

Aslund, Anders

Article

Poland: Combining Growth and Stability

CESifo Forum

Provided in Cooperation with:

Ifo Institute – Leibniz Institute for Economic Research at the University of Munich

Suggested Citation: Aslund, Anders (2013) : Poland: Combining Growth and Stability, CESifo Forum, ISSN 2190-717X, ifo Institut - Leibniz-Institut für Wirtschaftsforschung an der Universität München, München, Vol. 14, Iss. 1, pp. 3-10

This Version is available at:

<https://hdl.handle.net/10419/166522>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

POLAND

POLAND: COMBINING GROWTH AND STABILITY

ANDERS ÅSLUND*

Poland used to be the unfortunate battle ground at the center of Europe. Norman Davies (1982, xvi) named his great history of Poland *God's Play-ground* because of all the disasters that had befallen the nation. This phrase “can be aptly used as an epithet for a country where fate has frequently played mischievous tricks”. In the 18th century, Germans talked about *polnische Wirtschaft* (Polish economy), meaning bad economy, while Swedes used the term *polsk riksdag* (Polish Parliament) for political disorder.

The nation lost all independence from 1795 until 1918. In the interwar period it suffered from hyperinflation and economic stagnation. During World War II, it lost six million citizens, the largest share of any country. After the war, the Red Army occupied the country, and the Soviets guaranteed communist dictatorship until 1989. Poles reacted by emigrating in their millions.

Today everything has changed. Since 1989, Poland has become a consolidated democracy. In January 1990, Poland opted for a radical and comprehensive program of economic reforms that quickly created a market economy. From 1990 until 2011, Poland experienced the greatest economic growth in the former Soviet bloc in Europe by a wide margin. It more than doubled its GDP in real terms (see Figure 1). In 1997, Poland became a member of the North Atlantic Treaty Organization, and in 2004 it joined the Euro-

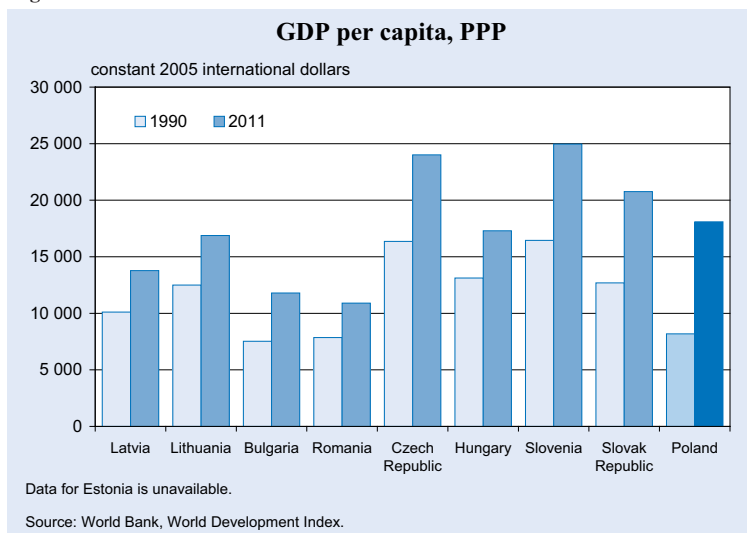
pean Union (EU). No post-communist country, possibly with the exception of Estonia, has been as successful as Poland (Åslund 2012). Never have Poles enjoyed two decades of such peace, freedom, welfare and happiness.

The aim of this article is to review major economic developments and compare Poland with its closest peers – the Czech Republic, Slovakia, and Hungary, as well as the three Baltic countries (Estonia, Latvia, Lithuania) and occasionally with Slovenia, Romania and Bulgaria, which together form the Central and Eastern European 10 (CEE10), the ten former communist countries that became members of the EU in 2004 or 2007. Throughout this paper unweighted averages are used, giving each country equal weight regardless of its size.

Poland's relative economic development from 1990 to 2012 falls into three different periods. In the post-communist transformation, 1990–2000 Poland persistently recorded superior growth. During the global boom from 2001–2007 Poland experienced lower growth than other countries in the region and in the global financial crisis of 2008–2012, Poland outperformed once again (see Figure 2). The final section assesses Poland's strengths and weaknesses facing the future, and suggests what its government should do.

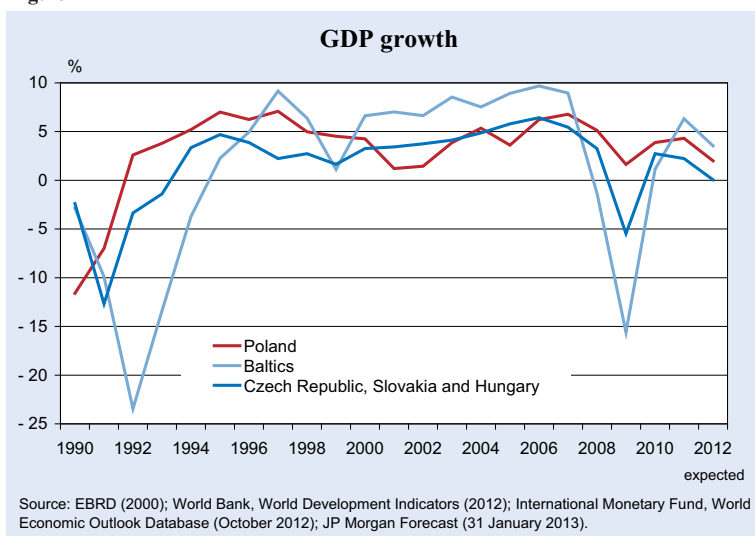


Figure 1



* Peterson Institute for International Economics.

Figure 2



Leszek Balcerowicz's shock therapy worked

The secret of Poland's success lies in the immediate post-communist period. In June 1989, Poland held the first partially democratic elections in Eastern Europe. The opposition could not contest most seats, but it swept those open to it. In September 1989, Poland's first post-communist government was formed.

In spring 1989, Warsaw Professor Leszek Balcerowicz wrote a summary reform program, which included privatization, liberalization of foreign trade, currency convertibility, and an open economy. In September, he became minister of finance and, in effect, the country's chief economic reformer. Before the reform government was formed, the last communist government had liberalized food prices, which led to inflation of some 40 percent in the month of September and 54 percent, or hyperinflation, in October. A financial stabilization program had to be added to the radical structural reforms. Balcerowicz was assisted by his advisors Harvard Professor Jeffrey Sachs and his collaborator David Lipton, who had experience of defeating hyperinflation in Latin America (Balcerowicz 1992; Sachs 1990 and 1993; Sachs and Lipton 1990).

Balcerowicz's program prescribed early, radical and comprehensive reform. It was reminiscent of the 'Washington Consensus', but it went further. Its four tenets were macroeconomic stabilization, deregulation, privatization, and a reinforcement of the social safety net. The big novelty was its timing: to implement all tenets simultaneously, because there was a window of opportunity in the early democratization of 'extraordinary politics' that had to be utilized

(Balcerowicz 1994). Detractors nicknamed this big bang 'shock therapy'.

The outstanding feature of the Balcerowicz program was radical and comprehensive deregulation designed to create a real market economy almost overnight. This radical liberalization was implemented on 1 January 1990. It consisted of four measures: far-reaching price liberalization, a truly radical external liberalization, the breaking up of state concerns and associations into single enterprises and the liberalization of domestic trade.

The most radical measure was a legal act allowing anybody to sell anything anytime in any place at any price to anybody. As a result, the central squares in Warsaw and other big cities were flooded with people who started selling whatever they wanted to get rid of and soon this informal trade transformed into ordinary enterprises. Within two years, the most successful street traders had become shopkeepers. The external deregulation was also highly radical, instantly rendering the *zloty* convertible on current account and abolishing import tariffs, which was popular since it alleviated most shortages (Balcerowicz 1992; Åslund 2012). Poland saw the massive development of new, small enterprises (Johnson 1994). This large-scale deregulation was probably the main reason why Poland suffered less transitional output decline than any other post-communist country and started growing after only two years.

A second reason for Poland's early success was that it received timely and sufficient international assistance. Too often, Poles tend to forget how important that was. From the outset, the West displayed a broad consensus on Poland, gathering in the G24 (the then 24 members of the Organization for Economic Cooperation and Development) and pledging to finance the stabilization fund, which was connected to an International Monetary Fund (IMF) standby program. This strong Western support for Poland was relatively cheap. The upfront cost was about 1.6 billion US dollars (Sachs 1993).

A third cause of the success was related to favourable preconditions. Poland already had a large private sec-

tor in its communist era, primarily in agriculture, but also in urban industries. Therefore, Poland and Hungary were the only post-communist countries with reasonable legislation for the regulation of private enterprise (Åslund 1985). Moreover, because of the country's openness to the West, millions of Poles had migrated to the West at some time during their working lives and returned to their homeland bringing back new skills.

A fourth factor was macroeconomic stabilization, which succeeded, but it was not completely straightforward. The government tried to pursue a strict policy of macroeconomic stabilization, but it encountered serious political opposition, forcing it to soften macroeconomic policy. Monetary policy eased in the summer of 1990, and the budget deficit ballooned to 7 percent of GDP in both 1991 and 1992, leading to high inflation of 44 percent in 1992. As a result, Poland failed to comply with its IMF program in 1991.

The most interesting part of the macroeconomic stabilization was the exchange rate policy. In 1989, the Polish exchange rate fluctuated wildly, inspiring the idea of pegging the *zloty* to the US dollar, which functioned as Poland's informal currency. The government was able to peg the exchange rate thanks to the international financing, and the peg served as a nominal anchor for price stabilization. It was presented as a temporary measure, and when Poland was forced to devalue in May 1991, it adopted a 'crawling peg'. Unlike the Czech Republic and Slovakia, Poland avoided years of an overvalued exchange rate depressing the growth rate in this way.

While these four factors were decisive, Poland's problems should not be understated. It had patently unstable governments, changing about once a year. Its parliamentary elections in October 1991 resulted in a complete fragmentation with no less than 29 parties entering parliament. Instead of consensus there was vitriolic debate, questioning every element of the country's economic policy. Early attempts at large-scale privatization largely failed, leading to a large share of the big enterprises remaining in state hands. As a result, Poland saw much less foreign direct investment in the 1990s than its neighbours to the south.

Poland nevertheless succeeded in transforming itself into a market economy and achieving financial stabilization because it had done enough. In 1992, after

only two years of contracting output, it was the first post-communist country to return to economic growth, and from 1993–2000 its average growth rate was 5.4 percent a year (see Figure 2), superior to that of all other countries in the region. What at the time was widely perceived as an excessively tough stabilization policy turned out to be a wise precaution.

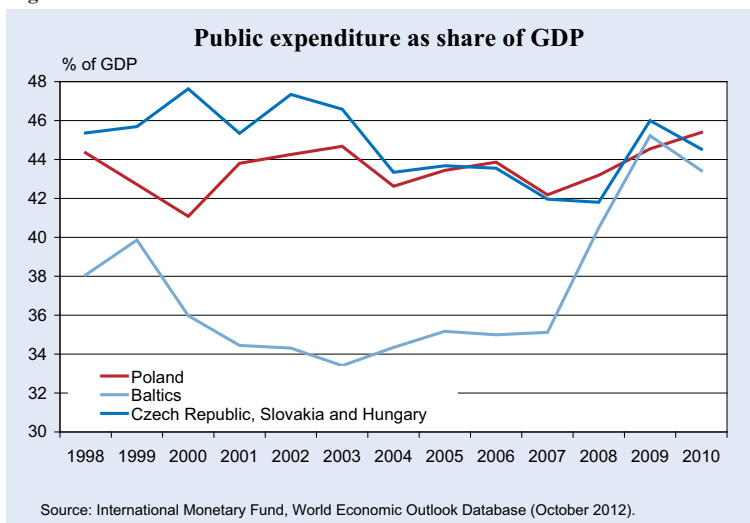
No boom or overheating in 2001–2007

For the post-communist world as a whole, the years 2001–2007 represented unprecedented economic growth. The average annual growth rate of the former Soviet countries was 9 percent. The exception was Central Europe, particularly Poland, which had an average growth rate of merely 4.1 percent (see Figure 2). What had gone wrong? Poland was still the poorest country in Central Europe, so its catching-up potential remained significant. Moreover, in 2004 Poland joined the EU together with seven former communist countries, which added to the growth of all of them, because it opened up large markets, the EU offered substantial subsidies and the region attracted more foreign investment.

There are three major explanations for Poland's slow growth during this period. Firstly, it failed to undertake a second generation of economic reforms. Secondly, the budget deficit expanded because of excessively high public expenditure. Thirdly, the National Bank of Poland (NBP) responded with strict monetary policy and inflation targeting.

While Poland had been a reform leader in 1990, it pursued few reforms in the early 2000s. It had already carried out most of the liberalizing reforms demanded by the EU. Complaints were common about red tape and poor infrastructure, while corruption was comparatively limited. A major concern was that social transfers were too large. The original reform government was actually at fault. It had been so afraid of unemployment and social suffering that it had doubled pensions in 1990. In the mid-1990s, Poland was stuck with the highest public pension expenditure in the world at 16 percent of GDP (Goleniowska 1997). Public expenditure as a whole persisted at an excessive level of some 44 percent of GDP, about as bad as in the rest of Central Europe, and far higher than in the Baltic states (Figure 3). Poland had higher public expenditure than it could finance. As a result, Poland ran an excessive budget deficit in the range of 4–6 percent of GDP from

Figure 3



2001–2006, doing as badly as the other Central European countries. In 2007, Poland finally moved within the Maastricht budget ceiling of 3 percent of GDP (Figure 4). The prime cause of the reduced budget deficit was increased state revenues thanks to high economic growth. The government introduced a ceiling of gross public debt at 55 percent of GDP, which it put into the constitution.

In 2001, Leszek Balcerowicz became Chairman of the NBP, a post that he retained until 2007. He changed Poland's monetary policy. The NBP compensated for the government's loose fiscal policy with very strict monetary policy. Inflation had stayed in the double-digits until 1997, but it was brought down from 8.6 percent in 2000 to 0.7 percent in 2002. Meanwhile, Poland moved from a dirty float to inflation targeting. The NBP maintained positive real interest rates when most other countries failed to do so. It leaned against

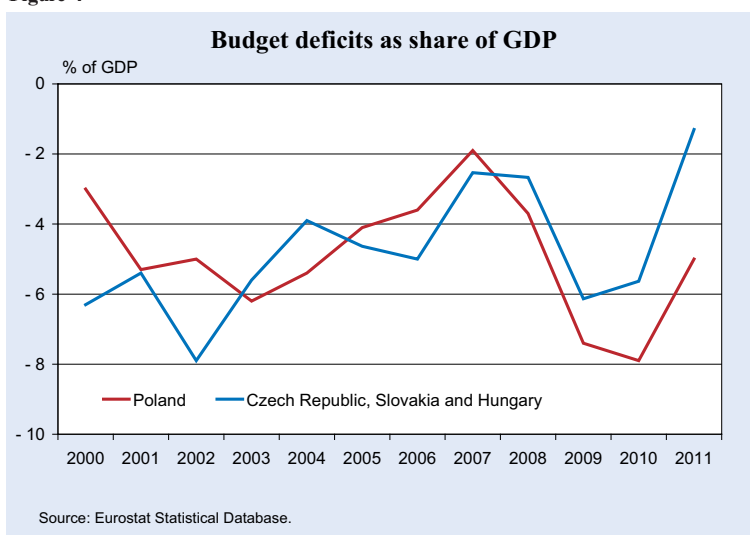
the wind, when it perceived that asset prices, notably housing prices, were rising too steeply. The NBP restricted domestic credits in foreign currencies through a combination of bank regulation and floating exchange rates, which made people aware of currency risks (Balcerowicz 2009). Simultaneously, the Czech Republic made the same policy switch, and Slovakia did so as well. From 2003–2008, these three countries with inflation targeting saw their nominal effective exchange rates rise by 30–40 percent, which impeded capital inflows and inflation (Bakker and Gulde 2010). In 2007, only Poland and Slovakia in this region had an annual inflation rate of lower than 3 percent. Poland had escaped overheating.

Ironically, Jiri Jonas and Frederick Mishkin (2005, 409) criticized Poland and the Czech Republic for their strict monetary policies: “undershoots of the inflation targets have resulted in serious economic downturns that have eroded support for the central bank in both the Czech Republic and Poland”. But the Czech and Polish central bankers successfully contained asset bubbles.

Continued growth during the global financial crisis in 2008–2012

Poland stands out as the greatest success story in the crisis, being the only EU country to grow in 2009 (by 1.7 percent). It experienced no recession and only saw a slight economic contraction in the last quarter of 2008. This compares very favourably with the average euro area contraction of 4.1 percent in 2009, while the CEE countries suffered to an even greater degree. The Czech Republic, Slovakia, Hungary, and Bulgaria faced decreases of around 5 percent of GDP, while Romania experienced a decline of 7.2 percent, Slovenia saw a 7.8 percent downturn, and the Baltics had a 14–18 percent fall.

Figure 4



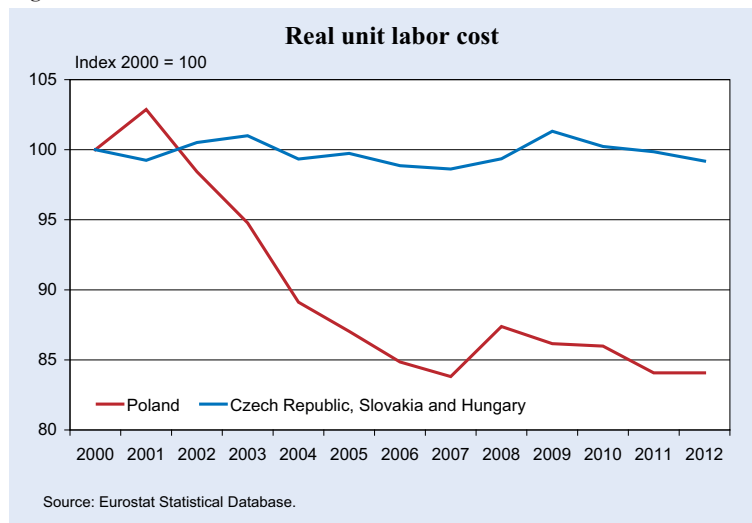
Poland grew solidly at about 4 percent a year in 2010 and 2011, while seeing a slowdown to probably 2.0 percent in 2012. As a result, it experienced twice as much growth from 2009 to 2012 than the next fastest growing EU country (Sweden). This looked quite miraculous. The explanation appears to be Poland's good macroeconomic starting position, its floating exchange rate with controlled wage costs, and fiscal stimulus (see Drozdowicz-Biec 2010). The IMF (2013, 1) summarized the causes of Poland's success suc-

cinctly: "Poland's economy performed well throughout the crisis, due to very strong economic fundamentals and effective counter-cyclical policies".

The main reason for Poland's success lay in its previously strict monetary policy. The country did not suffer from any overleveraging, toxic assets, housing bubble or banking problems. Since Poland had not allowed itself any overheating, it had not had any real boom, and no bust was needed. With its strict monetary policy, Poland could get away with a comparatively large budget deficit. Its relatively large domestic market contributed to financial stability.

A second cause of Poland's outperformance was the floating exchange rate. From October 2008 until January 2009, the Polish *zloty* depreciated against the euro by about one third, more than any other EU currency (ECB 2012). In January and February 2009, this posed great concern, because Polish banks suffered from a currency mismatch, and the international financing of the banks became dangerously expensive. However, in February 2009 the *zloty* started appreciating, and this potential bank crisis never came to fruition. Thus, the large depreciation caused no serious harm. Instead, Poland could benefit greatly from European economic integration because it had lower costs than the neighbouring euro countries, notably Germany. Poland is deeply entrenched in the German supply chain, and German companies with production or subcontractors in Poland could maintain full production, there while reducing elsewhere. Curiously, since 2002 Poland has experienced sharply falling real unit labour costs in comparison with its Central European peers. This decline gained fresh impetus with the depreciation in 2008–2009, and Poland has

Figure 5



managed to maintain quite low real unit labour costs (Figure 5). This factor has attracted little attention and appears to have been an outcome of a disciplined labour market.

A third explanation for Poland's strong performance is that it could afford a fiscal stimulus and looser monetary policy when the credit crunch started. Its budget deficit rose sharply from 1.9 percent of GDP in 2007 to 7.9 percent of GDP in 2009. Automatic stabilizers accounted for most of this fiscal stimulus. The government started fiscal consolidation relatively late, in 2011. The main measures taken were to transfer five percentage points of the payroll in pension contributions from the private to the public pension fund, and to implement an increase in the value added tax of one percentage point. On the expenditure side, public wages were frozen and discretionary expenditure was capped (World Bank 2012).

Despite having done so well, the credit crunch in the winter of 2008/09 raised Polish concerns about limited access to international liquidity, as nobody offered Poland any swap credits. Therefore, the nation turned to the IMF and became the first customer of a precautionary 'Flexible Credit Line' facility of 20.5 billion US dollars in May 2009 after the crisis had abated. Poland never drew on this credit line, but the argument ran that it functioned as an insurance policy. It has been renewed repeatedly. Its actual impact is not evident.

Poland's economic performance during the global financial crisis was very impressive. While economic policy was competent, no specific new reforms were carried out. Poland benefited from its good policies in

the past, leaving it with sufficient fiscal space and suitable exchange rate adjustment, as well as from its deep economic integration with the EU and the diversification of its economy.

The future: competitiveness under threat

In October 2011, the coalition government led by Donald Tusk and dominated by his Civic Platform was re-elected for a second term, something unprecedented in post-communist Poland. In 2012, Poland, with a GDP of half a trillion dollars, was the 20th biggest economy in the world measured in purchasing power parities. In GDP per capita at purchasing power parities, it ranked 45 within the world and 22 in the EU (IMF 2012).

Growing complacency based on excellent economic performance raised concerns that Poland was living on past achievements, while the future looked less bright. The country had eaten up its fiscal space, and the Tusk government did not undertake any significant structural reform during its first term. A sense was growing that more reforms were needed. Four areas stood out. Firstly, Poland needs pension reform. Secondly, the economy remains overregulated. Thirdly, the country has an extensive and intrusive bureaucracy. Finally, Poland still has more state corporations than the other Central European countries (EBRD 2010). In view of the nation's advances, the quality of its higher education looks unsatisfactory. Poland's two top universities in Cracow and Warsaw just scrape onto *The Times Higher Education* World University Rankings 2012–2013. A fear arose that Poland was getting stuck in a middle-income trap, which typically occurs at around a GDP per capita of 15,000 US dollars, that is, Poland's level (Eichengreen *et al.* 2011). As economic growth started declining, Poland no longer looked so outstanding.

Atypically of a re-elected government, the Tusk administration started off with an ambitious reform agenda. The financial crisis had prompted the EU to adopt its new fiscal compact, which Poland promulgated on 20 February 2013. The European Commission had adopted a much stricter attitude to fiscal deficits, and Poland's budget deficit was no less than 7.8 percent of GDP in 2011. By EU definitions, its public debt had risen to 56 percent of GDP in 2012, close to the Maastricht limit of 60 percent. In July 2009, the ECOFIN Council decided that an excessive deficit situation existed in Poland and set a deadline

for correcting it by 2012 (ECB 2012). Expenditure had to be cut, but revenues had to be raised as well. The government has proceeded with its fiscal consolidation through several measures. Wages for government employees were frozen, and the real growth of central government discretionary spending was capped, while the value-added tax was temporarily raised (World Bank 2012; Krajewski and Krajewska. 2011). The aim was to reach a budget deficit of 2.9 percent of GDP in 2012, but the preliminary outcome was a deficit of 3.5 percent of GDP.

The re-elected Tusk government first carried out a pension reform. In the midst of the crisis, the government had cut the contribution going to mandatory private pension savings from 7.3 percent of the payroll to 2.3 percent in order to reinforce the public pension fund. However, in May 2012 the government adopted a new pension reform. Its main aim was to reduce pension expenditure by gradually raising the retirement age for men from 65 to 67 years and for women from 60 to 67 years. This increase applied also to certain professional groups subject to early retirement. Another part of the reform was to gradually restore the share of contributions going to private mandatory pension savings (Jarrett 2011; EBRD 2012).

The other major reform is a deregulation of professions. Poland had 380 regulated professions, the largest number of in the EU. In the spring of 2012, the government insisted on 49 being deregulated immediately and 180 later on. This caused great opposition from the professions in question, but the government anticipated that hundreds of thousands of new jobs could be created, and Poland's labour force participation is very low at 65 percent (The Economist 2012).

Poland's business environment is too cumbersome. In the World Bank and International Finance Corporation's (2013) ease of doing business index, Poland ranks 55 out of 185 countries, a considerable improvement of 19 steps from 2012. Yet, Poland is still ranks below all but three of the post-communist EU members (the Czech Republic, Bulgaria and Romania) – see Figure 6. The four greatest administrative obstacles are: dealing with construction permits (ranking 161), getting electricity (137), starting a business (124), and paying taxes (114). All these procedures are impermissibly cumbersome and need to be facilitated, which in turn requires a reduction in state bureaucracy.

Figure 6



Poland has ample higher education, and the number of university students has more than doubled since the end of communism, but the quality of its higher education is not very high. Substantial reforms and international integration are needed to raise the quality of higher education, while financing is satisfactory.

The Polish government needs to focus on the two critical questions of whether it will be able to provide a sufficiently good business environment and higher education with research, so that these sectors can thrive on innovation through sound research and development. That means escaping the middle-income trap.

On 12 October 2012, Prime Minister Tusk made his annual programmatic speech to the Polish parliament, the *Sejm*. He rightly stated that: “the priority is to maintain economic growth”. However, the means he suggested were somewhat surprising. His first proposal was a new state development bank. He also suggested that various state corporations should carry out large-scale infrastructure investments in energy, highways and railways. He mentioned the need to deregulate more and to speed up court proceedings in commercial cases as well as a new liquidation law and a new building code, but these issues were only mentioned in passing. The need for better higher education and research was ruefully missing, and the essence of the speech was reliance on state corporations, or ‘national champions’ as they are increasingly called in the increasingly dirigiste government parlance. The prime minister was dissatisfied with capital flight by the predominantly foreign-owned banks in the country. These corporations should be privatized,

rather than prioritized. Privatization is proceeding, but very slowly.

The big outstanding policy question is Poland’s eventual euro accession. Given that Poland did so well with its floating exchange rate regime during the crisis, neither the public nor the government is in any hurry to adopt the euro. Although the euro enjoys minimal popularity at present, the government is remaining true to its commitment to eventually adopt it. The government emphasizes the need to be completely ready for the euro and it is currently discussing euro adoption in 2017 or 2018.

Poland has had a wonderful run through the global financial crisis. Its government has managed its financial affairs impressively. For the future, however, it is not obvious that Poland will continue to outperform other countries, such as the neighbouring Baltic republics, the Czech Republic, or Slovakia. Its business environment is slightly worse and its public debt is higher. It has more state corporations than the others. Its higher education is hardly better than that of its neighbours. Its public expenditure and taxes are about as high as in the Czech Republic and Slovakia, and much higher than in the Baltics. Its only significant advantage would probably be more and better entrepreneurship stemming from the rampant competition in the early transition. Poland presumably needs to undertake significantly more energetic reforms in order to stay ahead of the pack in the future.

References

- Åslund, A. (1985), *Private Enterprise in Eastern Europe: The Non-Agricultural Sector in Poland and the GDR*. New York: St. Martin’s Press.
- Åslund, A. (2010), *The Last Shall Be the First: The East European Financial Crisis, 2008–10*, Washington DC: Peterson Institute for International Economics.
- Åslund, A. (2012), *How Capitalism Was Built: The Transformation of Central and Eastern Europe, Russia, the Caucasus, and Central Asia*, 2nd Edition, New York: Cambridge University Press.
- Bakker, B.B. and A.-M. Gulde (2010), *The Credit Boom in the EU New Member States: Bad Luck or Bad Policies?*, IMF Working Paper 10/130.
- Balcerowicz, L. (1992), *800 dni skontrolowanego szoku* [800 Days of Controlled Shock], Warsaw: Polska Oficyna Wydawnicza BGW.
- Balcerowicz, L. (1994), “Understanding Postcommunist Transitions”, *Journal of Democracy* 5, 75–89.

Balcerowicz, L. (2009), "Is the Present Crisis the Moment for the Euro's Global Emergence? Panel discussion with Antonio de Lecea, Leszek Balcerowicz, C. Fred Bergsten, Erkki Liikanen, and Lawrence H. Summers", in: Pisani-Ferry, J. and A.S. Posen (eds.), *The Euro at Ten: The Next Global Currency*, Washington DC: Peterson Institute for International Economics, 181–197.

Davies, N. (1982). *God's Playground: A History of Poland*. Oxford: Oxford University Press.

The Economist (2012), "Donald Tusk's Government, Once Polished, Is Looking a Little Ragged", 7 April.

Drozdowicz-Biec, M. (2010), *Reasons Why Poland Avoided the 2007–2009 Recession*, Paper presented at the 30th CIRET Conference, New York, October 2010.

European Bank for Reconstruction and Development (EBRD, 2000), *Transition Report 2000*, London: EBRD.

European Bank for Reconstruction and Development (EBRD, 2010), *Transition Report 2010*, London: EBRD.

European Bank for Reconstruction and Development (EBRD, 2012), *Transition Report 2012*, London: EBRD.

European Central Bank (ECB, 2012), *Convergence Report* May 2012, Frankfurt: ECB.

Eichengreen, B., D. Park and K. Shin (2011), *When Fast Growing Economies Slow Down: International Evidence and Implications for China*, NBER Working Paper 16919.

European Commission (2012), *Eurostat Statistical Database*, <http://epp.eurostat.ec.europa.eu>.

Goleniowska, S. (1997), "Delayed Reforms of the Social Policy", in: CASE Center for Social and Economic Research (ed.), *Economic Scenarios for Poland*, Warsaw: CASE Center for Social and Economic Research, 31–42.

International Monetary Fund (IMF, 2012), *World Economic Outlook* online database, October, <http://www.imf.org>.

International Monetary Fund (IMF, 2013), *Republic of Poland: Arrangement under the Flexible Credit Line and Cancellation of the Current Arrangement – Staff Report*, <http://www.imf.org/external/pubs/cat/longres.aspx?sk=40264.0>.

Jarett, P. (2011), *Pension Reform in Poland and Elsewhere: The View from Paris*, CASE Center for Social and Economic Research Paper 425.

Johnson, S. (1994), "Private Business in Eastern Europe", in: Blanchard, O. J., K.A. Froot and J. D. Sachs (eds.), *The Transition in Eastern Europe*, Chicago: University of Chicago Press, 245–290.

Jonas, J. and F.S. Mishkin (2005), "Inflation Targeting in Transition Economies: Experience and Prospects", in: Bernanke, B.S. and M. Woodford (eds.), *The Inflation Targeting Debate*, Chicago: National Bureau of Economic Research.

Krajewski, S. and A. Krajewska (2011), "Fiscal Policy in Poland in the Times of Crisis – Origins and Consequences", *Comparative Economic Research* 14, 79–100.

Sachs, J.D. (1990), "What Is to Be Done?", *The Economist*, 13 January.

Sachs, J.D. (1993), *Poland's Jump to the Market Economy*, Cambridge, MA: MIT Press.

Sachs, J.D. and D.A. Lipton (1990), "Poland's Economic Reform", *Foreign Affairs* 63(3), 47–66.

The Times Higher Education (2013), *World University Rankings 2012–2013*, <http://www.timeshighereducation.co.uk/world-university-rankings/2012-13/>.

Tusk, D. (2012), *Drugie Exposé* (The Second Exposé), Kancelaria Prezesa Rady Ministrów, <http://www.kprm.gov.pl>.

World Bank (2012), *Poland Partnership Program Snapshot*, Washington DC: World Bank.

World Bank (2013), *World Development Indicators*, online database, <http://worldbank.org/>.

World Bank and International Finance Corporation (2013), *Doing Business 2013: Smarter Regulations for Small and Medium-Size Enterprises*, Washington DC: World Bank.