows from this relationship that with the increase in disposable income, the volume of imports (and vice versa) will increase. As soon as the income of economic entities decreases, the import of foreign products also decreases. The process stops when the trade balance will be again balanced (the net export will be zero).

#### Mechanism of the monetary approach

Unlike the previous approaches, mechanism of monetary approach monitors the balance of payments as a whole, not just a trade balance or a current account. This approach is based on these basic functional relationships: the balance of the trade balance causes changes in domestic money supply and changes in the domestic money supply and in demand for money backward affect the trade balance. For the monetary approach, the relationship between the starting balance of the balance of payments, the foreign exchange interventions of the central bank, the change in the money supply and the final trade balance are crucial. The active balance forces the central bank to buy foreign currencies in order not to appreciate the exchange rate of the domestic currency. This results in the sale of the domestic currency, the increase in domestic money supply and the pressure to increase imports or to decrease the export of goods and services. The balance of trade should restore its balance. A passive balance forces the central bank to sell foreign exchange in order not to depreciate the domestic currency rate. This leads to the purchase of domestic currency, to a reduction in domestic money supply and downward pressure on imports or the growth of exports of goods and services. The trade balance (Gandolfo, 2016).

The monetary approach to balancing mechanisms balance-of-payments complements the previously described mechanisms. Compared to previous equalizing mechanisms, this theory does not deal with the flow, but with state variables. Basic assumptions for using the monetary approach: the national economy is permanently at its optimum (at the level of the potential product); it is a small economy; domestic prices of goods and services are derived from world prices after conversion at the foreign exchange rate; a fixed rate system with no oscillation bands; domestic and foreign assets are perfect substitutes, and there is no risk premise. The weakness is that neither of these assumptions is fully implemented in practice.

#### 3.7 International investment position and external debt

As already mentioned, the external balance of the country is evaluated by the development of the balance of payments, investment position, external debt and other important macroeconomic variables. Since the balance of payments is always balanced, it is mainly important to follow the structure of the balance of payments for the analysis of the external balance.

One of the risks of a long-lasting unsustainable form of external economic equilibrium is the gradual or hike depreciation of the currency that occurs in the case of a long-term current account deficit funded by portfolio or other investments It is, therefore, possible to consider a suitable form of an external balance that is sustainable in the long run and does not indicate a future depreciation of the domestic currency in the future.

#### **3.7.1** International investment position

The balance of payments reflects the flow of real and financial resources between residents and non-residents. Streams of resources accumulate and form resource stocks. Stocks arising from the international movement of financial resources form the country's international investment position. The aggregate of operations of the financial account of the balance of payments and the international investment position constitute a complete set of international accounts in the economy. The country's investment position is a statistic showing the volume of residents' assets and liabilities vis-à-vis non-residents in the domestic currency. Practically its structure corresponds to the financial account of the balance of payments is a stock-oriented flow, as it shows the financial situation of the domestic economy relative to foreign countries by a certain date (IMF, 2009).

Financial items that include an investment position consist of requirements to nonresidents, liabilities to non-residents, monetary gold, and SDRs. By agreement, land and other real estate (except for those belonging to extraterritorial units) are considered to be property belonging to economic agents of the economy in which this real estate is located. Consequently, non-resident owners, instead of owning a real non-financial asset, have financial claims to a resident who (on the territory of which) this property is located. Assets are receivables from foreign entities and ownership of foreign assets by domestic entities. Liabilities reflect liabilities of the domestic entity to foreign assets and ownership of foreign assets on domestic territory. The difference between financial assets and liabilities is the country's balance of investment position. The investment position balance represents the net financial relationship of the country with non-residents. It combines the economic reserves of nonfinancial assets that make up the net cost of this economy. Based on the country's net investment position, it is possible to estimate the level of the country's net investment income on its foreign assets and liabilities (Burda, 2017).

Inte	rnational in	vestment position	Assets	Liabilities	
Net	International	l investment position			
1	Direct in	vestment			
	1.1	Equity and investment fund shares			
	1.2	Debt securities			
2	Portfolio	investment			
	2.1	Equity and investment fund shares			
	2.2	Debt securities			
3	Financia	l derivatives (other than reserves) and employee stock options			
	3.1	Central bank			
	3.2	Deposit-taking corporations, except the central bank			
	3.3	General governing			
	3.4	Other sectors			
4	Other investments				
	4.1	Other equity			
	4.2	Currency and deposits			
	4.3	Loans			
	4.4	Insurance, pension, and standardized guarantee schemes			
	4.5	Trade and other advances			
	4.6	Other accounts receivable/payable			
	4.7	Special drawing rights			
5	Reserve a	assets			
	5.1	Monetary gold			
	5.2	Special drawing rights			
	5.3	Reserve position in the IMF			
	5.4	Other reserve assets			

Table 2: International in	vestment position	structure
---------------------------	-------------------	-----------

Source: IMF, 2009, compiled by the author

The position at the end of a certain period reflects financial transactions, changes in value, revaluation and other adjustments that occurred during this period and affected the level of assets and liabilities. Since the level of reserves is often used in the balance of

payments to determine the income and payment of investment income, for consistency of stocks and flows and analysis of income and return on foreign investment, is important a compatible classification of the "income" category of current and financial accounts, as well as the investment position.

The classification of the international investment position has sections and subsections. The basic structure of the international investment position according to IMF is shown in table 2.

The first division of data is assets and liabilities. The difference between them is a net position. Sections, in full accordance with the classification of the financial account of the balance of payments, are divided into functional categories. Assets are divided into direct investments, portfolio investments, other investments and reserve assets. Liabilities are divided on the same principle but except reserve assets. The subaccounts are divided in accordance with the primary income of the current account and the financial account of the balance of payments. For example, direct investments are divided into share capital, reinvested earnings and other investments, portfolio investments, debt securities and financial derivatives. Also, assets and liabilities are divided by instruments.

The investment position is influenced by operations related to the change in debt:

- the exchange of debt for shares (swap debt/shares), where the difference between the nominal value of debt and the lower value of shares received is treated as regulation of the "value" of the position (revaluation);
- debt forgiveness, when the transfer of capital compensates the reduction of the debtor's liabilities in the balance of payments accounts, and the same operation in the international investment position reflects the reduction of the obligations of the debtor and the assets of the creditor;
- 3. debt consolidation, when the new loan essentially replaces the old debt and the nominal value of the new debt is the basis of the valuation;
- 4. unilateral cancellation of the debt by the creditor, which is reflected in the position as other adjustments.

Reserve assets are valued at current market prices for the respective dates. Monetary gold is valued at the prevailing market price. SDRs are valued at market rates calculated by the IMF.

Foreign currency assets and other claims are calculated at market prices prevailing at the relevant dates. Net investment position of the economy, i.e., external financial assets less external liabilities is often used to analyze the direction and trends of the country's development compared to the rest of the world at a certain date. The net position shows what the country owns in comparison with what it should (in most cases the same as the corporations or the national balance sheet expect). Sometimes the terms "net creditor" or "net debtor" in their arithmetic sense are used to describe the net position. A creditor nation is a country that has invested more in the rest of the world than other countries have invested in it. A debtor nation is a country that has borrowed more from the rest of the world than it has lent to it during its entire history (Maitah, 2009).

However, to describe the net position, these terms are unsuitable. It is more important to consider non-property components of the position, such as debt (all registered liabilities other than shares and direct investments in equity, including reinvestment of income).

#### 3.7.2 External debt

Practically all countries in the world making economic transformations resort to external sources of financing. Rational use of foreign loans and assistance contributes to the acceleration of economic development and the solutions to socio-economic problems. However, the absence of an integral state policy to attract and use external financial resources leads to the formation of external debt, which becomes a serious obstacle to economic transformation.

The theory of public debt is inseparably linked with the theory of the state budget and uses a number of basic budgetary concepts that are fundamental when considering public debt. The budget deficit is the excess of the state budget over its revenues. Most governments, both developed and developing countries, cannot cover their expenses with revenues by reducing the state budget with a deficit. Therefore, the question of the permissible size of the deficit, its impact on the economy in the short and long term and on the methods of its financing is important (Kubišta, 2009).

The national debt is the amount of the country's debt to all its creditors. The public debt is a characteristic of the effectiveness of all committed state credit operations. Its absolute magnitude, dynamics and rates of changes reflect the state of the economy and finance of the country, the effectiveness of the functioning of state structures. However, to

reflect the real economic situation, relative values are often used, in particular, the ratio of public debt to GDP. There are various economic methods used by the state for balancing the budget and regulating the business cycle.

Foreign indebtedness is a partial statistic of the investment position. It includes all the liabilities of the domestic entity to the foreign entities at a certain date. We only include debt investments in foreign debt, so we do not include direct investment and equity securities. External debt is compared to Gross Domestic Product. Generally speaking, the rule is that the ratio of gross debt to GDP should not be higher than 40%. The causes of the country's external indebtedness are linked to permanent deficits in the current account of the balance of payments (Neumann, 2010).

Besides the level of indebtedness itself, the economists monitor the structure of foreign indebtedness by types of debt instruments (cash and deposits, debt securities, loans and loans, trade loans and advances, other liabilities, SDRs); by institutional sectors (general government, central bank, banks, other sectors and inter-company debt). Public debt is also divided into short-term, medium-term and long-term. The most difficult are short-term debts. They soon have to pay the principal amount with high interest. This debt can be prolonged, but this is due to the payment of interest on interest. State authorities are trying to consolidate short- and medium-term debts, that is, turn it into long-term debts, postponing for a long time the payment of principal and limiting annual interest payments (Mandel, 2016).

To identify potential debt-related risks and support sound debt management have been developed debt ratios. There are two sets of debt indicators: those that are based on variable flows (for example, related to exports or GDP) they are called flow indicators, because the numerator or denominator or both are flow variables; and those that are based on the variables of the stock, that is, both the numerator and the denominator represent the stock variables (IMF, 2014). There are some of the most significant indicators:

 Ratio of debt to exports - is defined as the ratio of the total outstanding debt at the end of the year to the export of goods and services of the economy for any one year. This ratio can be used as an indicator of sustainability, increase of the ratio of debt to exports over time, for a given interest rate, entails the total debt grows faster than the main source of the external income of the economy, which indicates that in the future, the country may have problems with the implementation of its debt obligations.

- 2. Ratio of debt to GDP is defined as the ratio of total outstanding external debt at the end of the year to annual GDP. Using GDP as a denominator, this ratio can indicate the ability to service external debt by switching resources from the production of domestic goods to exports production. Indeed, a country can have a large debt-to-export ratio, but a low debt-to-GDP ratio, if exports constitute a very small part of GDP.
- 3. Ratio of Debt Service to Exports is a possible indicator of debt sustainability, as it indicates how much of the country's export earnings will be used to service its debt, and also how much the debt service payments are vulnerable, to the unexpected drop in export earnings. This ratio, as a rule, highlights countries with a significant short-term external debt. A stable level is determined by the ratio of debt to export and interest rates, as well as the time structure of debt obligations.
- 4. Ratio of International Reserves to Short-Term Debt is a liquidity indicator, which is defined as the ratio of the stock of international reserves available to the monetary authorities to the short-term debt stock on remaining- maturity basis. It gives a measure of how quickly the country would be forced to adjust if it were cut off from external borrowings (IMF, 2014).
# 4 Analysis of balance of payments of Kazakhstan

In this chapter, author will deal with the development of Kazakhstan's balance of payments for the last 11 years. In order to have an overall picture of Kazakhstan's balance of payments, let's first look at the development of all four balance of payments accounts (chart 2). Then I will focus on the description of the trends of individual accounts and sub-accounts development. As the main data source, I will use the balance of payments statistics and its annual reports, which are available on the website of the National Bank of Kazakhstan.

Throughout the reporting period, the dynamics of individual accounts of the balance of payments developments is very volatile. Individual accounts get both positive and negative values. The overall balance of payments also has no clear trend. As can be seen from the graph, the current and financial account is the most important for the overall balance of payments. The capital account is not a very significant balance of payments item.





Source: NBK, compiled by the author

## 4.1 Current account

Traditionally, the current account of Kazakhstan is characterized by an active trade balance and a negative balance of services, primary and secondary income. As can be seen from chart 3, the current account development trend is unambiguous. From 2005 to 2007,

we are seeing a current account deficit which reached its maximum value for the whole of the monitored period in 2007 - \$8.3 billion, accounting for -8% of GDP. During 2008, world oil prices showed continued growth, which had a significant impact on the current account. The growth rate of world prices on Kazakhstan's basic export goods outstripped the rise in prices for imported goods and, as a result, in 2008 there was a significant increase in exports and, thus, the positive balance of the current account of \$6.2 billion.



Chart 3: Structure of current account in 2005-2015, (in USD billion)

Source: NBK, compiled by the author

In 2009, we can see the impact of the global financial crisis at the end of 2008. The current account ended with a negative balance of \$ -4.1 billion, but compared to 2007, the deficit narrowed by more than 2.2 times. The impact of the global financial crisis was reflected in decline in exports of 38.9%. On the other hand, the devaluation of Kazakh tenge, which was made at the beginning of 2009, reduced import by 25.2%.

The current account balance is generally considered to be the most important indicator of external economic equilibrium. Over the reporting period, the value of the balance fluctuates a lot. The current account balance was determined by a trade surplus and other accounts deficit, balance on services, primary income balance and secondary income balance. The current account balance is used for the current account to GDP ratio, where the deficit sustainability threshold is set at 5%. In the reference period, this limit was exceeded only in 2007 when the ratio of the current account deficit to GDP was 8%. In other periods, this ratio ranged from 1.8-3.6%. Thus, we can indicate that the current account deficit is sustainable.



Chart 4: Development of current account in % to GDP in 2005-2015

Source: NBK, compiled by the author

#### 4.1.1 Trade balance

The balance of payments of Kazakhstan is mostly affected by the trade balance. During the observed period, total exports of goods exceeded total imports, which formed an active balance of trade balance. The trade balance reflects the position of the national economy in foreign trade. This balance is the main factor affecting the size of the current account balance. The steady positive value of the trade balance balances the demand for Kazakhstan's export goods on the international market. So, the positive balance means bringing foreign currencies into the country.

If we focus on the trend of export and import development, we can say that they have almost the same trend. Trade balance dynamics had a growing trend, but a sharp drop in export and import volumes was observed in 2009, driven mainly by the global financial crisis. However, in the following years, the volumes of turnover of goods are recovering and already in 2011 significantly exceeded the pre-crisis level. Thus, in 2011, the trade balance amounted to \$44.8 billion, exports increased by 43.7% and imports by 25.2%. For the whole reporting period, the highest export value was fixed in 2012 (\$86.9 billion) and the value of imports in 2013 (\$50.8 billion).



Chart 5: Development of trade balance in 2005-2015, (in USD billion)

Source: NBK, compiled by the author

As Kazakhstan specializes in the export of energy commodities and metals, fluctuations in world prices have a significant impact on the dynamics of foreign trade. An important indicator of international trade is terms of trade, which is calculated as the ratio of the export price index and the import price index. Improvement of terms of trade occurs when export and import prices increase, but export prices are growing "more" than imports. Then we can import higher quantities of imports for the same physical quantity of exports. There is a close link between the terms of trade and the exchange rate. The appreciation of the exchange rate leads to a fall in foreign exchange prices expressed in domestic currency, a depreciation of the exchange rate to the growth in foreign trade prices. But it can happen differently on the resulting trading terms. We can observe that the significant worsening of Kazakhstan's terms of trade was in 2009 and 2015, which affected the significant reduction of the trade balance in these years. At the same time, we can observe the link between the terms of trade and the exchange rate, because in these years the devaluation of the national currency has been made. But not always the appreciation of the exchange rate affects the terms of trade positive and depreciation negative, it depends on several factors. Thus, in 2009, currency devaluation was also carried out, but this did not have a significant effect on the worsening of the terms of trade compared to 2009 and 2015.

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
21	9	-3	5	-33	22	31	2	5	-2	-27

Table 3: Development of ToT of Kazakhstan in 2005-2015, (annual changes in %)

Source: NBK, compiled by the author

Kazakhstan's main export good is crude oil, so the development of Kazakhstan's terms of trade depends largely on the development of oil prices. Looking at oil price developments, we can find a correlation between the terms of trade and oil price developments. Thus, in addition to the mentioned exchange rate effect, the worsening of the terms of trade in 2009 and 2015 was due to a significant drop in oil prices.



Chart 6: Development of oil prices in 2005-2015

Source: indexmundi.com, compiled by the author

#### Commodity structure of foreign trade

Over the whole reviewed period the structure of foreign trade remained almost unchanged. In the structure of Kazakhstan's export, the major share is occupied by mineral commodities, non-ferrous metals, ferrous metals, a certain part of exports falls on cereals. The main exported commodity of the Republic of Kazakhstan is the commodity group "Mineral commodities", which characterizes the raw material orientation of the economy of Kazakhstan. It occupies 71.6% of the total volume of Kazakhstan's exports in 2015, where the share of oil and gas condensate amounts for 58.6%. The export in this commodity group is almost entirely represented by the raw materials of the fuel and energy complex. Such a structure of exports and a high share of oil revenues in the budget reflects the specifics of the increased demand for this type of product on the world market. In second place with a share of 8.8% in the structure of Kazakhstan's exports take nonferrous metals. The share of ferrous metals in 2015 was 5.5 %, group of other commodities accounts for 4 % and grain for 1.8%. In total, these five commodity groups represent the main nomenclature which accounts for 95.2% of Kazakhstan's total exports.



Chart 7: Structure of exports, and imports of goods in 2015 (ratio %)

Source: NBK, compiled by the author

The structure of imports indicates that mainly finished products, equipment, vehicles, appliances and apparatus are imported into Kazakhstan. The dominant commodity groups in the import structure of Kazakhstan are consumer goods, investment goods, intermediate consumption of manufactured goods and other goods. The main products imported to Kazakhstan are: machinery, equipment and machinery; electrotechnical equipment; their parts; The sound recording and sound recording equipment; equipment for recording and reproducing television images and sound; their parts and accessories; base metals and articles thereof; means of land, air and water transport, their parts and accessories. The most significant share in import in 2015 was investment goods, accounting for 36.8%. The share

of intermediate consumption of manufactured goods was 34.1% and consumer goods 27.3%. A significant part of consumer goods consists of non-food goods, which amounted to 20.2%.

#### Geographical structure of foreign trade

In the geographical structure of foreign trade turnover of Kazakhstan dominates European countries, mainly the countries of the European Monetary Union (EMU). Following are the CIS countries and the Asian region. According to the results of 2015 (chart 8), the share of total trade turnover of European countries represents 45.1%, including 34.9% the countries of the EMU; followed by the CIS states - 26.9% and countries of Asia - 24%. The proportion of Member States of the Eurasian Economic Union (EEU) was 20.8%.







From the point of view of each country in 2015 the first place takes Russian Federation (19.2% turnover), followed by China (13.9%), the third and fourth places remained Italy (12.3%) and the Netherlands (7%). At the same time, Italy is leading in terms of exports (17.8%), and in terms of imports - Russia (33.9%). According to the statistical results of the 2015 year, the top three leaders in export relations with Kazakhstan were Italy, China, and Russia. Regarding imports, Russia holds the first place, on the second - China and the third – Ukraine. High indicators of Kazakhstan on trade with Russia and China are connected, first of all, with a large volume of cross-border trade. High export performance with Italy is associated with close cooperation in the oil and gas sector.

#### 4.1.2 Balance of services

The balance of services over the entire reporting period is in deficit. But the balance of services is stable at around \$ 6-8 billion. Regarding internal structure, we can divide the service balance into three main components: transport, tourism and other official services. **Chart 9: Development of balance of services in 2005-2015, (in USD billion)** 



Source: NBK, compiled by the author

The main components in the export structure of services are transport and tourism, while in import structure main components are other business services, travel, transport and construction services. The largest part of income from export of services comes from transport services, which are mainly formed due to income from freight services. Transport that captures the automobile, air transport, rail way, pipeline and sea transport accounts for more than half of the volume of export of services. Over the entire observed period, rail way and pipeline transport contributed most to the increase in the volume of services provided. In recent years, the increase in pipeline exposures has shifted pipeline transport to the first place. Tourism during the period fluctuated between 24-28%.

The other business services are the main component of the import of services, which mainly causes the deficit of the services balance. The structure of this component is dominated by engineering, construction, and consulting services, which were mainly financed by the flow of foreign direct investment. In the structure of other business services, the main spendings contributed for the acquisition of architectural and engineering services. Large costs are still associated with the import of construction services. In the geographical structure of Kazakhstan's international trade in services, CIS countries take the first place in foreign turnover of services, the second and the third places take European countries and Asia. According to 2015 results, the share of foreign trade turnover of CIS accounted for 32.1%, while the share of Europe and Asia was 30.0% and 22.8%, respectively.







The main consumers of Kazakhstani services are the countries of the EEU, and the main suppliers of the acquired services are European countries. In the country distribution of exports and imports of services, the Russian Federation is leading in total exports and in total imports.

#### 4.1.3 **Primary income balance**

The primary income balance has been negative throughout the reporting period, with the steady deficit increasing every year except 2009, 2014 and 2015. It consists of three items, such as compensation for employees, investment income, and other primary income. Compensation to employees during the reporting period was in deficit, which means that non-resident wages in the domestic economy exceeded the wages of domestic workers working abroad.



Chart 11: Development of primary income account in 2005-2015, (in USD billion)

Source: NBK, compiled by the author

The primary income deficit is mostly contributed by investment income, which includes direct investment income, portfolio investment income, and other investment income. The deficit of the balance of investment income totaled \$10 billion (table 4) decreasing by 52.5% relative to 2014 (\$21 billion in the base period). Regarding volume, the most significant item is a foreign direct investment, which consists of dividends, interest and reinvested earnings. Dividends play an important role, as they average 60% of the direct investment income.

	2010	2011	2012	2013	2014	2015
Income receivable	2,556.9	2,088.1	1,945.9	2,176.7	2,071.9	2,113.2
Income on direct investment	303.5	155.9	194.9	347.6	309.4	583.6
Income on portfolio investment	716.6	901.3	959.9	1,094.4	1,183.0	1,035.4
Income on other investment	1,536.8	1,031.0	791.1	734.7	579.5	494.1
Income payable	20,665.9	28,242.8	28,274.9	25,660.5	22,903.1	11,790.0
Income on direct investment	17,997.1	25,213.2	24,753.0	22,510.9	19,763.9	9,197.4
Income on portfolio investment	922.8	1,751.2	2,070.3	1,590.9	1,667.1	1,639.3
Income on other investment	1,746.1	1,278.4	1,451.6	1,558.7	1,472.1	953.3
Investment income, net	-18,109.0	-26,154.6	-26,329.0	-23,483.8	-20,831.2	-9,676.9

Table 4: Investment income by types of instruments, (in USD million)

Source: NBK, compiled by the author

The main contribution to the income balance deficit was due to the attraction of foreign direct investment by the non-banking sector.

#### 4.1.4 Secondary income balance

Secondary income balances have the slightest impact on the current account balance. In terms of sector, private transfers dominate government transfers. Increase in the negative imbalance of secondary incomes, the deficit of the balance of secondary incomes of other sectors, is due to the reduction positive balance of transfer operations of government.

Starting from the third quarter of 2010, in transfer revenues and payments of the government sector, the distributed amounts of import customs duties are reflected in accordance with the procedure for transfer and distribution of import customs duties adopted in the Eurasian Customs Union. Earlier, the receipts for the general government sector were mainly generated by non-resident tax payments received in Kazakhstan, and transfer payments were mainly represented by membership contributions to international organizations.

The private sector has a negative balance, which means that unilateral payments abroad exceed payments from abroad. Most transfers to Kazakhstan were made from Russia, USA, and Germany. The largest volume of funds is channeled to Russia, China, and Turkey. **Chart 12: Development of secondary income balance in 2005-2015, (in USD million)** 



Source: NBK, compiled by the author

## 4.2 Capital account

During the observed period, the capital account shows a surplus but has a lesser effect on the balance of payments compared to other accounts. In 2010, we saw a record surplus of the equity account balance at \$7.9 billion. This extreme capital account surplus is associated with a proliferation in the process of restructuring part of the commercial bank debt to external creditors.



Chart 13: Development of capital account in 2005-2015, (in USD billion)

Source: NBK, compiled by the author

## 4.3 Factors stimulating the inflow of foreign investments to Kazakhstan

Since gaining independence, Kazakhstan has attracted significant foreign investment since independence. The attraction of foreign capital refers to the strategic objectives of the development of the Kazakh economy. For this, foreign direct investments are important, which provide access to financial resources, modern technologies, management skills, innovative goods and services, and directly increase the competitiveness of the national economy, its steady growth and contribute to improving the living standards of citizens. In this regard, the creation of favorable conditions for increasing the inflow of funds from foreign investors is one of the priorities of state economic policy.

The inflow of foreign direct investment into Kazakhstan is realized through the creation of joint ventures, subsidiaries, the privatization of state enterprises with the participation of foreign capital, the transfer to the management of foreign firms of large industrial enterprises and the investment of the banking sector.

One of the several factors which force investors to invest to Kazakhstan is a favorable legal regime for foreign investment in Kazakhstan. There are a number of political factors

favoring the work of investors are maintained: the preservation and strengthening of political and social stability; ensuring the national treatment of foreign investors, in particular, granting the right to free repatriation of profits. The government continues flexible macroeconomic policies that provide a competitive market environment without administrative interference. The legal regime provides guarantees for foreign investors, the main of which are:

- the national regime, i.e., foreign investors have the right to use conditions no less favorable than domestic investors;
- government guarantees on behalf of the republic;
- guarantees against changes in legislation and the political situation;
- guarantees against expropriation.

Also, it should be noted that the strategic position of Kazakhstan in the Asian region, as a large interregional transport center; the rich mineral resources; the considerable potential of the agroindustry complex; and the sufficiently high educational level of labor resources have predetermined the significant role of foreign direct investment in the overall flow of external financial resources (Knatov, 2012).

## 4.4 Financial account

The Financial account is the second major account that has a significant impact on the overall balance of payments. Its development is volatile so that I would focus on a more detailed description of the development in individual years. In 2007 there is a significant deficit compared to the previous years. The first half of the year was characterized both by the growth of non-residents' foreign assets and by a significant inflow of debt financing, which was mainly attracted by banks. But in August the growth of the credit crunch on the world financial markets and the deterioration in the financing conditions of Kazakhstan banks led to a change in the direction of capital flows. In the second half of the year, banks have been able to attract new funding in the form of long-term loans of \$7.1 billion.

We see the highest financial account balance in 2010, which amounted to \$15.3 billion. This record surplus was associated with a significant reduction in the medium-term liabilities of banks, as well as the growth in foreign assets of the National Fund of Kazakhstan (NFK).

In the following years, we see that the financial account gradually fell to negative values every year. Thus, in 2015, the balance of the financial account reaches its maximum

negative value at - \$11.4 billion. The main causes of the financial account deficit were the increase in liabilities and the reduction of the NFK's external assets, and thus the attraction of funds on international capital markets by the Ministry of Finance of the Republic of Kazakhstan.



Chart 14: Development of FA in 2005-2015, (in USD billion)

#### Source: NBK, compiled by the author

In terms of the structure of the financial account, it is evident that its development was determined by the development of direct and portfolio investments. The detailed analysis of these subaccounts will be described in the following chapters.

#### 4.4.1 Direct investments

Direct investments are the most important item of the financial account. Over the past 11 years, foreign direct investment (FDI) has fallen to Kazakhstan over the outflow of direct investment from Kazakhstan abroad in all seasons. Of the significant investment instruments, attracting direct investment was mainly due to debt securities. Also, the volume of debt securities transactions significantly exceeded the volume of investment operations in the form of equity and investment fund shares.

Between 2005 and 2008, FDI has shown rapid growth, coupled with the active phase of the acquisition of the Kashagan site, which is one of the five largest oil fields in the world. Depending on the type of economic activity, the main investment placements were the sector's activities for geological exploration, crude oil and natural gas extraction, and financial activity.

In the following two years, there was a slight fall in FDI, which is due to the rise in the indebtedness of second-tier banks. Over the course of two years, investment in financial activities declined, but activity in exploration and production of crude oil and natural gas remained dominant.







In 2011, the FDI inflow increased to \$13.7 billion compared with \$7.5 billion in 2010. This growth was mainly related to an increase in the capital of banks with foreign participation and non-bank sector enterprises.

From 2012 until the end of the monitored period, we see the downward trend in FDI. In 2015, FDI was \$6.6 billion, down 48% from 2012 (\$13.6 billion). In total, for the period 2005-2015, \$111.8 billion of FDI was attracted to Kazakhstan's economy.

From a territorial point of view, over the entire observed period, most of the FDI came from developed countries such as the Netherlands, the United States, Great Britain, France, Italy, Switzerland, Canada and the British Virgin Islands. In addition, large enough investors in Kazakhstan's economy are Russia, China and South Korea. The shares of other countries are insignificant. Overall, around 116 countries invest in Kazakhstan's economy. The outflow of direct investment from Kazakhstan abroad amounted to \$31.4 billion during the reporting period. The main financial flows were focused on offshore centers - the Netherlands and the United Kingdom.

#### 4.4.2 Portfolio investments

Another important part of the financial account is portfolio investment. In terms of volume, they are in second place after direct investment. Portfolio investment development is unambiguous; it has both positive and negative values during the given period. From the point of view of the structure, debt securities prevail over the whole period under review.

Portfolio investment balance has a surplus except 2009, 2010 and 2015. In 2009, net inflows were secured by a decline in foreign assets in non-resident securities and an increase in residents' liabilities to foreign investors. Its maximum minimum, which amounted to - \$8.4 billion portfolio investment, was in 2010. The increase in foreign assets of residents was mainly due to the growth of NFK's foreign assets, while the increase in liabilities was secured by operations of the banks and the non-banking sector. In 2015, the portfolio investment deficit was due to a high asset write-down in the portfolio investment structure with a slight increase in liabilities.



Chart 16: Development of portfolio investments in 2005-2015, (in USD billion)

Source: NBK, compiled by the author

#### 4.4.3 Financial derivatives

Financial derivatives are the least significant item of the financial account and their effect on the overall financial account is negligible. Throughout the period under review, derivatives transactions were principally carried out by commercial banks and NFK assets.

#### 4.4.4 Other investment

Other investments are the third most significant item of the financial account. Structure over the entire period is dominated by medium and long-term investments. Considerable fluctuations occur between 2006 and 2010. In 2006, the high growth rate of liabilities was mainly provided by medium- and long-term loans, while the main contribution to asset growth was introduced by non-financial sector operations with commercial loans and the banking sector with the credentials of non-residents. The net outflow of capital in 2010 amounted to \$22.7 billion, mainly driven by operations to reduce long-term and short-term external liabilities of banks. In addition, funds raised by the World Bank (\$1 billion) in the form of a loan to ensure financial stability and sustainable growth have led to an increase in the long-term liabilities of the Government of Kazakhstan





Source: NBK, compiled by the author

#### 4.4.5 Reserve assets

Reserve assets are new components of the financial account that represent an increase or decrease in foreign assets in the balance of payments. Their use in exchange rate interventions is important. During the period under review, the development of reserve assets was very volatile, with no clear trend.

At the beginning of the period under review, the NBK foreign exchange intervention was primarily focused on liquidity withdrawals and provision. In 2008, as a result of the fall in world prices on the main export balance of goods, the pressure on the tenge rate deteriorated and increased. In order to preserve the national stability, NBK carried out interventions in the foreign exchange market. But in the following year, the National Bank performs a tenge devaluation to maintain the reserves of monetary gold and the competitiveness of domestic producers of goods.

In 2014, the devaluation expectations in Kazakhstan's economy increased, and volumes of speculation operations grew, hence the NBK has carried out significant foreign exchange interventions that have reduced the stock of monetary gold. With this connection in February 2014, the NBK decided not to keep the exchange rate on the same level, to reduce the volume of foreign exchange interventions and to limit interventions in the tenge formation process. Finally, the third devaluation of the currency in the history of Kazakhstan occurred.



Chart 18: Development of reserve assets in 2005-2015, (in USD billion)

Source: NBK, compiled by the author

In 2015 there is a fourth devaluation of the national currency and a change in the exchange rate system. On August 20, the National Bank of Kazakhstan moved to a floating exchange regime, which means that the tenge course will be formed by supply and demand in the market, and NBK will no longer influence the formation of the course. The fall in reserve assets in 2015 was accompanied by NBK operations on the domestic, foreign exchange market. By 2015, the total foreign exchange reserves amounted to \$27.9 billion, of which currency stock amounted to \$7.5 billion.

## 4.5 Net errors and omissions

The error and omission item is a balancing item that balances the balance of the current, capital and financial account so that the balance of payments is balanced, i.e., the resulting balance is zero. The omission is due, for example, to the fact that it is complicated to keep an overview of all cash flows in both directions, especially the flows of individuals whose currency transactions often do not have a documentary confirmation, and payments are made in cash. Between 2005 and 2010, with the exception of 2008, the balance of errors and omissions was positive. The highest value is reached in 2010, which means that the National Bank was not successful in capturing all transactions. Over the last five years, we have seen the negative trend of errors and omissions. The causes of capital inflows were, first, the growth in demand for cash; second, according to the NBK, the cancellation of the customs declaration of goods within the Customs Union; thirdly, unregistered transactions of residents that were carried out outside the accounts at domestic banks.







# 5 Kazakhstan's external debt and international investment position analysis

## 5.1 International investment position

As I have already mentioned in the theoretical part, the investment position of the country is a status variable showing the volume of residents' assets and liabilities to non-residents at a certain date. Throughout the whole period, the net investment position is negative, with a slight increase in both asset and liability side, except 2015. This negative value shows that Kazakhstan has accumulated more foreign liabilities than assets over the whole of Kazakhstan.



Chart 20: Development of IIP of Kazakhstan in 2005-2015, (in USD billion)

Source: NBK, compiled by the author

To understand what items of the balance of investment position has evoked such development, author will focus on the structure of assets and liabilities. The structure of investment position assets is most affected by portfolio and other investment, while financial derivatives represent the smallest share. Portfolio investments have the most significant holdings of debt securities. In the structure of other investments, currency and deposits predominate, then loans and loans. The highest portfolio investment value was recorded in \$77 billion in 2014 and other investments in 2013 of \$50.3 billion. In the structure of liabilities, direct investments predominate. The value of direct investment increased with each year. The other significant item under liabilities is other investment.

In the structure of the investment position by the Kazakhstan economy, the positive balance was in financial activity and state administration. Other sectors of the economy saw the negative balance of the investment position.

#### Sectoral structure of investment position

Looking at the sectoral structure of the investment position, it is evident that the government sector and other sectors are the most involved. The government sector, consisting of the Government of the Republic of Kazakhstan and the National Bank, maintains the position of "net creditor" throughout the entire period. By contrast, other sectors were in the "net borrower" position. It follows that Kazakhstan's overall investment position is primarily determined by other sectors.



Chart 21: Development of IIP by economic sectors in 2005-2015, (in USD billion)

Source: NBK, compiled by the author

#### IPP of Government sector

In the government sector, assets are largely outweighed liabilities, and debt securities are dominated by the type of financial instrument both in assets and liabilities. A significant portion of the external assets of the Government is accounted for the NFK, which at December 31, 2015, was \$63.4 billion or 40% of the country's foreign assets. The external assets of the NBK are mainly represented by reserve assets, which at the end of the year amounted to \$27.9 billion or 18% of the country's foreign assets. The structure of the NFK and the reserve assets of the NBK is presented in chart 22. In general, for 2015, the assets of

the NFRK decreased by \$9.8 billion, including le in the fourth quarter - by 4.1% billion by reducing debt securities in the structure of the fund. The NBK's assets decreased in \$1.3 billion.



Chart 22: NFK assets and NBK reserve assets by financial instruments, as of 31/12/2015

#### Source: NBK, compiled by the author

#### IPP of Other sectors

Under the other sectors belong other financial and non-financial corporations, households and Non-profit institutions serving households (NPISHs). During the whole reviewed period international investment position of other sectors maintains "net borrower" position. In the other sectors, liabilities are increasing, while there is a growing trend throughout the entire period of the liability. The largest share in external assets is accounted for equity and investment fund shares, in 2015 its share accounted 40 % of total external assets. The largest share of external liabilities is formed by loans from non-residents, which in 2015 amounted 44.6 % of total liabilities.

At the end of the year, 2015 investment position of Other sectors accounted - \$119.6 billion. External assets of Other sectors from the period from 2005 to 2015 grew from \$8.8 billion to \$57 billion, and external liabilities increased from \$35.4 billion to \$176.6 billion. Total external assets of Other sectors amounted 36% of the country's foreign assets, and external liabilities of other sectors amounted 89% of Kazakhstan's external liabilities at the end of 2015.





Source: NBK, compiled by the author

IPP of Banks sector

The sector of the bank, which is composed of second-tier banks and the Kazakh Development Bank from 2005 to 2010, was in the position of "net borrower." Then, between 2011 and 2014, the position of the "net creditor" was retained, and in the last year he was again in the position of "net borrower."



Chart 24: IIP of Banks sector by types of financial instruments, as of 31/12/2015

Source: NBK, compiled by the author

From the side of the type of financial instruments in the banking sector in assets and liabilities dominate debt securities.

The investment position of the banks as of December 31, 2015, was - \$4.2 billion, which means that the external liabilities in the form of debt instruments exceed external debt assets by \$2.8 billion. At the end of 2015, external assets of the banks totaled \$5.5 billion. (4% of external assets of Kazakhstan) and external liabilities accounted \$9.7 billion (5% of total external liabilities).

## IIP structure by types of financial instruments

The structure of the IIP by types of financial instruments remains unchanged during the last 11 years, where the largest portion of external assets is still debt securities of non-residents (in 2015 accounted 41.5% of total external assets), mainly in NFK portfolio and in the reserve assets of the NBK. Loans (in 2015 totalled 61.5%) and debt securities (in 2015 22.6%) in non-residents' portfolio represent a major part of external liabilities.







## Geographical structure of the investment position

The IIP structure, broken down by partner countries, helps to identify the excessive dependence of Kazakhstan's economy on another country and, hence, to identify potential vulnerability and contagion effect. Over the entire observed period, the permanent negative balance of Kazakhstan's investment position was secured mainly against the Netherlands, China, and the United Kingdom. The chart below shows that in 2015 the largest negative value of the investment position against the Netherlands amounted to \$46.3 billion. The Netherlands and the United Kingdom are the financial centers through which is being made the capital transits from other countries to Kazakhstan. Throughout the following period, Kazakhstan was permanently in the position of "net lender" towards the CIS countries, of which, in particular, towards the Russian Federation, until 2015. The permanent positive balance of the investment position was also found in some offshore centers, Seychelles, Antilles (USA). By the end of 2015 the positive investment position of Kazakhstan (the excess of assets over liabilities) as of the reporting date was in relation to countries such as the United States, Germany, Seychelles and other countries, and negative (excess of liabilities over assets) - in relation to the Netherlands, China, Britain, France. The highest positive balance in 2015 was secured against the USA \$28.7 billion.



Chart 26: IIP of Kazakhstan by countries, as of 31/12/2015, (in USD billion)

Source: NBK, compiled by the author

## 5.2 External debt

The country's investment position is followed by external debt, which represents the state of debt liabilities of domestic entities to foreign entities. During the observed period, we are following the growing trend of Kazakhstan's external debt. The exception is the year

2015 when the value of foreign debt fell by \$153.5 billion. Its external debt reached its highest level in 2014, which represents \$157.4 billion. Foreign indebtedness of Kazakhstan is primarily determined by the non-guaranteed state by foreign debt. The share of non-guaranteed debt in total external debt fluctuates within the range of 91-98%.



Chart 27: External debt of Kazakhstan in 205-2015, (in USD billion)

Source: NBK, compiled by the author

It is essential to distinguish long-term and short-term indebtedness because short-term indebtedness is riskier. In the case of Kazakhstan, most of the debt is long-term. Short-term foreign debt fluctuated between 4 and 19% during the period under review, and its share in total foreign debt decreased each year. Thus, from 2005 to 2015, the share of short-term debt decreased from 18.7% to 4.2%.

#### Sectoral structure of ED

In the sectoral structure of external debt, the other sectors predominate. In Other sectors dominate direct investments, the so-called inter-company debt, which includes only liabilities of non-financial corporations. These loans are linked to the implementation of projects by foreign investors in the domestic oil sector, the core of which comes from the Netherlands, where international consortia operating in Kazakhstan are registered. In particular, inter-corporate debt defines a basic increase in foreign debt. In 2015, they accounted for 53.3%. Between 2005 and 2015, its value increased from \$19.2 billion to \$81.8 billion. Foreign debts of other financial organizations also make a significant contribution to other sectors. At present, the state guarantee of other sectors attracts funds in the framework

of the implementation of projects following the reconstruction of Kazakhstan's electricity networks and the development of transport infrastructure.



Chart 28: Structure of ED by sectors in 2005-2015, (in USD billion)

Source: NBK, compiled by the author

The second major sector is the government sector. Within the government sector, the sector is dominated by public sector bodies, and in the year 2015, it accounted for 7.4%. The value of the government sector debt grew year on year during the observed period, so the debt increased from \$1.5 billion to \$11.3 billion. A significant increase in debt is observed from the beginning of 2009. This is mainly related to the adoption of a tranche of loans from international financial institutions in the framework of the implementation of projects "Western Europe-Western China."

The foreign debt of the National Bank in the total foreign debt is very small. NBK's foreign liabilities have been subject to significant fluctuations throughout the reporting period, due to the participation of non-residents in the bond market. The liabilities of the National Bank, represented primarily by SDRs.

Banks have the smallest share of the sector. Over the entire period, foreign indebtedness of banks has considerably shortened. In 2015, the banking sector's debt amounted to \$8 billion compared to 2007, when the debt reached its highest value of \$46 billion. Reducing the share of foreign debt of banks in the analyzed period is explained by a

reduction in banks' debt obligations on debt securities, a decrease in debt related to borrowing from non-residents and debt restructuring of "BTA Bank."

#### **Geographical structure of ED**

Chart 29 shows the ten largest creditors of Kazakhstan. As can be seen, the largest lender is the Netherlands, which Kazakhstan owes \$43.3 billion as of 31 December 2015. In essence, this debt is associated with direct investment and is caused by the registration in most of the SPV (Special Purpose Vehicle) companies and parent companies, including foreign subsidiaries operating in Kazakhstan. The second major creditor is the United Kingdom, its share being mainly due to the fact that euro bonds are registered in the country which were issued by residents. The Netherlands and the United Kingdom have a significant share of the capital, which has a large share of the capital in the country, with a higher risk of increasing concentrations Kazakhstan does not stand significantly.

A significant share of foreign debt due to financing the development of gold and copper deposits, the construction of transport infrastructure and the chemical complex belongs to China. The share of the US and France is related to the financing of the North Caspian oil projects.



Chart 29: Structure of ED by countries in 2005-2015, (in USD billion)

Source: NBK, compiled by the author

#### **Currency structure of ED**

Most of Kazakhstan's foreign debt is paid in US dollars, euros and Japanese yen. In 2015, from \$153.5 billion in debt, the national currency debt was \$3.9 billion and \$136.1

billion in foreign currency. In the foreign currency, the country will pay \$131 billion in US dollars, \$2.5 billion in euros, and \$0.55 billion in Japanese yen. In Czech crowns will only pay \$5 million.

## **External debt ratios**

Foreign debt ratios primarily serve to identify potential risks associated with debt and thereby provide a reliable basis for debt management. Widely used indicators are:

## 1. Ratio of external debt per capita

This indicator of foreign indebtedness indicates that the foreign debt pocket is per capita. In 2015 foreign debt amounted to \$4052.8.

 Table 5: External debt per capita in 2005-2015, (in USD)

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1590.7	3150.5	4292.3	4238.1	3902.7	4011.4	3763.2	4098.8	4420.2	4477.1	4052.8

Source: NBK, compiled by the author

2. Ratio of external debt to GDP

The ratio of external debt to GDP is an indicator reflecting solvency. The use of GDP as the denominator of a given ratio gives some guidance on the potential of external debt service due to the transfer of resources from the production of domestic goods to export output. The ratio of external debt to GDP is considered to be low where the value is less than 48%, with a moderate value ranging from 48-80% 21. The higher the value of the indebtedness indicator, the greater part of the income from the sale of the country's products is directed to repayment of the debt to foreign creditors. From the table below, it can be seen that the value of the foreign debt-to-GDP ratio in the monitored period varies greatly. Its critical value is 98.3%

 Table 6: External debt to GDP (%)

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
76.0	91.4	92.4	80.9	97.9	79.9	65.1	65.8	63.4	71.2	83.2

Source: NBK, compiled by the author

3. Ratio of external debt to exports

The ratio of foreign debt and exports of goods and services is used as a dynamic indicator, closely linked to the country's debt repayment potential. An indicator value of less than 132% is considered to be low, 132-220% for moderate. (Melnikov, 2001) The high value of this indicator means that foreign indebtedness is growing faster than the country's

primary source of external income and shows the possibility of future problems with meeting its debt obligations. The ratio of foreign debt and exports of goods and services mostly varies within the range of moderate indebtedness. Only in 2009 (235%) and 2015 (291%), the indicator exceeds the level of moderate indebtedness.

 Table 7: External debt to exports (%)

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
142.9	178.6	187.1	141.5	235.0	180.5	140.0	149.2	164.9	181.3	289.4
	17	1 11 .1	.1							

Source: NBK, compiled by the author

#### 4. Ratio of debt service to exports

The debt-to-export ratio gives an idea of how much of the country's export earnings will be used for the debt service and, therefore, how sensitive the repayment of debt service obligations to the unexpected drop in export earnings is. The critical value of the indicator is set at 25%. (Markova, 2012) In the case of Kazakhstan, this indicator in all periods is above the critical value.

Table 8: Ratio of debt service to exports (%)

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
45.7	40.3	55.7	44.7	81.1	38.8	33.1	34.8	35.0	36.6	71.9

Source: NBK, compiled by the author

## 5. Ratio of international reserves to short-term debt

The country's foreign reserves can be considered as a source of repayment of foreign debt. In this context, the ratio of reserve assets to short-term foreign debt shows whether reserve assets exceed the amounts of planned external debt installments over the next year. I.e., says the country's ability to make all its payments to repay a debt to non-residents over the next period through its international reserves. This ratio is a net indicator of liquidity. According to Guidotti rules, this ratio should be greater than 100%. The value of this indicator does not exceed 100% in 2005 alone; in the other years, we see that the value exceeds two to three times. Even in 2015, it composes 432.3%. This means that Kazakhstan is able to repay foreign debt through reserve assets.

Table 9: Reserve assets of the NBK to a short-term external debt (%)

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
87.3	153.7	152.9	209.2	330.3	318.6	372.4	311.1	261.0	300.7	430.2

Source: NBK, compiled by the author

## 5.3 Statistical analysis

Kazakhstan's external debt from the period from 2005 till 2015 increased by \$81.9 billion. The growth of external debt was mainly due to an increase in intercompany debt. This is connected with the implementation of oil and gas projects by branches of foreign companies on the territory of the country. Lack of inadequate capital acquires external debt to supplement domestic savings and investment. Therefore, the external debt of Kazakhstan has been increasing. However, the inflow of capital also linked to the growth in GDP. Also, the absence of an efficient monitoring system for foreign borrowings and due control, for their placement inside the country, created a threat to the national economic security of the Republic of Kazakhstan. Therefore, I would like to analyze the correlation relationship between the external debt and GDP (expressed in current prices).

# Correlation and regression analysis between ED and GDP Table 10: Calculation of the correlation coefficient between GDP and ED

Year	ED (USD billion) X	GDP (USD billion) Y
2005	43.43	57.12
2006	74.01	81.00
2007	96.89	104.85
2008	107.93	133.44
2009	112.87	115.31
2010	118.22	148.05
2011	125.32	192.63
2012	136.92	208.00
2013	150.03	236.63
2014	157.56	221.42
2015	153.38	184.39

Source: NBK, compiled by the author

	Correlation Matrix							
	GDP	ED						
GDP	1							
ED	0.933	1						

	Covariance Matrix						
	ED	GDP					
ED	1116.54						
GDP	1777.15	3252.54					

Source: compiled by the author (MS Excel)

## The regression function: f (ED) = GDP

The regression function equation: y = 1.592x - 31.729

The coefficient of determination:  $r^2 = 0.87 (87\%)$ 

250.00 200.00 150.00 y = 1.5917x - 31.729 GDP  $R^2 = 0.8697$ 100.00 50.00 0.00 0.00 20.00 40.00 60.00 80.00 100.00 120.00 140.00 180.00 160.00 ED

Chart 30: The correlation graph and regression function f (ED) = GDP

Source: compiled by the author (MS Excel)



Chart 31: The relationship between ED and GDP in 2005-2015, (in USD billion)

Source: NBK, compiled by the author

The correlation coefficient is 0.933, which means there is a high positive correlation between variables. As variable external debt increases, GDP also increases.

The coefficient of determination is 87%. It means that 87% of the dependent variable y (GDP) is explained by the analyzed relationship. The coefficient of determination, the correlation graph and the chart of the relationship between GDP and external debt suggest

that there exists the strong correlation relationship between GDP and external debt. If the external debt is rising, the GDP is also increasing. As a result, the economic performance is strongly dependent on the external debt.

## Correlation and regression analysis between IIP and GDP

As external debt is derived from international investment position, the correlation relationship should exist between international investment position and GDP.

Table 11: Calculation of the correlation coefficient between GDP and IIP

Year	IIP (USD billion) X	GDP (USD billion) Y
2005	-20.27	57.12
2006	-28.96	81.00
2007	-44.31	104.85
2008	-38.83	133.44
2009	-43.02	115.31
2010	-35.56	148.05
2011	-32.82	192.63
2012	-35.34	208.00
2013	-33.29	236.63
2014	-40.35	221.42
2015	-41.47	184.39

Source: NBK, compiled by the author

## **Correlation Matrix**

	GDP	ED
GDP	1	
ED	-0.33	1

Covariance Matrix

	IIP	GDP
IIP	44.54	
GDP	-125.21	3252.54

Source: compiled by the author (MS Excel)

## The regression function: f (IIP) = GDP

The regression function equation: y = -2.811x + 52.233

The coefficient of determination:  $r^2 = 0.108 (10.8\%)$ 



Chart 32: The correlation graph and regression function f (IIP) = GDP

Source: compiled by the author (MS Excel)

Chart 33: The relationship between IIP and GDP in 2005-2015, (in USD billion)



#### Source: NBK, compiled by the author

The correlation coefficient is -0.33, which means a negative correlation. If international investment position increases, GDP decreases, and vice versa.

The coefficient of determination between IIP and GDP is equal to 10.8%. It means that there is a weak negative correlation, only 10.8% of the dependent variable y (GDP) is explained by the analyzed relationship. From the chart 33, the converse relationship is visible. If the international investment position is decreasing (the rise in the deficit), the GDP is increasing.

## 6 Conclusion

This diploma thesis deals with the analysis of Kazakhstan's balance of payments development. The aim of the thesis was to analyze the balance of payments and external economic equilibrium. Over the reporting period, Kazakhstan's balance of payments has experienced some interesting developments.

The balance of payments is a reflection of the country's foreign economic relations, the degree of its integration into the world economy. It has individual characteristics for each country, which is a consequence of its economic policy, economic development, and national identity. World prices for the main goods of Kazakhstan's exports, the amount of foreign financing of infrastructure projects and servicing of the existing external debt remain the determining factors for the balance of payments of Kazakhstan. The development of Kazakhstan's balance of payments was mainly caused due to the development of current and financial accounts. The current account development was very volatile and was characterized by the surplus of the trade balance and deficit of other accounts such as the balance of services, primary income balance, and secondary income balance. According to the ratio of current account deficit to GDP, it was indicated that the current account deficit is sustainable.

The trade balance has a determining influence on the balance of the current account. There is a high commodity concentration of Kazakhstan's exports. Domestic production in most cases is not competitive, in this regard, the lion's share of exports falls on mineral commodities, such as oil and gas condensate. At the same time, the relatively low diversification of trade flows in the structure of exports of goods creates additional risks. On the contrary, in imports of goods, there is a significant commodity diversification. Most of the import is made up of investment goods and intermediate consumption of manufactured goods, i.e., goods practically not produced in Kazakhstan. Also, a significant part of consumer goods also comes from abroad. The current structure of trade turnover provides a high dependence of export flows on conjuncture of raw commodities markets, while imports of goods remain inelastic to external shocks and exchange rate fluctuations. In turn, this creates a high threat to the country's foreign economic security.

The negative effect on the current account was mainly due to the balance of primary income due to inflows of direct investment. Large projects in the oil and gas industry in Kazakhstan are usually implemented with the participation of foreign investors, so the current operating costs are financed by attracted foreign direct investment. A significant inflow of foreign financing is also provided through external borrowing, which, among other things, is attracted by the state and enterprises with state participation for economic modernization, infrastructure development, and business support. The main component of primary income is investment income. In turn, investment income is mainly formed by the income of foreign direct investors. In comparison with the trade balance and the balance of primary incomes, the variation in the balance of services and secondary incomes is relatively lower, and as a consequence, the impact of these items on the current account is fairly stable. Thus, the result of the current account balance in Kazakhstan is determined by the balance of the trade balance and the balance of primary income.

In addition to the negative impact on the balance of primary income, foreign direct investment has had other implications. Within the financial account, the FDI was the most important item, ensuring a more stable structure, as they have a long-term character and do not lead to debt. Another consequence of this is that this type of investment funded the current account deficit without any problems. Kazakhstan's investment position in the entire observed period was in negative values, which also resulted in an inflow of foreign direct investment.

Kazakhstan's foreign indebtedness has grown considerably over the reporting period. According to National bank of Kazakhstan, the main reason for the increase is the increase in intercorporate debt, which is connected with the implementation of oil and gas projects by branches of foreign companies and the growth of debts to direct investors for unpaid dividends and loan repayments, as well as external debt of the non-financial sector of the economy. The intercorporate debt accounts for approximately half of the total debt. An analysis of foreign debt ratios has shown that there is a tremendous risk associated with debt repayment. Conducted statistical analysis proved the strong correlation between GDP and external debt. The economy tends to cover the debts as the external debt rises.

Analysts' calculations show that to maintain the existing external debt without affecting other macro indicators and the exchange rate of tenge, the price of a barrel of oil should be at least \$ 100, but such quotations are not expected in the foreseeable future (Smirnov, 2018). Preservation of low prices will only aggravate the problem of the republic's external debt. Kazakhstan's non-diversified economy is critically dependent on oil exports. The deterioration in the balance of payments, which causes the devaluation of the tenge, is
associated not only with the fall in the price of oil, as a source of foreign exchange earnings, but also with large amounts of payments for the country's increasing external debt. Thus, the government should take urgent measures in the near future to prevent and shorten the growth of the debt. However, regulation of the volume of external debt of "Other sectors" of the economy, including inter-company debt, is possible only by indirect measures, as the civil legislation of Kazakhstan provides for freedom of decision-making, including when the residents carry out entrepreneurial activities.

In 2015, the economy of Kazakhstan developed under substandard sophisticated economic conditions. The largest adverse impact on the Kazakh economy was a significant decline in prices for oil in the world market, a drop-in demand for Kazakhstan's exports due to the recession and the slowdown in the growth of the economies of Russia and China. All these factors resulted in the devaluation of the national currency tenge and changing the exchange rate regime to the floating. This, however, had negative effects on the balance of payments. The export of Kazakhstan was significantly shortened, thus changing the current account trend from surplus to deficit. As a result of the decrease in residents' income from exports, there was a significant decrease in net income of non-residents from direct investment in Kazakhstan. The business and investment activity of the population has declined, which has reduced the balance of services deficit.

In connection with the events in 2015, the economy of Kazakhstan should revive in the coming years. The deficit of current account should gradually decrease, as the economy adapts to new economic realities. The floating exchange rate allows to increase the export potential of Kazakhstan producers of non-oil products and limits the risk of a sharp increase in consumer imports. However, the potential for rapid recovery of the current account and exit to the surplus is limited to large projects financed by foreign investors, since these projects are accompanied by a large number of imports and an increase in dividend payments to investors. Under the existing economic conditions, the current account out of the deficit in the medium term is possible only with a significant increase in prices for major export goods, primarily oil. And the main task of monetary policy in the medium term should be the restoration of confidence in the tenge.

## 7 References

### Books and electronic documents

ASHIMOV, Abdykappar A. *Macroeconomic analysis and economic policy based on parametric control.* New York, NY: Springer Science+Business Media, 2012. ISBN 9781461411536.

BURDA, Michael C., WYPLOSZ Charles. *Macroeconomics: European text.* Seventh edition. Oxford: Oxford University Press, 2017. ISBN 978-0198737513.

GANDOLFO, Giancarlo. *International finance and open-economy macroeconomics*. New York, NY: Springer Berlin Heidelberg, 2016. ISBN 9783662498606.

HALL, Robert E., TAYLOR, John B. *Macroeconomics*. 4th ed. New York: W.W. Norton, c1993. ISBN isbn0393963071.

International Monetary Fund. *Balance of payments and international investment position manual. 6th ed.* [online]. Washington D.C.: International Monetary Fund, 2009. [accessed 2017-02-03]. ISBN 978-1-58906-812-4. Available at: https://www.imf.org/external/pubs/ft/bop/2007/pdf/bpm6.pdf

International Monetary Fund. *External debt statistics guide for compilers and users [online]*. *2nd ed.* [online]. Washington D.C.: International Monetary Fund, 2014 [accessed 2017-02-03]. ISBN 978-1-48438-5586. Available at: <u>http://www.tffs.org/pdf/edsg/ft2014.pdf</u>

KRUGMAN, Paul R., OBSTFELD Maurice, MELITZ Marc J. International economics: theory and policy. 10th edition. Boston: Pearson, 2015. ISBN 978-0133423648.

KUBIŠTA, Václav. *Mezinárodní ekonomické vztahy*. Plzeň: Vydavatelství a nakladatelství Aleš Čeněk, 2009. ISBN isbn97880-7380-191-5.

MAITAH, Mansoor. *Macroeconomics*. Czech University of Life Sciences, Prague, 2009. ISBN 978-80-213-1904-2.

MANDEL, Martin, DURČÁKOVÁ, Jaroslava. *Mezinárodní finance a devizový trh*. Praha: Management Press, 2016. ISBN 978-80-7261-287-1.

MANDEL, Martin, TOMŠÍK Vladimír. *Monetární ekonomie v malé otevřené ekonomice.* 2., rozš. vyd. Praha: Management Press, 2008. ISBN isbn978-80-7261-185-0.

MARKOVÁ, Jana. Analýza efektu přímých zahraničních investic na vnější rovnováhu z pohledu platební bilance. Český finanční a účetní časopis. 2012, 7(1), s. 20-32. ISSN 1802-2200.

MCCONNELL, Campbell R., BRUE Stanley L., FLYNN Masaki Sean. *Economics: principles, problems, and policies.* 19th ed. New York: McGraw-Hill/Irwin, 2012. McGraw-Hill series in economics. ISBN 978-0073511443.

MELNIKOV, V., ILYASOV, K. Finance 3rd edition. Almaty: Economics, 2001. ISBN 9965-441-20-4.

NEUMANN, Pavel, ŽAMBERSKÝ, Pavel, JIRÁNKOVÁ, Martina. *Mezinárodní ekonomie*. Praha: Grada, 2010. Expert (Grada). ISBN isbn978-80-247-3276-3.

#### **Internet sources**

*Crude oil price*. [online]. Indexmundi.com. 2017. [accessed 2017-11-01]. Available at: https://www.indexmundi.com/commodities/?commodity=crude-oil-brent&months=180

*Import and export of Kazakhstan in December 2015.* [online]. Kazdata.kz. 2015. [accessed 2017-11-28]. Available at: <u>https://kazdata.kz/04/2015-12-export-import-kazakhstan.html</u>

JOHNSON, Nick. *J-curve effect*. [online]. The Political Economy of Development. 2016. [accessed 2017-10-20]. Available at: <u>https://peofdev.wordpress.com/2016/10/10/brexit-the-pound-and-the-j-curve-effect/</u>

KNATOV, Berik. *Significance of foreign investments to Republic of Kazakhstan*. [online]. Zakon.kz. 2012. [accessed 2017-11-28]. Available at: <u>https://www.zakon.kz/4494768-znachenie-inostrannykh-investicijj-dlja.html</u>

LEWIS, Nathan. *The price specie flow mechanism*. [online]. New World Economics. 2016. [accessed 2017-10-11]. Available at: <u>http://newworldeconomics.com/the-price-specie-flow-mechanism/</u>

National Bank of Kazakhstan. *Balance of payments statistics*. [online]. [accessed 2018-02-05]. Available at: <u>http://nationalbank.kz/?docid=199&switch=english</u>

National Bank of Kazakhstan. *External debt statistics*. [online]. [accessed 2017-02-05]. Available at: <u>http://nationalbank.kz/?docid=202&switch=english</u>

National Bank of Kazakhstan. *International investment position statistics*. [online]. [accessed 2017-02-05]. Available at: <u>http://nationalbank.kz/?docid=468&switch=english</u>

National Bank of Kazakhstan. *Kazakhstan: Balance of Payments and External Debt (publication) since 2005.* [online]. [accessed 2017-02-05]. Available at: http://nationalbank.kz/?docid=932&switch=english

SMIRNOV, Sergey. *Kazakhstan's external debt: what it consists of and what we risk*. Informburo.kz. 2018. [online]. [accessed 2017-03-09]. Available at: <u>https://informburo.kz/amp/mneniya/sergey-smirnov/vneshniy-dolg-kazahstana-iz-chego-sostoit-i-chem-my-riskuem.html</u>

# 8 Appendix

Appendix A: Balance of payments of Kazakhstan in 2005-2015, (in USD million) Appendix B: International invesment position of Kazakhstan in 2005-2015, (in USD million)

- a) International investment position by assets and liabilities
- b) International investment position by sectors

Appendix C: External debt of Kazakhstan in 2005 -2015, (in USD million)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Current Account	-1,036.0	-1,999.9	-8,372.3	6,250.1	-4,120.8	1,385.7	10,198.6	1,057.7	1,273.5	6,139.8	-5,134.4
Trade balance	10,361.5	14,691.7	15,226.2	33,612.0	15,003.9	28,500.2	44,844.1	38,145.2	34,792.3	36,245.5	12,671.4
Exports	28,299.2	38,761.4	48,348.1	71,964.2	43,923.4	61,391.7	85,193.9	86,931.1	85,595.4	80,309.5	46,515.9
Imports	17,937.7	24,069.7	33,121.9	38,352.2	28,919.5	32,891.5	40,349.8	48,785.8	50,803.2	44,064.0	33,844.4
Services	-5,434.0	-6,134.2	-8,443.2	-6,926.5	-5,978.0	-7,249.6	-6,635.2	-7,929.9	-7,073.7	-6,298.1	-5,106.3
Exports	2,087.3	2,676.9	3,424.8	4,292.4	4,103.7	4,119.0	4,337.7	4,828.2	5,384.7	6,618.1	6,476.0
Imports	7,521.3	8,811.1	11,868.1	11,218.9	10,081.7	11,368.5	10,972.9	12,758.1	12,458.4	12,916.2	11,582.2
Primary income	-5,555.5	-9,350.0	-12,945.7	-19,375.3	-12,417.5	-19,375.6	-27,745.1	-28,117.1	-25,147.7	-22,476.7	-11,149.4
Compensation of employees, net	-728.4	-948.4	-1,203.2	-1,452.0	-1,304.8	-1,406.4	-1,730.2	-1,927.8	-1,803.7	-1,785.3	-1,612.3
Investment income, net	-4,969.6	-8,544.1	-11,884.9	-18,063.1	-11,252.4	-18,109.0	-26,154.6	-26,329.0	-23,483.8	-20,831.2	-9,676.9
Income receivable	844.7	1,623.3	3,661.5	3,595.0	3,033.3	2,556.9	2,088.1	1,945.9	2,176.7	2,071.9	2,113.2
Income on direct investment	9.3	10.9	268.8	170.9	68.0	303.5	155.9	194.9	347.6	309.4	583.6
Income on portfolio investment	234.6	493.8	857.0	914.1	863.2	716.6	901.3	959.9	1,094.4	1,183.0	1,035.4
Income on other investment	600.8	1,118.6	2,535.7	2,510.0	2,102.2	1,536.8	1,031.0	791.1	734.7	579.5	494.1
Income payable	5,814.3	10,167.5	15,546.4	21,658.1	14,285.7	20,665.9	28,242.8	28,274.9	25,660.5	22,903.1	11,790.0
Income on direct investment	4,804.8	7,898.2	11,514.3	17,315.7	10,960.9	17,997.1	25,213.2	24,753.0	22,510.9	19,763.9	9,197.4
Income on portfolio investment	154.3	341.9	394.5	321.4	251.4	922.8	1,751.2	2,070.3	1,590.9	1,667.1	1,639.3
Income on other investment	855.2	1,927.4	3,637.6	4,021.0	3,073.4	1,746.1	1,278.4	1,451.6	1,558.7	1,472.1	953.3
Other primary income, net	142.5	142.5	142.5	139.8	139.8	139.8	139.8	139.8	139.8	139.8	139.8
Secondary income	-408.0	-1,207.4	-2,209.6	-1,060.1	-729.2	-489.2	-265.1	-1,040.6	-1,297.3	-1,330.8	-1,550.2
Capital account balance	4.5	30.8	35.8	19.3	31.4	7,898.0	31.8	15.4	-6.4	29.3	131.7
Financial account (excluding reserve assets)	2,293.8	-11,803.4	-1,993.6	1,680.5	-3,919.2	10,631.8	9,531.1	4,319.3	-303.2	-7,094.1	-9,324.4
Direct investment	-2,119.1	-6,689.4	-8,030.5	-13,114.7	-10,083.3	-3,665.2	-8,582.6	-11,855.9	-8,034.4	-4,591.1	-2,857.7
Portfolio investment	3,952.7	4,501.4	4,583.1	9,377.5	-3,093.1	-8,470.3	12,868.1	17,387.9	6,033.6	1,038.8	-5,887.9
Financial derivatives, net	112.6	67.8	369.1	-163.7	-66.2	3.9	-126.7	108.9	103.7	-37.1	-106.8
Other investment	347.6	-9,683.2	1,084.7	5,581.5	9,323.3	22,763.5	5,372.3	-1,321.7	1,593.8	-3,504.8	-472.0
Net errors and omissions	1,381.5	1,240.3	3,314.2	-2,423.7	2,638.7	6,054.4	-398.9	-1,060.3	-3,950.1	-9,008.4	-5,089.3
Overall balance	1,943.8	-11,074.6	3,028.7	-2,165.2	-2,468.5	-4,706.4	-300.4	4,306.5	2,379.7	-4,254.9	767.7
Financing	-1,943.8	11,074.6	-3,028.7	2,165.2	2,468.5	4,706.4	300.4	-4,306.5	-2,379.7	4,254.9	-767.7
Reserve assets NBK	-1,943.8	11,074.6	-3,028.7	2,165.2	2,468.5	4,706.4	300.4	-4,306.5	-2,379.7	4,254.9	-767.7
IMF credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exceptional financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Appendix A: Balance of payments of Kazakhstan in 2005-2015, (in USD million)

Source: NBK, http://nationalbank.kz/?docid=199&switch=english

### Appendix B: International invesment position of Kazakhstan in 2005-2015, (in USD million)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Net International Investment Position	-20,273.6	-28,958.4	-44,307.5	-38,830.4	-43,024.2	-35,562.1	-32,817.2	-35,343.9	-33,291.1	-40,349.1	-41,471.8
Assets	32,722.5	63,326.9	82,428.7	98,662.7	104,037.9	120,221.8	145,533.5	162,809.3	176,789.1	177,748.4	157,167.9
Liabilities	52,996.1	92,285.3	126,736.1	137,493.1	147,062.1	155,783.9	178,350.7	198,153.3	210,080.2	218,097.5	198,639.6

### a) International investment position by assets and liabilities

Source: NBK, http://nationalbank.kz/?docid=468&switch=english

### b) International investment position by sectors

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Net International Investment Position	-20,273.6	-28,958.4	-44,307.5	-38,830.4	-43,024.2	-35,562.1	-32,817.2	-35,343.9	-33,291.1	-40,349.1	-41,471.8
Central bank	6,967.8	18,053.3	17,543.2	19,841.6	22,173.5	27,252.4	28,746.8	27,662.6	24,313.5	28,808.3	27,859.1
Banks	-7,250.1	-22,937.0	-33,227.5	-20,778.3	-11,508.4	-4,359.7	3,432.4	4,588.9	12,385.9	6,623.1	-4,135.2
General government	6,638.2	12,857.3	19,947.5	26,315.4	22,785.1	27,879.0	42,474.5	55,443.5	67,556.5	68,143.1	54,118.3
Other sectors	-26,629.4	-36,932.1	-48,570.7	-64,209.1	-76,474.5	-86,333.8	-107,470.9	-123,038.8	- 137,547.1	-143,923.6	- 119,314. 0

Source: NBK, http://nationalbank.kz/?docid=468&switch=english

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
External debt	43,428.5	74,014.1	96,893.0	107,933.4	112,866.9	118,222.8	125,320.8	136,918.2	150,032.9	157,561.5	153,384.8
Short-term	8,102.4	12,445.2	11,529.7	9,486.8	6,985.1	8,864.5	7,867.2	9,086.3	9,468.1	9,713.8	6,478.4
Long-term	35,326.1	61,568.9	85,363.3	98,446.6	105,881.8	109,358.3	117,453.6	127,831.9	140,564.8	147,847.7	146,906.4
General Government	1,478.9	1,495.2	1,491.5	1,641.9	2,218.1	3,800.3	4,487.4	4,855.1	5,217.6	7,332.5	11,309.3
Short-term	0.0	0.0	0.0	0.0	0.0	0.0	7.9	0.1	0.0	0.0	17.8
Long-term	1,478.9	1,495.2	1,491.5	1,641.9	2,218.1	3,800.3	4,479.5	4,855.0	5,217.6	7,332.5	11,291.5
Central Bank	103.5	1,076.8	106.9	12.1	1,017.5	1,000.6	563.3	618.9	546.7	953.7	898.8
Short-term	101.6	1,074.9	105.0	10.2	479.7	470.4	36.3	88.1	10.7	215.6	76.0
Long-term	1.9	1.9	1.9	1.9	537.8	530.2	526.9	530.8	536.0	738.1	822.9
Banks	15,316.3	33,323.4	45,946.2	39,221.2	30,190.1	19,947.9	14,604.8	13,524.9	11,160.4	10,119.5	7,972.8
Short-term	6,297.2	7,465.5	6,102.8	3,093.4	1,646.2	1,622.5	1,046.6	1,647.6	1,227.6	1,467.6	764.4
Long-term	9,019.1	25,857.9	39,843.4	36,127.8	28,543.9	18,325.3	13,558.1	11,877.3	9,932.8	8,651.9	7,208.4
Other Sectors	7,307.8	12,605.7	19,267.8	26,859.4	29,809.2	41,199.2	43,089.1	50,311.0	58,928.7	59,574.0	37,071.7
Short-term	1,703.6	3,904.8	5,321.9	6,383.2	4,859.2	6,771.5	6,776.4	7,350.6	8,229.8	8,030.6	5,620.3
Long-term	5,604.2	8,700.9	13,945.9	20,476.2	24,950.0	34,427.7	36,312.8	42,960.5	50,698.9	51,543.4	31,451.4

Appendix C: External debt of Kazakhstan in 2005 -2015, ( in USD million)

Source: NBK, <u>http://nationalbank.kz/?docid=202&switch=english</u>