

*Hafiz Eldeniz oglu Guliyev,  
Ministry of Taxes of the Republic of Azerbaijan, Chief state tax inspector*

## FISCAL POLICY CHALLENGES: THE CASE OF AZERBAIJAN

*Хафиз Эльдениз оглу Гулиев,  
Министерство налогов Азербайджанской республики, старший налоговый инспектор*

### ВЫЗОВЫ НАЛОГОВОЙ ПОЛИТИКЕ: СИТУАЦИЯ В АЗЕРБАЙДЖАНЕ

*This article deals with fiscal policy challenges of Azerbaijan economy arising from oil extraction and exportation of the country. As background information, author provides macroeconomic overview by assessing several macroeconomic indicators in order to get well aware of the current situation in the country. Through evaluation of economic cycle, fiscal policy has been examined in terms of pro-cyclical and counter-cyclical perspectives. Furthermore, fiscal policy framework has been measured by analyzing various fiscal variables, discussion of fiscal rules and long-term sustainability as well as efficient public financial management system. In this article, Norway is shown as a successful country in oil revenue management by implementation of several explicit fiscal rules. Fiscal consolidation target of Japan's economy is also mentioned in this paper. At the end of this article, author delivers conclusion and some policy recommendations.*

*Эта статья имеет дело с проблемами налоговой политики экономики Азербайджана, являющейся результатом добычи и экспорта нефти страны. Автор предоставляет макроэкономический обзор, оценивая несколько макроэкономических индикаторов, с целью оздоровления текущей ситуации в стране. Посредством оценки экономического цикла налоговая политика была исследована с точки зрения проциклических и антициклических перспектив. Кроме того, структура налоговой политики была измерена, посредством анализа различных финансовых переменных, обсуждения финансовых правил и долгосрочной устойчивости, а также эффективной общественной системы финансового менеджмента. В этой статье Норвегия показывается как успешная страна в управлении доходами от добычи нефти, благодаря внедрению нескольких конкретных финансовых правил. В данной статье также упомянута финансовая цель консолидации экономики Японии. В конце этой статьи автор отражает некоторые стратегические рекомендации по налоговой политике Азербайджана.*

*Key words: fiscal policy, fiscal variables, oil prices, fiscal rules, fiscal consolidation.*

*Ключевые слова: налоговая политика, финансовые переменные, цены на нефть, финансовые правила, финансовая консолидация.*

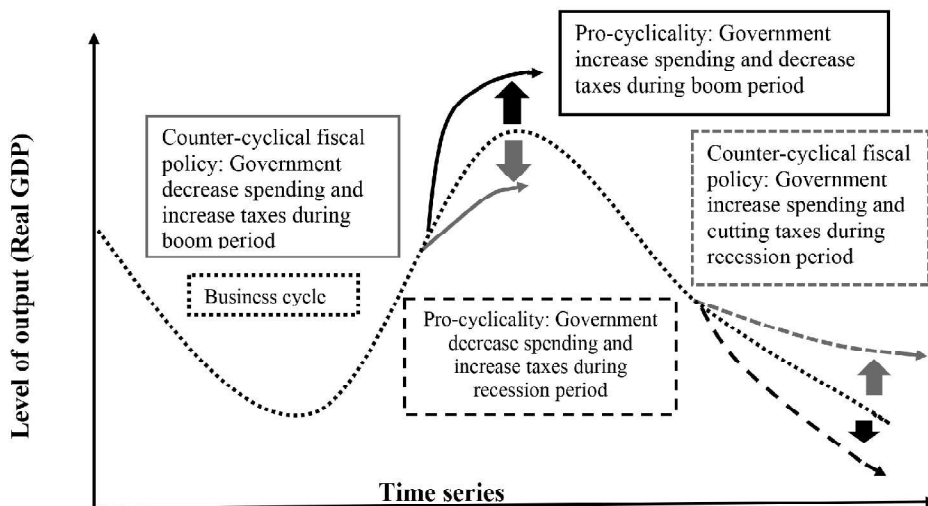
#### INTRODUCTION

Azerbaijan is situated on the south-eastern border of Europe connecting it with Central Asia and the Middle East. After declaring its independence from the USSR in 1991, Azerbaijan's economy has become one of the fastest growing in the world. However, the transition of the Azerbaijani economy to market economy, like in every post-soviet country caused to significant decrease in welfare of the population, increase in unemployment, rising of inflation and other similar social problems in the early years of independence. Fortunately, Azerbaijan has substantial oil reserves and the economy of the country has extremely changed with increases in oil production after the Baku-Tbilisi-Ceyhan (BTC) pipeline became fully operational in September 2006. Since that time, Azerbaijan has experienced a considerable economic growth arising from oil boom. Oil extraction and exportation had grown extensively and thus turning into a leading sector of the economy. Extensive oil extraction and exportation have led to massive oil revenues into the country, which in turn, have created favorable circumstances for implementation of large scale infrastructure and social projects contributing to socioeconomic development of the country.

As a matter of fact, oil producing countries with considerable amount of nonrenewable resources can benefit from them, and many countries have done it. However, relying on nonrenewable resource revenue lead to significant challenges to policy makers and the government has an important role to play in how the revenues from these resources are used. Therefore, fiscal policy choice has an important influence on economic activity in oil-rich countries due to the substantial share of the oil sector in the economy.

This article examines fiscal policy challenges for Azerbaijan economy is generally stemming from oil revenues constitute substantial part of government budget which is volatile and uncertain arising from oil price fluctuation in the world market. These particular characteristics of oil revenues cause to challenges with respect to intergenerational equity, fiscal sustainability in the long term.

Indeed, the analysis of fiscal policy over the economic cycle has become more important after the global financial crisis with international appealing for counter-cyclical fiscal policies. The following graph 1 describes pro-cyclical versus counter-cyclical fiscal policy.



Graph 1. Pro-cyclical versus counter-cyclical fiscal policy.

Fiscal policy has usually been found to be pro-cyclical in resource rich countries with symptoms for macroeconomic and fiscal volatility. Thus, where fiscal policies have been pro-cyclical, they have caused to macroeconomic instability and damaging boom-and-bust episodes. They have also put burden on public financial management systems, lessen the quality of spending and increased long-term uncertainties.

By analyzing various fiscal variables I am going to assess whether fiscal policy has been pro-cyclical or counter-cyclical in Azerbaijan. In addition, this article will enlighten the current fiscal challenges of Azerbaijan economy and its possible solutions.

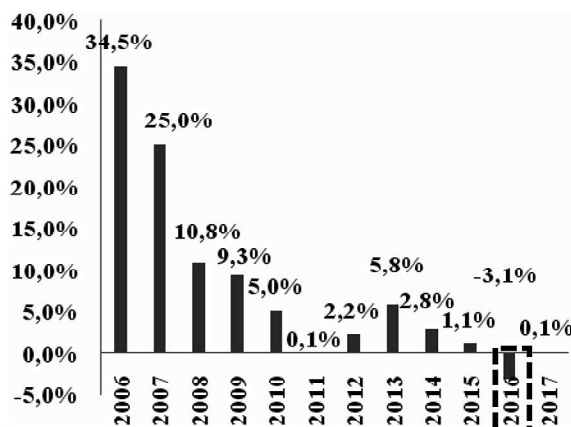
## 1. Macroeconomic overview

The sharp reduction in the oil prices since 2014 together with lower oil production has caused to severe effects on the major macroeconomic variables of the country. Accordingly, GDP growth rate accounted for -3.1% in 2016, the first negative growth rate Azerbaijan has observed since 1995. National currency — manat — is depreciated in February and December 2015 followed by inflationary pressure. Inflation increased while the current account surplus disappeared and the budget moved to a deficit. Monetary policy has been tightened to address inflation and support the domestic currency, so the Central Bank increased its refinancing rate from 3% to 10% in order to decrease the aggregate demand (Look at Graph 2 and Graph 3).

As it seems from graph below, GDP of Azerbaijan in dollars equivalence had a sharp decline starting from 2014. The intuition behind this trend is the devaluations of national currency (look at Graph 4 and Graph 5).

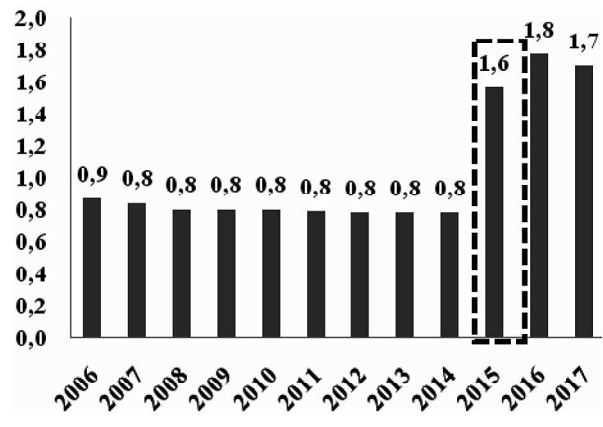
Dynamics of listed macroeconomics indicators demonstrate that, recent oil price slump has adversely impacted Azerbaijan economy.

In order to mitigate the oil price shock to the economy and shifting toward sustainable economic development, strategic road map prepared in 2016 and relevant documents



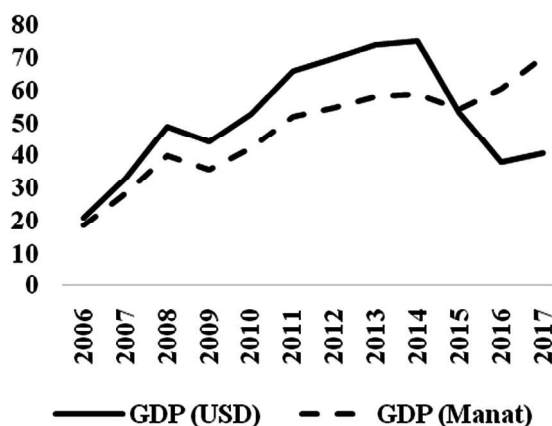
Graph 2. Real GDP growth

Source: [4].



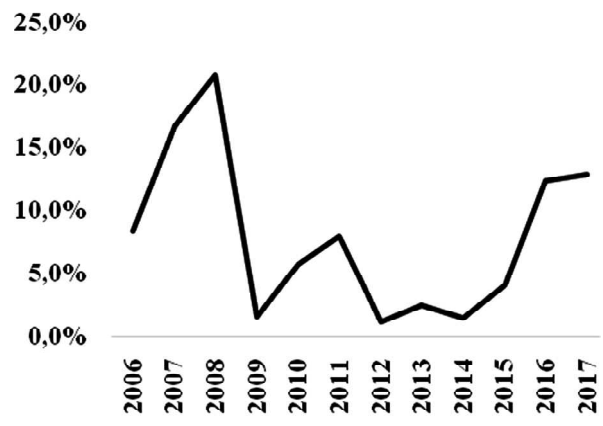
Graph 3. Exchange rate USD/AZN

Source: [5].



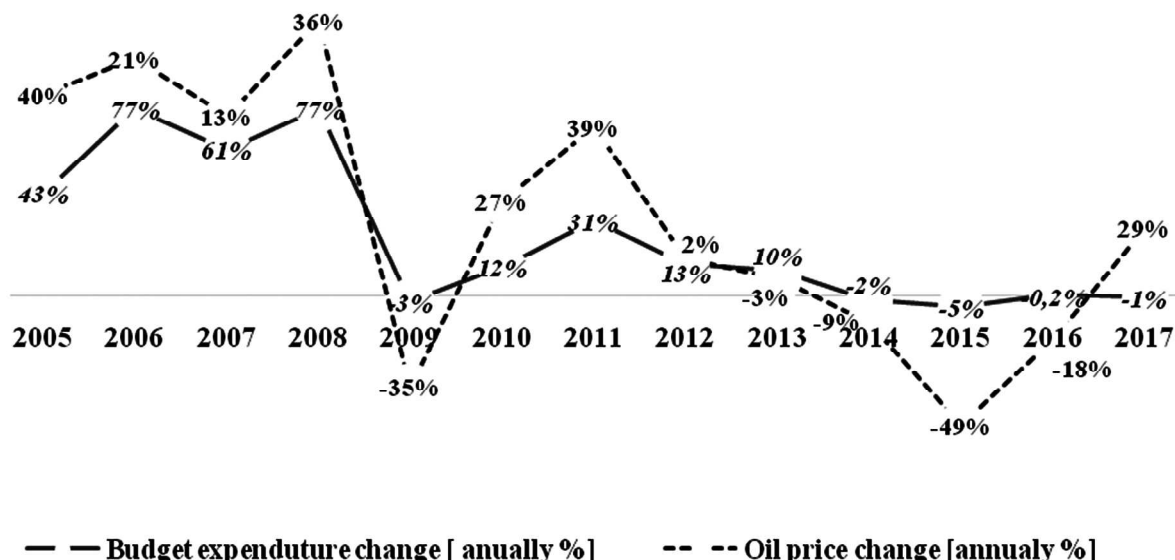
Graph 4. GDP [bln manats&usd]

Source: [4].



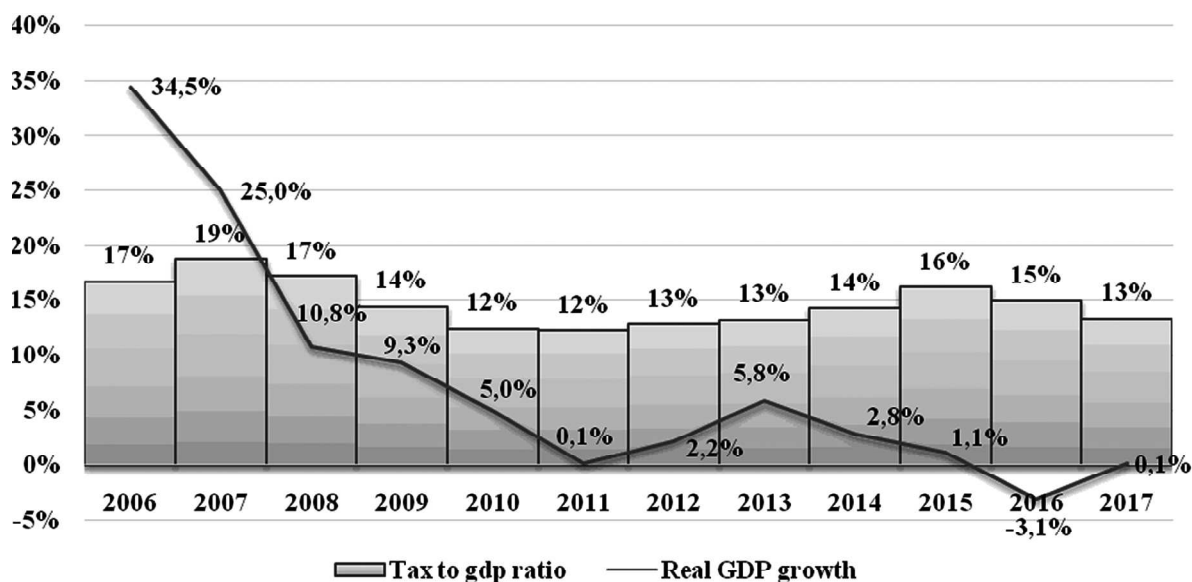
Graph 5. CPI (%)

Source: [5].



Graph 6. Dynamics of Budget expenditure and oil price change

Source: [4; 10].



Graph 7. Dynamics of tax/GDP ratio and real GDP growth

Source: [4].

approved by the end of same year. Road map covers short, medium and long-term perspectives and includes economic growth model and action plan for 2016–2020, long-term approach by 2025 and target outlook for the period after 2025. The main purpose of strategic road map is to foster diversification by generating different revenue channels away from oil and also diminish the share of oil sector in economy as well as boosting non-oil GDP growth.

In fact, diversification practice must be surrounded by an adequate environment mainly focused on a proper fiscal policy management and efficient use of public spending. Fiscal policy is the key instrument which allow regulator to realize the objectives of diversification strategy and the public investments are the transmission channel enabling the government to recycle its oil windfalls on sustainable growth by fostering sectors representing a new-value-added to economy.

## 2. Assessment of fiscal policy framework

2.1. Analysis of fiscal variables: Current research studies regarding the estimation of cyclical of fiscal policy are mostly focused on government expenditure. Therefore, first I will start to investigate the cyclical feature of fiscal policy in Azerbaijan economy over the recent years by evaluating

the trend between budget expenditures and oil prices (look at Graph 6).

As it seems above, there is positive relationship between the change in budget expenditures and oil prices. Thus, average annual growth of oil price 28% from 2005 to 2008 caused to 64% increase budget expenditure for the same period. Oil price reduction is starting from mid-2008 till the end of 2009 lead to decrease in budget expenditure around 3%. Later periods during 2010 and 2012 oil price escalation resulted average growth of 19% in budget expenditure again. Starting from mid-2014 substantial decline in mineral resource prices till the end of 2016 caused to 2 % cut in government expenditure. Even though in 2017 oil price increased 29%, government expenditure remained same as a previous year. Moreover, in order to identify relationship between government expenditures and oil price changes statistically, correlation test<sup>1</sup> has been implemented. Based on the test result correlation coefficient is equal to 0.6 which can be interpreted as a relatively positive strong relationship.

It is appreciated that, fiscal policy should be focused on stimulating economy during bad times by increasing public expenditure in order to boost aggregate demand.

<sup>1</sup> Also referred to as Pearson's or the bivariate correlation which is a measure of the linear correlation between two variables X and Y.

**Table 1. Tax rate changes**

Corporate Income Taxes		Personal Income Tax	
Years	Tax rate	Years	Tax rate
2004-2005	24%	2004-2009	14%-35%
2006-2009	22%	2010-2012	14%-30%
2010-up to now	20%	2013-up to now	14%-25%*

\* 14% percent for income up to 2,500 manat per month, 25 percent is charged more than 2500 manat

Sources: [6].

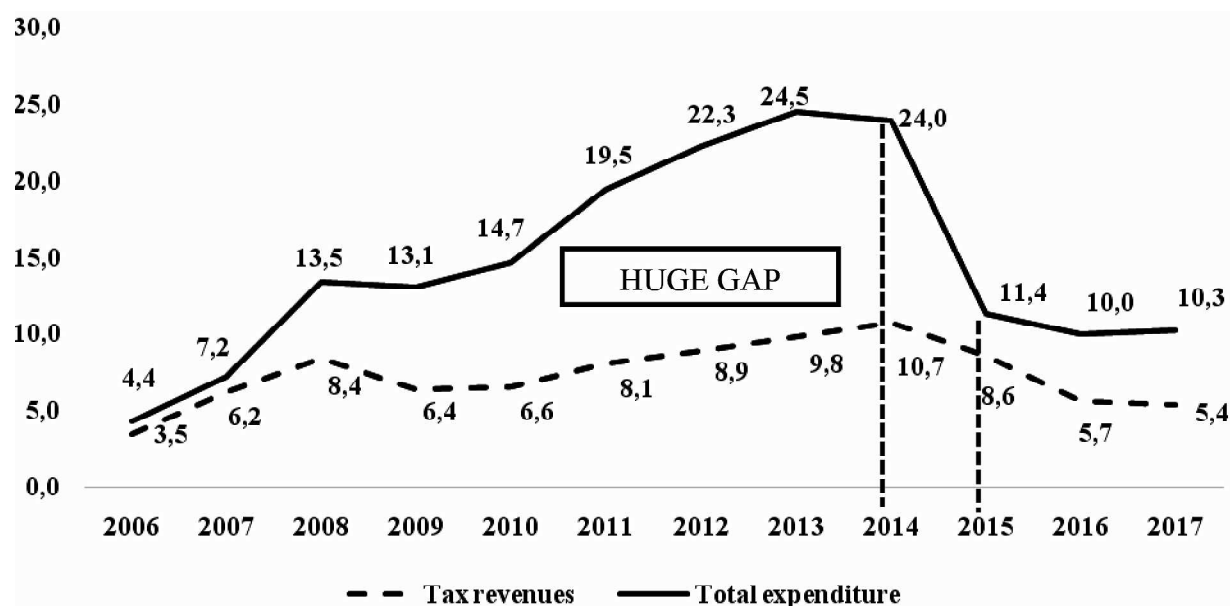
However, during the estimated time we could not observed this trend. On the other hand, budget expenditures failed to follow counter-cyclical properties of fiscal policy.

As a reaction to the global financial crisis of 2008 tax revenues decreased in percent of GDP which was adequate fiscal policy to foster economic growth during recession period (look at Graph 7). Corporate and personal income tax rates decreased consequently, those have substantial shares in overall tax revenues.

Afterwards, recovery of oil prices starting from 2010 lead to expansion of economy again, but within the boom period tax policy did not respond necessarily counter-

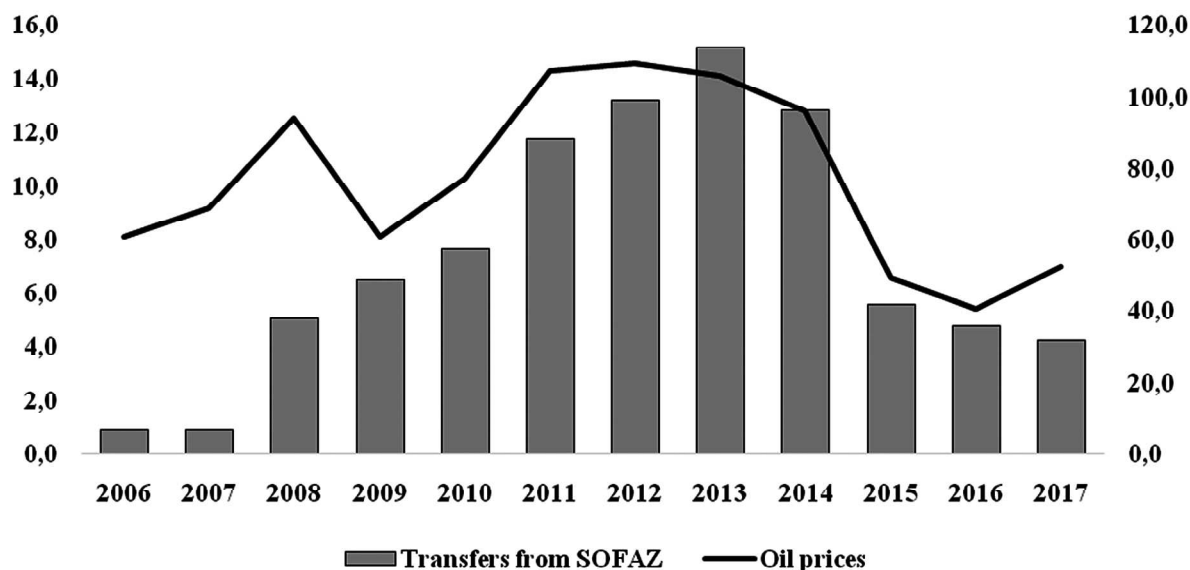
cyclical measures. More recently, the oil price slump in 2014 increased tax to gdp ratio 16% and 15% for the period of 2015 and 2016 accordingly, which means more tax collections with respect to previous years (look at table 1). As a matter of fact, 2016 was the year with economic downturn when the GDP growth rate has been observed negatively since 1995. During the recession period increasing tax revenues is an indication of pro-cyclicality which impedes breathing of economy. Although there was not any changes in tax rates during 2015 and 2016, improvement of tax revenues was associated with increasing supervision of tax collection within that period.

During the estimated period government expenditures and tax revenues increased substantially till the end of 2014 (look at Graph 8). Within that period of time expenditure enlarged more than 5 times while this trend is not observed proportionally in the tax revenues. At the beginning of the period gap between two fiscal variables is reasonable. After the Baku-Tbilisi-Ceyhan pipeline became fully operational from 2006, massive oil revenues entered to the country and government injected those hot cashes to the economy by implementing large scaled social and infrastructure projects.



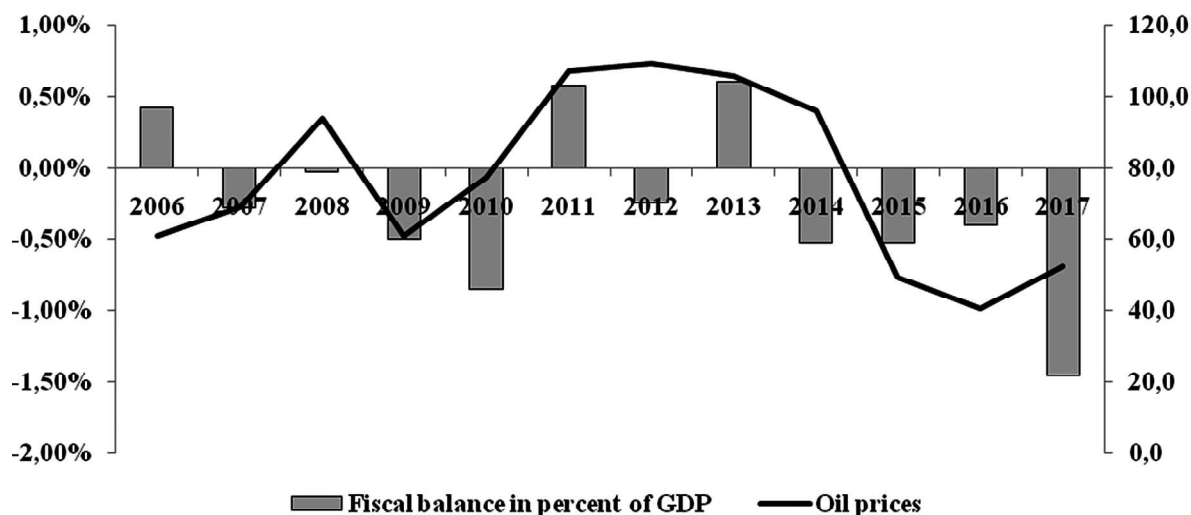
**Graph 8. Tax revenues versus total expenditure (bln usd).**

Source: [4].



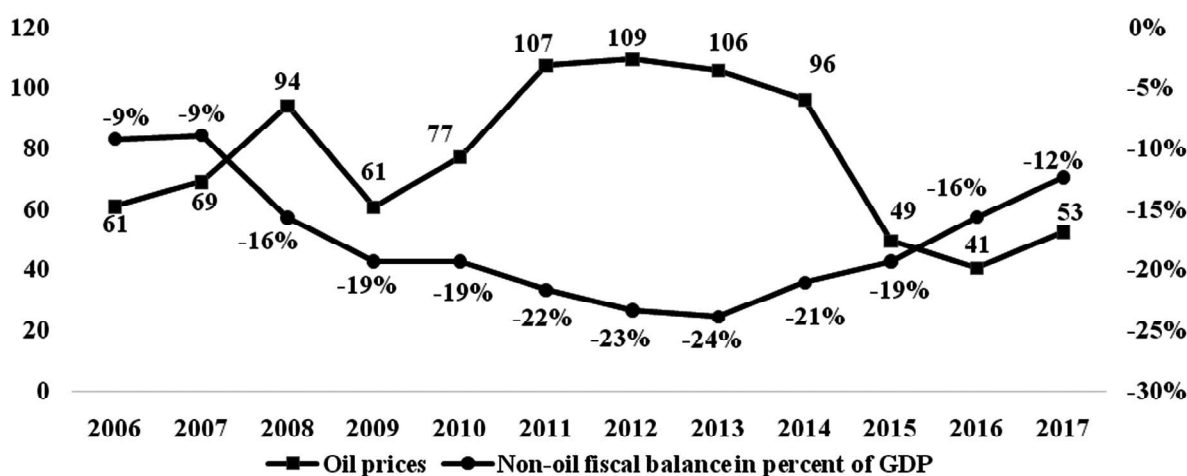
**Graph 9. Dynamics of SOFAZ transfer to government budget (bln usd)**

Source: [4; 11].



Graph 10. Overall fiscal balance

Source: [4].



Graph 11. Non-oil fiscal balance

Source: [4].

As a result, the gap between tax revenues and expenditure increased enormously. The reason for noticeable decline in both variables for the period of 2015 was related to devaluation of local currency more than 2 times.

Thanks to oil revenues huge gap or deficit of budget is financed through transfer from State Oil Fund of Azerbaijan (SOFAZ)<sup>2</sup>. Budget transfers from SOFAZ are mostly related global oil prices as it clearly seems in graph 9. To be more precise, when the oil prices is high budget received much more oil revenues from state oil fund. On the other hand, when resource prices declined transfers also decreased accordingly.

During 2006 and 2017 fiscal balance moved in negative and positive directions. Recent oil price turmoil started from mid-2014 resulted negative fiscal balance in 2014, 2015 and 2016. Although oil prices is started to rise from 2017, budget deficit increased and accounted for 1.5% of GDP which has been the largest deficit since 2006 (look at Graph 10).

It is worth to state that, the overall fiscal balance is a commonly used fiscal variable and also valuable to measure the government's net financing requirement. But, it is not supposed to be a good indicator for determining the effect of fiscal policy on domestic demand or the government's efforts in developing fiscal policy. Thus, high oil revenues lead to a fiscal expansion via growth in spending might be masked by improved overall balance. Therefore, the non-oil fiscal balance by excluding oil revenues will be better fiscal indicator for evaluating sustainability and determining

macroeconomic impact of fiscal policy. As it seems from graph 11, non-oil fiscal balance has been continuously in a negative direction since the 2006. When the oil prices started to rise the non-oil fiscal balance in percent of GDP even deteriorated.

Ministry of Finance of Azerbaijan issues annual budgetary reports which focus on overall fiscal balance. It is highly acknowledged that, oil rich countries should pay more attention to non-oil fiscal balance. Therefore, separating the overall balance into an oil and non-oil balance is important. Emphasizing non-oil balance in the budget would itself be vital step toward advancing fiscal policy.

## 2.2. Fiscal rules and long-term sustainability

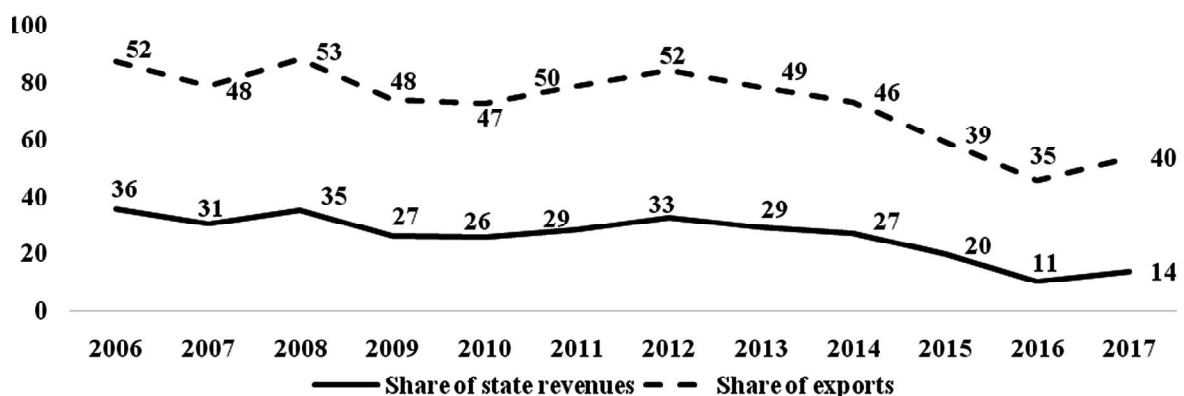
In order to possess pressures for overspending, fiscal rules implement a long-lasting restriction on fiscal policy through numerical targets on budgetary aggregates. For oil-rich countries, fiscal rules are commonly encouraged by a desire to decrease the pro-cyclicality of fiscal policy as a result of unstable resource proceeds, and promote savings as well as sustainability. Types of fiscal rules could be summarized as below (look at Graph 12).

There is no unique fiscal rule could be applied to all countries. Several countries aimed a single fiscal rule, while others have targeted two or more rules. In fact, there are only few oil rich countries that have implemented explicit fiscal rules that target non-oil deficits and most of them have implicit rules that seem less binding, regularly based on budgeted oil prices that define transfers to saving fund.

<sup>2</sup> The State Oil Fund of Azerbaijan (Azerbaijan's sovereign wealth fund) was established in December 1999 by the Presidential Decree as an extra-budgetary entity which accumulates and manages oil and gas revenues of the country for future generations.

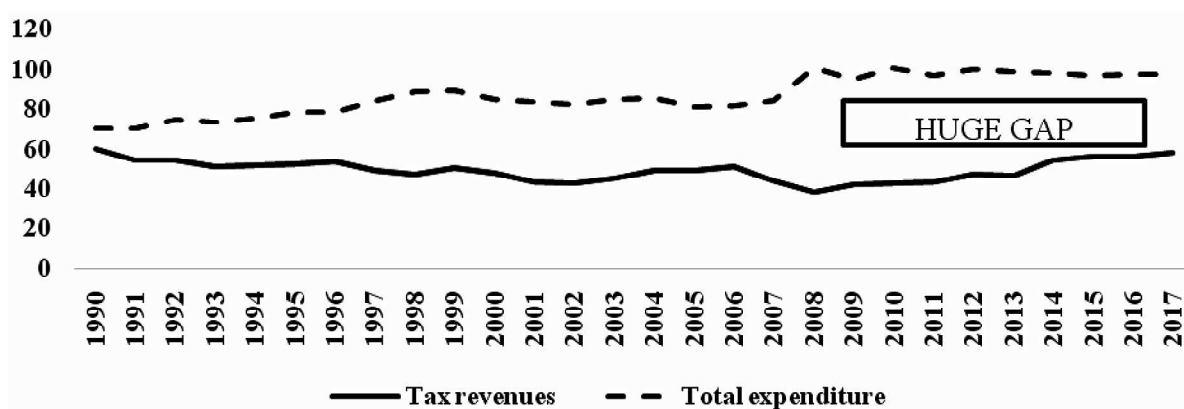
1	Deficit rules	Balanced budget Balanced budget over the cycle Structural non-resource balance Non-resource balance
2	Expenditure rules	Expenditure to GDP ratio Expenditure caps multi-yearly
3	Revenue rules	Revenue to GDP ratio Pre-defining the allocation of higher than expected revenue
4	Debt rules	Nominal outstanding Gross (net) debt to GDP ratio

Graph 12. Fiscal rules structure



Graph 13. Macroeconomic indicators of Norway for the oil sector

Source: [8].



Graph 14. Dynamics of tax revenues and total expenditures in Japan (trln. yen)

Source: [9].

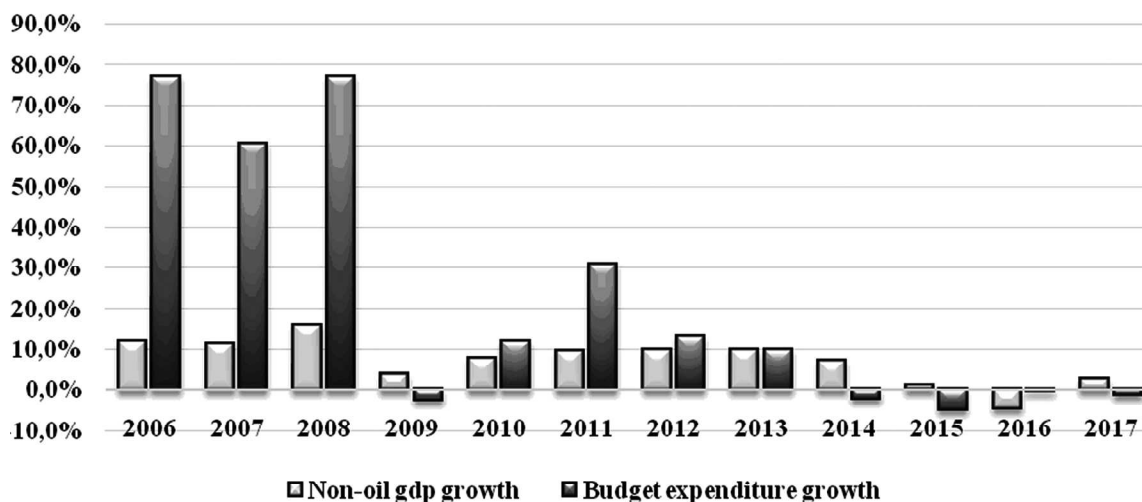
Azerbaijan fiscal policy is also directed by an implicit rule under which oil profits above the budgeted level based on an oil price assumption are transferred to the SOFAZ.

Norway experience: Successful oil revenues management

Norway is the world's fifth largest oil exporter and third largest gas exporter. As other industrialized countries Norway also encounters a fiscal challenge

related to the ageing of its population. The fiscal policy agenda presently in place is effective and contributing to fiscal discipline. The fiscal framework includes an explicit fiscal rule based on the structural non-oil budget balance and a transparent sovereign wealth fund (the Government Pension Fund Global, GPF<sup>3</sup>). This structure delinks the earning and use of oil revenues as well as supports the

<sup>3</sup> It was created in 1990 under the name Government Petroleum Fund and renamed as the Government Pension Fund Global in 2006. The GPF<sup>3</sup> is the largest sovereign wealth fund in the world with assets 1 035 USD billion.



Graph 15. Dynamics of non-oil GDP and budget expenditure growth

Source: [4].

avoidance oil price volatility and diminishes the risk of overspending. To be more precise, the state's net cash flow from the oil industry is transferred completely to the GPFG, besides the direct earnings from the Fund itself. The fiscal rule stipulates that the transfers back from the Fund to the central government budget in a long run reflect the expected real return. The application of the rule is based on a real return of 3 per cent. This fiscal rule is consistent with the permanent income hypothesis which would smooth consumption in the period of resource windfalls, helps macro-fiscal sustainability and intergenerational equity. As a result of accumulation oil revenues GPFG total assets currently reach to 1 035 USD billion which is more than 2 times of Norway GDP. For the comparison, SOFAZ assets account for 33.1 USD billion that comprises 80% of GDP.

Macro-fiscal indicators suggest that, over the last years Norway improved the non-oil revenues and non-oil exports further (look at Graph 13).

Norway's achievement in managing natural resource wealth should not only be documented to the fiscal rule and the oil fund. Their successful implementation and the relatively high degree of fiscal limitation over the past years separate Norway from other main oil rich countries. A high level of income and human development indexes, an advanced infrastructure and a comparatively diversified economy decrease the growth-based spending requirements. In general, developed institutions and a high level of governance supported to foster Norway toward sustainable economic growth.

Fiscal policy in Japan: Starting from 1990s, the government expenditure has constantly enlarged as a result of rising social security benefits along with aging society, on the other hand the level of government revenue has little altered. In this regard, rising gap between revenues and expenditures is a big challenges for the economy of Japan (look at Graph 14).

This situation is similar with Azerbaijan economy which is well described in graph 8. Distinction in this case is financing deficit from different income channels. Thus, Japan covers huge gap by issuing government bonds (construction and deficit-financing bonds) while Azerbaijan transfers oil revenues from SOFAZ to state budget for eliminating deficit. In order to deal with this challenge in 15 June 2018 government of Japan decided to integrate fiscal consolidation target by the FY 2025. Within that framework the fiscal consolidation target has to reach a primary surplus of the central and local government, also gradually decrease the public debt to GDP ratio. Moreover, fiscal consolidation target

strongly holds the principle of "no fiscal consolidation without economic revitalization" and based on 3 pillar-reforms of "overcoming deflation/economic", "expenditure reform" and "revenue reform". Economic revitalization considers promote investments in facilities and human capital by SMEs, tax reform implementations for improving productivity, support R&D through industry-government -academia cooperation as well as giving priorities those public investments which contribute enhancing productivity.

So far, Azerbaijan economy seems to be relaxed due to received large amount of oil windfalls. As I have already mentioned above, government budget deficit is covered by transferring oil revenues from SOFAZ to the state budget which is really easy and simple method. Considering the fact that, there are many studies that confirm debt has a positive impact on the productivity or the level of output, Azerbaijan government can issue a government bond as a Japan to finance the deficit and put some fiscal targets for mid and long-term perspectives in achieving fiscal consolidation. Instead of receiving revenues from SOFAZ which does not create any obligations, issuing the government bonds will increase responsibility of government since it is the liability and have to be paid back.

2.3. Efficient Public Financial Management: Volatility in public spending can involve fiscal costs in terms of quality and efficiency of spending. The rapid establishment or expansion of spending programs in terms of public investment in the situation of increasing oil prices can deteriorate the public administration's capacity to project, manage, and perform expenditure proficiently. In fact, the Azerbaijani government has implemented numerous large scale projects and created agencies to motivate this development. With the help of monetary and fiscal policy methods the government can use its existing resources to regulate the economy. In order to guarantee the growth of the non-oil sector, fiscal and monetary policies must be synchronized efficiently, as they play an important role in fostering growth. Recent researches confirm that, how that fiscal policy plays a major role in oil-exporting countries, however monetary policy generally eliminates the side effects of fiscal policy. Therefore, effective application of fiscal policy actions to motivate the development of the non-oil sector appears as a vital step in the Azerbaijani economy. Hence, examining the impact of fiscal policy is an important task, especially government budget expenditure on the non-oil sector in Azerbaijan where the fiscal policy has a dominant role as an oil rich country.

As it seems from graph 15, there is positive relationship between budget expenditures and non-oil GDP growth. Thus, when the government expenditures increase it leads to growth of non-oil sector GDP. On the contrary, decrease in government expenditure causes to diminish non-oil GDP growth. In order to detect the association statistically, I used correlation test. Based on the test result, correlation coefficient is 0.8 between two variables which could be explained as a strong relationship.

Furthermore, it is empirically confirmed that, a 1% growth in the government budget expenditures will cause to around a 0.2% rise in the value-added of the non-oil sector in the long-run. The positive effect of fiscal policy is statistically significant at a 1% significance level and consistent with Keynesian theory which outlines that government spending can motivate economic activity and consequently increase economic growth [1].

#### Conclusion and policy recommendations

There is strong relationship between oil prices and major macro-fiscal variables of Azerbaijan economy. The oil windfall caused to a substantial rise in government expenditures which were used to fuel aggregate demand.

As a result of several fiscal variables analysis, we can conclude that, over the last years fiscal policy has been pro-cyclical in Azerbaijan. In order to achieve sustainable development and macroeconomic stability economy needs to avoid pro-cyclical fiscal policy. Therefore, transition to countercyclical fiscal policy will enable the economy more resilient and stable.

Explicit fiscal rules should be applied to reduce overspending instead of conservative oil price assumptions which is implicit one. Although explicit fiscal rules in terms of medium term expenditure framework and permanent income hypothesis are defined in the Strategic Road Map of Azerbaijan Republic which is approved in 2016, however, up to now it is not implemented. The current rising oil prices might cause to government feel relaxed, but last oil price shock should be a good lesson for the Azerbaijan economy which adversely affected major macroeconomic variables in the country.

Within the explicit fiscal rule framework, government should target fiscal consolidation strategy in the medium term perspectives by smoothing the expenditure through transferring fixed amount from SOFAZ, increasing tax base accompanied by economic revitalization and financing the deficit with the government bonds. In the long run, when the economy would reach sustainable development, Azerbaijan economy can follow Norway model in which spending is only based on the expected real returns 3% on the resource revenues.

On the other hand, advancing quality of public investments management are key issues in the context of improvement of the technocratic framework of fiscal management. Therefore, assessment of public expenditure efficiency leads to us to conclude that, public expenditures boosts economic productivity in the long run. In order to optimize government spending the government should also soundly supervise application of ongoing projects to raise an efficient usage of revenues. Besides, the government can eliminate social and infrastructure projects which make lower contributions to valued-added of non-oil sector.

#### References:

1. Hasanov, F. (2018), "The Effects of Fiscal Policy on Non-Oil Economic Growth" MDPI, Basel, Switzerland.
2. <https://tradingeconomics.com> — IECONOMICS INC. Accessed 4 Sept 2018
3. <https://www.indexmundi.com> — Index Mundi data portal. Accessed 4 Sept 2018.
4. [www.stat.gov.az](http://www.stat.gov.az) — The State Statistical Committee of the Republic of Azerbaijan. Accessed 4 Sept 2018.

5. [www.cbar.az](http://www.cbar.az) — Central Bank of Azerbaijan Republic. Accessed 4 Sept 2018.

6. <http://www.taxes.gov.az/> — Ministry of Taxes of Azerbaijan Republic. Accessed 4 Sept 2018.

7. [www.maliyye.gov.az](http://www.maliyye.gov.az) — Ministry of Finance of Azerbaijan Republic available Accessed 3 Sept 2018.

8. <https://www.ssb.no/en/> — Statistics Norway — official statistics about Norwegian society since. Accessed 3 Sept 2018.

9. <https://www.mof.go.jp/> -Ministry of Finance, Japan. Accessed 2 Sept 2018

10. <https://www.swfinstitute.org> — Sovereign Wealth Funds. Accessed 4 Sept 2018.

11. <https://www.statista.com> — The portal for statistics. Accessed 1 Sept 2018.

12. <https://www.statsbudsjettet.no> — Norwegian Ministry of Finance. Accessed 4 Sept 2018.

13. <https://www.norskpetrolium.no> — Official site of the Ministry of Petroleum and Energy of Norway and the Norwegian Petroleum Directorate. Accessed 4 Sept 2018.

Стаття надійшла до редакції 07.09.2018 р.

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