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ANALYSIS OF THE POLISH ECONOMY 2010-2017

Abstract: Poland officially known as the Republic of Poland is a rapidly developing economy in Central Europe. Poland is also a parliamentary republic with a head of government – the prime minister - and the head of state - the president. The country is divided into 16 provinces and its governmental structure is centred on the council of ministers. Throughout this paper, key subheadings would be analysed in order to give the readers an insight into the situation in the Polish market. The applied research methods involve a review of legal acts and literature on the subject.

Keywords: Polish economy, analysis of economy, public sector, banking sector, financial market, tax.

Introduction

This paper has been divided into four main aspects. The first part would be on the general overview of the country, the second on the analysis of the current Polish market while the third and fourth would be on the public sector and financial market respectively. The aim of this paper is to describe the changes in the Polish economy over the years particularly after communism and its entrance into the European Union.

In addition, this paper would highlight that the Polish economy continued to grow even after the 2008 financial crisis and also that it came out of deflation in 2016.

Country overview

The years between 1945-1989 were the soviet communist dominance period and during these years polish people experienced social unrest and severe economic difficulties. After forty four years of being in communism, the communism in Poland came to an end in 1989. After communism, the finance minister then 'Leszek Balcerowicz' created a plan called the 'Balcerowicz plan' with the aim of rapidly changing Poland from a centrally planned to a capitalist market economy. His plan sought to do allot of things at once and they include:

- Greatly reducing the high inflation rate (it was as high as 50% per month),
- Decontrol most prices,

- · Eliminate shortages,
- Make the Polish economy convertible into other currencies at market rates,
- · Cease the subsidization of state enterprises,
- Remove most restrictions on foreign trade.

The government's actions then were intended to stabilize the macroeconomy and to create a condition suitable for market growth. The Balcerowicz plan was widely known as 'Shock therapy' and its liberalization and stabilization measures created conditions that proved extremely favourable to private business development throughout the polish economy. In 1989, the GDP was 66,895 million dollars and the GDP growth was 3.8% which was an increase of 0.5% from the previous year. The GDP per capita was 1,768.6 dollars. Before the transformation in 1989, unemployment did not officially exist in Poland but hidden unemployment however did exist. Nevertheless, in recent years the rate is low with a figure as low as 4.9% in 2017 but we would discuss this later on in this paper. After Poland's entrance on May 1st 2004 into the European union, the Polish economy has grown enormously. The most remarkable growth which best shows the economic progress can be found in the GDP statistics.

Based on the latest United Nations estimates as of Friday March 2^{nd,} 2018, the current population of Poland was 38,126,634. This population is Equivalent to 0.5% of the total world population. The population density of Poland is 124 per Km² (322 people per mi²) and the total land area is 306,230 Km² (118,236 sq. miles). Amongst the total population, 60.7% is urban and the median age in Poland is 40.1 years. The table below shows some future predictions for the population of Poland.

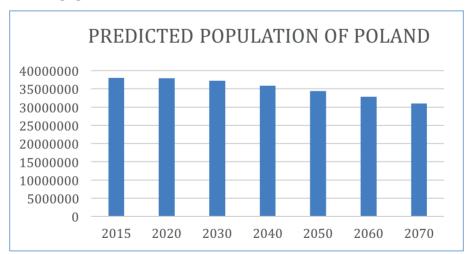


Figure 1: Predicted population of Poland

Source: Eurostat (2018)

Unlike lots of other countries in the world, the Polish population is not increasing at a very high rate. Up until 2007, it had a negative growth rate of 0.05% and this meant that the population instead of increasing was decreasing every year. The years following 2007 saw a slight increase in population. From the table above, it is predicted that the population would decrease in the future and this decrease could be linked to the reduction in the birth rate Poland.

As discussed in the overview, the unemployment rate of Poland bas being decreasing in recent years. With the youth unemployment also being very low, it makes the situation in Poland in regards to unemployment much better than it is in other big countries in the European Union. According to a recent data posted by the statistics portal, Poland was ranked the 7th country in the European Union with the lowest unemployment rate. Figure 2 below shows the unemployment rate over the last nine years.

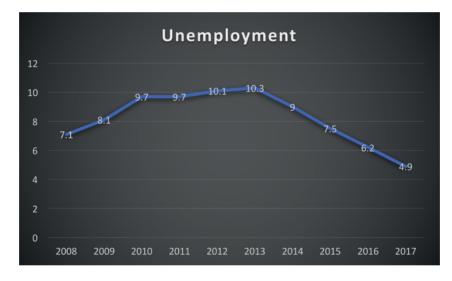


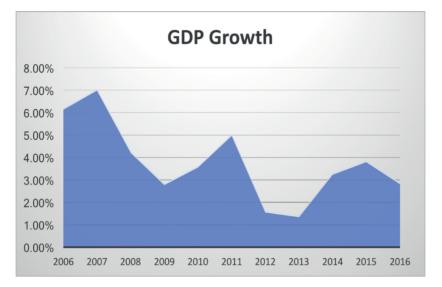
Figure 2: Unemployment (2008-2017)

The next part of this analysis would be on the most frequently used measure for the overall size of the economy; Gross Domestic Product (GDP) growth between 2006-2016 (Figure 3). After the 2008 financial crisis, a lot of countries were affected and forced into depression. Poland was also affected during the years of 2008-2010 in areas such as inflation fluctuations, unemployment growth and depreciation of the polish zloty. Despite all these, the economy still withstood the unfavorable macroeconomic tendencies and it was one of the few countries not only in Europe but also worldwide that did this. This can be seen in the fact that the GDP did not fall below zero during the years of the crisis.

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Source: Eurostats (2018)

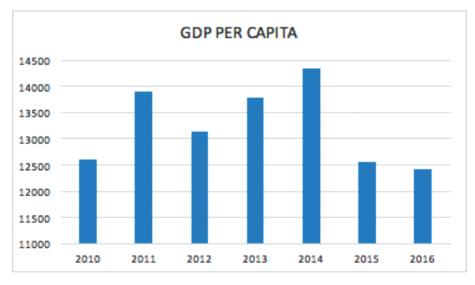
Figure 3: GDP of Poland (2006-2016)



Source: The World Bank, http://data.worldbank.org (2018)

The recent positive changes in the GDP of Poland were due to the rebound in fixed investment on the back of recovering inflows of EU funds and also a stronger expansion in the consumption of Polish household.

Figure 4: GDP per capita (2010-2016)



Source: The World Bank, http://data.worldbank.org (2018)

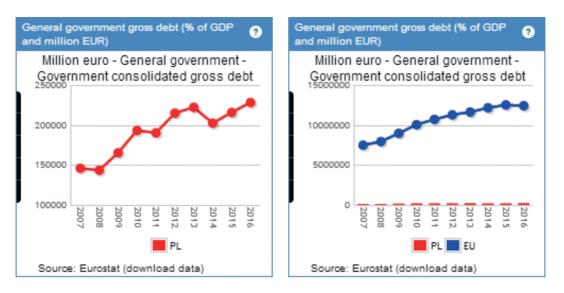


Figure 5: General government gross debt in Poland (2007-2016)

The column chart labeled as figure 4, shows the changes in the polish GDP per capita from 2010-2016. Although when compared with that of larger economies, the GDP per capita of Poland may seem low, it is vital to take into consideration that in Poland the prices for goods are also low and a lot of services are provided by the state thus making the quality of life in Poland good.

At this point, we can now briefly analyze the balance of payment and inflation rate in Poland.

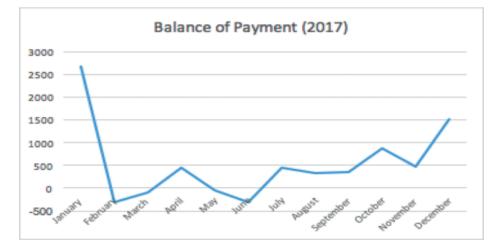
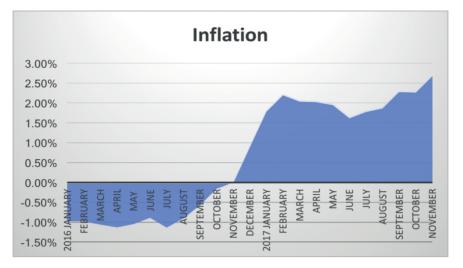


Figure 6: Balance of payment (2017)

Source: Eurostat, http://ec.europa.eu/ (2018)

Figure 7: Inflation (2016-2017)



Source: Eurostat (2018)

In November 2016, Poland emerged from a 28 months of price decline and the end of this "good deflation" translated into a slowing economic growth for Poland which can be seen in its GDP growth.

Finally, let's briefly discuss the Euro/ECU exchange rates- annual data. Over the past 8-9 years, the Polish zloty has fluctuated around 3-4.2 zloty per euro.

To conclude this part of the paper, let us consider what Poland contributes to the EU and what it receives. In 2016, the total EU spending in Poland was \in 10.638 billion and the total EU spending as a percentage of the polish gross national income (GNI) was 2.61%. On the other hand, the total polish contribution to the EU budget was \in 3.553 billion and this contribution as a percentage of GNI was 0.87%.

Public revenue and expenditure

Income and public revenue

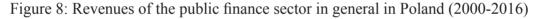
According to the Constitution of the Republic of Poland of April 2nd, 1997, funds for public purposes are collected and expended in the manner specified in the relevant act. As a result, the budget needs to be approved each year. Public funds are defined as all financial inflows collected on public authorities' accounts. So it is a broader concept than public revenues, as it also includes all kinds of income.

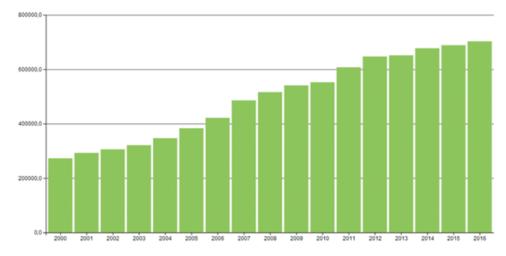
Public resources include:

- 1. public income;
- funds from the European Union budget, e.g. funds allocated for the pre-accession programs, resources from structural funds and the Cohesion Fund, resources from the European Agricultural Guidance and the "Guarantee Section" of the Guarantee Fund;
- 3. revenues of the state budget and budgets of local government units as well as other units included in the public finance sector, derived from the following sources,
 - a) sale of securities and other financial operations,
 - b) privatization of the treasury assets and the property of local government units,
 - c) repayment of loans granted from public funds,
 - d) loans and credits received;
- 4. revenues of entities included in the public finance sector obtained in connection with their operations, and from other sources.

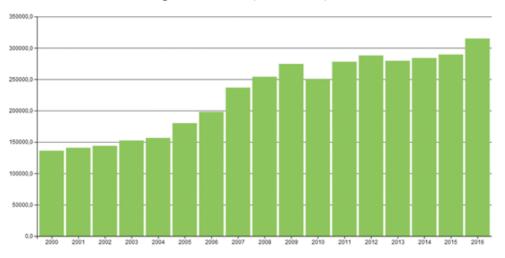
Public (budget) revenues – due or actual receipts cash to public budgets charged by financial bodies or by budgetary units that transfer proceeds to financial authorities, due to the connection with the budget realized by the gross system.

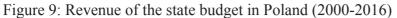
The figure number (below) presents information about revenues of the public finance sector in general in Poland (2000-2016). The income grows year by year.











Source: Macroeconomic Data Bank, http://bdm.stat.gov.pl/ (2018)

Public expenditure and expenses

Public funds can be allocated for the following purposes:

- public expenditure related to the functioning of departments (ministries) of government administration and local governments,
- public outlays related to the repayment of loans and credits received, the purchase of securities, and other financial operations as well as lending.

Public expenditure is spending cash by the state and other public-legal unions in order to meet public needs, or to performs functions (tasks) of the state of other public unions.

Public (budget) spending is the purchase of securities, repayments of loans and credits received as well as loans granted.

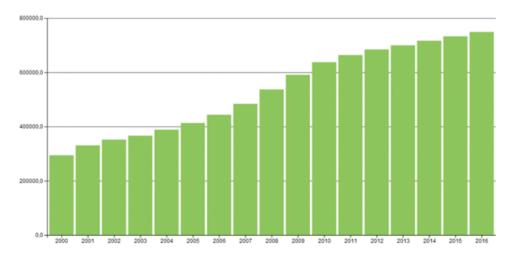


Figure 10: Total public sector expenditure in Poland (2000-2016)

Source: Macroeconomic Data Bank, http://bdm.stat.gov.pl/ (2018)

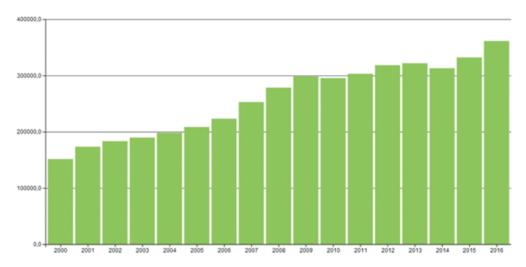


Figure 11: Expenditure of the state budget in Poland (2000-2016)

Source: Macroeconomic Data Bank, http://bdm.stat.gov.pl/ (2018)

Revenue of the public finance sector in general in 2000 was 271 641,9 mln PLN in 2000 and was 701 908,7 mln PLN in 2016, Expenditure of the public finance sector in total presented value: 293 115,8 mln PLN in 2000 and 747 974,2 mln PLN in 2016. Whereas Revenue of the state budget indicated the value: 135 663,9 mln PLN in 2000 and in 314 683,6 in 2016. Expenditure of the state budget was 151 054,9 in 2000 and 360 843,1 in 2016.

Causes of the budget deficit in Poland:

- 1983-1988 the main burden of the state budget in this period was the need to subsidize official prices, which were set at a level lower than justified by the costs and the profit assumed by producers. The tax collection system was based on direct debit from a bank account, which ensured high tax collection. The share of revenues from socialized enterprises in state budget revenues amounted to over 86%, and the burden on their profits was almost 53%. The small budget deficits presented at that time were financed with interest-free loans taken from the NBP.
- 2. After 1989 in order to stimulate the economy, the tax burden was reduced, the effect of which was that the share of payments to the budget from the gross profit of the socialized enterprises decreased to 35%. Liberalization of turnover, and especially of import, has created great opportunities for tax evasion. As a result, the central budget in 1989 was closed with a deficit of 4.3% of GDP, while a year earlier it was 0.2%. In 1990, the situation improved thanks to reduced subsidies on prices, and increased corporate inflation gains, and thus higher budget payments. The basis of this improvement, however, was very weak. The decline in production in the following years, and the low financial efficiency

of the system of budget revenues caused that the budget deficit in 1992 reached almost 7% of GDP.

- 3. The amount of the deficit and joining the European Union the total deficit of the public finance sector is one of the convergence criteria conditioning the accession of a given country to the European Monetary Union. According to the Maastricht Treaty, this deficit cannot exceed 3% of GDP.
- 4. Public sector like in the other countries of the former communist block, the definition of the public sector is not an easy task. In practice analyses are usually based on several definition approaches. One of them is based on the provisions of the Public Finance Act, which define public sector as all entities financed by state budget. Another definition, which we will partly refer to, was prepared for statistical reasons. According to the definition of the Central Statistical Office (Główny Urząd Statystyczny, GUS) the public sector encompasses entities which belong to the state (the State Treasury and state legal persons, local governments and mixed ownership with public sector stakeholders prevailing). As a consequence the public sector includes big production plants, which are profitoriented, and in which the state is a majority stockholder.

Value-added tax (VAT)

The minimum basic (not reduced) VAT rate that <u>EU</u> member states can use is 15%. This limit arises from the European Council Directive 2006/112/EC. The upper limit of the basic rate is not limited, and only in 2005 did Member States take a non-binding obligation not to introduce VAT rates above 25% by the end of 2010^[3]. In practice, member states apply different VAT rates, the lowest being 15% in <u>Luxembourg</u>, and the highest 27% in <u>Hungary</u>.

In terms of <u>tax on goods and services</u> (VAT), from January 1st, 2011, there are the following rates:

- basic: 23%;
- reduced: 8%, 5% and 0%;
- the so-called *released rate*, which is a conventional term covering a group of goods and services exempt from this tax.

Until the end of 2010, the following tax rates were applicable:

- basic: 22%;
- reduced: 7%, 3% and 0%;
- the so-called *released rate*.

In Poland, it was introduced by the Act of January 8th, 1993, on tax on goods and services and on excise duty. However, the need to conform Polish tax law with EU law forced the Polish legislator to regulate this issue in the new Act on tax on goods and services of 11th March, 2004 [Dz. U. 2017, item 1221].

Personal income tax

• direct tax comprising earnings obtained by physical people.

In Poland, the income tax on natural persons is regulated by the Act of July 26th, 1991. In addition, the rights and obligations of the taxpayer result from a number of provisions included in the Constitution of the Republic of Poland, many other acts, and ratified international agreements and implementing regulations.

The Polish Income Tax Act has been amended 133 times since 2000.

The personal scope of the income tax on natural persons

Taxpayers of this tax concerned are natural persons. When defining the natural person, it may be useful to refer to article 8 of the Civil Code, according to which every person from their birth has the legal capacity.

Entrepreneurs have a choice of taxation methods, i.e. they can either:

- isolate the business activities income from other sources of income and pay linear (proportional) tax on this partial income of 19% of the tax rate;
- or combine the income from business activities with other sources of income and be taxed on such global income according to a progressive tax scale (and thus having the option of using the tax deduction related to this tax).

By means of an appropriate fiscal policy, the state may use taxes to pursue non-fiscal objectives. For that, the tax deductions may be used. The tax relief should be understood as tax exemptions, deductions, or reductions provided for in the tax law, the application of which results in a reduction of the tax base or the amount of tax (such definition is found in the tax law).

Tax rates determine the amount of tax in relation to the tax base and have the nature of progressive rates (joint and level progression) in this tax. Currently (from January 1st, 2009) they are respectively: 18% and 32% – a higher tax rate pays about 1% of taxpayers. In the years 2003-2006, the income threshold (on which the tax rate depends on) was not adjusted in relation to the growth rate of the average monthly remuneration in the national economy.

The corporate tax – a type of direct tax on earnings obtained by legal persons.

For the first time in Poland, the tax was introduced by the Act of January 31st, 1989. The primary tax rate from legal entities in Poland is now 19%. Pursuant to the act of January 1st, 2017, the legislator introduced an additional, reduced rate of corporate income tax in the amount of 15%. The new rate is intended for small taxpayers whose revenue from sales (including the due tax on goods and services) in the previous tax year will not exceed the equivalent of EUR 1,200,000 expressed in PLN. The Act also provides for 50% sanction rate in case of understatement of tax liability by related entities.

Financial market

The Warsaw Stock Exchange

The Polish capital market traditions go back to 1817, when the Warsaw Mercantile Exchange was established. The Warsaw Stock Exchange was created as a joint-stock company on April 12th, 1991 by the State Treasury pursuant to the Foundation Act for Giełda Papierów Wartościowych w Warszawie SA (The Warsaw Stock Exchange Company – WSE). WSE held its first trading session on April 16, 1991 with five listed companies, all of which were formerly State-owned companies that had been privatized. Warsaw Stock Exchange is the largest stock exchange of financial instruments in the region of Central and Eastern Europe and rapidly growing exchange in Europe. It operates markets in stocks and bonds of nearly one thousand domestic and international issuers. The WSE Group also offers trade in derivatives, structured instruments and information services.

The WSE Group includes the leading institutions of the Polish capital and commodity market. The parent entity of the Group is the Warsaw Stock Exchange which organises trade in financial instruments and pursues a range of educational initiatives to promote economic knowledge of the general public. It is the key source of capital for companies and local governments in the region, contributing to dynamic growth of the Polish economy, creation of new jobs, international competitiveness of Polish businesses and the resulting affluence of Poles. Presence on the capital market provides Polish companies with additional benefits including enhanced visibility, credibility, efficiency and transparency in governance. The WSE has the biggest capitalisation of all exchanges in Central and Eastern Europe at EUR 131 billion. It is one of the biggest markets in Europe and lists 893 domestic and foreign companies. The GPW is the fourth biggest market in Europe as measured by the number of initial public offering (IPOs). Capital raised by companies on GPW in 2016 was EUR 127 million, ranking GPW first in the region and eighth in Europe.

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The mail indices of the WSE are:

- WIG20,
- WIG30,
- mWIG40,
- sWIG80,
- WIGdiv,
- WIG,
- RESPECT.

There are also additional indices, eg. 3 national indices (WIG-CEE, WIG-Ukraine, WIG-Poland), 11 sector indices (amoung others: WIG-BANKI, WIG-ENRG, WIG-INFO, WIG-MEDIA, WIG-MOTO) and 3 startegy indices (WIG20short, WIG20lev).

There are 477 companies listed on WSE, among them 429 national and 48 foreign with capitalisation of PLN 1,352,929.92 million. On the main market there is 368 companies with capitalisation of PLN 1,335,579.67 million and 109 on the parallel market with capitalisation PLN 17,350.25 million.

The banking sector

Legal framework for the Polish banking system is laid down in the Banking Act of 29th August 1997. It specifies the principles of carrying out banking activity, establishing and organising banks, including branches and representative offices of foreign banks, and branches of credit institutions, and also the principles of the exercise of banking supervision, reorganisation, liquidation and bankruptcy proceedings of banks. The activities of banks are regulated in Poland, inter alia, by:

- the Act on Narodowy Bank Polski of 29th August 1997,
- the Act of 29th August 1997 on covered bonds and mortgage banks,
- the Act of 10th June 2016 on the Bank Guarantee Fund, Deposit Guarantee Scheme and Resolution.

Banks in Poland operate as commercial banks and cooperative banks. According to the Polish Financial Supervision Authority in Poland there are (as for 31.12.2017)^[4]:

- 35 commercial banks,
- 553 cooperative banks,
- 28 branches of credit institutions.

Among these there are 8 banks owned by Treasury, 557 banks under private control and 551 banks under foreign control (including branches of credit institutions). The Polish government bent on the 'repolonization' of Poland's banking sector, the pace of state purchases was stepped up. Alior Bank, the successful startup bought by PZU in 2015, acquired a controlling stake in BPH Bank from GE last March and bid for Raiffeisen Polbank. Then in December 2016, PZU and development fund PFR combined to buy UniCredit's stake in Bank Pekao, Poland's second-largest lender, for \$ 2.6 billion. Despite Pekao's impeccable track record and strong balance sheet, bankers involved in the process say the two state-controlled entities were the only serious bidders to emerge.

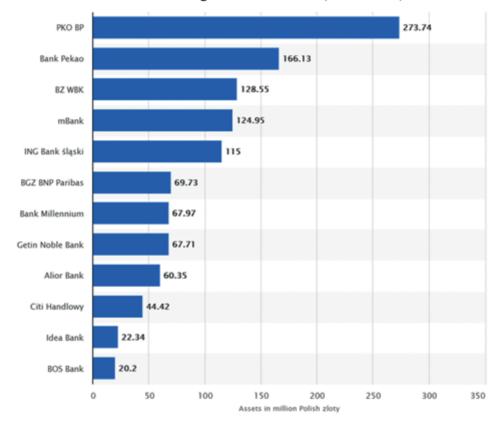


Figure 12: The assets of Polish banking market share are (as for 2017):

Source: www.statista.com/statistics/765766/leading-banks-poland-assets

Banking market share in Poland looks as follows:

- 47,84% 5 largest banks in assets,
- 47,09% 5 largest banks in deposits,
- 43,80% 5 largest banks in receivables due from non-financial sector.

There are 14 banks listed on WSE. All of them compose WIG-BANKI indice:

- Alior Bank SA,
- BOŚ SA,
- BZ WBK SA,
- Banco Santander SA,
- Bank Handlowy SA,
- Bank Millennium SA,
- Bank Pekao SA,
- Getin Holding SA,
- Getin Noble Bank SA,
- ING Bank Śląski SA,
- Idea Bank SA,
- PKO BP SA,
- UniCredit SpA,
- mBank SA.

Conclusion

Poland is a country with largest economy in the Central and Eastern European (CEE). It is among heavy lifters of the growth dynamic between the Czech Republic and Hungary. Warsaw Stock Exchange is the largest stock exchange of financial instruments in the region of Central and Eastern Europe and rapidly growing exchange in Europe.

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