

Poland's New Golden Age

Shifting from Europe's Periphery to Its Center

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October 2013



Abstract

The objective of the paper is (i) to help fill the gap in knowledge on the long-term economic history of Poland; (ii) to provide a new perspective to the debate on the economic future of Poland, with a special focus on its historically unprecedented post-transition growth experience; and (iii) to analyze critically long-term growth projections for Poland. The paper argues that (i) Poland has just had probably the best 20 years in its economic history, growing the fastest among all European economies and one of the fastest worldwide; (ii) by 2013, it Poland achieved levels of income, quality of life, and well-being likely never experienced before, including

relative to Western Europe, a natural benchmark; and (iii) Poland is well placed to continue converging with the Western European levels of income, permanently moving from the economic periphery of Europe, where it languished for centuries, to the European economic center. The twenty-first century thus promises to become Poland's new Golden Age. The paper calls for further research on the lessons from Poland's successful growth model for other countries in the region and beyond as well as on the long-term implications of the rise of Poland for the future of Europe.

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**Poland's New Golden Age:
Shifting from Europe's Periphery to Its Center**

by
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JEL Codes: N14, N34, O40, O47, O52, E65, F02

Key terms: Economic history, economic growth, growth projections, convergence, immigration, innovation, Poland, golden age.

Sector Board: Financial Sector (FSE)

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I. INTRODUCTION

Poland, the largest economy among post-socialist EU member states² and the sixth largest economy in the European Union on the purchasing power parity basis, has just had probably the best 20 years in more than one thousand years of its history.

Since 1989, when the Solidarity-led social movement spearheaded the collapse of communism, Poland's economy has grown by more than any other country in Europe. It was also one of the fastest growing economies in the world among countries at a similar level of development. Finally, Poland was the only European economy to avoid a recession during the ongoing global crisis, continuously growing since 1992.

As a result, in 2013 Poland has achieved levels of income, quality of life, and well-being never experienced before. This year, its GDP per capita will reach 62 percent of the level of income in the developed countries of Western Europe (Euro-area 17), Poland's natural benchmark and an objective of social aspirations, up from below 30 percent in 1992. It will also achieve the highest level of income relative to Western Europe since the year 1500, thus in just about twenty years offsetting more than 500 years of economic decline, a historically unprecedented achievement.

Aside from the highest absolute and relative incomes, Poland has also likely reached the highest levels of the quality of life, well-being and happiness, the ultimate objectives of economic growth and public policy. Rising incomes, open borders, access to the Internet, and the accession to the European Union have allowed Poland to participate in the global economic, social, cultural and technological progress to an extent never experienced before. As a result, international rankings of well-being suggest that the quality of life enjoyed by an average Pole is even higher than what the level of GDP per capita alone would suggest. Perceived happiness is also the highest on record.

² Poland's GDP of around \$520 billion on a nominal basis represents more than one third of the combined GDP of the new EU member states: Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Romania, Slovak Republic and Slovenia. It also amounts to around 1 percent of the world's GDP.

Going forward, Poland is well placed to continue converging with Western Europe. Long-term projections by the European Commission, the OECD and independent forecasters suggest that Poland will likely reach up to 80 percent of the EU-15 level of income by 2030, the highest relative level ever. In doing so, Poland will have largely moved from the economic periphery of Europe, “Europe’s third world” (Aldcroft 2006), where it languished for centuries, to the European economic center.³

The 21st century thus promises to become Poland’s new Golden Age.⁴

At the same time, the rise of Poland and the rest of Central and Eastern Europe (CEE) will help bring the two parts of Europe together for the first time since 16th century, when the continent split economically: CEE reverted back to feudalism and the resulting economic stagnation, while the West embarked on its long journey to industrialization and prosperity.

The objective of this paper is to provide evidence for the above statements and thus (i) help fill the existing knowledge gap about the economic history of Poland, (ii) provide a new historical perspective to the ongoing debate on the economic future of Poland, and (iii) critically analyze long-term growth projections for Poland. The paper moves away from the usual stock market-like focus on the short-term and re-emphasizes the importance of the long-term perspective. Finally, the paper calls for further research on the lessons from Poland’s successful experience for other countries in the region and beyond as well as the long-term implications of the rise of Poland for the functioning of the European Union and—through the EU—of the global economy.

³ This will also apply to most countries of Central and Eastern Europe, new EU member states, which similarly to Poland lagged behind the West in development, with a possible exception of the Czech Republic (Piatkowski 2009).

⁴ In fact, Warsaw and the surrounding Mazowieckie region are already in their Golden Age: Eurostat’s estimates from 2010 suggest that income per capita in the Mazowieckie region amounted to 103 percent of the EU-27 average. By 2013, it is likely to have exceeded the euro zone average. Income per capita in Warsaw alone is already around 150 percent of the average euro zone level.

As to the knowledge gap on Poland's economic history, most Western European readers of this paper will not be surprised to find that there is very little in the global economic literature on Poland. First, the majority of books on the European and global economic history largely ignore Poland's developmental experience.⁵ Second, Poland's economic history is featured in only two articles among more than 730 articles published during 2001-2009/10 in the three leading global journals on economic history.⁶ There is also only one Pole among the published 979 authors (Kowalski 2011, Pieczewski 2011, Bukowski 2011). Third, hardly any of the curricula of economic history courses taught in the leading global universities mention Poland.⁷ Finally, anecdotal evidence suggests that despite recent progress Poland still gets much less global press coverage than what would be suggested by the size of its population (38.2 million), the size of its economy (more than \$500 billion in nominal terms), its location in the middle of Europe and its remarkable growth record since 1989.⁸

Such weak interest in Poland's economic history could probably be explained by a number of factors, including scarce historical data, difficulty of dealing with the source materials in Polish, and Poland's heretofore peripheral status in the European and global economy.⁹ In addition, researching Poland's economic history has so far not been considered attractive, losing in competition to research on the BRICs, Asian TIGERS, and other "next emerging powers". Finally, difficult access of the Polish economic historians to international journals

⁵ Books on Europe's economic history almost exclusively focus on Western Europe only, with vlittle focus on Central Europe and Poland. For instance, the index of the most recent *Cambridge Economic History of Modern Europe, Volume 2, 1870 to the Present* by Broadberry and O'Rourke (2012, p. i) which "unlike most existing textbooks on the economic history of modern Europe (...) rethinks Europe's economic history since 1700 as unified and pan-European", mentions Poland in only two pages out of the total of 468 pages.

⁶ "The Economic History Review", "Explorations in Economic History" and "The Journal of Economic History".

⁷ For instance, a reading list of a 2013 spring course at the Berkeley University in California, on "Economics 210A. Introduction to Economic History" conducted by Jan de Vries and Barry Eichengreen does not have a single publication focused on Poland and/or Central Europe. From: http://emlab.berkeley.edu/users/webfac/eichengreen/e210a_sp13/210a_syll_sp13.pdf

⁸ Piatkowski and Jarmuzek (2008) show that during 2004-06 the five global leading newspapers—The Economist, Financial Times, Wall Street Journal, New York Times, and International Herald Tribune—mentioned Poland's economy (relative to its population) less than half as often as Slovakia and even less often than the three Baltic States.

⁹ As Tony Judt, the late historian put it, "Warsaw is not, and for most of European history never was, the center of very much at all" (Judt, 2012, kindle location 521).

might also have been a factor, partly driven by a tradition of qualitative rather than quantitative and internationally comparative research.¹⁰

Similarly, there is not much international interest in Poland's long-term economic future, aside from the largely mandatory work of the international institutions such as the European Commission or the OECD, discussed later in the text.¹¹

The paper is organized as follows. Section II summarizes Poland's economic performance since the year 1500 until the beginning of transition in 1989. Section III discusses Poland's remarkable performance since then, including the ongoing global crisis. Section IV focuses on the long-term growth projections for Poland and the pace of its convergence with Western Europe. Section V concludes.

II. POLAND'S ECONOMIC DECLINE FROM 1500 TO 1989

In 16th and 17th centuries, Poland was one of the largest and most populous countries in Europe, with a territory of almost one million square kilometers and a population exceeding 11 million (Davies 2005, Morawski 2011).¹² At the height of its territorial expansion in the late 1500s, Poland stretched almost all the way from the Baltic to the Black Sea (Figure 1). The ruling Polish-Lithuanian Jagiellonian dynasty ruled much of the region between the 14th and 16th centuries (the present day Lithuania, Belarus, Poland, Ukraine, Latvia, Estonia, parts of Russia, Hungary, Czech Republic, Slovakia, and Croatia), before losing the dynastic battle to the Habsburg family in 1526, helped by the death of Louis Jagiello of Hungary and Bohemia

¹⁰ For instance, the otherwise excellent main undergraduate textbook on the economic history of Poland authored by Wojciech Morawski, one of the leading Polish economic historians, in almost 350 pages of text does not have even one table or figure with internationally comparable data on the country's economic development (Morawski 2011).

¹¹ Friedman (2009), Sharma (2011) and Piatkowski (2011) are some of the notable exceptions. Friedman predicts the emergence of Poland as the new Great Power. Sharma succinctly argues that Poland will become the next "breakout nation". Piatkowski in turn asserts that Poland and the EU-10 (what he calls "New Europe") may be better positioned to grow in the long-term than the BRICs and emerging markets.

¹² Poland was then officially known as the Kingdom of Poland and the Grand Duchy of Lithuania or the Polish-Lithuanian Commonwealth, established in 1569. It was disbanded in 1795 following its third partition by the neighboring Russia, Prussia and Austria.

at the battle of Mohacs against the Turks.¹³ Jagiellonian University in Krakow, established in 1364, was one of the oldest and most respected universities in Europe, counting Nicholas Copernicus among its graduates. Polish-Lithuanian armies held an upper hand in repeated military clashes with Russia, Sweden and the Ottoman Empire. The economy thrived, with Poland becoming the “breadbasket” of Europe. No wonder then that the 16th century is often considered as the country’s Golden Age.¹⁴

Figure 1: Poland’s borders in 1600.



Source: <http://www.euratlas.net/history/europe/1600/index.html>

Maddison (2010), the leading source of long-term data on GDP, estimates that in the year 1500 Poland’s level of income per capita, based on the average for Eastern Europe, amounted

¹³ One can only wonder how the European history would have developed, if the young Jagiello had not fallen from his horse and died during the retreat from the battle, the Jagiellonian dynasty had continued to rule the region and the Habsburg dynasty had never extended their power into Central Europe.

¹⁴ Even though, for instance, only 2 percent of peasants were literate, less than in Western Europe (Wyczanski 1974).

to 62 percent of the level of income in the twelve leading Western European economies.¹⁵ In turn, Wojtowicz and Wojtowicz (2009) assert that Poland's GDP per capita in 1578 amounted to about 71 percent of today's EU-15. Finally, Allen (2001) estimates that in the 16th century the average income of building craftsmen in four leading Polish cities—Krakow, Gdansk, Lwow and Warsaw—ranged from 50 to 75 percent of the comparable salary in London.

However, things were soon to fall apart. Europe started to split in two halves between the ever more prosperous Western Europe and the ever less prosperous Poland and Central Europe, pushing it towards the European and global economic periphery from which it has started to emerge only 500 years later.

There are a number of explanations for why the two parts of the continent started to go different ways. The main line of argument centers on the dramatic increase in international trade following the discovery of America in 1492, which pushed countries to specialize in products in which they possessed a comparative advantage. Western Europe thus started to increasingly specialize in trade, notably with the New World, and manufacturing, while Poland and the rest of the region shifted towards agriculture (Berend and Ranki 1974, Berend 2005).

As a result, the rising grain prices led the Polish nobility to strengthen feudalism, intensify serfdom, and gradually eliminate cities as political and economic powers, exactly in the opposite way as in the West.¹⁶ Innovation also declined, as reflected in the slow expansion of printing presses (Dittmar 2011). Political stability was in turn undermined by *inter alia* the

¹⁵ Eastern Europe is defined as today's Albania, Bulgaria, former Czechoslovakia, Poland, Romania, and former Yugoslavia.

¹⁶ In the year 1600, urban population of Poland (for towns with a population of at least 10,000 inhabitants) amounted to only 0.4 percent, relative to the Netherlands' 24.3 percent, Belgium's 18.8 percent, Italy's 15.1 percent and the European average of 7.6 percent. The urbanization ratio in 1850 increased to only 9.3 percent, the lowest in Europe next to Austria/Bohemia (Broadberry and Gupta 2011).

uniquely Polish tradition of democratic elections of kings and the parliamentary liberum veto.¹⁷

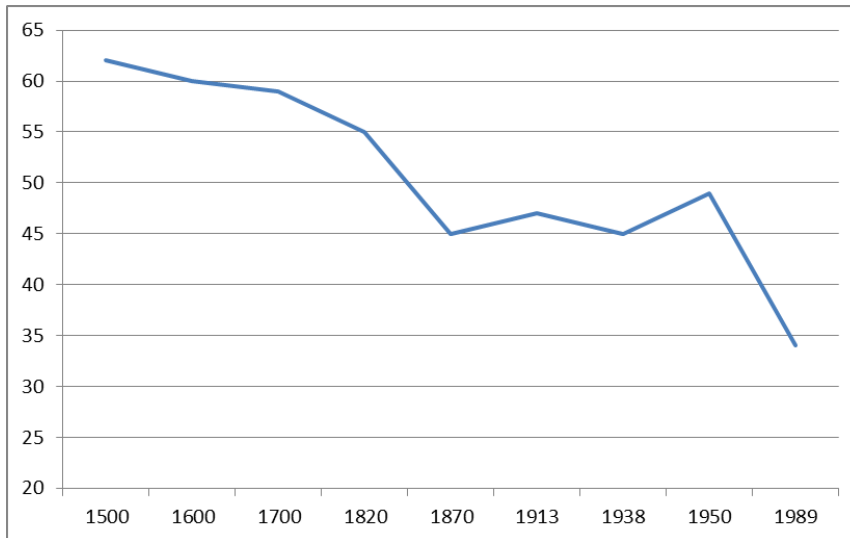
Poland (and Central Europe) became “an agrarian reserve of the increasingly industrialized West” (Berend and Ranki 1974, p. 3). Poland’s backwardness became structural, shaping and restricting subsequent developmental options. This agricultural growth trap proved impossible to escape until industrialization forced by the new communist governments after the Second World War.

Reversion to feudalism in XVI and XVII century, disappearance from the map of Europe in the late 18th century, the disastrous legacy of the First and Second World War, both fought largely on Poland’s territory, and almost fifty years of communism, all taken together led to Poland’s gradual economic decline, with its income per head (adjusted for purchasing power parity) relative to Western Europe steadily declining from around 60-70 percent in 1500 to only around 35 percent in 1989 (Figure 2).¹⁸ In nominal terms, unadjusted for purchasing power parity, an income of an average Pole in 1989 was worth less than one-tenth of that in Western Europe.

Figure 2: GDP per capita in Poland, 1500-1989, Western Europe = 100

¹⁷ Following the heirless death in 1572 of King Zygmunt II August, the last king from the Jagiellonian Dynasty, until 1791 kings in Poland were elected by all male nobles (szlachta). Universal szlachta suffrage helped undermine the authority of the royal family and opened scope for foreign influence. Liberum veto, Latin for “free veto”, in turn allowed each individual member of the Polish parliament, based on the premise that all noblemen were equal, to single-handedly oppose any legislation and force adjournment of parliamentary sessions. The resulting need for parliamentary unanimity led to a legislative paralysis.

¹⁸ Data from Wójtowicz and Wójtowicz (2009) and Allen (2001) show the same downward trend.



Note: Data for 1500, 1600, 1700 and 1820 based on an average for Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Romania, and Yugoslavia. Data for Poland only starting in 1870. See Maddison (2010) for definition of Western Europe (12 economies).

Source: own calculations based on Maddison (2010).

III. POLAND'S ECONOMIC MIRACLE FOLLOWING THE 1989 TRANSITION

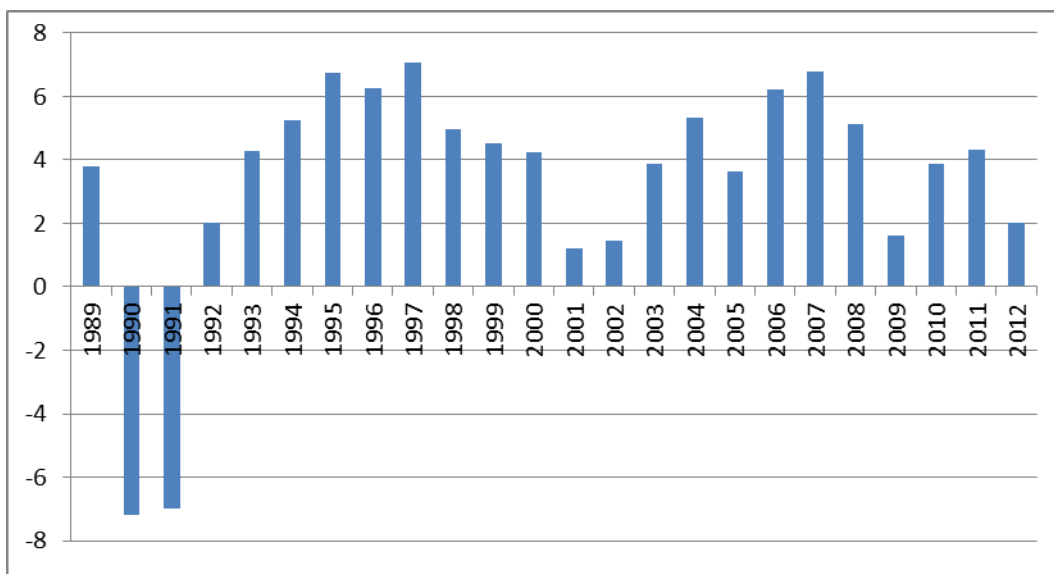
Evolution of GDP per capita

Poland was the first country in communist Europe to unshackle itself from communism, with partly free democratic elections held in June 1989 followed by the introduction of the first democratic government in September of 1989, well before the symbolic fall of the Berlin Wall in November of that year.

Following a number of economic reforms implemented already under the old regime (Kolodko 2000), in 1990 Poland embarked on a “shock therapy” to reform the old, socialist economic system. Under the new deputy prime minister and minister of finance, Leszek Balcerowicz, markets were fully opened to domestic and foreign trade, the Polish zloty was made convertible, prices were liberalized, subsidies to state owned enterprises were cut, privatization was started and banking sector reform accelerated (Balcerowicz 1995). Although the post-transition recession was much deeper than initially predicted, costing

Poland almost 15 percent of GDP¹⁹, the economy started growing again in 1992, well ahead of all its regional peers. Under a “Strategy for Poland” developed in 1994 by the new deputy premier and minister of finance Grzegorz W. Kolodko, Poland’s growth rate exceeded 6 percent a year during 1994-97, earning it an invitation to join the OECD in 1997. From then on, Poland has not stopped growing, although the economy slowed in 2001 and 2002 largely as a result of a strict monetary policy and then in 2009 following the onset of the global crisis (Figure 3).

Figure 3: GDP growth rates in Poland 1989-2012

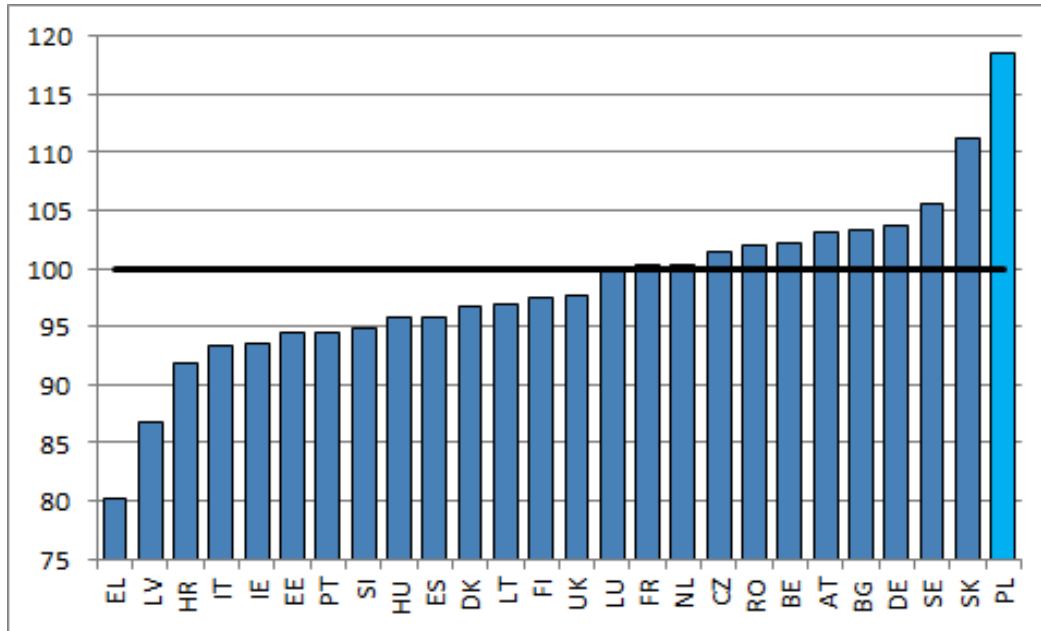


Source: own calculations based on the IMF World Economic Outlook, October 2012.

Most remarkably, Poland was the only economy in Europe to avoid a recession during the global crisis, benefiting from a depreciated real exchange rate, large domestic market, relatively low exposure to international trade, low household and corporate sector debt leverage and stimulative fiscal and monetary policy. As a result, in 2012 Poland’s GDP was almost 20 percent higher than at the beginning of the crisis, a peerless performance among all EU 27 countries (Figure 4).

¹⁹ Although Orłowski (2010) and others argue that the fall in GDP was actually less, as some of the lost production reflected goods and services, which did not meet quality standards of market economies.

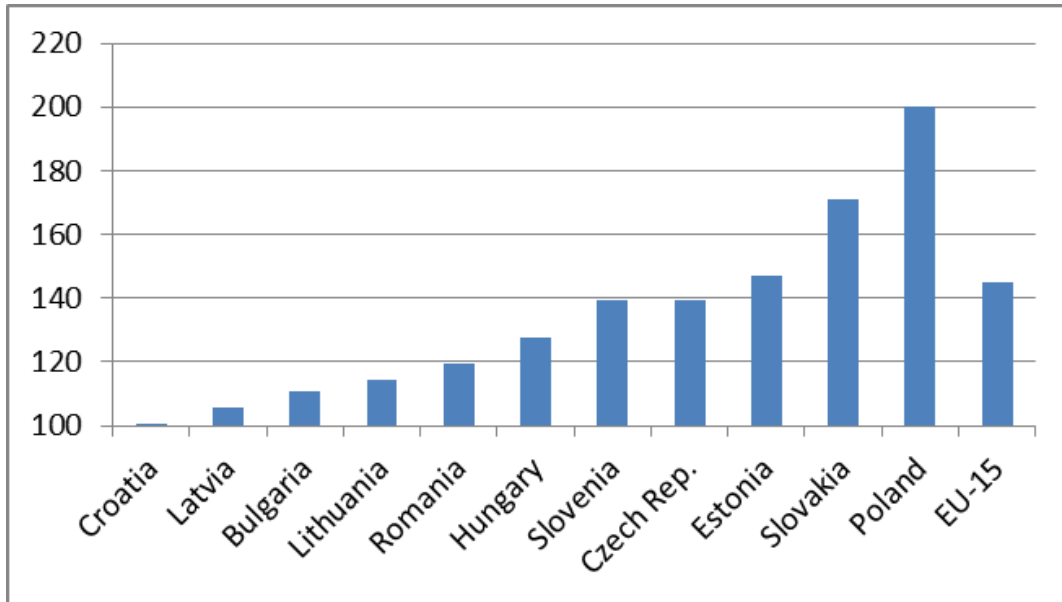
Figure 4: EU27 Countries Output Level in 2012, 2007=100



Source: World Bank staff estimates based on Eurostat

Strong performance during the crisis helped Poland become the star performer among all transition economies. Its GDP per capita has doubled since 1989, performance partially matched by the Slovak Republic and Estonia only. Poland's economic growth was also faster than in any other country on the continent, becoming Europe's growth champion (Figure 5).

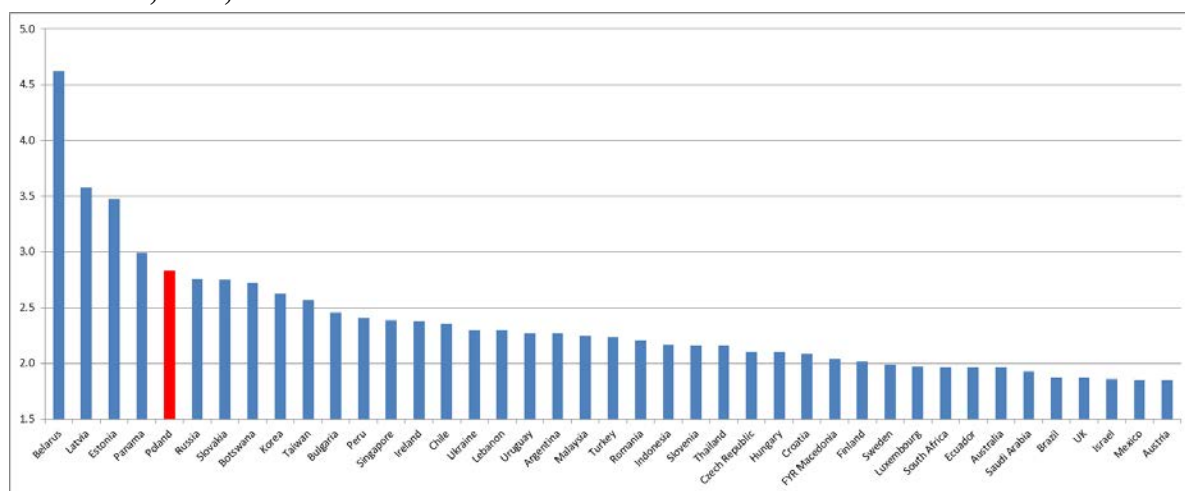
Figure 5: GDP per capita in EU-11 and EU-15 in 2012, 1989=100



Source: own calculations based on EBRD, Eurostat, and IMF World Economic Outlook Database

Poland's performance also compares well internationally. Its GDP per capita in purchasing power terms improved from \$7,300 in 1995 to \$21,000 in 2012, an almost three fold increase, placing it in the top five of global best performers among forty countries at a comparable level of development (Figure 6). Poland beat all global high-achievers among rich countries (Korea, Singapore, Ireland), BRICS (Russia, Brazil, South Africa) and emerging markets (Mexico, Malaysia, Chile or Turkey). As a result, in 2011 the OECD and the World Bank changed Poland's classification from "upper-middle income" to "high income" for the first time in the country's history.

Figure 6: GDP per capita in 2012 relative to 1995 in selected middle and high income economies, PPP, 1995=1



Note: In current international dollars.

Source: own calculations based on the IMF World Economic Outlook database, April 2013

As a result of this impressive economic performance, Poland's income per capita in 2012 reached 61 percent of that in Western Europe (euro zone-17), more than doubling from 28 percent in 1992.

This implies that in just twenty years Poland has managed to offset almost 500 years of economic decline, an unprecedented achievement comparable to the economic success of only some Asian economies such as Japan, Korea and China.

Evolution of well-being

GDP growth, however, is not all. It is by now well recognized that GDP growth by itself does not necessarily fully depict improvements in the overall quality of life and the level of well-being (Stiglitz, Sen, Fitoussi, 2008). It does not also necessarily buy happiness (Easterlin 1974, Stevenson and Wolfers 2013).

From the well-being perspective, Poland does even better than on the basis of GDP only. It enjoys historically unparalleled quality of life, which lags behind Western Europe much less than what differences in income would suggest.

Poland's educational, health, environmental, social, and even sport outcomes, all factors found to drive human happiness (Layard 2003, Bok 2010, Kahneman 2012) place Poland squarely among the developed countries. In addition, thanks to the Internet, open borders and flattening of the world's economy, Poles enjoy the fruits of global technological, cultural, and social development almost to the same extent as the Western Europeans do.²⁰

In 2012, Poland's actual individual consumption (AIC), which measures household consumption regardless of whether it was paid by the household or the public sector (thus also measuring the comprehensiveness of public services), amounted to 67 percent of the AIC in the euro zone, according to Eurostat, above 61 percent based on income per capita (PPS) alone²¹. Similarly, UNDP's Human Development Index for Poland, combining GDP per capita, educational achievement and life expectancy, places Poland in the 39th place in the world, above its 47th place in terms of GDP per capita alone. Likewise, in the most comprehensive OECD's "Better Life Index", which combines most measures--housing, income, jobs, community, education, environment, civic engagement, health, life satisfaction, safety and work-life balance--believed to affect well-being and happiness²², Poland comes 24th among 34 high-income OECD countries, above its 29th place based on the income per capita alone. Other indexes developed by private think-tanks, such as the Legatum's Prosperity Index, provide a similar picture.

²⁰ Anecdotal evidence abound: technological gadgets are available in Poland at the same time as in Western Europe; international movies premiere on the same day as elsewhere. Music stars visit Poland as often and sometimes even more often (especially after opening four new football stadiums built for the 2012 European Cup) than in Western Europe. Internet is now available for everyone, thanks to a universal mobile phone penetration.

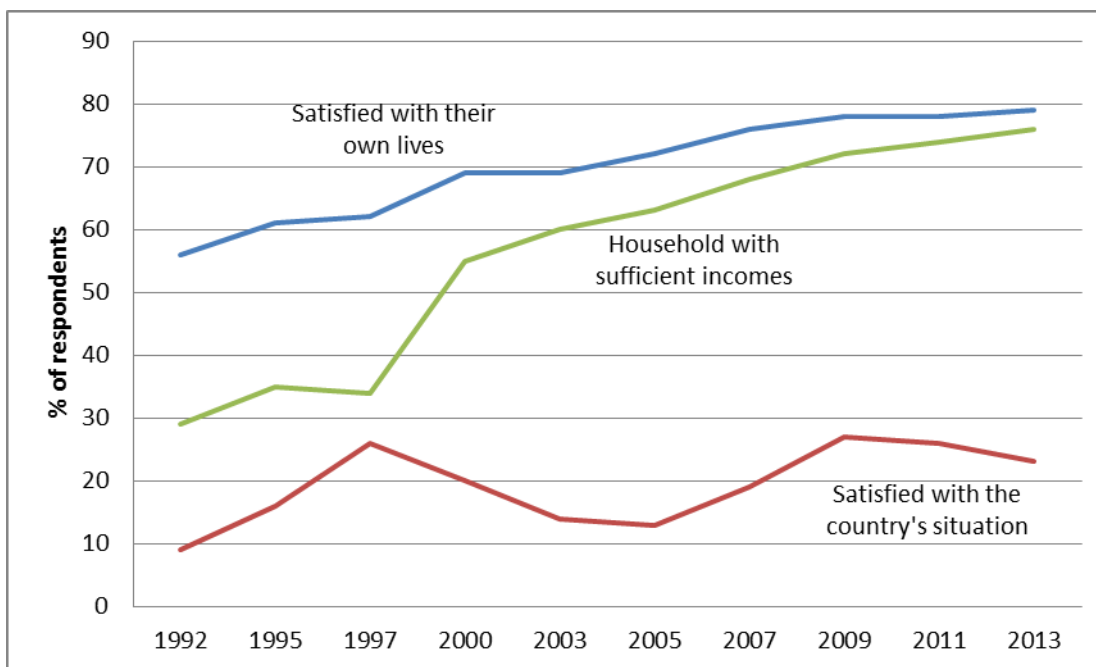
²¹ Eurostat's Glossary explains AIC and argues that "although GDP per capita is an important and widely used indicator of countries' level of economic welfare, consumption per capita may be more useful for comparing the relative welfare of consumers across various countries".

²² In the OECD's own words: „There is more to life than the cold numbers of GDP and economic statistics – This Index allows you to compare well-being across countries, based on 11 topics the OECD has identified as essential, in the areas of material living conditions and quality of life”. Quite interestingly, the Index allows users to change the relative weights for subindicators and thus alter the ranking. For instance, raising the weights for “education” and “safety” to their maximum (while keeping other subindicators in the default position) raises Poland's ranking to 22nd place, beating Spain and Italy. See the index's web site at: <http://www.oecdbetterlifeindex.org/>

In short, Poland's level of social well-being is much closer to Western Europe than what the level of income alone would suggest.

In terms of happiness, the most fickle of all categories, it also seems to have improved considerably from the depths of socialist malaise, as evidenced by domestic (Social Diagnosis 2013) and international sources (Eurofound, 2012). Poles seem to be happier with life than ever before on record (Figure 7).

Figure 7: Life satisfaction in Poland, 1992-2013



Source: own calculations based on Social Diagnosis (2013)

IV. THE PROJECTED FUTURE OF POLAND UNTIL 2060

All long-term growth projections conclude that Poland will continue to grow faster than Western Europe and thus continue to converge at least until 2030. This would allow Poland to reach levels of relative income never experienced before of around 80 percent of the EU-15 average income by 2030.

First, the European Commission's 2012 Ageing Report (European Commission 2012) projects that during 2010-2060 Poland will be the second fastest growing economy in the EU, after Bulgaria. Poland's GDP per capita is to grow at an average rate of around 2.0

percent year until 2030 and 1.8 percent on average until 2060, 0.5 percentage points faster than the average for the euro zone (Table 1). This would allow Poland to exceed 70 percent of the Western European level of income by 2030 and reach 75 percent in 2045. However, owing to negative effects of the projected demographic decline on economic growth, with population projected to fall from 38.2 million in 2012 to 32.6 million in 2060, Poland would fail to fully converge with Western Europe during the projected period.

Table 1: Projected growth in GDP per capita in the new EU member states, the euro zone and the EU-27, 2010-2060, by decades.

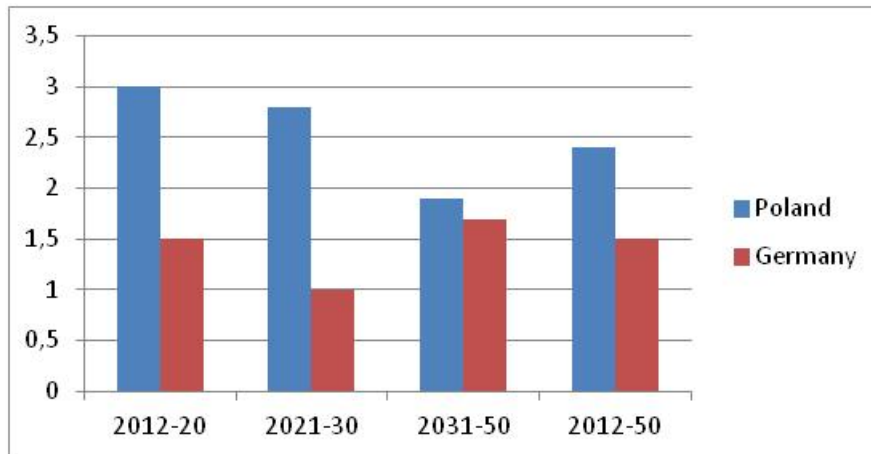
Country	2010-60	2020	2030	2040	2050	2060
BG	1,9	2,0	2,2	1,8	1,4	1,7
PL	1,8	2,0	1,9	1,6	1,0	1,3
EE	1,8	2,1	2,4	1,8	1,1	1,6
SK	1,8	2,8	1,8	1,1	0,9	1,5
LV	1,8	2,5	2,5	1,8	1,0	1,4
LT	1,7	1,9	2,1	2,1	1,2	1,4
CZ	1,6	1,6	1,8	1,5	1,2	1,5
RO	1,5	1,6	1,7	1,5	1,1	1,2
HU	1,4	1,5	2,1	1,4	1,2	1,3
EU27	1,4	1,5	1,4	1,4	1,4	1,6
EA17	1,3	1,4	1,2	1,2	1,4	1,6

Source: European Commission 2012.

Based on the same demographic projections, OECD (2012) predicts that Poland's GDP per capita will grow by 2.6 percent during 2011-2030 and by 1.4 percent during 2030-2060, resulting in GDP per capita rising to more than 70 percent of the eurozone's income level by 2030.

PWC, a consulting firm, is more optimistic. According to its growth model, Poland is projected to grow at an average rate of 2.5 percent per year until 2050, a much faster rate than what is projected for Germany, a benchmark economy for Western Europe (PWC 2013) (Figure 8). As a result, Poland's level of income would reach 83 percent of the German level by 2030 and then slowly grow to 87 percent by 2050. Assuming that Germany would continue to grow at least in line with the growth rate of the EU-15, this would translate into Poland's reaching 93 percent of the EU-15 average level of income by 2030 and 97 percent by 2050, virtually converging with the West.

Figure 8. Projected real GDP growth rates for Poland and Germany, 2012-2050.



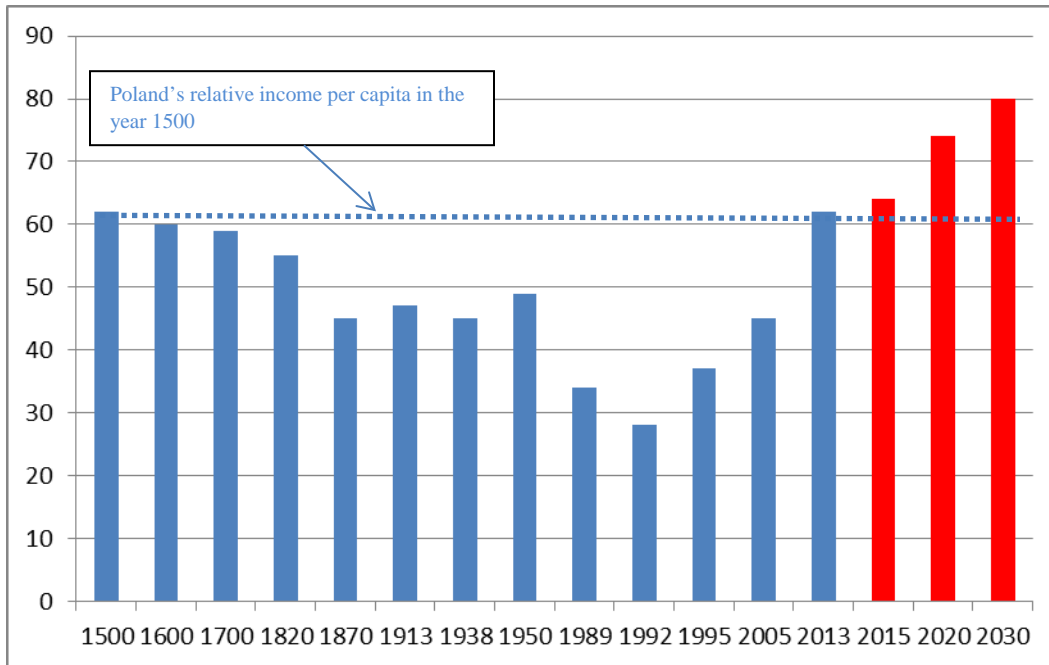
Source: PWC (2013)

Similarly, Goldman Sachs, an investment bank, projects that by 2030 Poland and other countries of Central and Eastern Europe should grow by at least 2 percentage points per year faster than EU-15. By 2050, Poland's income per capita would only be 15% lower than in EU-15, but higher than in, for instance, Spain (Zsoldos and Zadornova 2008).

Before critically looking at these long-term projections, it is important to note that according to all the projected growth scenarios, by 2030 Poland's relative income would reach around 80 percent of the EU-15 level of income (roughly based on the average of all four projections), exceeding the highest historical level recorded in the 16th century (which, as discussed earlier, ranged between 60-70 percent of the income level in Western Europe).²³ The living standards and the level of well-being would be even closer to that in Western Europe than what income alone would suggest. Such achievement would herald the arrival of Poland's new Golden Age (Figure 9).

²³ In fact, given that income inequality in the past was much higher than today, with most income and wealth concentrated in the hands of a small elite, while the rest of the society barely survived, today's median incomes in Poland are already much higher than ever before. Clark (2007, p. 14) argues that "in in preindustrial agrarian societies half or more of the national income typically went to the owners of land and capital, in modern industrialized societies their share is normally less than a quarter".

Figure 9: Projected GDP per capita in Poland until 2030, EU15=100



Source: own calculations based on Maddison (2010) and Eurostat, projections for 2013-2030 based on an average from the EC (2012), OECD (2012), PWC (2013) and Zsoldos and Zadornova (2008).

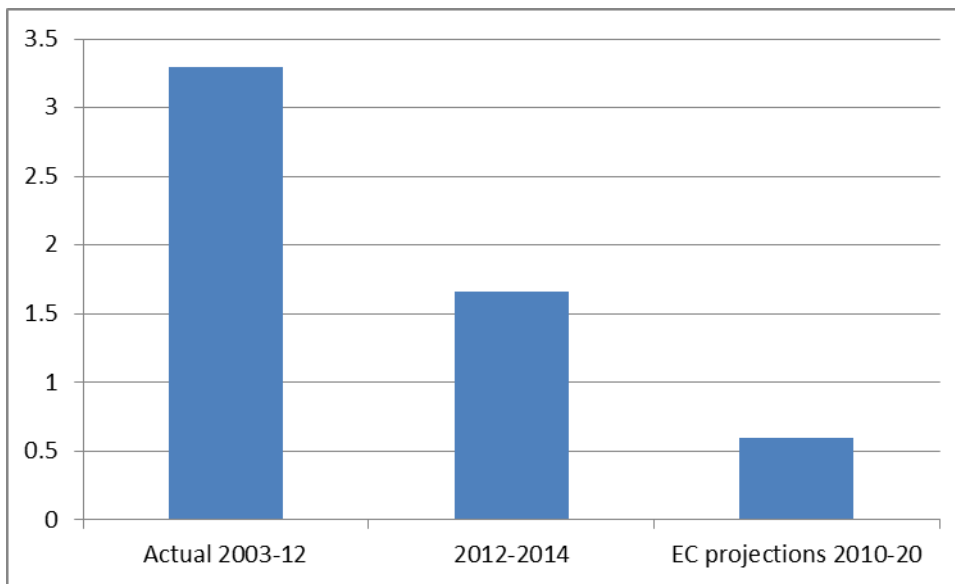
Upside risks to the projections

There are strong reasons to believe that Poland's economic performance in the future may again surprise on the upside, as it repeatedly did in the past, including during the global crisis. The pace of Poland's convergence with the West could therefore actually be faster than projected by the forecasters, particularly the European Commission. Thus, Poland's new Golden Age would arrive even sooner. Let us look at the following arguments.

First, the European Commission's projection seems to be somewhat pessimistic. It assumes that the speed of Poland's convergence will slow dramatically already in the ongoing decade 2010-2020 to only 0.6 percentage points a year relative to the euro zone (Table 1). This stands in stark contrast to the fact that Poland's average speed of convergence in the last decade amounted to 3.3 percentage points a year. Even more importantly, during 2012-14 the pace of convergence is likely to amount to 1.7 percentage points a year, almost three times faster than the EC's projections (Figure 10). Given that the demographic decline is projected to start only after 2020, the major reason for the projected long-term growth slowdown (more

on it below), it is not clear what would drive such a dramatic deceleration in the speed of convergence. Assuming that Poland's pace of convergence would slow to only 1.5 percentage points annually, with Poland's GDP per capita growing at 3 percent on average until 2020, Poland's income per capita relative to the euro zone would reach 70 percent by 2020, 8 percentage points more than in 2013.²⁴ This is in line with Poland's National Development Strategy 2020, which assumes achieving 74-79 percent of the EU-27 level of income (69-73 percent of the euro zone level of income) in 2020.

Figure 10: Speed of Poland's income convergence with the euro zone, actual versus projections, in %-points per year



Source: Own calculations based on Eurostat and EC (2012). Eurostat projections for 2013 and 2014.

Second, the EC report assumes that Poland's pace of convergence will decline mostly owing to negative demographic trends. These show that because of population ageing and continued low fertility (at 1.4 in 2011, below the natural replacement rate of 2.1), Poland's working population will decline quite dramatically by more than 20 percent in the next forty years, undermining economic growth.

²⁴ To put it in perspective, Poland's GDP per capita relative to the euro zone increased by 18 percentage points during 2002-12, from 43 to 61 percent.

However, demographic projections, while correct in a static scenario, are not likely to be correct in a dynamic scenario.

Specifically, and most importantly, demographic projections give no allowance for immigration, even though the past experience of developed countries strongly suggests that Poland is likely to become a magnet for immigration in the near future. This is especially so given the projected 3 billion increase in the global population by 2060 mostly in developing countries, who will be keen to emigrate, growing fatigue with immigration in Western Europe, and rising attractiveness of Poland in terms of the level of income and the quality of life, especially to culturally similar citizens of Eastern Europe (Ukraine, Belarus and Moldova).²⁵

Rising income and quality of life in Poland could also, especially if supported by new policies on return emigration and repatriation, attract almost twenty million people of the Polish diaspora living abroad, including two million Poles, who emigrated to Western Europe after the EU accession (Ministry of Foreign Affairs 2013).

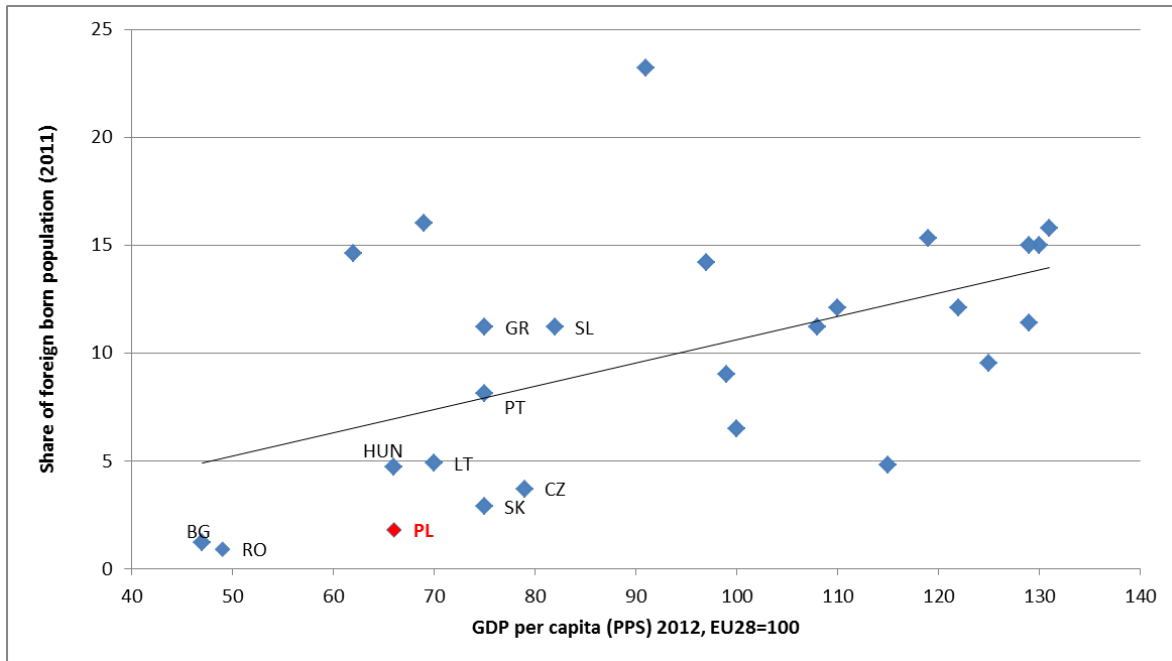
Increased immigration would not only upend the current demographic projections, but would also likely increase fiscal revenues, enhance innovation, and safeguard and/or increase competitiveness by helping to keep wage growth in line with growth in productivity (especially when the low saving and investment levels mitigate the potential for labor-saving investment).²⁶ The latter would be particularly welcome when Poland joins the euro zone to avoid the erosion of competitiveness experienced earlier by Southern Europe.

²⁵ Migration from these countries is already happening: Brunarska, Grotte and Lesinska (2012) quote studies, which estimate that there are 250-300 thousand Ukrainians working in Poland, legally and illegally.

²⁶ To give an example, if Poland started to attract as many immigrants as the Czech Republic during 2005-2010, its immigrant population would be growing by 250 thousand a year (or 5 million in the next 20 years), wreaking havoc to all demographic and economic growth projections.

Today, Poland is a clear outlier in terms of inflows of migration. Foreign born population in Poland is barely existent, representing only 1.8 percent of total population, considerably below the EU-27 average of 6.5 percent, as well as below its regional peers, Czech Republic (3.7 percent) and Hungary (4.7 percent) (Figure 11). If Poland followed the footsteps of Portugal, Greece or Slovenia, and there are no clear reasons why it would behave any differently from them, within the next decade or so it should attract additional immigration of around 6-9 percent of total population or almost 3 million of new inhabitants.

Figure 11: Share of foreign born population as percent of total population relative to income per capita, 2011-2012



Source: Own calculations based on Eurostat

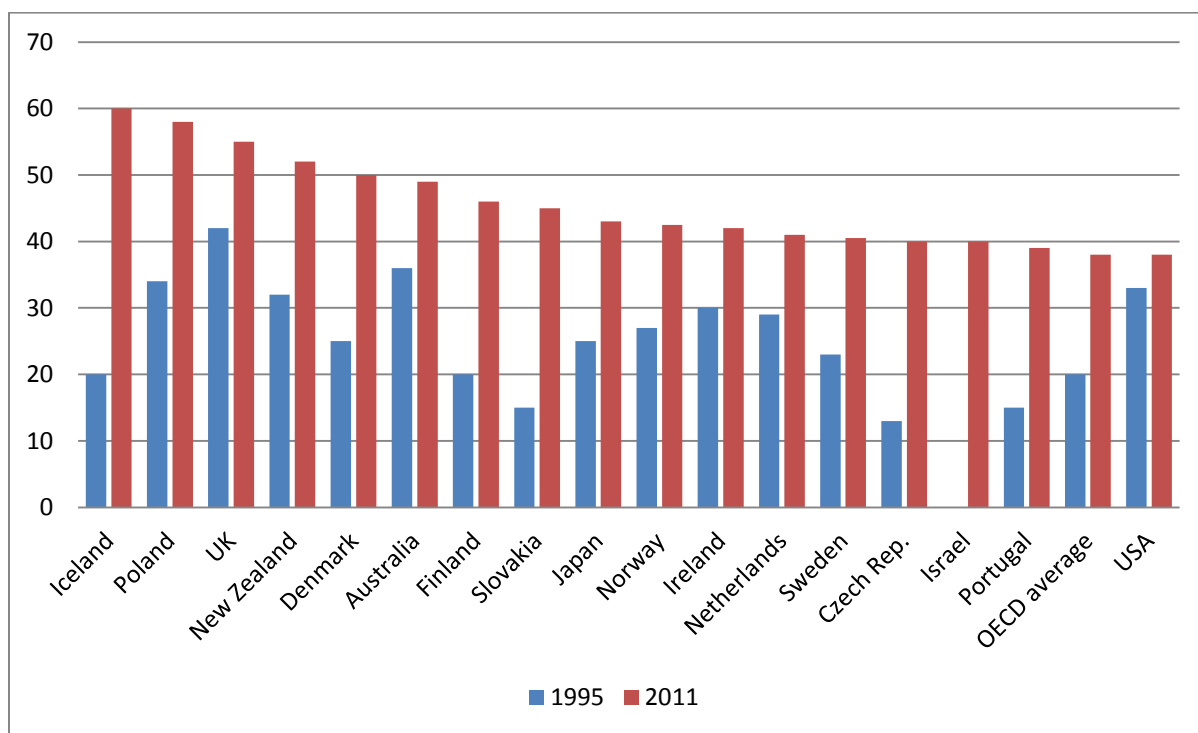
Third, economic growth models underestimate the historical importance of Poland's accession to the European Union in 2004, especially as a long-term anchor for the rule of law, secure property rights, high quality of institutions, political and social stability, and--thanks to NATO membership--also military security, which Poland has sorely missed throughout its history. All these factors are widely believed to undergird long-term economic growth (Landes 1998, North 2005, Acemoglu, Johnson and Robinson 2005). EU membership is especially valuable, as it limits the scope for growth-damaging populist economic policies,

which—as abundantly shown in many other countries in the past—are ultimately the biggest danger to long-term growth²⁷. For instance, it is quite difficult or almost impossible for an EU member state to undermine the independence of the central bank, discriminate against imports from other member states, or provide undue advantage to local business interests. The rule of law is also firmly established, as any breaches of the rule of law could be invalidated by the European Court of Justice, whose decisions are legally binding in member countries. The last decade has already shown that the institutional straitjacket and EU-supervised rule of law largely works.

Fourth, economic growth models tend to also underestimate the unprecedented improvement in the quality of education in Poland. Today, almost 60 percent of young adults (aged 18-24) in Poland are enrolled in tertiary education, the second highest ratio among the OECD countries, and up from only 35 percent in 2000 (Figure 12) and around 10 percent in 1989 (Ingłot-Brzek 2012). The stock of people with tertiary education increased from only 6.5 percent in 1988 to almost 25 percent in 2012 and will continue increasing, eventually reaching 60 percent when the current generation will fully replace older generations. The quality of education is also high: according to OECD PISA ranking which measures functional literacy of 15-year olds, Poland was ranked in the 14th place overall among all the developed OECD countries, beating Germany, France and the United States (OECD PISA 2011). This was achieved despite the fact that Poland spends less than half on education per student in PPP terms than its more developed peers (OECD 2013).

²⁷ Lin (2009), among many others, argues that in the long-term the quality of economic policymaking is ultimately more important than geographical location, natural endowments, or the quality of institutions.

Figure 12: First-time tertiary education graduation rates, 1995/2000 and 2011, in percent



Note: Tertiary-type A university education. Year 2000 instead of 1995 for Poland, UK, Australia and Ireland.

Source: based on OECD (2013, chart A3.2)

Fifth, Poland will continue to receive historically unprecedented support from the EU Structural Funds, boosting growth by up to 1.0 percentage points a year until at least 2020.²⁸ In the next EU financial perspective 2014-2020, Poland will be the single largest beneficiary of EU funds, receiving around 106 billion euro (in 2011 prices, including payments under the EU’s Common Agricultural Program, CAP), equivalent to more than 2 percent of GDP a year. This new EU budget support will in fact exceed the value of the post-Second World War Marshall Plan for Europe, which Poland missed for political reasons, worth around 85-

²⁸ Poland’s Ministry of Regional Development (2013) estimates that in 2012 EU funds have increased Poland’s growth by 0.8 to 1.1 percentage points, raising the level of GDP relative to the non-EU accession scenario by 6.2-16.1 percent. In 2013, the growth contribution is projected to amount to 1.2-2.1 percentage points and to around 0.7 percentage points in 2014-15.

90 billion euro in today's prices.²⁹ Further, although smaller, funds will also be available during the next EU budget perspective 2020 onwards. The EU funds will continue to spur the most productive investments in infrastructure, human capital, innovation and ICT.³⁰ Poland will hence remain one of the largest construction sites in Europe, with new infrastructure that Poland has never had before and that it could not have afforded on its own. For example, Figure 13 shows the unprecedented improvement in the road infrastructure in Poland in the last decade: between 2000 and 2013 the length of highway and express roads has increased fivefold.³¹ These investments, together with further large outlays on the highway, railway and—most importantly—broadband network will spur economic growth for decades to come.³² If Poland has managed to become Europe's growth champion without good roads, railways and broadband, would it not continue to grow fast with them?

In addition, Poland's convergence will be supported by further integration of the EU markets, especially in the service sector, helping Poland to benefit from its low cost, but high quality of services, and introduction of free trade zones with countries like the neighboring Ukraine, which will favor Poland more than other EU members. On the whole, ever closer integration of Europe will continue to be a blessing for Poland.

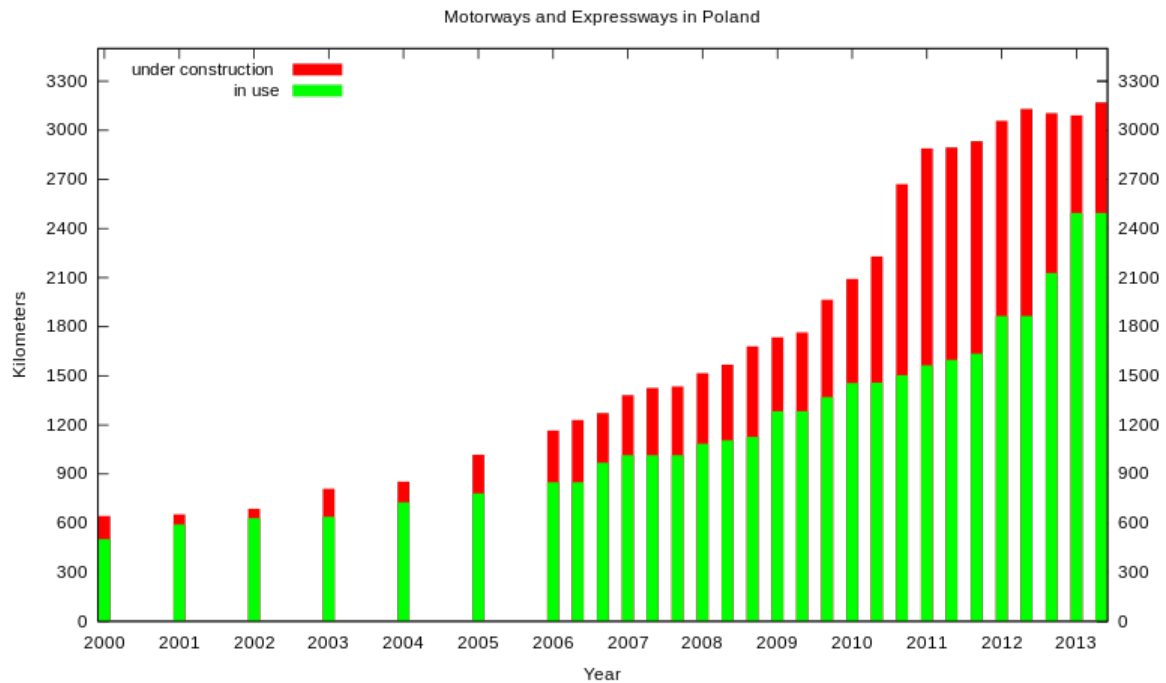
²⁹ Calculated as the original cost of around \$13 billion times inflation from 1950/51 until 2012 based on <http://www.usinflationcalculator.com/> and divided by the current US\$/euro exchange rate.

³⁰ Although there may be some doubts as to the efficiency of some of the EU-financed spending, especially on innovation (World Bank 2012).

³¹ Poland actually never had a good road infrastructure: Osęka (2011) argues that in 1939 in Poland only 7% of all roads were modern, paved with asphalt or concrete, and suitable for automobile use, out of the total of 340,000 kilometers. This compares with 100% in Denmark, 90% in France, 70% in Germany and more than half in Czechoslovakia. In addition, all good roads in Poland were only single lane, not two-lane highways. There was not a single modern road connecting any two major cities. The average travel speed was about only 40 km per hour.

³² See also an entertaining animated account of changes in the highway infrastructure in Poland between 1932 and 2012: http://pl.wikipedia.org/wiki/Plik:Historia_budowy_autostrad_i_dr%C3%B3g_ekspresowych.gif and plans until 2016: http://stadiony.klszarak.org/sec_a_s.swf

Figure 13: Improvements in the highway and express way infrastructure between 2000 and 2013, in kilometers



Source: <http://pl.wikipedia.org/wiki/Plik:PL-Motorways-pl.svg>

Sixth, growth models are blind towards soft, but nonetheless critically important factors such as culture, values or the determination to get ahead and catch up with the West.³³ Specifically, growth models compare oranges to apples when they do not reflect the fundamental difference in Poland between the old, post-Soviet generation and the new, European generation in terms of work ethos, command of English, personal integrity, entrepreneurship, educational aspirations, social trust, openness, internet use or civic engagement³⁴.

The old, 50+ generation has throughout their lives acquired skills, which allowed them to survive under communism, but have proven difficult to thrive in capitalism. Kafkaesque

³³ Landes (1998), North (2005) and Clark (2007) among others emphasize the importance of culture, values and the social environment for long-term economic growth. As Albert Einstein said, “not everything that counts can be counted, and not everything that can be counted counts.”

³⁴ Crunching numbers in growth models without adjusting for the generational difference could be likened to comparing old Soviet and American computers: the same name, but quite a difference in performance.

incentives, lack of innovation, acceptance of mediocre quality, lack of focus on customer service and satisfaction, and a guarantee of employment promoted a skill set and mentality that are not the same as those needed today in modern European capitalism.³⁵ The work ethos also suffered, following in the footsteps of earlier generations.³⁶

In turn, the young generation of Poles today is probably the most competitive Polish generation ever. Anecdotal and formal evidence (Social Diagnosis 2011, 2013, Boni 2011) suggests that the new generation is more materially motivated, more assertive, and more focused on success than the old generation. It is also much more travelled, cosmopolitan, urban, open-minded and European. It is also significantly better educated: only 13 percent of the generation aged 55-64 has tertiary education relative to 39 percent for those aged 25-34, one of the largest differences among the OECD countries (OECD 2013). The new generation is also widely perceived to be among the most productive and hard working in Europe, in reversal of old stereotypes.³⁷

In addition to all these factors, Poland's growth is also likely to be supported by the low level of social inequality and high social mobility³⁸, the planned adoption of the euro³⁹, diversified exports (with no single industry representing more than 10 percent of total exports), strong economic links with Germany, and a healthy, utility-like banking sector. Moreover, Poland

³⁵ As the old saying under communism went, "we pretend to work, they pretend to pay us".

³⁶ Post-1945 attitudes to work were in fact not much different than those before 1945: Jacob (1826, p. 30, 65, 79-80) argues that XIX century Polish serf farm workers tended to be negligent, lazy, and drunken, arguably because of lack of incentives to be productive when providing services to their noble masters for free. The latter, in turn, looked down on any sort of business as not in line with their social status. Involvement in commerce "would be treated by others as having lost their caste and descended to a lower rank of society" (Jacob 1828, p. 79). As a result, the commanding heights of the Polish economy were occupied by foreigners or by the Jewish minority (Jacob, *ibid.*). These anti-business attitudes among the gentry largely persisted until 1939, undermining Poland's growth and convergence. Turnock (2006, p. 10) argues that before the Second World War "the contributions of the aristocracy to modernization were seen more through military service and administration than through enterprise". Morawski (2011) adds that during the 15th and 16th century nobility could be forfeited if a nobleman was engaged in "city activities", trade and business. The law was repealed in 1775, but the social stigma of being pro-business remained.

³⁷ See, for instance, *The Economist*, "Another kind of health tourism", June 8, 2013, arguing that "the first thing Polish immigrants brought to Britain (...) was an admirable work ethic".

³⁸ As regards some anecdotal evidence for social mobility, hardly any of the leading economic policy makers in Poland in the last 25 years has come from a privileged social background.

³⁹ According to pre-euro crisis estimates of Schadler et al. (2006) and the National Bank of Poland (2009), owing to higher trade, higher investment, lower risk premia, and the elimination of currency exchange costs, adoption of the euro would increase GDP growth in Poland by between 0.3 and 0.7 percentage points annually.

could also benefit from the recently discovered large deposits of shale gas, which could ensure its energy independence. It is also less exposed to the potentially negative effects of global warming (World Bank 2013).

Finally, Poland seems to have already avoided the “middle-income trap”. The concept, developed by Gill and Kharas (2007), is based on a finding that growth in many developing countries slows and convergence falters when they reach a middle-income status as the simple growth reserves largely based on cheap labor dissipate. While the very existence of the trap is disputed (The Economist, 2013b), the good news is that Poland, with an income of \$21,000 PPP per capita in 2012, seems to have already passed the “trap”, which Eichengreen, Park and Shin (2013) estimate may exist in countries with an income level per capita at around \$15,000-16,000 PPP. In addition, Poland is already considered a “high-income” country by the OECD and the World Bank, as mentioned earlier.

Downside risks

Granted, economic projections for Poland also face a number of downside risks, which could slow the speed of convergence. These include low saving and investment rate, low level and low efficiency of spending on innovation, low labor participation rate, still rather unfriendly business climate or a low level of social trust.

As regards saving and investment, Poland does not save enough to support high investment rates and to insulate the economy from future crises by lessening reliance on import of foreign capital, especially of the fickle portfolio capital. Countries that have successfully caught up with developed countries, mostly in Asia, saved and invested on average more than 30% of GDP (World Bank 2008). However, Poland’s saving and investment rate is much lower: during 2004-2011, the average saving rate amounted to only 17% of GDP, while investment to only 21% of GDP, below the EU average and most regional peers (Geodecki et al. 2013).

The low level and efficiency of spending on innovation and R&D is also an issue. Despite a significant rise in EU-financed spending supporting public and private R&D effort, investment in R&D in 2012 increased to only 0.7 percent of GDP, much below the EU average. The private sector spent less than one-third of the total amount, in contrast to Western Europe, where the roles of the private and public sector in R&D spending are reversed. Even more worryingly, whatever is spent on R&D and innovation does not seem to translate into increased output of innovative products and services (World Bank 2012). As a result, Poland continues to lag behind most EU countries in innovation rankings. For instance, the 2013 Innovation Union Scoreboard classifies Poland only in the 24th place in the EU-27 in terms of the overall innovation performance.

Finally, despite much recent progress, the business climate is still far from friendly. While Poland has managed to become the fastest reformer worldwide in the World Bank's Doing Business 2013, it is nonetheless still classified in the 55th place overall, below the EU average.

While it is not clear to what extent all these risks could negatively affect the growth rate in the long-term, notably since they have not prevented Poland from becoming the European growth champion in the last twenty years, it would still be pragmatic to base economic policy on the assumption of the unfolding of a worst case scenario and focus on mitigating the downside risks to growth.⁴⁰ Such economic policy could be based on a re-adjusted growth model, such as the "Warsaw Consensus" recommended by Piatkowski (2011), which *inter alia* argues for increasing domestic savings, raising the employment rate, enhancing innovation, controlling real exchange rate appreciation, diversifying exports and maintaining largely conservative financial sector supervision, while increasing focus on policies to promote well-being and happiness, going beyond GDP only.

⁴⁰ See also IMF 2013, World Bank 2011, 2012, Gill and Raiser 2012, OECD 2012, Geodecki et al. 2013, Social Diagnosis 2013, and Van Ark and Piatkowski 2009 for additional discussion of the growth challenges facing Poland and policy recommendations.

V. CONCLUSIONS

Poland has likely never had it so good before. The distance between Poland's and Western Europe's level of income, quality of life, and perceived happiness now seems to be the shortest since at least the 16th century.

Based on the current projections of independent forecasters such as the European Commission or the OECD, Poland will likely continue converging with Western Europe until at least 2030, reaching around 80 percent of the Western European level of income, the highest in the country's history. This convergence will be supported by Poland's strong economic DNA, which helped it become the European champion of growth in the last twenty five years. The quality of life in Poland will also likely continue rising, reaching levels even higher than what the level of GDP per capita alone would suggest.

The economic rise of Poland would herald the arrival of its new, 21st century Golden Age, for the first time since the 1500's. The rise would help shift Poland from the European economic periphery, where it languished for centuries, towards Europe's economic, political and social center. Together with the increasing prosperity of the rest of Central and Eastern Europe, the continent would become more balanced than ever before, breathing with both of its Western and Eastern European lungs.

As for suggestions for future research, it would be useful to focus on the lessons from the Polish successful growth model for other countries in the region and emerging markets outside Europe. It would also be important to research the implications of the rise of Poland (and of the rest of Central Europe) on the functioning of the European Union and—through the EU, still the largest economy in the world—of the global economy. These implications would likely include an acceleration of EU enlargement, especially to Eastern Partnership countries, further deepening of the EU internal market, notably in services, and renewed focus on open markets and global free trade.

The Polish Golden Age, however, will not arrive automatically. Policy makers will need to stay committed to keep the convergence going, especially as it will get more difficult to grow

as Poland closes the developmental distance to the West. It will be critical to inter alia focus on increasing domestic savings, raising labor participation, keeping a competitive exchange rate and opening labor markets to immigration. Poland will also need to start to innovate rather not only imitate. The unprecedented historical chance of catching up with the West should concentrate minds, promote ever stronger leadership and strengthen commitment to reforms among all political forces. Catching-up with the West is a marathon, not a sprint, and the cooperation of all Poles will be needed to achieve it. Poland has a rendezvous with history that it should not miss.

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