THE MINISTRY OF EDUCATION OF AZERBAIJAN REPUBLIC

ECONOMIC CONSEQUENCES OF DEVALUATION IN ECONOMY. AZERBAIJAN AS AN EXAMPLE

RESEARCHER: LEYLA DASHDAMIROVA

SUPERVISOR: RAMIN RAHIMOV

AZERBAIJAN STATE UNIVERSITY OF ECONOMICS

JUNE 2018

Acknowledgements

Firstly, I would like to note that working on this dissertation has been a valuable experience for me. It influenced me a lot, as it helped me to broaden my knowledge not only in the scientific ground, but also on a personal level.

I would like to thank my principal scientific supervisor Ramin Rahimov for supporting me considerably and being patient throughout the intensive period of preparation. The guidance of my supervisor helped me to follow the right direction and successfully finish my dissertation.

Abstract

The weakening power of the national currency, or in simple words the devaluation process has a considerable effect on economic growth of a country. In this paper, firstly I study the consequences of devaluation on both developing and developed countries with particular examples of each study group respectively. Analyzing a particular country helps to conclude an idea on similarly developed economies.

Moving forward I examine the influences of devaluation on Azerbaijan economy by using different time series data for over a 15-year period. The variables I opt for comprised of GDP per capita, annual and the monthly salary of the workforce, foreign trade balance. My research also includes the data about the performance of Azerbaijan Banking sector after devaluation.

Key Words Devaluation, Exchange Rate, Export, Import

Table of Contents

Introduction

Each country has three economic goals to achieve both in the long and in the short term, these are reaching the economic growth, creating more workplaces and as a result improve employment rate and having no or minimum inflation rate at the same time.

In order to succeed in achieving these targets and make the countries better, governments opt for fiscal and monetary policies as an action plan and let their community's aggregate demand curve to move either to the left or right-hand side. The fiscal policy is about allowing the government to accumulate taxes and expend them on public sectors like education, infrastructure etc.

This also basically focuses only on the domestic economy while monetary policy deals with both international and domestic economy. Meaning that the government can choose monetary measures and the exchange rate strategies of devaluation in order to influence the domestic and international markets respectively.[1]

Back in the time, governments had a permission to make use of trade barriers to constraint their imports from and exports to the foreign market but as time passed, and the free trade became the most stressed element among the nations, the role trade barriers played became unimportant and the only way of influencing the nation's proficiency in the foreign market became devaluation.

[1] (Fratzscher, Duca and Straub, 2014)

In today's world, devaluation process become one of the best effective measures in making exported goods cheaper and imported goods high-priced so that the country's export will be stimulated, whereas its import will be discouraged. As a result, the country may be able to tackle its balance of payment deficit with the assistance of devaluation.

Due to inequitable division of the world's natural resources countries adopt in various types of international trade since some nations like in the Middle East for example, have a plenty amount of natural gas resources while some other countries like in African continent have gold, diamond and other valuable metals. There is no nation on the planet that can please all of its citizen's demand locally without importing, and in parallel all of its producer's excess supply without exporting procedures. That's why, international trade is an important area where all countries need to take part in.

As resources have allocated in discriminatory ways across the globe, the need of international trade is very considerable and it is the only method of movement the existing resources all over the globe. Although the plentiful existence of natural resources in some particular countries is taken as a source of disagreement and instability in most of the cases, it is the back bone of the nation's GDP as well and it has the big share from the total export of many of the mineral exporting nations.

That's why, it's clear that governments would take part in some kind of profit improvement strategies provided their exportable goods and among the measures some of them are noted as follows; imposing various entry barriers like tariff and quota on imported merchandises, lowering the power of domestic currency against other currencies, giving some incentives and subsidies for the local manufacturers, and tax liberations on exportable products and so forth.

Many of the third world countries are not capable of giving essential incentives and subsidies for the manufacturers and exporters at the meantime, the country

would be out of the track if it employs the tax exemption measures and the civil servants and the government enterprises would be fully under the control of the international lenders, donors, and foreign financial institutions that's why, the last 2 strategies would not matter for LDCs generally and specially sub Saharan African communities, even if they are influential for some nations which possess budget surplus in their economies.

The initial strategy would not matter either due to the effect of globalization and the free trade treaties that were signed by the participant countries of the World Trade Organization that's why, weakening the power of the domestic currency would be the only method of influencing the nation's international trade.

Similar to any other country, Sub Saharan African countries are also connected to international trade for several years, even decades in fact, they are not fortunate enough to witness positive trade balance. Therefore, these countries are mostly not being able to cover their expenditures by themselves and basically they are looking for foreign financial assistance like credits and donations in order to reduce their trade deficit.

As a result, they are not even capable of covering all the expenditures of their government by themselves let alone giving subsidies and tax exemptions for the producers and exporters therefore, the only measure that needs to be taken into account is the devaluation.

Chapter I

Theoretical and empirical review of devaluation

1.1. Theory of devaluation

No country wants to experience its own currency to devaluate against other currencies. But sometimes devaluation can be inevitable and make it necessary for economic recovery.

Devaluation is a formal downward regulation to the value of the nation's monetary system, relative to the other currency, a group of currencies or just standard.

A devaluation process is a method of letting the devaluating country to lose some percentage of the value of its currency relative to dollar or any other currencies.[2]

Devaluation is frequently confused with depreciation. Although the national currency becomes relatively fragile in both devaluation and depreciation times, the sort of exchange rate regime is separate for them. Devaluation can take place either in managed floating or fixed exchange rate regime and the government has some voice over adjusting the international exchange market whereas, depreciation happens most commonly in floating exchange rate and government never has rights to decide about the value of national currency, which is totally defined by the market's supply and demand mutual relation.

What's more, revaluation is a calculated increase to a country's formal exchange rate in comparison with some other monetary systems or standard measures as gold. Revaluation emerges either in managed as well as fixed floating systems and the final decision of the value of domestic currency that is exchanged for the other currency is made by the Central Bank of the country.

In contradiction, at the time when the price of national currency rises through the demand and supply relations, without any hindrance of the country, it's called

[2] Folks and Stansell, 1979

appreciation. There is talk over the efficiency of devaluation in promoting the nation's trade, based on the empirical and theoretical investigations. As for to the one source, the application of devaluation in an economy might result opposition of both aggregate supply and aggregate demand.[3] To begin with the causes that enforce total demand to contradict following the employment of devaluation as a policy measure; devaluation consequences in a redistribution of revenue among those with high marginal inclination to save. To put it differently, exporters who have a high marginal tendency to save would be the ones who derive an advantage from devaluation and the nation's aggregate demand would remain unchanged. As a result, a decrease in investment would be a case or it could stay static.

Devaluation brings about a low government minor propensity to expend out of revenue collected from taxes. This is especially a case if the government imports facilities or other construction materials in order to fulfill infrastructures or other government projects. Real income deteriorates under a first trade deficit which takes place following the employment of devaluation in the economy. Particularly, whenever devaluation realized in an economy, both importers and export suppliers will not respond straightaway either to the fall of the volume of imports or increase in the level of export since contracts has to be signed a couple of days before trade that's the reason, the nation's trade balance would experience deficit immediately after devaluation process and lead real income to decrease. Devaluation could also lead to a reduction in the real wealth. While a nation "Nation X" devaluates its monetary system against the other nation "Nation Y" may also devaluate its currency against the former country "Nation X" and by doing so both nations may dispirit their import demands at the time their export demand remains intact and this may result a cut down in aggregate output of both nations.

The causes which enforce aggregate supply to drop following the realization of devaluation are followings:

[3] Solomon 2010

- Initially, more valuable imported manufacturing inputs; if exporting firms make use of imported merchandises as an input, devaluation would be dispiriting for the corporations that import production inputs and it would have a negative influence on the overall supply of exportable products.

Secondly, a frequently applied devaluation stimulates assumptions and brings about confidence erosion; furthermore, continuous devaluation makes the national currency to weaken its purchasing power gradually so that it creates misrepresentation in several economic factors such as the house hold real income, industrial growth, consumption, public finance, imports-exports, manufacturing growth, money supply and other variables alike. It is an obvious fact that if the consumer's take in pattern diminishes, the producer's production pattern also reduces and the company's production pattern has a direct connection with government revenue or public finance.

Thirdly, the demand for export is not only defined by export prices, but also by the trade reliability, understanding of the residents of importing nation towards the quality of the merchandise to be exported and the similar factors. So, the country's overall supply might reduce following the employment of devaluation if there is no alteration in import demand of the importing nations of our export commodities. [4]

In contradiction, according to the expenditure shifting measures, devaluation makes imported merchandises expensive in internal market and exported goods comparatively cheaper in the world market. As a consequence, the nation's trade balance improves following the employment of devaluation.

On the other side, according to the particular source, characterized that the impact of devaluation on trade balance could be defined by the sum of elasticity of demand for import and export in absolute value [5]. If the total amount of the absolute value of elasticity of demand for import and export is more than 1, devaluation results in

[4] Solomon, 2010
[5] Bahmani-Oskooee and Niroomand, 1998

improvement of the nation's trade balance, and if it is less than 1, the trade balance gets more worsen as devaluation adopted as a measurement.

Devaluation has its own impact on the nation's trade balance and various governments would like to employ devaluation as a monetary policy, so as to get better of their economic constraints caused by overvaluation of their own currency but the effect of devaluation on developed countries is quite distinct from that of the developing ones.

1.2 The economic effects of devaluation on developed economies

Among the researches which used an integration method, assessed whether devaluations has any long-run impact on LDCs' national output or not, for 30 high and upper-middle income countries.[6] They applied the unit root test technique, in order to get informed if the variables such as GNP, real effective exchange rate and nominal effective exchange rate have the same influence and they detected that there is a unit root on the variables of seventeen countries that's why, they checked the co integration between GNP and exchange rate by using the model below, where GNP stands for gross national product and R for (both real and nominal) exchange rate.

$$GNP = \delta 1 + \delta 2\ R + u \quad (10)\quad R = \delta 1 + \delta 2\ GNP + \varepsilon$$

The conclusion they come up with showed that there is no long-run connection between the two variables for most of the countries which are under consideration. Even if they stated that, in the long time period, in almost all aimed countries the Marshal Lerner condition has contented and devaluation of the domestic currency improved the country's trade balance, the production level of most countries was not

[6] (Bahmani-Oskooee and Niroomand, 1998: 135)

influenced by the alteration of the foreign exchange rate neither from real nor nominal one. That's why, devaluation has no long-run impact on LDCs internal production. In a likely manner another study described that, the selected 27 developed and developing countries of Latin American, Asian and other industrialized countries of the world have empirically shared resembling kind of trends in the short and long-term period of time.[7] Although the adoption of devaluation results contractionary impacts in the short run, it has a positive influence on trade balance and BOP account in the long run for approximately all countries under observation.

The researchers empirically showed appreciation (revaluation) of national currency makes the real GDP possible to grow in the short run. Since there is a correlation between output growth and real exchange rate, devaluation process has a positive impact on output growth in the long run.

Moving to the other analyze it has been concluded that by using the likelihood based panel co integration method there is no absolute evidence to say devaluation improves the Swedish trade balance.[8]

The model that has been used is shown as follows:

$$\text{Ln } Xt = \beta 1 + \beta 2 \text{ Ln } WY + \text{Ln } \beta 3 \text{ RER} + UT$$

$$\text{Ln } Mt = \alpha 1 + \alpha 2 \text{ Ln } DY + \alpha 3 \text{ Ln RER} + et$$

There X stands for Swedish Real Export and M for Swedish Real Imports from its bilateral trading nations under observation. RER stands for real bilateral exchange rate between Sweden and its trading companions, WY and DY represent real income of the Swedish trading countries and the real Domestic income of Sweden respectively and U and e are error terms.

[7] (Kamin and Klau, 1997)
[8] (Bahmani-Oskooee, 1998), (Irandoust, Ekblad, and Parmler, 2005)

In addition, Ln stands for the natural logarithm of the information.
By applying the model above, they found out that, though the Swedish export is positively connected with the exchange rate for its 6 of 8 main bilateral trading countries: Denmark, Norway, Germany, the Netherlands, France and the US, only for four bilateral countries of Sweden, the Netherlands, Finland, France and the US does devaluation as a measurement, enables to decrease the volume of import of Sweden. The bilateral trade, which means the process affecting both sides, with the rest two trading countries, Finland and the UK, would end following the implementation of depreciation of the Swedish currency.

The Marshal Learner condition has exercised only in two of the bilateral trading nations of Sweden such as the Netherlands and France; however, it is not carried out for the rest of its trading countries that's why, it is difficult to conclude depreciation as a method of achieving improvement in trade balance.

Among the studies that use OLS method, one of them has been tested on the panel data of US and its 5 highest bilateral trading economies from Europe and empirically proved that, depreciation of USD has no influence to decline of the trade deficit of USA against its bilateral European trading countries[9].

The regression model that has been utilized is as below:

$$TBt = \beta 1 + \beta 2\ R + Ut$$

Where TB and R represent the trade balance and exchange rate of America with its five biggest European bilateral trading states respectively Ireland, France, Italy, Germany and the Netherlands. According to the researcher USD depreciation has an insignificant effect on America's trade deficit but devaluation of Dollar might cause more disadvantages for American economy than its benefits. Because when US weakens the value of its currency, there occurs a decrease in the value of Dollar and various countries and people who hold Dollar lose their confidence on this currency

[9] (Le Khak, 2006)

and they opt for to use some other alternative currencies other than USD and this affects the US economy more.[10]

Future devaluation of US dollar will cause further concerns in world economy and Dollar as a currency would be less alluring. That's to say, devaluation is not the best option to tackle the problem of the US trade deficit upon condition it is responsible for other monetary disadvantages. In contradiction to this, Hooper, Johnson and Marquez have utilized a very alike type of model with Irandoust, Ekblad, and Parmler and came up with a distinct conclusion in fact; the observed groups that they have addressed are two quite different nations. They used the model as follows and recommended that real depreciation of dollar had to be considered as a measurement in order to reduce the ongoing foreign trade deficit from getting broader.

$$\text{Ln } Xt = \beta 1 + \beta 2 \text{ Ln } WY + \text{Ln } \beta 3 \text{ RER} + Ut$$

$$\text{Ln } Mt = \alpha 1 + \alpha 2 \text{ Ln } DY + \alpha 3 \text{ Ln RER} + et$$

Again here, X stands for Export and M for Imports from their bilateral trading countries under examination. RER is relative bilateral exchange rate, WY and DY stand for real income of their trading countries and real Domestic income of the G7 countries respectively; in addition, U and are error terms. What's more, Ln represents the natural logarithm of the provided research.

Moreover, the other research was conducted on 20 OECD countries and their bilateral trade connections with 52 developed and developing nations shows that, a 10 % appreciation of domestic currency causes a 6.8 % average reduction of export levels[11]. The model has taken RER[12], as an independent and real export of both OECD and non- OECD nations as a dependent factor and come up with the resolution that real exchange rate appreciation has a negative effect on OECD nation's trade balances.

[10] (Le Khalk, 2006)
[11] (Berthou, 2008)
[12] Real Effective Exchange Rate

Weakness in the economy of Japan has given investors reason to concern about. The data that have been released a short time ago revealed that GDP grew just 0.2% quarter-over-quarter throughout the last three months of the year 2013. This turned out to be a quarter-over-quarter annualized rate of merely 0.7%, and noted the second consecutive quarter of more fragile increase relatively the previous times. Development in the nation has relieved in stipe of the considerable fiscal and monetary incentive, and it is particularly worrying, considering that an impending tax increase, occurred in April, 2014 has drew some take in onward.

A more massive plunge into the growth data indicates that currency devaluation may not be having the wanted influence on the economy of Japan. The national currency of Japan, yen, has lost its power more than 25% relative to the U.S. dollar since the offset of the third quarter in 2012 and has had an identically marked downward tendency in comparison to other major currencies which include: the euro, Chinese yuan, British pound, the South Korean won and Canadian dollar. A generally accepted theory reveals us that a lowered yen makes Japanese exports more competitive, and in parallel, exports should have increased considerably since the third quarter of 2012. Without doubts, the data approves that on a concrete ground, beginning from the second half of 2012 exports have risen considerably.

What's more, it is crucial to reminisce about the other aspect of currency devaluation as well when thinking of its effects on the economy of Japan. At the time a low-powered monetary system raises the relative allurement of a nation's export products, it supports import costs as well, what is exactly has occurred in Japan. At the time export products have increased notably since the monetary system started to lose its power, the increase in the import proportions has submerged the revenues gained on the export side. Being provided that net export merchandises are variables utilized in the conduction of GDP, economic growth was adversely influenced by the nation's widening trade deficit. Japan witnessed the most severe trade deficit in the history of the country in January of the same year.

Biggest part of the impairment in the trade balance has emerged as a result of a severe growth in energy import materials, having Japan now obliged to import 93% of the country's national energy fuel needs against 80% at the beginning of the March, 2011. Tohoku earthquake and tsunami have happened in the same year. The demolishing after effects of this shocking event comprised a shut-down of all of the nuclear fabrics in Japan, that had benefited as plenty as 30% of the nation's total energy demands. Whilst country's energy import requirements have taken off, Prime Minister of Japan, Shinzo Abe, had an obligation to relax fiscal and monetary measures which meant that as Japanese yen has lost its power, individuals and enterprises likely should pay a lot for the escalated energy import products. The shutdown of a nuclear reactor as well as its influences on the trade accounts has clearly turn into a matter of important disagreement in Japanese political declaration. Beginning to launch the nuclear reactors again would pass a considerable way to supporting the nation's accounts of trade and the growth of GDP.

1.3. The effects of devaluation on developing countries

Decreasing the power of one country's currency in comparison with that of another country has been a ubiquitous trend, especially in developing countries. These alterations in currencies can have either expansionary or conflicting effect on economic growth. There are some organizations like International Monetary Fund which support the conception of devaluation of currency as one way of economic development besides the arrears and other financial aids to the member countries. It is

considered to enhance competitiveness of domestic firms and raise the production of national products and output. The international exchange system of a country can be utilized to get many objectives other than the clearance of foreign-exchange market, as well as encountered with inadequate measurements of policy to realize a lot of objectives expected of them, the governments of comparatively less developed nations have called upon it to do this way. The functions it has range from encouraging industrialization, strengthening the terms of trade, and increasing the revenue to distributing income among a number of classes and even doling out favors to political partners. For example, in Argentina when the exchange rate was employed to the traditional exports, meat and wheat, was deliberately kept low for several years with a view to keeping down the cost of living for urban labor force. All of the listed functions involve different exchange rates of some degree, either it be explicit or implicit, that is, charging varying exchange rates in accordance with commodity or service, the destination or origin, which they often replace in function.

What's more, politicians have acknowledged that an objective reached indirectly is often socially acceptable when direct action would not exist. This case emerges not always as a result of an imperfect understanding of the indirect means in contrast to the direct one, despite it plays a crucial role. It is much easy for an interest group to mobilize successfully against an export tax that it is for against an overvalued currency supplemented by high import quotas and potentially accompanied by some kind of export subsidies, even if the two regimes might have precisely alike economic influences.[13]

The hardship is that the pursuit of the listed negative objectives too often leads to neglect of the function of the exchange rate in placement the supply of foreign exchange. When balance-of-payments pressures the development, sometimes as a

[13] As Fritz Machlup has said (in connection with Special Drawing Rights): "We have often seen how disagreements among scholars were resolved when ambiguous language was replaced by clear formulations not permitting different interpretations. The opposite is true in politics. Disagreements on political matters, national or international, can be resolved if excessively clear language is avoided, so that each negotiating party can put its own interpretation on the provisions proposed and may claim victory in having its own point of view prevail in the final agreement."

consequence of inflationary measures, which in the short-term period are frequently also a successfully ambiguous was to appease conflicting social objectives, governments then engage in a series of patchwork efforts and marginal controls to prevent the problem, which may disarrange the original objectives. When devaluation eventually happens, as a result, the case is taken to sweep away many of the measures which have been formulated to avoid the urgency for devaluation as well.

This is the fact that makes currency devaluation in many developing countries a good deal more complex than a simple adjustment of the exchange rate, and the analysis ought to be modified to take these other adjustments into account. Generally speaking, four types of devaluation can be distinguished:

- Straight devaluation. It involves a discrete alteration in the main exchange rate or an administered slide in the rate, such devaluation was employed by Colombia, Brazil and Chile in the late sixties, whereby the rate was devaluated by a little amount every two to eight weeks.
- Devaluation with a stabilization program of contractionary monetary and fiscal policy targeted at diminishing the level of total demand, or at least the rate of increase od demand.
- Devaluation accompanied by liberalization, by which imports and other international payments that were initially prohibited or subject to tariffs are allowed to take place under less restraint that before the devaluation.
- Devaluation accompanied by partial or full change rates is collapsed into a single, unified rate, or at most two rates, the lower one applying to traditional exports of primary products and in effect amounting to a tax on these exports.

It must be pointed that in most developing countries the difference between fiscal and monetary policies does not have the same meaning it has in more advanced nations. Ever since the access to foreign capital markets is restricted and capital markets are

little developed, budget deficits, after letting foreign assistance, have to be financed by the banking system that results directly or indirectly in monetary extension. This way, the usual attention on eliminating government deficits is merely an indirect way to limit the rate of monetary expansion. These different simultaneous adjustments must be taken into consideration when analyzing the economic influences of devaluation. An additional factor is that less developed countries are more prone at the time of devaluation to be generating new money demand at a rate greater than can be accommodated by overall domestic output plus foreign aid and other long run capital inflows from abroad. Long story short, they are getting inflationary policies, as opposed merely to having process that have gotten out of the line in the course of past inflation.

As a matter of fact, most of the devaluating countries have some combination of a suppressed payment deficit and an open one. But for clarity of exposition and bring about the contradiction with the analysis above most specifically, it will be considered that devaluation from a position where the payments deficit is fully suppressed by other measurements, and in which the devaluation process is accompanied by unification or/and liberalization of the exchange system involving the removal of subsidies, special taxes and prohibitions that have been set up earlier. Additionally, it will be supposed that the nation is not pursuing inflationary measures at the time of devaluation process.

Firstly, it is worth to point that the elasticity of demand for imports is prone to be low at the time when imports are concentrated on semi-fabricated merchandises, raw materials, and capital goods, a trend widespread in less developed countries. With import substitution in a progressive stage, all the easy substitutions having already been made in the purpose of pursuing industrialization, imports largely depend on output rather than income and in addition, they are not very sensitive to relative price alterations. There is more space for substituting home production for imports of foodstuff, though it will usually take a season or even longer to happen.

Furthermore, import liberalization and exchange-rate unification will actually consequence in a cut down of the prices of those imports tightly restrained before the devaluation process, so consumption of them will be promoted.

There exists a great diversity of experience with regard to exports. Some nations, manufacturers of oil, cocoa, copper, for example, have virtually no domestic take in of the export goods. In other countries, exports comprised of the major wage good-beef in Argentina and fish in Iceland, for example. In the first listed countries, growing exports demand broadened output and development of new export merchandises, and none of these courses can be easy in the short term, although tree crops can sometimes be more widely harvested. In the second mentioned nations, there is more space for immediate rises in exports permitted by reductions in domestic consumption of the exported goods. In developed countries by contrast, there are plenty of domestically consumed products that are actual or potential exports, and since there is more space for short-run growth in export supple by diverting output from the home to the external market.

When it comes to incentives to broaden output and expand volume, the main reallocation here is between exports and import competing goods in the case of open economies. This is because by assumption imports have already been stringently restricted by high tariffs and quotas, disadvantageous exchange rates, and quantitative limitations, all of which create a strong price incentive for national production. Some exports may have also been subsidized and. Where this is so, devaluation process accompanied by removal of the subsidy may leave no new incentive to increase production for export. However, generally talking, exports are heavily penalized under the regimes we are considering and devaluation has the effect of reducing the premium for producing import-competing goods for the home market and increasing the premium for production for export, with the main shift in incentives coming between these two sectors rather than with respect to home-goods sector.

New investment in the capacity to export will demand that investors expect the improvement in their position to last, that the devaluation and associated policy measures will establish a new regime that will not simply slide back in to the old configuration of policies.

Establishing these expectations is the one of the most difficult tasks of those carrying out the reform. The same problem exists in principle in devaluation from open deficit also, but developing countries that have not relied in limitation of imports for payments reasons stand a better chance of success, because investors will expect any emerging disequilibrium to be corrected rather than suppressed by controls.

What's more, the required investment may differ in character from that in developed countries. Where producers can be competitively exported under the new regime, conversion from the domestic manufacturing, may be relatively easy; but opening up export markets for manufactured merchandises for the first time is a drawn-out process, requiring the establishment of new marketing channels. The shift from the domestic to export crops in agriculture- or the opening of new lands – is generally easier; but for livestock and for tree crops the required gestation period may be several years.

For all these reasons, some pessimism with regard to price elasticities would be quite justified for many developing countries, at least in the short term.

Now let's have a look at some models to explain the devaluation consequences in more detailed form. By applying the following model researchers concluded that real depreciation of national currency promotes the trade balance of Serbia in the long run even though J curve effect has observed and trade balance deteriorates in the short run. [14]

$$TB = \alpha 1 + \alpha 2 \text{ Ln GDPd} + \alpha 3 \text{ Ln REER} + et$$

[14] Petrović and Gligorić, 2010

Where TB represents the country's trade balance, and GDP and REER stand for the Serbian's gross domestic product and real efficient exchange rate respectively. Similarly, Algieri claims that, even if petroleum is not incorporated in the calculation; the Russia's trade balance gets improvement whenever there is a real depreciation of domestic monetary system.

In order to empirically analyze the impact of exchange rate devaluation on the Russians trade balance the researcher used the following model:

$$\text{Log } Xt = \beta 1 + \beta 2 \text{ Log } Pt + \beta 3 \text{Log } Yt + \beta 4 \text{ Log } Wt + Ut$$

Where X is export, P is the relative price (p/p*), Y is the aggregate income and W is the OECDs overall productions characterized by industry. The model that the researcher used has taken the price and income elasticity of trade of Russia in to consideration and he got significant results of both of the parameters. As relative price increased by 1 percent (when domestic currency depreciates), export increased by 2.039%.

Chapter II

Review of Azerbaijan economy and economic consequences of devaluation in Azerbaijan

2.1. The economic review of Azerbaijan economy before devaluation.

The oil and gas sector played a key role in the development of other sectors in the economy of Azerbaijan. The proportion of the private sector in GDP was actually less than 10% when privatization process began; however, now it has reached 85%. Since 1995, a new phase of the transition period in Azerbaijan - a recovery period has begun.

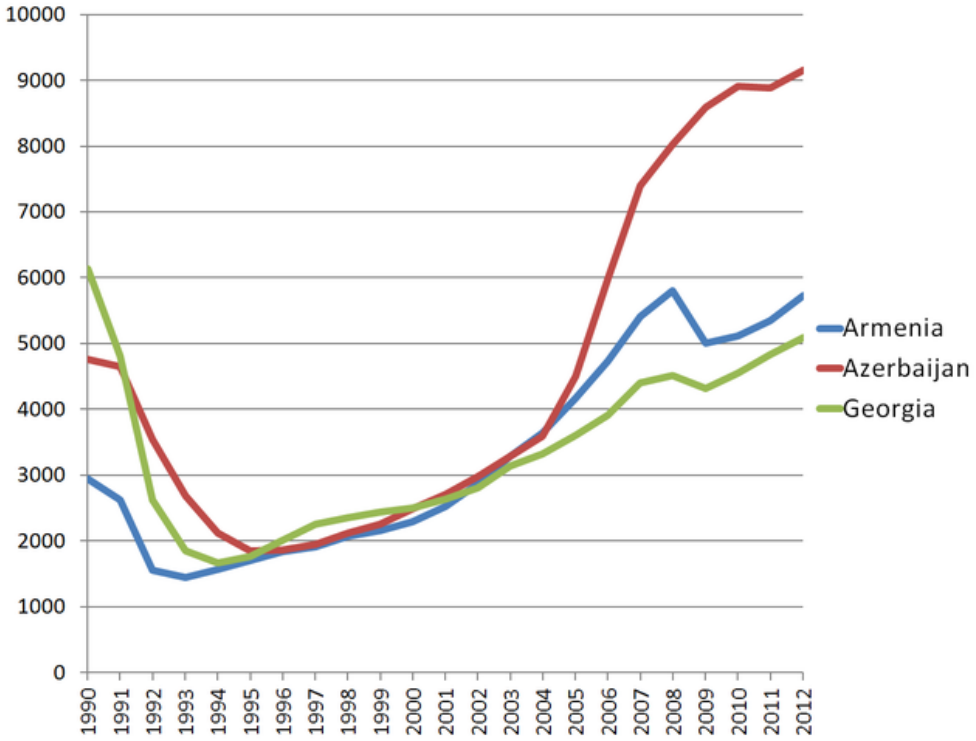
During a 8-year period between 1995-2003, gross national product grew by 90.1%, state budget revenues 3 times, foreign currency reserves 85 times, the volume of industrial output by 25.2%, agricultural production by 53.9%, foreign trade turnover 4 times, the standard month-to-month real wage of those involved in the economy increased 5.6 times, the inflation rate dropped to 2-3%, and the total investment in the economy through all financial sources exceeded $ 20 billion. Once the Republic of Azerbaijan gained its independence, one of its major foreign economic policies was to establish close connections with international financial-credit and economic entreprises. The country has been a member of almost all prestigious international organizations[15].

In spite of the acute recessions as the result of the world's leading global financial and economic crisis, macroeconomic stability, economic growth, the decline in poverty and the promotion of the population welfare continued in 2009.

At the same time, Azerbaijan was the leader among the regional countries in terms of the real growth rate of the economy in 2009, and it ranked at a high

[15] including the International Monetary Fund in 1992, the World Bank, the European Bank for Reconstruction and Development, the Islamic Development Bank, and the Asian Development Bank in 1999.

level in the world according to the provided indicator.



Thus, according to the results of the year, the real GDP growth in 2009 was 9.3% in comparison with 2008, and the real volume of GDP per capita was 7.9%. 64.1% of GDP was in production, 28.3% in service sectors, and real growth in these sectors accounted for 10% and 9.1%, respectively.

In 2009, the real growth rate in the oil and gas field accounted for 14.3% and 3.2% in the non-oil sector, and the real growth rate in the industrial sector was 12.8%, 9.3% in transport, 13.1% in communication and 9.9% in trade. The real growth rate of agriculture soared reaching 3.5%, a notable change in comparison with 2008. Overall, in 2004-2009 GDP rose by 2.8 in real terms and reached $ 43.0 billion at current prices. The share of GDP per capita increased by 2.2 in real terms in 2009 compared to 2004 and accounted for $ 4874.1. During this period, the monetary income of the population increased by 2.0 times in real terms, per person income escalated by 85%, average wages tripled,

minimum pensions increased by 3.8 and minimum wages rose by 6.3.
In 2009, both revenues and expenditures of the state budget increased by 7 times in comparison with 2004, 32886 new enterprises were created in the country during 2004-2009, and approximately 840 thousand new workplaces were launched.

As a result of application of purposeful measures, the poverty level has dropped by 4.1 times over the past five years from 44.7 to 11 percent.
In 2004-2009, the foreign trade turnover increased by 2.8 times, including exports by 3.9 times, imports by 1.7 times as well as exports of non-oil sector by 2.4 times. The volume of foreign trade turnover of the Azerbaijan Republic in 2011 was 36.33 bn. US $; what's more, imports totaled of $ 9.76 billion and exports accounted for 26.57 billion USD.

Throughout this period the Republic of Azerbaijan has mutually beneficial connections with 149 countries and the foreign trade balance has positive value of 16.81 bln. US Dollars. Compared to the same period of 2010, the foreign trade turnover of the Republic of Azerbaijan increased by 29.92 percent in 2011, including an increase of 47.81 percent in imports and 24.39 percent in exports. The Share of the public sector in export operations in 2011 was 25 250.74 mln. US dollars (95,03%) and private sector had the share of 1 127,23 mln. US dollars (4.24%), and natural people's share of 192.92 mln. US dollar (0.73%). In the import operations, the share of the public sector during the mentioned period accounted for 3,404.25 mln. US dollar (34.89%), the share of private sector made up 5,901.17 mln. US Dollars (60.49%), the share of individuals was

$ 450.55 million. US Dollars (4.62%).

During the years 2008-2009, when there was a limitation in the global financial and monetary markets, the borrowing capacity of local firms from abroad as well as their refinancing opportunities were not only limited, but also they were required to pay early repayments of some debts.

In such conditions, banks if Azerbaijan returned $ 1.2 billion a year of the debt. In addition, the money transfers of the Azerbaijani people living abroad from the social point of view were significantly reduced that was for the population of the regions. As a result, the national economy faced with the pressure on the devaluation of the manat like in some neighboring countries. In order to maintain the stability of the national currency, the Central Bank had to spend considerable resources, which eventually proved to be justified. With the decline in internal and external sources of funding, the Central Bank had to soften its monetary policy, and the discount rate was reduced from 15% to 2%.

Real and nominal growth dynamics of GDP

The graph above illustrates the changes that occurred over a decade.

The extension of the American economy went with strengthened employment levels in 2015, brought about the situation that the FED turned to the dwindling monetary strategy. Then again, the second biggest financial power - China experienced a lower economic development rate for a long-term with a decrease in exports, and accordingly unfavorably influencing worldwide monetary movement. Additionally, the quick decay of prices in worldwide fuel markets, attributable to basic and political reasons, brought about a financial downturn in nations dependent on their fuel trades, while importers encountered a higher economic movement in parallel with lower inflation suppositions.

Correspondingly, new monetary conditions appeared in the second half of 2014, leaned their negative effect on the economic dynamics of Azerbaijan throughout the next year. The insufficiency of economic diversification approaches in the country was uncovered with regards to the decrease in fuel prices.
The economic administration framework, established in big-scale oil incomes in the most recent decade lost its controlling capacity, and in this manner, the government chose to devaluate its monetary system by 33.55% to stop a swift depletion of the reserves. This devaluation process had a high tension on the real part, which was adjusted to a fixed exchange rate system for a long period. Therefore, the obligations accumulated by organizations and households rose, costs of final utilization and production rely on imports increased causing a lower household demand. In addition, the cuts in the budget expenditure existed, as well as the minimum loaning in the banking sector, and lower economic attempt. Since the economic and money related strategies were initially tied to the oil price of 90 USD, the standard of 53.4 USD brought about a financial irregularity and eventually led to the second sharp devaluation process toward

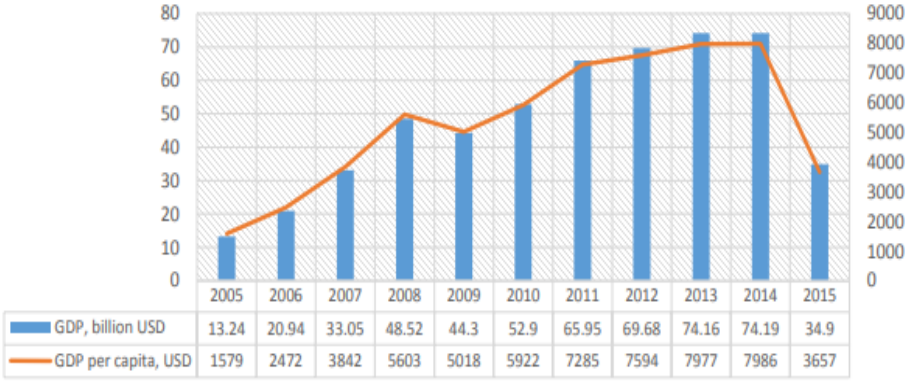
the end of the year[16]. In other words, the Central Bank was not able to sustain the fixed exchange rate system and shifted to the floating regime. Consequently, manat, the national currency of Azerbaijan, weakened its power by 98.7% officially, and actually within the year it was 120%.

2.2. Devaluation of National Currency of Azerbaijan and its economic consequences.

As manat lost its power against other currencies, per capita income as well as month to month paid wages lowered; what's more the position of Azerbaijan in global economic terms also worsened.
Moreover, a decline in the earning levels of population and the high proportions of debts in terms of foreign monetary system led to a crisis in the banking sector by worsening the credit repayment capacity of local people. As 90% of exported commodities were dependent on oil, balance of payments and foreign trade stability were negatively influenced.
At the same time, the Republic of Azerbaijan was deprived of more than 20% of its operative exchange reserves. It ought to be noticed that following the development in a decade ago Azerbaijan could expand its proportion in the Caucasus economy from 54.1% in the year 2005, to 74.6% in 2013[17]. This figure was 72.7% in 2014, gradually losing ¾ proportion of its share in the territory in 2015.

[16] 21.12.2015
[17] (SSCRA, 2016); In other words, Azerbaijan made up 75 dollars out of the total 100 dollars of the value-added in the Caucasian economy in the year 2013.

GDP and the dynamics of GDP per capita



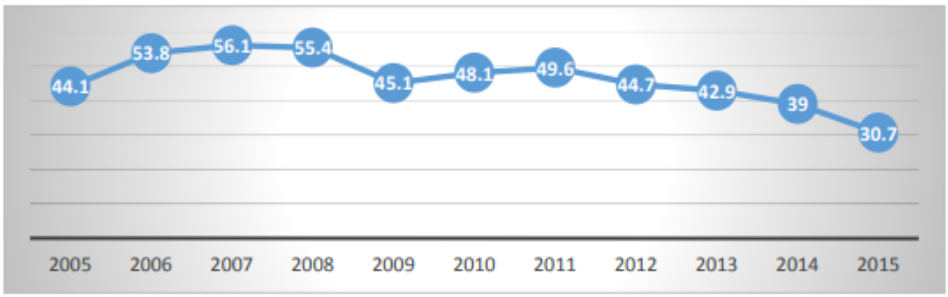
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
GDP, billion USD	13.24	20.94	33.05	48.52	44.3	52.9	65.95	69.68	74.16	74.19	34.9
GDP per capita, USD	1579	2472	3842	5603	5018	5922	7285	7594	7977	7986	3657

As provided in the chart, the Azerbaijan economy experienced 2 significant contractions throughout last 11 years: the first one occurred in 2009 as a result of the Global Financial Crisis; and the second one owing to the extreme decrease in the international oil prices in 2015.

This way, both of them can be characterized to the severe decline in oil prices. Nevertheless, the economic depression of 2015 was more influential leading to the devaluation of manat, national currency. The GDP per capita accounted for 3657 USD5 in 2015, which is circa two times lower [18] than the former year and approximately the same with 2007. However, in terms of oil incomes the GDP per capita rose five times throughout the period of 2005-2014. The economy of Azerbaijan has a significant deal of hydrocarbon riches; it can be split into 2 main sectors: non-oil and oil section. The former one accounted for 69.3% of the overall value-added in 2015. This was by 8.4 per cent higher than it was in 2014, 60.9. There was witnessed 4% increase in the non-oil GDP in accordance with State Statistical Committee. Obviously, relatively same increase was recorded in 2001 which was 68.7%. Throughout the following year the reputation of non-oil sector weakened significantly as result of the raised oil manufacture later when the Baku-Tbilisi-Ceyhan pipeline was put into service.

[18] 54.2%

The proportion of non-oil section in the economy, in percentages



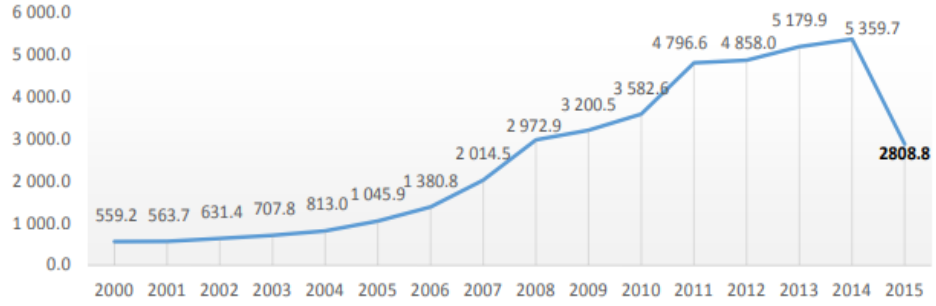
In 2007 the non-oil sector experienced the minimum share with 43.9%. The termination of oil boom in 2011 brought about the non-oil sector to alter its position. In general, throughout preceding years, economic growth in Azerbaijan is attributed to the extension of the non-oil sector. The increase in non-oil sector is acquired from raised government expenditures, which successively, financed by oil incomes. Namely, throughout 2015 one of the basic obstructions to growth was reductions connected with budget spending. Though budget spending was forecasted to account for 13.53 billion USD [19]. That's why, taking into account the financial points, there has existed a 2.13 billion USD worth shortening which in turn, has a negative influence on the recent trend of the economic growth, funded by budget expenditure.

The income of population made up 26.7 billion USD in 2015, which was 47.1% less in comparison with the former year, 2014- it accounted for 50.5 billion USD. Whilst in 2014 the income separated for the final consumption

[19] converted based on the exchange rate at the end of the year 1 USD=1.5594. It made up 15.7% less, being 11.4 billion USD

made up 68.8%, it was 75.7% in the following year. Moreover, 2.9% of personal revenues were defined towards the repayment of loans in 2015, that was 0.4% more than in former year, 2014 (2.5%). As for the State Statistical Committee, throughout 2015, 15.9% of income has been spared to savings, falling from 20% documented in 2014.

Income per person, in terms of USD



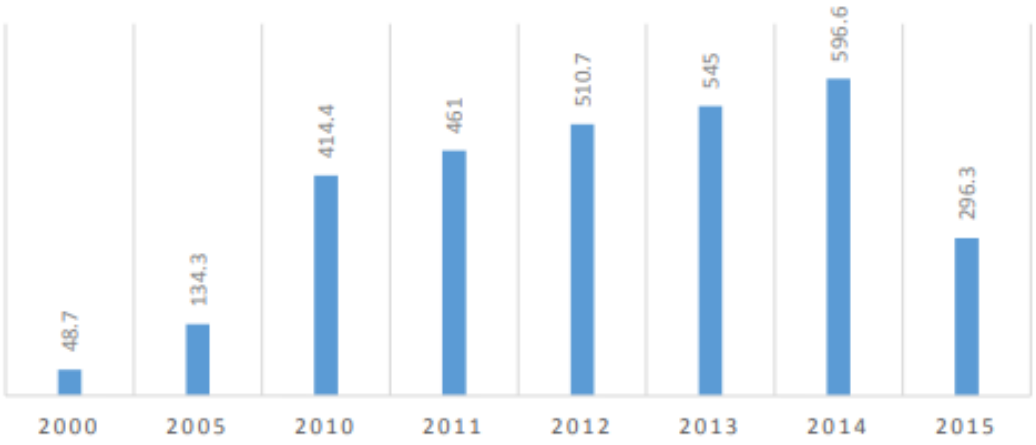
The standard income per capita was reported to be 2808.8 USD in 2015, which was lower than in 2009[20]. It should be taken into account that, the maximum rate was calculated in 2014, at the time income per capita reached the top level in the country. It can be obviously seen that beginning from 2006, when the Baku-Tbilisi-Ceyhan pipeline was routed, the income levels increased considerably, but dropped in 2015 because of the resolute decrease in oil prices. This way, it can be inferred that, there has been a crucial role of oil revenues in revenue levels of the population in the course of former years.

In accordance with the official information presented in December 2015, a

[20] According to the graph above, throughout past 15 years (the period of 2000-2014), the income per capita reached its peak, an uninterrupted rise, but nearly halved in 2015.

number of paid employees, dropped by 0.8%, accounting for 1 million 504 thousand. This fall was experienced both in private and public sector. That is, based on the records obtainable in December 1, the number of paid labor was 624.6 thousand in private sector while a number of workers in public sector was 879.4 thousand. The graph below illustrates the data about average monthly salary in USD terms.

Average month-to-month salary, in dollars



The amount of average monthly salary augmented by 4.6% in terms of manat in 2015, national currency nevertheless, it fell by 48% in terms of USD, being 296.3 USD. However, the proportion of average monthly salary accounted for 596.6 USD in 2014[21]. The given diagram reveals that in the course of the 15-year cycle, beginning from 2000 to 2014, the standard

[21] As a result of this movement, Azerbaijan damaged its status as a "middle income country".

monthly wages were gradually in a growing trend. Thereafter, throughout this time it increased by 12 times, and in 2014 reached its peak. Yet, in 2015 the severe drop that was recorded had a bad effect on the domestic demand the social welfare of the community.

As for to the deteriorating economic properties and severe devaluation of national currency, entrepreneurs encountered considerable borrowing costs, by broadening the effect of recession in the real sector.

Some businesspeople came across bankruptcy, whilst other ones reduced the number of their workforce. There is no formal information on hand about the number of shut workplaces; however, observations indicate that the unemployment rate rose in comparison with the former years. On this conditions, the head of the country conveyed his dissatisfaction about the closure of workplaces, which made up 40 thousand, in the conference on economic and social development indicators in 2015.

That the overall influence devaluation had on the income levels of the nation, let's now turn to another major area where devaluation also left its traces, which is foreign trade conditions.

In 2015, the foreign trade circulation dropped by 33.4% in comparison with the former year, making up 20.6 billion USD. This considerable contraction in foreign trade circulation was as a result of the shrinking level of exports. To put it another way, the number of exports fell to 10.6 billion USD, or we can say by 48.7% throughout 2015. The main cause of this nosedive is the acute drop in the international oil prices. Juxtaposing to eleven months of 2014, in the following year the size of gas exports, oil and oil products reduced by 53.8%, making up 9.1 billion USD, whereas in 2014 it made up 19.77 billion dollars. In comparison with exports, there existed a growth in import levels. So that, within 11 months

of 2015 the size of imports increased by 1% from preceding year[22]. Thinking that macroeconomic circumstances have not changed notably at the last month of 2015, the ultimate results of 2015 can be connected to 11 months' trend.

Years	Million USD			
	Trade Turnover	Import	Export	Trade Balance
2005	8 558,4	4 211,2	4 347,2	136,0
2006	11 638,9	5 266,7	6 372,2	1 105,5
2007	11 771,7	5 713,5	6 058,2	344,7
2008	54 926,0	7 170,0	47 756,0	40 586,0
2009	20 824,5	6 123,1	14 701,4	8 578,3
2010	27 960,8	6 600,6	21 360,2	14 759,6
2011	36 326,9	9 756,0	26 570,9	16 814,9
2012	33 560,9	9 652,9	23 908,0	14 255,1
2013	34 687,9	10 712,5	23 975,4	13 262,9
2014	31 016,3	9 187,7	21 828,6	12 640,9
2015	20645.9	9221.4	11424.5	2203.1

Throughout the years succeeding the launch of the Baku-Tbilisi-Ceyhan pipeline, the foreign trade circulation increased by 6.4 times and in 2008 reached its peak with 54.9 USD. At the time when the increase in imports accounted for 70%, during the period, exports grew by 11 times. This way, in 2008 the trade stability was equal to 40.6 billion USD. The drop in the price of energy resources caused the trade balance to fell to 8.6 billion USD. The most important factors which caused the exports to lower and consequently damaged trade balance were the termination of the oil boom in 2011 and parallel decline in the oil production.

What's more, growing government expenditure in parallel with infrastructure projects throughout 2013 brought out in 1 billion dollars more imported merchandises from preceding year, as a result damaging trade balance. Taking

[22] Accounting for 8.2 billion USD

into account, a lot of experts considered that the imports are even higher in reality, trade balance encountered a negative disposition in 2015[23].

As for to the report, whilst there is a decline in the credit accessibility, collections of tax, different customs procedures, registration of property, the access to electricity, a development is noticed in starting business, obtaining the allowance for construction, and particularly in defending foreign investments. In general, in comparison with preceding years, the importance of foreign capital took off in 2015.

The president of the AR stated that, the investment flow to the country accounted for 20 billion USD, and in 2015 the proportion of foreign investments was 50%. This statement was declared in the conference about the social and economic outcomes of 2015.

The investment level dropped by 28.3% in the economy in 2015. In USD relations the decline accounted for 7.9 billion USD, whereas it made up 27.91 billion USD in 2014.

As shown in the bar chart below, throughout the period of 2000-2014 the size of investments grew by approximately 20 times. However, there was a drop in particularly two years, namely in 2009 and 2015, both of them can be characterized as a result of the drop in oil costs, in parallel with the depression. To put it differently, Azerbaijan, recognized for its rich oil resources, becomes less alluring for investment intentions, when there occurs an oil slump.

There was a significant decline in both domestic and foreign investments in 2015, respectively 14.5% and 38.3%. The principal reason for declining domestic investments is weakening power of manat - the devaluation of national monetary system.

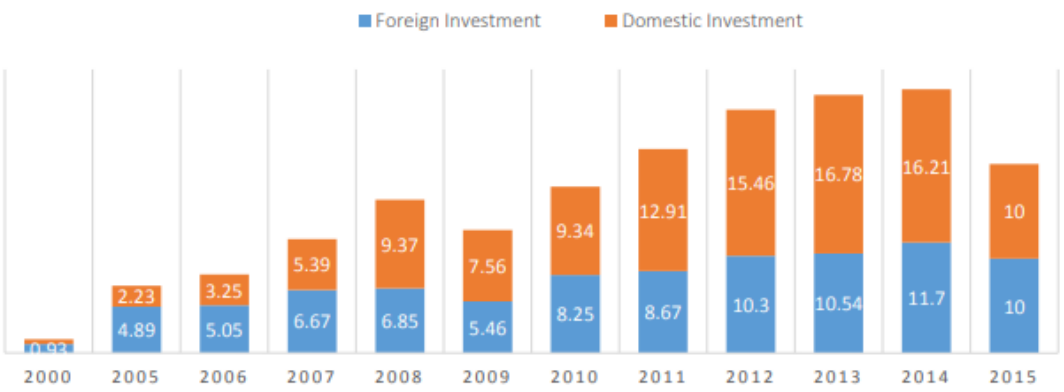
[23] Notwithstanding Azerbaijan entered a stage of stagnation beginning from the second part of 2015, the World Bank did not alter on the attitude of Azerbaijan in the "Doing Business" index of the country.

In addition, the growing number of risks had negative influence on economic initiatives that can be taken into account as the second reason of lower investment amounts. Based on rough calculations, approximately 39% or 8 billion USD of the overall investments was directed to the oil sector in 2015. This is 18.8% more than preceding year[24].

It is important to note that the level of non-oil field investments in international investments accounted for 14.9%, in 2016.

To put it in a different way, foreign investments were basically directed to oil sector in the similar manner as former years.

The dynamics of foreign and domestic investments



It is important to mentioned that, foreign loan rating enterprises such as "Standard and Poor's" and "Fitch Ratings" preserves the rating of Azerbaijan as "BBB- ".

The State Oil Fund of the Azerbaijan Republic predicted to possess 13.06 billion dollars in incomes, and expenses of 15.06 billion USD, in 2015 based on standard yearly cost of 90 dollars per barrel in 2015. But, the average yearly oil price accounted for 53.4 USD in 2015, which meant a notable decline in revenues of Fund.

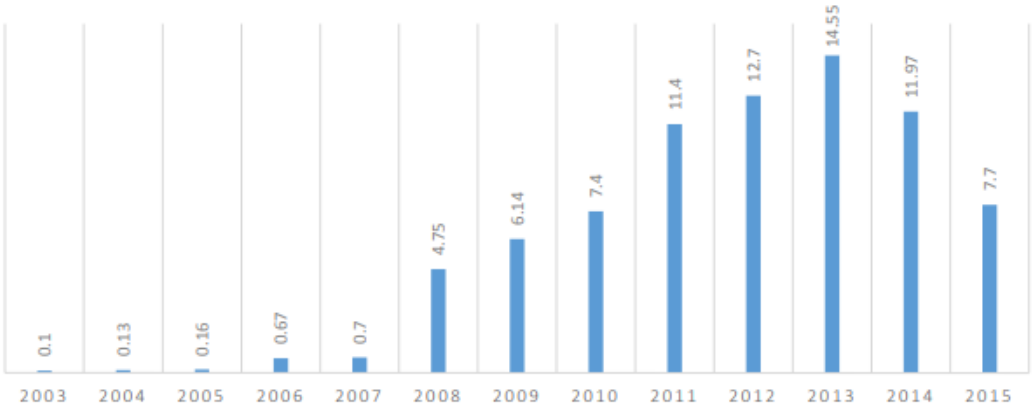
[24] When it accounted for 6.73 billion USD, 2014. Foreign investments are considered to be the main source of investments directed to the oil sector.

As a result, expenditure was reduced in order to diminish budget deficit and to sustain the reserves of the Oil Fund. Throughout nine months of 2015, the Fund revenues accounted for 5.25 billion USD, whilst the expenditures were 6.06 billion[25].

This was, the forecasted revenues and expenditures of the Fund reduced considerably. According to the Ministry of Finance of Azerbaijan Republic, transfers of the Fund to state budget in the period of 2015 compile 7.7 billion dollars, being 41.8% less than the conducted number. Though, devaluation that occurred in February 2015 cut down the financial load of the Fund, firstly, the Oil Fund failed to face its commitment in front of the state budget. Consequently, incomes of the state budget made up 11.8% less. That's why, the number of transfers to the state budget was diminished by 4.27 billion dollars, as well as in percentage it accounted for 35.2% in 2015 in comparison with former year.

Transfers from the SOFAZ to the state budget

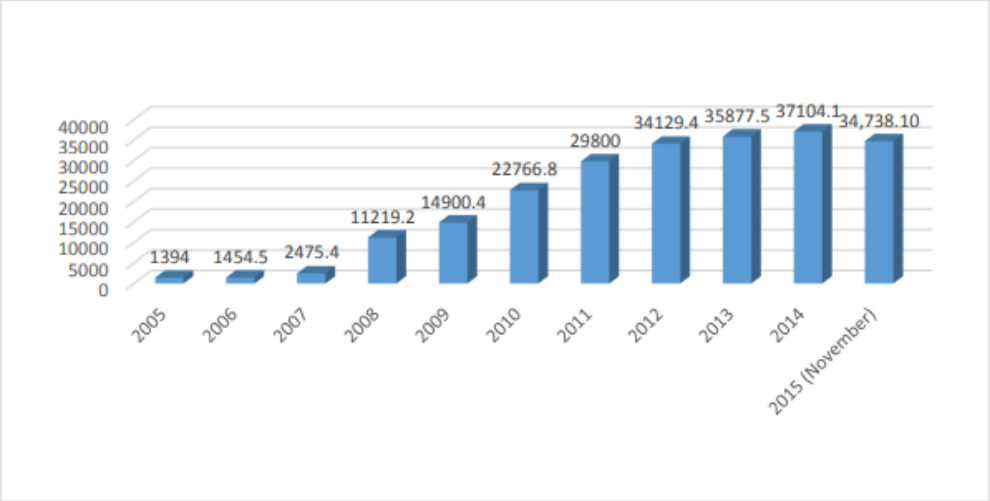
[25] During the time period, the number of the transfers from Fund to the budget made up 5.35 billion dollars. It was converted as 1 USD=1.05 AZN, as the Oil Fund had completed its yearly transfers to state budget before the second devaluation process.



According to the diagram, beginning from 2006, the number of transfers from the Fund to the state budget increased swiftly, and reached its peak in 2013. To put it differently, throughout the period 2005-2013, the number of transfers grew by 91 times.

In 2014, the state diminished the number of transfers with the aim of saving. But, the acute decline in the fuel prices in 2015 made the reduction necessary. According to the data available on 2015 October 1, in 2015 the assets of the Fund diminished by 6.38%, being equal to 34.7 billion USD. Taking into account that only the transfers to state budget from the Fund accounted for 2.35 billion USD in the most recent quarter of the year the reduction of assets continued in the fourth quarter.

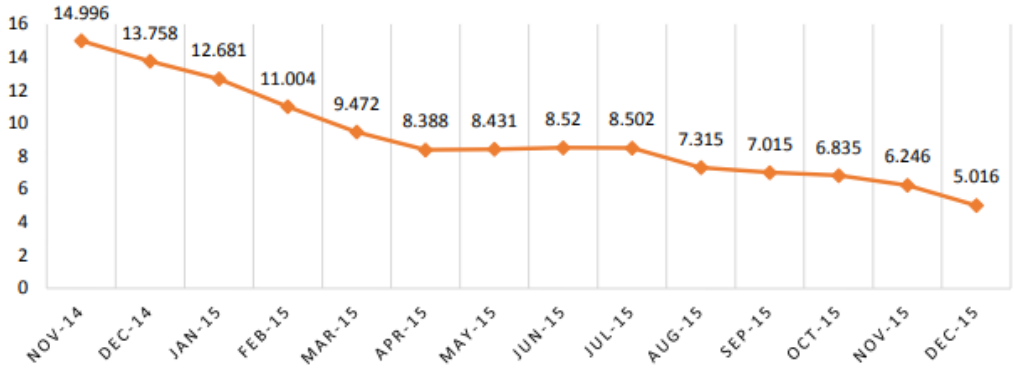
Assets of the Oil Fund, billion USD



Throughout a ten-year period between 2005-2015, the variables shown in the chart above initially cut down in 2015. It ought to be pointed that, the CESD suggested decreasing transfers to state budget in 2011[26].

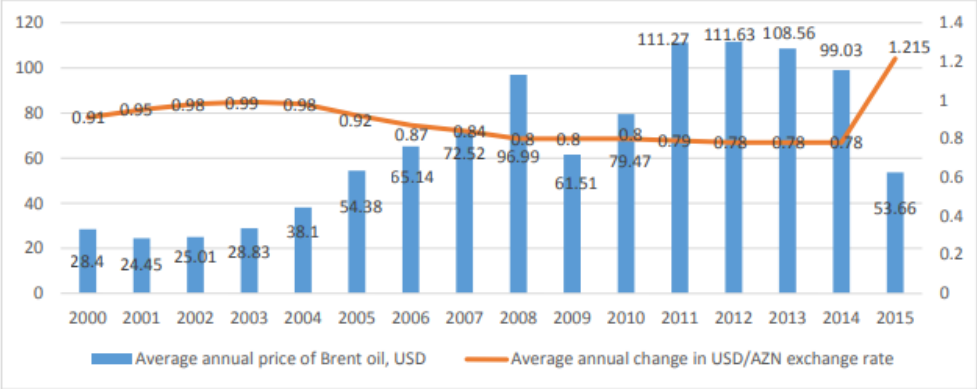
[26] As for the CESD, the fast drop of oil funds must be avoided to meet up with the requirements in the period of lower oil manufacture of 2010-2025. In 2015, the exchange rate policy of the Central Bank was based on the decreasing foreign exchange supply and its increasing demand. The sharp decline in the oil price together with the devaluation of national currencies of oil-rich countries resulted in a considerably increased demand of foreign exchange in financial markets in Azerbaijan. That is to say, during 9 months of 2015 the total volume of transactions in exchange markets rose by 1.8 times, and 91% of these transactions were in USD. This is 1.8 times higher compared with the respective period of 201427. Altogether, the value of transactions in USD during 9 months was 54 billion, while transactions in EUR rose by 2.1 times. Within the 3 quarters of the reporting year, the demand of population for USD, as a net cash of foreign currency, increased by 61.7%, and the highest demand was observed during the first quarter. In other words, the first quarter accounted for 63% of USD, and 38% of EUR sold in cash during 9 months. Source: Central Bank.

Official exchange reserves of the Central Bank, billion USD



Despite positive the statements by the country; the devaluation process hardly the confidence in the domestic currency. As a result, this matter noted the broadening of the dollarization process. The savings and deposits of households and businesses, as well as lending were converted to and conducted in international currency. Throughout the 10 months of the initial devaluation, the exchange reserves reduced by 43.2% as well as by 4.76 billion dollars. It can be clearly seen from chart, that within 14 months exchange the reserves observed a down-wand trend, only with a slight growth in May and June. Accompanied by the switch to a flexible exchange rate system in Kazakhstan in August, the demand for international monetary system increased once again. That is to say, the expectations of alike decision in Azerbaijan got huger, having a resembling economic structure of these nations.

The exchange rate of national currency and Brent oil price



The chart above illustrates the relation between the exchange rate of the domestic monetary system and the oil prices. Throughout the period of increasing oil prices in beginning from 2001 to 2014 the national monetary system happened to be higher by 21%. Nevertheless, accompanied by the severe drop in the oil costs in the end quarter of 2014 the balance of payments of the nation was impacted negatively, and in 2015 the national currency lost its value by 54.9% on average. After the initial devaluation, the Central Bank tried to diminish the volume of national currency in turnover in order to obstacle the demand for international currency. Throughout this time, the banking section highly restricted lending in AZN[27]. Accordingly, in 2015 on 21st of December, there was new and more important devaluation. The Central Bank stressed its incapacity to control the ongoing circumstances, and declared the shift to the floating exchange rate regime. As for the statement of the Central Bank, the first devaluation was altered to 50-55-dollar price of oil. The exchange rate declared, for the time of turning to the flexible exchange rate system, was 1 dollar=1.55 AZN, which means a devaluation of national monetary system by 100%

[27] On the other side, during the execution of the state budget, the Ministry of Finance implemented a 3.1 billion AZN (2.95 billion USD) reduction in unprotected expense directions (Samir Sharifov, Minister of Finance), sharply decreasing the national currency inflows into circulation. The money market shrank by 70%, or from 14.71 billion USD to 4.4 billion USD comparing with the beginning of 2015. Floating exchange rate regime- The incessant fall of the oil price, the reduction of reserves to the minimum, and the decision of a U.S. Federal Reserve System to start to a contractionary monetary policy after 9 years, all limited the potential maneuver of the Central Bank and government.

throughout the year. After the second devaluation, there was a steady weakening of the national currency, and as a result of the limited participation of the Central Bank in monetary system markets, the actual conversion degree was 1 dollar=1.85 AZN. Taking into account that the international exchange reserves of the Central Bank are at the lowest rate, the involvement of the State Oil Fund in currency markets is forecasted to decrease considerably in comparison with former years. What's more, as expectations stated, the oil price is going to decrease further rather than to increase, the fall of national monetary system is predicted to be unchanged. The real sector used to be in accordance with a constant exchange rate system for a long time, and was not prepared for devaluations of 2015. As a consequence, the real sector encountered a large debt load, people came across soared consumer prices while their incomes dropped rather than rose, and the banking area encountered the risk of default.

2.3. Azerbaijan Banking sector and its current performance after devaluation

New economic circumstances occurring at the end quarter of 2014 was a mark of difficulties for banks in the following year. The swift cut down in oil costs caused a severe drop in international exchange inflows to the government, that in return resulted a tension on domestic currency.

The state of banks in the beginning of the year, billion USD

External liabilities	*6.356*
Credits	*23.275*
including	
National currency	*16.923*
Foreign currency	*6.352*
Deposit and savings	*14.544*
including	
National currency	*9.275*
Foreign currency	*5.265*
Problem Loans	*1.245*

As for the graph above, international liabilities of banks in external monetary system accounted for 11.62 billion dollars, at the time their assets made up 6.35 billion dollars. To put it differently, there is a deficit of 5.27 billion dollars. It can be summed up that, banks were fragile to any potential devaluation process from the onset of 2015[28].

The indicators of the banking sector after the devaluation on 21.02.2015, billion USD

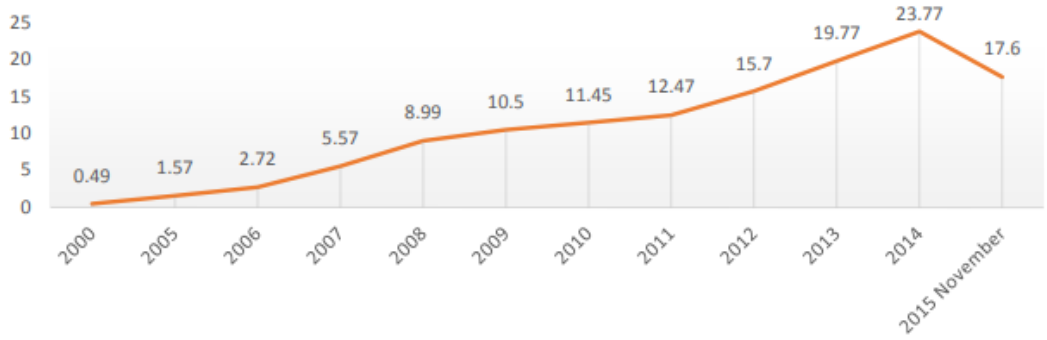
[28] So that, the 33.4%35 devaluation by the Central Bank led in a loss of 1.33 billion dollars in the banking sector. It means that borrowers having credits in external monetary system had to pay 33.4% more in terms of local currency, reducing credit repayment capacity of customers, and consequently increased problem credits.

	change	28.02.2015	01.01.2015
External liabilities	+17.5%	7468.2	6.356

Credits	-15.3%	19.71	23.275
including			
National currency	-30.7%	11.73	16.923
Foreign currency	+25.6%	7.98	6.352
Deposits and savings	-20.4%	11.57	14.544
including			
National currency	-42.1%	5.37	9.275
Foreign currency	+17.8%	6.2	5.265
Problem loans	-15.3	1.08	1.245

As it can be seen from the table above, the devaluation in February increased international liabilities, loan portfolio in foreign currency, and deposits in external monetary system by 17.5%, 25.65 and 17.8% accordingly. At a later date, some preserved positive dynamics across these three categories were allocated by a notable contraction. Additionally, the February devaluation led loans to increase by 30.7%, while reducing deposits by 42.1% concurrently in terms of domestic monetary system. As a result, in the structure of credits, the proportion of credits in international currency increased from 27.3% to 40.5%. The worsening of the economic depression and the issues in the banking sector had adversely effected the dynamics of loans after the devaluation process. Consequently, at the ending period of November 2015, the credit portfolio of banks fell by 24.4% or by 5.67 billion dollars, made up 17.6 billion dollars. Furthermore, the lower degree of confidence in the banking section caused in reduced deposits and savings, in parallel with changing the structure of monetary system. That is to tell, the number of savings in November accounted for 11.67 billion dollars, dropping by 19.8% in comparison with the offset of the year. At the same time, the proportion of savings in international currency in total

savings increased to 68.5%. This growing proportion of deposits and savings in international currency led banks to suggest their credits in international currencies. Because of the expectation of next devaluation, businesses gave up to allure credits in international monetary system causing to the shrinking credit portfolios in the last decade. To put it another way, following the devaluation, banks were not interested in funding credits in domestic currency, while customers desired to prevent credits in international monetary system.



As can be seen in the graph, throughout the a 15-year period 2000-2014 the number of credits grew by more than 48 times. This increase is fastened following the opening of the BTC pipeline, but a stagnation episode was recorded during 2008-2011 as a result of Global Financial Depression. Following this, a development was witnessed throughout the following three years, but in 2015 again the trend was reversed into down-ward side.

What's more, an adverse influence on banks assets also was calculated. That is to tell, while banking assets soared by 7.4 times reaching to 32.1 billion dollars within the 2006-2014, throughout the 11 months of 2015 they made up 27.2 billion dollars falling by 15.3%. In other words, the process of shrinking of banking sector has started. According to some experts, many banks are likely to cease their operations because of either bankruptcy or consolidation. Currently, 7 out of 45 banks operating in the country are under liquidation. [29]

[29] It should be noted that, while the Central Bank used to disclose the data about the financial reports revenues and expenses- of banking sector on a monthly basis in previous years, following the February

Conclusion and recommendations

To sum up, the year 2015 was not successful period for the economy of Azerbaijan Republic. Decreasing oil prices in the international markets were reflected in macroeconomic factors in the short-term period.

To start with, the country was forced to give up the fixed exchange rate system. The national currency of manat weakened its power by 50% during the observed year.

Accounting for 5 billion for the first time since August, 2009 the exchange reserves of the Central Bank dropped by 8.74 billion USD. To put it differently, the amount expended by the Central Bank in 2015 only, was equal to what had been collected during 5 years.

What's more, there was a considerable decrease in the GDP and GDP per capita, falling by 53.6% and 54.2% respectively. In other words, the previous one fell to 34.9 billion USD, while the second to 3,657 USD. It ought to be pointed that, last time the GDP per capita was approximately similar to this number back to 2007.

The falling incomes in the state budget caused to cut government expenditure, and as a result, at the end of the year the income side of the budget was calculated with a drop of 11.8%, whilst the spending part with 15.7%. Throughout the last decade, the major driver of the economic growth was the budget spending.

As regards to the revenue of community, 2015 was not successful either. That is to tell, the revenue per capita dropped by 47.6% compared to the preceding year, accounting for 2808 USD, which was calculated in 2009. What's more, the average month to month wages in the nation reduced by 48%, accounting for 296 USD. The economic contraction influenced adversely to the employee market as well. According to the data by the Statistical Committee, the quantity of paid labor force dropped by 0.8%. But the CESD states that, the shrinkage in labor market is undervalued in official materials, making reference to the expansion of shadow economy.

---

devaluation, it ceased to do so39. Considering the major source of revenues for banks are interest revenues, the shrinking credit provision will result in a considerable decline in banking revenues. According to the information available at the end of 2014, 72.7% of banking revenues are attributed to the interest revenues.

Exports encountered a drop of 33.4% in the circumstance of nosediving oil prices, and as a consequence, the trade balance became worse by 5.7 times in comparison with former year. Therefore, in 2014 a positive trade balance of 12.2 billion USD fell to almost 2.2 billion USD in 2015.

The investment atmosphere was also influenced by the economic conflict. That is to tell, throughout 2015 the overall amount of investment inflows reduced by 28.3%, foreign and national investment reducing by 14.5 per cent and 38.3 per cent accordingly.

The reduced revenues of the State Oil Fund caused hardships in understanding their obligations. The devaluation process promoted to mitigate the burden of the Fund; transfers from the Fund to the state budget were 27.7% lower. Nevertheless, the diminution of the funds was unescapable, in 2015 reducing to 34.7 billion dollars.

The banking sector encountered serious issues due to the sharp devaluation process. The credit repayment capacity of households and businesses diminished, leading to bigger problem credits, banks became more careful in their lending policies. In a consequence, the value of credits reduced by 6.2 billion dollars otherwise by 26% in comparison with former year. It should be pointed that, extending credit portfolios were refunded for the lack of yearly capital to some expansion, which had a positive impact on the economic activity. Contractionary measures of the banking section as well as that of the government's furthered economic pressures throughout the year.

In general, inadequacy of measures employed to diminish resource dependence, an insincere growth based on wide-ranging oil revenues, ineffective expenditures, as well as, the failure in creating free market principles throughout 25 years, in 2015 all resulted in an important crisis. Throughout the initial 6 months of reducing oil prices, factors of crisis started to appear.

But, this economic emergency caused the formation for first-hand reforms. Until wide-ranging economic and structural reforms are realized, the depression is forecasted to be intensified, and that's why, the global status of the nation to decrease behind. At the close period, the government have to keep contractionary measurements that target to defend the domestic monetary system, with expansionary policy. These policies will good influence to economic activity and aggregate demand, and consequently led to future promotion of non-oil sector growth, growing employment, as well as reducing social burden of government.

References

- http://cesd.az/new/wp-content/uploads/2016/01/CESD_Research_Paper_Azerbaijan_Economy_2015.pdf
- http://www.openaccess.hacettepe.edu.tr:8080/xmlui/bitstream/handle/11655/2402/58ab82cb-da4f-46d6-9f3e-1946cb4d2810.pdf?sequence=1&isAllowed=y
- file:///C:/Users/%D0%90%D0%B4%D0%BC%D0%B8%D0%BD/Downloads/EC301_Assignment_S11086906_S11088328.pdf
- https://www.researchgate.net/publication/267639392_The_effect_of_Devaluation_on_Economic_growth_in_Fiji
- http://www.ne.su.se/polopoly_fs/1.25800.1318417049!/menu/standard/file/Endaylalu_Genye_Tirsit.pdf
- https://www.bis.org/publ/work215.pdf
- https://www.princeton.edu/~ies/IES_Essays/E86.pdf
- http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.544.9806&rep=rep1&type=pdf
- https://www.researchgate.net/publication/254351148_Currency_Devaluation_and_Output_Growth_An_Empirical_Evidence_from_OECD_Countries
- State Statistical Committee of the Republic of Azerbaijan. Income of population in 2015, 18.01.2016. Retrieved from http://stat.gov.az/news/?id=3086 State

- Statistical Committee of the Republic of Azerbaijan. Income of population in 2014. Retrieved from http://www.stat.gov.az/news/?id=2658
- Center for Economic and Social Development. The State Oil Fund may run out of funds by 2015, 26.11.2011. Retrieved from http://cesd.az/new/?p=1391&lang=az
- Central Bank of the Republic of Azerbaijan. Banking sector, assets section, 13.01.2015. Retrieved from http://www.cbar.az/infoblocks/bank_actives
- http://cesd.az/new/?p=10818
- http://cesd.az/new/wp-content/uploads/2015/03/Azerbaijan_National_Currency_Devaluation2.pdf
- https://fins.az/bank/942948/kreditler-devalvasiyadan-evvel-ve-sonra.html
- https://news.milli.az/country/391948.html