



Towards a Competitive Poland

**How Can Poland Climb
the World Economic
League Table?**



TOWARDS A COMPETITIVE POLAND

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Tomasz Geodecki
Jerzy Hausner (ed.)
Aleksandra Majchrowska
Krzysztof Marczewski
Marcin Piątkowski
Grzegorz Tchorek
Jacek Tomkiewicz
Marzenna Weresa

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KRAJOWA IZBA GOSPODARCZA

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The Economy and Public Administration Foundation
ul. Rakowicka 10B/10
31-511 Kraków
www.fundacja.e-gap.pl
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Translation:
Jasper Tilbury MITI MCIL (tilbury@kr.onet.pl)
Proofreading:
Anna Chrabąszcz

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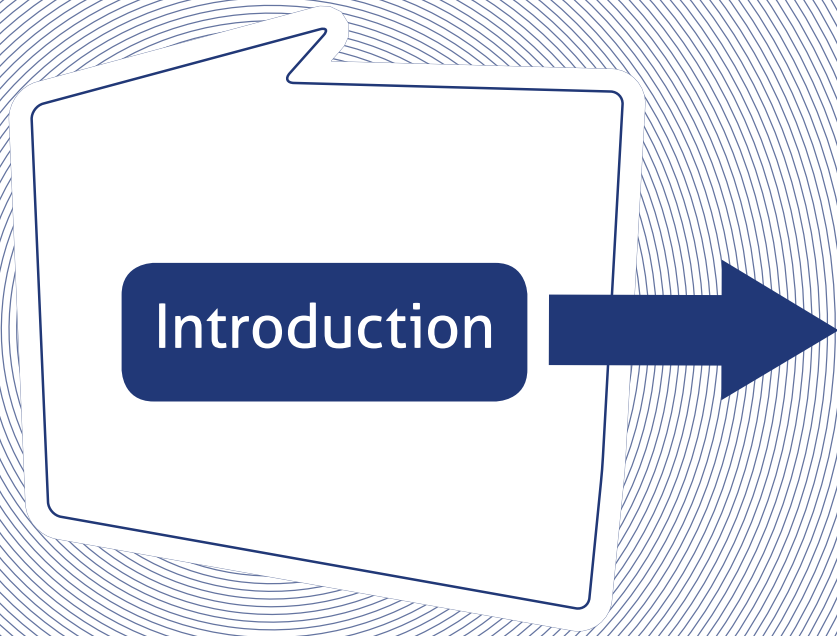
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Introduction



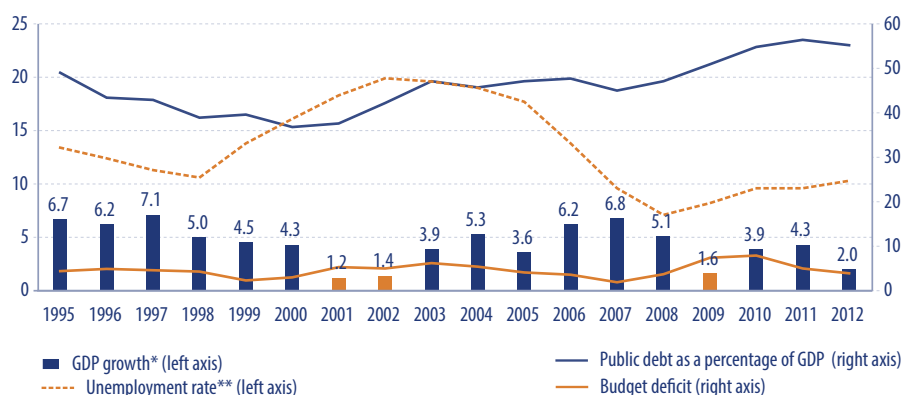
Until 2012, Poland was one of those European economies that had felt the effects of the global crisis only mildly. Now, though, the economic situation has begun to deteriorate fairly rapidly. The question arises, therefore, as to whether we were genuinely good in the previous period or just lucky. We believe it is not possible to answer this question unequivocally. There is no doubt that in many respects the Polish economy has proved resilient to the crisis, but we have also had a considerable amount of good fortune. However, this is not what we wish to consider here. There is another question that we consider more important, namely, whether our success has been determined more by cyclical factors or by structural ones. It appears to us that in the years 2009–2012 there was a beneficial interweaving of cyclical and structural factors – yet with the former weighing more heavily. To put it differently: our ‘crisis-proofing’ fundamentally arose from the skilful, day-to-day responses of enterprises, households and public authorities to changes in the global environment that were very unfavourable to the Polish economy. Each of these three kinds of entities drew upon its resources and capacity, with the effect that domestic demand and economic growth were maintained for a long period of time. Everything would have surely fallen perfectly into place if the world economic crisis – and especially the European economic crisis – had not persisted, if it had played out in a manner similar to ‘classical’ cyclical crises. An economic recovery in Western Europe would have lifted the Polish economy along with it – and from a relatively high level.

But the revival did not come and the world crisis continues. This has become a ‘stubborn slowdown’ – a structural and systemic collapse. The methods used to manage the crisis, both standard and well-known, and new and unconventional, are failing. This is perhaps because they chiefly concern cyclical factors and are an immediate response to the here and now. They do not, therefore, penetrate the fundamental structural causes of the crisis nor lead to essential institutional change. What is more, even when these short-term measures are applied, it is with considerable delay and hesitation. They are applied inconsequentially and indecisively.

It is clear to us that the causes of the current problems are fundamentally external and cyclical. Yet not exclusively so. The Polish economy has its structural weaknesses, which are primarily manifested in the tendency for each cyclical slowdown to be accompanied by high unemployment and sharp rises in the budget deficit and level of public debt.

Although they do not lead to regression, successive cyclical slowdowns, which in a market economy cannot be avoided, restrict our economic growth and reveal serious structural problems. In the end we find a way to deal with them, and the economy once again begins to grow rapidly. It is becoming increasingly clear, however, that the periods of acceleration are becoming shorter and less dynamic. Although we reach ever-higher levels, each time we do so we follow a lower trajectory. We still cope well with cyclical problems, but we pay insufficient attention to solving structural ones. In short, although we remain strong we are losing growth potential. Figure 1 provides empirical evidence for this claim.

Figure 1. Poland's Main Macroeconomic Data, 1995–2012



* Periods of rapid growth of the Polish economy (above 2% of GDP per year) are marked in blue; periods of slow growth (below 2% of GDP per year) are marked in orange.

**after 2004, the Labour Force Survey unemployment rate.

Source: International Monetary Fund.

The present crisis is more revealing of our weaknesses and shortcomings precisely because it is so persistent and structural. This time around, the cyclical responses to it may prove unsatisfactory and less effective. All the more so, in our view, in the face of the growing contradiction between short-term (cyclical) and medium- and long-term (structural) interventions. The interventions that have beneficial effects now may be harmful later on, and in this respect they function similarly to performance-enhancing drugs.

A number of conclusions may be drawn from the above:

1. Even though there has been no recession in the period under analysis, macroeconomic parameters (unemployment rate, budget deficit) are behaving in this time of slowdown as they do in highly advanced economies during times of recession.
2. The growth rate in successive periods of acceleration is becoming lower and lower. This is associated with the rate of potential GDP growth: in 2008 potential GDP grew by 5%, while in 2012 it fell back to 3% and will remain at this level until 2015 (data from the National Bank of Poland inflation forecast of March 2013).
3. The situation on the labour market and in the public finance sector is deteriorating very rapidly during the slowdown. There is a certain temporal asymmetry here: the situation on the labour market and in the public finance system improves far more slowly in a period of recovery than it worsens in a slowdown.
4. The decline in the growth rate to around 2% not only signifies slower growth and a slower narrowing of the development gap with highly-advanced economies, it is also triggering a whole series of dangerous processes:
 - unemployment is quickly rising with all its negative social (greater exclusion), political (increased support for populist parties) and economic (lower consumption) consequences;

- the worsening condition of the labour market (high unemployment, low wage growth) may stall the convergence of income levels between Poland and Western Europe, which will lead to further emigration and further weaken the growth potential of the Polish economy;
- the state of public finances is rapidly deteriorating: the deficit and the ratio of public debt to GDP are both increasing, which, apart from the obvious greater macroeconomic instability, produces further negative outcomes;
- the combination of low growth and a high deficit very quickly leads to an increase in the public debt to GDP ratio, which means exceeding the prudence thresholds established in the Act on Public Finance; this, in turn, translates into a need for swift fiscal adjustment of a structural nature, which inevitably produces pro-recessionary effects;
- the structure of the fiscal adjustment, which is being made under time-pressure, is not optimal: it is mainly investment expenditure, which is decisive for economic potential and which has the highest demand multipliers, that is being cut;
- there is thus a risk of not using the EU resources for the 2014–2020 budgetary period due to, first, insufficient public funds at the central and local government level to co-finance projects and, second, to the lack of options for additional, transitional borrowing associated with the pre-financing of projects.

Our major problem can be summarised as follows: cyclical effects combined with a disturbing trend of decline in the rate of potential GDP growth. This causes a reduction in the negative output gap and an increased share of the structural deficit in the overall budget deficit at the expense of the cyclical deficit. As a result, fiscal policy must be tightened in order to return to equilibrium. This mechanism of pursuing restrictions in fiscal policy as a remedy for a declining rate of potential GDP growth may not be successful if the fiscal savings are made from development expenditure that impacts on potential GDP growth – as is the case in Poland.

The continuing global crisis and the resulting problems for the Polish economy should make us aware of the urgent need to introduce structural and systemic measures that will not only revive the economy but set it on a path to high long-term growth, raise its potential growth rate, use our development potential more fully and – as a consequence – not only maintain but increase the competitiveness of the Polish economy to ensure that it has an enduring presence at the economic and political core of the European Union. Although in achieving this task Poland can take advantage of its EU membership and of EU structural funds – as well as look to many models and examples from abroad – it is plain that we must ourselves formulate a concept and strategy of further socio-economic growth. All the more so given that the market economies of various states are becoming increasingly divergent depending on the relationship between the structure and strength of a given economy, on its capacity to restructure itself, and on the strength of its major economic centres. In Europe it is the German economy that has become this centre and main point of reference. Operating in an environment such as this, it is not possible to copy any foreign economic model wholesale. We must generate our own model so that we can meet the challenges and eliminate the threats. Only in this way, but within the context of international interdependence, will Poland be strong and have its own voice.

It is therefore necessary to take measures that can protect the Polish economy from a slowdown in the rate of productivity growth and from the so-called middle income trap.

To accomplish this requires the introduction of comprehensive and coordinated measures, which are defined in the literature as new industrial policy or as new structural policy (Rodrik 2006). This terminology refers to the overall effect of institutional changes that create a set of stimuli and, at the same time, an environment conducive to improving an economy's competitiveness.

Our report sets out the directions these policy measures are taking. So diverse are they that it is necessary to include as great a number of institutions as possible to ensure that improving the global competitiveness of the Polish economy is the foremost priority not only of entrepreneurs, but also of trade unions and of the entire political class (as has been the case for so many years in Germany). It is, after all, mainly on this that our economic growth and therefore civilizational development will depend.

The report concerns the competitiveness of the Polish economy. However, it was prepared in the hope that it might be of interest to readers from other Central and East European countries. The comparisons made between Poland and the Visegrad countries (Czech Republic, Slovakia and Hungary) as well as Bulgaria and Romania lead to the conclusion that many elements of the social, economic, and institutional environment which determine competitiveness and attractiveness to investors are developing in a similar fashion. This means that it is possible to speak not only of geographical similarities. We believe that the observations and assessments presented in the report will also be useful and interesting to readers in those countries where the processes of transformation and European integration are not as advanced as in Central Europe.

The report was written by the following team of experts: Dr Tomasz Geodecki (Cracow University of Economics), Prof. Jerzy Hausner (project leader, Cracow University of Economics), Dr Aleksandra Majchrowska (Łódź University), Prof. Krzysztof Marczewski (Warsaw School of Economics, Institute for Market, Consumption and Business Cycles Research), Dr Marcin Piątkowski (Kozminski University), Dr Grzegorz Tchorek (Warsaw University), Dr Jacek Tomkiewicz (Kozminski University), and Prof. Marzenna Weresa (Warsaw School of Economics).

We began work on the report in the second half of 2012. We presented its preliminary arguments and gathered opinions during a debate held on 24 January 2013 in the Chancellery of the President of the Republic of Poland which – we believe – enabled us to identify the most important development challenges facing Poland.

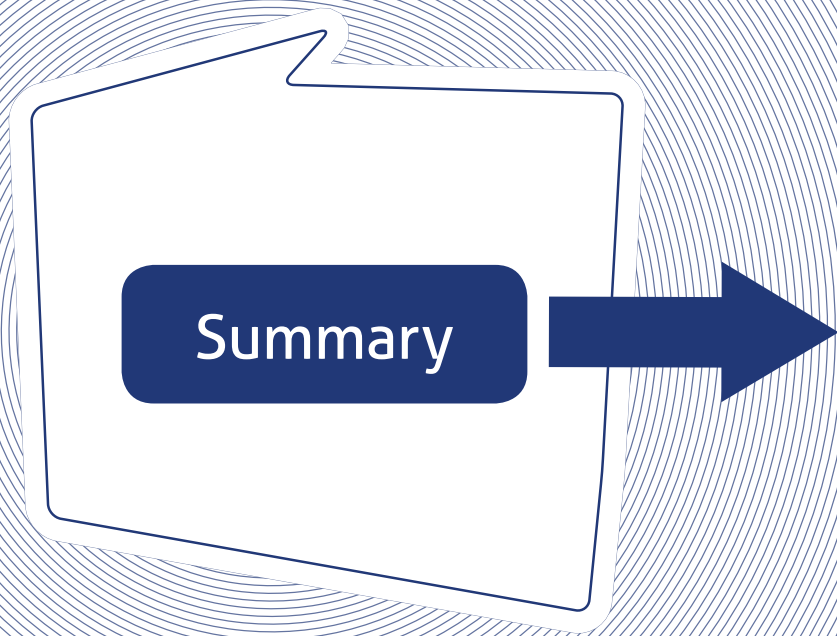
In preparing the report we drew upon various opinions and studies, including *Poland's Competitive Position in Industrial Design* by Dr Łukasz Mamica (Cracow University of Economics), *The Impact of the EU Climate and Energy Package on the Electricity Sector and the Competitiveness of the Polish Economy* by Dr Wojciech Szymła (Cracow University of Economics), and *The PPP Market in Poland* by Dr Irena Herbst, Tomasz Jagusztyn-Krynicki and Piotr Szewczyk.

We were also informed by the conclusions drawn during a series of economic debates organised by the Chancellery of the President of the Republic of Poland and by the individual opinions offered by economists who agreed to comment on the draft version of the report.

The report comprises three sections: section one offers a conceptual and methodological introduction; section two provides an extensive analysis of empirical data concerning the various aspects of the Polish economy's competitive position and potential; and section three sets out the development challenges facing economic entities and public authorities in Poland. The

report then concludes with key recommendations for public policy. In addition, the version available on the website contains an Annex with selected policy recommendations.

The report was prepared with the intention of provoking reflection and public discussion. We hope that our work will stimulate debate and that the various participants of this debate will not only respond to our arguments and conclusions but will also want to propose additional, specific solutions of their own. There is a form on the Polish Chamber of Commerce website (<http://kongresig.pl/pl/konsultacje-raportu/>) that readers can use to respond to the arguments put forward in the report and present their own proposed solutions. We would like to compile and comment on this feedback in the form of a supplement to the report, which will be presented in the autumn of 2013.





A solution to the present global crisis in the form of global mechanisms for international joint management will not appear soon. Instead, the way ahead lies via the measures taken by each state in respect of its own economy with international cooperation running in parallel. In this way, autarchic and protectionist solutions can be discarded and the outcomes required for open economies with the capacity to compete and to cooperate can be sought.

Economists are agreed that the state should create the conditions for enterprise growth. Opinions differ, however, as to how the notion of ‘conditions’ should be defined. For some people it simply means the shaping of the general conditions under which free markets and economies function. If this is so, they are certainly not in favour of structural policy, including – especially – industrial policy. We are convinced that the state cannot be responsible for the general conditions alone. Rather, it should also be responsible (in a way appropriate to the economy concerned) for the specific conditions that relate to clearly-defined structural weaknesses and key sectors. At the heart of the matter lies the distinction between three types of state intervention: enabling, facilitating and delivering. It is sufficient for some to regard state action as primarily a matter of enabling. We believe otherwise. We regard interventions of the second type as advisable and, in specific cases, interventions of the third type as permissible. It is not enough, however, simply to remove the barriers to enterprise development and allow enterprises to grow: it is also necessary to support their competitive capacity and help them to grow, that is, to pursue a new industrial policy.

Let's help
enterprises grow

Observing the motives for the investment decisions companies take shows that highly competitive economies are characterised by a relatively high share of large companies. Larger companies are more productive, more export-oriented, and more inclined to innovate. Exporters have more extensive resources, have diversified financial structures, are more open to the world (as manifested in inward and outward direct investment), and are more inclined to interact. Companies that are more productive also have a geographically diversified trade structure and are active on a greater number of markets.

Poorly diversified
export

The key idea in the debate over the new industrial policy is the ‘global value (added) chain’. This idea has sometimes been interpreted and understood in a traditional manner by assuming that the specific links in this chain tend to create greater value added – and especially so in the case of technology and sales. Those who favour this outlook recommend a conscious shift towards a more profitable position in the chain. In our view, this is a simplification. Deriving benefits (generating value added) does not exclusively depend on the type of activity conducted, but also on whether a company is better at a given activity that is essential in the chain of cooperation than its potential competitors.

It's important not just
what you produce, but
how you produce it

This means that both at the company and national level it is not necessary to do everything. On the contrary, it is necessary to specialise in something. But we must be genuinely good – if not excellent – at our own particular specialisation: so good that if our partners withdrew from cooperation it would be a significant loss to them. Such specialisation allows additional benefits arising from participation in international trade to be derived, which increase many times over thanks to the multiplier effect.

Institutional quality and operational efficiency are not our strong points

It is not only the question of where to intervene, but also of how to do so in such a way that public intervention strengthens rather than weakens competitive potential, that is fundamental to the new industrial policy. One thing is certain: such a policy can only be pursued effectively by a state with a high level of institutional quality and operational efficiency. One must concede that these characteristics are not among the strong points of the Polish state.

We need to develop a new strategy for European integration

It is becoming ever clearer that we are in urgent need of a new strategy for European integration that will become an element of long-term Polish foreign policy in the new global political and economic system that is gradually emerging from the protracted global crisis. We are convinced that economic competitiveness – as understood and interpreted by deciding how, with whom, and for what we wish to compete – should become the main axis of this strategy. It is also necessary in this context to take up the issue of joining the common currency. For this to be beneficial to Poland, the economy must be prepared for, and capable of meeting, significantly greater competitive demands. In this sense the pursuit of a medium-term programme of structural policy aimed at raising the competitiveness of the Polish economy is an essential component of the measures to be taken in order to enter the Eurozone. Adoption of the Euro should also be perceived as a significant factor in ensuring that the Polish economy remains highly competitive over the long term.

The changes in Poland's economic position in the world and the trend in its level of economic growth should be assessed positively. Slowly but surely, Poland is producing a greater proportion of the world's goods and services and the comparatively swift rate of economic growth is narrowing the development gap between it and the more advanced economies.

The level of labour productivity in Poland as expressed in GDP per person employed (at purchasing power parity) in 2011 was close to two thirds of the value for the countries of Western Europe. This was, however, also the result of the comparatively long hours worked by Polish employees and of lower prices. In nominal terms, however, Poland generated the equivalent of approximately EUR 10.00, that is, four times less than in Germany and three times less than in Spain or Italy.

The Polish economy is characterised by a certain conservatism with regard to what goods it exports and where. There is in this, though, a significant difference between companies with foreign capital (CFC) and companies with domestic capital (CDC). From the middle of the 1990s, the share of the former in Polish exports has risen continually. It exceeded 48% in 1998 and reached more than 57% in 2005. Over subsequent years it stabilised at a level of approximately 55%.

Of the more than 15,700 large and medium enterprises, only a little over 4,000 specialise in export, that is, they sell more than 50% of their production abroad. These are most often companies with foreign capital that produce export products of high import intensity within international (intra-corporate) chains of cooperation. This has a negative impact on the volume of value added generated by export.

Our position in the global value chain is high volume and low added value

There is a need to modernise the export offer of domestic companies in four directions: modernisation of the production process, modernisation of the product, modernisation of the company's position in the value chain, and modernisation of (or change in) the value chain itself, to which the company belongs. Polish companies have so far made progress mainly in the first two areas.

We are cheaper at assembly and tightening screws

The Polish labour market is reasonably flexible: entrepreneurs can adjust pay at the level of the company and the costs of dismissals and redundancies are relatively low. What is a problem, though, is the low level of utilisation of human resources. This translates into reduced production potential and – by reducing budget revenues and increasing outgoings – has a negative effect on public finances. If economic activity levels among Poles could be raised to those seen in Germany, GDP could grow by as much as 6%.

A measure of competitiveness is the productive use of our own labour resources

Polish foreign investment, though it represents just under 10% of the country's GDP, grew tenfold in 2004–2011. This is evidence that the country possesses the resources necessary for international expansion. The Polish economy's relatively healthy macroeconomic situation and the financial condition of its enterprises mean that in many cases companies have taken advantage of the crisis to bolster their presence on foreign markets. Furthermore, it cannot be ruled out that Polish enterprises, which are burdened by excessive administrative barriers, have taken the opportunity to conduct regulatory arbitrage by moving to more friendly institutional environments.

FDI inflows should be linked to our domestic manufacturing base

The expected depopulation of Poland is a consequence of changes in patterns of parenthood: although in 2010 the fertility rate increased to 1.38 per woman, we remain a long way from a value that would ensure generational replacement (2.10). One consequence of this unfavourable demographic tendency will be a loss of economic competitiveness: first, a shrinking internal market will reduce Poland's attractiveness as a place in which to invest and, second, the declining numbers of people of working age in relation to the numerous cohorts of retirement age will mean that labour will be burdened with the costs of maintaining older generations.

Poland is one of those countries that offers relatively low tax relief to those who have to bear the costs of bringing up children. Yet, as is shown by the reproductive patterns of Poles who have emigrated (to countries with well-developed welfare systems), material incentives are a significant factor when deciding how many children to have. Extensive emigration is a further factor reducing Poland's population. In 2004–2012, two million people left Poland: most were of reproductive and working age.

The state of the balance of payments provides little cause for alarm: the current account deficit does not exceed the level regarded as safe for macroeconomic stability. We can state in general terms that we do not face any serious imbalances that could threaten the competitiveness of the Polish economy.

Although the share of foreign debt by the criterion of place of issue is stable and comparatively low: 31.6% at the end of 2012 (data from the Ministry of Finance), the engagement of non-residents in the domestic market for Treasury securities has been increasing relatively quickly: its share grew from 34.4% in 2008 to over 54.5% by the end of 2012. This could be a worrying trend as it means that the process of managing public debt is dependent on the mood of world markets, which has recently been extremely volatile.

The configuration of the social insurance system has a fundamental influence on the future state of the public finance sector: policy in this area is clearly subordinated to current needs at the cost of future ones, which could generate problems over the long term.

The foundation of innovativeness is creativity-focused education

Poland is relatively low down the league table for innovation. According to the Innovation Union Scoreboard 2013, the country lay in twenty-fourth position among the EU-27 countries. We are faced, furthermore, with the phenomenon that low expenditure by companies on innovation is accompanied by low pay in manufacturing. In Poland, remuneration accounts for 45% of value added in manufacturing, which places it in the group of countries competing on costs. If low pay is maintained for an extended period, this could cause the country to become less attractive as a place to live. Only an increase in the innovativeness of the Polish economy will make it possible to raise productivity and at the same time increase the share of remuneration in value added. The favourable figures for the knowledge intensity of export are largely due to the innovativeness of foreign concerns that have transferred production to Poland rather than to the domestic R&D infrastructure.

Innovativeness leading to a higher share of remuneration in added value is key

The relatively high competitiveness of enterprises stems from consistently maintaining growth in the productivity of low-paid labour. Thanks to this, growth in real wages is moderate and does not undermine macroeconomic equilibrium. Keeping real wages in check is easier when there is a high level of structural unemployment. But this situation has its disadvantages as well as its advantages. We have, after all, considerable resources of labour, but we are not taking full advantage of them.

We are on a trajectory of low growth, falling into the middle income trap

The high growth in consumer demand that characterised the Polish economy in the past was an expression of consumer aspirations that had gone unsatisfied for many decades. These announced themselves with great force and intensity under the new economic and systemic conditions. They began to be satisfied on a mass scale, but mainly at the expense of falling savings and of households going into debt. The weakness of domestic consumer demand could become a new structural problem for the Polish economy and impede a return to high growth rates.

There is no doubt that the Polish economy finds itself at a turning point. Its growth to date has been associated with a sizeable inflow of foreign capital, which has delivered export growth, and with a high growth in household consumption made possible by a low propensity

to save and a readiness to go into debt. It will not be possible to continue with this pattern of behaviour. Either we will lose our hitherto competitive advantage in the shape of low manufacturing costs (especially labour costs), which will put the brakes on economic growth or, in order to maintain the growth dynamic, we will need to make deep structural changes in the economy and move towards knowledge-intensive and highly innovative sectors. This will take us into a different segment of global competition by both significantly reducing our consumption of raw materials and energy and by reducing the sensitivity of the economy to exchange rate fluctuations.

Participants in the trilateral social dialogue involving the government, trade unions, and employers' organisations are not capable of coming together to address development problems and instead remain focussed on their current interests. Discussions on issues that are important from the point of view of the Participants' narrow interests, such as, for instance, the representativeness of particular organisations, have gone on for years. But there is no debate about strategic questions. The government treats the dialogue as a useful form of consultation that commits it to nothing. It is perhaps true that the dialogue goes some way to reducing the risk of major social conflict, but it is certain that the Trilateral Commission is not a forum for debate devoted to formulating a structural policy that aims to maintain and increase the competitiveness of the Polish economy. What is more, there have been recent signs that the Commission is becoming a forum for the issues driving day-to-day political conflict, which does not augur well.

A reactive style of conducting politics, whose most important feature is to win and maintain power rather than to address and solve major social problems, or to pursue growth, is absolutely dominant in Poland.

The state's administrative system is ineffective. In practice, a bureaucratic-distributive system with numerous bad habits inherited from the command economy of the People's Republic of Poland is assuming an ever more distinct form. Public administration is reduced to inordinate reporting and ceaseless inspection. It is sustained by the absorption and distribution of EU funds. Subordination is driving out cooperation.

The state's administrative system is stagnating and is incapable of introducing essential institutional solutions. On the contrary, the bureaucratic dismantling of the institutional system is in progress. Its victims include local authorities. Where problems arise and dysfunctions come to light, the response is to enact further regulations, which are subsequently subject to a long series of chaotic amendments.

A comparative analysis of the various aspects of Poland's competitive position and competitive potential will enable us to identify and propose our most important recommendations. These are expanded upon in the next section of the report.

1. An improved climate for enterprise

It is essential to change the regulatory environment within which enterprises operate. This should rest on a freedom of economic activity act whose importance is underlined by being codified. For internal markets to be competitive, the economy must be further demonopolised.

Structural policy is dialogue followed by action, not a government document

A state dominated by labour organisations is not ready to respond to the challenges of the

Running a business in Poland carries a heavy burden of risk, whose source is the state itself and its administrative apparatus

2. New industrial policy

We need a selective and strategic industrial policy that increases enterprises' capacity to compete and does not concentrate on protecting our own economy. This should firstly concern sectors that generate high value added from exports.

3. Switching to a pro-innovation economy

The state's role will be to enable autonomous entities to innovate and to assist them in doing so. The central element is education, which will release individual creativity at all levels of learning. A change in the way higher education institutions are funded and a new, comprehensive regulation of intellectual property are required.

4. Structural reconfiguration of the labour market

Labour market policy must counteract the situation in which it does not pay to invest in raising the level of human capital and creative and entrepreneurial potential.

5. A significant increase in domestic savings

A higher level of domestic savings is essential to finance private investment rather than, as hitherto, primarily finance the public deficit. A simplified and more transparent tax system is fundamental to higher savings in the enterprise sector. To achieve growth in individual savings it is essential to end the period of uncertainty regarding the second pillar of the pension system and to introduce stronger tax incentives to participate in the third pillar.

6. The promotion of exports

A business-oriented foreign policy and diplomatic service is required, which will provide practical support for the foreign investments of domestic businesses. It is essential that efforts to promote the country's brand are coherent and coordinated.

7. A modern administration and an efficient state

It is imperative to counteract the domination of the state by professional and economic corporations on the one hand and the uncontrolled growth in the country's administrative structure on the other. It is especially important to streamline the justice system, to thoroughly modernise the government administration, to complete the third stage of local government reform, and to establish a national centre for strategic studies.

8. Partnerships for growth and a new formula for social dialogue

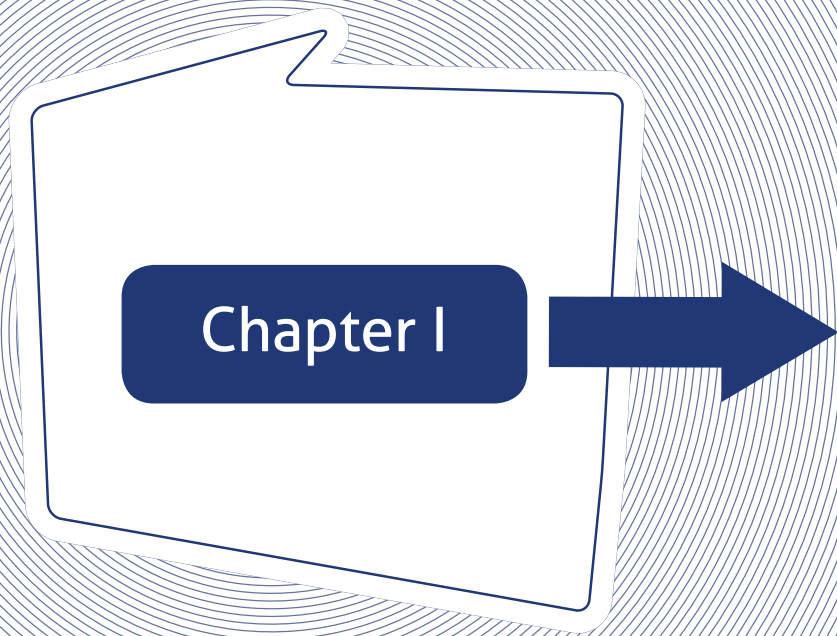
Effective dialogue with representatives of economic entities is essential. This should extend beyond the traditional exchange of information and consultation on projects; it should involve continuous learning, the interlinking of interests, and joint problem-solving. The dialogue conducted by the Trilateral Commission should be supplemented by a National Council for Economic Competitiveness headed by the Prime Minister.

9. The use of EU funds to promote growth

The use of EU funds cannot be an end in itself and instead should be placed clearly in the service of economic competitiveness. A thorough revision of the Public Procurement Act is imperative. In the light of the worsening financial situation of local authorities, it is important to ensure that public–private partnerships become widespread and to pay special attention to changing the political climate for cooperation between public authorities and the private sector.

10. A new national strategy for European integration

Faced with what in practical terms is the formation of a multi-speed Europe, Poland requires a new strategy for European integration. In this, the question of entry into the Eurozone must be closely aligned with measures to improve the competitiveness of the Polish economy.



Chapter I



The Competitiveness of the Economy: Dimensions and Analytical Methods

In the first chapter of the report we present the conceptual and methodological assumptions of the analyses, whose results are set out in the second chapter.

1. Dimensions of economic competitiveness

The idea of competitiveness, which has been exhaustively promoted over recent decades, is ubiquitous in economic debate. A measure of the idea's popularity is that it was declared the major aim of the Lisbon Strategy of 2000. Under its auspices, the European Union was, by 2010, to become the most competitive and dynamic knowledge-based economy in the world. It was to be capable of sustained growth, with more and better jobs and with greater social cohesion. Europe 2020, the next EU-wide strategy, envisions seven central initiatives 'to promote smart, sustainable growth fostering social inclusion'. It may be noted that the strategy no longer refers directly to competitiveness, but to economic growth with qualitative components. This redefinition of strategic goals may present a good opportunity for us to answer the question whether talking of competitiveness between national economies is a 'dangerous obsession' or whether countries really do compete economically.

In our opinion, competitiveness can be viewed in a number of dimensions and the entities involved can be enterprises, branches, sectors, countries and transnational areas. This means that, following Misala (2011), the idea of competitiveness may refer to:

- the competitiveness of products and enterprises (the microeconomic dimension);
- the competitiveness of branches of industry (the mesoeconomic dimension);
- the competitiveness of regions and agglomerations (the mesoeconomic dimension);
- the competitiveness of national economies (the macroeconomic dimension);
- the competitiveness of international blocs (the megaeconomic dimension).

Our primary concern in the report is the competitiveness of the Polish economy, so we approach competitiveness from the macroeconomic perspective. We also analyse competitiveness at the enterprise level. The idea of competitive advantages, which are primarily visible in the productivity of factors of production (Porter 1990, 2008; McKee and Sessions-Robinson 1989), is very closely associated with competitiveness. Competitive advantages can be understood statically.

They then indicate that entities, e.g., economies, have a greater relative or absolute productivity of labour or capital. In this approach the focus is on changes in productivity over time. At issue is the relatively faster growth in the productivity of factors of production in one national economy compared to others. The consequence is accelerated socio-economic development and, in the case of states with a low level of growth, the narrowing of the development gap.

Yet there is another way of looking at these distinctions. Static advantages may be understood as absolute advantages, while dynamic advantages may be understood as relative advantages, that is, as comparative advantages. In the case of comparative advantages, while it is true that certain resources are exploited less effectively in a given economy than in the economies with which it must compete, they are also exploited more effectively for a specific period and in this way the absolute difference in the productivity of the resources in question is reduced. This means that (relative) comparative advantages can lead to absolute (competitive) advantages. In our opinion a national policy to promote competitiveness should rest squarely on measures leading to the transformation of (relative) comparative advantages into (absolute) competitive advantages.

Over time, the debate about the competitiveness of economies led to the introduction and establishment of the concepts of institutional competitiveness and of the competition state. The former is understood as the capacity of a given state, when compared to other countries, to achieve socio-economic success through its political, cultural and economic institutions. In this understanding, the competition state is treated as an alternative to the traditional welfare state. It does not take a protectionist line with regard to its domestic productive capacity, but rather ensures that this is productively exploited under the conditions of an open economy and international and global competition. The scholar O. K. Pedersen defines the competition state as follows: 'It emerges when the national welfare state – its tasks, organisation and governance arrangements – change in a systematic and permanent manner with the explicit goal of enhancing the nation's competitiveness by establishing comparative advantages for national industries and services' (Pedersen 2011, p. 7). However, some advocates of the competition state do not discard the idea of the welfare state but instead favour it in an altered form, which is termed an active or activating welfare state, whose interventions stimulate and sustain a lifelong commitment to work but do not involve social compensation for loss of work or for exiting the labour market.

The traditional welfare state functions in a comparatively stable international environment and draws in its international relations on protectionist instruments such as tariffs, trade quotas, customs barriers, technical trade barriers, and the devaluation of the domestic currency. The competition state is engaged in a much broader and more dynamic international relationship, in which the instruments used until now either cannot be applied or are not very effective. While it was possible for the welfare state to defend its own economy from the disruptive and harmful impact of the international environment fairly successfully, the modern state is compelled to engage in the shaping and modification of the international terms of trade and at the same time to establish the conditions for the adaptation of the domestic manufacturing base to those rules. This means mobilising domestic resources to support economic entities in acquiring and maintaining the capacity to compete internationally rather than protecting domestic economic entities.

The approach that regards institutional competitiveness as significant is identified by a departure from an absolute understanding of competitiveness as a category that describes the level of productivity, income or growth in favour of conceiving competitiveness as dynamic, stochastic and strategic, that is, seeing it through the lens of acquiring competitive capacity by means of

R&D expenditure, expanding the creativity of human resources, and innovation. Its ultimate goal is to enhance social well-being and not only to achieve higher economic indicators.

The diamond (rhombus) model of the determinants of competitive advantage is composed of four basic elements: These are:

1. Factor conditions (human resources, knowledge base, technology, the rate and efficiency of creating the factors of production).
2. Demand conditions (the scale and structure of demand stimulating innovative activity).
3. Related and supporting industries (conducive to the exchange of ideas and innovation).
4. The strategy, structure and rivalry of companies.

Acquiring competitive advantage involves the interaction of these four groups of factors, which are presented in graphic form as the tips the diamond (Porter 1990, p. 71).

Competitiveness, however, is also defined by other factors. If we wish to pursue M. E. Porter's approach, we should analyse the following issues:

- the productivity of resource use in a given economy;
- the institutional system guiding the policy of promoting comparative advantages;
- the institutional environment in which enterprises operate in terms of developing their capacity to compete internationally.

This means that the relationships between business and politics and the interactions between the various types of institutions (institutional complementarity) are pivotal in analysing the competitiveness of an economy. Accepting that the institutional system influences the competitiveness of an economy is tantamount to acknowledging that the use of the term 'institutional competitive advantage' is valid. Yet, essentially, this is not absolute but comparative advantage:

- first, the given institutional system enables the effective use of domestic resources to secure international competitive advantage;
- second, this institutional system will display adaptability (a reforming tendency) in the context of the changing conditions of international competition (Pedersen 2011).

This means that institutional analysis should be regarded as an important public policy instrument – especially in pro-competitive policy. The essence of this policy, however, is to carry out appropriate and necessary institutional reform. According to Pedersen (ibid, p. 8), if these reforms are to ensure the acquisition and maintenance of competitive advantage, they must focus on three areas: (1) the institutional environment in which enterprises operate (exogenous reforms); (2) the shaping of incentives and interests for companies and employees (endogenous reforms); and (3) the relationship between the public authorities and social partners. Specific reforms conceived in this way, which concern, for example, the education system or which develop in practice the idea of creative and competitive cities, are under way in many OECD countries.

This leads to the emphasis being placed on structural policy, that is, policy directed at shaping the institutional environment of enterprises and not, as was hitherto the case with the monetarist paradigm, only on the questions of macroeconomic management and macroeconomic equilibrium.

It should be stressed that this policy cannot be effectively pursued by governments alone. Instead, what is required is institutionalised partnership as the practical expression of the concept of public governance. Specific forms of partnership are being developed to fortify the competitiveness of the economy in a number of states. Governments in Finland, Sweden, and Denmark have created special globalisation councils as fora where key social partners can negotiate and agree a strategy for competitiveness (Pedersen 2010).

In the report, we take it as a given that nations and national economies do compete and must compete. After Pedersen, cited earlier (2011, p. 27), we believe that nations compete by:

1. Reforming the institutional environment (legal, political, economic, cultural) in which companies operate to create competitive advantages, e.g., by creating internal and external flexibility in the terms of employment and conditions of work.
2. Influencing the attitudes, values, aspirations and interests of citizens and companies as a means of securing competitive advantages through changes in social behaviour.
3. Building institutional complementarity, e.g., by coordinating the actions taken in various spheres of public policy where social entities and public authorities work together. Constructing a multi-level governance system, whose participants are capable of learning and experimenting to induce guided social change.

The significance of nations and state structures is growing in the face of global competition. Porter values the active role of the state as an institution that creates the conditions conducive to the growth of domestic industries, but not when it is the author of protectionist policies with regard to its own trade. His outlook has found expression in the idea of the Global Competitiveness Report (GCR), to whose contemporary form he has made a significant contribution in the role of co-author. The report defines competitiveness as 'the set of institutions, public policies and factors that determine the level of productivity of an economy and the pace of its growth'.

In accordance with the understanding of competitiveness adopted in the Global Competitiveness Report, we regard the key elements of competitive potential as those that are the effect of the creative process by which communities of states produce opportunities. They cannot be created 'once and for all', but it is possible to develop them in the space of one or two generations. We conceive of these opportunities collectively as competitive potential and we analyse their impact on selected aspects of the economy's international competitiveness, which in turn contributes to the prosperity and well-being of citizens.

We shall attempt to show in our analyses the extent to which the Polish economy's competitive potential (from earlier years) is being transformed into the country's current competitive position.

Competitiveness is a category that requires a comparative perspective and the proper selection of a comparison group is important for the interpretation of the results. The basic criterion for this choice is usually a similar level of *per capita* GDP, but other criteria, such as the size of the economy or the degree to which it is open, can be added. Estimating the efficiency of converting inputs into outputs and comparing the results for Poland with the countries selected as a comparison group will reveal the strictly-defined competitiveness of the Polish economy.

The intended analyses will make it possible to stipulate the mechanisms, factors and tools we can and should mobilise to increase Poland's competitive potential.

2. Methodological introduction to the data analysis

The prosperity measure that can be considered as the desired outcome of competitiveness is **per capita GDP**. For a more exact calculation of how much can be bought for this *per capita* GDP, the values for this indicator are adjusted according to purchasing power parity (PPP).

We have adopted the following variables to determine the competitiveness of a given economy:

- **Labour productivity per person employed** and its percentage change. Labour productivity determines the inflow of capital and also comparative and absolute advantages in foreign trade.
- **Change in the number of people employed** calculated as the percentage growth in the number of people employed. Where this growth is high the economy has the capacity to create new jobs.
- **Change in capital stock** understood as the capacity of an economy to generate savings and to convert them into investments. The measure of this variable will therefore be the level of gross fixed capital formation (GFCF). When a given market is attractive but has insufficient capital, there is an incentive to provide it, that is, to draw in foreign capital. A supplementary measure is therefore the inflow of foreign direct investment (FDI).
- **Market power**, that is, the measure of the share of a given country's exports in total world exports¹. The indicator will be the percentage change in the share of trade in goods.

1 Because the value of this variable differs considerably between countries (some countries and markets are bigger than others), it can be adjusted according to the share of a given country in world GDP. Yet this adjustment too has certain drawbacks as small economies are compelled to trade abroad more. Looked at in this way, big economies appear – counter intuitively – less competitive (Germany, Japan, USA).

Table 1 presents a summary of the indicators of competitive position, which are described in the next chapter.

Table 1. List of Indicators of Competitive Position Analysed in the Report

Number of section in Chapter II	Competitive position
1.1.	<i>per capita</i> GDP
1.2.	Productivity
1.3.	Effective use of the labour force
1.4.	Change in capital stock (investment)
1.5.	Export competitiveness

Source: prepared by the authors.

We understand competitive potential as the sum of factors that contribute to achieving specified outcomes of competition. Competitiveness, the number of factors, and the classification of those factors are defined differently depending on the theoretical approach, the aspect of competition being studied, and the availability of data. For instance, in the annual Global Competitiveness Report (GCR) published by the World Economic Forum in Davos, the factors of competitiveness are divided into twelve pillars grouped according to three clusters. Together they make up the Global Competitiveness Index (GCI). Our understanding of competitiveness is consistent with the definition adopted by the authors of this publication. It is thus useful for the purposes of this report to add these twelve pillars of competitiveness to the components of competitive potential – the more so in view of the fact that the GCR compiles data not only for European and OECD economies, but also for emerging markets. There are other domains in which failure to take up the challenges in the not-too-distant future could impair the country’s competitive position. We have therefore conducted additional analyses of demographic trends and the investment rate.

We have divided the areas that competitive potential is composed of into two groups: resources (material and non-material), and institutional and technological factors. Resources are the elements that make up the supply of labour and capital, including human capital. Institutional and technological factors, in turn, are those components of potential that influence how effectively resources are employed. These include economic policy and the institutions and factors associated with innovativeness and the use of technology. Table 2 presents a summary of the components of competitive potential, which are described in the next chapter.

Table 2. Summary of the Components of Competitive Potential Analysed in the Report

Competitive capacity			
Number of section in Chapter II	Resources	Number of section in Chapter II	Institutional and technological factors
2.1.	Labour market	3.1.	Institutions
2.2.	Health	3.2.	Good market efficiency
2.3.	Education	3.3.	Macroeconomic environment
2.4.	Higher education and training	3.4.	Business sophistication
2.5.	Market size	3.5.	Technological readiness
2.6.	Demography	3.6.	Innovation
2.7.	Infrastructure		
2.8.	Financial market (determining the volume of available capital stock)		

Source: prepared by the authors.

The analysis concerns the years 2004–2011. We have taken 2004 as the starting year, that is, the moment of Poland’s accession to the European Union. Before then, competition took place in a different international context. The period under analysis ended in 2011, for which year the majority of the data describing competitive position and competitive potential are available. In some cases we also had data for 2012. To illustrate the position of the Polish economy and its competitive potential we have used sporting terminology at the end of each section describing the components of competitive position. We have thus defined highly competitive countries as First Division, countries with an average level of competitiveness as Second Division, and countries with the lowest levels of competitiveness as Third Division².

In the summary we have compared Poland’s present competitive position with its present competitive potential. We take a closer look at the dynamics of the particular variables determining competitive position and at the changes in resources and institutional factors. We have divided the years 2004–2011 into two sub-periods: 2004–2008 and 2008–2011. The aim was to determine whether there had been any significant differences in the competitiveness of the Polish economy before the crisis compared to the crisis years themselves and whether remaining the ‘emerald isle of GDP growth’ during the slump enabled Poland to improve its competitive position.

In a straightforward regression analysis, we then juxtapose competitive potential and the various indicators of competitiveness.

2 The categories of First, Second and Third divisions were derived by dividing the number of countries in the groups (the 144 economies examined in the GCR, the EU-27, and the comparison group of 15 countries) by three to form three leagues with roughly the same number of countries. Taking the 144 countries in the GCR as an example, the first 48 countries in the ranking make up the First Division, those in positions 49 to 96 the Second Division, and those from 97 to 144 the Third Division.

We felt that reference should be made to diverse groups of economies when defining Poland's position. The model of growth and competition for weakly developed economies, which are largely based on low production costs, differs from that which applies to rich, technologically advanced states that are able to pursue product innovation and quality on international markets. The fundamental challenge for the former group is to build effective institutions and social and material infrastructure for the efficient exploitation of available assets. Factors determining the quality of human resources and incentives to exploit economic knowledge are more significant for the latter group.

The group of analysed economies comprises countries whose competitive position and potential is of particular interest from the Polish point of view. The countries are listed below along with the criteria used in their selection:

Central and Eastern Europe

Czech Republic, Slovakia and Hungary: these states have wealth levels similar to or a little higher than Poland. They form a natural comparison group due to their similar geographical, historical and institutional conditions – all the more so as they are in competition with Poland for foreign investments and sales markets in the EU. **Bulgaria and Romania,** whose characteristics are similar to those of the Visegrad countries, are also included in this group. These are states that are a little less wealthy than Poland but that are quickly closing the development gap.

Southern and Western Europe

Spain and Italy: these economies have a similar structure to Poland's (small family enterprises, low innovativeness). They are competing with the new Member States for the localisation of production and EU sales markets and also, to a lesser degree, for investments financed from EU funds.

Germany: The EU's largest economy, which maintains a high level of competitiveness despite its high level of development. It is a benchmark for other EU economies. The development of other European economies depends to a greater or lesser degree on its performance. The situation of the Polish economy is very closely linked to that of the German economy.

The Countries of Latin America and Asia

The countries that have been selected are those creating a competitive economic model, which is more liberal in the case of Latin America and more state–corporate in the case of Asia.

Chile and Mexico are countries with similar levels of development. Chile is engaged in market reforms similar to Poland's, while Mexico – like Poland – is under the influence of a prosperous neighbour.

Indonesia, Malaysia, Korea³ and Turkey: apart from the comparatively poor Indonesia, these are countries at a similar or higher level of economic development – with a state takes an active role in ensuring that the economy has the right conditions for competition. These countries are governed more autocratically than European countries.

3 Two generations ago, the potential of Korea was regarded as that of a third-world country. Yet, by the 1990s, it was comparable to Poland's. The present level of productivity has secured the country a position amongst the world's leaders, while innovativeness and other components of its competitive potential mean that this economy has a tremendous opportunity to enjoy further rapid growth.

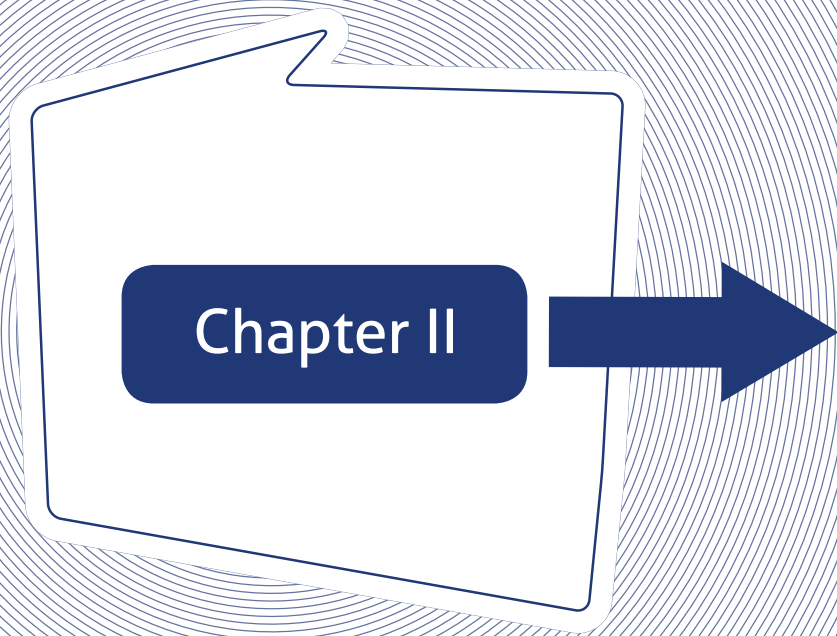
Table 3. Poland's Competitive Position, Potential and Challenges Compared to Selected Economies

POLAND (POL)		CZECH REPUBLIC (CZE)		HUNGARY (HUN)	
Population (thousands)	38216	Population (thousands)	10546	Population (thousands)	9971
GDP (billion USD), 2011	514.5	GDP (billion USD), 2011	217	GDP (billion USD), 2011	140
<i>Per capita</i> GDP (USD PPP)	20012	<i>Per capita</i> GDP (USD PPP)	27112	<i>Per capita</i> GDP (USD PPP)	19571
Structure of exports		Structure of exports		Structure of exports	
Agriculture	12.1	Agriculture	5.5	Agriculture	9.2
Oils and minerals	9.9	Oils and minerals	5.9	Oils and minerals	5.6
Industrial products	77.9	Industrial products	88	Industrial products	85.0
Recipients of exports		Recipients of exports		Recipients of exports	
1. EU-27	77.5	1. EU-27	83	1. EU-27	76.2
2. Russia	4.5	2. Russia	3.2	2. Russia	3.2
3. Ukraine	2.5	3. USA	1.9	3. USA	2.0
4. Norway	2.0	4. Switzerland	1.7	4. Ukraine	2.0
5. USA	2.0	5. China	1.0	5. United Arab Emirates	1.8
SLOVAKIA (SVK)		BULGARIA (BGR)		ROMANIA (ROM)	
Population (thousands)	5440	Population (thousands)	7476	Population (thousands)	21390
GDP (billion USD), 2011	96	GDP (billion USD), 2011	53.5	GDP (billion USD), 2011	189.8
<i>Per capita</i> GDP (USD PPP)	23366	<i>Per capita</i> GDP (USD PPP)	13812	<i>Per capita</i> GDP (USD PPP)	12520
Structure of exports		Structure of exports		Structure of exports	
Agriculture	5.9	Agriculture	17.2	Agriculture	11.0
Oils and minerals	9.3	Oils and minerals	32.5	Oils and minerals	9.7
Industrial products	84.5	Industrial products	49.2	Industrial products	78.8
Recipients of exports		Recipients of exports		Recipients of exports	
1. EU-27	84.5	1. EU-27	62.5	1. EU-27	71.1
2. Russia	3.7	2. Turkey	8.5	2. Turkey	6.2
3. China	2.6	3. Gibraltar	3.1	3. Russia	2.3
4. USA	1.6	4. Russia	2.6	4. Ukraine	1.8
5. Turkey	1.4	5. Serbia	2.6	5. USA	1.8

SPAIN (ESP)		ITALY (ITA)		GERMANY (DEU)	
Population (thousands)	46235	Population (thousands)	60770	Population (thousands)	81726
GDP (billion USD), 2011	1476.9	GDP (billion USD), 2011	2194	GDP (billion USD), 2011	3600.8
<i>Per capita</i> GDP (USD PPP)	30478	<i>Per capita</i> GDP (USD PPP)	30422	<i>Per capita</i> GDP (USD PPP)	38077
Structure of exports		Structure of exports		Structure of exports	
Agriculture	15.7	Agriculture	8.4	Agriculture	6.4
Oils and minerals	12.2	Oils and minerals	7.4	Oils and minerals	5.9
Industrial products	69.5	Industrial products	81.3	Industrial products	85.3
Recipients of exports		Recipients of exports		Recipients of exports	
1. EU-27	65.0	1. EU-27	55.4	1. EU-27	58.2
2. USA	3.7	2. USA	6.1	2. USA	7.0
3. Turkey	2.1	3. Switzerland	5.5	3. China	6.1
4. Switzerland	2.0	4. China	2.6	4. Switzerland	4.5
5. Morocco	1.9	5. Turkey	2.5	5. Russia	3.3
CHILE (CHL)		MEXICO (MEX)		INDONESIA (IDN)	
Population (thousands)	18096	Population (thousands)	116901	Population (thousands)	244200
GDP (billion USD), 2011	248.6	GDP (billion USD), 2011	1153.3	GDP (billion USD), 2011	846.8
<i>Per capita</i> GDP (USD PPP)	17310	<i>Per capita</i> GDP (USD PPP)	14616	<i>Per capita</i> GDP (USD PPP)	4669
Structure of exports		Structure of exports		Structure of exports	
Agriculture	23.4	Agriculture	6.6	Agriculture	24.0
Oils and minerals	61.8	Oils and minerals	19.8	Oils and minerals	42.2
Industrial products	13.0	Industrial products	70.7	Industrial products	34.1
Recipients of exports		Recipients of exports		Recipients of exports	
1. China	22.8	1. USA	78.7	1. Japan	16.6
2. EU-27	17.7	2. EU-27	5.5	2. China	11.3
3. USA	11.2	3. Canada	3.1	3. EU-27	10.1
4. Japan	11.1	4. China	1.7	4. Singapore	9.1
5. Brazil	5.5	5. Colombia	1.6	5. USA	8.1

MALAYSIA (MYS)		SOUTH KOREA (KOR)		TURKEY (TUR)	
Population (thousands)	29179	Population (thousands)	50948	Population (thousands)	7474
GDP (billion USD), 2011	287.9	GDP (billion USD), 2011	1116.2	GDP (billion USD), 2011	775
<i>Per capita</i> GDP (USD PPP)	16009	<i>Per capita</i> GDP (USD PPP)	31220	<i>Per capita</i> GDP (USD PPP)	14543
Structure of exports		Structure of exports		Structure of exports	
Agriculture	17.1	Agriculture	2.3	Agriculture	11.1
Oils and minerals	20.2	Oils and minerals	11.8	Oils and minerals	8.9
Industrial products	62.0	Industrial products	85.3	Industrial products	77.2
Recipients of exports		Recipients of exports		Recipients of exports	
1. China	13.1	1. China	24.2	1. EU-27	47.0
2. Singapore	12.7	2. USA	10.2	2. Iraq	6.2
3. Japan	11.5	3. EU-27	10.1	3. Russia	4.4
4. EU-27	10.4	4. Japan	7.1	4. USA	3.4
5. USA	8.3	5. Hong Kong	5.6	5. United Arab Emirates	2.7

Source: International Monetary Fund, GCR 2012/2013.



Chapter II



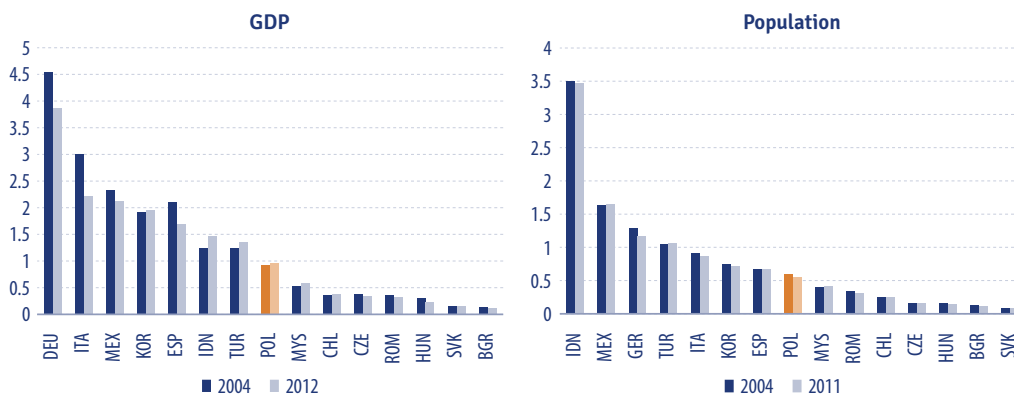
An Analysis of the Competitive Position and Competitive Potential of the Polish Economy

1. Competitive position

1.1. Prosperity: GDP and *per capita* GDP

The Polish economy is large. When measured in terms of its GDP as a proportion of world GDP, it occupies a significantly higher position than the comparable New Member States (NMS) of the EU. In 2012, Polish GDP accounted for almost 1% of world production.

Figure 2. Poland's GDP and Population Compared to Selected European and World Economies in 2004 and 2012* (% , world = 100%)



* 2012 – IMF estimates.

** Population in 2011.

Source: International Monetary Fund.

The growth in Poland's share of world production in 2004–2012, when it increased from 0.92% to 0.97%, should also be assessed positively. Though modest, this growth should be emphasised – all the more so in view of the fact that during the period under analysis the remaining NMS states – excluding Slovakia – lost share.

In analysing Poland's level of economic development (measured as *per capita* GDP) it may be observed that though it has been a good deal lower than in Germany, Italy or Spain, the gap between Poland and these three economies has narrowed considerably during the period under examination. While in 2004 Poland's *per capita* GDP was less than 50% of Spain's and Italy's, by 2012 it had reached 70%. The development gap with respect to Germany has also narrowed but to a lesser extent (from 44% to 54%).

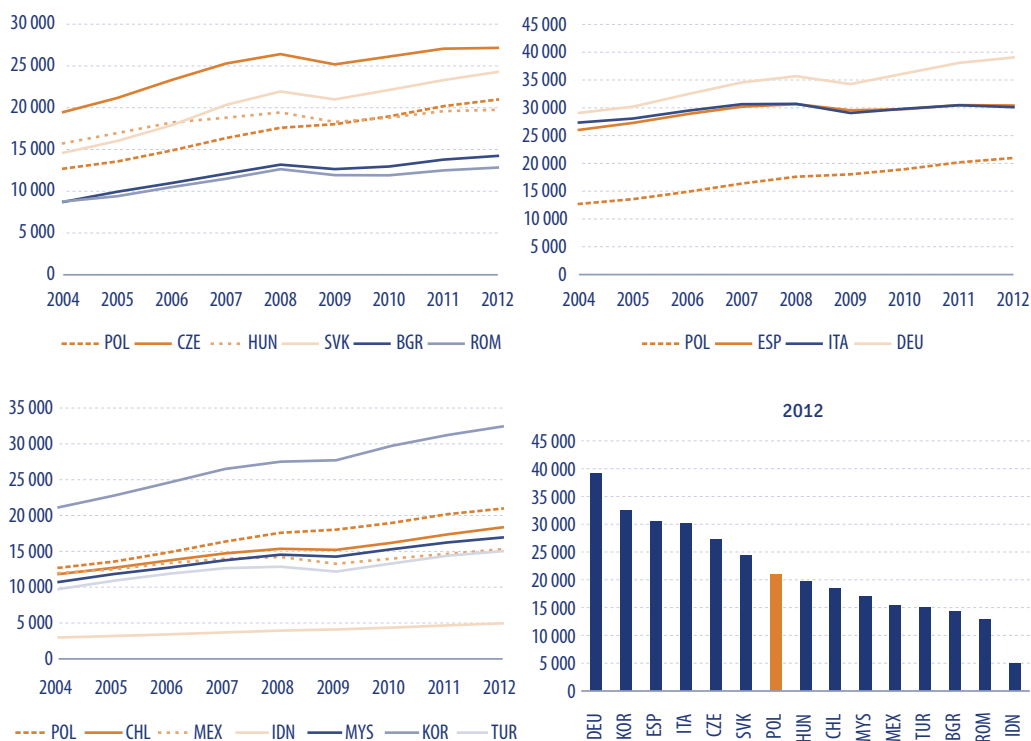
It can be seen when comparing Poland's level of economic development with the NMS in the comparison group that it is higher than in Romania or Bulgaria. Poland has performed a good deal worse compared to the Czech Republic and Slovakia. Over the last few years, Poland has been able to overtake Hungary on *per capita* GDP, which is largely due to that country's economic difficulties.

Poland has performed very well on its level of economic development when compared to the economies from beyond Europe in the comparison group. Of this group, only Korea had a higher level of *per capita* GDP, though its rapid economic growth has had the effect of widening the development gap with Poland. Chile, Malaysia, Mexico, Turkey and Indonesia all recorded a lower level of economic growth than Poland. While the differences were comparatively slight in the case of the first four countries (Chile's GDP in 2012 stood at 87% of Poland's, while for Malaysia, Mexico and Turkey the proportions were 81%, 73%, and 72%, respectively), the Indonesian economy was distinguished by its very low *per capita* GDP, which in 2012 stood at not quite 24% of Poland's.

The changes in Poland's economic position in the world and the trend in its level of economic development should be assessed positively. Not only has Poland's share in world production increased, it has also advanced its economic position within the European Union. According to data from Eurostat, Poland's share in the EU's combined production rose in 2004–2012 from 1.9% to 3.0%. The changes in Poland's share of both world and EU production are consistent with the trend that indicates the growing importance of emerging economies in world production and the declining significance of the highly-developed economies.

Poland's development gap has been narrowed as a result of a faster pace of growth than in the more highly-developed European economies. **In 2004 Poland's per capita GDP (measured by purchasing power parity) stood at 51% of the EU average; by 2011 it had jumped to 64%** (Eurostat data).

Figure 3. Poland's *per capita* GDP (measured by purchasing power parity) Compared to Selected Countries, 2004–2012

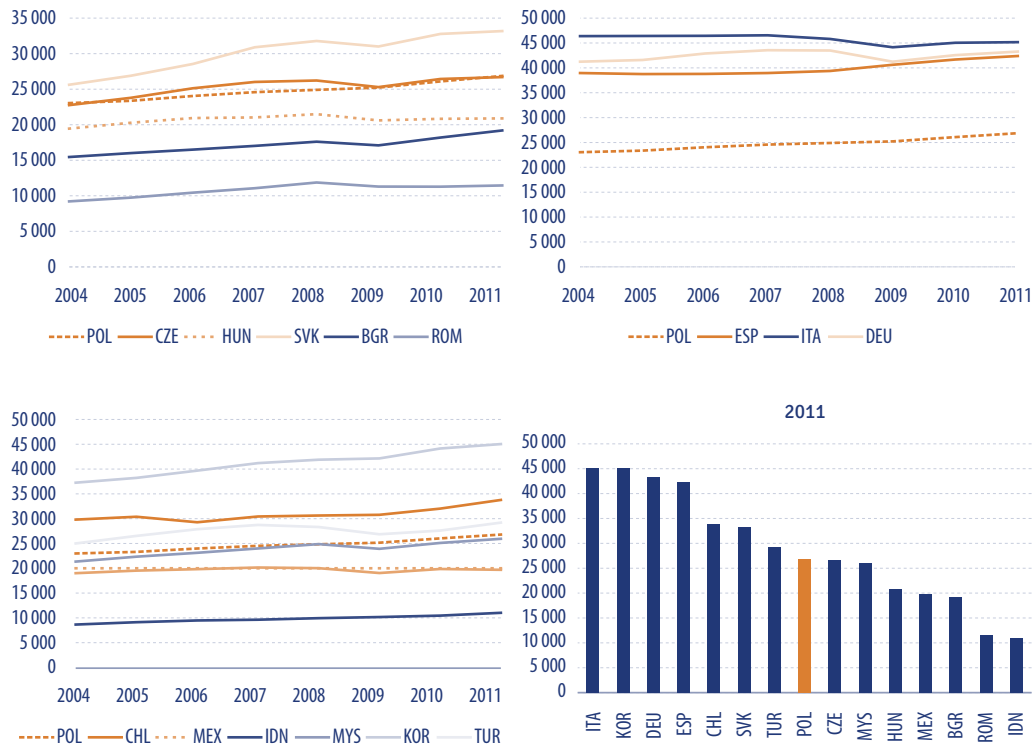


Source: International Monetary Fund.

1.2. Productivity

The Polish economy increased its productivity as its GDP rose. **Expressed in terms of purchasing power parity, GDP per person employed stood at USD 23,000 in 2004 and had reached USD 27,000 by 2011. This was one of the highest values among the Central European countries in the comparison group: only in Slovakia did workers generate a higher *per capita* GDP (USD 33,000), while in the Czech Republic the figure was identical (USD 27,000). The productivity of the Polish worker was 35%–40% lower when compared to the countries of Western Europe (USD 42,000–USD 45,000).** Of the American and Asian states compared, Korea was some way ahead of Poland, while Chile and Turkey were only a little way ahead (USD 33,000 and USD 29,000, respectively). The workers of Malaysia and Indonesia were a little less productive than those of Poland (USD 26,000 and USD 20,000), while those of Indonesia were considerably less productive (USD 11,000).

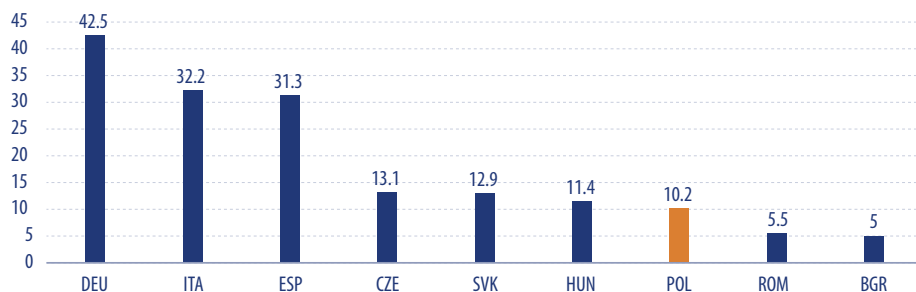
Figure 4. Productivity (GDP per employed person) in Selected Countries (According to Purchasing Power Parity), 2004–2011



Source: World Bank.

The lower standard of living has meant that Poles have been prepared to work harder. As in other countries of Central Europe, the average working week in Poland is 40–41 hours. Of the EU countries under consideration, the Hungarians (39.4 hours), Spanish (38.1 hours), Italians (37.1 hours), and Germans (35.6 hours) all work shorter hours. Poles also take fewer holidays, which resulted in a figure for average hours worked per employee in 2011 of 1,937. Employees from the other countries in our region – including Turkey – worked an average of 1,800 hours to 2,000 hours, while in the more prosperous countries of Western Europe the annual figure was below 1,800 hours in Italy, 1,700 hours in Spain, and approximately 1,400 hours in Germany. It is interesting that Korean, Turkish, Chilean and Mexican workers put in more hours (more than 2,000 annually and, in Mexico, more than 2,200 hours) which, taking into account the similar or higher standards of living in these countries, was not the result of poverty but rather of a different social model. This is distinguished by a lower level of social security, greater inequality and – perhaps – a greater motivation to acquire the means of subsistence (e.g., as a result of a higher fertility rate than in European countries).

Figure 5. Productivity in Selected European Union Countries in 2011 (EUR per working hour)



Source: Eurostat.

Taking into account, therefore, that the Polish worker had to work longer hours to earn his salary, it is possible to calculate the value of the products manufactured in one hour. In this case, the level of productivity in Poland (EUR 10 per hour) was only one-third that of Spain and Italy and only one-quarter that of Germany. In the remaining Visegrad countries the level was EUR 11–EUR 13 per hour, while in Bulgaria and Romania it was approximately EUR 5 per hour (see Figure 5).

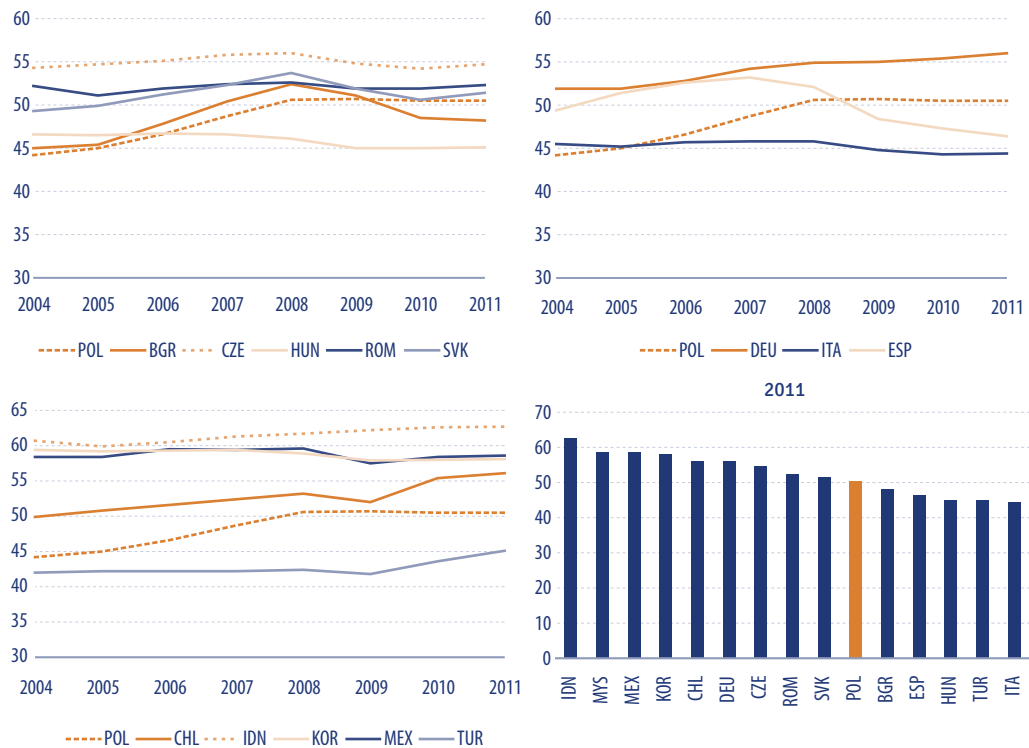
1.3. Effective use of the labour force

One of the indicators of how effectively the labour force is being used is the employment rate. It measures the percentage of the working-age population that is employed. If it is low it signifies that a large portion of those of working age are not involved in generating the national income and therefore that the potential for economic growth is reduced. A low employment rate is also bad for the state budget: a proportion of those of working age are not working or paying taxes and the revenues of the state budget are therefore reduced.

Poland's employment rate was quite low when compared to the comparison group of economies. In 2010 it stood at 50.5% of the population aged 15 or older. This means that a large proportion of all those older than 15 were not working. A proportion were unemployed and seeking work. The remainder were not working for a variety of reasons. They may have been at school or studying, or they may have had a disability that prevented them from working. There are also people who were not working because they did not want to work.

Of the New Member States of the EU in the comparison group, the employment rate was lower than Poland's in 2011 only in Hungary and Bulgaria. The indicator for Poland in 2011 was higher than for Spain, but this was as a result of the fall in employment during the crisis. Germany had the highest employment rate of the European states compared in the report. The employment rate in Poland was also lower than in the majority of the states outside Europe examined here. Only Turkey had a significantly lower employment rate.

Figure 6. The Employment Rate in Poland and in Selected Countries, 2004–2011
(percentage of the population on aged 15 or above)

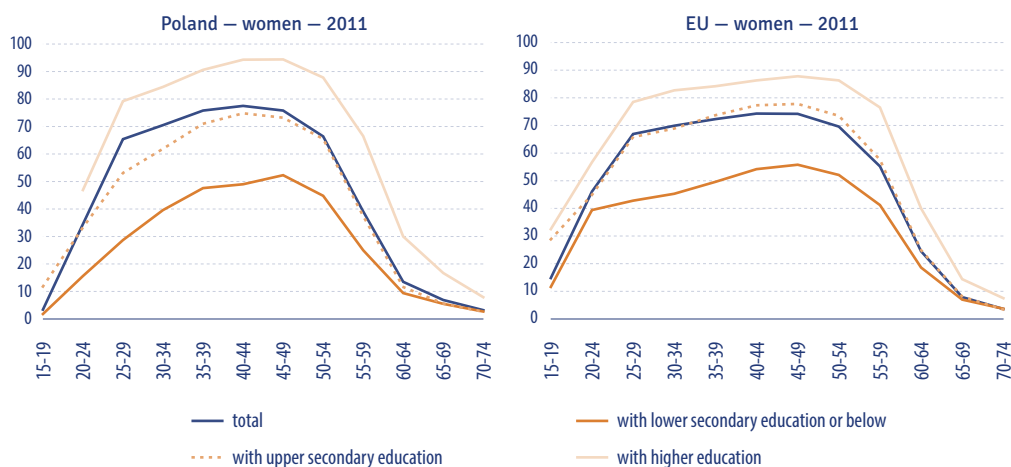


Source: World Bank.

The changes that took place during the period under analysis should be assessed positively. In 2004–2011 the employment rate in Poland grew from 44.2% to 50.5% of the population aged 15 or older. This growth was largely the result of an increase in the number of people working, which was a great deal higher than the increase in the number of people of working age.

We should, however, draw attention to the very low employment rates among those with low education (see Figure 7). These people leave the labour market comparatively early. For the sake of comparison, employment rates among groups of people with higher education were at the same level or even higher than the EU average. These people retire later. Employment rates among women are lower than those among men. Furthermore, women – especially those with a lower level of education – leave the labour market earlier (see Figure 7).

Figure 7. The Employment Rate in Poland According to Age and Level of Education Compared to the EU Average



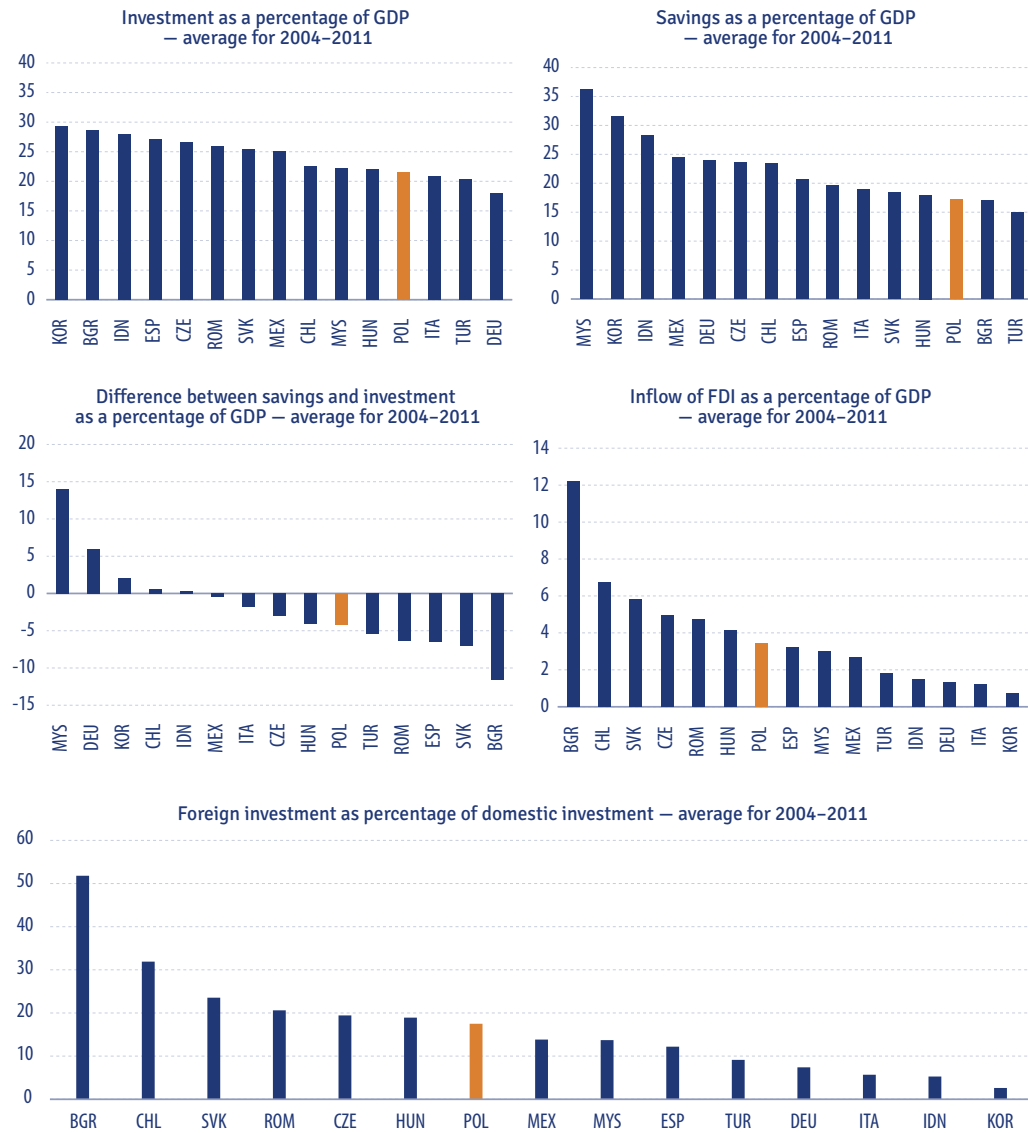
Source: Eurostat.

1.4. Changes in capital stock

Hausmann, Rodrik and Velasco (2005) distinguish two groups of factors (binding constraints) that can restrict an economy's capacity to invest and grow. On the one hand this can involve insufficient access to finance (savings constraint) resulting primarily from a shortage of domestic savings or, on the other hand, from an underdeveloped and uncompetitive financial services system. The lack of savings may be alleviated by the import of foreign savings in the form of private capital or public transfers (in the case of Member States these can be EU funds). On the other hand, insufficient investment demand can limit the scale of investment and growth in an economy (investment constraint). The causes may be administrative and institutional barriers, difficulty in establishing businesses, poorly protected property rights, or protracted debt-enforcement processes. This category also covers constraints connected with the lack of opportunity to employ capital or of ideas on how to do so. This may be the result of an unsuitable industrial policy, which should support investment and demand for innovation.

Figure 8 shows the rate of investment (I) (gross capital formation) and the rate of savings (O) as a percentage of GDP. The data indicate that **Poland is a country with a relatively low rate of investment, which could be a consequence of low savings. The difference between domestic savings and investment is largely compensated by the import of foreign capital in the form of FDI.** We look at foreign direct investment in greater detail in the chapter on the size of the market and the extent to which it is able to attract investment.

Figure 8. Investment and Savings as a Percentage of GDP



Source: prepared by the authors on the basis of World Bank and UNCTAD data.

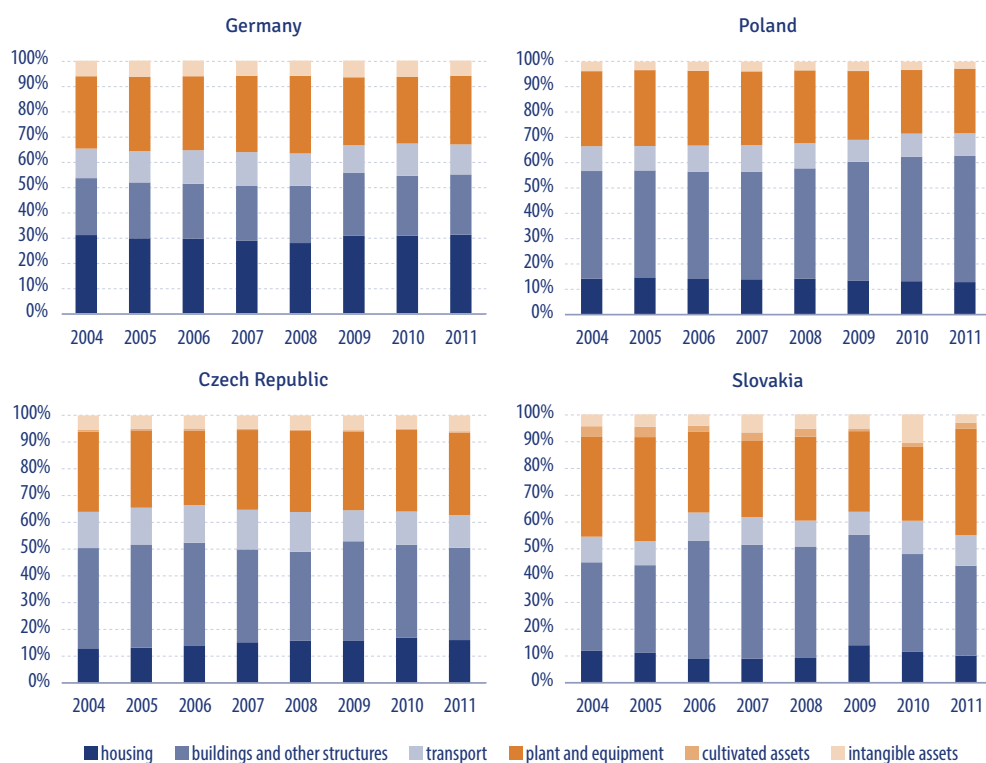
The low level of investment noted in the Polish economy may have been the result of an unfavourable climate for investment, the low quality of institutions, or excessive regulation. Factors linked to administrative barriers, the incoherence and instability of regulations, and the lack of proper dialogue between investors and the national government have also been identified as barriers to investment by foreign investors.

What is important for the competitiveness of an economy is not only the level of investment but also its structure. The experience of the peripheral Eurozone countries and the Baltic states

in the crisis suggests that it is necessary to apply appropriate incentives in regulatory policy. Even though these countries have experienced increased access to, and a fall in the costs of, financing (having entered the Eurozone or having pegged their exchange rates to the Euro), in many cases the capital has been consumed or unproductively invested, such as in financing a boom on the real estate market.

In the case of Poland (and other countries with a low level of development) infrastructure investments (buildings and other structures) make up a comparatively large share of expenditure on fixed assets. Although investment is generating production assets, greater stress still needs to be placed on investments in intangible assets (licences and technology) and in plant and equipment. Where these investment categories are concerned, Poland occupies a position below the Czech Republic and Slovakia (see Figure 9).

Figure 9. Expenditure on Fixed Assets



* The structure of investment on the basis of gross fixed capital formation. In the case of Poland, this figure was lower in 2004–2011 by approximately 1.4% of GDP than gross capital formation. This difference results from the fact that inventory is included in the second of these categories.

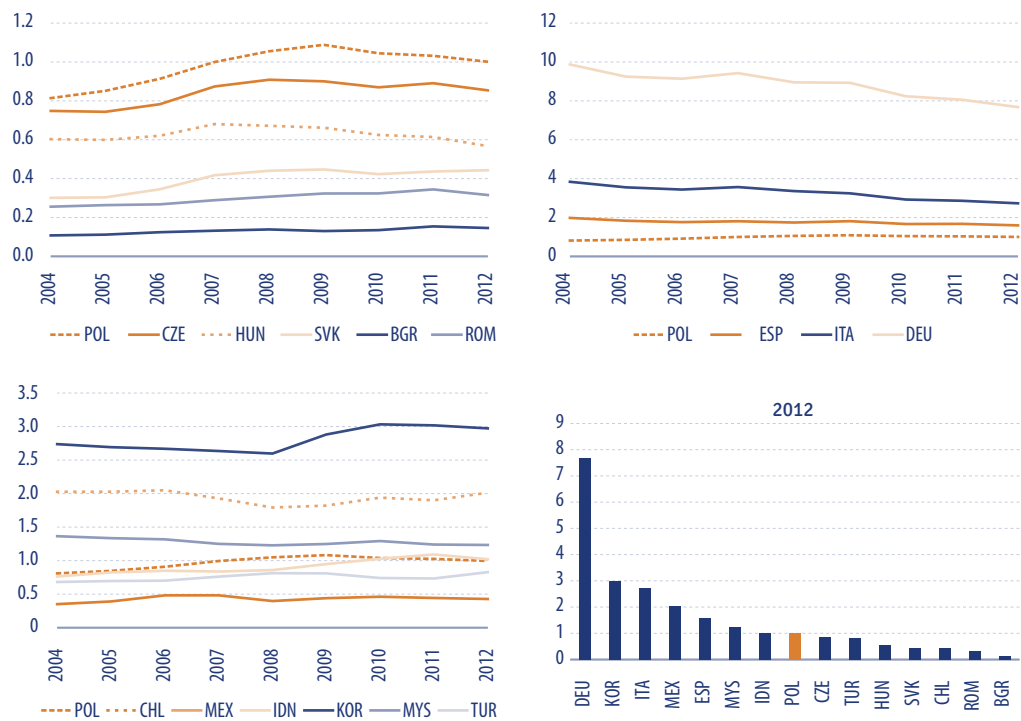
Source: prepared by the authors on the basis of Eurostat data.

1.5. Export competitiveness

According to Reis (2012), the competitive position of exports has four dimensions: the pace of export growth and its share in the world market, the nature and extent of geographical and commodity diversification, the quality of products offered, and the dynamics and duration of company involvement in these activities.

What is important in the first dimension is a **high pace of growth in export volume that consistently exceeds the pace of growth of GDP and ensures a gradual increase in the share of world trade** (see Figure 10).

Figure 10. Selected Countries' Share in World Exports, 2004–2012 (%)

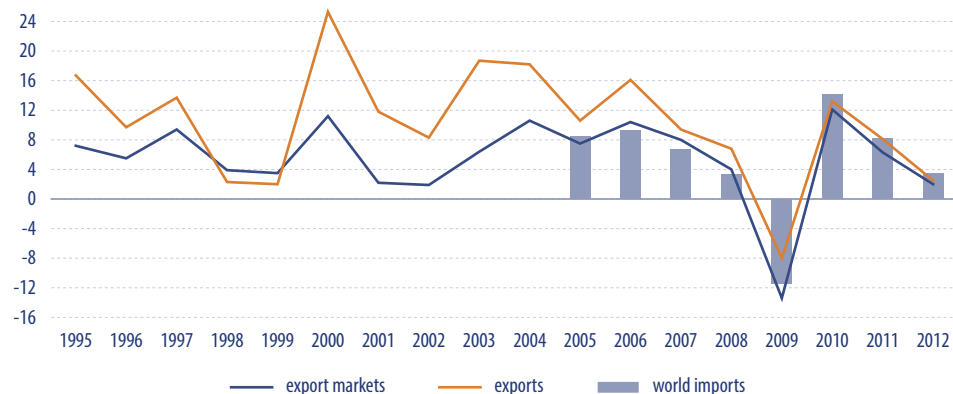


Source: World Trade Organization.

Beginning in 2009, Poland's rate of export growth has been lower than the rate of growth of world imports (see Figure 11). One of the factors influencing this has been the high concentration on exports to EU markets – especially to the Eurozone. These have not been the fastest-growing economies for some time now and, in recent years, under the impact of the financial crisis, they have been amongst the most sluggish. **As a result, demand for Polish exports, understood as the weighted sum of its trading partners' imports, is growing more slowly than world demand for imports** (see Figure 11). The commodity structure of Polish export, which is concentrated in a few branches of mechanical engineering (especially automotive) and conducted as intra-European trade, has not been conducive to major sales growth either.

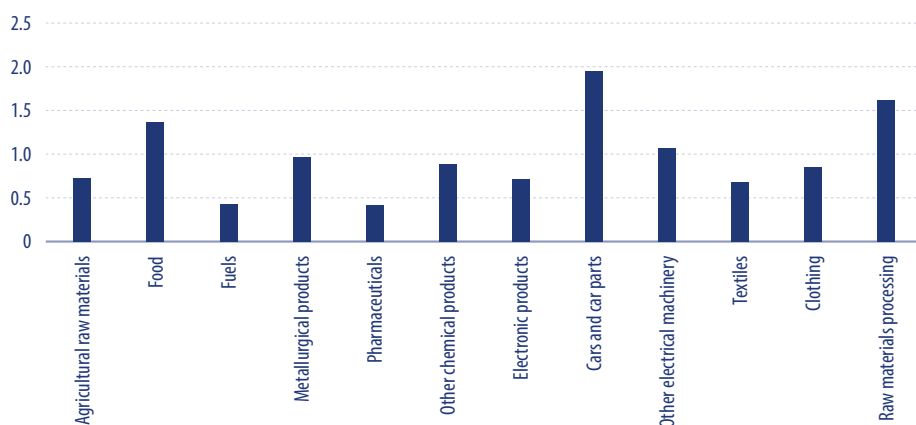
As Figure 12 illustrates, leaving aside the automotive sector, Poland has achieved revealed competitive advantage (RCA >1)⁴ only in food products and raw materials processing.

Figure 11. Export Market Growth and Actual Growth in Poland's Export Volume Compared to Changes in World Imports, 1995–2012 (annual changes in volume in %)



Source: prepared by the authors on the basis of data from the Central Statistical Office (GUS) and international organisations.

Figure 12. Poland's Revealed Competitive Advantage (RCA) in the Export of Manufactured Goods in 2011



Source: prepared by the authors on the basis of data from the World Trade Organization.

Therefore, **the present forms of both the geographical and commodity diversification of Poland's exports are not conducive to improving its competitive position.** What is more, Polish export is profoundly ossified. As World Bank research has found, as much as two-thirds of Poland's export growth in the last decade has been achieved by supplying the same ('old') products to the same ('old') markets. Only just under 30% of export growth has

⁴ The Revealed Competitive Advantage (RCA) indicator for Poland is the ratio of the share of a given group of products in Polish exports to the world market to the share of competitors' exports of this group of products to the world market.

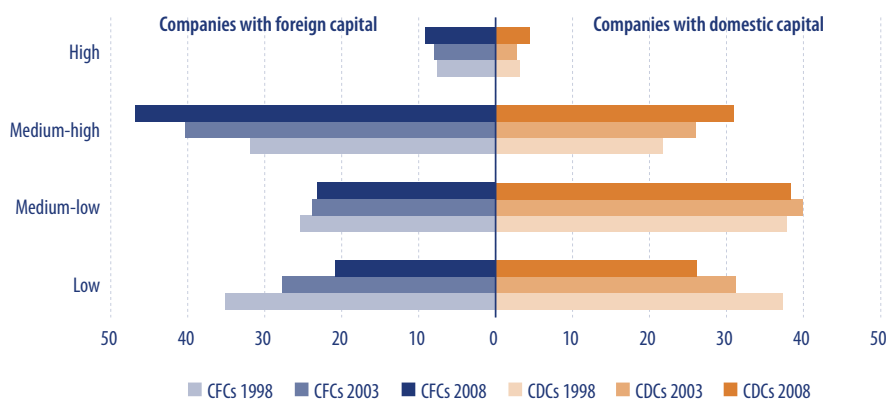
been generated by supplying ‘old’ products to ‘new’ markets (that is, geographical expansion) and less than 4% by supplying ‘new’ products to ‘old’ markets, that is, commodity expansion (ibid. 2012).

The conservatism of the geographical and commodity structure of Poland’s exports is linked to the relatively low – albeit improving – level of technical sophistication and, therefore, to the relatively low quality of the products Polish companies offer.

However, there is a significant difference between companies with foreign capital (CFC) and those with domestic capital (CDC). From the middle of the 1990s, the share of the former in Polish exports has risen continually. It exceeded 48% in 1998 and reached more than 57% in 2005. It has stabilised since then at a level of approximately 55% (Chojna 2005, 2009).

The OECD classification according to levels of technological sophistication shows that CFCs are setting the tone when it comes to modernising Poland’s export offer. Insofar as CDCs have shifted over the last decade from low technology exports to medium-low technology exports, CFCs have jumped a level higher to medium-high technology exports. It remains the case, however, that both groups of enterprises have exported only a small percentage of high-tech goods (see Figure 13). Less progress has been made in Poland than in the other countries of Central Europe in raising the technological sophistication of exports (see Reis 2012).

Figure 13. The Export Structure of Manufactured Goods According to Level of Technological Sophistication, 1998–2008



Source: Marczewski (2010).

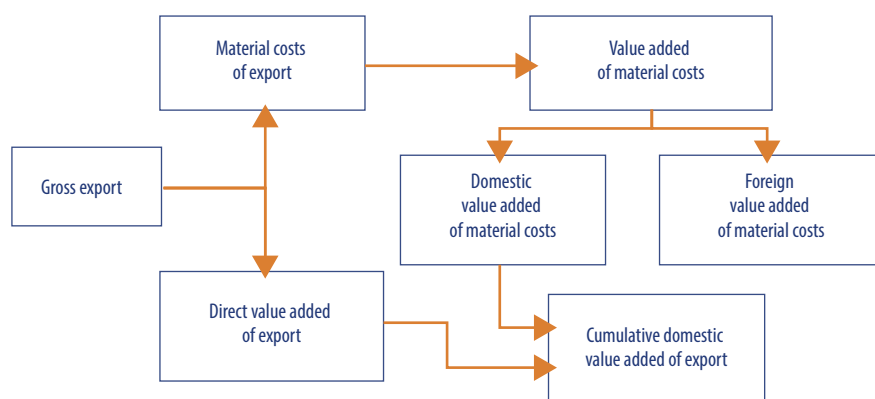
The level of internationalisation of Polish companies is steadily increasing. The percentage of exporters in the total number of SMEs exceeded 32% in 2010. The highest percentage of these companies (62.5%) is in the manufacturing (sector C). Exporters also have an above average presence in transportation and storage (sector H) and information and communication (sector J).

Manufacturing itself is led by the manufacture of motor vehicles, trailers and semi-trailers (branch 29), followed by manufacture of basic metals (branch 24), manufacture of other transport

equipment (branch 30) and manufacture of furniture (branch 31). There is, however, quite a low level of internationalisation among manufacturers of food products (branch 10)⁵.

The comparatively high percentage of large- and medium-sized companies in the group of exporters is not synonymous with a high share of exports in their sales. Of the more than 15,700 large and medium enterprises, only a little over 4,000 specialise in export, that is, they sell more than 50% of their production abroad. These are most often companies with foreign capital that produce export products of high import intensity within international (intra-corporate) cooperation chains. This has a negative impact on the quantity of value added generated by export. This concerns both the direct and cumulative domestic value added of export. These concepts are illustrated in Figure 14.

Figure 14. The Relationship between the Components of Cost and the Value Added of Export



Source: prepared by the authors.

Table 4 displays the coefficients of the direct share of value added and of intermediate goods imports in world production in manufacturing branches. The figures in bold describe the branches with the highest levels of these indicators.

As can be seen, the greatest differentiation was to be found in mechanical engineering, which includes, on the one hand, precision manufacturing with the greatest share of value added and, on the other hand, the manufacture of radio and television equipment and motor vehicles, which had one of the lowest levels of value added. We may add that these branches, along with petrochemicals, had the highest levels of intermediate goods import intensity.

⁵ There is also a low level of internationalisation in branches such as manufacture of beverages (branch 11), printing and reproduction of recorded media (branch 18), manufacture of other non-metallic mineral products (branch 23), and repair, maintenance and installation of machinery and equipment (branch 33).

Table 4. The Share of Value Added in World Production and Direct Import Intensity of Intermediate Goods in Branches of Manufacturing in 2005

Item	Value added	Intermediate goods imports
Food and beverages	0.1917	0.0955
Cigarettes and tobacco	0.3324	0.2518
Textiles	0.3265	0.3109
Clothing and fur products	0.3994	0.2502
Leather and leather products	0.3289	0.3315
Wood and wood products	0.2826	0.1580
Pulp, paper, and paper products	0.2603	0.2571
Printed matter and recorded media	0.3783	0.1810
Coke, refined petroleum products	0.0805	0.6751
Chemicals, chemical products	0.2291	0.3003
Rubber and plastic products	0.2889	0.2799
Products from other non-metallic materials	0.3495	0.1098
Metals	0.2609	0.2526
Fabricated metal products	0.3317	0.1953
Machinery and equipment	0.3193	0.2097
Office machinery and computers	0.2399	0.3097
Electrical machinery and apparatus	0.2790	0.2843
Radio, television, and telecommunications equipment	0.1419	0.6197
Medical and precision instruments and equipment	0.4543	0.1655
Motor vehicles, trailers, and semi-trailers	0.1739	0.4327
Other transport equipment	0.2727	0.2007
Furniture and other manufactured goods	0.2810	0.1971
Secondary raw materials	0.2463	0.0341

Source: prepared by the authors on the basis of Central Statistical Office (2009) data.

Table 5 sets out the coefficients of the cumulative share of value added and intermediate goods imports in the final production of manufacturing branches. The figures in bold describe the branches with the highest levels of these indicators.

The leading branches in terms of share of value added in final production are minerals, food products, precision instruments, wood products, and printing. Refining, radio and television equipment, and motor vehicles are the weakest manufacturing branches with regard to generating value added. They have the highest cumulative intermediate goods import intensity as a share of final production. Cumulative import intensity is also high in the chemical and leather industries and in metallurgy. **When the analysed indicators are compared with the export structure of Poland's manufactured goods (see Table 5), it turns out that**

the latter is concentrated in branches that make products of high import intensity and low value added. Of those branches with a significant share of export (above 4%), only the manufacture of food products and beverages has a high share of value added and a low import intensity (marked in orange). A change in the structure of export towards products of this branch would therefore trigger an increase in the share of export in generating GDP, where GDP is constant. The remaining important branches in the structure of export (marked in blue) are characterised by high import intensity and low value added.

Table 5. The Cumulative Share of Value Added in Final Production and Cumulative Import Intensity of Intermediate Goods in Branches of Manufacturing versus the Export Structure of Manufactured Goods in 2005

Item	Value added	Structure of export (%)	Intermediate goods imports
Food and beverages	0.7471	8.1	0.2275
Cigarettes and tobacco	0.6230	0.1	0.3208
Textiles	0.5909	3.9	0.3970
Clothing and fur products	0.6646	2.6	0.3237
Leather and leather products	0.5797	0.7	0.4087
Wood and wood products	0.7000	3.6	0.2809
Pulp, paper, and paper products	0.6115	2.6	0.3705
Printed matter and recorded media	0.7218	0.6	0.2683
Coke, refined petroleum products	0.2691	2.4	0.7083
Chemicals, chemical products	0.5643	5.9	0.4056
Rubber and plastic products	0.5903	4.9	0.3924
Products from other non-metallic materials	0.7515	2.4	0.2243
Metals	0.5842	7.7	0.4010
Fabricated metal products	0.6625	5.8	0.3256
Machinery and equipment	0.6526	8.8	0.3351
Office machinery and computers	0.5947	0.3	0.3925
Electrical machinery and apparatus	0.5887	6.0	0.3971
Radio, television, and telecommunications equipment	0.3213	4.0	0.6690
Medical and precision instruments and equipment	0.7378	1.0	0.2514
Motor vehicles, trailers, and semi-trailers	0.4452	16.7	0.5458
Other transport equipment	0.6524	4.9	0.3352
Furniture and other manufactured goods	0.6564	7.1	0.3282
Secondary raw materials	0.7215	0.0	0.2479

Source: prepared by the authors on the basis of Central Statistical Office (2009) data.

Because Polish export is predominantly conducted via the global networks of trans-national corporations, **of the three phases of the value chain (design, production and market-**

ing) the emphasis is placed on the second, while phases one and three, where the majority of value added is generated, are relatively weak. Meanwhile, it is their low levels of innovation that cause companies that are not part of global networks to be weak in the first phase of the value chain. Data from Poland's Central Statistical Office (GUS) show a strong link between enterprises' innovativeness and their size and technological advancement. Yet a breakdown of indigenous enterprises in Poland reveals a relatively high proportion of micro enterprises and a low proportion of large companies. The moderate level of innovation in Poland therefore has clear structural determinants. These are also the factors that make Polish exporters weak in the marketing phase. As has been demonstrated by the results of research conducted by the Institute for Market, Consumption and Business Cycles Research (IBRKK), only 49% of manufacturing exporters surveyed in 2011 sold their goods on foreign markets under their own brand names. Those that did so were most often large companies (Pilat 2012, Institute 2012).

The call to increase the share of value added in export can only be answered by medium- and long-term measures to change its structure and to reposition Polish exporters in the value chain. In particular, this involves creating favourable conditions for the growth of production and export in branches that are already highly technologically advanced and that are strong in creating value added. It also means supporting the research and development conducted by companies in conjunction with universities which aims to move to a higher level in the value chain – either by remaining with the current export specialisation or by changing to another. At the same time, there is a need to thoroughly redefine policy on foreign direct investment. In view of the medium and long-term demands for support from public funds (under the auspices of government grants or special economic zones), the proposals that are accepted should involve more than the straightforward assembly of imported parts and sub-assemblies.

Sectoral shifts require time and structural policy measures. Yet a great deal of progress can be made within individual enterprises when they are given appropriate support from industrial policy. There is a need to modernise the export offer in four directions: modernisation of the production process, modernisation of the product, modernisation of the company's position in the value chain, and modernisation of (or change in) the value chain itself, to which the company belongs (Pilat 2012). Polish companies have so far made progress mainly in the first two areas.

In addition to attaining a market position, securing a better place in the value chain, or simply changing it, requires the prior accumulation of significant resources of social and human capital, and of a knowledge and research base. The state can provide a synergic boost to the efforts of companies by improving their business environment, strengthening higher education and science, facilitating access to capital, and removing barriers to investment and innovation. Below we summarise our analysis of Poland's competitive position on the analogy of football league divisions.

Table 6. Elements of Poland's Competitive Position Compared to the 144 Countries in the GCR, the 27 Countries of the EU, and the 15 Countries in the Comparison Group

Symptom of competitiveness / dimension of competition	Global GCR 144	European EU-27	Comparison group 15
1.1.a. <i>Per capita</i> GDP (according to purchasing power parity)	46. First Division	24. Third Division	8. Second Division
1.1.b. Growth in <i>per capita</i> GDP, 2004–2011 (according to purchasing power parity – PPP)	60. Second Division	2. First Division	5. First Division
1.2. Productivity, 2011 (GDP PPP per person employed)	42. (of 109) Second Division	23. Third Division	8. Second Division
1.3. Employment rate, 2011 (employed persons / population aged 15+)	109. Third Division	19. Third Division	10. Second Division
1.4. Share of investment in GDP, 2011	53. Second Division	12. Second Division	12. Third Division
1.5. Share in world export, 2012	27. First Division	8. First Division	8. Second Division

* where Poland is situated in the top third of a given group, this denotes First Division; subsequent positions denote Second Division, and the lowest positions denote Third Division.

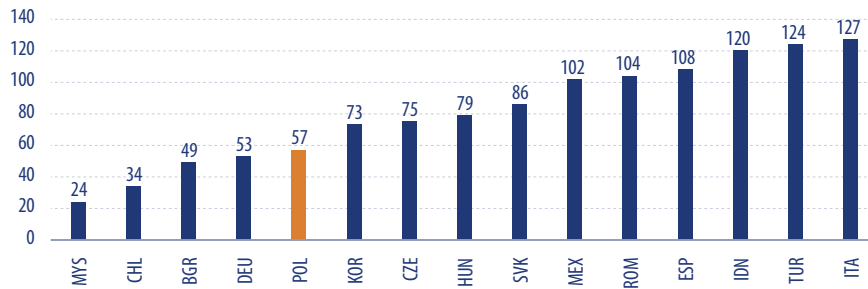
Source: prepared by the authors on the basis of World Bank and World Trade Organization data.

2. Competitive potential: resources

2.1. The labour market

It is difficult to evaluate Poland's competitive position with regard to labour market efficiency from the latest GCR 2012/2013 ranking. **On the one hand, Poland is fairly low down in 57th position** (it is 15th among the EU states). **On the other hand, Poland is doing quite well relative to the countries compared in the report**; labour market efficiency was rated higher only in Malaysia, Chile, Bulgaria and Germany.

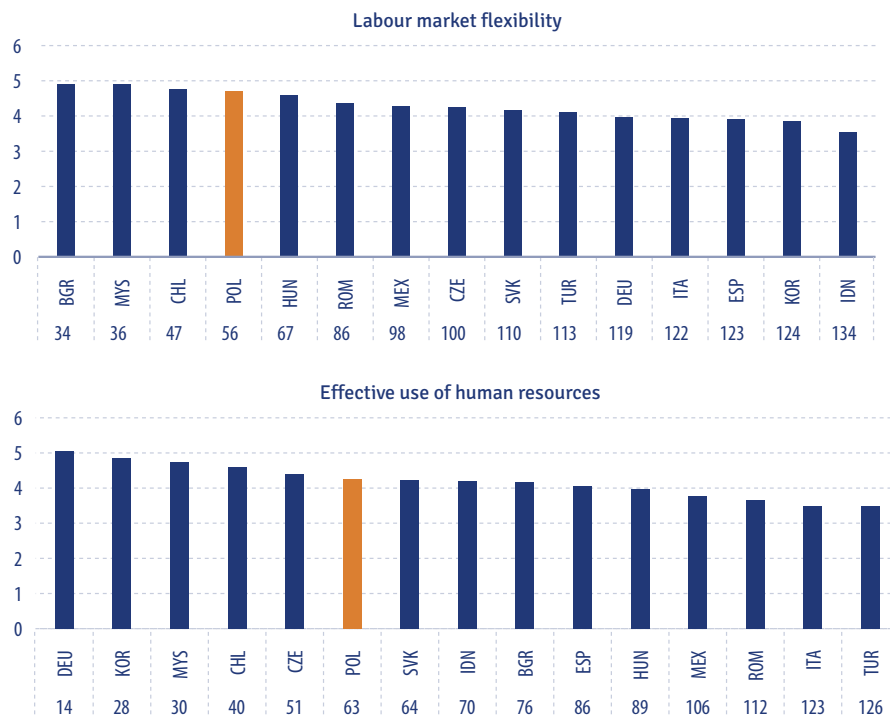
Figure 15. Poland's Competitiveness in Terms of Labour Market Efficiency Compared to Selected Economies in the GCR 2012/2013 Ranking



* the number above each country denotes its world position: 1. – best, 144 – worst.

Source: GCR 2012/2013.

Figure 16. Poland's Competitiveness in Terms of Labour Market Flexibility and Effective Use of Human Resources Compared to Selected Economies in the GCR 2012/2013 Ranking



* the number below each country denotes its world position: 1. – best, 144 – worst.

Source: GCR 2012/2013.

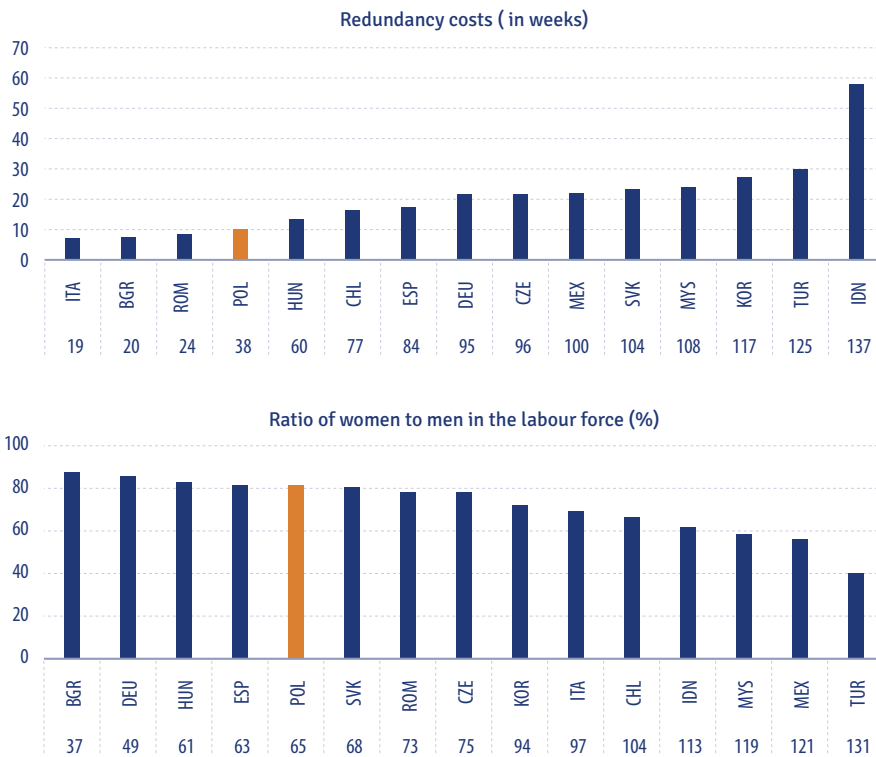
The labour market was divided into two subsections: labour market flexibility and effective use of human resources. Poland performed better in the first (56th place in the world, 9th in the EU), but was weaker in the second (63rd place in the world, 18th in the EU).

The following were assessed in regard to labour market flexibility: cooperation in labour-employer relations, the flexibility of wage determination, hiring and firing practices, and redundancy costs. Thanks to this, it is possible to test the ease with which entrepreneurs are adapting to the changing conditions of the business cycle. It must be remembered, however, that three of the four indicators (apart from redundancy costs) were based on respondents' replies.

The following were assessed in regard to the second subsection: the strength of the link between pay and productivity, reliance on professional management, brain-drain, and the participation of women in the labour force. Here, too, the first three indicators originate from survey data. Due to the low comparability of indicators based on respondents' replies in different countries, that is, based on 'soft data', we only show Poland's position in terms of 'hard data' measurements: the costs of laying off or dismissing employees and the proportion of women in the labour market. According to the criteria adopted in the GCR, Poland's position turned out to be good in the case of both these indicators. **Redundancy costs are quite low relative to the economies compared in the report.** In 2011 the average severance payment was the equivalent of approximately ten weeks' remuneration. In Italy, which topped the assessment in this respect, the average severance payment was 7.2 weeks' remuneration, while in Indonesia, which was rated worst, it was 57.8 weeks' remuneration.

The ratio of women to men in the Polish labour market was also relatively high. In 2010 it was 81 women to every 100 men, which is close to the values recorded for other European economies. The lowest percentage of women working was found in Turkey (40 women to every 100 men), Malaysia and Mexico (below 60), and Indonesia (62), which in these societies is the result of the persistence of the traditional family model.

Figure 17. Poland's Competitiveness Compared to Selected Economies in Terms of Redundancy Costs (in weeks) and the Ratio of Women to Men in the Labour Force



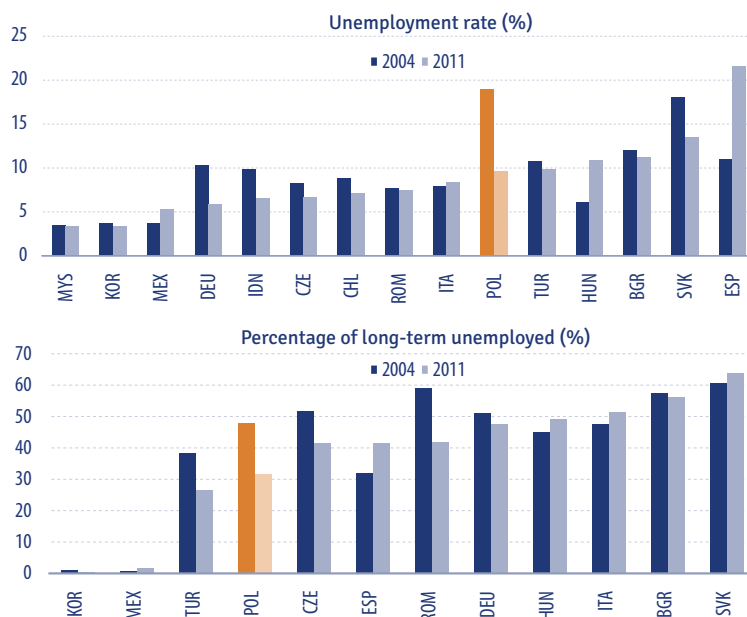
Source: GCR 2012/2013.

The raw statistics available in international databases may also be employed to analyse the efficiency of the Polish labour market: the unemployment rate and activity rate of the population.

The unemployment rate declined significantly in Poland from 2004 (from a level of almost 19%) and in 2011 it was close to the EU average of 10%⁶.

⁶ According to the *Labour Force Survey*.

Figure 18. The Unemployment Rate and Percentage of Long-term Unemployed in Poland and Selected Countries in 2004 and 2011 (%)

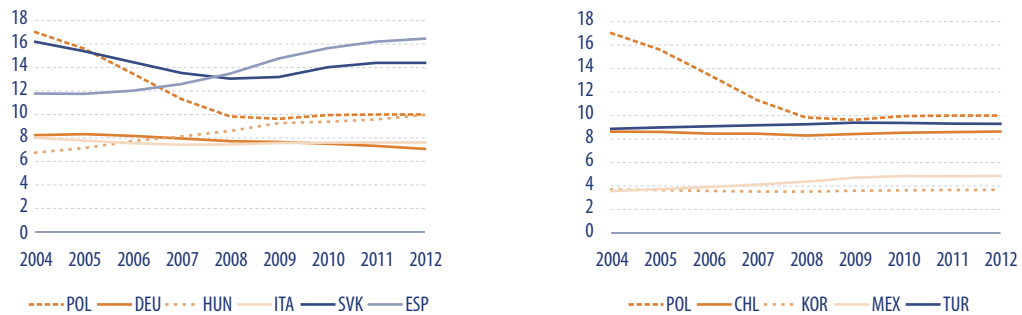


Source: World Bank.

One of the measures of labour market efficiency is the percentage of long-term unemployed (longer than 12 months) in total unemployment. If this remains at a high level, the labour market is not functioning effectively and imbalances persist between the demand for labour and its supply. **In Poland in 2004–2011 the percentage of long-term unemployed fell considerably from almost 50% to 32% of the overall total.** At almost 60% in 2011, the highest level of long-term unemployment among the economies studied was recorded in Slovakia. World Bank data indicate that in Korea and Mexico the percentage of long-term unemployed was very low (0.4% and 1.8%, respectively).

The fall in unemployment noted in Poland coincided with a decline in structural unemployment, which suggests that the Polish labour market is functioning better. It emerges from OECD data that in 2004–2012 the non-accelerating inflation rate of unemployment (NAIRU) fell in Poland from 17% to 10%. It is noticeable when assessing the economies compared in the report that structural unemployment has risen very sharply in Spain as a result of the recent crisis. The Slovakian labour market should be assessed negatively. Despite a slight fall, the unemployment rate remains high compared to other European economies.

Figure 19. NAIRU in Poland and in the Countries Compared in the Report, 2004–2012 (%)

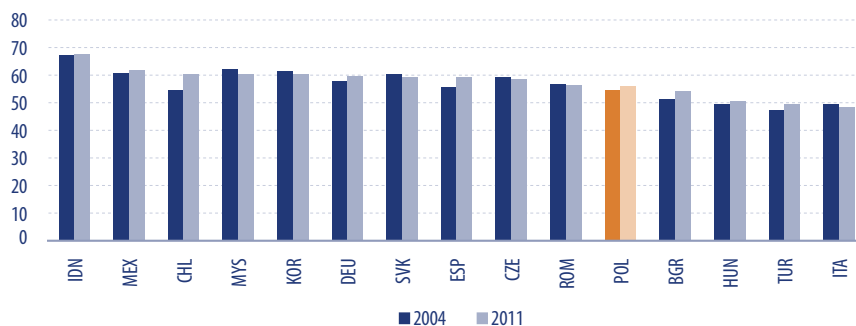


Source: OECD.

The economic activity rate, which measures the proportion of the working age population⁷ participating in the labour market (working or seeking work) is fairly low in Poland (just under 56% in 2011 according to World Bank data). A considerable proportion of the potential labour force is therefore economically inactive. For the economy this means an ineffective use of human resources and reduced production potential.

The use of the labour force was significantly higher in the following countries from the comparison group: Indonesia, Mexico, Malaysia, Chile, Korea, Germany, Spain, Slovakia, the Czech Republic, and Romania.

Figure 20. The Economic Activity Rate in Poland and Selected Countries in 2004 and 2011 (percentage of the population aged 15 or above)



Source: World Bank.

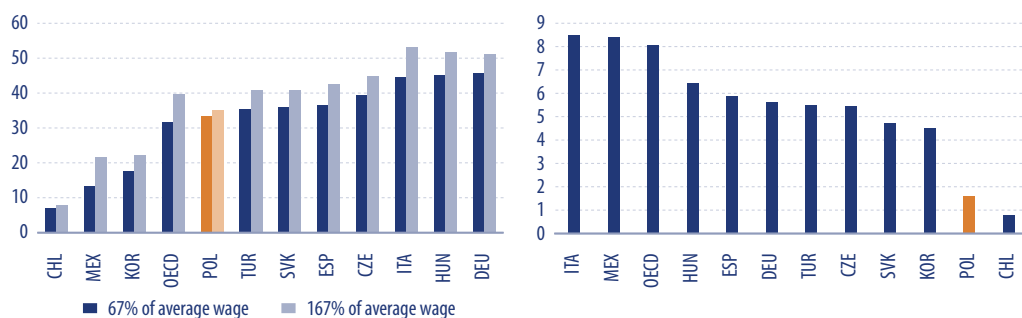
The low level of use of the labour force in Poland is one of the more pressing economic problems. The low rates of economic activity of the population aged 55–64, and particularly of women, are largely the result of early retirement schemes, which were discontinued not long ago. In 2004 the average age upon leaving the labour market stood at 55.8 for women and 60

7 The World Bank takes this to mean people aged 15 or above.

for men (Eurostat data), while the official retirement ages were 60 for women and 65 for men. Another important reason for women taking early retirement is the limited access to care services for the elderly. A proportion of women aged over 50 withdraw from the labour market to look after older family members. There are two reasons for the low rates of economic activity among young people: many of them study and are either not working at all or working in the black economy.

The tax wedge, which is not particularly progressive and entails comparatively high non-wage costs when employing people on low incomes, is a factor limiting employment in Poland that particularly affects those with low qualifications. In 2011 the tax wedge⁸ in the case of those receiving 67% of the average wage stood at 33.4% and was only slightly lower than for those earning 167% of the average wage (35%). It is possible that the relatively high non-wage costs lead to fewer people on low incomes, and fewer people with low qualifications, being employed and thus contribute to the growth of the black economy.

Figure 21. The Tax Wedge (percentage of gross salary) for a Single Person Earning 67% and 167% of the Average Wage (left diagram – in %) and the Difference Between Them (right diagram) in Poland and Selected Countries in 2011

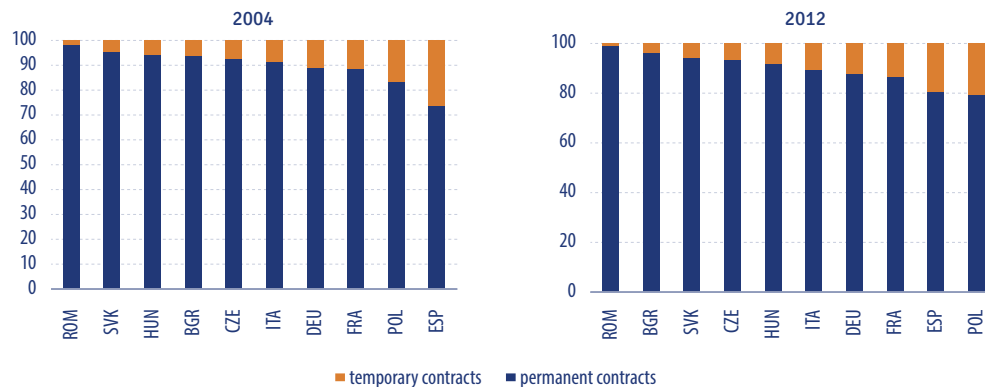


Source: OECD.

To summarise: Poland's competitiveness in terms of labour market conditions is ambiguous. On the one hand, the Polish labour market is fairly flexible: entrepreneurs can adjust pay at the level of the company and the costs of layoffs and dismissals are relatively low compared to the other economies studied in the report. On the other hand, it is employers' frequent use of other forms of employment than a standard employment contract that is to a large extent responsible for the flexibility of the Polish labour market. **Over the last few years Poland has been one of the EU states with the highest percentage of people employed on temporary contracts and, since the drastic fall in employment in Spain, it has become the EU state with the highest percentage of people employed in this way** (see Figure 22). This has allowed employers to be more flexible in their adaptation to changing economic conditions. There is a lack, however – both on the side of employees and of employers – of incentives to invest in workers and raise their qualifications. It is possible that this could feed through into lower labour force quality and so reduce the prospects for long-term growth.

⁸ Calculated as income tax plus total employer and employee health insurance contributions minus the amount received in transfers (OECD data).

Figure 22. Percentage of Employees on Temporary and Permanent Contracts in EU Countries Compared in the Report in 2004 and 2012



Source: Eurostat.

The low level of utilisation of human resources is also a problem. This translates into reduced production potential and – by reducing budget revenues and increasing outgoings – has a negative effect on public finances.

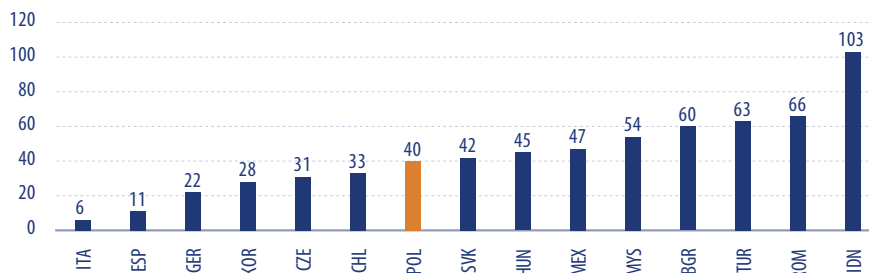
2.2. Health

Health is an extremely important factor of competitiveness and therefore of economic growth. Sick and ill employees do not make the best of their potential and are less productive. Moreover, leaving aside the cost of lost revenues for the state budget and for enterprises, an unhealthy population increases public sector costs. Expenditure on health and social insurance rises. Investment in health services is key to maintaining an economy's competitiveness.

The indicators presented in the rankings of the Global Competitiveness Report have been used to assess Poland's competitiveness in the area of health. This includes data on the incidence of tuberculosis (number of cases per 100,000 of population) and AIDS (percentage of adults aged 15-49 years infected with the HIV virus), on infant mortality (number of deaths per 1,000 live births) and on life expectancy (average life expectancy at birth). These are 'hard' indicators originating from statistical data, which can therefore be compared between states and over time. World Bank data have also been used in the comparison.

According to the GCR 2012/2013, the consolidated competitiveness indicator in the area of health put Poland in 40th place among the 144 states in the ranking (20th place among EU states).

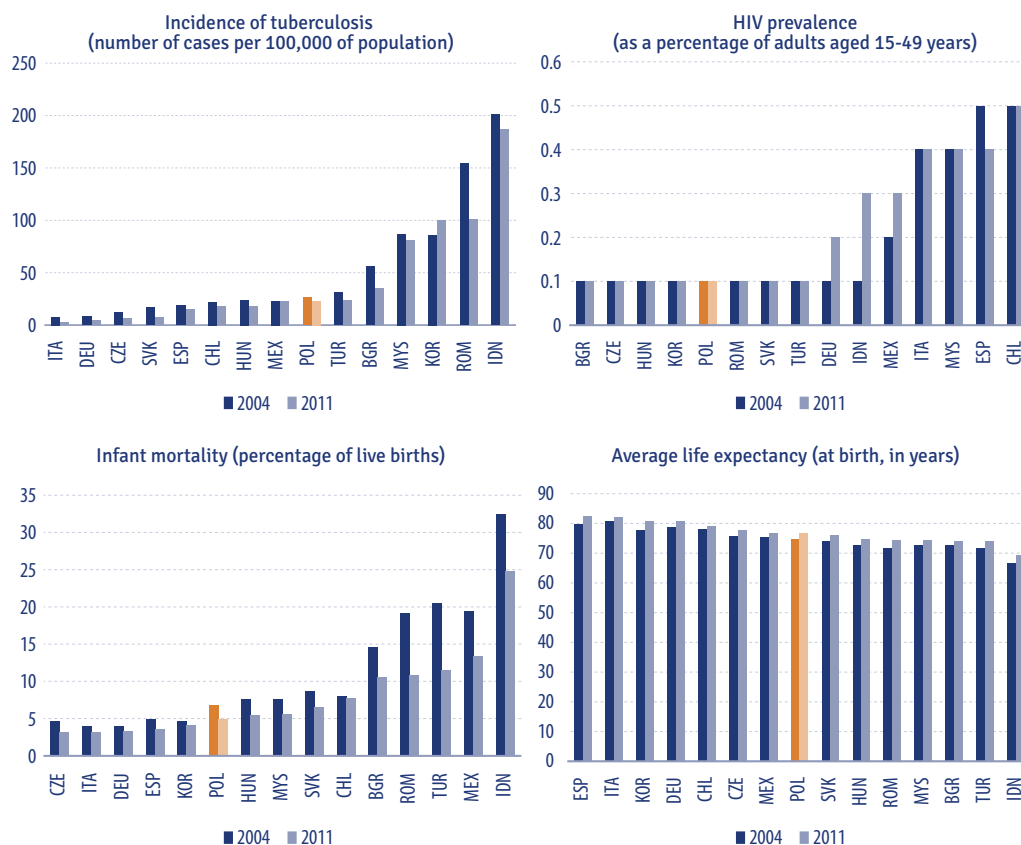
Figure 23. Poland's Competitiveness in the Area of Health Compared to Selected Countries in the GCR 2012/2013 Ranking



* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

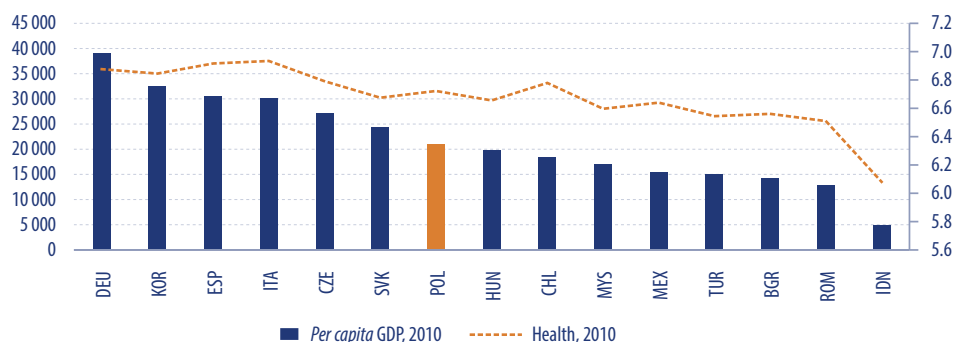
Figure 24. Selected Indicators of Poland's Competitiveness in the Area of Health Compared to Other Economies Analysed in the Report



Source: World Bank.

Poland's competitiveness in the area of health is relatively low and this was borne out by the indicators for the incidence of tuberculosis and for life expectancy.

Figure 25. Per capita GDP and Competitiveness in the Area of Health in Poland and Selected Countries in 2010



Source: International Monetary Fund and GCR 2012/2013.

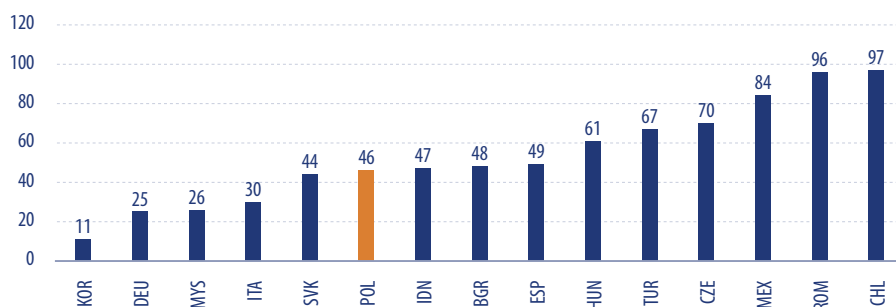
Poland's low competitiveness rating concerning the health of Poles results from the country's comparatively low level of economic development and the associated poor quality of health care. **Both public and private sector health care expenditure in Poland is modest compared to other EU Member States.** The data demonstrate that, despite the large number of hospital beds, there are too few nurses and doctors.

2.3. Primary education

From the point of view of the competitiveness of the economy, primary education is just as important as the good health of the population. Early childhood education is reflected in the growth of individuals' skills and creativity.

Poland was placed 46th in the world and 21st in the European Union in the GCR 2012/2013 primary education ranking. This result must, however, be treated with caution as it is composed not only of 'hard' data (gross enrolment index) but also of 'soft' data (responses to the question: How do you rate the quality of primary education in your country?).

Figure 26. Poland's Competitiveness in the Area of Education Compared to Selected Countries in the GCR 2012/2013 Ranking



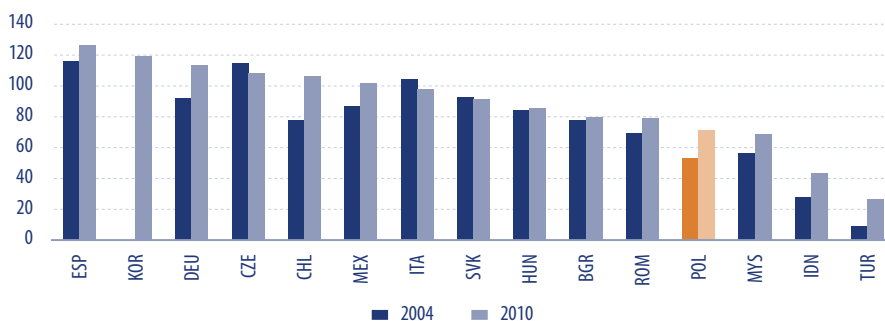
* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

The following analysis draws upon statistics from the World Bank database, which enables a more reliable comparison to be made between countries.

The net enrolment rate (calculated as the percentage of all children in a given age cohort attending primary school) is significant. In Poland, in 2010, 96.65% of children in the given age cohort were attending primary school. This was, however, lower than the proportion in Spain (99.72%). While a growth in the enrolment rate could be observed in less well developed countries, in 2004–2010 the rate declined in more advanced countries. In Germany it declined by one percentage point – from 98.6% to 97.6%; there were also falls in Spain, Italy and Korea.

Figure 27. The Net Enrolment Rate in Poland Compared to Selected Countries in 2004 and 2010*

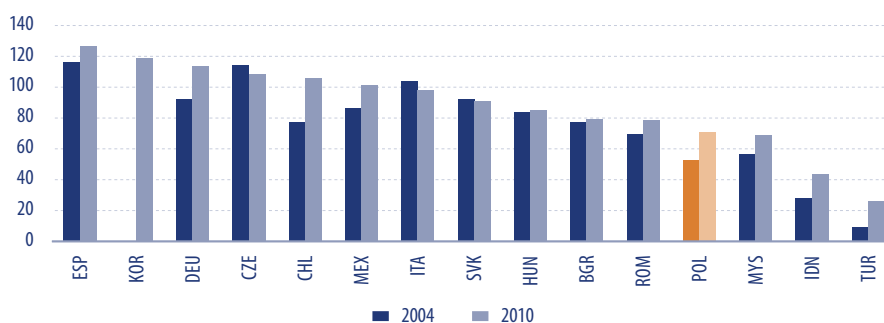


* no data for the Czech Republic and Slovakia.

Source: World Bank and GCR 2012/2013.

In addition to stressing the significance of primary education, more emphasis is now placed on the importance of pre-school education. Poland has performed very poorly in this respect. Even though 71% of children received pre-school education in 2010, this was the lowest proportion among the European economies analysed. Of the countries in the comparison group, this indicator was lower only in Malaysia, Indonesia and Turkey. These are, however, countries in which traditionally fewer women work.

Figure 28. Percentage of Children Attending Pre-School Education in the Total Number of Children of Pre-School Age* in Poland and Selected Countries in 2004 and 2010 (%)

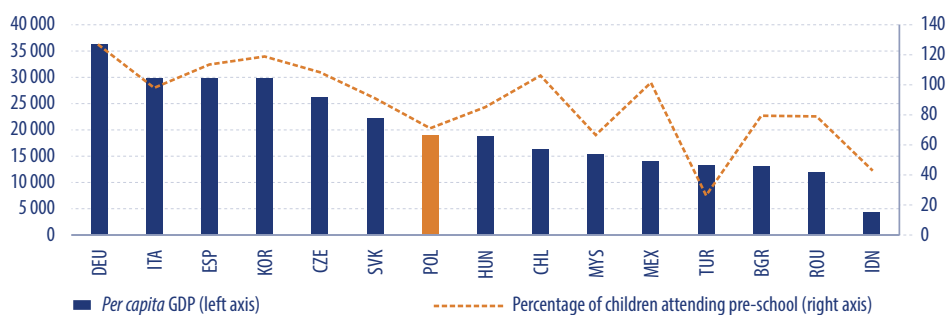


* The percentage may exceed 100% because the figure includes children who are younger or older than the age group attending pre-school and because it also includes children attending the given group for a second time.

Source: World Bank.

There is a positive correlation between the percentage of children receiving pre-school education and the level of economic development. A high percentage of children were found to attend in pre-school education in Germany, Italy, Spain and Korea. The percentage was significantly lower in less well developed countries with traditional family models (Turkey, Indonesia).

Figure 29. Per capita GDP and the Percentage of Children Attending Pre-School Education in Poland and Selected Countries in 2010



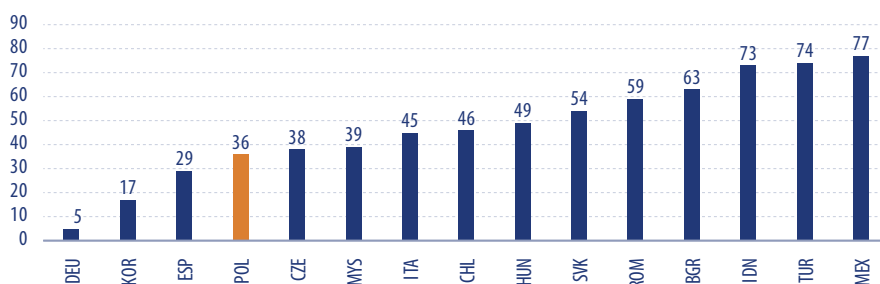
Source: International Monetary Fund and World Bank.

In general, **Poland performed quite well with regard to the enrolment rate and the quality of teaching in primary schools.** The pre-school enrolment rate, however, was low in Poland.

2.4. Higher education and training

In the area of education and training Poland occupied 36th place in the GCR 2012/2013, which was a good performance in worldwide terms. Its position of 18th among the EU member states, however, was a little weaker. Poland performed very well compared to the countries in the comparison group; only Germany, Korea and Spain received better assessments. But this result should be treated with caution: of the eight components that make up education and training, only two are ‘hard’ indicators; the others were compiled on the basis of respondents’ replies in the countries concerned.

Figure 30. Poland’s Competitiveness in the Area of Higher Education and Training Compared to Selected Countries in the GCR 2012/2013 Ranking



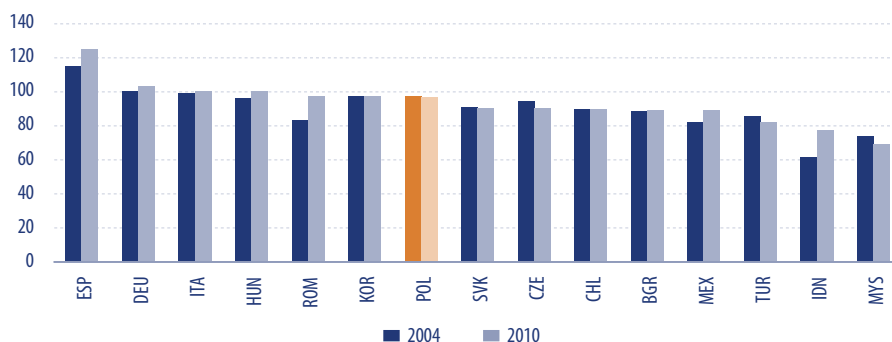
* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

The percentage of people attending secondary school in Poland is comparatively high. In 2010 the gross enrolment rate⁹ stood at almost 97% of those of statutory secondary school age (in 2004–2010 this fell slightly by one half of a percentage point). Malaysia, Indonesia, Turkey and Mexico were the countries with the fewest number of people attending secondary school.

⁹ This includes not only those of secondary school age but also people older and younger who are studying at secondary school level.

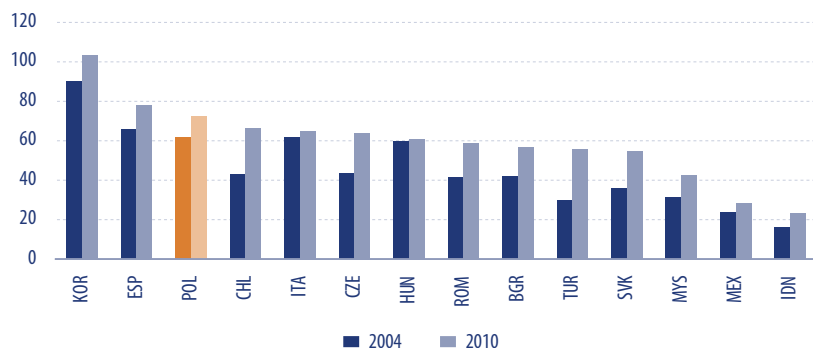
Figure 31. The Gross Enrolment Rate in Secondary Education in Poland and Selected Countries in 2004 and 2010 (percentage of people of statutory secondary school age)



Source: World Bank.

The gross enrolment rate in higher education was high in Poland compared to the other countries in the comparison group. In 2004–2010 the rate increased from 61.5% to 72%. It is possible for this indicator to exceed 100% because degrees are also undertaken by people who are not at the age at which the majority of people attend higher education. Both Korea and Spain had a higher percentage of people studying in higher education. The lowest percentages were recorded by Indonesia (23%), Mexico (28%) and Malaysia (40%).

Figure 32. The Gross Enrolment Rate in Higher Education in Poland and Selected Countries* in 2004 and 2010 (percentage of people at the statutory age for higher education)



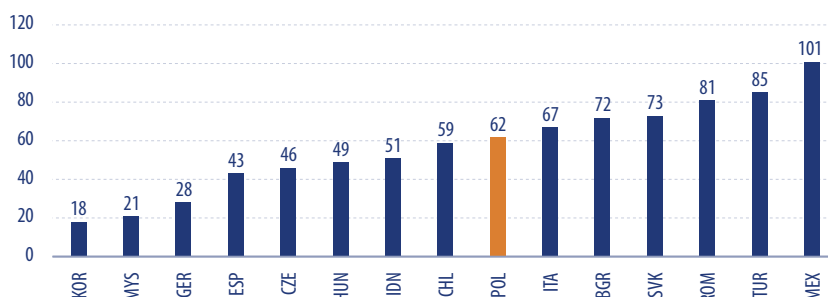
* no data for Germany in the World Bank database

Source: World Bank.

The indicators available from the World Bank database concerned enrolment only. There is a lack of data on the quality of education. This is why we also use the ‘soft’ indicators from the GCR 2012/2013 to compare the quality of education. The assessment given to the quality of education in Poland was quite low. Poland occupied 62nd place worldwide. Of the countries

in the comparison group, Korea, Malaysia, and Germany were found to have the best quality of education, while Mexico, Turkey, and Romania had the worst.

Figure 33. Poland's Competitiveness in the Area of Quality of Education Compared to Selected Countries in the GCR 2012/2013 Ranking

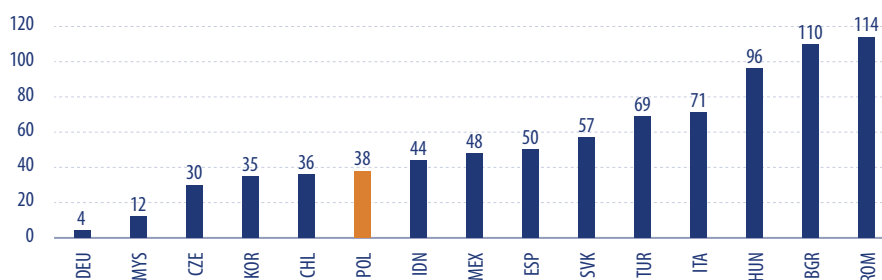


* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

Poland was ranked higher in terms of lifelong learning, for which it occupied 38th place in the GCR 2012/2013. Of the economies in the comparison group, Germany and Malaysia were assessed as better than Poland, while Romania and Bulgaria were rated as the weakest. When interpreting this indicator, however, we must remember that it was compiled on the basis of respondents' replies.

Figure 34. Poland's Competitiveness in the Area of Lifelong Learning Compared to Selected Countries in the GCR 2012/2013 Ranking



* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

What is more, the available statistical data showed that, although the percentage of people aged 20–29 with a bachelor's or master's degree was very high, the proportion that had graduated in science subjects was low. **It is possible that the growth over the last few years in the unemployment rate among those with higher education demonstrates that courses**

at this level are ill-matched with market requirements. It would appear, therefore, that greater emphasis should be placed on matching courses to labour market needs, including by increasing the role played by apprenticeships, and vocational and professional training, both at the secondary and higher levels.

2.5. Market size, attractiveness to investors, and FDI inflows

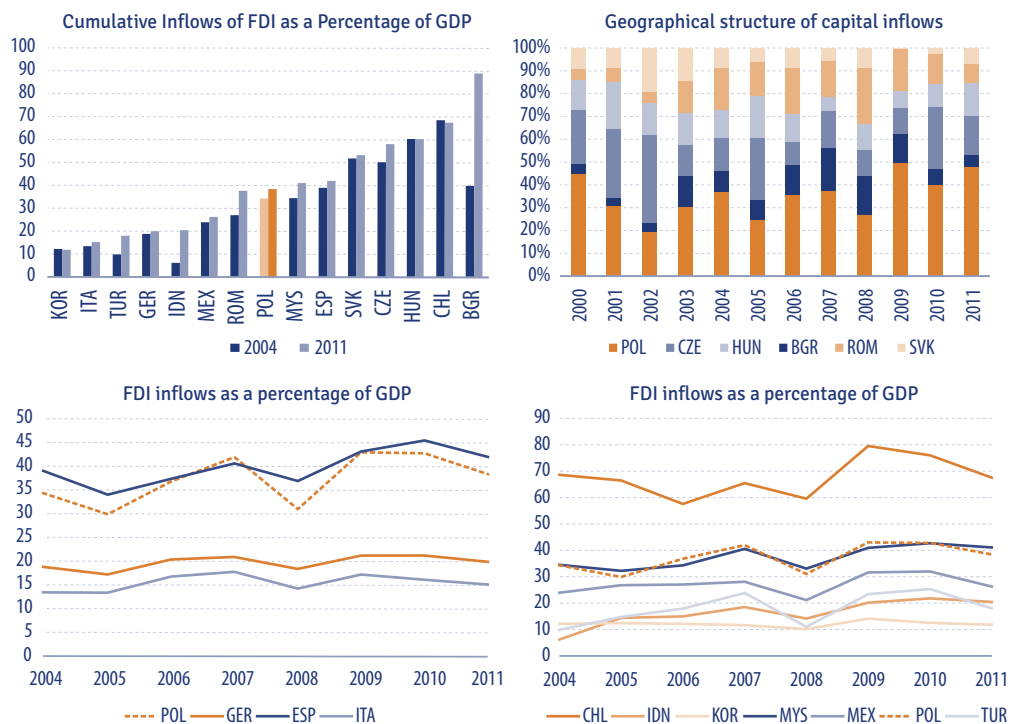
The three factors mentioned in the title should be considered together as there are significant links between them. Attractiveness to investors is understood as the capacity to capture investment by offering the best conditions for enterprises to function. At the same time, the size of the market is one of the decisive factors in attracting foreign direct investment inflows. FDI and their structure also become a factor in attracting further investors and in helping restructure the economy.

The size of the market expressed as the absolute value of GDP is one of the Polish economy's important strengths. However, it is also worth noting the size of the market measured as the proportion of exports in GDP, which indicates that the economy is still marked by a low level of openness. One of the reasons for this is the relatively large size of the economy (large economies are usually less open; Germany is an exception as its economy is very strongly pro-export).

Among the comparison group of states, the Polish economy is comparable in size to that of Turkey and much bigger than those of the NMS. It is small, however, when viewed alongside the economies of Indonesia, Korea, Mexico, Germany, Italy and Spain (see 1.1).

The size of the market combined with the relatively low costs of labour in relation to the qualifications offered has become one of the important factors in the inflow of capital to Poland. **Although the Polish economy has attracted the most FDI in the region in terms of absolute values, its share of FDI in GDP places it alongside countries with an average level of capital inflows** (see Figure 35). As a result of enhanced attractiveness to investors in the crisis, and thanks to macroeconomic stability and economic growth, Poland's share in the structure of foreign direct investment in the six NMS rose from 37% in 2004 to 47% in 2011. According to data from 2010, one-third of the total cumulative value of FDI was accounted for by investment in manufacturing.

Figure 35. Cumulative Inflows of FDI as a Percentage of GDP

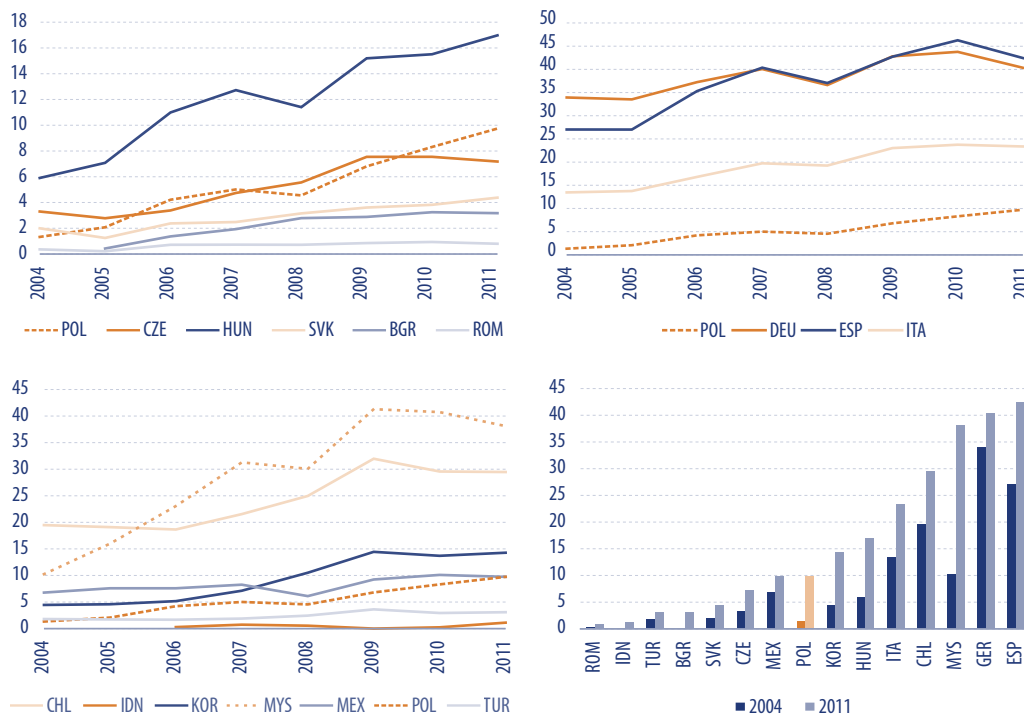


Source: UNCTAD.

Although FDI can be very important for the attractiveness of an economy, it is the capacity to export foreign investment that signals competitiveness and the maturity to expand on external markets (see Figure 40). Until now, the expansion of Polish entities abroad in the form of FDI has been largely regional and has primarily concerned the EU states, Russia, and Ukraine (Witek-Hajduk 2010). The purpose of the capital internationalisation of Polish companies has principally been to acquire new sales markets and lower production costs.

Polish foreign investment, though it represents just under 10% of the country's GDP, grew tenfold in 2004–2011. This is evidence that the country possesses the resources necessary for international expansion. **The Polish economy's relatively healthy macroeconomic situation and the financial condition of its enterprises mean that in many cases companies have taken advantage of the crisis to bolster their presence on foreign markets.** Furthermore, it cannot be ruled out that Polish enterprises, which are burdened by excessive administrative barriers, have taken the opportunity to conduct regulatory arbitrage by moving to more friendly institutional environments. This phenomenon has also been visible in Italy, for instance, where, due to a high level of economic regulation, there are relatively large capital outflows in the form of FDI (23% of GDP) with significantly lower inflows of 16% of GDP (the lowest – besides Greece – in the Eurozone).

Figure 36. Cumulative Outflows of FDI as a Percentage of GDP



Source: UNCTAD.

The size of the Polish economy put it in 20th place among the 144 economies in the GCR ranking and in 6th place among the EU-27. This is an important strength and a factor – along with continued economic growth in a crisis – that has increased the attractiveness of the market. The advantage provided by a large sales market is, however, conditional: it depends on how it is managed. The aim of economic policy should be to increase attractiveness to investors in pro-export FDI, which can become a source of innovation and technological progress. If this is not achieved, Poland's large market could simply be exploited as a sales market.

Where FDI structure is unfavourable it can lead to a rise in consumption and borrowing and, consequently, to internal and external imbalances. Portugal had attracted a comparatively large amount of foreign investment up to the mid-1990s because of low labour costs and fairly rapid economic growth. Notwithstanding this, the structure of investment, which was largely in services for the domestic market (70%–80%), was unfavourable. There was little pro-export activity. Before the crisis the southern Eurozone countries, as well as the Baltic republics, Bulgaria and Romania, attracted investment in the unproductive services sector (including real estate and finance), which made them more vulnerable to the crisis and destabilised their current account balance.

2.6. Demography

Poland, which accounts for 0.56% of the world's population, has 38.2 million inhabitants (data from 2010) and is the 34th most populous country in the world and the 6th most populous in the European Union. In 2010 Poland had an estimated GDP of approximately half a trillion USD, which was the 20th largest. While it is not easy to compare the years 1970 and 2010 in terms of the size of economy ranking, we can state that Poland's importance in terms of population potential has significantly declined in that period (see Table 7).

Table 7. Population in Millions and Percentage of the World Population of Selected Countries in 1970, 2010, and 2050 (forecast)

		World	Europe	Poland
1970	million	3696.2	655.9	32.5
	% of world population	100	17.7	0.88 (23 rd to 229 th position)
2010	million	6895.9	738.2	38.3
	% of world population	100	10.7	0.56 (34 th to 229 th position)
2050 (forecast)	million	9306.1	719.3	34.9
	% of world population	100	7.73	0.38 (58 th to 229 th position)

Source: United Nations.

The forecast for the following 40 years is not promising. Assuming an average birth rate, the UN estimates that the world population will increase in 2010–2050 from 2.4 billion to 9.3 billion. Meanwhile, **in Poland, as a result of the low birth rate, there will be 3.4 million fewer citizens**, the population will decline to 34.9 million, and Poland's share in the world population will fall to 0.38% (58th place).

The fertility rate indicates the average number of children a woman has. The minimum for Poland was observed in 2002, when there was an average of 1.22 children to each woman. By 2010 this had risen to 1.38. However, this is still below the level required to ensure generational replacement, which is slightly above two children per woman. In Europe, the fertility rate is lower only in Latvia, Portugal, Romania, and Hungary. The only EU countries with a fertility rate above 2.0 are France and Ireland.

Poland's low fertility rate stems from the changes in reproductive patterns that occurred in 1980–2010. A further cause has been the growth in the number of births outside marriage and the higher number of parents bringing up children alone, which does not encourage people to have more children. Along with generational change and new patterns of education, the maximum fertility level shifted from the 20–24 age range to the 25–29 age range, which is also not conducive to fertility (Strzelecki 2011, p. 15). To demonstrate the significance of demographic changes for an economy's competitiveness, it is necessary to remember that one of the basic factors determining the inclination to locate capital in a particular country

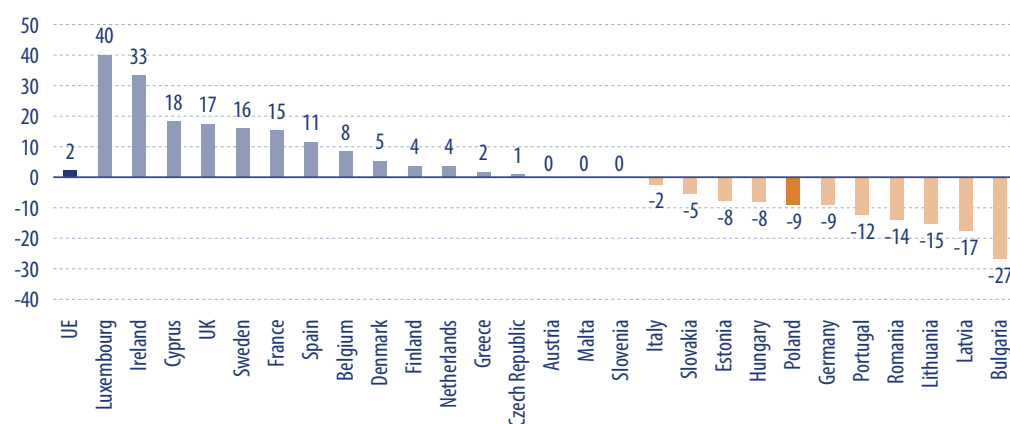
is – apart from proximity to sales markets and the prosperity of the citizens – the number of inhabitants there will be to buy the products that are manufactured. In turn, it is the price of products on the market (also on international markets) that determines the cost of labour, which is derived from the size of the labour supply and non-wage costs.

Poland’s attractiveness stemming from the size of its market will decline for demographic reasons. As we have noted, in 2010 according to UN estimates Poland occupied 20th place in the world in terms of GDP size, yet in 2050 (assuming average population growth and the present global distribution of wealth), it will fall to 29th place.

The countries whose GDP will increase due to population increase are (in order) Saudi Arabia, Venezuela, Sweden, Norway, Belgium, Iran, Argentina, the United Arab Emirates, and Nigeria. The attractiveness of larger economies, including the Mexican, Indonesian and Turkish economies, will grow significantly in this respect, as will the attractiveness of the smaller but rapidly growing economies of emerging countries.

Poland, with its predicted negative birth rate, is losing importance not only in the world, but also in the European Union. The demographic change forecast for the EU over the next 40 years leads to the conclusion that the populations of the NMS (apart from Cyprus) and of Italy, Germany and Portugal (see Figure 37) will not increase. Meanwhile, an increase in population is forecast for the remaining countries of the ‘15’. There will thus be an increase in the overall EU population between 2010 and 2050 of 2%. It is perhaps symptomatic that the countries that will be more affected than Poland (-9%) by a reduction in population are Portugal (-12%), Romania (-14%), Lithuania (-15%), Latvia (-17%), and Bulgaria (-27%). Apart from Portugal, these countries are a little lower than Poland in terms of the wealth of their citizens (*per capita* GDP). This suggests that material factors provide a strong incentive to have children.

Figure 37. Populations of Member States of the European Union – Percentage Change from 2010 to 2050 (forecast)



Source: prepared by the authors on the basis of United Nations forecasts.

The most serious challenges for Poland's competitiveness, and also for other European countries, are not exclusively a matter of changes in population but also involve the changes in its age structure and the associated changes in the size of the labour force. This has consequences for the costs of labour and for the prices of products.

While the age dependency ratio, calculated as the proportion of the population of post-working age (in this case 65+) to that of working age (here: 20–64) stood at 21% in 2010, it will be 52% in 2050. This indicator will rise sharply in Poland (by almost two-and-a-half-times), which will not be the case in the majority of West European countries. Taking into account that the tax wedge in Poland (the difference between gross pay along with all the non-wage costs paid by the employer and the employee's net pay) now stands at approximately 34% on average, of which the greater part (approximately 27 percentage points) is made up of social and health insurance contributions, the rise in labour costs in Poland will be faster than in Western Europe and will mean that this component of comparative advantage is lost. The crisis may, however, be more severe, as the forecasts take no account of migration.

Where pro-family policy is concerned, lower sums are transferred in Poland in one-off maternity payments and child tax relief than in many EU countries and many neighbouring countries (e.g., the Czech Republic and Russia). **Other tax arrangements likewise do not reduce the costs of having children** – at least compared to analogous costs in other countries (e.g., the VAT on products for children, which is often reduced in other EU countries, is charged at the standard rate in Poland; there are preferential arrangements for single parents, yet almost none for married couples¹⁰; and until recently there was a principle in the pension system that parental leave did not count as an insurance contribution period¹¹.)

The difference between the burden on the incomes of those with children and those without serves as a measure of the strength of the financial incentives to have children. Figure 38 presents an OECD measure of the tax wedge for various family types. In the case of deductions from the pay of a single childless person receiving two-thirds of national average wage compared with a person with two children, the differences are almost always considerable: after taking into account the financial support given for having children, the income of the former is much lower than the income of the latter. The average deductions from the pay of childless 'singles' in OECD countries are twice as high (16% versus 32%), though in some countries single parents receive more from the state than they contribute towards its expenditure. It is interesting that the leading countries in providing support are from the Anglo-Saxon cultural sphere (Ireland, New Zealand, Australia, Canada and the USA), with the addition of Luxembourg. In Poland the average deduction from the pay of single people is 33%, though having two children lowers the deduction to 28% of gross pay¹². It can be seen, then, that there is little difference between the deductions and that they are both at a high level. In the case of married couples receiving 100% and 33% of average pay – depending on whether they are bringing up two children or

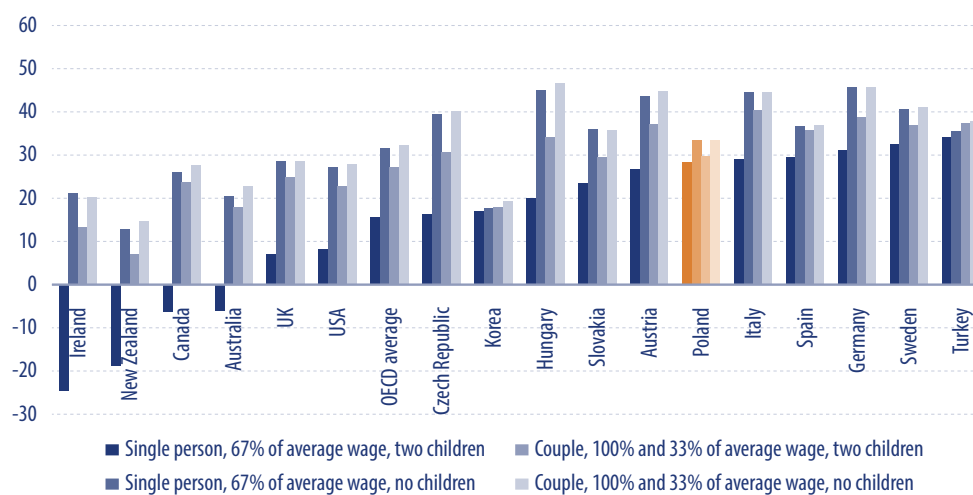
10 It is worth noting that the care for single-parent families and for large families that is written into the Constitution is not symmetric: insofar as single-parent families – whatever their income – can count on preferential arrangements when filing their tax returns, or with regard to pre-school enrolment, large families cannot count on preferential arrangements unless they have (very) low incomes. This provides an incentive for people to declare that they are bringing up children alone and to actually do so, which does not encourage the birth of greater numbers of children.

11 This means that parents, as the people contributing to the continuation of the inter-generational contract in terms of pensions, will receive lower pensions than those without children. This is, therefore, a system that redistributes income from those with children to those without.

12 After taking into account amounts deducted by the employer.

represent the DINK (double income, no kids) model – the differences in deductions from pay in the OECD countries are smaller but still clear: the average in the OECD is 27% compared to 32% for a childless couple. The greatest differences (above 7 percentage points) are found in the Central European countries influenced by German culture (Germany, Austria, Switzerland, the Czech Republic, Slovenia and Hungary¹³) and in Ireland and New Zealand. In Poland this is 30% compared to 33%, which is a difference of three percentage points. Therefore, the preferential terms afforded parents remain small while the deductions are high.

Figure 38. The Tax Wedge in Selected OECD Countries for Various Types of Families (percentage of average pay)



Source: prepared by the authors on the basis of OECD data (OECD 2011).

If the trend for GDP convergence with EU countries is maintained, and the barriers to immigration are lowered, it is possible that Poland could become a country with a substantial immigrant population. However, Poland has quite restrictive regulation in this area, which is not conducive to people going to live there. This even applies to citizens from countries across the eastern border who are linguistically and culturally close.

Emigration may prove to be the barrier to further growth and to maintaining relatively competitive labour costs. The high tax wedge, the continuing low share of pay in GDP, and the relatively low number of new jobs created are all causes of the economic migration of Poles. This, in turn, causes a reduction in the population of working age, further growth in non-wage costs deducted from pay, and a continuing willingness to emigrate.

The fall in the population over the next 40 years presented above does not therefore give the full picture of a complicated situation. In conditions that allow people to come and go relatively freely, temporary stays abroad have not been taken into account. The results of the last National Census of Population and Housing in Poland in 2011 have shown that at the end of March 2011 **2.017 million people registered as permanently resident in Poland had been abroad for more than three months**¹⁴, which represents approximately 5% of the population. Of these,

¹³ In Hungary this difference rose from 7% to 12% in 2011.

¹⁴ Of these, more than 1.56 million had been abroad for twelve months or longer.

600,000 were in the UK and 440,000 in Germany. These countries are also subject to demographic pressure, such that creating the conditions for people to settle there may be regarded as a means of preventing the erosion of social systems. The aim is to sustain the competitiveness of their own economies, at least until the moment the societies of other countries begin to age. In addition, it is generally people of working age that emigrate, and a large percentage of them are of reproductive age. Without ignoring the cultural reasons for low fertility rates, the example of the Polish emigration to the UK has demonstrated that material incentives are very significant. Polish women have given birth to more children than any other minority in the UK – more than Pakistani women. While in Poland women give birth to an average of 1.4 children, in the UK the figure for Polish women is almost twice as high: 2.7 children.

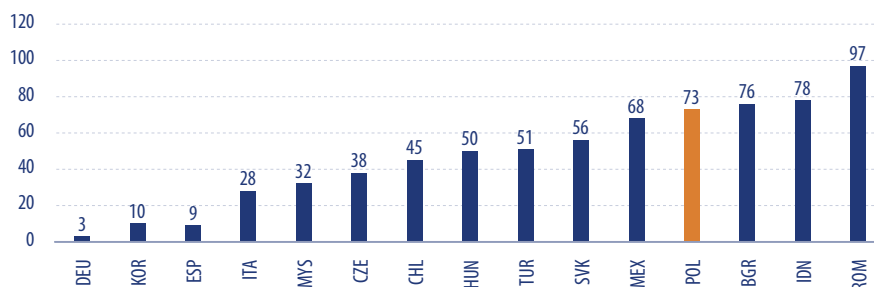
2.7. Infrastructure

The degree to which the pace of growth of a given economy is determined by the quality of its infrastructure depends largely on its level of economic development and the structure of its production. It is evident that, in emerging countries where GDP is dominated by agriculture and industry (chiefly mining), what is known as traditional infrastructure (roads, railways, and sea ports) will be of greatest importance because it largely determines the ability to access the world market. In the case of economies at a higher level of development, however, where GDP is dominated by services, the quality of what is known as modern infrastructure is of much greater importance. This primarily involves the exchange of information (IT and telecommunications) and ensuring that specialists can travel swiftly from place to place, which requires a well-developed network of airports, high-speed rail links, and motorways. As ICT Infrastructure is analysed elsewhere in the report, we shall be concerned here with assessing roads, railways, airports, and the power industry.

The structure and level of development of Poland's GDP (approximately 70% of which is services) shows that the focus should primarily be on modern infrastructure. However, when taking into account Poland's geography we must not forget it is a transit country and therefore the quality of north–south and east–west road links is critical if this is to be exploited.

Infrastructure, even of a very high quality, does not on its own generate value added in an economy. Instead it functions as a catalyst for economic activity. Infrastructure investment projects must therefore rest on a thorough examination of the needs of the economy, which is an extraordinarily difficult task that relates to the future.

Figure 39. Poland's Competitiveness in the Area of Infrastructure Compared to Selected Countries in the GCR 2012/2013 Ranking



* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

The development of a modern road network based on express roads and motorways has been one of the greatest failures of the Polish public administration during the transition period. Despite the adoption of various strategies – from financing road building from public funds to a licensing system in which the investor is a private company – not one government has been able to overcome the shortcomings in this area. There was 1,342 km of motorway in use in Poland by the end of 2012.

Given that there was 552 km of motorway in Poland in 2004, some progress has been made. But if we consider that in the same period road freight increased by more than 43% and the transport of people (counted in passenger kilometres) rose by more than tenfold, it is hard to speak of a fundamental improvement in the road network compared to the growth in the demands placed upon it.

Table 8. Number of Kilometres of Motorway in Selected EU Countries, 2004–2011

Country / year	2004	2005	2006	2007	2008	2009	2010	2011
Bulgaria	331	331	394	418	418	418	437	458
Czech Republic	546	564	633	657	691	729	734	734
Germany	12174	12363	12531	12594	12645	12813	12819	12845
Spain	10747	11432	12073	13013	13518	13506	14262	14554
Italy	6532	6542	6554	6588	6629	6661	6668	6668
Hungary	569	636	785	858	1273	1273	1273	1273
Poland	552	552	663	663	765	849	857	1070
Romania	228	228	228	281	281	321	332	350
Slovakia	316	327	327	364	384	391	416	419

Source: Eurostat.

When compared to other EU countries, Poland's road infrastructure appears in a very unfavourable light. Poland is separated from countries such as Germany (more than 12,000 km of motorway), France (11,000 km) and Spain (14,000 km) by a gap that is largely the result of

development lag. However, countries at a similar level of development have also fared better than Poland: the much smaller countries of the Czech Republic, Slovakia, and Slovenia had, respectively, 734 km, 415 km, and 771 km of motorway in use in 2011. Croatia, which was able to build a motorway network 1,126 km long without being an EU member (and hence without access to EU funds) provides a very good reason to be jealous.

The geographical distribution of the existing motorways and express roads is also unsatisfactory. **In Poland there is no stretch of road of motorway or express road spanning the entire country** (aligned east–west and north–south) that would make the efficient transit of goods and people possible. That large towns and cities often lack ring roads and bypasses only makes the problem worse. Furthermore, eastern Poland, which is less well-developed than other regions, remains on the periphery of the transport network: none of the large towns there (Białystok, Lublin, Olsztyn, Rzeszów) is connected by either motorway or express road with the rest of the country.

Poland has quite a well-developed rail network, which is 37,800 km long. There are only two EU countries with longer networks: France (51,300 km) and Germany (70,500 km). Poland's problem, however, is the quality of the railway lines, which determines train speed and hence the accessibility of towns and cities. **No progress has been made even with the strategic connections, such as Warsaw–Wrocław or Warsaw–Gdańsk, on which trains cover a distance of approximately 300 km in six hours.** It is evident from the dynamics of rail freight, which in 2004–2011 fell by 12% even though the Polish economy was not in recession during this period, that the rail network is not helping to raise the competitiveness of the economy. It is difficult to explain this decline by any Europe-wide trend (see the data below): before the financial crisis and recession, the quantity of goods transported by rail had been rising in the majority of countries.

Table 9. Rail Freight (in billion tonne-kilometres) in Selected EU Countries

Country / year	2004	2005	2006	2007	2008	2009	2010	2011
Poland	2829	2696	2914	2453	2489	2008	2168	2486
Czech Republic	888	856	975	998	951	767	829	871
Hungary	517	509	547	515	515	423	458	474
Slovakia	504	493	524	518	479	376	443	437
Bulgaria	no data	no data	219	219	197	133	129	142
Romania	727	692	683	688	667	506	529	607
Spain	305	297	299	299	269	213	220	250
Italy	835	898	1022	1053	958	763	844	918
Germany	3103	3173	3461	3611	3713	3121	3557	no data

Source: Eurostat.

Poland's organisation of the 2012 European Football Championship was an important incentive for the central and local authorities to redouble their efforts in expanding the transport infrastructure. Though many of the investments were not completed on time, significant progress was made. The following should be mentioned here:

- extending the A2 to Warsaw;
- modernisation of a number of important railway stations: Warszawa Centralna, Poznań, Wrocław, Katowice;
- opening of an airport in Modlin (due to construction errors the runway is now being repaired).

The public sector (at the central and local level) is undertaking significant investment efforts to expand the infrastructure. It can therefore be assumed that the bottleneck that is the capacity of transport routes will gradually be resolved.

Table 10. Public Sector Investment as a Percentage of GDP in Selected EU Countries, 2004–2011

Country / year	2004	2005	2006	2007	2008	2009	2010	2011
UE-27	2.4	2.3	2.5	2.6	2.7	2.9	2.7	2.5
Bulgaria	3.2	3.4	4	5.2	5.6	4.9	4.6	3.4
Czech Republic	4.2	4.3	4.5	4.2	4.6	5.1	4.3	3.6
Germany	1.5	1.4	1.5	1.5	1.6	1.7	1.7	1.6
Spain	3.4	3.6	3.7	4	4	4.5	4	2.9
Italy	2.4	2.4	2.4	2.3	2.2	2.5	2.1	2
Hungary	3.6	4	4.5	3.7	2.9	3.1	3.4	3
Poland	3.4	3.4	3.9	4.2	4.6	5.2	5.6	5.7
Romania	3	3.9	5.1	6.2	6.6	5.9	5.7	5.2
Slovakia	2.4	2.1	2.2	1.9	2	2.3	2.6	2.3

Source: Eurostat.

The capacity of Poland's power stations could prove to be a further bottleneck in the growth of the economy. So far there have been no serious breakdowns causing disruption to energy supply, but there has been a noticeable decline in energy reserves (from 22% of existing capacity in 2004 to 13% in 2011), which indicates that there is a greater risk if technical problems were to arise.

Another problem is the structure of power generation in Poland. Only just under 7% of electrical energy is generated from renewable sources (the EU average is 20%) which, in view of the EU's Climate and Energy Package (the 20-20-20 objectives), will necessitate major investment to increase the ratio of alternative energy sources to those based on fossil fuels. The non-renewable sources are dominated by coal, which is problematic from the point of view of carbon emissions. The insufficient development of the hard technical infrastructure considerably limits the development possibilities of the Polish economy and therefore reduces its competitiveness: of the countries compared in the report (see Figure 39), only Romania and Bulgaria have a worse infrastructure worse than Poland.

Particular attention should be paid to the following when assessing the state of Poland's infrastructure:

- the lack of strategic management and of an overall vision of how infrastructure can be improved, that is, the model for motorway-building, the role of rail transport for passengers and freight, and the role of air transport;
- obvious problems with managing individual projects at both the technical and organisational level;
- the scant use of public-private partnerships, which can be important instruments in financing investments that benefit the public;
- the declining energy reserves at power stations, which increases the risk of negative effects in the event of a breakdown;
- the energy intensity of the Polish economy is as important – if not more important – than generating electrical energy: the consumption of energy per unit of GDP in Poland is now more than twice the EU average.

Table 11. The Energy Intensity of Selected EU Economies (number of kilograms of oil equivalent per 1000 EUR of GDP)

Country / year	2004	2005	2006	2007	2008	2009	2010
UE-27	168	165	160	153	152	150	152
Bulgaria	871	863	833	770	717	664	671
Czech Republic	467	433	414	391	371	364	375
Germany	158	156	151	143	142	143	142
Spain	161	159	153	149	144	137	137
Italy	131	131	127	124	123	122	124
Hungary	307	312	298	292	288	292	295
Poland	390	381	377	351	340	322	331
Romania	516	493	474	443	412	387	396
Slovakia	515	496	454	389	378	363	371

Source: Eurostat.

2.8. The financial market

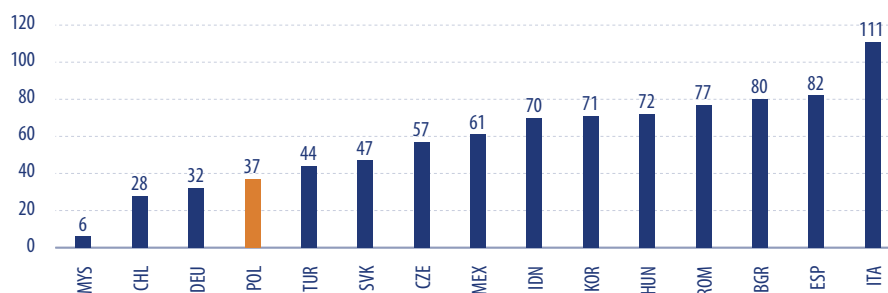
A suitably deep (quantity of funds on the market) and wide (diversity of instruments) financial market influences the competitiveness of the economy through the mobilisation and effective allocation of capital and by offering financial services to enterprises. The financial system is pivotal with regard to the propensity to save. If there is no suitable range of products enabling the accumulation of savings (deposits, life insurance, investment funds), households and enterprises will not be inclined to provide the capital that is a source of financing for both public and private investments.

Financial intermediaries play a central role in the optimal allocation of resources in the economy by turning savings into capital. It is banks and investment funds that for the most part decide how to allocate the savings of households and enterprises. The effectiveness and competitiveness of the economy therefore depends on the quality of the investment policies pursued by financial entities.

Enterprises depend to a large extent on effective cooperation with the financial sector. This involves not only the acquisition of development capital through borrowing or issuing shares, but also access to a range of services (letters of credit, revolving credit, hedging instruments, insurance, etc.) without which it would be difficult to function nowadays and whose quality and accessibility go a long way to determining the transaction costs of businesses.

From the point of view of boosting the economy's innovativeness and competitiveness, access to finance for small and medium enterprises, including start-ups, is extremely important. It is therefore essential for venture capital institutions to grow dynamically so that capital can be provided to new innovative entities which are not partners of banks but which possess high growth potential. This form of financing should exist in parallel with traditional forms of investment finance, such as bank loans or the issue of shares or debt securities.

Figure 40. Poland's Competitiveness in the Area of the Financial Market Quality Compared to Selected Countries in the GCR 2012/2013 Ranking



* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

Table 12. Basic Data on the Financial Sector in Selected Countries around the World (for 2011)

Country / variable	Gross domestic savings as a percentage of GDP	Current account balance as a percentage of GDP	Stock exchange capitalisation as a percentage of GDP	Stock exchange turnover as a percentage of capitalisation	Bank loans as a percentage of GDP	Non-performing loans as a percentage of total loans
Poland	18	-4.9	26.9	58.4	66.2	8.4
Czech Republic	22	-2.9	17.7	38	67.4	5.6
Hungary	21	0.9	13.4	83.9	75.7	10.4
Slovakia	22	0	4.9	10.2	54.1 (2009)	5.8
Bulgaria	25	0.4	15.4	3.4	71.4	13.5
Romania	25	-4.6	11.8	12	55	13.4
Spain	18	-3.5	69.8	129	230	4.6 (2010)
Italy	16	-3.1	19.7	237	157	7.8
Germany	24	5.6	32.9	134.5	124.8	3.3
Chile	23	1.8	108.7	18.6	71.2	2.5
Mexico	24	-1	35.4	26	45.5	2
Indonesia	33	0.2	46	37.2	38.5	2.9
Malaysia	34	11	137	32	129	2.9
South Korea	32	2.4	89	195	102	1.9
Turkey	13	-10	26	163	69	3.1

Source: prepared by the authors on the basis of World Bank and International Monetary Fund data

In correcting our knowledge of the role of the financial sector in the economy, the beginning of the financial crisis taught us a salutary lesson. There is no doubt that the financial sector has a positive influence on the competitiveness of an economy, but attention has been drawn to the potential risks malfunctioning financial entities can present to the economic system. First of all, speculation on the financial market may lead to the formation of asset bubbles, that is, a rapid escalation of asset prices that is not based on economic fundamentals but largely on the herd mentality of investors (Szyszka 2009).

The dangers inherent in the unrestrained growth of the banking sector could be observed in Iceland or – more recently – in Cyprus. Where the level of financial assets is several times higher than a country's GDP, turbulence on financial markets destabilises the whole economy and the state is unable to fulfil its obligations as the guarantor of bank deposits.

Another restriction on competitiveness, which results from an over-extended financial market, is the absorption of resources by financial institutions, which reduces the productivity of other sectors with the result that the entire economy performs below its potential.

The size of the Polish financial sector (whose assets amounted to 117% of GDP in 2010) is unimpressive if we compare it to the entire EU (496%), or even to the Czech Republic or Hungary, where the ratio of financial sector assets to GDP was 136% and 162%, respectively. The share of loans to the private sector as a proportion of GDP, which is a further indicator of the size of the financial system, was also lower: for Poland it was 55% of GDP, while for the Czech Republic and Hungary it was over 60% of GDP.

The capital market is the source from which capital is acquired, but it is also an important place for individuals and institutions to deposit their savings. Poland's performance is exceptionally beneficial in this regard. The Polish Stock Exchange is the undisputed regional leader in all respects: absolute size of capitalisation (EUR 107 billion compared to EUR 29 billion in the Czech Republic, EUR 15 billion in Hungary, and only EUR 4 billion in Slovakia), the ratio of capitalisation to national GDP, turnover volume, and the number of companies listed. It is possible to hold certain reservations with regard to the liquidity of the market, whose measure is turnover volume (see the data in Table 12), which is at an unfavourable level compared to the situation in highly developed countries. However, liquidity is not at a level that would jeopardise the freedom to make transactions on the capital market.

Open Pension Funds (OPFs) are an important component of the financial sector in Poland. The manner in which the capital part of the pension system functions is controversial, mainly due to its influence on the dynamics of public debt, but the fact remains that it is a significant channel for the mobilisation of savings and has a great deal of importance in shaping the financial market. The net assets of Open Pension Funds stood at PLN 269.5 billion at the end of 2012 (all data according to the Polish Financial Supervision Authority – KNF). Although the growth rate of assets declined as a result of the decision in 2011 to lower the contributions transferred to Open Pension Funds (aggregated contributions in the years 2010–2012 were PLN 26.9 billion, PLN 15.8 billion and PLN 8.4 billion, respectively), this does not alter the fact that OPFs have a major influence on the capital market. At the end of 2012 the Open Pension Funds portfolio comprised shares (35%), Treasury securities (51.3%), and what are known as motorway bonds. The considerable role played by OPFs is demonstrated by their share of stock exchange turnover, which stood at more than 12% of all transactions in 2011.

It is also worth mentioning the dynamically growing capital market, which was established with small and medium enterprises in mind. The New Connect market was established in 2007 and is becoming an important source of capital for enterprises that cannot be listed on the main trading floor. The number of companies listed on New Connect grew from 24 in 2007 to 351 at the end of 2011. Turnover and capitalisation also rose in this period: the former from PLN 302,565 in 2007 to PLN 1.85 billion in 2011, while the latter had already reached PLN 8.38 billion by 2011.

Private equity financing, which is of importance primarily for financing innovation, remains at a very low level. The annual investments made by funds in this sector fluctuate between 0.1% and 0.2% of GDP, which shows how inaccessible they are to enterprises. While this is a greater volume than in the Czech Republic, Hungary or Slovakia and is comparable with the EU average (0.3% of GDP), the examples of Sweden or the UK, where funds of this type reach volumes of 1% of GDP, could also be mentioned.

We may state in conclusion that Poland avoided the uncontrolled financial sector growth that was seen in Iceland, Ireland, Cyprus and the Baltic countries, where the sector's assets multiplied in the 2000s at several dozen per cent annually. The turbulence on world financial markets did not destabilise Polish financial institutions, which says much for the state's supervision and the quality of management. The high percentage of non-performing loans compared to other countries is not a cause for concern because these are largely the result of restrictive domestic regulations and of the way a non-performing loan is defined. What is more, the share of loans in the economy is significantly smaller than in Hungary or Italy, which means there is no risk of banking sector assets destabilising the economy.

It is, though, worthwhile addressing the following disconcerting issues in the long term:

- Poland has a very low level of domestic savings, which prompts fears concerning the financing of capital accumulation, and hence fears concerning the rate of economic growth;
- it is often difficult for small and medium enterprises to gain access to finance;
- turnover liquidity on the capital market is low, which is particularly the case for New Connect; it should be higher;
- the funds held in Open Pension Funds finance economic growth to an insufficient degree, while the majority of OPEs' activity relies on investment in Treasury securities (as a result of regulation), which raises concerns about the way in which the capital pillar functions;
- public regulations and the market offer of financial institutions are not yet capable of mobilising Poles to save for their old age; private forms of saving for retirement are an important, albeit insufficiently large element of the social security system and could, in the event of regulatory change, form a firm foundation for investing in growth and development.

To conclude this analysis of Poland's competitive potential in terms of resources, we summarise its results employing the football league divisions analogy.

Table 13. Elements of Poland's Competitive Potential (resources) Compared to the 144 Countries in the GCR, the 27 Countries of the EU, and the 15 Countries in the Comparison Group

Factor of competitiveness / dimension of competition	Global GCR 144	European EU-27	Comparison group 15
2.1. Labour market	57. Second Division	15. Second Division	5. First Division
2.2. Health	40. First Division	20. Third Division	7. Second Division
2.3. Education	46. First Division	21. Third Division	6. Second Division
2.4. Higher education and training	36. First Division	18. Second Division	4. First Division
2.5. Market size	19. First Division	9. First Division	8. First Division
2.6. Demography (age dependency ratio, 2010)	109. Third Division	4. First Division	8. Second Division
2.7. Infrastructure	73. Second Division	25. Third Division	12. Third Division
2.8. Financial market	37. First Division	8. First Division	4. First Division

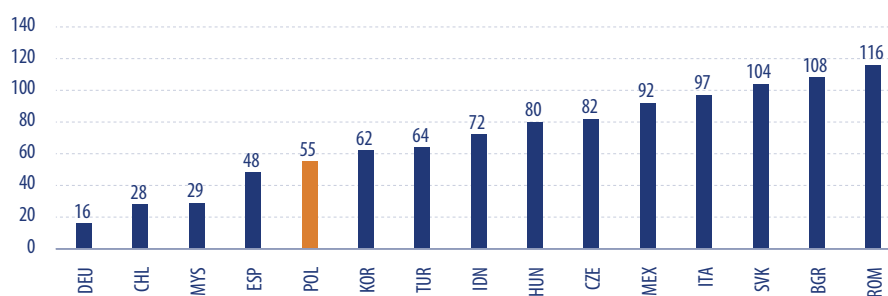
Source: prepared by the authors on the basis of the Global Competitiveness Report and United Nations data.

3. Competitive potential: institutional and technological factors

3.1. Institutions

Poland occupied 55th place in the world in the institutional pillar of the Global Competitiveness Index, which forms a part of the Global Competitiveness Report. Poland also performed comparatively well when set against the countries selected for comparative analysis in this report.

Figure 41. Poland's Competitiveness in the Area of Institutional Quality Compared to Selected Countries in the GCR 2012/2013 Ranking

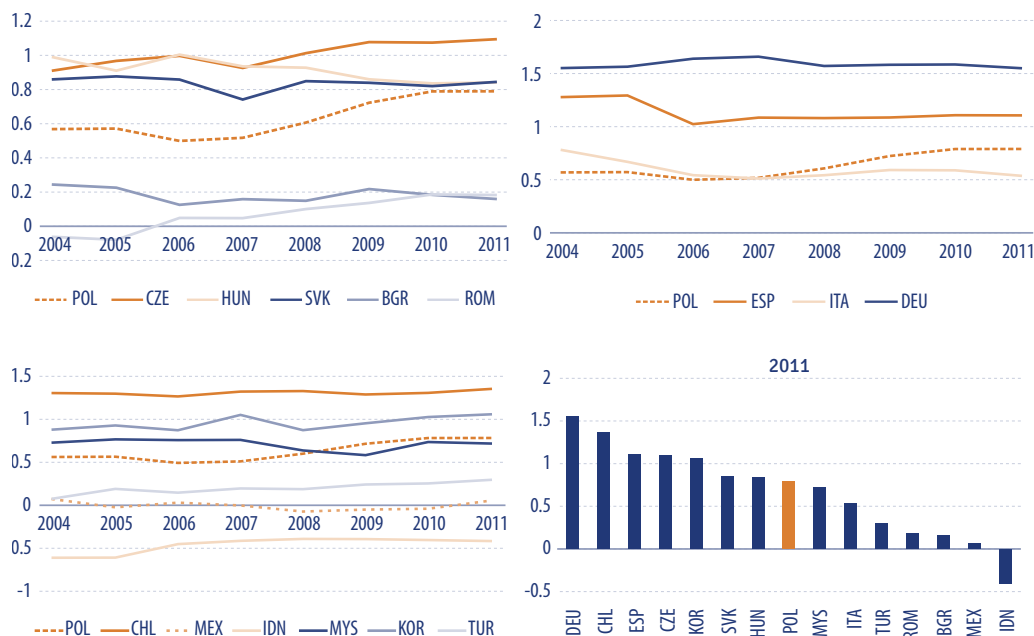


* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

An analysis of the dynamics of the World Bank's World Governance Indicators found a consistent improvement in 2004–2011, which has enabled Poland to catch up with the other Visegrad countries apart from the Czech Republic. Of the states compared in this report, only Romania and Turkey registered a similar improvement in 2004–2011. Figure 42 presents the development of the World Governance Indicators (the average of the three key indicators for doing business: government effectiveness, regulatory quality, and the rule of law).

Figure 42. Average Values of the Indicators of Government Effectiveness, the Rule of Law, and Regulatory Quality in Selected Countries, 2004–2011



The WGI index was calculated by adding up three indicators (rule of law, government effectiveness, and regulatory quality) and dividing by 3; it is thus the arithmetic mean of these three indicators.

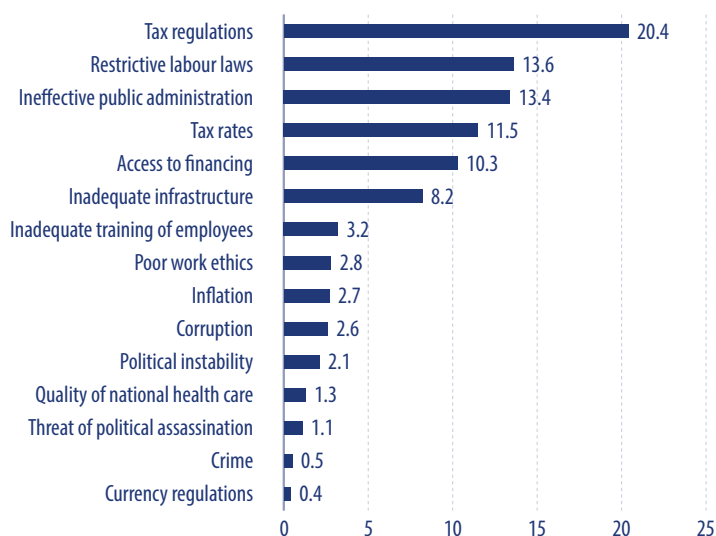
* the values range from -2.5 (worst) to +2.5 (best).

Source: World Bank, *World Governance Indicators 1996–2011*.

The belief that an economy's institutional environment is of poor quality may result from, among others, great diversity in the assessment of its components. Great variation in the values of institutional indicators is typical for Poland: some are regarded as strengths while others illustrate serious shortcomings in the institutional system. **The components that place Poland's institutional framework below 100 in the GCR ranking are associated with the poor organisation of economic life: burden of government regulation (131st place), efficiency of legal framework in settling disputes (111th place), efficiency of legal framework in challenging regulations (103rd place), and the government provision of services for improved business performance (105th place).** This testifies both to the failure to appreciate the role of the state in the modern economy, whose primary task is to provide an organisational framework conducive to business, and to the unhealthy state of

affairs in the area of establishing laws and law enforcement. The wholesale corruption of state institutions is not the problem, as the indicators for open transgression of ethical norms and crime associated with holding power placed Poland between 30th and 60th place in the world (business costs of terrorism, organised crime, irregular payments and bribes, favouritism in decisions of government officials) which, considering the overall ranking of 55, is not a bad result. The shortcomings entrepreneurs most often mentioned were those of regulatory effectiveness (employment law, tax law) as well as all-round administrative effectiveness.

Figure 43. Greatest Obstacles to Doing Business in Poland According to Respondents' Replies in the Global Competitiveness Report 2012/2013 (percentage of respondents)



Source: GCR 2012/2013.

The World Bank indicators from the Doing Business series offer a good supplement to this assessment as they are more objective. First, they allow us to look more closely at the various practical aspects of the quality of public institutions and the consequences of weak institutions for the everyday lives of entrepreneurs wishing to establish companies, build factories, get access to loans, or recover debts from dishonest contractors. Second, these indicators are based on objective measures, such as the number of days needed to resolve a particular matter or the number of procedures to be gone through before an administrative decision is issued. They therefore form an important supplement to the indicators based on entrepreneurs' opinions, which necessarily are not fully objective.

We may take the ranking positions for time taken to start a business and to obtain construction permits, as well as ease of paying taxes (see Table 14), as measures of government effectiveness as regards the business climate. In the first case, the World Bank has Poland in 124th place in the world. In the comparison group of states, the Czech Republic, Indonesia and Spain were all assessed as worse, though the length of time required to start a business was longer only in Indonesia. In the case of obtaining construction permits, Poland occupied last place in the comparison group. While it is true that the Czechs had to go through more procedures, the

time required was longest in Poland: the entire process takes up 300 days and lasts ten times longer than in Korea. **Ease of paying taxes deserves separate treatment. In Poland this is assessed just as poorly as in other Central European countries** (114th position in the world; see Table 14) and similarly to Italy and Indonesia. It is worth noting, however, that in themselves the tax rate, number of payments, and time required to complete tax returns, though assessed as poor, still do not fully reflect the difficult situation facing Polish entrepreneurs. The system of remuneration for tax officials leads to administrative short-sightedness of a kind that is suicidal for the economy's competitiveness. This is because the loss of long-term tax revenue is not taken into account when, in the process of enforcing tax arrears, the tax office brings about a company's liquidation (these are often cases where the tax arrears concerned are not in fact owed, which is belatedly confirmed by the courts). Accompanying this is the typical bureaucratic aversion to risk and the fear of being thought guilty of bias. Yet the success of local businesses should be the common concern of the state and entrepreneurs alike. There are also often cases where the regulations are interpreted in a way that is extremely unfavourable to tax payers and where – despite the *lex retro non agit* principle – tax arrears are collected for several previous years. This undermines trust in state institutions and spreads the belief that running a business in Poland carries a heavy burden of risk, whose source is the state itself and its administrative apparatus.

The inefficient justice system is also regarded as a serious barrier to enterprise. The absence of alternative mechanisms to court proceedings as a way of resolving disputes, and the burdening of the courts with the work of keeping registers of commercial activity, restricts the general access to justice. **Although the number of days required to resolve a court case has fallen since 2005 from 980 days to 685 days, the number remains greater than in any of the countries compared in the report except Italy (1210 days).** The data on the comparatively high public spending on the justice system and on the ratio of cases to judges suggest that the problem lies more in the way the work of the justice system is organised and in adapting it to the requirements of a market economy than in underinvestment as a result of a low level of development.

The low level of effectiveness in enforcing court judgements is also generally identified as a weakness of the justice system. If prosperity depends on specialisation in the economy, and this is possible when potential disputes between parties are resolved easily, quickly and cheaply, the inefficient functioning of this aspect of the justice system may have a significant impact on the inclination to cooperate with potential partners. A two-year court case against a dishonest contractor represents a greater threat to a company's survival than if that same case were to be resolved in one year (see the German and Hungarian cases). The Korean courts were most efficient in the comparison group (230 days), while the Singaporean courts were assessed as the best in the world in this respect. The number of days required to resolve a case was no higher than 500 in the Asian and Latin American countries studied.

Table 14. Selected Indicators of the Business Climate in 2012

	POL	CZE	HUN	SVK	BGR	ROM	ESP	ITA	DEU	CHL	MEX	IDN	MYS	KOR	TUR
1. Business climate (position in the ranking of 185 countries)	55	65	54	46	66	72	44	73	20	37	48	128	12	8	71
2. Starting a business (position)	124	140	52	83	57	68	136	84	106	32	36	166	54	24	72
number of procedures	6	9	4	6	4	6	10	6	9	7	6	9	3	5	6
number of days	32	20	5	16	18	10	28	6	15	8	9	47	6	7	6
3. Obtaining a construction permit (position)	161	74	55	46	123	129	38	103	14	84	36	75	96	26	142
number of procedures	29	33	26	11	21	15	8	11	9	15	10	13	37	11	20
number of days	301	120	102	286	107	287	182	234	97	155	69	158	140	29	180
4. Obtaining loans (position)	4	53	53	23	40	12	53	104	23	53	40	129	1	12	83
5. Investor protection (position)	49	100	128	117	49	49	100	49	100	32	49	49	4	49	70
6. Paying taxes (position)	114	120	118	100	91	136	34	131	72	36	107	131	15	30	80
number of payments	18	8	12	20	15	41	8	15	9	6	6	51	13	10	15
paying taxes – number of hours per year	286	413	277	207	454	216	167	269	207	291	337	259	133	207	223
tax rate (percentage of profits)	44	49	50	48	29	44	39	68	47	28	52	34	24	30	41
7. Enforcing contracts (position)	56	79	16	69	86	60	64	160	5	70	76	144	33	2	40
number of procedures	33	27	35	32	39	32	40	41	30	36	38	40	29	33	36
number of days	685	611	395	545	564	512	510	1210	394	480	415	498	425	230	420
cost (percentage of contract value)	19	33	15	30	24	29	17	30	14	29	31	139	27	10	25
8. Company liquidation (position)	37	34	70	38	93	102	20	31	19	98	26	148	49	14	124
number of years	3	3.2	2	4	3.3	3.3	1.5	1.8	1.2	3.2	1.8	5.5	1.5	1.5	3.3

* the values of the main indicators marked in light orange denote the ranking position; the other indicators denote the number of procedures, the number of days needed to resolve a matter, and the cost (as a percentage of contract value).

Source: World Bank *Doing Business* 2013.

Although the indicators of administrative effectiveness are improving, it is the practical aspects of the way the administration operates that are of most importance to economic activity from the point of view of business. Poland's overall, comparatively high assessment in the Doing Business ranking is more the result of the ease of access to loans or the strength of investor protection, which depend only indirectly on the everyday workings of the administration.

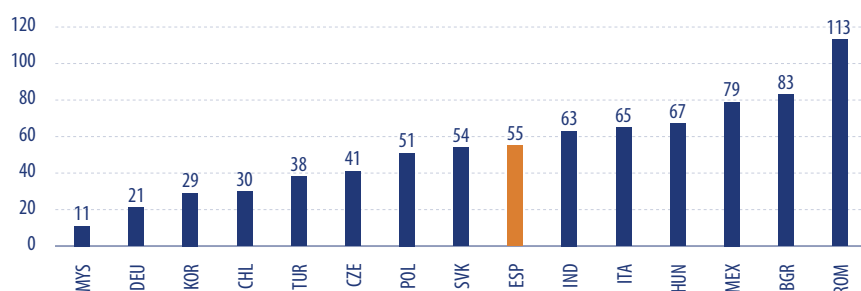
We may conclude from the above that:

- Poland has been climbing the quality of institutional environment league table for a number of years now; in 2012 it was in 55th place among the 144 world economies assessed in the Global Competitiveness Report;
- the indicators of quality of governance are improving: on government effectiveness, rule of law, and quality of regulation Poland has been improving its position in relation to neighbouring economies (from a level of 0.56 in 2004 to 0.79 in 2011; on a scale of -2.5 to +2.5) and is approaching the level of Hungary and Slovakia;
- the Polish institutions' most salient defects are poor quality of regulation, opaque tax law, and an unfriendly and short-sighted administration – especially the fiscal administration – that make doing business harder;
- a large proportion of the deficiencies mentioned in the economy's institutional environment have been noted in government documents, including in the Poland 2030 report; there exists no political will and no precisely-formulated strategy for reform in this area;
- the performance of the indicators for institutional quality in the countries most affected by the crisis suggests that the improved reputation of Poland's institutional environment could be short lived because, as the economic situation worsens, trust in state institutions tends to fall.

3.2. Goods market efficiency

Countries with effective markets for goods and services can easily combine factors of production in the appropriate configurations and, to a greater extent than over-regulated economies, have the capacity to provide the products to satisfy both domestic and foreign demand – in the case of the latter due to low trade barriers.

Figure 44. Poland's Competitiveness in the Area of Goods Market Efficiency Compared to Selected Countries in the GCR 2012/2013 Ranking



* position 1 – best, position 144 – worst.

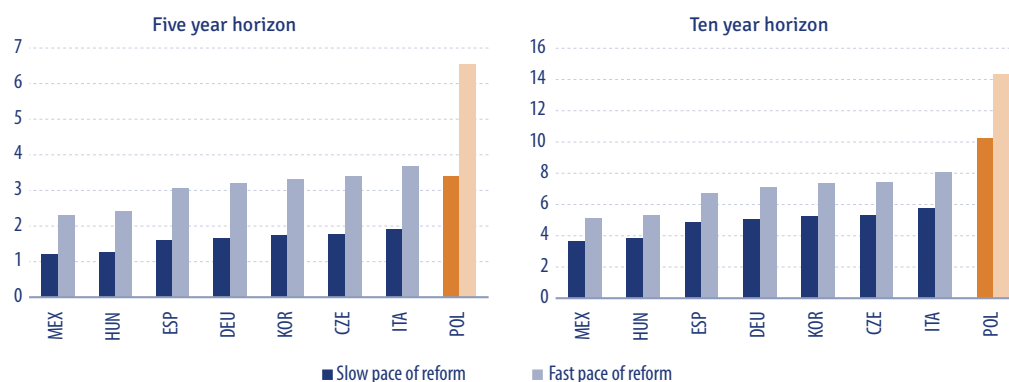
Source: GCR 2012/2013.

The elements that combine to create the index of goods market efficiency reveal the varied position of the Polish economy. They can be divided into four groups:

1. Indicators describing the regulations concerning the freedom of competition on the domestic market: here the assessment of the Polish economy is relatively favourable. On the one hand, this may be due to the quality of regulation, including that adopted owing to EU membership, and on the other, to the comparatively large and attractive market.
2. Poland receives the worst assessments for indicators describing administrative control and government interference in enterprises' freedom to do business.
3. Indicators describing the economy's openness to external competition: apart from the low customs duties resulting from EU membership, the assessments of parameters such as the prevalence of trade barriers, the rules on FDI, and the burden of customs procedures place the Polish economy in the second or third division on the global and European scale as well as against the background of the comparison group.
4. Indicators describing local conditions for the creation of demand: favourable assessments in this area are confirmed by maturing demand conditions, a high degree of customer orientation, and buyer sophistication. This may be due to the comparatively large market, which creates the appropriate conditions for competition.

According to OECD research, Poland has, as a country with one of the highest indicators of regulation, the greatest potential of all OECD states with regard to increasing productivity by streamlining regulation of the market for goods and services – especially in network sectors (Boius & Duval 2011) (See Figure 45).

Figure 45. Estimated Growth in Efficiency of Factors of Production (in per cent) as a Result of Goods Market Reform



Source: Boius & Duval (2011).

Goods market regulations do, however, reduce the productivity and openness of an economy – especially in the sector of small and medium enterprises operating on local markets.

We should not, however, succumb to the illusion of excessive deregulation and leave the allocation of resources exclusively to market forces. Given what we have experienced in the crisis, under-regulation of a market (the financial market almost everywhere in the world, the housing market in the absence of a mature rental market, e.g., in Spain, and the deregulation

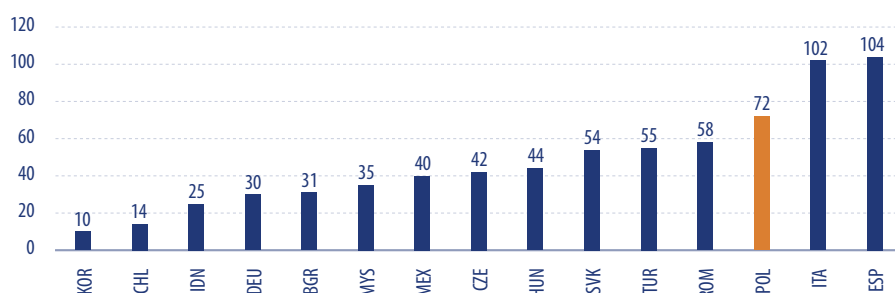
of the labour market in that same country) can lead to macroeconomic instability. That is why increasing the role of ‘intelligent’ regulation to shape sectoral policies promoting specific industries and to determine the financing structure, the structure of FDI, and the structure of investment in particular sectors will present a considerable challenge.

3.3. The macroeconomic environment

The influence of the macroeconomic environment on an economy’s competitiveness arises from two issues. First, the risks involved in doing business are increased in a macroeconomically unstable economy, which keeps the propensity to save and invest at a level that does not permit the development of productive potential. Second, although there may be general stability, the macroeconomic indicators may settle at a level that prevents domestic enterprises from competing on foreign markets. This primarily concerns the exchange rate, but also, albeit to a lesser degree, the level of interest rates and the situation on the labour market.

Large scale imbalances in the public sector can have an adverse effect on the competitiveness of an economy. Examples of this include the crowding out of private investment by Treasury securities or the risk to economic entities presented by the need for fiscal adjustment, which leads inexorably to an increase in the tax burden and/or cuts in the state budget and to adverse macroeconomic and microeconomic outcomes.

Figure 46. Poland’s Competitiveness in the Area of Macroeconomic Stability Compared to Selected Countries in the GCR 2012/2013 Ranking



* position 1 – best, position 144 – worst.

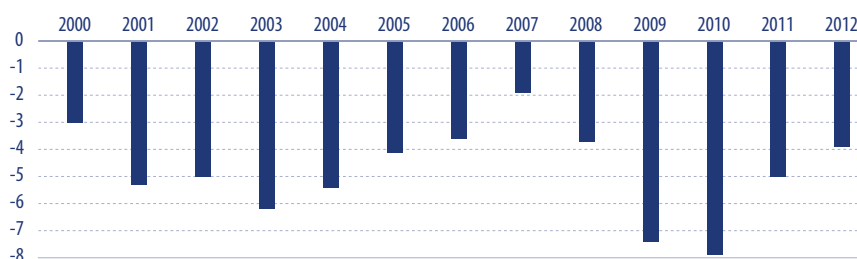
Source: GCR 2012/2013.

Assessments of macroeconomic stability cannot be restricted to analysing inflation or the public sector balance. It is worth recalling that Ireland and Spain were both running budget surpluses in the mid-2000s, but despite this they both later became members of the ‘bankrupts’ club’. The financial crisis emphatically demonstrated that too much private sector indebtedness can be just as dangerous as public borrowing and that more often than not the two are directly linked: the sharp rise in the budget deficit and in public debt in Ireland in 2009 was a result of the need to inject money into the financial system from the state budget to the tune of 40% of GDP.

The Polish economy, which is comparatively open, was strongly affected by the turbulence on world markets: the rate of growth of GDP fell significantly from 6.8% in 2007 to 5.1% in 2008 and then to 1.7% in 2009. This had an adverse impact on the public finances. The influence of the financial crisis on the state of Poland's public finances has, though, been fundamentally different compared to the majority of highly- or averagely-developed economies. There are two reasons for this. First, Poland did not enter recession. The rate of growth fell considerably, **but it is difficult to compare it with the growth rates in countries such as Spain, Ireland or Latvia**, where falls in GDP of, respectively, 3.7%, 7%, and 18%, were recorded in 2009. Second, the Polish financial sector proved to be crisis-proof. No financial institution operating in Poland required state support.

The significant rise in the budget deficit and public debt was primarily the result of structural factors, **and the worsening economic situation contributed to only a small extent to the growing public sector deficit.** It is estimated that cyclical factors increased the public sector deficit by only around 1.7% of GDP, while the public sector debt grew from 1.9% of GDP in 2007 to 7.9% of GDP in 2010 according to ESA'95.

Figure 47. The Public Sector Deficit in Poland (as a percentage of GDP)



Source: Eurostat.

The fiscal stimulus initiated in 2007–2008 helped to keep the economy growing, although this was more the result of a happy coincidence than a conscious policy measure. The decisions that reduced public revenue were taken in the light of the comparatively healthy condition of the public finances in 2007 and 2008, which was the result of the exceptionally high growth in GDP in those years (6.8% and 5.1%, respectively), and not with a coming crisis in mind.

Figure 48. Public Sector Debt (as a percentage of GDP) in Selected Countries in 2004 and 2011



Źródło: GCR 2005/2006 i GCR 2012/2013.

In assessing the relationship between exchange rate fluctuations¹⁵ and competitiveness, it is necessary to take at least two values into account, that is, the price of foreign currency and the volatility of the nominal exchange rate. The exchange rate directly determines the international competitiveness of domestic products¹⁶. Frequent and powerful fluctuations in exchange rates can adversely affect the competitiveness of an economy through increased macroeconomic risk and the additional costs involved in hedging against exchange rate movements. These costs can be extremely high because entrepreneurs are capable of being less than adept at manipulating derivative instruments – as was the case with the currency options that were the source of very high costs for many Polish companies in 2009.

The present exchange rate of approximately PLN 4.10 to EUR 1.00 does not represent a threat to the viability of exports. We possess no unequivocal, objective estimates of the optimal nominal exchange rate for the competitiveness of the Polish economy¹⁷, but surveys of exporters (NBP 2012) suggest that the limit for the viability of export production is a PLN/EUR exchange rate of 3.80. The present situation on the currency market is therefore more favourable to exporters. Also, the sustained appreciation of the zloty in 2004–2008, when the annual average PLN/EUR exchange rate was, respectively, 4.5, 4.0, 3.9, 3.8 and 3.5, has now ceased.

The profound depreciation of the zloty in 2009 (its lowest rate of PLN 4.90/EUR 1.00 was reached on 18 February 2009) definitely helped exporters, whose competitiveness had declined steeply during the earlier period of appreciation (at the end of April 2008, the rate reached PLN 3.90/EUR 1.00). **There are no great causes for concern with regard to the balance of payments/current account deficit**, which in itself is both a normal and, in a certain sense, even desirable phenomenon in a country such as Poland. The deficit is at a level that poses no

15 From the point of view of the structure of Poland's foreign trade (80% of transactions are with Eurozone countries), we shall concentrate on the EUR/PLN exchange rate.

16 The situation is, however, not so simple as to permit us to state simply: the weaker the zloty, the greater the competitiveness of the Polish economy. This is because a weakening currency means an increase in the costs of imports – often accounted for by semi-finished goods and intermediate products – which is manifested in increased inflationary pressure and which increases the costs of servicing debt denominated in foreign currencies.

17 With regard to estimates of what is known as the equilibrium exchange rate, very different results are produced according to the methodology employed.

threat to macroeconomic stability. After rising to 6.8% of GDP in 2008¹⁸, it declined to 4.3% of GDP in 2011 and to 3.5% of GDP in 2012, which is an entirely safe value.

In assessing the impact of the macroeconomic environment on doing business in Poland, it may be stated that there are no serious imbalances that could threaten the competitiveness of the economy.

There are, however, a number of causes for concern:

- the state of the public finances in Poland poses no threat to macroeconomic stability and the growth in public investment expenditure is highly desirable, yet it is difficult to ignore the risk associated with the fall in EU subsidies entailed in the transition to the next EU budget of 2014–2020 and the significant constraints on this inflow in the not-too-distant future;
- the economic slowdown of 2009 has revealed a deep structural deficit in the public finance sector; the rapid growth in public debt means that Poland is in danger of exceeding the second of the prudence thresholds specified in the Act on Public Finance (55% of GDP), which in practice makes it impossible to conduct an active fiscal policy in the event of a further slowdown;
- it is difficult to see in the fiscal adjustment that has been in progress since 2011 (the deficit of the sector fell from 5.1% of GDP at the end of 2011 to 3.9% of GDP at the end of 2012) the structural changes that would stabilise the public finances and so strengthen the competitiveness of the Polish economy; in fact, the sector's lower deficit is largely the result of reductions in the contributions transferred to Open Pension Funds and to rises in the rate of VAT;
- although the share of foreign debt by the place of issue criterion is stable and comparatively low: 31.6% at the end of 2012 (data from the Ministry of Finance), the engagement of non-residents in the domestic market for Treasury securities has been increasing relatively quickly: its share grew from 34.4% in 2008 to over 54.5% at the end of 2012; this could be a worrying trend as it means that the process of managing public debt is dependent on the mood of world markets, which has recently been extremely volatile;
- although the worrying trend represented by the growing indebtedness of local authorities seen in 2007–2011 (local authority debt rose from PLN 25.8 billion to PLN 64.2 billion) has been halted, many local authorities are still functioning on the edge of the statutory debt limit, which places severe limits on investment; a further source of risk is the indebtedness of municipal companies, which, for all practical purposes, is beyond the state's control;
- the configuration of the social insurance system has a fundamental influence on the future state of the public finance sector: policy in this area is clearly subordinated to the current situation, which could generate problems over the long term.

¹⁸ Shortly before the crisis began, that is, in 2007, Lithuania, Latvia, Estonia and Bulgaria recorded current account deficits of, respectively, 14.6%, 21.6%, 17.8% and 25.4% of GDP (data from the International Monetary Fund).

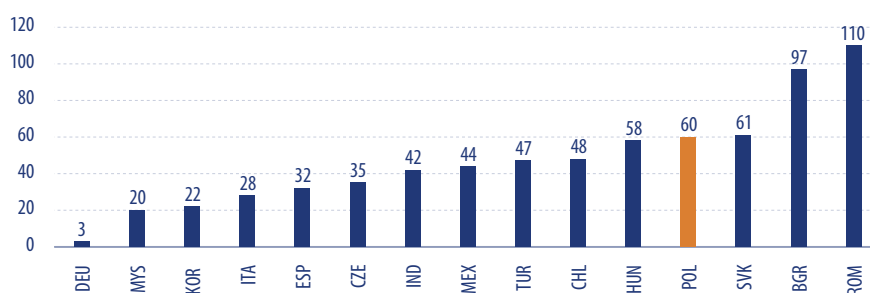
3.4. Business sophistication

Sophisticated business practices result from the efficiency of the market for goods and services and of the labour market, the quality of the factors of production held, institutional determinants, and human and social capital. Business sophistication also concerns the specialisations of enterprises, the way they are organised and cooperate, and their inter-relationships and interconnectedness.

Despite the growth of globalisation and unceasing technological progress, it is often still the case that the source of a company's competitive advantage is its location. Policies promoting the establishment of innovation and production clusters are regarded as an effective means of supporting regional and local development. Clusters often represent the most advanced form of the spatial organisation of industry. In achieving critical mass for development they can secure a region's competitive advantage. Their advantage with regard to regional management is that they are established and grow in a competitive and at once cooperative environment based on common goals, which means that there is less need for direct financial support. What they do require, however, are the outcomes of more advanced soft-management tools, such as the building of partnerships, bonds, and trust in associative and network linkages that unlock pro-innovative feedback effects (Nowak 2009).

The benefits offered by clusters and regional innovation systems correspond with the set of processes and practices compiled in the Business Sophistication pillar of the GCR¹⁹.

Figure 49. Poland's Competitiveness in the Area of Business Sophistication Compared to Selected Countries in the GCR 2012/2013 Ranking



* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

There are still only a few clusters in Poland that make a significant contribution to increasing the competitiveness of regions. Apart from their relatively short history, there exist numerous soft barriers that need to be surmounted before they can function effectively. This is the result of low levels of social capital. The readiness to cooperate between enterprises and research institutions, and between the business environment and companies themselves, remains slight. Instead, entities concentrate on their own competitiveness on the local and regional market and often forget about long-term goals. The low level of trust may

19 These are local supplier quantity, local supplier quality, state of cluster development, nature of competitive advantage, value chain breadth, control of international distribution, production process sophistication, extent of marketing, and willingness to delegate authority.

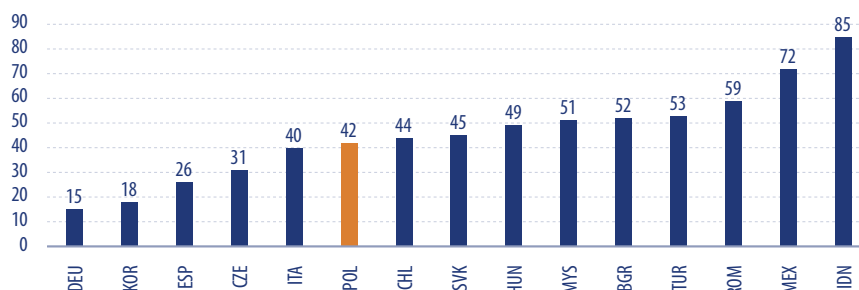
also be explained by the lack of a tradition of cooperation among Polish enterprises, who do not perceive the benefits arising from cooperation and the opportunities it can provide.

3.5. Technological readiness

Technological readiness is the element of an economy's competitiveness that concerns its capacity to absorb technology that increases the productivity of factors of production. Technological readiness concerns selected factors of technology transfer that trigger the flow of information conducive to innovations or that increase their absorption (OECD, Eurostat 2005, p. 37).

The aggregated assessment of technological readiness in the 2012 Global Competitiveness Report listed Poland in 42nd place in the world. Of the countries compared in the report, only the West European countries, the Czech Republic, and Korea achieved higher assessments (see Figure 50).

Figure 50. Poland's Competitiveness in the Area of Technological Readiness Compared to Selected Countries in the GCR 2012/2013



* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

The indicators used to illustrate technological readiness can be divided into two groups: the first concerns the availability and transfer of technology (providing a framework to assess the availability of the latest technology), domestic enterprises' capacity to absorb technology, and the role of FDI in bringing in and disseminating new technology. These are, therefore, measures that depend to a certain extent on the prevailing opinion of a given country's level of technological sophistication.

Meanwhile, the second group of indicators ('hard' indicators) concerns the degree of Internet use and the quality of the infrastructure that enables access to the network (see Table 15).

Table 15. Indicators of Technological Readiness in Poland in 2008 and 2012*

	GCR 2012/2013 position among 144 countries (indicator values)	GCR 2008/2009 position among 134 countries
Access to technology and technology transfer		
Access to the latest technology	95. (4.6)	75. (4.4)
Absorption of technology by enterprises	112. (4.2)	72. (4.7)
FDI and technology transfer	58. (4.8)	64. (4.9)
Regulations on information technology	-	87. (3.4)
Infrastructure		
Fixed telephone lines	72. (18.1%)	41. (29.8%)
Mobile telephone subscribers	31. (128.5%)	34. (95.4%)
Internet users	40. (64.9%)	38. (36.6%)
Fixed broadband subscribers	42. (14.4%)	35. (7.6%)
Mobile broadband subscribers	16. (48.4%)	-
Broadband speed	37. (40.2 kb/s p.c.)	-
PCs	-	49. (16.8%)

* the data used in the GCR 2012/2013 report are usually from 2010; the data used in the GCR 2008/2009 report are from 2006.

Source: GCR 2008/2009 and GCR 2012/2013.

The GCR technological readiness indicators regarding access to technology and technology transfer place Poland's economy in a comparatively low position in the ranking. The situation with regard to telecommunications infrastructure is assessed fairly positively. Poland occupied 31st place with regard to the number of mobile telephone subscribers.

In the e-Intensity Index ranking (Cimochowski et al. 2011) Poland was a very long way back in third-from-last place. This is because 50% of its score was composed of network infrastructure (last place among the states studied). Poland's much better results for online activity and the value of online purchases (each accounting for 25% of the score) were thus unable to compensate for the adverse influence of the infrastructure barrier. Although Poland was classified in 42nd place for fixed broadband access, the indicator for mobile broadband access, which put Poland in 16th place among 144 states, showed that – given the country's more dispersed settlement network compared to its neighbours – Internet access provided by GSM operators might be more popular in future.

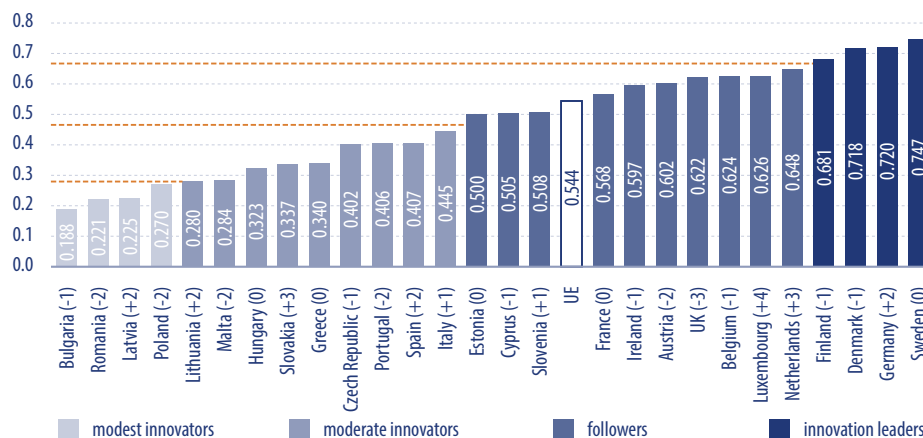
3.6. Innovation

The most straightforward way of competing on international markets is price competition, which involves offering manufactured products at lower prices than the competition. Countries competing on cost, however, condemn their citizens to remaining poor or – at best – averagely wealthy. This way of competing also has a second serious drawback: there are many countries where manufacturing costs are low and, as technological progress spreads ever more widely,

and technical infrastructure and institutional conditions improve, countries whose involvement in international trade has so far been marginal will be engaging in it to an increasing degree. Low costs are therefore no guarantee that over the long term other, poorer countries will not be willing to manufacture even more cheaply. This is why making products that are unique in terms of use or quality is an alternative and safer means of competing. This can be achieved only by systematically offering new or improved products or by using innovative methods to manufacture them. This is also why knowledge-intensive industries, whose share of R&D in sales revenues is high, are of such vital importance to export.

Because they influence the direction of policy at the European Union level, the monitoring system for innovation in the Europe 2020 Strategy and the list of indicators that make up the Summary Innovation Index (SII) within the framework of the European Commission's annually-published Innovation Union Scoreboard²⁰ are of most importance to Poland. **In the most recent edition (IUS 2013), the SII value for Poland was calculated as 0.270, which meant the country was in 24th place among the 27 EU states** (see Figure 51). This was a fall of two places on the previous year, which left Poland below Slovakia and Lithuania.

Figure 51. The Summary Innovation Index (SII) 2013



* changes in ranking position compared to the previous IUS edition (IUS 2011) are given in brackets.

Source: Innovation Union Scoreboard 2013.

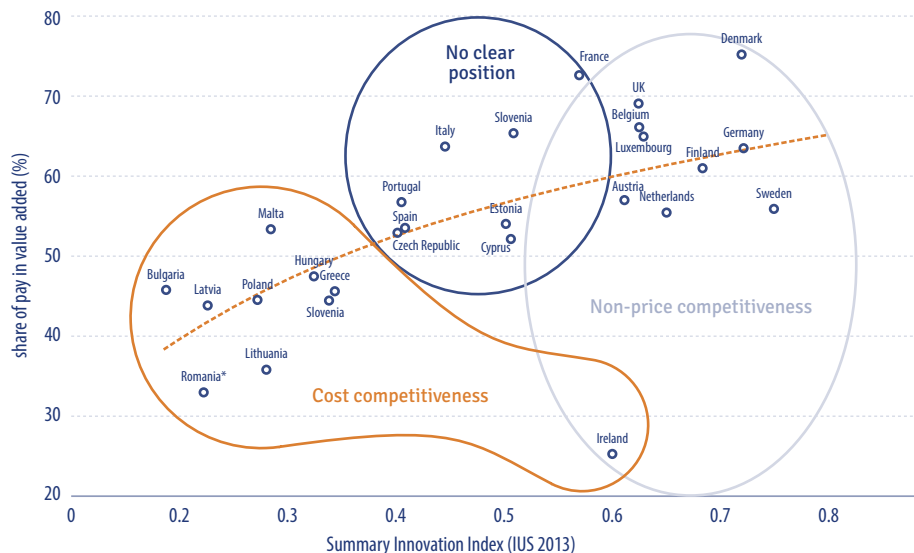
The Polish economy's low innovation index has been a cause for concern to researchers and decision-takers for two decades now. The report entitled *Setting a Course for Innovation: How to End Poland's Development Drift* (2012) gives a comprehensive account of the poor organisation of Poland's system of innovation.

Countries with highly innovative economies are not only able to obtain greater value added from manufacturing but are also in a position to allocate a larger share of it to remuneration. In effect, these economies offer their workers high salaries and are attractive places for skilled and energetic immigrants to settle. The relationship is strong and clear: the higher the inno-

²⁰ European Commission Communication of 6 October 2010: *Europe 2020 Flagship Initiative – Innovation Union*, available at: http://ec.europa.eu/research/innovation-union/pdf/innovation-union-communication_en.pdf.

vation index, the greater the percentage of value added allocated to remuneration. Figure 52 displays the relationship between the share of pay in value added (2011) and the innovativeness of European economies as measured by the Summary Innovation Index (IUS 2013).

Figure 52. Share of Pay in Value Added in Manufacturing Industry (2011) and the Summary Innovation Index According to IUS 2013



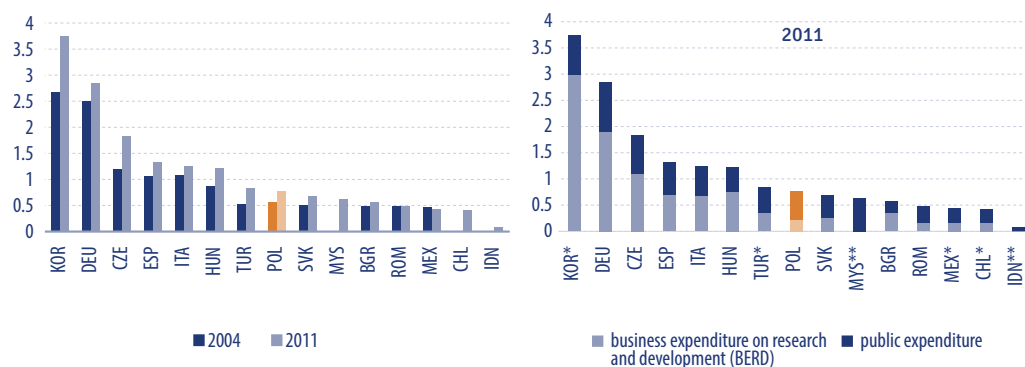
Source: prepared by the authors on the basis of Halesiak & Mrówczyński (2013).

Where the countries and the products manufactured in them are highly innovative (let us take an SII of 0.6 and above as a cut-off point) competitiveness ceases to be a matter of price. These countries allocate approximately 55%–75% of value added to remuneration. In this connection, however, it is worth noting the case of Germany which, in contrast to other large European economies, has been sufficiently adept at controlling labour costs as to enable its manufacturing industry to consistently sustain its competitiveness. In turn, the least innovative states (let us take an SII of 0.4 and below as a cut-off point) can afford only a much lower level of consumption of value added (30%–50%) because they must maintain low labour costs to be able to compete on international markets. A breakdown of the SII indicator pinpoints the deficiencies in the Polish system of innovation and lays the foundation for an analysis of possible ways to increase the economy’s innovativeness.

The situation is quite promising with regard to human resources. Poland was placed above the European average as regards the percentage of people with secondary education and the percentage of those with higher education (113% and 107%, respectively). Poland performed far worse (and the situation is continuing to deteriorate) with regard to the number of new doctorates (33%). In the remaining dimensions of innovativeness, **Poland’s position indicates that there is a significant technological gap.** Its fundamental expression is in the intensity of research and development activity. At the level of R&D (expenditure of enterprises) and of the elements that depend on it (patent applications, income from patents and licences), the values of the majority of indicators placed Poland low down, that is, in the

range of 10%–20% of the EU average. Figure 53 presents the share of gross expenditure on research and development (GERD) in GDP. Poland, with a GERD value of 0.77%, found itself placed in the middle of the pack.

Figure 53. Share of Gross Expenditure on Research and Development in GDP % in 2004 and 2011



* 2010, ** 2009.

Source: Eurostat, OECD, and World Bank.

The structure of R&D expenditure is informative where states with large technology gaps are concerned. The majority of this expenditure in the most technologically advanced countries is borne by enterprises (BERD: business expenditure on research and development), while in less technologically advanced countries it is public expenditure that to a great extent compensates for the disinclination of companies to spend on R&D. This expenditure takes the form of HERD (higher education research and development expenditure) or GovERD (government research and development expenditure). Therefore, although according to IUS 2013 Polish enterprises' R&D expenditure as a proportion of GDP was only 18% of the EU average, public expenditure was (compared to private expenditure) relatively high at 70% of the EU average.

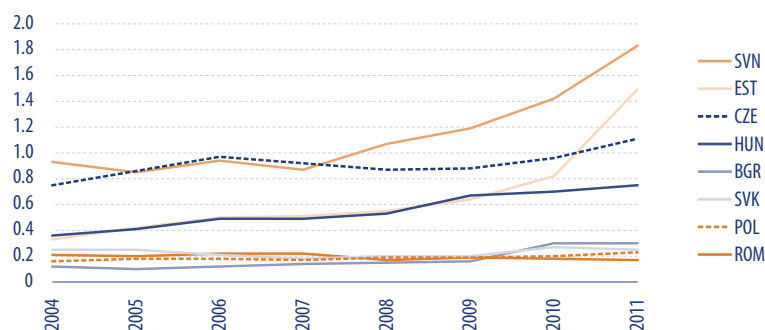
The better developed a country's innovation system is, the lower the proportion of public expenditure. Enterprises are more effective at commercialising the results of research because the motivation of the entrepreneur is of central importance to the economic exploitation of the results of scientific investigation. Publicly-funded research can play a supporting role. Ninety per cent of the variation in the number of patents in EU countries can be attributed to the variation in BERD; it depends to a lesser degree on public R&D expenditure. Poland's low share of patent applications submitted to the European Patent Office (12% of the EU average) and of patent and licence income from abroad (9% of the EU average) thus converge with the positions the country occupies for enterprise R&D spending.

Poland's indicators for employment in high-technology industrial enterprises and for the export of knowledge-based services were comparatively favourable (approximately 60%–70% of the EU average). The country's share of medium-high technology products in the balance of payments was in line with the EU average. This is because the production sold and exports of medium-high technology enterprises are concentrated in the motor vehicles, trailers, and semi-trailers branch. Foreign companies are responsible for the vast majority of the produc-

tion in this branch. If, therefore, a foreign company's Polish branch produces only motor vehicles, but the R&D departments and design offices are in the home country, the statistics will tell us that R&D expenditure is high even though the research and development is actually carried out abroad.

We cannot expect the technological gap to be closed within a year or two. What is important is that it should be narrowing consistently. The readiness of Polish enterprises to compete on innovation on international markets can be measured by the degree of firms' R&D activity and how successful they are in increasing it. An analysis of the dynamics of the BERD indicator for other countries in Central and Eastern Europe can help us to assess the extent to which countries with similar starting conditions to Poland's have been able to make progress towards a model of competition that uses knowledge-intensive industries.

Figure 54. Share of Business Expenditure on Research and Development in GDP (%) in Postsocialist EU Countries, 2004–2011



Source: Eurostat.

With the exception of the Czech Republic and Slovenia at 0.7% of GDP, the expenditure borne by entrepreneurs in all of the Central and East European countries in 2004 did not exceed 0.4% of GDP. The following years brought not only a significant rise in R&D expenditure in the Czech Republic, Hungary, Estonia, and Slovenia but also saw a clear convergence of the other countries' BERD values at 0.2%–0.3% of GDP. During the recent period (2007–2011) in particular, this dualism became more entrenched.

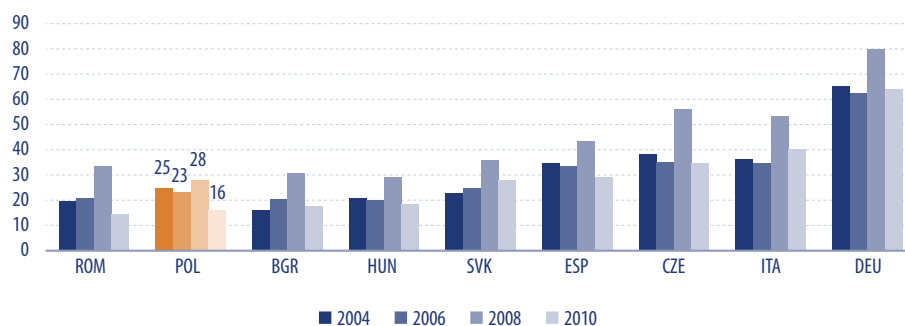
There are a number of essential conditions that generate the impetus to start innovating in business: human capital, a relatively well-developed telecommunications infrastructure, and the quality of institutions. Neighbouring countries, who are competing with Poland for capital and as sites for investment by international concerns, have often outperformed Poland on ICT rankings. First of all, though, as entrepreneurs assessing the conditions for doing business in Poland point out, Polish institutions are emblematic of the profound bureaucratisation of the economy. The effect of this is to restrain companies from engaging in innovative undertakings that involve a high level of uncertainty, the source of which lies in the public institutions themselves. There is thus a dualism associated with Poland's competitive potential: **on the one hand, a comparatively well-educated society and entrepreneurs who are over-performing considering the overall conditions and the means at their disposal and, on the other, a weak institutional environment and under-developed infrastructure**

that makes it harder to pursue economic activity – including innovation and R&D, which is most susceptible to risk. This cleavage is clearly illustrated by the knowledge economy rankings. The World Bank’s 2012 Knowledge Economy Index (KEI) had Poland in 38th place – one place below the Latvian economy. If we take that same institution’s Knowledge Index (KI), however, the Polish economy was ranked higher than Latvia’s. Poland performed better on indicators of human capital and enterprise innovativeness. Yet the institutional system and the less well-developed telecommunications infrastructure mean that there is less latitude for Polish enterprises to apply this knowledge with the aim of translating it into good economic results. Poland’s relatively high potential is thus wasted by the economy’s badly-managed environment, which stems from a weak administration and from infrastructural deficiencies. This has serious consequences in the form of an unwillingness to undertake risky R&D.

A further structural **weakness of the Polish economy is the unfavourable size structure of enterprises**. Small enterprises implement far fewer innovations of all kinds than do large ones, although a greater disproportion in this area is seen in the case of technological innovation in products and processes, that is, in those areas that make use of the results of R&D to the greatest extent. Poland has an exceptionally high percentage of micro-enterprises, which make up 95% of all enterprises. A similarly high percentage of enterprises that employ fewer than ten people (over 90%, but nowhere as high as in Poland) is found in some countries of Southern Europe: Cyprus, Spain, Portugal, and Italy. There are few large enterprises in Poland – 82 per million inhabitants. Having a large number of such companies (above 110 per million inhabitants) clearly favours high and rising expenditure on innovation, as is the case in Austria, Denmark, Finland, Germany and, in the NMS, the Czech Republic, Estonia, and Slovenia (Eurostat 2011).

As a consequence, the direct measures of innovation were not very favourable for Poland. These measures include the percentage of innovative small and medium enterprises (36% of the EU average), the percentage of enterprises implementing technical, organisational, and marketing innovations (49% of the EU average), and income from the sale of new or improved products (56% of the EU average).

Figure 55. Percentage of Enterprises that Implemented Technological Innovation in 2004–2010



* CIS research only takes into account European countries.

Source: Community Innovation Survey (CIS) Research 2010, Eurostat.

Below we summarise our analysis of the institutional and technological factors in Poland's competitive potential on the analogy of football league divisions.

Table 16. Elements of Poland's Competitive Potential (institutional and technological factors) Compared to the 144 Countries in the GCR, the 27 Countries of the EU, and the 15 Countries in the Comparison Group

Factor of competitiveness / dimension of competition	Global GCR 144	European EU-27	Comparison group 15
3.1. Institutions	55. Second Division	17. Second Division	5. First Division
3.2. Good market efficiency	51. Second Division	18. Second Division	7. Second Division
3.3. Macroeconomic environment	72. Second Division	16. Second Division	13. Third Division
3.4. Business sophistication	60. Second Division	21. Second Division	11. Third Division
3.5. Technological readiness	42. First Division	22. Third Division	6. Second Division
3.6. Innovation	63. Second Division	22. Third Division	12. Third Division

Source: prepared by the authors on the basis of the *Global Competitiveness Report*.

4. A summary of the changes in Poland's competitive position and potential compared to selected world economies

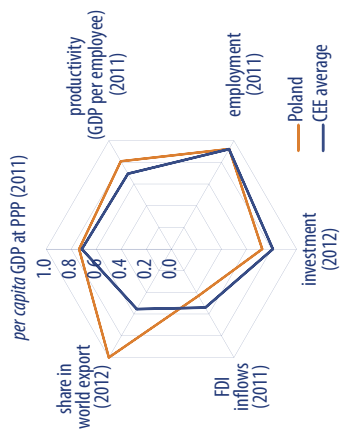
Measures of the Polish economy's competitive position and potential have been collected to present a summary of Poland's performance when compared to the other economies in the report. The radar charts (see Figures 56–58) present the indicators representing various aspects of the country's competitive position and competitive potential in 2011 and, where this was possible, in 2012. The data for Poland (denoted by an orange line) were compared to the economy with the highest value in a given group of states (a value of 0.1 in the figure) and to the average for all of the countries in a given group (blue line). The Polish economy was then compared to Central and East European (CEE), and Southern and West European (SWE), countries as well as to Latin America and Asia (AmAs). The lower section of each figure has bar graphs that show the dynamics of the changes in competitive position and competitive potential in relation to the average changes. A value above 0 means that during the years 2004–2011 Poland achieved a greater growth dynamic than other economies, while a value below 0 means that it was performing less well and so fell in the rankings²¹. The period 2004–2011 was divided into two sub-periods: 2004–2008 and 2008–2011.

21 We performed the following arithmetical procedures so that higher values could be presented as better values:

- we used an inverted age dependency ratio, which can now be understood as the number of people of working age (20–64) for every person aged 65 and above (the more the better);
- we presented public debt as a percentage of GDP after subtracting from 100, which tells us the portion of annual GDP that is not burdened with debt.

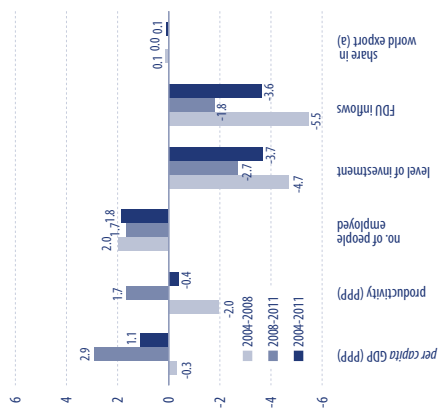
Figure 56. Poland's Competitive Position in 2011 and Changes to it in 2004-2011 Compared to Selected World Economies

Poland's Competitive Position in 2011 Compared to other Central and East European Economies*



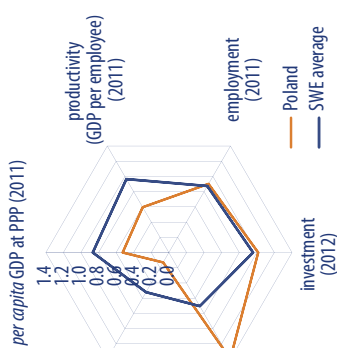
* Bulgaria, Czech Republic, Romania, Slovakia, Hungary

Changes in Poland's Competitive Position* Compared to the Average for Central and East European Economies, 2004-2011 (difference in percentage points)



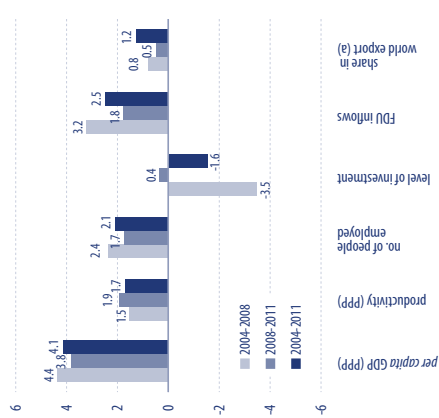
* differences in annual average growth rates and in variables representing indicators of competitiveness (in the case of exports, the data are for full periods)

Poland's Competitive Position in 2011 Compared to Southern and West European Economies*



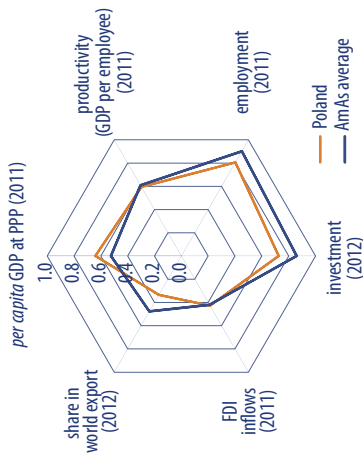
* Spain, Germany, Italy

Changes in Poland's Competitive Position* Compared to the Average for Southern and West European Economies, 2004-2011 (difference in percentage points)



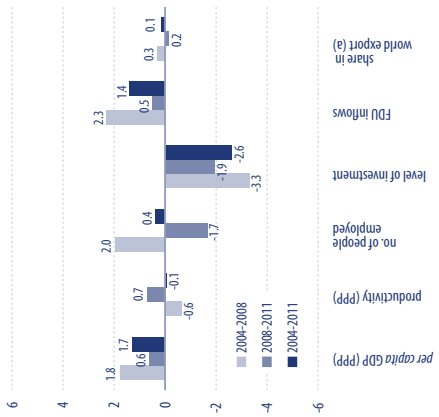
* differences in annual average growth rates and in variables representing indicators of competitiveness (in the case of exports, the data are for full periods)

Poland's Competitive Position in 2011 Compared to Selected Latin American and Asian Economies*



* Chile, Mexico, Indonesia, Korea, Malaysia, Turkey

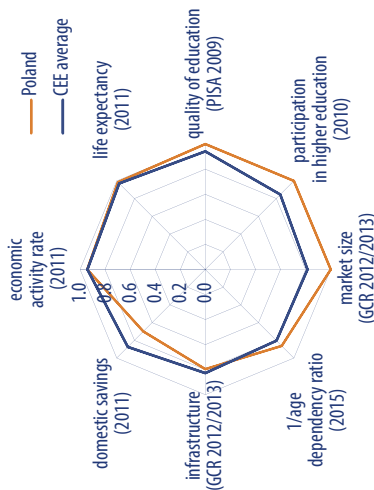
Changes in Poland's Competitive Position* Compared to the Average for Latin American and Asian Economies, 2004-2011 (difference in percentage points)



* differences in annual average growth rates and in variables representing indicators of competitiveness (in the case of exports, the data are for full periods)

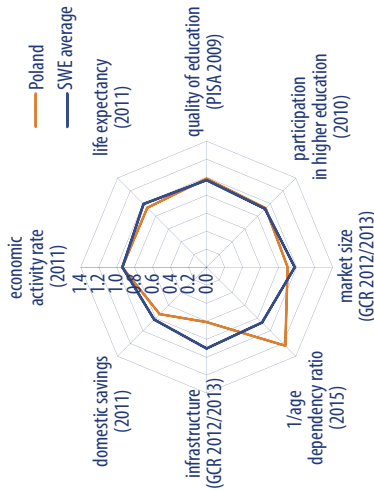
Figure 57. Poland's Competitive Potential in 2011 and Changes to it in 2004–2011 Compared to Selected World Economies – Resources

Poland's Competitive Potential in 2011 Compared to Central and East European* Economies – Resources



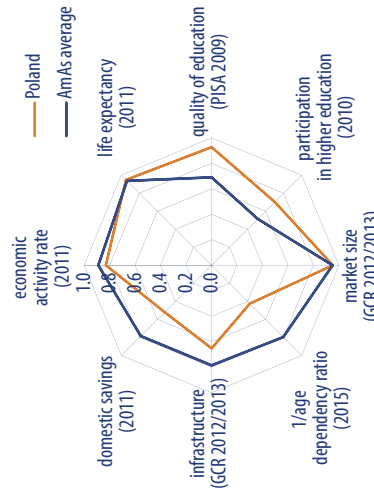
* Bulgaria, Czech Republic, Romania, Slovakia, Hungary

Poland's Competitive Potential in 2011 Compared to Southern and West European* Economies – Resources



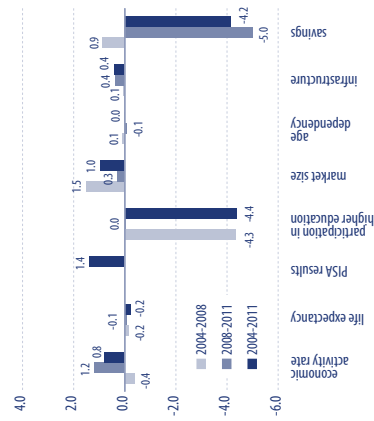
* Spain, Germany, Italy

Poland's Competitive Potential in 2011 Compared to Latin American and Asian* Economies – Resources



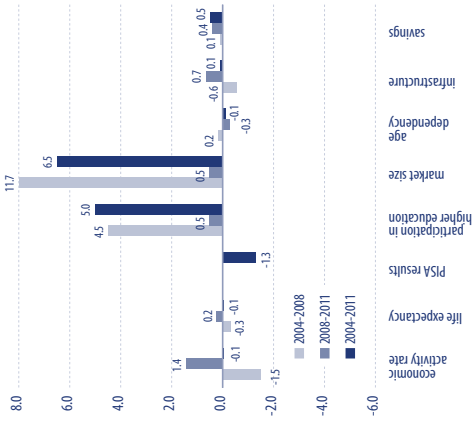
* Chile, Mexico, Indonesia, Korea, Malaysia, Turkey

Changes in Poland's Competitive Potential (resources)* Compared to the Average for Central and East European Economies, 2004–2011



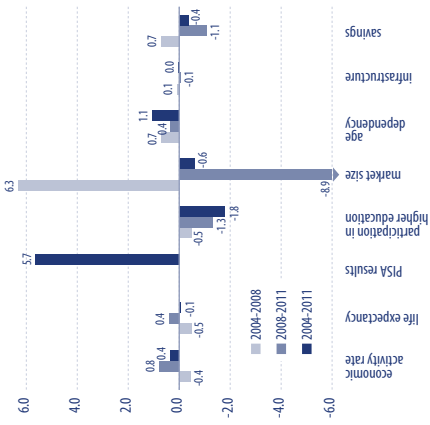
* differences in annual average growth rates and in variables representing indicators of competitiveness

Changes in Poland's Competitive Potential (resources)* Compared to the Average for Southern and West European Economies, 2004–2011



* differences in annual average growth rates and in variables representing indicators of competitiveness

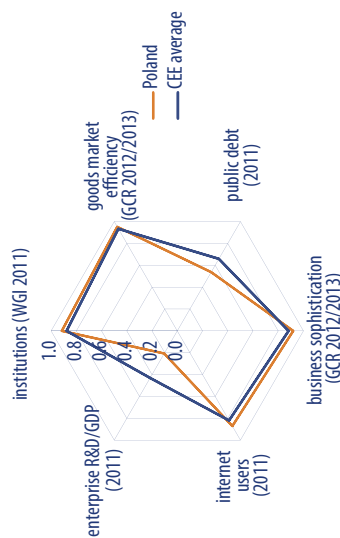
Changes in Poland's Competitive Potential (resources)* Compared to the Average for Latin American and Asian Economies, 2004–2011



* differences in annual average growth rates and in variables representing indicators of competitiveness

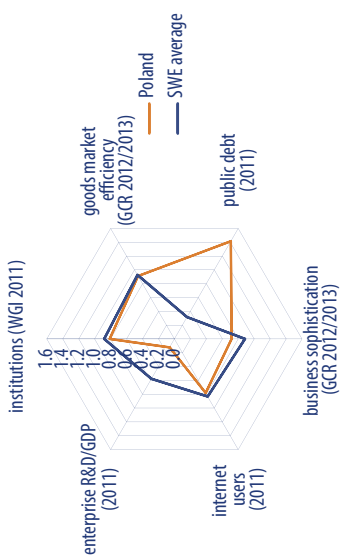
Figure 58. Poland's Competitive Potential in 2011 and Changes to it in 2004–2011 Compared to Selected World Economies – Institutional and Technological Factors

Poland's Competitive Potential in 2011 Compared to Central and East European Economies* – Institutional and Technological Factors



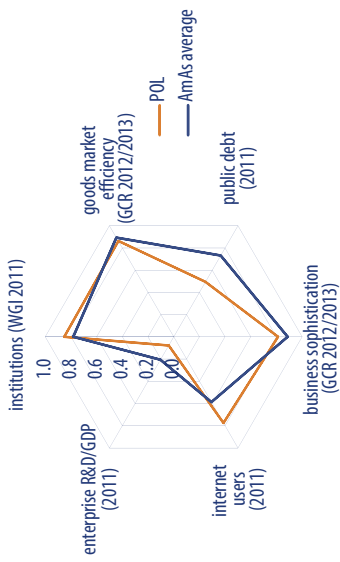
* Bulgaria, Czech Republic, Romania, Slovakia, Hungary

Poland's Competitive Potential in 2011 Compared to Southern and West European Economies* – Institutional and Technological Factors



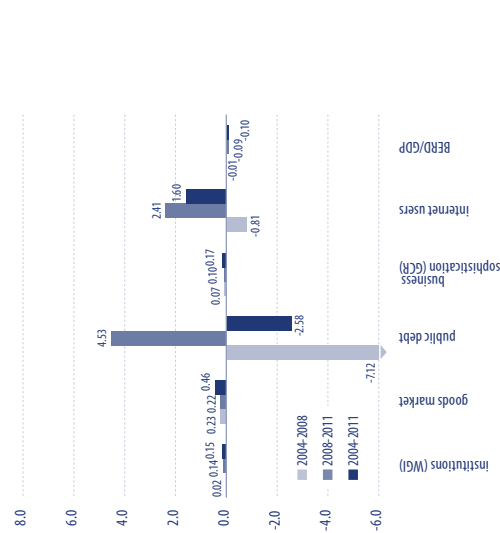
* Spain, Germany, Italy

Poland's Competitive Potential in 2011 Compared to Latin American and Asian Economies* – Institutional and Technological Factors



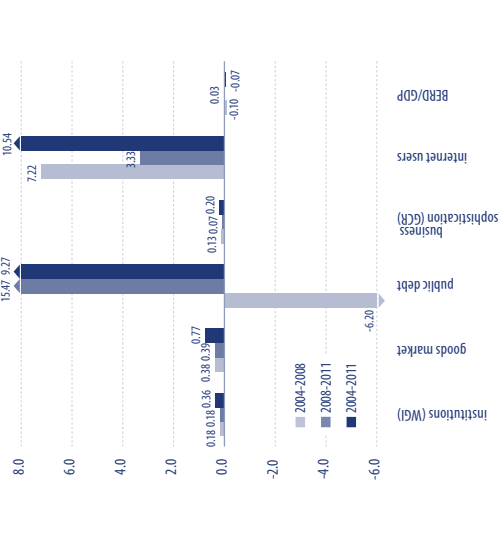
* Chile, Mexico, Indonesia, Korea, Malaysia, Turkey

Changes in Poland's Competitive Potential (institutional and technological factors)* Compared to the Average for Central and East European Economies, 2004–2011



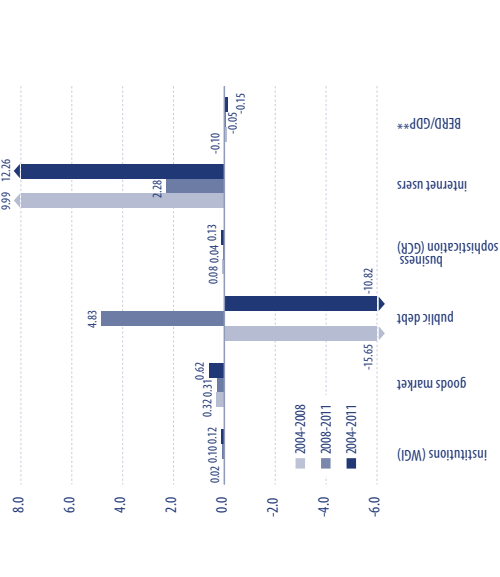
* differences in annual average growth rates and in variables representing indicators of competitiveness

Changes in Poland's Competitive Potential (institutional and technological factors)* Compared to the Average for Southern and West European Economies, 2004–2011



* differences in annual average growth rates and in variables representing indicators of competitiveness

Changes in Poland's Competitive Potential (institutional and technological factors)* Compared to the Average for Latin American and Asian Economies, 2004–2011



* differences in annual average growth rates and in variables representing indicators of competitiveness

** not including Malaysia and Indonesia

5. The capacity to turn competitive potential into competitive position

A straightforward analysis of the capacity of the Polish economy to translate competitive potential into productivity in the economy tells us that the country has been doing well. In 2004–2011, in all of the sub-periods analysed, the limited competitive potential at the outset – understood in terms of the aggregated GCI (Global Competitiveness Index) – did not prevent Poland from achieving high rates of growth in prosperity as measured by *per capita* GDP according to purchasing power parity.

Poland's GCI in 2004 was at a very low level – 3.57; it occupied 72nd place in a classification of 104 countries and last place in the group of countries compared in this report. The growth in GDP (at an annual rate of 8% according to purchasing power parity) was average compared to the other states – especially when considering that poorer countries with lower potential were growing relatively quickly. It emerges from a comparison of the Global Competitiveness Index for 2008 with the growth rate for the following three years that, despite a large rise in that index's value for Poland (to 4.28), the *per capita* GDP growth rate (above 4% annually), though lower than in the previous period, was still significantly higher than for the majority of countries in the comparison group²².

22 The reasons for the good one-off results the Polish economy recorded in the first phase of the crisis were: 1) strong stimulation of consumer demand thanks to reductions in taxes and other charges; 2) the expansion, adopted in 2007 and implemented in 2009, of public investment and operational programmes part-financed from EU funds; and 3) a sharp depreciation in the zloty caused by a temporary rise in risk premiums in emerging economies. Structural factors also played their part: 1) the Polish economy's relatively low degree of openness to foreign trade compared to other Central European countries; 2) the comparatively high share of inelastic expenditure on domestic goods and services in overall consumer spending; and 3) the relatively high share of investment goods in import (Konopczak & Marczewski 2011).

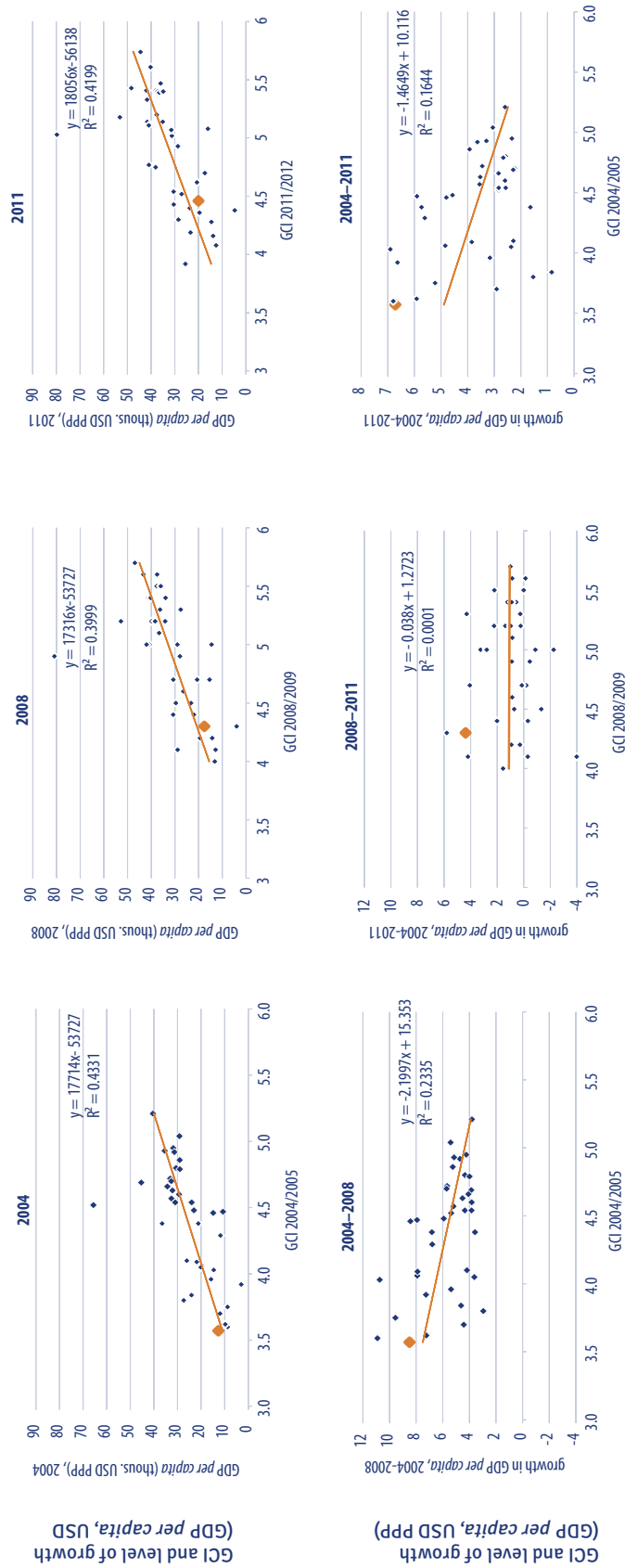
Table 17. Global Competitiveness Index (GCI) and Competitive Position Achieved by Selected World Economies, 2004–2011

	Global Competitiveness Index*			Gross national income per capita according to purchasing power parity (GDP PPP)				Productivity (GDP per person employed)				Investment		No. of people employed				Share in world export				
	2004	2008	2011	2004	2011	2004–2011		2004	2011	2004	2011	2004–2011		2004	2011	2004	2011	2004	2011	2004–2011		
				USD	USD	change (%)	annual change (%)	USD	USD	USD	USD	change (%)	average	(% GDP)	thousands	thousands	thousands	thousands	%	%	change	(percentage points)
POL	3.57	4.30	4.46	12650	20480	61.9	7.1	23042	26867	2.2	21.5	11804	13914	18	0.81	1.00	0.19					
CZE	4.06	4.60	4.52	19110	24280	27.1	3.5	21517	26704	3.1	26.7	3927	4058	3	0.75	0.85	0.11					
HUN	3.96	4.20	4.36	15340	20260	32.1	4.1	20052	20889	0.6	22.0	3234	3086	-5	0.60	0.57	-0.04					
SVK	4.03	4.40	4.19	14060	22230	58.1	6.8	25624	33172	3.8	25.5	1882	2019	7	0.30	0.44	0.14					
BGR	3.60	4.00	4.16	8980	13980	55.7	6.5	15463	19198	3.1	28.7	2413	2423	0	0.11	0.15	0.04					
ROM	3.75	4.10	4.08	8550	15140	77.1	8.5	9119	11452	3.3	26.0	7849	7810	0	0.26	0.32	0.06					
ESP	4.10	4.70	4.54	25610	31660	23.6	3.1	39098	42383	1.2	27.2	14495	14521	0	1.98	1.59	-0.39					
ITA	3.80	4.40	4.43	27430	32710	19.2	2.5	46374	45170	-0.4	20.8	17595	17616	0	3.84	2.73	-1.11					
DEU	4.86	5.50	5.41	29930	39970	33.5	4.2	42045	43276	0.4	18.0	28677	30254	5	9.87	7.68	-2.19					
CHL	4.29	4.70	4.70	10350	16330	57.8	6.7	29898	33860	1.8	22.6	5363	6664	24	0.35	0.43	0.08					
MEX	3.70	4.20	4.29	11140	15060	35.2	4.4	19051	19726	0.5	25.0	38538	43605	13	2.04	2.02	-0.01					
IDN	3.92	4.30	4.38	2740	4530	65.3	7.4	8669	11037	3.5	28.0	89786	102777	14	0.77	1.03	0.26					
MYS	4.47	5.00	5.08	10260	15190	48.1	5.8	21400	26009	2.8	29.4	9726	11019	13	1.37	1.24	-0.13					
KOR	4.38	5.30	5.02	21690	30340	39.9	4.9	37355	45158	2.7	22.2	20423	20976	3	2.75	2.99	0.24					
TUR	3.62	4.10	4.28	10090	17340	71.9	8.0	25062	29274	2.2	20.4	18526	22565	22	0.69	0.83	0.15					

* 7 – best, 1 – worst.

Source: GCR 2012/2013, International Monetary Fund, World Bank, OECD, World Trade Organisation.

Figure 59. Competitive Potential (GCI) and Level and Growth of Per Capita GDP in Selected World Economies



* the points on the graph represent the 15 economies in the comparison group as well as other OECD countries; Poland is marked in orange.
Source: prepared by the authors on the basis of GCR 2004/2005, 2008/2009, 2011/2012 and International Monetary Fund data.

It can be stated from a preliminary analysis (the upper part of the graphs in Figure 59 illustrating competitive potential and *per capita* GDP) that the GCI, whose purpose it is to measure the potential to compete, in fact reflects the current competitive position, that is, it provides a good explanation of the present differentiation in the level of prosperity (and also of labour productivity). The richer countries have greater competitive potential: they have better infrastructures, education systems and institutions, and are more innovative. If competitive potential was combined with the capacity to achieve greater productivity or prosperity, the conclusions would be similar to those formulated by the proponents of endogenous growth theory²³.

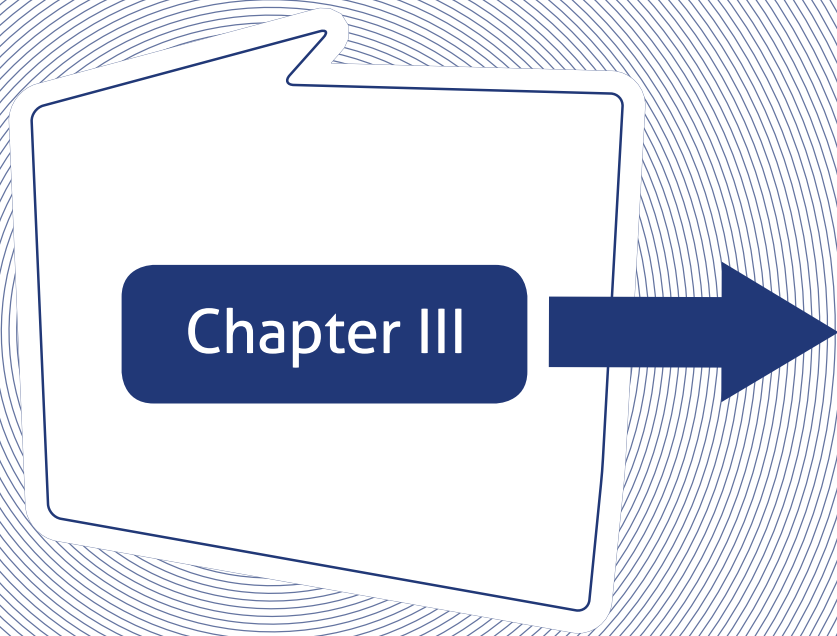
Yet the GCI does not explain well the growth in *per capita* GDP expressed according to purchasing power parity (and also of labour productivity). The three lower graphs in Figure 59 illustrate the negative relationship between GDP growth and the GCI. The lower the competitive potential, the higher the rate of growth in the countries studied. This paradoxically suggests that high competitive potential has an adverse impact on competitiveness as measured by the capacity to achieve higher growth rates. Convergence theory, according to which the economies of more weakly developed countries grow more quickly, is thus confirmed – at least for some groups of countries.

The dynamics of GDP and labour productivity – especially over the short term – do not have to be the most important criteria for the choices made in economic policy. It may be that the desire to avoid social costs or to maintain development over the long term are more important. For example, in 2004 the potential of Spain and Italy indicated that there should be a fall in the level of productivity, but this came about only in Italy, while in Spain productivity rose. This, however, came at a price: the loss of a few million people from the labour market (a rise in the rate of unemployment in 2008–2011 from 8.3% to 21.7% compared with a rise from 6.1% to 8.4% in Italy). The Italian approach, that is, to preserve jobs at the cost of medium-term competitiveness, but to leave open the possibility to maintain human resources (and the social insurance system) in the long term, is more beneficial for sustaining long-term, strategic human potential during a crisis (that is, not allowing a situation to develop in which young people leave the country). Having high competitive potential makes it possible to choose a solution that at first glance seems less beneficial.

23 In seeking to explain why (contrary to the conclusions drawn from the Solow model) poorer countries do not grow more quickly, they came to the conclusion that the nature of technological knowledge makes it possible to derive non-diminishing returns as the scale of capital applied increases. In this way richer countries can grow more quickly but the investments do not flow to poor countries as the latter do not possess human capital that is sufficiently well-developed to make effective use of them.

When constructing a straightforward synthetic indicator it is impossible to foresee the political choices that will be made: it is therefore impossible to predict the growth dynamics of the individual elements of competitiveness. This may suggest that it is better to understand the GCI as a measure of current competitiveness and not as an index of competitiveness *ex ante*. In other words, the GCI has no predictive value and is of limited use in forecasting future growth rates and development dynamics²⁴.

24 The correlation between competitive potential (GCI) and the dynamics of the various elements of competitiveness was found to be statistically significant in the case of export dynamics and productivity dynamics only in the years 2004–2008. The conclusions drawn from the crisis may suggest that the weightings of the individual components of competitive potential require frequent revision. It can be seen from the significant improvement in the competitiveness rankings of the Polish economy that this is being done. The change has been brought about by appreciating the significance of the institutions responsible for regulating the financial market and by assigning more weight to institutions (including to those that make it possible to protect national economies) and less to the liberalisation endorsed by the Washington Consensus.



Chapter III



Development Challenges and Key Recommendations

In this chapter we first present a statistical analysis and diagnosis of Poland's competitive position and potential and comment on how efficiently it is being used. Based on this, we then proceed to set out the challenges facing the Polish economy and conclude with recommendations for public policy.

1. Development challenges

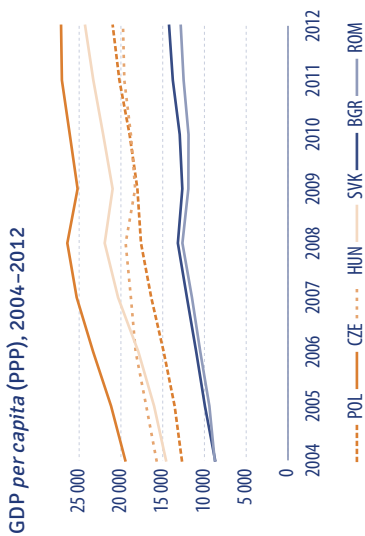
Having first issued and digested the health warning that forecasting the future is fraught with difficulty, we should examine the challenges the Polish economy should surmount to achieve more beneficial results with the resources available and also consider what action is required in the specific areas that determine its competitive potential.

The following set of tables synthesise measures of Poland's competitive position and potential against the economies of the comparison group selected for the report. The left-hand section of the table illustrates the development in 2004–2012 of the variables for the categories we are studying (or, where the data are available, in 2004–2011) compared with other countries of Central and Eastern Europe that have similar historical and institutional determinants and levels of development and with whom Poland is competing most intensely for goods markets and capital. Given that the competitive potential of the Visegrad countries, along with Bulgaria and Romania, is similar, we can compare the statistical account of these countries' achievements with those of Poland's since EU entry to arrive at the best assessment of how well Poland is using its resources. The table's central column presents Poland's position compared to all of the economies in the comparison group, so that Germany and the countries of southern Europe, Latin America and Asia are now added. We have summarised the challenges we think the Polish economy needs to surmount to gradually improve its position in Europe and the world in the right-hand section of the table.

1. COMPETITIVE POSITION

Dynamics in 2004–2012

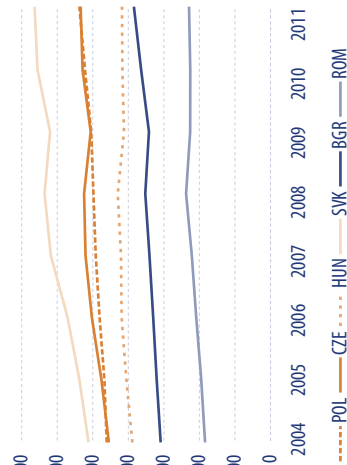
1.1 PER CAPITA GDP



Source: International Monetary Fund (estimates for 2012).

1.2 PRODUCTIVITY

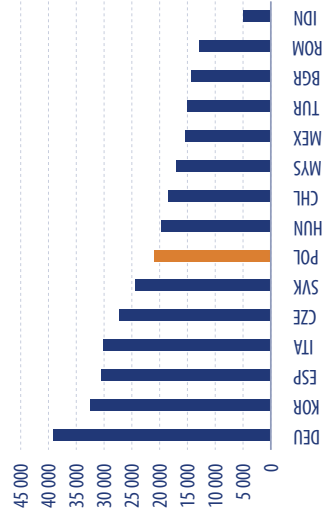
Productivity, 2004–2011 (GDP according to PPP per person employed in USD)



Source: World Bank.

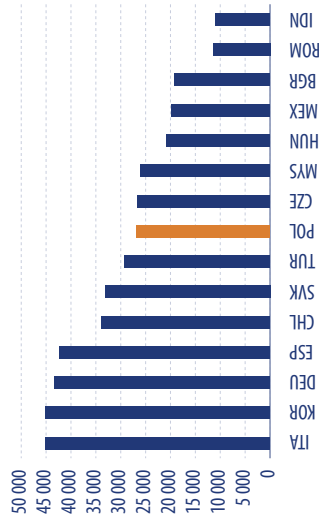
Current state

GDP per capita (according to purchasing power parity) in 2012



Source: International Monetary Fund (estimates for 2012).

Productivity 2011 (GDP according to PPP per person employed in USD)



Source: World Bank.

Challenges

Although Poland's level of economic development is continually rising, the country remains one of the most poorly-developed in the EU in terms of per capita GDP.

The measures required to accelerate economic growth and raise the level of development are those that will lead to an increase in resources, to greater expenditure on the factors of production (labour, capital, raw materials), and to more efficient use of those factors and resources. We have formulated these development challenges, which are faced by every kind of economic entity: households, enterprises, and the state (public authorities), with reference to specific factors of production and to the areas that influence them.

Productivity – measured both by GDP per person employed and GDP per hour worked – has been gradually increasing in Poland. Its growth in 2004–2011 was greater than that in the whole EU-27.

- Challenges: to improve competitive potential by bringing about positive changes in the following determinants of productivity:
- the level of technological sophistication (see the innovativeness of the economy);
 - capital deepening (investments – see capital resources);
 - the quality of the economy's institutional environment (see institutions);
 - the value of the workforce's human capital (lifelong learning – see education).

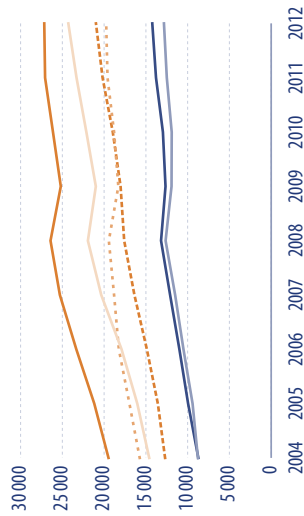
Dynamics in 2004–2012

Current state

Challenges

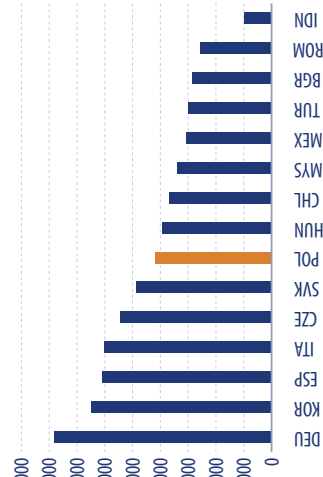
1.3. LABOUR RESOURCES

Employment rates, 2004–2011 (%) (percentage of the population aged 15 or above)



Source: World Bank.

Employment rates in 2011 (percentage of the population aged 15 or above)



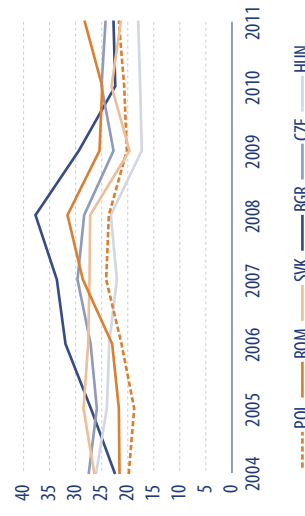
Source: World Bank.

Increasing the incentives to work for both employers and people who are not working:

- lowering the tax wedge;
- social welfare to be more strongly linked with working or looking for work (see the labour market section of this report for the particular challenges involved).

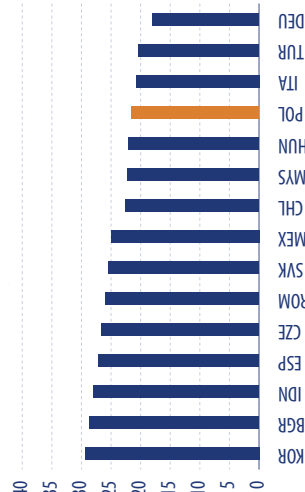
1.4. CAPITAL RESOURCES

Investment as a percentage of GDP, 2004–2011



Source: Eurostat.

Investment as a percentage of GDP – average for 2004–2011



Source: Eurostat.

Challenges for the public authorities:

- creating tax and regulatory incentives to increase the share of the most productive investments in overall investment;
- limiting the administrative barriers to company growth;
- stimulating the growth of the smallest enterprises which invest the least;
- formulating a structural and macroeconomic policy to make investment a more attractive proposition for foreign capital;
- taking measures to increase the rate of savings and to streamline the mechanisms by which they are transformed into investments.

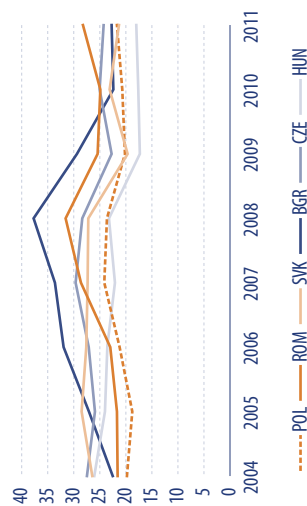
Challenges for enterprises:

- investment in innovation and intangible assets;
- expansion onto foreign markets and the internationalisation of enterprises through investment abroad;
- joint investment projects in domestic, international, and network environments.

Dynamics in 2004–2012 **Current state** **Challenges**

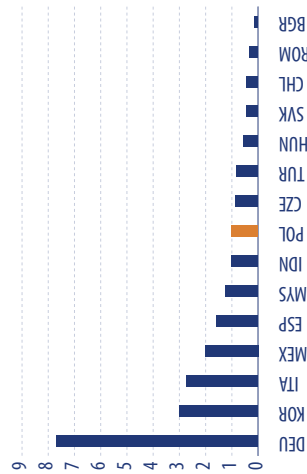
1.5. EXPORT

Share in world goods' export (%), 2004–2012



Source: World Trade Organisation.

Share in world goods' export (%) in 2012



Source: World Trade Organisation.

Challenges for enterprises:

- to increase the share of high value added and low import intensity branches in the structure of exports;
- to generate a more advanced export offer with greater emphasis on re-positioning Polish companies in the value chain while modernising (or changing) the value chain itself.

Challenges for the public authorities:

- favouring and promoting high value added and low import intensity products in the structure of exports;
- taking measures to attract FDI in these areas;
- encouraging domestic investment.

2. COMPETITIVE POTENTIAL: RESOURCES

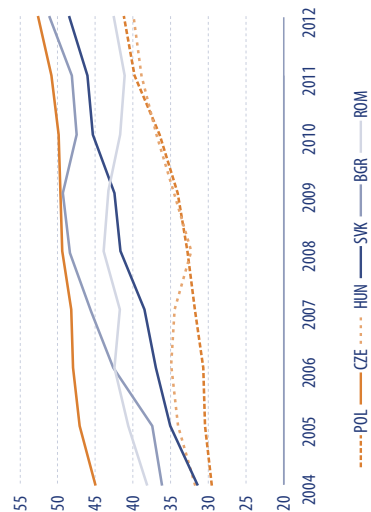
Dynamics in 2004–2012

2.1. LABOUR MARKET

Current state

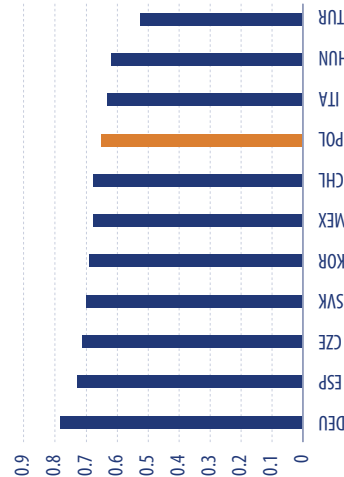
Challenges

Economic activity rate of the population aged 55–64 years, 2004–2011 (%)



Source: Eurostat.

Economic activity rate of the population in 2011 (%)



Source: OECD.

Acting to increase the supply of labour (calculated as the sum of employed and unemployed people as a proportion of the working-age population).

Challenges for the public authorities:

- to improve access to care centres and services for the elderly (a proportion of women aged over 50 withdraw from the labour market to look after older family members);
- to increase the availability of nurseries and pre-schools so that the economic activity and rate of employment of young women can rise;
- to lower the tax wedge for those on the lowest incomes so that the rate of employment among people with low qualifications can be increased;
- to consider the feasibility of varying the level of the minimum wage according to sectors and/or regions;
- to take further action to harmonise the pensions system for all groups of workers;
- to introduce financial incentives to remain on the labour market for longer, e.g., by linking the level of pensions to the time spent on the labour market;
- to provide more incentives for the unemployed and professionally inactive to take employment by making a proportion of welfare benefits dependent upon taking a job.

Challenges for enterprises: to increase cooperation with schools, which will help to ensure that school leavers have the skills the labour market requires.

Challenges for households:

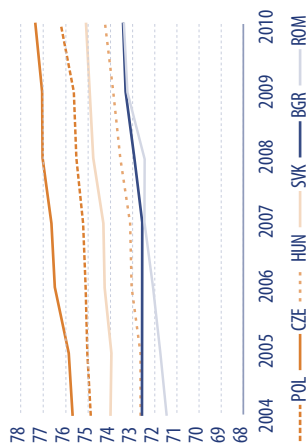
- to increase the incentives to gain new qualifications;
- to combine learning and employment.

2. COMPETITIVE POTENTIAL: RESOURCES

Dynamics in 2004–2012

2.2. HEALTH

Life expectancy at birth (in years)

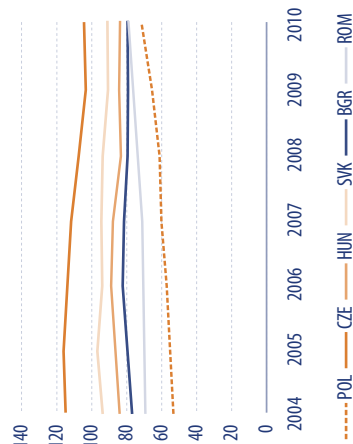


Source: World Bank.

Dynamics in 2004–2012

2.3. PRIMARY EDUCATION

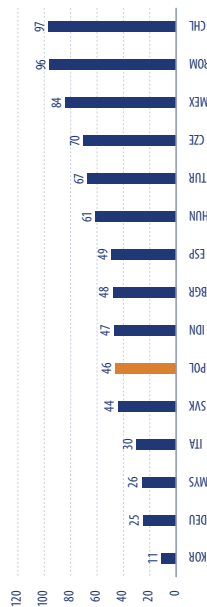
Proportion of children attending pre-school (%)



Source: World Bank.

Current state

Poland's competitiveness in the area of health compared to selected countries in the GCR 2012/2013 ranking



* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

Challenges

Poland performs quite poorly on health when compared to the other EU Member States, which is borne out by the indicators for the incidence of tuberculosis and for life expectancy. This is partly the result of the poor quality of health care in Poland.

Challenges for the public authorities:

- to devise mechanisms and to introduce incentives that will increase private expenditure in the field of health care;
- to treat expenditure on health care as an investment in human capital.

Challenges

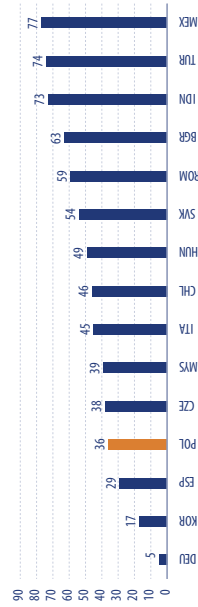
Poland performs quite well on the gross enrolment rate at primary school level, but considerably worse – according to the GCR ranking – on the quality of education.

Poland performs very weakly with regard to education at pre-school level. The low number of available nursery and pre-school places finds expression in the very low percentage of children attending early-years institutions.

Challenges for the public authorities: to put mechanisms in place that will enable local government and individuals to expand the network of nurseries and pre-schools.

Current state

Poland's competitiveness in the area of education compared to selected countries in the GCR 2012/2013 ranking



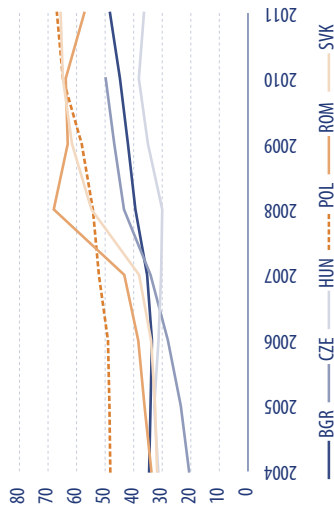
* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

Dynamics in 2004–2012

2.4. SECONDARY AND HIGHER EDUCATION

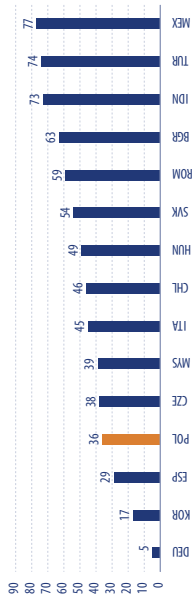
Number of graduates of higher education (levels 5 and 6) aged 20–29 years per 1000 people of that age



Source: Eurostat.

Current state

Competitiveness of selected economies in the area of education and their GCR 2012/2013 indicator



* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

Challenges

Poland performs comparatively well in the GCI in terms of enrolment indicators. While a high percentage of people were studying, the quality of education received a poorer assessment. Polish fifteen-year-olds have performed comparatively well in the OECD's quality of education rankings (PISA).

When set against comparable economies, there is a low percentage of science graduates in Poland. It is possible that the growth over the last few years in the unemployment rate among those with higher education demonstrates that courses at this level are ill-matched with market requirements.

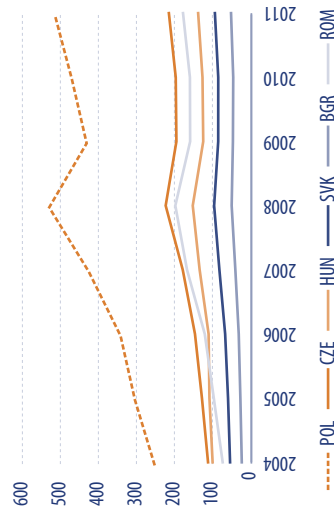
Greater emphasis should therefore be placed on matching courses to the needs of the labour market, including by increasing the role played by apprenticeships, and vocational and professional training, both at the secondary and higher levels.

Challenge for the public authorities: to foster cooperation between institutions of higher education and employers and between vocational schools and employers.

Dynamics in 2004–2012

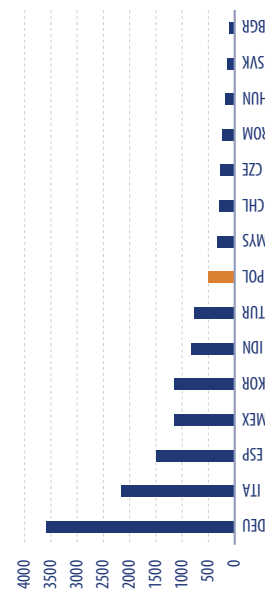
2.5. MARKET SIZE AND ATTRACTIVENESS TO INVESTORS

Absolute size of GDP in billion USD, 2004–2011



Source: United Nations.

Absolute size of GDP in billion USD in 2011



Source: United Nations.

Challenges

Challenges for the public authorities:

- to ensure that the structure of FDIs is such that it boosts the export potential of the Polish economy and increases resources of knowledge and technology. If this is not done, investors will treat the economy as nothing more than a large sales market, which will not lead to an increase in competitive potential;
- to attract FDIs as part of a long-term macroeconomic policy. Ensuring that the economy is attractive to investors should be reconciled with other strategic goals, such as the intelligent specialisation and diversification of the economy (via incentives in tax, regulatory, and educational policy).

Challenges for enterprises: to become more open to foreign markets and to seek new markets.

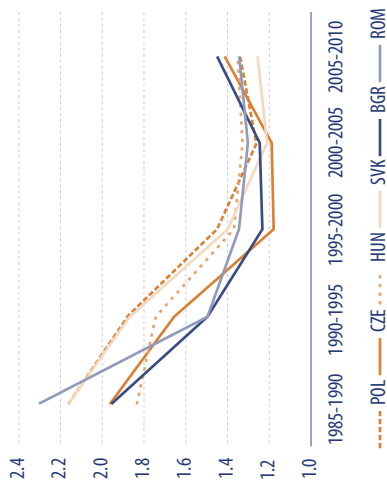
Dynamics in 2004–2012

Current state

Challenges

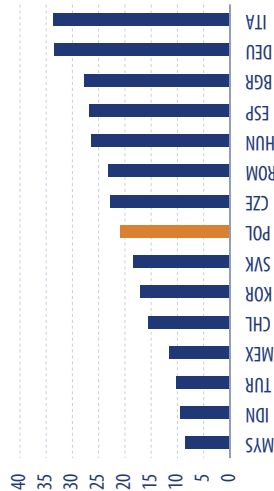
2.6. DEMOGRAPHY

Fertility rate (children per woman of reproductive age), 1985–2010



Source: United Nations.

Age dependency ratio in 2010 (%)



Source: United Nations.

Poland's age dependency ratio has developed quite favourably compared to other EU states. However, in the long term the situation will worsen considerably, among others due to Poland having one of the world's lowest birth rates. Measures to protect Poland's demographic potential include slowing down the growth in the age dependency ratio by reducing emigration and providing stronger motivation to have children. This will make it possible to contain rises in labour costs.

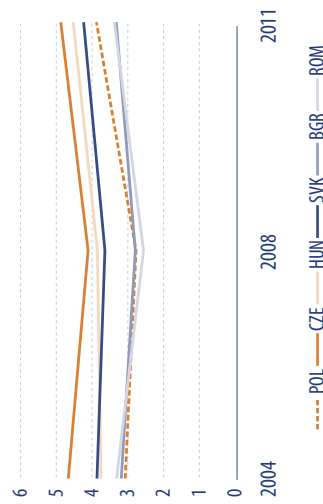
Challenges for the public authorities:

- to shape the tax system (with a view to the long-term positive externalities to society) in such a way that families can be compensated for the costs and difficulties of bringing up children;
- to take seriously the constitutional duty to protect parenthood and the family.

Challenges to households: to factor into long-term calculations that the future age dependency ratio will mean that pensions will be lower than they are now and, therefore, that having children may make living in old age easier.

2.7. INFRASTRUCTURE

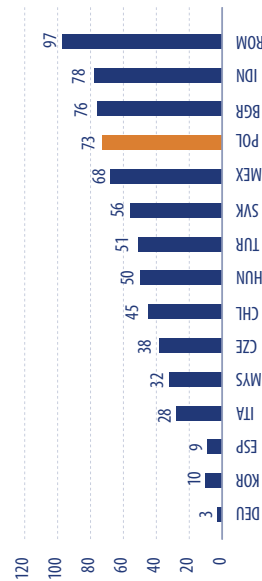
Competitiveness of selected economies in the area of infrastructure, 2004–2011



* 7 – best score, 1 – worst score.

Source: GCR, 2004/2005, 2008/2009, 2011/2012.

Competitiveness of selected economies in the area of infrastructure in the GCR 2012/2013 ranking



* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

Challenges for the public sector:

- to complete the construction of a basic motorway network that will link the major cities and make east–west and north–south transit possible;
- to modernise the railways and thus cut journey times between the major urban centres;
- to adjust the energy supply system to the requirements of the economy, that is, to lower the energy intensity of the economy, to modernise electricity generation, to make the supply of energy more competitive, and to prepare for the EU 20–20–20 Climate and Energy Package targets;
- to improve the regulations governing public–private partnerships;
- to develop the market for financial instruments used to finance infrastructure projects.

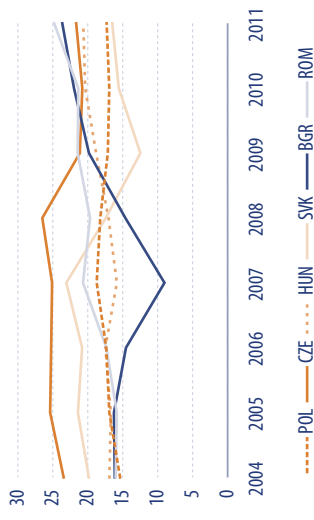
Challenges for enterprises:

- to invest in infrastructure under the auspices of public–private partnerships.

Dynamics in 2004–2012

2.8. THE FINANCIAL MARKET

Domestic savings rate as a percentage of GDP



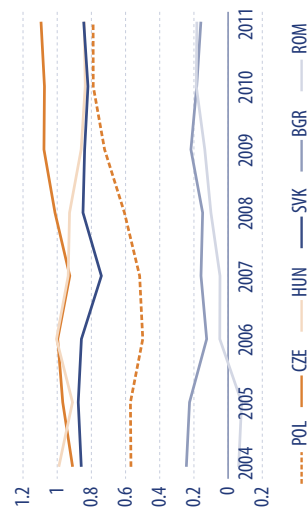
Source: Eurostat.

3. COMPETITIVE POTENTIAL: INSTITUTIONAL AND TECHNOLOGICAL FACTORS

Dynamics in 2004–2012

3.1. INSTITUTIONS

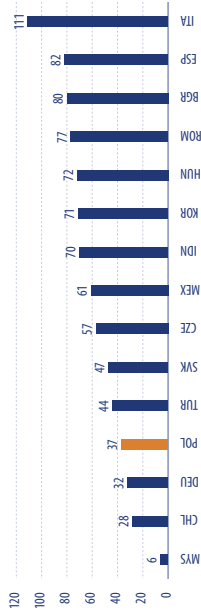
Average values of the indicators of government effectiveness, the rule of law, and regulatory quality, 2004–2011



Source: World Bank.

Current state

Poland's competitiveness in the area of financial market quality compared to selected countries in the GCR 2012/2013 ranking

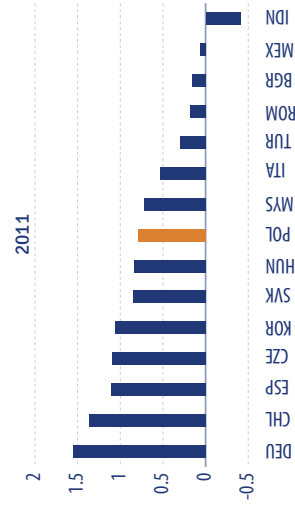


* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

Current state

Average values of the indicators of government effectiveness, the rule of law, and regulatory quality in 2011 (values range from -2.5 to +2.5).



Source: World Bank.

Challenges

Challenges for the public sector:

- to improve access to finance for venture capital undertakings with regard to the investment opportunities of both enterprises and households;
- to improve incentives for long-term savings;
- macroprudential regulation to prevent excessive growth in private sector debt;
- regulations to give small and medium enterprises greater access to financing.

Challenges for enterprises:

- to increase the range of financial products for small and medium enterprises;
- to increase the range of products that will allow households to save over the long term.

Challenges for households:

- to increase their levels of savings: mostly those made over the long term with a view to retirement.

Challenges

The fundamental challenge for the public authorities is to improve the institutional environment for doing business:

- to simplify administrative procedures that are vital to the functioning of enterprises;
- to make taxation law and the principles by which it is applied more transparent, including by an enterprise-friendly reorientation of the fiscal administration;
- to streamline and accelerate judicial procedures – especially the latter.

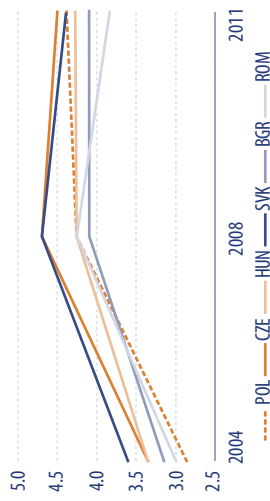
The challenge facing businesses is to work to raise awareness that the success of domestic companies is the foundation of a healthy economy.

3. COMPETITIVE POTENTIAL: INSTITUTIONAL AND TECHNOLOGICAL FACTORS

Dynamics in 2004–2012

3.2. GOODS MARKET EFFICIENCY

Competitiveness of selected economies in the area of goods market efficiency, 2004–2011

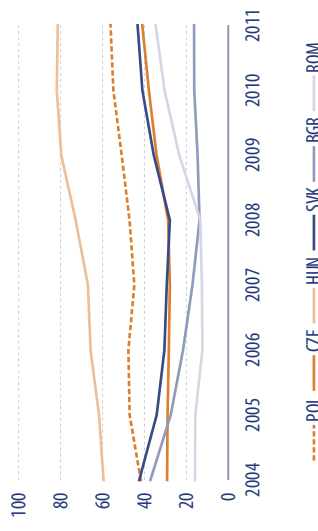


* 7 – best score, 1 – worst score.

Source: GCR, 2004/05, 2008/09, 2012/13.

3.3. THE MACROECONOMIC ENVIRONMENT

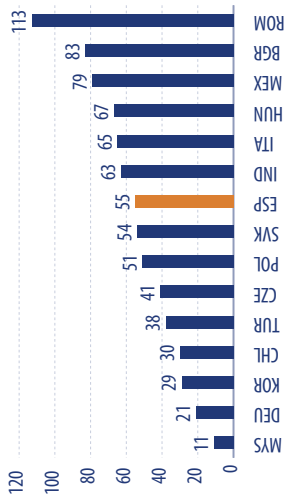
Public debt as a percentage of GDP



Source: Eurostat.

Current state

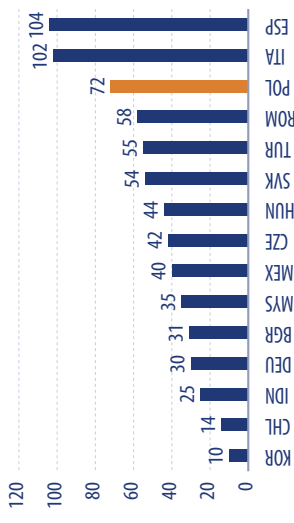
Poland's competitiveness in the area of goods market efficiency compared to selected countries in the GCR 2012/2013 ranking



* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

Poland's competitiveness in the area of macroeconomic stability compared to selected countries in the GCR 2012/2013 ranking



* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

Challenges

Challenges for the public authorities:

- to reduce administrative interference with regard to the time and procedures involved in establishing a company, the access of FDIs to the domestic market, the stability and transparency of the tax system, and the overall investment climate;
- to devise 'smart' regulation that will dovetail with an economic policy promoting specific categories of investment and enterprise behaviour, e.g., allocating resources to high-technology, pro-export sectors or ensuring that resources do not become over-concentrated in a particular sector and thus cause macroeconomic imbalances.

Challenges for the public sector:

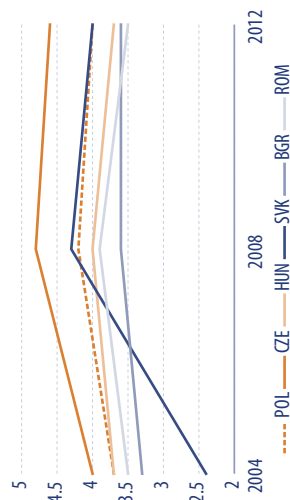
- to make a substantial reduction in the structural deficit in public finances, primarily by restructuring the public expenditure system;
- to raise the level of domestic savings through growth in public and private savings, chiefly those associated with the pensions system;
- to limit reliance on foreign investors in financing public debt.

3. COMPETITIVE POTENTIAL: INSTITUTIONAL AND TECHNOLOGICAL FACTORS

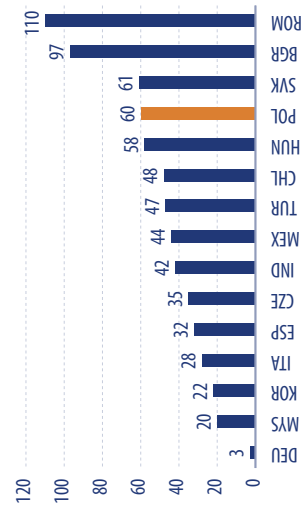
Dynamics in 2004–2012

3.4. BUSINESS SOPHISTICATION

Competitiveness of selected economies in the area of business sophistication in GCR rankings, 2004–2012



Competitiveness of selected economies in the area of business sophistication in the GCR 2012/13 ranking

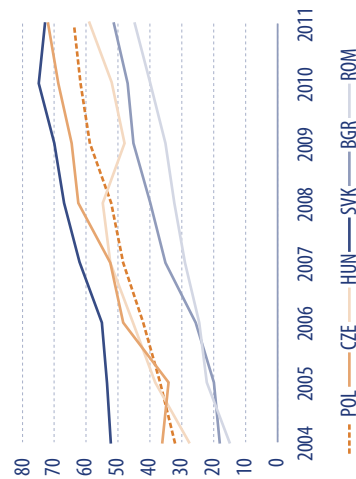


* 7 – best score, 1 – worst score.

Source: GCR, 2004/2005, 2008/2009, 2012/2013.

3.5. TECHNOLOGICAL READINESS

Internet users per 100 inhabitants, 2004–2011



Source: World Bank.

Current state

Challenges

Challenges for the public authorities:

- to increase the proportion of technologically and organisationally sophisticated investments (including foreign investments) through, e.g., network and international research and manufacturing projects;
- to create a business-friendly climate via a system of support for the institutional environment, to train and educate local leaders, to pinpoint intelligent regional specialisations, and to foster the development of clusters and special economic zones.

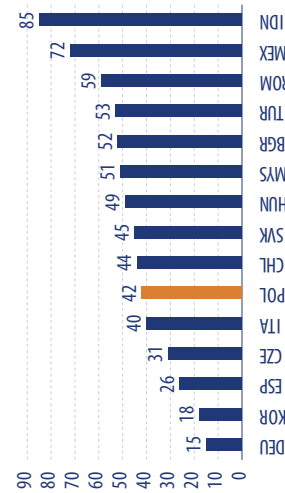
Challenges for enterprises:

- greater openness and willingness to cooperate as well as company mergers and joint goal-setting.

* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

Poland's competitiveness in the area of technological readiness compared to selected countries in the GCR 2012/2013 ranking



* position 1 – best, position 144 – worst.

Source: GCR 2012/2013.

The telecommunications infrastructure in Poland saw a rapid improvement in 2004–2011, although Polish entrepreneurs gave a relatively low assessment to the availability of new technologies.

Challenges for enterprises: the availability of new technologies stems from the development of home-grown technology and from technology transfers from abroad. Polish enterprises therefore need to be more willing to conduct research and development (see innovations) and to attract innovative foreign capital.

Challenges for the public authorities:

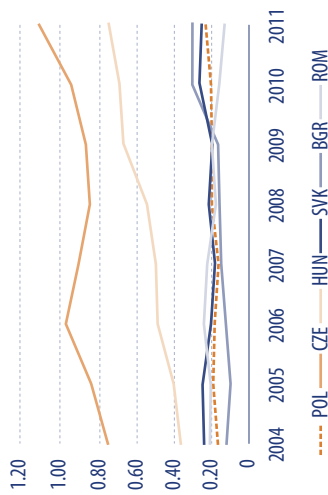
- to support the development of telecommunications infrastructure;
- to reinforce the willingness of enterprises to invest in technology.

3. COMPETITIVE POTENTIAL: INSTITUTIONAL AND TECHNOLOGICAL FACTORS

Dynamics in 2004–2012

3.6. INNOVATION

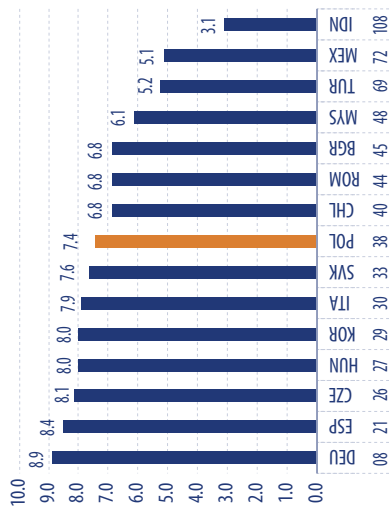
Enterprises' R&D expenditure as a percentage of GDP, 2004–2011



Source: Eurostat.

Current state

Values of the World Bank's Knowledge Economy Index in 2012 on a scale of 1–10 (position amongst 145 countries shown at the bottom)



Source: World Bank.

Challenges

The Polish economy has been assessed as one of the least innovative in the European Union (IUS 2013). Challenges facing the public authorities:

- to take advantage of the relatively large stock of human capital and enterprise expenditure to create the comparative advantages required to manufacture innovative products;
- to remove institutional barriers that deter investment in innovation, including investment in research and development;
- to improve the legal and institutional conditions for cooperation between higher education and business.

The challenge enterprises have to surmount is to ensure that available human capital is sustained and developed and to enter into innovative partnerships with other enterprises and with universities.

The challenges and recommendations are set out in detail in the report entitled *Setting a Course for Innovation: How to end Poland's Development Drift* (2012).

2. Key recommendations

The recommendations are encapsulated in ten thematic sections.

2.1. An improved climate for enterprise

The competitiveness of enterprises stems primarily from appropriate and duly-proportioned regulation. This concerns, in particular, the institutional framework for new enterprises entering the market and the way it affects their functioning and development. The arrangements made for bankruptcy are also important: they should not go too far in penalising the economic failures of entrepreneurs.

It is extremely important for enterprise that the tax system is stable and straightforward and that predictability and reliability in trading is ensured by the courts such that, for instance, commercial and administrative cases are swiftly resolved. Progress will not be made in these two areas, however, until the fiscal administration and the judiciary have been fundamentally reformed. There continues to be too great a burden on companies in the form of reporting and inspection, which applies to both the number of supervisory institutions and their remit.

If all administrative procedures were made available online, this would represent a profoundly beneficial institutional change leading to an improvement in the climate for enterprise.

Changes in the regulatory environment for companies should be preceded by a comprehensive and systemic survey of commercial law and regulation; they should not consist in endless amendments to existing rules. A freedom of economic activity act, whose general clauses stipulate the course of legislative change and advise on how to interpret regulations, should form the core of the system of commercial law. This fundamental act should be of code rank and should not be subject to frequent and hurried amendments. Revisions should only be permitted when the act has been in force for a sustained and stable period and only after a thorough *ex post* evaluation conducted by independent experts, which should be presented to all interested parties.

The Better Legislation 2015 programme announced by the present Minister of Economy would seem to be a step in the right direction. What is needed, however, are not still more government declarations and programmes but the consolidation of good and well-thought-out legislative practice. This begins with pre-legislative work (diagnosis, ideas), continues in the government-parliamentary phase conducted in partnership with the most important stakeholders, and concludes in the post-legislative stage (implementation, monitoring, evaluation).

The development of competitive internal markets and of the financial market is conducive to enterprise. It is necessary for this reason to move towards further demonopolisation of the economy (e.g., the power sector, the insurance sector, banking, and wholesale trading). The Office of Competition and Consumer Protection (UOKiK) should not only passively monitor documents (contracts) and react *ex post* to monopolistic practices: it should also pro-actively analyse the margins obtained in the concentrated industries and institute anti-monopoly proceedings based on this.

Competitiveness is the attribute of an economy that is most determined by the conditions in which enterprises operate and the resources at their disposal. The goal of regulation, and of the economy's overall institutional environment, should be to generate incentives for enterprise

The state is a source of risk for enterprises

In order to achieve success, you must have the right to undertake risk and incur losses

and to stimulate the growth of the new companies that are established as a result. It is only now, after all, that large companies are acquiring the critical mass of resources that will allow them to compete globally. In view of this, it would appear justified to cease acting according to the principle of 'let's allow companies to grow' and instead pursue a policy of 'let's help companies to grow'. Such business-friendly or smart regulation should be tailored to the sector concerned and adapted to the specificities of the branches, regions, and company structures. This means that one set of tools should be applied to small and newly-established companies and another to the medium and large entities that more often decide to internationalise their operations.

2.2. New Industrial Policy

New industrial policy is mainly associated with a supply-side approach to the economy which, rather than involving the state as an owner or investor, is pursued through institutional solutions that support enterprises in various sectors in their efforts to achieve high productivity and competitiveness. This policy may be described as selective and strategically-oriented.

It requires institutionalised partnership that is focussed on development and structural change. It is distinctly different from the classical industrial policy implemented after the Second World War, which was based on state intervention. That policy was conducted along corporatist lines (trilateral dialogue: government, employers, trade unions) and its aim was to stabilise the economy and maintain social peace by protecting the interests of dominant business and employee groups. In essence, it was designed to protect the domestic economy from competition. What counts now, though, is to nurture competitive potential in an open and global economy. It must be acknowledged that such a policy is not straightforward and that it could easily sink into etatism. Yet without it the Polish economy will develop as a sub-ordinated economy at the periphery.

The purpose of a pro-competitive policy is to change the international structure of trade

One feature of the new industrial policy is that it influences sectors from the point of view of the overall competitiveness of the national economy rather than addressing sectors individually. Energy policy can serve as an example. This should take into account the energy security of the economy as a whole (households as well as enterprises) and should especially address the economic aspects of energy security by ensuring that companies are supplied at a price that allows them to achieve or maintain competitive advantage in respect of foreign competitors. In short, do companies pay a higher or lower energy bill than their competitors for each unit of economic value produced?

Describing the policy as 'selective' and 'strategic' suggests long-term rather than immediate aims. Its scope and the tools used must be clearly determined and delimited, and must match the competitiveness strategy adopted by the economy in question. In this way, the risks associated with the new industrial policy can be reduced. Improper or ineffective measures can be identified and eliminated through the systematic monitoring of strategy implementation by independent experts.

This policy should in no way involve the wholesale copying of the solutions and experiences of other states (such as Germany, Chile, South Korea, Singapore, Taiwan, or the USA). The policy must be deliberately formulated from the outset with the specificities of the given economy in mind, such as its strengths and weaknesses, and the environment in which it operates (i.e., with whom and for what are we competing?).

New industrial policy cannot be concerned only with the use of finance and asset capital but should also trigger the generation and simultaneous exploitation of soft forms of capital: intellectual, creative, human, and social.

It is our belief that the basic reference point for the development and introduction of new industrial policy in Poland should be the analysis of the value added of export in the various sectors of the economy we presented in the previous chapter. This found that Poland's present comparative advantages are in the following manufacturing sectors: minerals, food products, precision instruments, wood products, and printing. It is these sectors that the new industrial policy should address first. We also take the view that including armaments expenditure in the new industrial policy, which should first of all serve the modernisation of Poland's manufacturing base, is an absolute necessity.

2.3. Switching to a Pro-Innovation Economy

It is not the role of the state to directly trigger innovation through public intervention but to support the establishment of a variety of partnership forms, especially between enterprises and R&D centres (in Poland, the latter form of partnership has hitherto been found mostly in higher education). This is to ensure the free flow of domestic R&D thinking into economic activity. Essentially, this is about influencing the complementarity of the various links in the innovation process, their openness to cooperation, and their capacity to put this into practice.

At the same time, there arises the important matter of whether entities involved in innovation, most of which – but not all – will be enterprises and universities, will be functioning in a way that catalyses, and is conducive to, individual creativity. Technology transfer offices are being established at many universities. But given that applied research is not conducted at these universities, what is the purpose of opening such offices? We have an increasingly extensive administrative and office structure, yet no increase in innovation. Indeed, innovation is declining.

In our understanding, the role of the state (the public authorities) as regards innovation should clearly be to support autonomous entities to behave innovatively by creating a legal environment conducive to conducting research, by allowing companies to set R&D expenditure against tax, and by abandoning the regulations in force at universities that hamper research. Education is fundamental to a society's capacity to innovate. The surest way the state can contribute to the innovativeness of the economy (albeit indirectly) is by promoting a model of education that unlocks individual creativity at all levels of the education system and galvanizes cooperation between creative individuals. For this to become a reality, however, an emphatic shift of emphasis towards teaching media, culture, and citizenship will be required.

Thus, if we are justified in complaining of an insufficiently high level of innovativeness, then we only have to look at the outdated education system, in which a powerful bias towards formal educational achievement is combined with an ossified structure and organisational culture, to find the source of the problem. This is why further revisions to the educational programme, whether piecemeal or extensive, will not lead to authentic educational change. That will require a new way of learning and teaching. The behaviour of the teaching profession, legitimised by the Teachers' Charter, has also proved to be an insurmountable barrier. This behaviour is sustained by the Ministry of Education, which at once functions as an administrative cover and as the political representative of teachers' interests.

Sectors with the highest value-added exports should be included in the new industrial policy programme first of all

The demand for technology is more important than its supply

Polish schools stifle social capital

As for the universities, if they are to carry out wide-ranging applied research and be able to commercialise its results, the way they are financed must be changed. A greater share of financing must come from conducting research, including applied research and implementation studies financed from private funds. This will lead to a clear division of higher education institutions into teaching universities and research universities. This essential measure requires that different funding sources and financing rules are stipulated for both these types of higher education institutions.

These necessary changes to the system of financing for higher education institutions will not succeed, however, if they are not accompanied by fundamental changes in the institutions' legal status. In our view, it would be best for them to take the form of public (statutory) corporations.

Students can provide the social base for innovativeness. This calls for fundamental changes in the pattern of teaching and learning in higher education. Students not only have to gain knowledge but also create it, which can be accomplished by orienting university education towards entrepreneurship, design work in teams, problem solving with the involvement of practitioners, and research and development work.

Legal arrangements should enable the creation of hybrid organisational forms oriented towards the commercialisation of research results, thus lending cohesion to the work done in this area by local government, academic institutions, and business.

New regulations in intellectual property law are indispensable if the innovativeness of the Polish economy is to be boosted. These should generate incentives to invest in intellectual capital and also be conducive to its dissemination; in this way, the monopolisation of intellectual capital can be countered. We have in mind here incentives both for organisations, such as universities, and for individual innovators, such as researchers and scientists. There is an urgent need for new and comprehensive regulation that will balance the interests of creators, producers, and consumers of various kinds of symbolic goods but that will not obstruct the commercialisation of new knowledge. This general principle should form the basis for creating a public domain for intellectual goods that can be accessed for non-commercial purposes by all participants at a small charge.

Other areas of activity that can be pursued by public authorities to encourage the generation of knowledge-based capital include access to information, public databases, public statistics, the availability of Internet infrastructure and software, research and development conducted by public institutions, and centres for creativity and design.

In view of the postulates set out above, it would seem reasonable to stimulate such forms of cooperation as clusters, associations, special economic zones, and metropolitan areas. It is precisely in such agglomerations, where there is greater access to resources, greater population mobility, a multitude of interactions and, therefore, greater trust and willingness to cooperate, that innovations are generated.

2.4. Structural reconfiguration of the labour market

In the case of both the formal and informal areas of the economy, the labour market in Poland has become very elastic as a result of temporary employment contracts and a flexible system of adjusting remuneration according to the economic performance of companies. The Poles' black-economy ingenuity has also played a part. This has served the fortunes of the economy

well, as it has a good deal of latitude for adjustment that is not available to the economies of more highly-developed countries. Yet the matter does not appear quite so favourable from the structural point of view. The sustained high level of structural unemployment has led to considerable economic migration. Moreover, it is the most enterprising people who have emigrated, including those with exceptional talents and high professional qualifications. This represents not only a drain of manpower, but also a brain drain. In short, it is causing a significant outflow of human capital and a reduction in Poland's development potential. If the migration was only temporary (because mechanisms were in place encouraging people to return) it could be beneficial: people would return to Poland armed with new experiences, qualifications, language skills, etc. Unfortunately, this is usually not the case.

The growing flexibility of the labour market means that for a significant proportion of those employed their labour is not only low paid but there is also little incentive to invest in it. As the level of human capital adjusts to the level of remuneration, so too do the requirements made of employees.

A mechanism is taking shape which is improving the present state of the economy but doing damage in structural terms. Poland is thus improving its economic position at the expense of its potential. This means that we are lowering potential output and the long-term growth rate. On the one hand, this trend will restrict the potential for internal growth in consumer demand, and on the other, will block Poland's chances of export expansion, which will not be possible over the longer term if it is confined to the cheap, mass-produced, low-added-value segment. We will be thrust out of that category by emerging economies weaker than Poland's that have considerable resources of even cheaper labour.

The need to turn back from short-term measures that involve securing the maximum possible flexibility of employment in favour of structural measures that will raise levels of human capital, creative and entrepreneurial potential, and productive self-employment, is becoming ever more apparent in labour market policy. In this context it is worth considering the introduction of a new and comprehensive labour code rather than making partial and temporary amendments to existing legislation.

The structural reconstruction of the labour market must be assisted by all arms of the education system. Its essence lies in equipping young people with the skills and ability to be able to make the following choice: Am I looking for an employer or will I become my own employer and create a job for myself? The latter option must play a greater and more important role. Yet the appropriate financial solutions and incentives, including the configuration and level of social insurance contributions in the first period of self-employment, must be in place if it is to become widespread.

To increase the overall employment rate, that is, to increase the efficient use of labour resources, it is above all necessary to increase levels of employment among women and among those with less than secondary level education. It is in this group that the percentage of employed people is lowest. This may be partly the result of employment in the black economy. If this is indeed the case, it would mean that there is demand in the economy for these people's labour, but that the costs of employing them formally are too high and/or the incentives for them to take employment are too low.

The specific issues that require a new approach, or modifications to existing practices, with regard to the structural reconfiguration of the labour market include (on the side of employers) keeping

Self-employment must not mean the "wholesale" transition from employment contracts to civil contracts

We must use the potential of the generation entering the labour market and adapt the cultural changes it brings

down labour costs arising from redundancies and sickness compensation and (on the side of employees) lowering the tax wedge – especially for those with low qualifications and remuneration.

What is of key importance if the prospects for labour market resources are to be bright, though, is to pursue an active immigration policy. By 2040 Poland should take in a very large number of immigrants, mainly from the culturally-close countries to the east. It is necessary to take immediate steps to attract as many foreign students as possible and, once they have graduated, to issue all of them with residence cards almost automatically.

2.5. A significant increase in domestic savings

Significantly higher domestic savings are necessary in the Polish economy to finance private investment – especially that aimed at export growth in high-added-value sectors. Little assistance can be provided by public investment. It is worth noting that in Poland private savings have so far mostly financed the budget deficit rather than investment.

Individual consumption has risen at the cost of household savings

If we examine the economic transformations that have taken place in Poland, it can be seen that economic policy has not been geared to generating domestic savings. The share of individual consumption in GDP is the highest in the region (at the expense of savings by households). Instead of building rules encouraging saving into the system, Poland has arrangements very similar to those of the USA. In that country, though, there is a massive and open capital market, which makes it possible to maintain economic growth (importing net savings from Asia). Poland has a good deal less room for manoeuvre: if it is not able to guarantee foreign investors the required return on capital (and this is a function of competitive position), sufficient quantities of it will not flow in. It should be added that the net import of capital can be reduced through investments made by Polish companies abroad.

The capital pillar of the pension system is necessary to raise the level of domestic savings

We cannot count on a significant increase in the accumulation of capital in the enterprise sector if the tax system is not changed in its favour. It is of fundamental importance that it is simplified: passing a new and transparent tax code act can help to accomplish this. The tax system has to strengthen the competitiveness of companies so that they are given incentives to invest, to create jobs, and to generate employment. This cannot be achieved unless the tax authorities begin to interpret tax law provisions consistently. Experience in this area, and the recent suggestions made by the Ministry of Finance, give great cause for alarm. Interventions of this kind will definitely not bring about greater fiscal discipline. The mass ‘production’ of mortgage credit cannot be the sole source of long-term investment capital. The Open Pension Funds could perform this function on a large and secure scale, e.g., by issuing mortgage bonds, which could activate the housing market. This, however, would require an end to the period of uncertainty regarding the future of the capital pillar of the pension system. A significant reduction in the running costs of the Universal Pension Funds (PTE) is also essential. An increase in savings can also be accomplished by establishing much more powerful tax incentives to save in the third – voluntary – pillar of this system.

It is an error to assume that an increase in savings will lead to reduced domestic demand. Particularly now, when companies are not interested in investing on the domestic market, a higher propensity to save could provide additional resources to invest in the future when the slowdown ends – this time without a renewed deterioration in the current account balance and, as a result, in Poland’s international investment position. This is especially pertinent given that with respect to these two indicators Poland has already exceeded the prudence thresholds adopted by the European Commission in its Macroeconomic Imbalance Procedure.

2.6. Export promotion

If demand is to be sustained at a satisfactory level, the Polish economic model, following the German model of an economy based on wage control and prudent monetary policy, requires strong and constant boosts from exports. The export-promotion system should help companies enter dynamic geographical markets and goods markets with an offer that contains a high proportion of domestic value added. It is imperative that Polish foreign policy and the diplomatic service become more business oriented.

The globalisation of trade in the majority of market segments should essentially be understood as its regionalisation. This is because Polish companies that wish to enter markets beyond the EU should primarily focus on geographical markets that are closer. If companies have other markets in mind, such as those in the far east, it is best to act in close cooperation with enterprises that are well embedded in the markets concerned. This approach can be discarded only in the case of very large global companies, which offer high quality capital goods. There are no companies of this sort in Poland.

It is essential to safeguard the strategic security of Polish investors, including by ensuring that foreign policy and the diplomatic service are much more focussed on the needs of business. The Polish diplomatic service must serve Polish enterprises, such as by providing them with economic analyses of states where trade or investment could be possible, by giving legal and commercial advice, by making it easier to enter external markets, and by advancing the interests of Polish companies during political dialogue. Any realignment in foreign policy should take economic and business benefits into account.

The present export-promotion system consists of the financial instruments to support export that lie within the competence of the Ministry of Finance and BGK (Bank Gospodarstwa Krajowego), the insurance instruments within the competence of the Export Credit Insurance Joint Stock Company (KUKI), and the promotional instruments within the competence of the Ministry of Economy and the Polish Agency for Enterprise and Development (PARP). A national information network on foreign markets, in the form of regional Investor and Exporter Service Centres (COIE) is gradually being developed. If this diverse range of instruments is to be successfully applied, these entities must work in close cooperation with trade and diplomatic representations abroad. It would be desirable if a body were established to coordinate this cooperation. The major criticism laid at the door of KUKI is that too small a proportion of Polish export takes advantage of the insurance cover it provides. In over twenty years of operation, it has never managed to consistently insure more than 5% of total Polish exports. Although the major reason is limited demand on the part of exporters for insurance services (a large proportion of export is conducted within corporations and a high percentage of small and medium exporters conduct no deferred payment transactions), KUKI's meagre appetite for risk cannot be discounted. Indeed, KUKI's board and supervisory bodies are attempting to avoid the accusation that they are exposing public money to the risk of serious losses. Given this situation, it would be desirable to give KUKI greater powers of intervention and to make it more effective.

The resources currently available to promote export are insufficient. It is therefore worth considering the establishment of a foreign trade company (privately-owned but with the participation of public capital) to sell the products of small and medium enterprises in various branches. This type of company has proved effective in the internationalisation of small and medium enterprises in many countries.

The export-promotion system should help companies enter dynamic geographical markets and goods markets with an offer that contains a high proportion of added value

When discussing export promotion, it is impossible not to refer to the branding of the country from which the goods and services originate. Promoting the country's brand (branded export and public diplomacy) is relevant in at least two areas that are important from the viewpoint of this report. It is public institutions that – for obvious reasons – should take most of the responsibility for looking after the brand. However, these efforts should be made in cooperation and consultation with the private sector, since products can both benefit from a country's reputation as well as influence the perception of the country's brand.

It is important to coordinate the various promotional measures and maintain a high level of cohesion between them; even when working to a small budget this can deliver appreciable results. Likewise, it is absolutely necessary to agree upon and introduce a coherent narrative for the various communications public and private institutions address to the international audience. The outstanding values associated with Poland's brand from the perspective of the competitiveness of the economy should be innovativeness, creativity, and efficiency. This plea for harmonisation is an especially urgent one in view of the considerable resources earmarked from EU funds for various promotional measures.

2.7. A modern administration and an efficient state

If we expect too much from the state and entrust too much to it, we allow its administrative structure to swell unchecked so that it captures an ever greater pool of development resources. Even where it allows certain public services to be provided at a greater volume or at a higher level, this does not unlock creativity, efficiency, or innovativeness. What is needed is to change the functional programming of the public administration, which can be accomplished by modifying the institutional mechanism by which the interests of particular groups are made common interests.

A state that is dominated by various labour and business organisations, which is how it is in Poland to a great extent, is not ready to respond to the challenges of the future. It can, with some degree of efficiency, ensure temporary social and systemic equilibrium, but at the cost of cost of running down development resources, capacities, and opportunities. A state such as this can launch a variety of ostensibly pro-growth and pro-innovation measures, but these cannot accomplish the goals that have been set. Instead, existing structures will be strengthened and stagnation will be the result. We regard the following as the major weaknesses of the Polish state:

- the low quality of political leadership,
- the minor importance of the public sphere and of public discourse on fundamental issues affecting the country's development,
- a system of interest representation that is dominated by informal arrangements and networks within ministries and corporations,
- insufficient dialogue and willingness cooperate in the private sector,
- flawed mechanisms for setting the state's strategic goals.
- insufficiently robust tools for conducting, monitoring, and evaluating public policy.

In a situation such as this even well-known problems that have been set out in government documents are not being tackled (see the Poland 2030 report by Michał Boni, which was well-received and was a sign of a new approach to development). They are becoming items in a long catalogue of problems to be filed under the heading 'unsolvable' or 'self-solving'. The weaknesses in law making and law enforcement, which have been identified many times, are

Creativity and innovativeness only flourish where there is social trust, but Poland's legal and administrative system weakens, rather than strengthens, this trust

a good example. It still takes an exceptionally long time to recover a debt via the courts: in 2012, the average time taken was 685 days (of the EU states it took longer only in Italy).

Creativity and talent will flourish only where there is social trust. Yet the Polish legal and administrative system diminishes trust rather than fortifying it: mistrust and a reluctance to act are deeply engrained. Rather than social and economic development, the result is business as usual and administrative enlargement.

Let us restate emphatically: innovativeness cannot be brought about without an amenable social space. It is not the task of public policy to be directly responsible for driving innovation within enterprises, but rather to create a space that is conducive to it and that will encourage it. Innovativeness can neither be decreed nor bought off the shelf, but it can be facilitated and supported to create a suitable infrastructure of inter-institutional cooperation.

There is little sense in complaining of a lack of social capital or (more rarely) of a lack of human capital. The only possible way of increasing social and human capital lies in their practical use to achieve development goals at all levels of state organisation: from municipal councils to central government.

We consider the following as key to a modern administration and efficient state:

- making the law enforcement system more effective,
- comprehensive modernisation of the government administration,
- completing the third stage of the local government reform,
- establishing a national centre for strategic studies, which would be responsible for formulating Poland's growth strategy and for preparing other strategic reports required to plan development, including an immigration policy.

2.8. Partnerships for growth and a new formula for social dialogue

An efficient policy to promote the competitiveness of the national economy cannot be conducted without an effective dialogue with the key representatives of participants in the economy – and especially not without the involvement of businesses. The purpose of such dialogue is to build a platform for communication that fosters mutual openness and trust, while also creating and spreading knowledge and the ability to interpret it reflexively. Dialogue between economic partners is thus an indispensable mechanism in a process of continuous learning, marrying interests, mitigating disputes, and solving problems. No programme of structural policy can hope to be successful without it. This mode of dialogue represents a break with traditional forms of information exchange and consultation on projects or programmes. Nevertheless, it will only be possible if specific institutional requirements are met: (1) the emergence of bodies representing economic entities that are autonomous vis-à-vis the public authorities; (2) open and effective access to public information for these bodies; (3) the creation of a suitable arena for dialogue; (4) the setting of an agenda for the dialogue; (5) the involvement in the dialogue of representatives of all the major stakeholders (e.g., it is unacceptable to hold dialogue on energy security with the participation of energy producers and distributors alone while ignoring the representatives of various groups of users and consumers).

A centralised corporatist dialogue took shape in the 1990s in Poland in the form of the Trilateral Commission for Social and Economic Affairs. It played a positive role in ensuring social peace

The bureaucratic dismantling of the institutional system is in progress, and its victims include local authorities

From corporatist dialogue to civic and pro-development dialogue

during a period of profound restructuring and privatisation. It was not long, though, before politicisation set in: the trade unions, who were closely associated with warring political parties, began to treat it exclusively as an arena for political struggle. By the early 2000s, the threat of overt politicisation had passed. But other threats then emerged as the social partners – the employers' organisations as well as the trade unions – began to treat the Tripartite Commission as an institution for the formulation and defence of particular interests rather than one for reaching compromises or agreements for the common good. Though it had degenerated in this way, the dialogue still played a positive role to the extent that the participants were able to learn of each other's interests and therefore knew what to expect from the other partners. Though it civilized the disputes, it did not go nearly far enough.

It should be added that certain agreements were reached in regard to labour relations. These, however, did not concern the most urgent issues affecting society and the economy. When, in 2003, attempts were made to begin work on an agreement that would give priority to the country's development, it soon became clear that the participants in the dialogue would not be able to put aside their corporatist interests. This prompted proposals to augment the Tripartite Commission by including the government, employers' organisations, and the trade unions, to open the dialogue to other social groups, such as local government and NGOs, and to establish new and different forms of wider civic dialogue. Unfortunately, nothing of the sort materialised. On the contrary, after 2005 the Tripartite Commission was significantly weakened and there was no prospect of it taking on other forms. An opportunity to break free of the narrow particularism appeared in 2009. When the threat of economic crisis became a reality, the parties to the dialogue (the trade unions and employers' organisations, without the participation of the government) agreed to a compromise so that a way out of the crisis could be found. This was a sign that it is possible to overcome particularism when extreme conditions require it. Yet as soon as the crisis no longer presented a direct threat, the parties began to withdraw from the agreement. There has to be a thorough reformulation of social dialogue if Poland is to surmount the many development challenges it faces. The task is to shift from corporatist dialogue that involves very few partners and is focussed on current issues to dialogue that is open and that attends to matters of strategy and development and especially to the competitiveness of the economy. The dialogue conducted by the Trilateral Commission should be supplemented by a National Committee for Economic Competitiveness chaired by the Prime Minister that brings together business leaders, employers' and consumers' organisations, and experts (including experts from abroad). This Committee should also appoint sectoral commissions that would address the issue of cooperating to promote competitiveness in those sectors of the economy that have been included in the new industrial policy.

There has to be a thorough reformulation of social dialogue if Poland is to surmount the many development challenges it faces

2.9. The use of EU funds to promote growth

Taking into account that capital accumulation as a share of GDP in developing countries stands as a rule at 20%–30% (up to 40% in periods of prosperity), EU funds provide a significant additional source of investment. In Poland in 2007–2011 investment occupied the 20%–25% range, while allocations from the structural funds stood at 3.5%–4% of GDP²⁵, which was more than 10% of gross annual capital accumulation.

The positive effects of the absorption of EU funds have largely concerned demand, which means they are short-term in nature. Of greater importance is the question of whether the

25 Calculating the allocation of EUR 67 billion split across the years 2007–2013 with Poland's real GDP in the years 2007–2011 gives a result of approximately 2.8% of GDP annually.

EU funds that have been invested will produce a sustained impact on the supply-side, that is, lead to a growth in potential GDP.

At the same time, the beneficial influence the inflow of EU funds into Poland's economy has had cannot conceal its negative impact in the form of such phenomena as rent seeking, that is, the attempt by beneficiaries to make certain they will win the race for subsidies, which lowers the competitiveness of more efficient companies that have not applied for it. It is enough to take a look at the market for training and conferences, but also that of seed finance, to immediately grasp the practical consequences of the incorrect use of these resources.

What is known as the 'opium of absorption', that is, the pressure to utilise all available EU funds with no concern for how effectively they may be spent, has also been criticized. The establishment of a national performance reserve has fuelled competition of this nature between provinces. What is more, according to public administration analysts, EU cohesion policy funds are becoming a means for the practical seizure and concentration of power.

Given that Poland must be able to manage without EU funds were they to be much reduced, it is of primary importance that instead of becoming an end in itself, their use is clearly and practically made to serve the competitiveness of the economy.

A thorough revision of the Act on Public Procurement is required so that the problems that arose with the motorway-building programme can be avoided when spending EU resources over the course of the next budgetary period. The provisions for procurement also require renewal in the areas of education and development research. The inadequacies of the Act on Public Procurement are holding back the introduction of innovation. The investment projects that will be financed from the EU 2014–2020 budget must be well prepared so that they are ready to be rolled out in the second half of 2014. This will require an efficiency upgrade for the services responsible, e.g., Polish State Railways (investment in the railways is particularly overdue).

The turn of the last century was a period of intense expansion in municipal infrastructure, whose aim first of all was to make up for the deficits inherited from the previous system. This process gathered pace after Poland joined the EU and once it had gained access to cohesion policy funds. However, there is a serious risk that the deteriorating financial situation of local government will bring it to a halt. The opportunity to invest in the further modernisation and expansion of municipal infrastructure will be restricted by the difficulties involved in generating own funds to cover the financial contribution that is essential in relation to EU funds. The greater utilisation of public-private partnerships (PPP), which have so far played a marginal role, takes on a vital significance in this context.

The major reasons for the slow introduction of PPP mechanisms have been the corrosive political atmosphere surrounding cooperation between the public authorities and private entities and, associated with this, the widespread fear of accusations of undermining the public interest, an insufficiently detailed knowledge of how to prepare projects of this nature, insufficient skill in conducting the process of selecting a private partner and in sharing risk (in proportion to the ability to manage it), and a lack of trust that is expressed in an inability to cooperate effectively and efficiently.

A legal formula needs to be found that will make the use of PPPs easier. In particular, it is necessary to revise article 242 of the Public Finance Act by removing the provisions on limiting

The 'opium of absorption' harms structural transformation and long-term development

Public-private partnership should be understood as development dialogue and not as an investment mechanism

current expenditure on PPPs which, in many cases, increases the costs of applying this partnership formula. The establishment of a dedicated consultancy for central and local government entities that would guide infrastructure development according to the PPP formula, as well as prepare and update a National Infrastructure Plan, is also recommended.

The far more extensive use of refundable financial instruments rather than of grants and subsidies is likewise an imperative.

2.10. A new national strategy for EU integration

A 'multi-speed' European Union is clearly taking shape, though the term 'variable geometry' would seem more fitting. This term harks back to the Leo Tindemans report of the mid-1970s, which foresaw that further rounds of enlargement of the then Common Market to include states at lower levels of development would lead to the formation of a number of circles of EU integration. In this arrangement, individual states would belong to circles at different levels of integration depending on the policy area. In practical terms, the proposals for EU reform consistently advanced by the UK point to such a solution.

This changes Poland's position in relation to the EU. Hitherto, it may have seemed that with the cooperation of the other countries in our region we would be able to resist a division into a two-speed Union. Yet this is already a fact and, what is more, it is highly likely as current trends deepen that the concept put forward in the Tindemans Report will gradually reach fulfilment. We are therefore faced with the task of devising a new Polish strategy for EU integration, which must resolve the following dilemma: Do we want to adopt the common currency and become a part of the Eurozone or not? This dilemma cannot be resolved today, however, without considering numerous other international relations issues, including EU integration. It can be stated with utter certainty that the matter of entry into the Eurozone cannot now be reduced to meeting the formal nominal convergence criteria or the date for adopting the common currency.

One beneficial aspect of the debate now in progress is that some of its participants have raised the question of the internal criteria for readiness to adopt the common currency. They have considered criteria such as the structural consolidation of the public finances, labour market flexibility, and effective micro- and macro-prudential financial supervision. This line of thought is very close to ours: it demonstrates that entry into the Eurozone cannot be interpreted only as a technical, economic, and political issue (a change in the Constitution). It is primarily a very serious and difficult structural and economic undertaking with a considerable burden of risk attached.

What worries us, however, is the perception that some of the participants in the debate who are proposing specific criteria are not in fact pursuing the goal they have declared, but rather wish to take advantage of the debate to achieve other aims associated with domestic politics. It may be that the present 'Euro fever', to quote Marek Belka, is supposed to assist in accomplishing an economic-policy manoeuvre that would be questionable, or at least a great deal more difficult, were it to be performed under other circumstances. This is how we explain the proposal to declare a decrease in the level of public debt to below 40% in the space of a few years as one of the internal criteria. There is only one way in which this could be achieved within the timeframe set: through the final dissolution of the capital pillar (pillar II) of the pension system. We believe that it is irresponsible to use the debate on the conditions of entry into the Eurozone to further short-term political gains.

Poland is focused on acclimatising to the EU and absorbing EU funds – we are unable to exploit our position within the Union

It is of course possible to put the matter differently and presume that Poland is not in fact applying to join the Eurozone. This would mean that in strategic terms we would be making a choice to leave Poland outside the future core of the European Union (which is likely to consist of the strongest states in the reformed Economic and Monetary Union) with little chance of joining it in the future. That option, though, would require us to spell out how we would cope in the conditions of competition that Poland would face, especially after 2020 when the next EU budget settlement comes to an end.

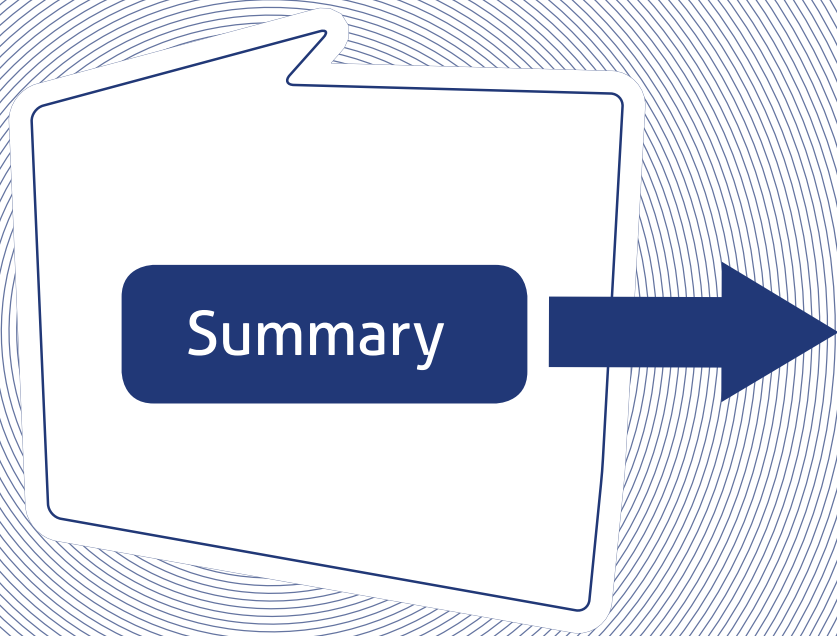
It would be naïve to think that anyone is currently in a position to foresee precisely how the situation in the Eurozone, in the EU, and in the world will develop. We are therefore forced to consider a number of scenarios. That said, we must settle on one of them. If we adopt a passive attitude and wait for events to take shape, we will abandon ourselves to the will of others rather than acting as self-determining partners. Taking the latter course can ensure that a strategic choice is made, that the necessary internal measures it implies are taken, and that strategic trajectories are set for Polish foreign policy. It is only in this way that we can play a conscious and active part in the process of forming the new European Union, which will function according to ‘variable geometry’, and mark out a position within it that will bring us the most tangible economic and political benefits possible, including, in particular, making it possible to sustain the competitiveness of the Polish economy. Reflecting on the Eurozone only makes sense if we accept that entry will not in itself be an automatic antidote to Poland’s weaknesses. On the contrary, it will reveal those weaknesses ruthlessly while relieving us of the basic exchange-rate security we have hitherto enjoyed. Relinquishing our autonomous monetary policy will be justified only when we have devised other mechanisms and tools to shape the competitiveness of the economy.

Introducing the Euro, that is, surrendering control over the exchange rate of the national currency, would mean greater economic openness and international inter-dependency. This could be extremely beneficial for a strong and competitive economy. But a weak economy, which would go into chronic stagnation and, in time, find itself shunted to the periphery, would lose out in such an arrangement. Nor would it help to pursue a conservative fiscal policy, which would be the only macroeconomic mechanism for balancing the economy still available. In this way, the economy would be exposed to competition it could not match.

All of the economies in the Eurozone are at risk of internal shocks, but they are especially exposed to external ones. Some of these are asymmetric. It is not possible to react to them effectively and in a way that benefits all Member States at the level of an integrating group. Instead, a suitable response is required from national policy. If it is not possible to push the exchange-rate button, it becomes a matter of still greater urgency to command other economic policy tools, of which a proportion will be cyclical in nature, but which first of all will be structural. This is possible where there is a modern and innovative economy. We hold the view that this is now the most important reference point in the Polish debate on entry into the Eurozone.

We are not arguing, however, in favour of delaying entry to the Eurozone. On the contrary, what we are advocating is determined but comprehensive and well-thought-out strategic action. We do not share the opinion of those who think it sufficient to put one foot in the Euro–EU door but not to actually enter. The flaw here is that the door we have our foot in is now being torn from its frame and thrown aside. The principle of ‘not too early, not too late’ is a curse – proof that long-term policy has been abandoned.

The principle of ‘not too early, not too late’ is a curse – proof that long-term policy has been abandoned





The competitiveness of the Polish economy cannot be considered or discussed without the awareness that we are operating in a protracted world crisis. Hyperglobalisation, which entails the general liberalisation of trade and the globalisation of financial markets, is a threat to all because it is taking place without a corresponding institutional and political infrastructure. As such an infrastructure will not be created, the widespread response is to revert to the traditional protectionist tools of the nation state. Yet this is not helping to overcome the problems that have accumulated and the crisis persists. The experience of Economic and Monetary Union has confirmed that where there is institutional incoherence and incompleteness there will emerge over time powerful dysfunctions that can lead to a deep economic crisis and systemic breakdown.

A solution to the present global crisis in the form of global mechanisms for international co-management will not appear soon. Instead, the way ahead lies via the measures taken by each state in respect of its own economy with international cooperation running in parallel. In this way autarchic and protectionist solutions can be discarded and the outcomes required for open economies with the capacity to compete and to cooperate can be sought. Only in this way can hyperglobalisation be peacefully 'controlled' by democratic states. Considering the global distribution of demographic growth, 'controlling' hyperglobalisation presents a tremendous challenge to leaders of states. Failure to achieve this would surely lead to a global and civilizational breakdown.

The solution to this complicated global puzzle lies in harnessing finance capital to efficient manufacturing. For now, this capital (of which there is an evident surplus) continues to dart about the globe seeking the most profitable deposits. In doing so it triggers new and threatening expressions of economic disruption and imbalance.

When considering the subject of the competitiveness of the domestic economy, and especially of public policy, we are necessarily setting foot in an area that is highly uncertain. This clearly does not mean that no useful forecasts whatever can be made, but it does mean that there are very few specific points of which we can be absolutely certain. Competitiveness and pro-competitive policy involves strategic thinking and action. We cannot cease to engage in this, for if we do, we risk failure. The strategic choices we make today can, in time, turn out to have been mistaken. For what making strategic choices means is adopting particular priorities and concentrating on particular measures while ignoring others. No goals whatever will be accomplished by focussing on everything to the same degree.

What is important is the conviction that from the public policy perspective what matters is not to make specific, strictly economic decisions, but rather to trigger certain economic mechanisms and to block or inhibit others. Nevertheless, it is clear that enterprises, the conditions under which they operate, and their expansion on international markets, are the main points

Unilateral withdrawal from global interdependence is not possible. What makes sense is to strengthen one's self-determination in the context of interdependence

Every country has to solve its own problems. Fortunately, it doesn't have to solve them alone

of reference. It is vital to consider these points in terms of the international market and foreign trade, for only in this way is it possible to assess whether and to what extent Polish companies are competitive. As they operate in a highly competitive international environment, they are compelled to take measures to increase productivity and to use the resources available to them effectively. This aids not only export, but the overall economy too.

Solving structural problems means active and innovative adjustment to the endlessly changing conditions of competition and cooperation

The world crisis and the resulting tempestuous repositioning of the world's economic architecture has given cause to revise many hitherto entrenched outlooks. One current line of thought strongly emphasises that focussing on high-added-value sectors is becoming insufficient. This approach must be augmented by examining the question of value added in relation to specific types of economic activity in specific sectors. It is only a minority of economies that will be able to enjoy high growth rates in whole high-added-value sectors. Yet if the types of activities that generate high value added are developed in other sectors, including in traditional ones, the majority are in no way doomed to economic failure. This will always, though, demand a high degree of innovativeness in those types of activities that draw on domestic resources of knowledge and human capital, skilfully augmented by external resources. This can be accomplished by systematic investment in areas of economic activity that hold promise for the future. Here, the growth of knowledge-based capital is extremely important. However, as matters stand in Poland, this cannot be generated without appropriate changes to intellectual property law.

Meso- and microeconomic policy are just as important as macroeconomic policy

Public policy does not have to, and should not, directly address every kind of economic activity. Of most benefit for the general development and growth of the economy in many of its dimensions is to do business according to market principles and in accordance with the general rules and regulations laid down in law. But economic policy – alongside macroeconomic matters – must influence the key structural issues in the economy as they are important for its competitiveness and define its growth potential. Part of the impact of economic policy involves preventing undesirable phenomena, such as monopolisation. But it also has another focus that is exemplified in the achievement of positive aims, such as providing good technical and social infrastructure. The clear aim of both kinds of policy initiative – those that remove barriers and those that create necessary resources, such as high-quality university graduates – should be to serve the competitiveness and development of the economy. Moreover, the tools employed in economic policy must be appropriate to the adopted strategic aims and to the state of the economy. It is only then that they can be efficient and effective. Economic policy levers must also be differentiated. This begins with the setting of specific economic parameters by public institutions, e.g., interest rates in the case of the National Bank of Poland, and also includes infrastructure programmes, such as motorway building, systemic solutions, the formulation of development strategies, participation in public debate, and the propagation of specific development ideas and concepts within that debate. All of this, however, should proceed in accordance with the principle of subsidiarity: in the end, it is households and enterprises that decide the economy's competitiveness and pace of development. In this sense, the public authorities play an important, essential, but nevertheless ancillary role in respect of the economy, and they should not be permitted to embark on a further course of dirigisme. It must be borne in mind that both the institutional framework for conducting structural policy and the tools employed must be varied according to the competitive position of the economy in question and the degree of its involvement in the global economy. Contemporary nation states – especially those of middle size and rank – are not in a position to combat the negative results of hyperglobalisation other than by ensuring that their economies are competitive and economically self-determining in respect of international interdependence and the international division of labour. No functional return to autarchic isolation and an etatist economy is conceivable

today without the risk of being shoved onto the path of stagnation and cast to the periphery. The economic borders of today are drawn not by administrative constraints on trade but by the competitive strength of domestic enterprises. Their economic meaning is changing too: there was a time when the division of the fruits of international trade was chiefly a bilateral affair played out as a zero-sum game. But today it is a multi-lateral and multi-level game with many possible outcomes, in which it is necessary to strive for the competitive strength and self-determination of the domestic economy. That borders are open does not mean that they do not exist. But they have ceased to be hard, physical, and administratively protected. They are borders that are regulated according to what flows through them by many different public – but also private – entities. Borders such as this cannot be defined or ‘protected’ using the old methods of border guards, customs offices, or the army. What counts is the capacity to set and achieve strategic goals for social and economic development and the ability to produce prospective analyses to identify future threats and challenges.

In opening up the economy we cannot protect it from competition. On the contrary, in exposing it to competition we must build its capacity to compete through institutional, strategic and development measures while eliminating the systemic factors that weaken it and amplifying the systemic factors that strengthen it. The policy of withdrawal and import substitution has lost all meaning. Openness means Poland consciously shaping its own international specialisation so that, as a result, a suitably high level of value added will be generated. Success in this will depend on the successful alignment of public policy and the market economy. However, the relationship between policy and the economy must change completely: there can be no question of their subordination one to the other. What will count instead is complementarity and interdependency. It is not the role of the state to enforce its will on other entities. The state should proceed strategically by designating pathways for action and, when undertaking key strategic projects, specify the conditions under which other entities will act and establish the principles of cooperation essential to achieve countrywide aims. If the state is incapable of this, opening the economy in an age of globalisation will undermine both state and economy. This will arouse an authoritarian social reaction, cause civilizational demotion, and set the country on a path to autarchy and etatist dirigisme.

To these general recommendations summarising the report we would like to add the long-term forecast for Poland’s potential GDP growth presented recently by the European Commission. We regard it as a cautionary forecast. The results are set out in Table 18.

There is no possibility of return to a closed and protectionist economy

Table 18. Breakdown of Poland's Potential GDP Growth, 2010–2060 (annual average in %)

	Category	Eurozone	UE-27	Poland
1=2+5	GDP	1.3	1.4	1.5
2=3+4	Productivity	1.4	1.5	2.1
3	– total factor productivity	0.9	1.0	1.3
4	– capital deepening	0.5	0.6	0.8
5=6+7+8+9	Labour input	–0.1	–0.1	–0.6
6	– total population	0.1	0.1	–0.3
7	– proportion of the population of working age	–0.2	–0.2	–0.4
8	– employment rate	0.0	0.1	0.1
9	– average working time	0.0	–0.1	0.0

Source: European Commission (2012).

The European Commission's forecast indicates a sharp fall in the supply of labour in Poland. According to this projection, the total population will fall from 38.2 million in 2010 to only 32.6 million in 2060. This negative outcome will be aggravated by a parallel fall of almost 10 million (!) in the number of people of working age (15–64) from 27.3 million to 17.4 million. The rise in the rate of employment expected for this period from 59.3% to 62.3% will not redress these negative tendencies. The authors of the forecast do not foresee a change in average working time. However, they are optimistic about the share of TFP (Total Factor Productivity) and capital deepening in GDP growth. The forecast does not take into account the recent extension of the retirement age to 67 years nor the decrease in the school leaving age by one year. Both these measures will mitigate the fall in the population of working age and could increase the employment rate. On the other hand, the contribution to Poland's GDP growth expected from TFP is a good deal higher than in the present Eurozone and the EU 27.

We are experiencing a reduction in potential output

The very negative demographic trends given in the forecast will not be remedied easily or quickly. Nevertheless, this can be achieved over a period of fifty years. The Polish state must adopt a policy that will boost the birth rate: the first signs of this have been seen in the proposals put forward recently by the President of Poland. A greater openness to immigration must also be a component of this policy.

Even assuming that these measures deliver significant results, the prospects for maintaining the Polish economy on a path of high growth (markedly higher than in the Eurozone countries) remain primarily associated with the resolute and systematic raising of its productivity, that is, to put it in the terms adopted in this report, with the highly efficient transformation of competitive potential into competitive position. It is this that is our major asset. Using it to the full will assure Poland's social and economic development and further narrow the gap with the more developed countries. If this is to come to fruition, we have to be more and more creative as a society and do so on a scale that will ensure a highly innovative economy. We cannot continue to rely simply on imitating and copying the solutions developed by others.

If we do not rise to this challenge, we will fall into the middle income trap. This idea applies to states that grow relatively fast owing to technological imitation and are therefore able – for a time – to narrow the development gap considerably. However, they reach a certain point and become stuck at an intermediate technological level which they are unable to raise any higher. In essence, the middle income trap is a technological snare resulting from an imitative model of innovation. A widely-quoted World Bank analysis has shown that over the course of the last fifty years only 13 of 101 economies that reached an intermediate level of development were able to release themselves from this trap. This is the challenge facing Poland today.

In this respect, Poland finds itself at a strategic turning point. Generally speaking, our economy is doing fairly well when compared to other states and continues to grow. However, as we stated in the report's introduction, it is growing at a much slower rate. We must not be seduced into thinking that this is only a matter of unfavourable external conditions and that it will correct itself as the world economic situation improves. We have tried to demonstrate in the report that this is not the case. Rather, it is a question of the structural features of the Polish economy. This is why now is the time to think strategically about development, to implement a pro-competitive structural policy (including a new industrial policy), and to engender structural change; in a word: to secure a pro-innovative reorientation of the Polish economy.

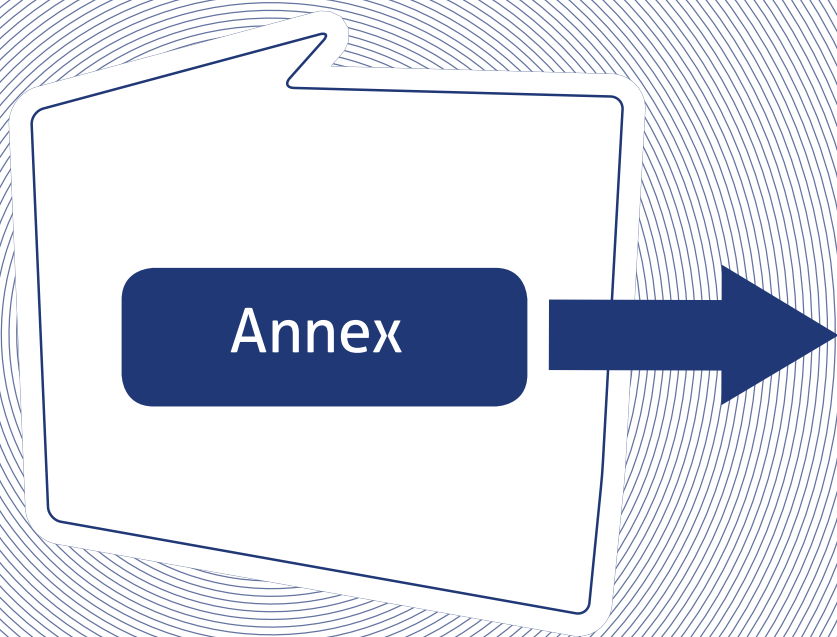
The south–north divide is often employed in the debates in Poland on the situation in Europe and on the country's prospects for development. The contrast is made so that in grasping the very considerable problems of the southern states of the European Union (especially Greece, Spain Portugal, and Italy) the northern states (especially Germany, Holland, Denmark, Finland and Sweden) can be emulated. This approach is as clear and simple as it is naïve. And it is not only a matter of the sizeable differences between the northern states as regards their economic model. First of all, in the modern global economy there are a variety of national market economy systems in rivalrous co-existence and, at the same time, although the rules are made by the most powerful, they are not uniform and everlasting: they change as the balance of power changes. In this situation, all states – even the strongest – face the need to influence the adjustment processes of their own economies. Success depends on how internal resources and factors can be creatively linked with the shaping of external conditions in this process. In this case, 'creative' means proceeding autonomously, actively, and courageously; it means taking responsibility for one's own future and doing so with strategic imagination.

What is needed is positive energy to bring about necessary institutional and social change

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Selected Policy Recommendations

1. Financial support for export

The 1994 act providing for Treasury-backed export credit insurance introduced a mechanism for promoting the export of Polish goods and services to countries with high levels of non-trade risk: political risk, the risk of natural disasters, chronic delays, and public debtor risk). This act met the legal standards applied in the world's most economically advanced countries. Under the act, export credit insurance is based on a wide-ranging formula of protection. It covers losses incurred before goods have been despatched or services have been provided (known as production risk) as well as those arising following delivery of the goods or services (known as credit risk).

The major accomplishment of the Export Credit Insurance Joint Stock Company (KUKI S.A.) has been to offer Polish companies what is a very pertinent proposal on the domestic market: to insure their receivables from Polish clients. This assumed particular importance in 2009 when, for the first time in the history of KUKI, the value of turnover insured on the domestic market exceeded the value of export sales insured. Polish companies went to KUKI for insurance cover in the crisis due to the reduced involvement of private insurers (mostly from abroad). KUKI thus became the insurer of last resort. This confirmed, and continues to confirm, the need for an institution that is organisationally efficient and capable of providing insurance services for commercial receivables in domestic trade. Without such an institution this market would be entirely under the control of an oligopoly of a few foreign providers of these services. This, along with the constant stream of requests from companies, demonstrates the continuing relevance of such insurance to KUKI's portfolio.

In the twenty-two years KUKI has been operating there have been eight changes in the post of chairman of the management board; of these, six have occurred since 2000. This situation has certainly not been conducive to KUKI pursuing its adopted strategy consistently. KUKI's performance has also been encumbered by its inability to retain many of the experienced specialists who worked together to build a strong institution but who have now joined the ranks of its direct competitors.

KUKI has made periodic attempts to improve and expand its commercial offer. However, it has rarely managed to be the first to market in this. In most cases, in fact, these improvements have imitated insurance products that others have already offered. This means that companies wishing to insure their receivables do not perceive KUKI as the market leader.

2. The competitiveness of the food sector

The specific systemic position of agriculture in the Polish economy and its structural deficits are weakening the competitiveness of this branch. Despite this it does possess comparative advantage – especially with respect to the EU market. This advantage lies in food products and is to a large degree the result of the rapid development of a modern food industry, which has taken place partly thanks to foreign investment. During the last decade, production in the food industry in Poland has grown more than twice as fast as production in agriculture and more than three times as fast as domestic demand for food and beverages. This has been assisted (especially from 2003) by rapid growth in the export of food products.

There is a smaller gap between the productivity of Polish agriculture compared with the EU than in the other sectors of the economy. Agriculture, and especially the food industry, can attract foreign investors. Value added in the export of food products is high in the case of Poland. Further growth in the production of food products and in their export may, however, be hampered by insufficient growth in domestic agricultural production. Food industry enterprises in Poland are using agricultural commodities produced in other EU countries more and more frequently.

Releasing and exploiting the economic potential of agriculture will require major structural and institutional change. The main priority is to gradually move away from protectionism, which in agriculture has taken two forms: systemic and subsidy-based. Farms and the rural population are not included in the general rules of the system but are simultaneously subsidised in various ways. The artificial agricultural rent this produces gives rise to political rent. This is what is responsible for the particular position occupied by farmers' parties in Poland's political system. Failure to change the structure of agriculture and its anachronistic systemic distinctiveness has clearly favoured this state of affairs. This model does not, however, benefit the rural population, nor is it conducive to rural or national development. Only 10%–15% of farms are actually developing. At the same time, there is a strengthening long-term trend for agricultural land to fall out of production (in 1990–2010, more than 2 million hectares fell out of production). The failure to exploit agricultural land is becoming more and more widespread on smallholdings, which have no opportunities to develop or to make effective use of production resources. KRUS, the still-unreformed agricultural social insurance fund, favours this state of affairs. Moreover, the indebtedness of farms is rising.

One of the factors preventing change in Poland's largely inefficient structure of agriculture, which includes several hundred thousand smallholdings, is the Common Agricultural Policy. Poland belongs to the group of Member States that is very strongly in favour of maintaining it.

The desirable course of development for Poland involves modern agriculture in a multifunctional countryside. There is a need to perceive other (wider) relationships between agriculture and socio-economic development if this direction is to be taken. This requires a reinterpretation and modification of the relationship between the countryside, agriculture, and the rest of the economy. This process should mean that agriculture will be able to produce and generate many different varieties of economic goods, which will be conducive to developing the efficiency and competitiveness of other sectors of the economy. The markets to the east, especially those of Russia and Ukraine, would appear to offer the best prospects for the sale of food production and for the export of food products. In the agricultural sector, 40% of companies are now exporters. The restrictions on foreign capital in the purchase of agricultural land will be lifted in 2016. If

structural changes in the agricultural sector are not carried out and reforms aimed at redressing the under-exploitation of agricultural land are not introduced before then, it may be that the changes made will follow a course set by foreign investors. What is at stake here is the need for Poland to become a supplier of food products and not only of agricultural commodities.

3. The power sector

For the Polish power sector, which rests mainly on coal, and for the energy-intensive branches of industry, 2013 is a turning point. For it is in 2013 that Poland, within the terms of the European Emission Trading System (EU ETS), will enter the third phase (2013–2020) of limits to greenhouse gas emissions, which will see the use for the first time of an auction system for the allocation of allowances. The need to cover the costs of CO₂ emissions allowances and to increase the share of renewable energy in all energy sources to 15% pursuant to the Climate and Energy package (CEP) has been influencing the changes in the power sector for a few years now.

The obligations introduced by the CEP are having a significant impact on the structure and cost dynamics of energy generation, including with regard to changes in the structure of the sources used to produce electricity, the cost of fuel (in heat generation), the costs of buying CO₂ emissions allowances, and the costs of increasing the share of ‘green energy’ through the purchase of certificates of origin or through domestic production of that ‘green energy’, which requires extensive investment expenditure.

Given the pre-allocated, combined limits to 2020, the main factor in the possible growth in the price of emissions allowances is supply and demand. In this situation, attempts by the European Commission²⁶ to regulate the supply of allowances on the market, which would raise their price significantly, could pose a threat.

Poland, whose energy prices are lower than the EU average, is very competitive in this area. The loss of this trump card could, depending on a given investment’s sensitivity to the cost of electricity, reduce the level of FDI inflows and investments by domestic producers. The issue of transferring production to countries not subject to the obligations arising from the CEP, which is known as carbon leakage, has been only partially resolved by the European Commission. The receipt of free emissions allowances for sectors at risk of carbon leakage (direct costs) does not release them from the need to buy essential electricity at higher prices (indirect costs). The European Commission has left it to the Member States to resolve this problem. The Commission also gave a green light to granting these sectors additional support. This would not, however, breach the rules on state aid for enterprises. Apart from reducing the energy charges mentioned earlier, the Polish government has so far done nothing to support the sectors at risk. The application of the greenhouse gas emissions benchmark in the procedure for allocating emissions allowances to energy-intensive sectors, which is now placing them in a very difficult situation, could have a significant impact on making carbon leakage a reality.

26 The announcement by the European Commission to postpone until 2020 a portion of the allocated emissions allowances (in a process known as backloading) caused an immediate rise in the price of EUAs (European Union Allowances). Following protests from several countries, including Poland, this proposal was, however, withdrawn.

The increasing use of more expensive sources of energy will reduce the competitiveness of the Polish and EU economies – especially compared to the United States. What is more, the growth in the share of imported fuels will make the Polish economy even more dependent on Russia and even more exposed to price fluctuations on the world market. Given the significant disparities in the costs of energy in the EU and other countries, the exploitation of reserves of shale gas could represent an opportunity for Poland.

So far, Poland has not been in a position to sell renewable energy source (RES) technology, though this could change if funds raised from the sale of EUAs were used by the state to develop advanced technology in that area. The technological leap forward that would be possible given sufficient investment could directly influence the competitiveness of the Polish economy.

The development of smart grids and distributed energy sources is important with regard to increasing the competitiveness of the Polish economy. The state should encourage the formation of a new, innovative, and decentralised energy market. This market would, however, require the rights of market participants to be adjusted to the new technology as well as rules of operation for connection to the grid, demand management and system interoperability, and investment in energy storage. Smart grids will mean the creation of a measurement data market, the qualitative development of the energy production and consumption infrastructure, including the electronic vehicles infrastructure, better management of the transmission network, and new services. At the same time, the system will give a boost to small-scale energy generation by individuals through more effective exploitation of renewable micro-sources. The central challenge is thus to define a model for a competitive energy market, whose system would embrace infrastructure, transmission, storage, generation, and consumption.

New regulation, including an act on transmission corridors and on rights and obligations with regard to grid management, is essential if this aim is to be achieved. The present system of co-firing subsidies supports market intermediaries rather than the development of capital investment in infrastructure and generation, and therefore needs to be changed.

4. Public-Private Partnerships

Public-Private Partnership (PPP) is different formula for the provision of public services than that hitherto applied. It involves entrusting economic entities with the construction of essential infrastructure for the provision of public services (or providing the latter service) and financing these undertakings from public funds. The PPP formula entails a departure from financing the provision of public services from public funds alone. Under a PPP, the private partner finances the undertaking and takes responsibility for all the economic activities associated with implementing the project on the basis of a civil-law contract. The public partner, meanwhile, is responsible for the level and quality of service delivery. This division of rights and responsibilities creates a new market space where private enterprises can earn income and public partners – even where public funds are lacking – can make considerable increases in the efficiency and effectiveness of public service provision.

In accordance with EU regulations, the division of risk between PPP partners makes it possible to avoid exceeding indebtedness limits (public budgets) even though the public partner takes on financial obligations with regard to the private partner. In a situation in which it is neces-

sary to reduce the public finance deficit, this is an additional argument (besides the greater effectiveness arising from the form of cooperation itself) for taking measures to increase the use of PPPs in Poland.

The Polish PPP market is only now beginning to take shape. Not a single project emerged during the period in which the previous Act on Public-Private Partnerships of 2005 was in force. From the moment the amended Act came into force in February 2009 until the third quarter of 2011, the new regulations produced 118 invitations for expressions of interest, of which 24 resulted in the signing of a contract. The net value of the PPP market, calculated on the basis of invitations for expressions of interest, is approximately PLN 2.5 billion. The estimates prepared on the basis of projects announced by local government bodies increase this sum to PLN 15.0 billion – the duration of these projects is not specified.

There is no strategy in Poland either to use PPPs in social and economic policy or to make them more widespread. No set of procedures for the promotion of examples of best practice has been formally accepted by the public authorities. The existence of even well-regarded statutory regulation is insufficient: it leaves too much room for the interpretation of the justness of PPP decisions (often subjective and based on insufficient knowledge), including the interpretations, or misinterpretations, made by supervisory bodies. It is becoming necessary for government bodies to take an active role in standardising procedures for public-private undertakings.

The following measures are recommended if PPP projects are to be implemented to the desired extent:

- provide systemic support from public funds to finance a portion of the costs of preparing PPPs (e.g., using the example of the Act on the Fund for the Development of Local Authority Investment: preferential credit to finance part of the costs of preparing PPP projects);
- establish a system of guarantees for loans taken out in order to implement PPP projects;
- set up an institution to assess the benefits of the PPP formula compared to the traditional formula;
- amend, in accordance with the PPP formula, the regulations regarding the category of the expenditure (capital / current) that the public entity incurs in remunerating the private partner.

5. Special Economic Zones

There are now 14 special economic zones operating in Poland. They are to be found in: Kamienna Góra, Katowice, Kostrzyn-Słubice, Kraków, Legnica, Łódź, Mielec, Pomorskie Province, Słupsk, Starachowice, Suwałki, Tarnobrzeg, Wałbrzych, and Warmińsko-Mazurskie Province. They occupy a combined area of 14,100 hectares (the statutory limit is 20,000 hectares).

In the eighteen years they have been in operation, the Special Economic Zones (SEZs) have become an important instrument in Poland's economic development. Entrepreneurs who invest in SEZs are exempt from personal or corporate income tax. The public assistance is directly linked with the investment expenditure incurred or with the cost of any new jobs created. Furthermore, SEZs offer building land of the greenfield or brownfield type, office

space to rent, investment advice, and support for companies during the period they operate in the zone. When Poland joined the European Union, the legal provisions for the SEZs that were already in operation were revised to comply with EU law.

The available data indicates that investments worth PLN 84 billion have been made in SEZs. The companies operating in the zones have created 58,000 jobs. The zones have become important to the Polish economy as locations for FDI (approximately 90% of the capital invested in the zones is of foreign origin). They are also home to domestic small and medium enterprises. A series of technology parks, business incubators, and industrial clusters have sprung up in the zones. Many of the zones, including Kraków, Pomorskie Province, and Słupsk, are involved in projects to accelerate technology transfer and train students and secondary school pupils in how to run their own businesses. They are also engaged in promoting entrepreneurship and an open approach to innovation. The companies that manage the zones support and promote cooperation between science and business. The zones located in the less well-developed provinces of eastern Poland (Mielec, Suwałki, Tarnobrzeg, Warmińsko-Mazurskie Province, and Starachowice) are among the few effective instruments for regional development there.

As the law stands, all the SEZs in Poland must wind up their activities by 2020. The businesses will decide on further investment depending on whether the zones' period of operation is extended. A change such as this does not have to be negotiated with the European Commission as the agreement was reached at the time of Poland's entry into the EU. The decision on whether or not to extend the life of the SEZs lies with the Council of Ministers and requires revision of the individual regulations that apply to the zones or amendments to the Act on Special Economic Zones.

In addition to extending their period of operation, maintaining SEZs' contribution to the competitiveness and development of the Polish economy will require fixed-term permits that vary according to the GDP of the region concerned. The process of expanding the borders of SEZs needs to be streamlined and investment incentives for BPO (Business Process Outsourcing) and ITO (IT Outsourcing) branches need to be adjusted. Improving cooperation between the regional institutions responsible for providing investor services is another important issue.

6. Industrial clusters

The establishment of clusters as a policy instrument for stimulating the competitiveness of regions in Europe began in the mid-1990s and thus has a relatively short history. Meanwhile, many of the clusters that are now thriving had their origin in measures taken at the beginning of this century. Poland's experience with clusters is of an even shorter duration. After 2007, when it became possible to use EU aid for this purpose, there was a sharp increase in cluster initiatives. However, this led to the establishment of many clusters simply to gain access to EU finance rather than as a result of a well-thought-out strategy to integrate businesses and put a common vision for a region's development into effect. This has been confirmed by those involved in clusters and by those who provided the initial impetus for their establishment. According to them, the opportunity to create advanced business models was not the most important impulse. Instead, the predominant motivation was associated with the fashion for establishing cluster initiatives in regions (regional public authorities), with the hope of obtaining finance for, or protecting, branches or companies in difficulty, with prestige (academic

institutions), or with the image of institutions whose task it was to sustain entrepreneurship and the labour market (local public authorities) (PARP 2012).

Notwithstanding these weaknesses, the stage of trial and error and of attempts to stimulate the growth of cluster initiatives should be acknowledged as appropriate for the first phase of cluster policy in Poland. It made it possible to assess the strengths and weaknesses of potential clusters, to select those initiatives that had reached critical mass and could continue to function efficiently, and to move to the stage of identifying the economic agglomerations that would play a decisive role in the competitiveness of regions and of the country as a whole. One product of the revision of Polish cluster policy based on German, Swedish and French experiences, which is set out in the document *Cluster Policy in Poland to 2020: Directions and Assumptions* (PARP 2012), is to determine the key clusters and promote the most active ones by means of competitions. Cluster policy is thus in the process of a horizontal evolution towards a sectoral policy stimulating regional specialisation.

The experience of successful clusters tells us that they are structures which, through meetings, conferences, workshops and training sessions, achieve real results in forging interrelationships, inspiring interactions, conducting a throughflow of knowledge, defining common aims and finding the tools to achieve them. This accords with the assumptions that underlie the desire to stimulate competitiveness and innovativeness, according to which innovation is a collective endeavour that occurs as a result of interaction and knowledge exchange. The principal factors are trust, the ability to interact, and the opportunity and desire to share knowledge. In the majority of cases the entity animating the dialogue is a local leader able to amalgamate other entities that recognise the benefits arising from joint action. This can be an institution in the business environment, a university, or a large enterprise from the branch in question.

Clusters may be described as systems that organise enterprises. They can function in almost any sector of economic activity: agriculture, services, industry, and high technology. There are too few significant examples of agricultural clusters in Poland, however. The negative experiences associated with of Poland's cooperative movement and the often low level of social capital mean that instigating long-term cooperative relationships is harder than in other sectors.

A cluster may be treated as a regional system for the allocation and transfer of resources. Both on the side of demand and supply, a cluster's scale of operation can cause sufficient 'liquidity' to be reached on markets for particular resources, such as educated personnel, qualified suppliers, consumers, etc. Where a major role is played by small, dispersed entities, the role of a cluster can be to generate aggregate demand for innovation and to ensure that there is a sufficient quantity and diversity of orders for research providers. The formation of clusters is especially justified in Poland because domestic enterprises, which are dominated by small businesses and micro businesses, continue to show insufficient inclination to cooperate. Moreover, cluster structures that have attained a high level of effectiveness strive to ensure a supply of qualified labour in the region which, on the one hand, reduces training costs, and on the other is conducive to knowledge transfer.

Successful clusters are structures with a high level of internal (to local entities) and external (to entities outside the cluster, including foreign entities) openness. This means that they are flexible structures capable of learning and of interacting with entities that have sizeable competitive potential. Thanks to this, they can serve as a platform for the internationalisation of economic activity.

7. Corporate governance

Among the more serious and still unresolved institutional problems in the Polish economy is the weakness, if not defectiveness, of corporate governance with respect to some Treasury assets (especially Treasury companies) and to the public (state) sector of the economy. It is worth noting that this is one of the major causes of the low competitiveness of the Portuguese economy, in which the public sector holds a comparatively high share.

The failure to solve this problem, which has been publicly identified a major institutional weakness of the Polish economy on numerous occasions, is primarily the result of the far-reaching and long-entrenched practice of filling management posts at Treasury companies and at agencies administering public assets along party political lines. This phenomenon is just as prevalent in local government as it is in central government.

However, if the present method of filling management posts continues unchanged, the state companies and agencies concerned could still be a great deal more efficient (much of the management is highly qualified and experienced) if their public owner had a clearly-defined strategy. Unfortunately, there is either no strategy or the strategy changes according to who is in charge at the Treasury and the prevailing configuration of personal and political influence within the government. A prime example of how the Treasury treats its assets is the frequency with which the CEOs of companies such as PGNiG or BGK are replaced. LOTOS is an exception in this regard, which has clearly benefited both the company itself and the economy.

Under such circumstances, taking no action secures people's futures and keeps them in their jobs. The future is the more certain and secure the greater the degree of control the politically subservient have over the marketing and sponsoring budgets. And it would seem that this is what the work of many supervisory boards amounts to. If they were really to fulfil their economic task, they should be staffed by independent experts (and not, for instance, by Treasury officials who augment their salaries in this way), authorised by the owner and entitled to commission external reports and economic analyses without the involvement of the management boards of the companies and agencies concerned.

8. Metropolitan growth and innovation areas

Globalisation is inextricably linked with metropolitanisation. It results in the creation of a network of world metropolises, which become centres of knowledge, innovation, economic activity, communication and, on a transnational scale, of culture. If Poland is to matter in the international arena, and if its economy is to be competitive, it is essential that the central state authorities adopt a pro-metropolitan policy. Its aim should be to strengthen the network of Polish metropolises. A network of metropolises should be stipulated as a strategic political project. Responsibility for designating metropolitan areas rests with the parliament and with the government.

Two basic challenges face the public authorities in this area. The first involves the development and integration of a nationwide metropolitan network, which is to encourage growth in development, creative and innovative potential and, as a result, strengthen Poland's position in the globalising world. It should be stressed that this aspect directly concerns central policy and not local or regional policy.

The second aspect involves regulating the development of individual metropolitan areas, which in technical and social terms are multifunctional settlement networks. This again is not a matter for local policy. The elements determining the development of settlement networks in individual metropolitan areas are, on the one hand, elements of the technical infrastructure, whose construction, modernisation and maintenance fall within the competence of central government (and partly within that of provincial government) and, on the other, elements of the social infrastructure, whose management is shared between central government and the various levels of local government.

In a unitary state with a polycentric settlement structure, central government policy on metropolises can only be conducted in partnership with local authorities. For this reason, it will be necessary to designate units of authority in metropolitan areas (metropolitan regions) within the structure of Polish local government. On the one hand, these regions must act in partnership with the central authorities and, on the other, perform a supporting role with respect to local authorities in metropolitan areas.

The current state of affairs is that we both have and do not have metropolitan areas. A development plan for metropolitan areas, which will form an integral part of the National Development Strategy and the National Spatial Planning Strategy, is the main requirement if this problem is to be resolved. This will provide the foundation for legislation on metropolitan areas. In practice, the absence of a metropolitan policy implies an inability to promote the competitiveness of the economy. It is also a barrier to raising the level of human capital and creative potential.

9. The financing of innovativeness

It is a conspicuous weakness of the Polish economy that the banking system, which has been preoccupied in recent years with the mass ‘production’ of mortgages and personal loans, has gradually withdrawn from the financing of small and medium enterprises.

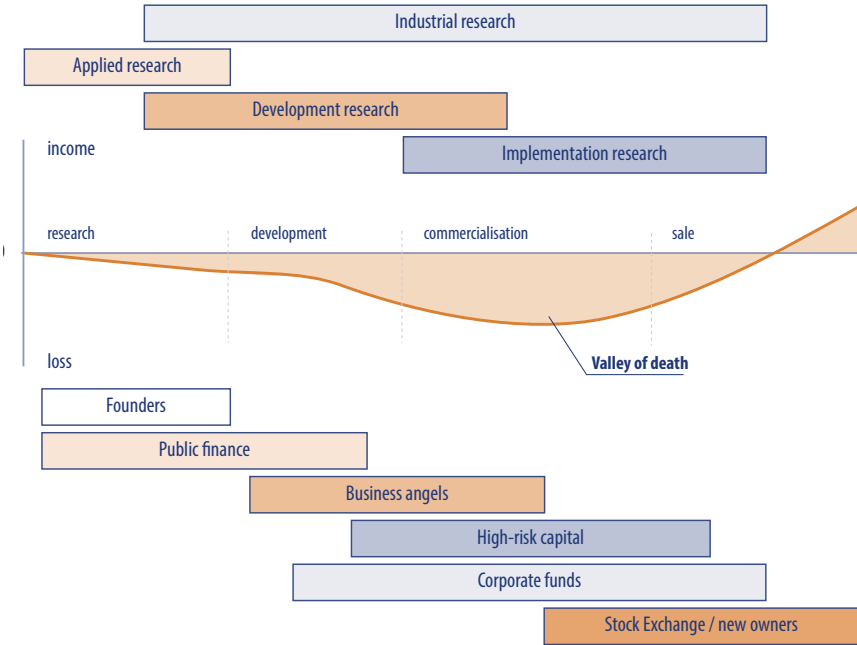
For this reason, and also because there is insufficient private domestic capital and the capital market is shallow, financing innovative ventures and start-ups requires the mobilisation of public capital. This does not mean that public capital needs to crowd out private capital. On the contrary, it should be deployed in such a way that in accepting part of the risk it galvanises private capital. Loan and guarantee funds would serve this purpose very well: there are many of them in Poland – especially at the regional level – and they hold considerable assets. It is unfortunate that the mechanisms for creating and provisioning them are defective. They are formed without the participation of private capital and, in the majority of cases, take no risk whatsoever. Instead, they deposit their resources in bank accounts and use the interest to pay for their personnel and their continued passive existence.

In the case of many of these types of funds, only the unemployed can take advantage of them. This is absurd. It means that an undergraduate or graduate would first have to register as unemployed before being able to access these funds. This would certainly not encourage universities to try to raise the quality and relevance of their courses. To this end, every large university should establish its own guarantee fund provisioned from public resources. At the same time, projects prepared by students, for which financial support and the opportunity for self-employment can be obtained, should become a part of their study programmes. A fair number

of innovative companies could be established in this way, and a pathway of this sort should be made available to increasing numbers of students and graduates. If such measures are not undertaken, a significant proportion of them will begin their working lives by registering at an employment office.

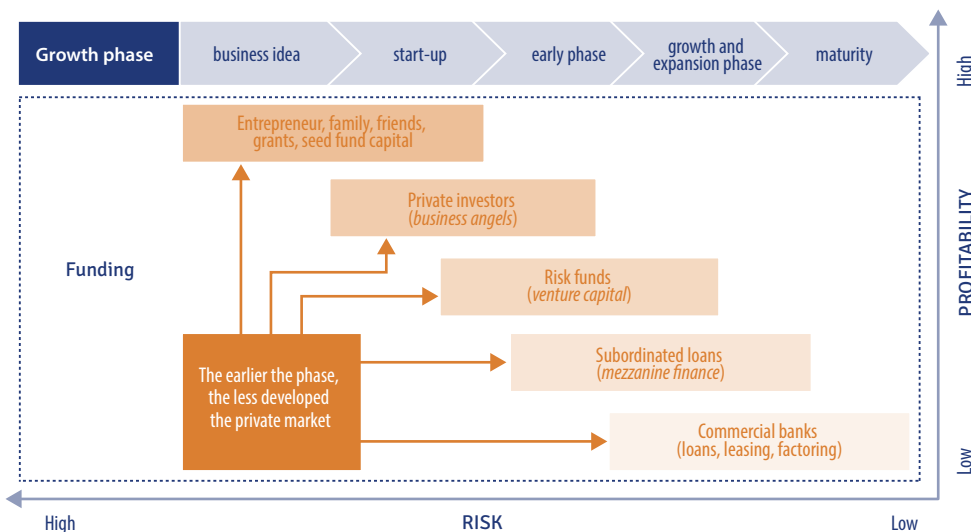
Below we present two figures that show the patterns of funding for applied research and innovative enterprises that are required in a modern economy.

Figure A1. Access to Funding for Industrial Research



Source: prepared by the authors on the basis of Konsztowicz (2012).

Figure A2. Enterprise Access to Funding



Source: prepared by the authors on the basis of materials of the Latvian Ministry of Economy (“Industrial Policy in Latvia”), presented in Riga on 12 December 2012..

If the level of financing for innovation is to be raised, it would be desirable to introduce solutions, such as making it possible for universities and R&D centres to contribute intellectual property to a company. Intellectual property should be contributed not as a non-cash consideration with a fixed valuation in exchange for shares, but as property rights whose value can vary. The tax due on intellectual assets contributed to a company should not be paid at the moment they are contributed, but at the moment shares are sold (in full or in part). The way the sale of intellectual goods is taxed requires new regulation: a more precise definition of the place of service provision, the recipient, and the time of sale.

10. Industrial design

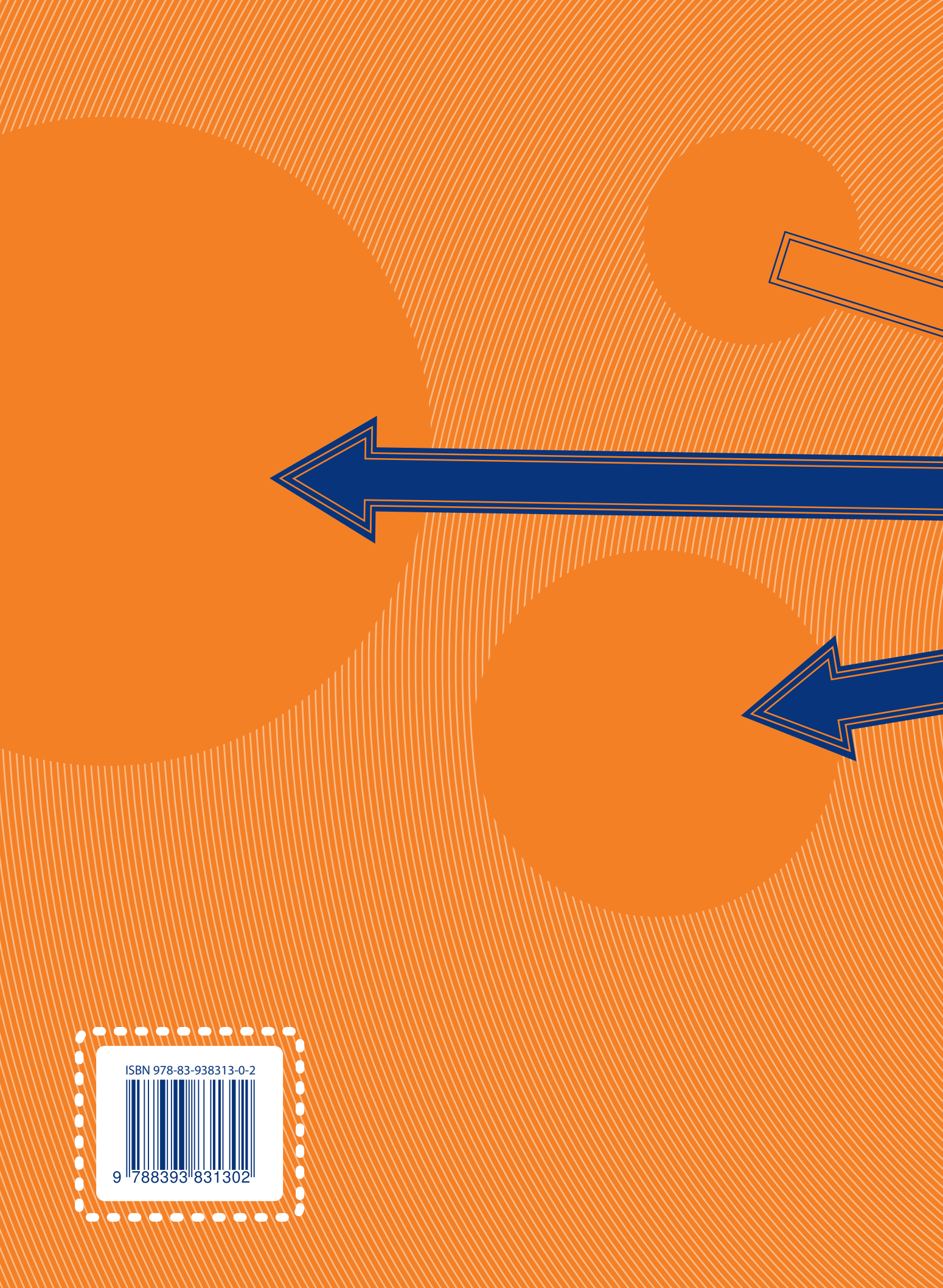
The global economy compels enterprises to seek the factors whose exploitation will enable them to secure comparative advantage. Industrial design not only allows companies to stand out from the competition at a relatively low cost, it also means that products and services with higher value added can be offered and sold to customers. The role of design extends beyond the benefits arising from higher profit on sales of goods and services and more prudent use of materials in the production process. It also concerns the ergonomic aspects of machinery and equipment. In this way, well-designed products become a part of material and cultural heritage. The proper application of industrial design makes it possible to use the designed goods more effectively in future. High quality design is extremely important in building a country’s image abroad and can enable companies to achieve competitive advantage.

Appropriate measures need to be taken in three areas if the quality of industrial design in Poland is to be improved: promotion, creating demand from enterprises, and support for education and training.

Where promotional activities are concerned, competitions should be held for designers to enable those with no professional experience to make their name on the market for design services. In addition to the Institute for Industrial Design, these activities should also be run by regional design centres, e.g., by reference to designs associated with the dominant branch in the region concerned. The organisation of post-competition and historical exhibitions both in Poland and abroad would also serve to promote design.

One group of measures needed to stimulate demand for industrial design from enterprises would involve creating a system of dedicated grants for design students that would finance longer term cooperation with a specific company. The introduction of a system whereby graduation projects are prepared and developed according to the requests of interested companies should also be conducive to this. Furthermore, there is a need to consider instituting a system of small design grants for companies, which would be aimed primarily at spurring cooperation between enterprises and design firms, as well as at financing implementation in situations where such cooperation has already begun.

In a strengthened training and education system for designers that would cover three levels of instruction (training and education at secondary school, university, and post-graduate level), it is necessary to strive for the widest possible cooperation between educational institutions and industry through an extensive system of internships. It is also necessary to provide the resources to upgrade the material base of universities and design schools, especially where this concerns equipping thematic workshops and studios. The introduction of design-related content into the curricula of technical universities and economics academies would also be recommended. Understanding the role of design in the development process for new products, including its business aspects, will make it more likely that the comparative advantages of Polish companies can be secured on the basis of industrial design.



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