IS MIDDLE-INCOME TRAP IN POLAND INEVITABLE?

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ABSTRACT

According to Felipe, Abdon, Kumar (2012) Poland is the country which was lower income before 1950 and in 2000 was graduated to upper-middle income. It was the only EU country with no fall of GDP during the last global financial crisis but the rates of growth have been very low after the crisis which may indicate that Poland is approaching a middle-income trap. In the following paper, firstly the concepts of the middle-income traps are analyzed. Secondly, a brief characteristic of Poland as a typical middle-income country is presented (the GDP level, the structure of output, trade and FDI, the role of technological imitations and innovations, and so on). Then it is argued that there are some risks that the slow-down of the Polish economy can become permanent.

The slow-down of the Polish economy can occur because there are some inherent barriers to growth. The paper identifies the barriers: inefficient justice system, complicated tax code, red tape (especially in the case of construction permits), not very high quality of tertiary education, low innovativeness and adverse demographic trends are among the most important ones.

Finally the authors of the paper argue that the situation is not inevitable. There has been substantial improvement in transport infrastructure (which was an Achilles heel of the Polish economy for many years). And some improvement in the business environment, in quality of education and the growing – it is a pity not very fast – number of innovations give still some hopes that Poland will be able to catch-up with advanced economies and become a country which economy is based on knowledge. The EU transfers and the EU integration can help in achieving higher rates of growth but the most important are institutional reforms. The crucial areas of these reforms are indicated in the paper.

Keywords: middle-income trap, Polish economy, emerging economies

1. Introduction

Poland with total income of $489,795 (in 2012 year) is the 24th largest economy in the world and 6th largest economy on the EU (World Bank, 2014)[106]. and is one of the major economies in the UE. The transition recession – which occurred after the collapse of communism in Poland in 1990 and 1991 – affected a large part of the Polish society the recession was not as big and not as long as in many other transition economies. The recession was a result of a change of the economic system and of a series of tough policy measures taken by the government. Price controls were lifted, public sector employees wages were capped, trade was liberalized, and the Polish currency, the złoty, was made convertible. The policies left millions out of work but freed Poland to begin to recover from decades of mismanagement.

[106] The population of Poland is about 38.2 million.

In spite of some internal and external problems the Polish economy has been constantly growing since 1992. One can distinguish three periods of quite periods of growth or economic booms (Nazarczuk, Marks-Bielska, 2009):

- in 1994-1998 – the result of reforms,
- in 2004–2008 – the result of the unification with the UE,
- in 2010-2011 – the result of responsible macroeconomic policies (and also some luck) which caused that the economy resisted the global financial turmoil.

First boom was due to the reform stimulating supply and the end o the crisis characteristic to the transition period. The enterprises started to adjust to the conditions of the new economy, investment and business environment was good, and there was also favourable world economic climate. This positive trend (with the rates above 5%) ended in 1998 as a result of the financial crisis in Russia. After 1998 the economy was still growing but the rates of growth ere much lower. The next stage of fast growing GDP started in 2004. It was the result of the fact that Poland becomes a member of the UE. The EU funds and trade fostered the economic growth, and decreased unemployment rates. From 1989 to 2007 its economy grew by 177 percent, outpacing its Central and Eastern European neighbours as it nearly tripled in size. The last was boom was relatively weak and the question may be raised whether the eakness should be attributed to the nature of the recent business cycle or it should be attributed to the changes in the potential GDP.

2. Middle-income trap hypothesis

The middle-income trap occurs when after some years of relatively high rates of growth a poor country's growth rates become low and eventually the country stagnates after reaching middle income levels. Probably the tirst time the term was used by Gill and Kharas (2007) to describe the apparent growth slowdowns in many former East Asian miracle economies. Then, after the global financial crisis, the term was made popular by Eichengreen, Park and Shin (2012) and Eichengreen, Park and Shin (2013). According to Eichengreen, Park and Shin (2012) a country is in a middle-income trap when it satisfies three conditions: GDP per capita is more than $ 10 000 US PPP, it had a growth rate of 3.5 for seven or more years, and the fall of the GDP growth rate has gone down by at least 2 percentage points for at least a few years. Eichengreen, Park and Shin (2012) argued that the trap may occur at about $15,000-16,000 level of GDP per capita (PPP, 2005 prices), in the paper from 2013 they argue there is a possibility of another trap, at $10,000-11,000 level. They also added that the trap does need to mean a complete leveling-off of the rates of growth but it can also mean a rapid deceleration of the growth rates.

The middle-income trap refers to a country that has realized rapid growth to become a middle-income country but is unable to grow further: it has already used the advantage of cheap labour and other cheap resources (and the easiness of absorption of simple technologies) but the ages has already started to go up, and it is unable to offer better quality and more technology advanced products. The slow-down of the economies (in the absence of technological progress) has been predicted by many standard growth models but

it was rather said that it could happen in richer countries. The concept of the middle-income trap suggests that the slow-down can happen at much earlier stage of development. The traps may be overcome after some time but it indicates that the development (or catching-up) may be quite bumpy and not smooth.

Felipe, Abdon and Kumar (2012) took a sample of 124 countries for which they have consistent data for 1950-2010. They divided the countries into four categories: low-income (40 countries), lower middle–income (38 countries), upper-middle income (14) and high-income countries (32). They have found 35 out of 52 middle income countries today to be in the middle-income trap, 30 countries in the lower- middle-income trap and 5 countries in the upper-middle income. "The trapped countries" are in Latin America (13), the Middle East and North Africa (11), but also in Asia (3) and in Europe (2). The research shows that there is a real threat of the economic stagnation, but that there are also success stories of development.

3. Polish economy during and aftermath of the global financial crisis

In 2009, Poland was the only EU country to avoid a recession. A few factors played an important role: a floating exchange rate regime (Polish currency depreciated in the beginning of 2009), good supervision of the banking sector and quite low – in comparison to otjer countries – mortgage loans to GDP ratio, relatively sound monetary and fiscal policy responses (with some loosening the fiscal policy during the global crisis), and transfers from the EU. Following strong economic growth of more than 4 percent in 2011, GDP growth slowed to 1.9**%** in 2012 and further decelerated in early 2013, as renewed fiscal turmoil in the Euro zone weakened business' and consumers' confidence. This in turn caused some stagnation on demand side of the economy, and the investment spending started even to fall (see table 1).

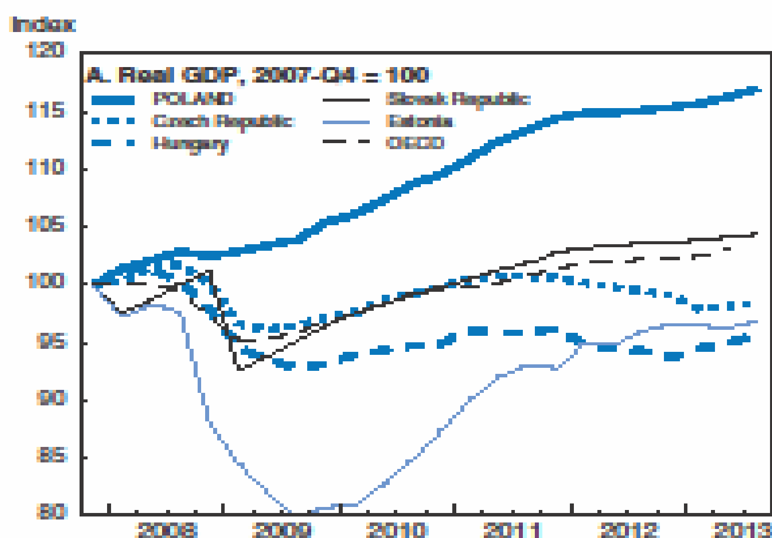
Table 1 The main indicators of the Polish economy before and after the global financial crisis

	Unit	2005	2006	2007	2008	2009	2010
GDP per capita	USD current PPPs	13 78 6	15 057	16 750	18 025	18 796	19 862
Real GDP growth	Annual growth %	3.6	6.2	6.8	5.1	1.6	3.9
Gross fixed capital formation	% of GDP	6.5	14.9	17.6	9.6	-1.2	-0.4
Government deficit	% of GDP	-4.1	-3.6	-1.9	-3.7	-7.5	-7.9
General government debt	% of GDP	54.1	54.2	50.4	55.5	57.6	61.4
Current account balance of payments	% of GDP	-2.4	-3.8	-6.2	-6.5	-4.0	-5.1
Inflation rate	Annual growth %	2.2	1.3	2.4	4.2	3.8	2.6
Unemployment rate	%	17.9	14.0	9.6	7.0	8.1	9.7
Long-term unemployment:	%	52.2	50.4	45.9	29.0	25.2	25.5

Source: OECD Country Profile: Poland (2014)

As a result of the resistance of the Polish economy to the global financial crisis, the differences in the level of economic development had been gradually diminished; GDP per capita increased from 51.8% of the UE average in 2005 to 56,3% in 2008 and 65, 1% in 2011. During the whole period of the global crisis Polish economy performed much better than the OECD countries, including other former communist (or emerging European) economies (see Figure 1). However, as it is shown by Figure 1, the Polish GDP growth curve has become flatter for the last three years.

Figure 1 Real GDP growth in Poland and in some other countries in Central Europe.



Source: OECD Economic Survey: Poland (2014)

Unfortunately, since 2011 the overall global economic and political climate has started to influence Polish economy the negative way. Following the strong economic growth of more that 4 percent in 2011, GDP growth slowed to below 2% in 2012 and further decelerated in early 2013. In 2012 global economy started to rebound. It raises the question if Poland will kept with this trend or there is a risk that Poland will fall into a middle-income trap.

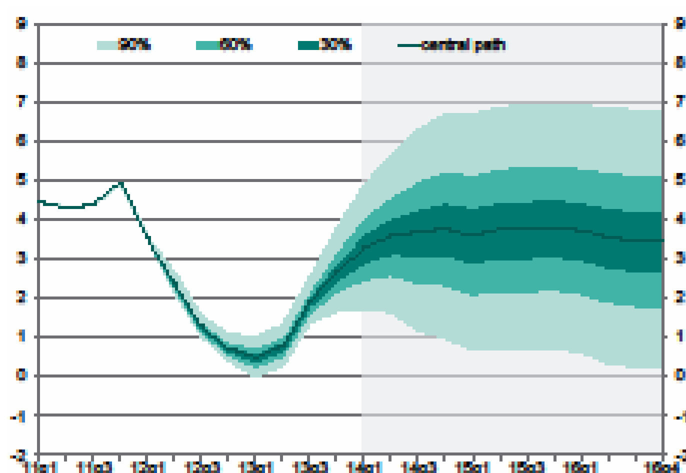
Table 2 Real GDP indices (100 – quarter in the previous year)

	1st q.	2nd q.	3rd q.	4th q.
2010	102,7	103,7	104,2	104,7
2011	104,5	104,3	104,4	104,9
2012	103,5	102,4	101,3	100,7
2013	100,5	100,8	101,9	102,7

Source: GUS (2014)

The forecasts for the next three years are a little more optimistic. The central bank of Poland predicts that the GDP growth rate will achieve 3.5-3.6% (see Figure 3). This can be seen as a very good result if you compare it to the situation of, for example, Greece but it is not enough if Poland wants to catch-up with the richest European countries in 20-30 years.

Figure 2 GDP growth rates forecasts



Source: Inflation Report (2014)

4. Obstacles to growth of the Polish economy and the chances to overcome them

Eichengreen, Park and Shin (2013, p. 1) argue that "slowdowns are less likely in countries where the population has a relatively high level of secondary and tertiary education and where high-technology products account for a relatively large share of exports, consistent with our earlier emphasis of the importance of moving up the technology ladder in order to avoid the middle-income trap."[107] Poland has got one of the highest rate of young people attending universities in the world, but quality of the Polish higher education needs a lot of improvement[108].

Polish spending on research and development is very low – it is still below 1% of GDP[109]. The number of patents is low, and Poland is not known because of new innovative products. Poland is not at the bottom of the technological production ladder but very seldom does it export high-tech products. It is the biggest producer of household appliances in Europe, it sells parts for German car industry, and it also a very important producer of furniture.

Table 4 Research & development spending and the number of researchers in Poland

	Unit	2005	2006	2007	2008	2009	2010	20101
Gross domestic expenditure on R&D	Mln USD	2 982	3 107	3 384	3 790	4 301	4 870	5 294
Researchers: full-time equivalent	Per '000 employed	4.4	4.1	4.1	3.9	3.9	4.1	4.0

Source: OECD Country Profile: Poland (2014)

107 The lack of space does not allow to add comments on the newest literature on the middle-income trap, and the proposed ways to avoid or escape it. Aiyar, Duval, Puy, Wu and Zhang, (2013) provide a good survey about it.
108 According to *PISA 2012 Results* (2013) there has been observed a substantial progress in primary and secondary education,
109 At least three big international companie spend more on R&D than the whole Poland.

"The supply of human capital and innovations" are one side of the coin. The other side of the coin is the situation of firms. There are still too many obstacles to start a business, and too many obstacles for firms to develop and absorb new technologies. The *Doing Business* reports show that in spite of some progress a lot of reforms must be introduced (see Table 3)[110]. Getting credit is the only aspect of the business environment that does not cause a lot of hardship for owners and managers of firms[111]. There has been a lot of progress in improvement of resolving insolvency for the last year, but there is still a lot of room for reforms.

Table 3 Poland in *Doing Business Ranking 2014* (the ranking for 189 countries)

Starting a business	116
Dealing with construction permits	88
Getting electricity	137
Registering property	54
Getting credit	3
Protecting investors	52
Trading across borders	49
Enforcing contracts	55
Resolving insolvency	37
Paying taxes	113
Overall	45

Source: Doing Business Ranking 2014 (2013)

The EU transfers and the EU integration can help in achieving higher rates of growth in Poland but the most important are institutional reforms both of business environment and of higher education and research institutions.

There is one more important argument for being aware of the possibility of the middle income trap. The reforms which should aim at the improvement of productivity (Poland is becoming less and less competitive as far as the wages are concerned) should be launched as fast as it is possible because Polish population is ageing. Poland has already got a high public debt[112], and if the economy slows down the share of government transfers to households will go up, and Poland may face a fiscal crisis.

5. Conclusions

Poland was the only EU country with no fall of GDP during the last global financial crisis but the rates of growth have been very low after the crisis which may indicate that there is a danger that Poland is approaching a middle-income trap. The slow-down of the Polish

[110] Similar conclusions can be drawn from *The Global Competitiveness Report* (2013). OECD Economic Survey: Poland (2014) stresses the need to boost employment, strengthen product market competition, and consolidate macroeconomic policies. It seems that it focuses more or medium-term, and not long-term problems of the Polish economy.

[111] However, it should be added that the interest rates are higher in Poland than in many other countries.

[112] See Table 1. Thanks to a different methodology of calculation, the official Polish government estimation of the public debt are lower.

economy can occur because there are some inherent barriers to growth: inefficient justice system, complicated tax code, red tape (especially in the case of construction permits), not very high quality of tertiary education, low innovativeness and adverse demographic trends are among the most important ones. However, the falling into the trap is not inevitable. There has been substantial improvement in transport infrastructure (which was an Achilles heel of the Polish economy for many years) and also some improvement in the business environment. The innovativeness of the Polish economy is low but there are still some hopes that Poland will be able to catch-up with advanced economies and become a real knowledge-based economy.

References

Aiyar, S., R. Duval, D. Puy, Y. Wu and L. Zhang, (2013), "Growth Slowdowns and the Middle-Income Trap," IMF Working Paper WP/13/71.

Doing Business 2014 (2013). The World Bank: Washington, DC.

Eichengreen, B., D. Park, and K. Shin (2013), "Growth Slowdowns Redux: New Evidence on the Middle-Income Trap," NBER Working Paper 18673.

Eichengreen, B., D. Park, and K. Shin (2012), "When Fast Growing Economies Slow Down: International Evidence and Implications for China," Asian Economic Papers, 11, pp 42–87.

Felipe J., Abdon A., Kumar U., (2012) Tracking the Middle-income Trap: What Is It, Who Is in It, and Why, Levy Economics Institute Working Paper No. 715.

Gill, I., and H. Kharas (2007), An East Asian Renaissance. The World Bank: Washington, DC.

GUS (2014), www.gov.stat.pl, accessed February 28, 2014.

Inflation Report (2014). National Bank of Poland: Warsaw.

Nazarczuk M., Marks-Bielska R. (2009), Czynniki wzrostu gospodarczego Polski w świetle neoklasycznego modelu wzrostu,[w:] Problemy ekonomii, polityki ekonomicznej i finansów publicznych, (Ed..) J. Sokolowski , Prace Naukowe UE we Wrocławie, t.1, nr 39, s.266-273

OECD Country Profile: Poland (2014), www.oecd.org, accessed February 28, 2014.

OECD Economic Survey: Poland (2014). OECD: Paris.

PISA 2012 Results (2013). OECD: Paris.

Spence, A. M. (2011). The Next Convergence: The Future of Economic Growth in a Multispeed World. Farrar, Straus and Giroux: New York.

The Global Competitiveness Report 2013–2014 (2013). World Economic Forum: Geneva.

The World Bank (2014), GDP ranking, http://databank.worldbank.org/data, accessed February 28, 2014.