PREPARING FOR EURO ADOPTION IN POLAND

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By Rafal Kierzenkowski
ABSTRACT/RESUME

Preparing for Euro adoption in Poland

The objective of joining the euro area has become an important priority in the policy agenda of the current government. The paper focuses on the major structural reforms necessary to prepare for euro adoption that should allow a sustainable fulfilment of the Maastricht criteria and maximisation of the ensuing various benefits. These reforms are desirable independent of the effective date of adoption, given the necessity to restore fiscal discipline, maintain price stability and ensure a balanced growth going forward. However, they are even more essential in the run up to euro adoption as the process of real and nominal convergence remains largely incomplete, which requires a substantial strengthening of alternative adjustment mechanisms to domestic interest- and exchange-rate changes. The reforms should aim to create strong institutions to ensure fiscal sustainability and an efficient counter-cyclical rules-based fiscal policy supported by an independent fiscal council; promote flexibility in labour and product markets; and head off the risk of a boom-bust cycle triggered by much lower real interest rates, too rapid credit expansion and overblown perceived permanent income gains. The timing of euro adoption should therefore be determined by the speed of the implementation of reforms; otherwise the outcome of early membership without appropriate preparation may turn out to be difficult and risky. Yet, provided that adequate reforms are implemented, euro adoption should speed up the convergence process. This Working Paper relates to the 2010 OECD Economic Survey of Poland (www.oecd.org/eco/surveys/poland).

JEL codes: E42; E58; E61; E62; P20
Keywords: OECD; Poland; Euro area; convergence; Maastricht criteria; fiscal rules; labour-market flexibility; boom-bust cycle.

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Préparer l’adoption de l’euro en Pologne

L’objectif que constitue l’entrée dans la zone euro est devenu un objectif important du gouvernement actuel. Cet article est consacré aux principales réformes structurelles nécessaires à la préparation de l’adoption de la monnaie unique, qui devraient permettre à la Pologne de satisfaire durablement aux critères de Maastricht et de maximiser les différents avantages qu’elle en retirera. Ces réformes sont souhaitables indépendamment de la date effective d’entrée dans la zone euro, compte tenu de la nécessité de restaurer la discipline budgétaire, de maintenir la stabilité des prix et de garantir une croissance équilibrée dans l’avenir. Néanmoins, elles sont d’autant plus cruciales à l’approche de l’adoption de la monnaie unique que le processus de convergence réelle et nominale reste dans une large mesure inachevé, ce qui exige un renforcement sensible d’autres mécanismes d’ajustement que les taux d’intérêt et le taux de change domestiques. Ces réformes devraient viser à : mettre en place des institutions fortes garantissant la soutenable des finances publiques, ainsi qu’une politique budgétaire anticyclique efficace fondée sur des règles et étayée par un conseil indépendant de politique budgétaire ; à promouvoir la flexibilité du marché du travail et des marchés de produits ; et à neutraliser le risque d’un cycle de forte expansion et de récession déclenchée par des taux d’intérêt réels nettement plus bas, une croissance trop rapide du crédit, et l’impression injustifiée de gains de revenu durables. Le moment d’adoption de l’euro devrait donc être déterminé par le rythme de mise en œuvre des réformes. Faute de quoi, une entrée prématurée dans la zone euro sans préparation adéquate pourrait se révéler difficile et risquée. Néanmoins, si des réformes adaptées sont instituées, l’adoption de la monnaie unique devrait accélérer le processus de convergence. Ce Document de travail se rapporte à l’Étude économique de l’OCDE de la Pologne 2010 (www.oecd.org/eco/etudes/pologne).

Classification JEL : E42; E58; E61; E62; P20
Mots-clés : OCDE ; Pologne ; zone euro ; convergence ; critères de Maastricht ; règles budgétaires ; flexibilité du marché du travail ; cycle d’expansion et de récession.

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Preparation for euro adoption in Poland

Rafał Kierzenkowski

There are numerous benefits stemming from membership in the euro area as the adoption of the single currency will notably lead to an elimination of exchange-rate risk, lower transactions costs and reduced domestic interest rates. The resulting boost in trade and financial integration, stronger competition, improved confidence and higher investment rate are all likely to increase economic growth and enhance the convergence in living standards. However, reaping all the benefits should not be seen by the authorities as automatic, as their extent will essentially depend on the implementation of structural reforms that are needed to best prepare the economy for this move. Reforms are necessary for various reasons. First, joining the euro area is conditional on meeting formal (Maastricht) convergence criteria. A purely indicative – at a single point in time and for illustrative purposes only – assessment suggests that Poland did not satisfy three out of four nominal convergence criteria around mid-2010 (Table 1), namely those on price stability, the government financial position and exchange-rate stability. Only the long-term interest rate criterion was satisfied. However, fulfilment of some legal requirements was not ensured as well. Second, European institutions may put a greater emphasis on the sustainability with which the Maastricht criteria are met than heretofore, which requires compliance with them in a credible way. Third, the adoption of the euro implies abandoning an autonomous monetary and exchange-rate policy. This can prove to be particularly challenging if the process of real and nominal convergence is unfinished and when the exchange rate has played an offsetting role so far. Fourth, once the euro is adopted the incentive for structural reforms may be lessened, for instance due to reduced fiscal discipline (notably because of lower public debt servicing costs) or relaxed constraints on financing current account deficits. In any case, supportive structural policies are desirable on their own, independent of the objective of joining the euro area, given the need to consolidate public finances, maintain price stability and ensure high potential growth. They are also all the more necessary should the demand-enhancing impact of EU transfers overlap with falling interest rates in the run-up to the euro area. The contribution of the authorities toward rising public and political awareness about the need for structural reforms in Poland (NBP, 2009b; Chancellery of the Prime Minister, 2009) creates fertile ground for implementation.

1. This paper was originally produced for the OECD Economic Survey of Poland, published in April 2010 under the authority of the Economic and Development Review Committee, but is updated for some more recent developments. Rafał Kierzenkowski is an economist in the OECD Economics Department. The author is thankful to Hervé Boulhol, Andrew Dean, Robert Ford and Peter Jarrett and for their valuable comments on previous drafts. The author also thanks Patrizio Sicari and Mee-Lan Frank for research assistance and excellent technical preparation.
Table 1. Indicative extent of fulfilment of formal nominal convergence criteria

<table>
<thead>
<tr>
<th>Per cent</th>
<th>Reference value</th>
<th>Effective value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal criterion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– General government deficit(^1) (2009)</td>
<td>3.0</td>
<td>7.1 (EDP)(^2)</td>
</tr>
<tr>
<td>– Public debt(^1) (2009)</td>
<td>60</td>
<td>51.0</td>
</tr>
<tr>
<td>Exchange-rate stability in the ERM II</td>
<td>Central parity rate +/-15%</td>
<td>Not member of the ERM II</td>
</tr>
<tr>
<td>Inflation (May 2010)(^3)</td>
<td>0.8</td>
<td>3.6</td>
</tr>
<tr>
<td>Long-term interest rate (April 2009)(^4)</td>
<td>10.5</td>
<td>6.0</td>
</tr>
</tbody>
</table>

1. As a share of GDP.
2. EDP – Excessive Deficit Procedure since July 2009. At the time of the examination by the European institutions, the existence of an EDP is verified in the first place when assessing the fiscal criterion.
3. The inflation criterion stipulates that the 12-month average HICP inflation cannot exceed by more than 1.5 percentage points the reference value of the three best-performing EU 27 Member States with the most stable prices.
4. The interest rate criterion stipulates that the 12-month average of 10-year government interest rate cannot exceed by more than 2 percentage points the average of such interest rates in the three best-performing EU 27 Member States with the most stable prices.

Source: Based on Ministry of Finance estimates, „Monitor konwergencji nominalnej”, July 2010.

The main issues that need to be tackled to adopt the euro are as follows. The first priority is to implement a credible fiscal consolidation in order to meet the fiscal criterion, contain the rise in general government debt and, at the same time, prepare for an efficient stabilisation of the economy once it is in the euro area. The second issue is to improve the working of labour and product markets to promote smooth adjustment to shocks and efficient use of resources. The third priority is to adopt measures that will head off the risk of a lending boom fuelled by much lower real interest rates stemming from the combination of lower nominal interest rates in the euro area and higher domestic inflation, greater financing available to the private sector and potentially overly optimistic perceptions of sustainable income. The experience of some euro area countries (Portugal, Ireland and Spain) or countries participating in ERM II (Estonia, Latvia and Lithuania) shows how a boom-bust cycle can develop. The authorities should focus on these objectives, which will best prepare the economy for membership in the euro area and maximise related benefits, rather than concentrating the public’s attention on a specific entry date as a key issue for membership.

Avoid setting another official entry date at this stage

The issue of euro adoption in Poland became a high priority in the policy agenda of the current government following the announcement in October 2008 of the official target date of 2012. This marked a clear break with past practice, as the authorities had never formally committed to a specific date. It also represented a major policy change of the current government, which did not appear to make rapid membership in the euro area a key policy priority when it was formed in mid-November 2007. When taking up power, the current government emphasised the need to prepare the economy and create conditions that would ensure unquestionable net benefits stemming from the adoption of the euro. However, it refused to provide any specific date and stressed that membership was beyond the reach of a single parliamentary term (four years). At the end of October 2008, a roadmap for Poland’s euro adoption was prepared by the government; this was a document establishing a timetable with the official target date of 2012 and major actions vis-à-vis the European institutions to be undertaken before effective membership (Table 2). In April 2009, an additional document indicating the prerequisites for the implementation of the next stages of the roadmap was published, such as conditions for the ERM II entry. These notably included the objective of an ERM II membership reduced to the shortest possible length and the need to ensure the
fulfilment of all formal requirements at the time of assessment by the European institutions of Poland's readiness for euro adoption.

Table 2. Main actions vis-à-vis the European institutions to adopt the euro

<table>
<thead>
<tr>
<th>Stage I</th>
<th>Prior to inclusion of the Polish zloty in the ERM II:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>– Signing the Partnership Agreement with the European Union.</td>
</tr>
<tr>
<td></td>
<td>– Negotiations between the Ministry of Finance, the National Bank of Poland (NBP) and the EU institutions on the inclusion of Polish zloty in the ERM II. The decision on entry of a given country's currency into the ERM II mechanism is taken by the ministers of finance of the euro area countries, the European Central Bank (ECB) and the ministers of finance and presidents of central banks of the countries participating in the ERM II mechanism. The decision-making itself (by way of the decision made by the ERM II Committee or the Session on ERM II) is preceded by the consultations in which the European Commission (EC) and the ECB play the main role.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage II</th>
<th>Upon entering the ERM II until the ECOFIN Council's decision on abrogation of the derogation and the subsequent introduction of the euro, the following steps are necessary:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>– Introduction of the Polish zloty in the ERM II exchange-rate mechanism.</td>
</tr>
<tr>
<td></td>
<td>– Poland has to request the EC and the ECB to prepare the convergence reports outside their normal schedule of publication (every two years), unless the EU Council's decision on abrogation of the derogation is taken directly after their regular release.</td>
</tr>
<tr>
<td></td>
<td>– Poland has to submit to the EC a fiscal “notification”, notably indicating the levels of general government deficit and debt.</td>
</tr>
<tr>
<td></td>
<td>– Convergence Reports prepared by the EC and the ECB.</td>
</tr>
<tr>
<td></td>
<td>– Decision of the ECOFIN Council on abrogation of the derogation.</td>
</tr>
<tr>
<td></td>
<td>– Decision of the ECOFIN Council on establishing the irrevocable euro conversion rate for Polish zloty.</td>
</tr>
</tbody>
</table>

| Stage III | Poland enters the euro area. |

Source: Based on The Roadmap for Poland's Euro Adoption, Ministry of Finance, October 2008.

However, by late 2008 several difficulties appeared, notably the deepening of the global financial and economic crisis, which precluded the key objective of joining ERM II in the first half of 2009 and the euro area in 2012. The lack of a broad political consensus prevented the fulfilment of some legal aspects, notably related to the need to amend the constitution (for instance, for the fact that monetary-policy and exchange-rate decisions will be taken at the euro-area level). Although, such legal changes are not a formal requirement for joining the ERM II, their lack was perceived by the government as a risk factor that could have had negative consequences on the stability of the exchange rate. With the global crisis, the volatility of the exchange rate increased sharply, rendering ERM II entry all the more risky. More importantly, the volatility of the currency blurred the assessment of the equilibrium exchange rate at which the central parity will have to be set. The crisis also contributed to a sharp fiscal deterioration, triggering the opening of an Excessive Deficit Procedure by the European Commission in early July 2009.2 Rapidly falling revenues highlighted the extent of the deterioration of the structural deficit in 2008 and, more generally, the lack of sufficient fiscal discipline during the boom phase of the business cycle. Finally, the combination of domestic inflationary pressures and rapid disinflation elsewhere in the EU has put a question mark on Poland’s ability to meet the inflation criterion in the near term. While none of these setbacks represented a formal obstacle to joining the ERM II, it has become increasingly obvious that meeting all the convergence criteria by 2011 would be extremely challenging. These implied that the

2. The initial estimate of the general government deficit for 2008 came out at 3.9% of GDP, but was subsequently revised to 3.7% (3.6%) of GDP according to domestic (Eurostat) definition.
indispensable conditions of ERM II entry, set by the government in April 2009, had not been met, in particular the requirement of a high probability of fulfilment of all convergence criteria within a two-year horizon of the ERM II participation. In July 2009 the government, represented by the plenipotentiary for the euro adoption, officially postponed the timetable for joining the currency union.

The maintenance of the official date for the adoption of the euro might have helped to anchor investors’ expectations in the midst of the crisis and thus have had a stabilising effect. However, failure to meet a commitment once again would have costs in terms of credibility. In fact, an empirical investigation of market expectations reveals that the publication of the budget deficit outcome for 2008 in late April 2009 had a decisive impact on market participants’ views in this respect (Ministry of Finance, 2009). While the median of expectations pointed to the year 2013 just before the announcement, the market simply stopped expecting that Poland could join the euro area over the next ten years right afterward. Moreover, the in-depth report by the central bank on the participation of Poland in the third stage of the EMU published in mid-February 2009 (NBP, 2009a) also clearly signalled the risks of joining the ERM II and the difficulty in meeting the Maastricht criteria in the context of the global downturn.

The main implication of these events is that the government should be very careful when providing any new date and implement structural reforms that will allow Poland to credibly fulfil all Maastricht criteria by the date of assessment by the European institutions. Setting another adoption date prematurely risks damaging the authorities’ reputation. To strengthen the credibility of its integration strategy, the government has decided not to set a new official target date while confirming its commitment to adopt the euro as soon as possible. However, frequent comments by top officials as to when the currency could join the ERM II system and/or nominal convergence criteria could be met unnecessarily attract the public’s and market’s attention to a specific entry date. Instead of focusing on the date as such, a better strategy is to concentrate for the time being on implementing policies to ensure sustainable convergence in the perspective of membership. Establishing a checklist of reforms that have to be implemented prior to joining the euro area in order to fulfil the Maastricht criteria in a sustainable way and best prepare for the adoption of the single currency would be helpful and welcome. The set of recommendations presented in Box 3 are those that are the most needed. Put differently, the timing of euro adoption should be determined by the speed of implementation of the reforms that will best prepare the economy for it.

To begin to prepare the Polish economy for the introduction of the single currency, an organizational structure was established for that purpose by a government decree in November 2009. In its current setup it comprises: a National Coordination Committee for Euro Changeover, a Coordinating Council and eight Working Committees. The Coordination Committee and the Council are chaired by the Government Plenipotentiary for Euro Adoption and co-chaired by the Plenipotentiary of the NBP’s Management Board. The aim is to take all the steps that are feasible without a target date so as to achieve a high degree of preparation when conditions for euro adoption improve.

**Highlighting the benefits and costs of euro adoption**

After having judged in 2004 that the balance of costs and benefits of euro adoption would be positive and recommending joining the euro area as quickly as possible, the central bank published a second, much more comprehensive report on the same issue in 2009 (NBP, 2004 and 2009a). The latter stresses that the benefits of euro adoption would outweigh the costs, although the timing of euro-area entry and conditionality of the long-term net benefits upon the actions taken on the road to the euro area may constitute an important factor. Yet, in the context of the economic crisis, the report assessed that in the short term the benefits of reduced transaction costs and currency risk would be coupled with the risk of an ECB monetary policy being sub-optimal for the Polish economy, while indirect benefits could appear only in the medium term. At the same time, the Monetary Policy Council continuously expressed the view (in its press releases in 2009) that Poland should join the ERM II and the euro area at the earliest possible date,
once all legal requirements are fulfilled. Joining a currency union involves many theoretical and empirical considerations (Wojcik, 2008). More specifically, various benefits and costs can be expected from membership (Box 1). The benefits are linked to an elimination of transactions costs; disappearance of exchange-rate risk; enhanced macroeconomic stability and lower country risk; higher investment rate; growth of foreign trade; integration of financial markets with attendant liquidity deepening; and stronger competition.3 On the other hand, the costs are related to the currency changeover; practices of rounding up prices; inability to use an autonomous monetary policy and smooth the adjustment process in the economy through the flexibility of the nominal exchange rate; and a series of risks: of choosing an inappropriate central parity rate in the ERM II and conversion rate in the EMU for the exchange rate; of failing to meet the nominal convergence criteria; of experiencing a boom-bust cycle; and that alternative adjustment mechanisms do not allow for an efficient offsetting of shocks.

<table>
<thead>
<tr>
<th>Box 1. Benefits and costs of euro adoption</th>
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<tr>
<td>The various costs and benefits associated with euro adoption can be closely intertwined. The main benefits of euro adoption are:</td>
</tr>
<tr>
<td>• Elimination of transactions costs. Joining the monetary union eliminates the transactions costs linked to the PLN/EUR exchange rate incurred by enterprises and households. These cost savings include financial commitments (bid-ask spreads between the two currencies and fees charged for currency conversions) and in-house administrative expenses borne by firms (linked to the use of human and capital resources necessary to carry out foreign-exchange operations).</td>
</tr>
<tr>
<td>• Elimination of exchange-rate risk. The uncertainty related to the value of the PLN/EUR exchange rate vanishes with the adoption of the single currency. This cancels the related exchange-rate risk premium in domestic interest rates and allows a removal of the costs of managing currency risk, which should improve business conditions and investment planning as well as facilitate an optimum use of available resources, notably in the trade and financial sectors.</td>
</tr>
<tr>
<td>• Enhanced macroeconomic stability and lower country risk. The adoption of the single currency eliminates the risk of a currency crisis, which is conducive to a lower macroeconomic risk of the country, translating into a reduced default-risk premium in domestic interest rates as well as higher foreign and domestic investors' confidence.</td>
</tr>
<tr>
<td>• Higher investment rate. Reduced transactions costs, the elimination of exchange-rate risk and the reduction in the risk of default lower the cost of capital which, along with an improved macroeconomic stability and comparability of prices, favours domestic and inward direct investment (FDI) and thus results in a higher investment rate in the economy. A country adopting the single currency also gains easier access to the euro-area capital market. The increase in the capital stock may strengthen labour productivity and potential growth, while the inflow of new technologies accompanying FDI is likely to speed up the convergence to the technological frontier. Increased domestic and foreign direct investment is also likely to result in enhanced exports.</td>
</tr>
<tr>
<td>• Growth of foreign trade. The combination of lower transaction costs, removal of exchange-rate risk, a more stable macroeconomic framework and increased price transparency should stimulate foreign trade. This can lead to a stronger trade specialisation and increased economies of scale in production, implying greater productivity gains and higher investment. However, the degree of SME-sector competitiveness and innovativeness may condition the extent of benefits stemming from increased international trade linkages.</td>
</tr>
<tr>
<td>• Integration of financial markets. Euro adoption enhances the integration of domestic financial markets with those of the euro area. This should encourage the development of the Polish capital market, increase risk sharing, improve access to the deep financial markets in the euro area and induce a lower liquidity-risk premium in domestic interest rates.</td>
</tr>
<tr>
<td>• Stronger competition. The use of the common currency enhances the comparability of prices across euro-area markets. The latter stimulates competition between enterprises, which can be conducive to lower mark-ups, higher efficiency in the allocation of capital and labour and stronger innovation.</td>
</tr>
</tbody>
</table>

3. Although in a currency union the need to hold foreign-exchange reserves for currency stability and convertibility purposes is reduced, it is the ECB that in practice is responsible for holding and managing them on behalf euro-area member countries.
of Poland’s business cycle with that of the euro area (Figure 1). However, a more detailed analysis reveals
10
(after ECO/WKP(2010)46)

The main costs of euro adoption are:

- **The one-time costs of currency changeover.** These include the need to modify IT, accounting and reporting systems, adapt ATMs, train personnel and business representatives, launch information campaigns for the citizenry, mint coins and print banknotes.

- **The risk of rounding up prices.** With insufficient policies to promote competition in product markets and price transparency, prices consisting in rounding up prices at the time of changeover can lead to a one-off adjustment in prices and related temporary inflation blip, hence lowering the public’s support for the euro.

- **The cost of giving up an autonomous monetary and exchange-rate policy.** Although a new member country gains some influence on the decision process of the ECB, the inability to use interest rates and the exchange rate for macroeconomic stabilisation purposes, especially in the case of asymmetric shocks, can lead, all else equal, to higher output, employment and price variability. This cost is higher when the exchange rate has been a shock-absorbing rather than a shock-propagating instrument. Moreover, given the long-term commitment to membership, any subsequent hypothetical withdrawal from the EMU could lead to unpredictable costs.

- **The risk of choosing an inappropriate central parity rate in the ERM II and conversion rate in the EMU for the PLN/EUR exchange rate.** While a currency belonging to a fixed exchange-rate system can be subject to speculative attacks, failing to set the central parity rate at an equilibrium value could also trigger excessive short-term capital flows and exchange-rate volatility, potentially inconsistent with the required stability of the latter. This difficulty is all the more significant as the real equilibrium exchange rate is bound to appreciate in catching up countries. So far, European institutions have shown more tolerance for appreciations than depreciations (allowing for re-evaluations), but there is a risk of excessive nominal appreciation. An overvalued conversion rate when joining the EMU could adversely affect competitiveness and the pace of income catch-up, against an increase in inflation and inflation expectations in the case of an undervaluation.

- **The risk of failing to meet the nominal convergence criteria.** With a fixed exchange rate, price-level convergence in Poland can occur only through higher structural inflation (compared with advanced economies), which could create inconsistency with the inflation criterion. Even in the case of supportive structural measures smoothing the price-convergence process, this may require an overly tight policy mix. Moreover, higher public investment needs and larger cyclical swings than in developed countries, all else equal, lead to larger budget deficits and hence stronger consolidation efforts to comply with the fiscal criterion.

- **The risk of experiencing a boom-bust cycle.** A faster trend growth implies that the real interest rate needed to stabilise output and inflation is higher in catching up than in developed countries. With unfinished convergence, membership in the euro area would induce lower nominal interest rates and higher structural inflation, and hence push real interest rates in Poland below the natural (equilibrium) level. A too low cost of capital could lead to its mislocation (housing and/or consumption boom), undermine the stability of the financial sector (excessive risk taking and borrowing) and worsen competitiveness (real-exchange rate overvaluation). This is all the more likely if the absorption capacity of “productive” investments is low. The ensuing bust would lead to a costly adjustment process to restore healthy economic fundamentals.

- **The risk that alternative adjustment mechanisms do not allow for an efficient offsetting of shocks.** This includes the ineffectiveness of fiscal policy, insufficient inter-sectoral and/or international capital and labour mobility and the existence of rigid wages and prices.

According to the Optimum Currency Area (OCA) theory a key issue in considering the option of joining a monetary union is the correlation of business cycles. High co-movement of business cycles between Poland and the euro area would thus suggest a low cost of relinquishing independent interest-rate and exchange-rate instruments and signal a reasonable suitability of a common monetary policy. However, beyond limitations of business-cycle correlations based on pre-membership data (see below), there can be uncertainty over effective correlations due to a small sample period of economic transition and the fact that it mostly covers the years of the so-called “great moderation” between 1993 and 2007, which combined output expansion and stable inflation in leading OECD countries.

With this as a background and depending on the measurement method and sample period, empirical studies identify a business-cycle correlation between Poland and the euro area that is relatively high (Fidrmuc and Korhonen, 2006); intermediate and broadly stable (Skrzypczynski, 2008); moderately strong (Adamowicz et al., 2008); or significant (Konopczak, 2008). Indeed, the estimates of cyclical components of GDP and industrial production using a band-pass filtering technique suggest a marked synchronisation of Poland’s business cycle with that of the euro area (Figure 1). However, a more detailed analysis reveals
Figure 1. Cyclical components of GDP and industrial production in Poland and the euro area¹

Percentage points, 1995Q1-2009Q3

1. The cyclical components are identified using the Christiano-Fitzgerald band-pass filter with a business cycle of between 1.5 and 10 years.

Source: OECD, Main Economic Indicators database.

Exposure to asymmetric shocks provides an additional insight about the cost of abandoning an independent monetary and exchange-rate policy. Despite the fact that shocks hitting Poland and the euro area as a whole have been rather asymmetric so far (Konopczak, 2008; Stazka, 2008; Mikek, 2009), the estimates also reveal a significant correlation of output responses in both areas to individual shocks (Konopczak, 2008; Adamowicz et al., 2008). Indeed, should an economy be hit by various asymmetric shocks, a high ex post synchronisation of business cycles could merely reflect a significant stabilisation role played by mitigating policy measures and/or other adjustment mechanisms such as the exchange rate. In fact, the latter has been a shock-absorbing rather than a shock-propagating instrument in Poland (Stazka, 2008; Blaszkiewicz-Schwartzman, 2008).

Recent developments highlight the stabilisation role of the currency, though with a tendency to overshoot (Figure 3). While the nominal appreciation of the PLN/EUR by 25% between July 2006 and July 2008 helped damp growing inflationary pressures and was concomitant with a steady deterioration of the merchandise trade balance over the same period, the subsequent intensification of the financial crisis triggered a sharp fall of the currency by as much as 34% from July 2008 to February 2009. This in turn contributed to a strong rebound of net exports, even though it added to inflation dynamics. However, the
real exchange rate most probably overshot its equilibrium value in the midst of the crisis as it was estimated by the IMF to have been undervalued by around 10% in spring 2009 (IMF, 2009a). Although developments in the trade balance have been mainly driven by a large decline in imports, the depreciation of the currency has supported the recovery of exports.
Figure 3. *Trade balance developments and nominal bilateral exchange rate*

Billions PLN, monthly data, seasonally adjusted

A. Trade in goods

B. Balance of trade and PLN/EUR exchange rate

1. Three-month moving average.

Source: OECD, Main Economic Indicators database; Datastream.

Going forward, there are various factors that will condition the extent of future business-cycle volatility and correlation in Poland with respect to the euro area such as differences in domestic economic structures, trade intensity and specialisation profile, and the characteristics of transmission mechanisms. While differences and similarities exist in each of these fields (Adamowicz et al., 2008; Boulhol and Lequien, 2010; Grabek et al., 2008), in the long run a country becomes progressively a more suitable participant in a monetary union after joining as suggested by the literature on the endogeneity of OCA criteria initiated by Frankel and Rose (1998). Haan et al. (2008) report that business cycles in the euro area have gone through periods of both convergence and divergence but became more synchronised during the 1990s, notably under the influence of rising trade intensity (even though increased trade specialisation could lead to business-cycle asymmetry). A better synchronisation can be also expected to occur in Poland, though the consensus is less strong as to the timing of expected benefits (Cieslik et al., 2008; Daras and Hagemejer, 2008). Overall, while the common monetary policy and fiscal policy co-ordination within the EMU is likely to ensure effective output stabilisation in Poland in the long term, the objective should be to minimise the short- and medium-term cost of foregoing an autonomous monetary and exchange-rate policy. It is therefore essential that a strong institutional setting with a sound, rules-based, counter-cyclical fiscal policy, tight financial regulation and enhanced labour- and product-market flexibility be put in place prior to the membership. This is all the more necessary as, despite significant progress, the process of real and nominal convergence is still largely unfinished.

**Continuing the process of real and nominal convergence**

The Polish economy has made substantial progress over recent years in reducing the GDP per capita gap with the euro-area countries. With an average annual GDP growth rate of 4.2% between 1999 and 2008, as against 2.0% for the euro area over the same period, the convergence in living standards has proceeded rapidly and has been even faster since EU entry in 2004. As a result, the percentage gap in GDP per capita relative to the euro area countries shrank from 58% in 1999 to 49% in 2008 and was mainly driven by gains in labour productivity (Figure 4). The contribution of labour resource utilisation to income convergence has been comparatively lower, with the impact of higher average annual hours worked and a positive demographic effect partly offset by the drop in the employment rate. As the level of GDP per capita remains well below the euro-area average, measures boosting labour productivity and improving the employment rate are essential to reduce the gap in living standards with euro-area countries, notwithstanding the issue of the impact of euro-area membership on the speed of income convergence.
A salient feature of the new member states of the European Union is that while their GDP per capita is catching up to higher income levels observed elsewhere, the price level is converging as well (Figure 5). As richer countries are characterised by higher price levels, the price-level convergence in lower-income countries can be achieved either by the appreciation of the nominal exchange rate and/or higher domestic inflation with regard to the euro area. In the second half of the 1990s, the catch-up in prices was the result of a much higher relative inflation in Poland, while the currency was subject to persistent nominal depreciation under the crawling-band exchange-rate regime (Figure 6). The subsequent monetary-policy regime shift to a pure float has been marked by substantial fluctuations of the nominal exchange rate and a much lower inflation differential, leading to a depreciation of the currency in real terms between 2001 and 2004, for instance. However, the convergence in prices resumed afterwards with nominal appreciation being the key driving factor. Several implications can be drawn from these stylised facts.

1. Based on current purchasing power parities and current prices.
2. GDP per hour worked.
3. The share of working-age population in total population.

Source: OECD, National accounts, Productivity and OECD Economic Outlook 86 databases.
First, nominal appreciation can serve to accommodate the real-nominal convergence nexus insofar as it allows a catch-up to international price levels while domestic inflation can be kept at a level consistent with price stability. Moreover, the nominal appreciation does not have a detrimental effect on competitiveness as long as it occurs at a rate reflecting the appreciation of the real equilibrium exchange rate. Various supply-based approaches can explain why in a less mature economy, such as Poland’s, the real exchange rate is bound to appreciate along an equilibrium path due to price-level convergence, even though these theories do not deliver a link between real and nominal appreciation of the exchange rate (Dobrinsky, 2006; Egert et al., 2006). One of these is the Balassa-Samuelson effect, which could have accounted for 25% of the gap in headline inflation (or 0.9 percentage point per year) between Poland and
the euro area over the last decade (Mihaljek and Klaau, 2008). Other factors underlying the appreciation of the equilibrium exchange rate in Poland include the effect of quality upgrading and hikes in regulated prices that may lag behind international averages (Egert, 2007), the latter contributing to increase headline inflation also over the recent past (OECD, 2010b).

Second, once the nominal exchange rate is fixed, price convergence can occur only through higher domestic inflation relative to the euro area. Indeed, it will no longer be possible for the trend of domestic inflation in Poland to exceed only marginally that in the euro area (as for instance, it did on average in 2005-08) (Figure 6). Assuming 2% headline inflation in the euro-12 countries, a linear convergence of the price level towards the euro-12 level in 30 years would lead to an average inflation rate of 3.5-4% per year in Poland (Benassy-Quéré and Turkisch, 2009). This implies that inflation will remain relatively elevated in the foreseeable future and has an important bearing on the ability to fulfil the Maastricht inflation criterion. The latter stipulates that the 12-month average HICP inflation in a given country cannot exceed by more than 1.5 percentage points the inflation rate in the three best-performing EU 27 Member States with the most stable prices. The reference value for inflation could be even lower than 1.5% as, in practice, the exact definition of the best performers in terms of price stability is defined by the European institutions. Indeed, according to a new approach applied by the European Central Bank in its latest Convergence Report (ECB, 2010), the reference value reached 1.0% in March 2010 as countries subject to moderate deflation (Portugal, Estonia and Belgium) were taken into account in the calculation. Moreover, the reference value can be based on inflation outcomes in countries not necessarily participating in the euro area. Achieving a low level of inflation consistent with the Maastricht criterion will therefore depend on the cyclical position of the Polish economy relative to other EU countries and, beyond structural measures, require an appropriate policy mix.

Third, a credible run-up to joining the euro area will lead to a reduction and subsequent disappearance of the exchange-rate risk premium incorporated in interest rates. The rapid convergence of nominal market interest rates toward the euro-area level, along with a structurally higher domestic inflation in Poland, will push down real interest rates. This creates the related risk of triggering a boom-bust cycle, in particular when interest rates are persistently and significantly below the level that would be needed to stabilise output and inflation (Ahrend et al., 2008).

Meeting the Maastricht criteria in a sustainable way and achieving a smooth convergence within the euro area

Achieving sound fiscal policy is a major pre-requisite for respecting the Maastricht criteria. The consolidation of public finances would lower inflation pressure, contribute to reducing the volatility of the currency and favour the convergence of interest rates, while offsetting their expansionary impact on activity at the same time. In terms of implementation, the reduction of the structural deficit backed by the strengthening of the fiscal framework could be phased in gradually. While there is a growing experience with fiscal rules in OECD countries, cross-country empirical evidence suggests that countries which adopt

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4. The Balassa-Samuelson effect stipulates that a catch-up in the level of aggregate productivity can be driven by a higher domestic productivity growth in the tradables than in the non-tradables sector. Assuming wage equalisation between sectors, the relative price of non-tradables will rise and lead to a positive inflation differential through the non-tradable component of inflation vis-à-vis countries with lower productivity growth (advanced economies).

5. Using an uncovered interest-rate-parity equation including a risk premium and an appreciation of the real equilibrium exchange rate to account for the convergence process, one could show the following relationship: if the nominal exchange rate is fixed, then the reduction in the risk premium resulting from the adoption of the euro yields an equivalent drop in the real interest rate, which is reflected in some combination of a lower nominal rate and higher inflation.
them are able to sustain longer lasting fiscal consolidation (Guichard et al., 2007a; OECD, 2007b, 2009a,b). This would help to create an environment propitious for fulfilling all Maastricht criteria over an extended period of time and, in that sense, be consistent with the notion of sustainability on which emphasis may be put by the EU institutions when assessing Poland’s performance in meeting the criteria. Reducing the structural deficit would also reinforce the ability to adjust to asymmetric shocks once Poland becomes a member of the euro area. Reforms in the run-up to euro adoption aimed at increasing labour-market flexibility and labour supply, boosting productivity gains in the non-tradables sector and promoting competition in the product market more generally would also help to achieve the Maastricht criterion on inflation. The speed of financial deepening could be better handled by the implementation of strong macro-prudential regulation. However, such structural transformations are necessary notwithstanding the issue of euro adoption given the need to restore fiscal discipline, keep inflationary pressures in check, make the most of EU funds and ensure balanced growth going forward.

**Building a rules-based counter-cyclical fiscal policy**

Significantly improving the fiscal position and the efficiency of fiscal institutions is a major policy challenge for the authorities in the perspective of euro-area membership. Under the Excessive Deficit Procedure started in July 2009, the ECOFIN Council recommended that Poland correct its general government deficit by lowering its value to below 3% of GDP by the end of 2012. This, in principle, would also satisfy the corresponding Maastricht criterion. However, as the latter is also assessed by European institutions in terms of sustainability, the government should not rely on revenues stemming from a possible demand-induced turnaround in the output gap to comply with it. Indeed, even though the focus in Poland is concentrated mainly on the state budget, the general government deficit has systematically exceeded 3% of GDP, except in 1999 and 2007, while the debt-to-GDP ratio is projected to rapidly expand toward the 60% Maastricht ceiling. Therefore, credible compliance with the fiscal criterion is a key policy challenge.

Public finances in Poland are subject to different domestic rules. Since 2006, the authorities informally followed a rule of not allowing the state budget deficit to exceed PLN 30 billion (an amount that represented 3% of GDP in 2006 and 2.3% of GDP in 2009), even though effective targets could have been lower. However, this implicit rule will not be respected in 2010 and has several drawbacks anyway, as discussed below. Additionally, the amount of local-authority debt cannot legally exceed 60% of revenues. Moreover, Poland is unique among the new EU member states in that it also has a rule on the debt-to-GDP ratio, enshrined in the constitution, requiring that it never surpass 60% of GDP. However, that definition of the public debt is not fully consistent with that applied by Eurostat, although both measures led to an almost identical figure in 2006, 2007 and 2008. The major difference is that the debt of the National Road Fund is not included in the national definition, which might create a perverse incentive to get around the constitutional ceiling and intermediate thresholds. Indeed, debt issuance by the Fund to carry out investment projects was intensified in 2009 and the Fund’s debt is expected to exceed 2% of GDP by end-2010. This not only undermines the credibility of the constitutional rule, but can lead to confusion. Therefore, for the sake of transparency and good practice, the exclusion of the debt of the National Road Fund in the definition of the public debt should be abolished, and the national definition made strictly compliant with its EU counterpart.

Two intermediate debt thresholds at 50% and 55% have been defined in the Public Finance Act to prevent the 60% ratio from being breached, each of them progressively more binding. 6 Thus, if the public debt exceeds 50% of GDP in year x, the state budget deficit for the following year (x+2) cannot be larger as a share of total revenues than in the current year (x+1). If public debt exceeds 55% in year x, this

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6. In 2009 there were plans to implement additional precautionary thresholds (at 47% and 52% of GDP) and to tighten austerity measures, but the reform was abandoned, given the expected increase in the public debt.
triggers more stringent measures: the state budget deficit must be reduced to zero for the following year \((x+2)\) or set at a level that ensures that the debt-to-GDP ratio will not exceed the level reached in year \(x\). As a consequence, and laid out in the Act, wages in the public sector cannot be increased, the indexation of pensions is limited to inflation in the current year \((x+1)\), no new loans and credits can be granted from the state budget and expenditure increases in key budgetary units (Offices of the Parliament, Senate, President, etc.) cannot be higher than in the central administration. There are also restraints on the level of deficit for the sub-national governments, with allowed increases in expenditure mainly resulting from the co-financing of EU-related projects. Finally, if nonetheless the public debt breaches 60% of GDP, radical measures have to be undertaken: the government has one month to submit to Parliament an economic programme to lower the debt-to-GDP ratio to below 60%, all automatic consolidation measures at the central government level at above the 55% threshold apply, but also the proposed local budgets have to be balanced for the next year \((x+2)\) and public finance entities cannot issue new guarantees. The public exceeded the 50% threshold in 2009; it may well surpass 55% in 2010 and, if no consolidation measures are introduced, breach the constitutional limit of 60% of GDP in 2011 or 2012 according to different projections published in late 2009 (OECD, 2010b).

Poland has a solid (though not yet tested) framework to prevent excessive growth in the public debt-to-GDP ratio that has enabled compliance with the Maastricht Treaty so far. However, the rule might end up being pro-cyclical, given the obligation to tighten fiscal policy independently of the position in the business cycle if the constitutional threshold is in sight. To avoid this risk in the future and limit increases in the debt, the current framework should be supplemented by a stricter deficit rule. If policy had been tighter in the upturn, the government would not have been in such a difficult fiscal position during the current economic downturn, a situation common to many OECD countries. Indeed, the nominal anchor rule at PLN 30 billion on the central government deficit followed until recently has two major drawbacks (OECD, 2006). Because the ceiling concerns the state budget, it does not prevent slippage at the level of overall public finances and, worse, creates incentives to shift expenditure to other parts of the general government sector. In addition, with a ceiling set on the deficit, rather than on expenditure, it is possible to act pro-cyclically by, for example, introducing new spending during the fiscal year if revenues look set to exceed budgeted levels.\(^7\) Even if the reduction of the tax wedge in 2007 and 2008 was a welcome reform, it occurred in the boom phase of the business cycle, which exacerbated excess-demand pressures in the economy and complicated the anti-inflationary policy of the central bank (OECD, 2008a). More generally, fiscal policy has often been pro-cyclical or insufficiently counter-cyclical as attested by changes in the underlying general government balance as compared with the output gap over the last decade (Figure 7).

Emphasising the distinction between the structural and cyclical components of the budget balance would improve the quality of fiscal policy. Polish authorities should consider introducing a rule in terms of the structural general government balance and consistent with the medium-term objective (MTO) of the Stability and Growth Pact. The latter is currently defined as a maximum allowed structural deficit at 1% of GDP, but the authorities have failed to achieve this objective so far.\(^8\) This rule should be inscribed in the Public Finance Act to increase its binding character (in a similar way to the precautionary thresholds of 50% and 55% on public debt), but any deviations from it should be left to the appreciation of an independent fiscal council. Germany has recently adopted a similar fiscal rule, which imposes a ceiling in

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7. Only the government is allowed to increase the level of the deficit, while the Parliament may modify only the composition of expenditure and revenue. However, the state budget deficit cannot be higher during the fiscal year than the level adopted in the budget law, which otherwise has to be amended and approved by the Parliament.

8. According to the March 2008 convergence programme, Poland was committed to fulfil the MTO in 2011, but the authorities indicated in the December 2008 update of the programme that this would occur only after 2011. No date was provided in the latest update of the programme released in early 2010.
the constitution on the structural deficit at a maximum level of 0.35% of GDP for the federal government in 2016 and zero for the länder from 2020, with a progressive phasing in of the rule as from 2011.9

Figure 7. Cyclicality of fiscal policy, 1997-2008

In Poland’s case, a rule defined in terms of the (general government) budget balance would have several advantages. It would be consistent with the fiscal criterion on the budget deficit insofar as it refers to the general government (Maastricht definition) budget position and not just the state budget balance. Shifting the public’s attention to the Maastricht indicator would provide a better understanding of the fiscal stance and thus, in terms of the political economy of reform, facilitate consolidation measures aimed at reducing the structural deficit in the perspective of euro-area entry. The rule would also allow for the working of the automatic stabilisers over the cycle, leaving a safety margin vis-à-vis the EU ceiling at 3% of GDP on the overall deficit and thus strengthening the commitment to comply with the latter on a sustainable basis. Yet, counter-cyclical discretionary fiscal policy would be possible in a downturn only if the structural balance is better than the MTO during expansion. Keeping the underlying balance at a safe distance from the MTO would be in accordance with the long-term plan of the authorities to eliminate the structural deficit by 2030 (Chancellery of the Prime Minister, 2009). Symmetrically, by not imposing any ceiling on the strong side of the target, fiscal policy could be tightened to head off the risk of a boom-bust cycle. In this respect, the fiscal council could provide a useful ex ante assessment as to the appropriate extent of counter-cyclical policy of the fiscal stance, which would lower the political cost of consolidation measures and make their implementation easier. Finally, with an explicit target in terms of the general government balance year by year, such a rule would effectively complement the constitutional obligation to maintain the public debt below 60% of GDP and thus alleviate its pro-cyclical bias.

The efficiency of the fiscal framework could be further enhanced if the deficit target were augmented with an expenditure rule. Indeed, there is empirical evidence that budget-balance rules generally work better when combined with expenditure rules (Guichard et al., 2007a; IMF, 2009b). The rule could take the form of multi-year ceilings on general government expenditure in nominal terms. Such a ceiling would allow the automatic stabilisers to operate fully on the revenue side, though they could also do so on the spending side if cyclically sensitive expenditure (in particular unemployment benefits) were excluded from the ceiling. Focusing on the general government sector would prevent expenditure being shifted to other

9. The structural or underlying deficit is the nominal outcome adjusted for the influence of the economic cycle and one-off operations.
levels of government. At the same time, a nominal rule, compared to a rule specified in volume terms, would be more counter-cyclical and transparent. In particular, the rule would be simpler, easier to monitor and more understandable for the public.

An expenditure rule was proposed in Poland in 2001: the so-called “Belka rule” foresaw limiting real expenditure growth to 1% annually, though it referred only to the central government. It was never implemented due to insufficient political support. More recently, the authorities have started to reconsider the usefulness of an expenditure rule. At the end of January 2010 the Chancellery of the Prime Minister published a development and public finance consolidation plan, which advocated the adoption of two expenditure rules with the intention to reduce and subsequently stabilise the general government structural deficit at the level of the medium-term objective of 1% of GDP. The first rule would be temporary and prevail until the structural deficit is reduced to 1% of GDP. It would be based on limiting real expenditure growth of the central government to 1% annually, though it would apply only to expenditure that is “discretionary”, i.e. not determined by already enacted laws. Such expenditure represents only around 25% of central government spending and 12% of general government expenditure. Therefore, unless the authorities act energetically to reduce the “rigidity” of public expenditure and implement tighter coordination with other levels of the government, it is highly unlikely that the rule would bring significant savings in the foreseeable future. Indeed, no time horizon nor scenarios as to how efficient the rule would be in lowering the structural deficit from an official estimate of close to 7% of GDP in 2009 to just 1% of GDP have been provided. Moreover, the rule could also lead to insufficient spending on public investment, unless such expenditure is taken out of the central budget (as in the case of National Road Fund), thus further damaging the transparency of public finances. The second rule would follow with a less restrictive growth-rate ceiling, but details provided so far are scarce. It would be permanent, apply to a wide range of general government expenditure and follow the goal of stabilising the structural deficit at the MTO level. This ceiling would be linked to real GDP growth over a reference period of several years and the inflation target. The rule is intended to be counter-cyclical, though a further undefined effort could be necessary to reduce the share of public expenditure in GDP (which was around 44% in 2009) to an objective of less than 40%. More generally, it remains to be seen how such a rule would operate counter-cyclically across the full cycle, effectively ensure that the structural deficit is kept at a low level and maintain the share of expenditure in GDP at a target level all at the same time.

The recent steps of the government towards a medium-term budgeting framework offer fertile ground for the incorporation of an expenditure rule on a multi-year basis. Indeed, along with the traditional annual budget, the Ministry of Finance has started to prepare and present to the Parliament an indicative performance budget, including programme objectives, a programmatic breakdown of expenditures and key performance indicators. Moreover, the current Public Finance Act introduces multi-annual planning and performance budgeting for a period of four years as from 2010. However, such a budgetary framework might be insufficient on its own to strengthen fiscal discipline (OECD, 2009c). Despite a clear objective to reduce the public deficit over the medium term, commitments to restore budget balance can be systematically postponed, thus tarnishing the credibility of multi-year budget planning.

The operation of deficit and expenditure rules would greatly benefit from the creation of an independent fiscal council, as has recently been done in Hungary; the longer experience of the Netherlands illustrates the benefits of such an arrangement (Bos, 2008). More generally, independent fiscal bodies assessing the budget are present in about one-fifth (18%) of advanced economies (IMF, 2009b). In the case of Poland, the council could conduct regular surveillance of public finances, evaluate the budget ex ante and provide ex post evaluations of the government’s performance with regard to the rules. In doing so, such an institution could create objective grounds for reforms and therefore reduce the influence of the political cycle on the fiscal stance. Indeed, four-year election cycles have an apparently strong influence on the fiscal stance and politico-economic factors seem to be at the root of persistent budget deficits in Poland (Rutkowski, 2007). Moreover, setting up such a council would overcome the main drawbacks of the rules
on the general government expenditure and debt. The difficulty with a rule based on a structural balance is the lack of simplicity and transparency. Indeed, the breakdown between cyclical and structural components of the fiscal balance is subject to uncertainty and hence measurement errors when assessing past and projecting future potential output (Koske and Pain, 2008), over and above the issue of political influence. The former problem has become even more acute with the current crisis (OECD, 2009d). Data revisions of actual output can also blur the picture of the output gap several years after the initial estimate. The fiscal council could play a key role in analysing such developments and in maintaining the credibility of the rule in the face of inevitable uncertainties. For example, should there be important revisions between initial and final estimates of the output gap published by leading forecasters, a related deviation from the rule on the structural deficit could receive a legitimate justification.

Ceilings on expenditure alone do not lead to a specific debt path as optimistic planning and slippages in revenues are possible. Therefore, the council could evaluate the ex ante consistency of budget assumptions vis-à-vis both rules and the constitutional rule on the debt-to-GDP ratio, for instance by issuing early warnings and proposing corrective measures to draft bills. The council could also allow for increased flexibility of the deficit and expenditure rules in extraordinary circumstances. If the latter force the government to violate the rules, the council could help to assess the impact of the shock on public finances and deliver an objective rationale for deviation. In order to guarantee its independence, the council should act in strict respect of the constitutional threshold on the debt-to-GDP ratio at 60%. However, the establishment of such a council would not remove control of fiscal policy from elected politicians (OECD, 2010a). They would appoint its members and ensure that the new institution is accountable to them, while the parliament and the government would still determine, in a rules-based framework, the size of the public sector and the allocation of taxes and spending. The representation and independence of the council would nevertheless be strengthened if its members were appointed by a “heavy” parliamentary majority and had relatively long-term and overlapping mandates.

**Meeting the other Maastricht criteria**

Adopting a rules-based fiscal framework would create favourable conditions not only for credibly meeting the fiscal criterion, but also to sustainably comply with the other Maastricht requirements. The fiscal stance can play an important role in favouring exchange-rate stability in the ERM II (Beza-Bojanowska and MacDonald, 2008). More generally, an appropriate combination of monetary and fiscal positions can be helpful in order to maximise the probability of fulfilling the inflation criterion. In particular, by ensuring that the price differential with the best performing EU countries be driven as much as possible by structural factors rather than by cyclical demand-side influences, but also given the possible conflict with the process of price-level convergence. Yet, the conjunction of a tight policy mix, positive market sentiment, inflows of EU funds and further appreciation of the real equilibrium exchange rate could result in a strengthening of the currency. Although it is not necessarily inconsistent with the exchange-rate criterion, it may be too rapid (i.e. overshoot fundamentals if it occurs at a pace exceeding the appreciation of the real equilibrium exchange rate) and may be sensitive to a speculation in the foreign-exchange market. Moreover, even if the central parity rate can be re-valued (as the examples of Greece and the Slovak Republic illustrate), an excessive appreciation of the exchange rate is undesirable insofar as it forces the central bank to proceed to unlimited intervention when the 15% maximum allowed deviation has

10. This phenomenon has come to be known as the “boxer effect” or “weighing-in” syndrome: like the boxer who refrains from eating for hours prior to the weigh-in only to consume a big meal thereafter, the candidate country will do whatever is required in order to squeeze down inflation prior to accession, only for repressed pricing pressures to re-emerge once it has joined the EMU (Szapary, 2000). Because of this, Darvas and Szapary (2008) have proposed a modification of the Maastricht inflation criterion, arguing that it has lost its economic logic when applied to catching-up countries, and proposed instead to define it as the euro-area average rate of inflation plus 1.5 percentage points.
been realised. While such interventions would be easier to conduct than in the case of depreciation, their sterilisation through the sales of central bank bills could, once the euro is adopted, leave the banking sector awash with liquidity if such bills would have to be redeemed quickly and possibly trigger a credit boom.

Beyond demand-management policies, structural policies should also help to meet the inflation criterion. Major discrepancies in the level of regulated prices (corrected for the level of GDP per capita between Poland and the euro area) should be eliminated before Poland joins the ERM II. This is particularly true for sectors exhibiting prices at below cost-recovery levels, such as the electricity, gas and water-supply sectors (Egert, 2007). Additionally, a combination of efficient incentive-price regulation aimed at keeping costs under control, coupled with increases in retail prices would increase margins and allow for much needed investments to modernise those sectors. This is particularly true for the electricity sector whose obsolescence and vertical integration represents an obstacle to reaping all the benefits from globalisation, even though ongoing privatisation creates opportunities for improvements. More generally, measures designed to enhance the effects of inward FDI and improve export performance, notably by promoting competition in the product market (OECD, 2010b), would strengthen potential output, engender lower price mark-ups and thus lead to a more price-stability-oriented environment.

Consistent with the original theoretical assumption underpinning the Balassa-Samuelson effect (Balassa, 1964), the productivity gap between Poland and the euro area in sheltered sectors is smaller than in open sectors (Figure 8). However, measures promoting productivity gains in the non-tradables sector would help to smooth the price-level convergence by lowering the extent of wage spillovers from tradables to non-tradables sectors. In doing so, the structural inflation differential vis-à-vis the euro area would be spread over a longer period of time. This is especially relevant for sectors that exhibit low productivity levels such as electricity, gas and water supply; transport, posts and communications; education; and health and social work (Figure 8). Privatising and appropriately regulating utilities, upgrading the transport network and improving education efficiency should create conditions for a faster productivity convergence (OECD, 2010b). However, it is also critical to avoid the emergence in the boom phase of the business cycle of a kind of Dutch disease effect driven by the real estate sector or any other non-tradables sector getting oversized. In particular, this could occur if wage increases spill over from the non-traded to traded sectors and outpace productivity gains in the latter. The resulting cost-push inflation and losses in competitiveness could have detrimental effects on the ability to achieve the Maastricht inflation and exchange-rate criteria. Moreover, cost-push inflation could be reduced by refraining from increasing the minimum wage faster than the average wage in the economy (see below).

As long as other criteria are fulfilled, Poland should not encounter difficulties in meeting the reference value for long-term interest rates as well. The criterion is designed to test the durability of the price-stability process, but can be respected even if the inflation criterion is breached (as in the case of Poland illustrated throughout the second half of 2008 and in almost all of 2009). In fact, even in the midst of the financial crisis Poland managed to meet the criterion, even if only by a very thin margin. This confirms that, to some extent, progress has been made in the convergence of nominal interest rates between Poland and the euro–area average. Therefore, it is to be expected that, in the context of a credible euro-area roadmap, a combination of further capital inflows driven by expectations of membership, lower inflation and adequate policy mix should safeguard against the risk of violating the long-term interest-rate criterion.
Figure 8. Sectoral labour productivity¹

A. Average annual rate of productivity growth, 2000-06

B. Sectoral labour productivity (2000 PPP USD, EU11² = 100)

1. Labour productivity is defined as gross value added (in constant 2000 prices) per worker.
2. Austria, Belgium, Finland, France, Germany, Greece, Italy, Luxembourg, Netherlands, Portugal and Spain.
3. The open sectors include agriculture, hunting, fishing, and forestry, mining and quarrying, and manufacturing. The remaining sectors not classified as open sectors are classified as sheltered.

Source: OECD, National accounts database and Eurostat.

Enhancing labour-market flexibility

The ability to withstand asymmetric shocks in the euro area will hinge critically on the degree of labour-market flexibility. This includes the extent and speed with which the labour force shifts among sectors and/or geographically. The experience of some of the euro-area countries such as Portugal and Germany also reveals the significance of the competitiveness channel in order to correct an overvalued real exchange rate, which can be achieved either through higher productivity gains in tradables and non-tradables sectors and/or a downward adjustment of real and nominal wages (Blanchard, 2006). However, the greater are real or nominal rigidities, the larger the amount of unemployment necessary to re-establish competitiveness, which can translate into a protracted period of subdued growth performance.

Survey studies suggest that the degree of downward nominal wage rigidity in Poland is comparable to that in the euro area on average. In Poland, only a low percentage of firms resort to nominal wage cuts due to the need to attract the most talented employees (Strzelecki, 2008). Downward nominal wage rigidity may also reflect the catching-up process (implying more leeway to reduce labour costs through productivity increases). Indeed, such rigidity does not seem to be linked to labour-market institutions and their impact on the wage-setting process. Poland has a largely decentralised (company-level) and uncoordinated wage-bargaining system, which in many aspects is comparable to that in the United States and the United Kingdom (Du Caju et al., 2008). The rate of trade-union density is low and does not exceed 25%, bargaining coverage is limited (between 30 and 40%), the length of collective agreements is relatively short (one year), and firms have the possibility to legally avoid agreements among multiple employers in the same sector. Sectors dominated by large state-owned enterprises and sheltered from
international competition (such as the energy sector) represent a major exception, with strong collective bargaining, the use of inflation expectations in the wage-setting process and high union activity.

There is also government involvement in the minimum-wage-setting process through tripartite agreements, but negotiations are ultimately imposed by the authorities if no agreement is reached. While the ratio of the minimum to the average wage hovered around 34% between 2000 and 2007, substantial discretionary increases in 2008 and 2009 (respectively by 20.3% and 13.3%) lifted the ratio to 40% (Figure 9). This also represented a major increase relative to other OECD countries. Yet, the authorities recognised the severe impact of the crisis when setting the 2010 increase at only 3.2%. More generally, an annual indexation rule introduced in 2002 and amended in 2005 aims at compensating for expected inflation developments. The law also stipulates that if the minimum wage is lower than half of the average wage (50% rule), it is additionally increased by two-thirds of the projected real GDP growth. Negotiations within a tripartite commission can lead to large hikes, with a view to meeting the 50% rule. This rule should be abandoned as, by increasing wage rigidity, further hikes in the ratio of minimum to average wage can have detrimental effects on various dimensions of the economy. In particular, they would not only weigh on employment levels, but might also affect the ability to meet the inflation criterion and improve competitiveness, should there be a need to adjust to a significantly overvalued real exchange rate.

![Figure 9. Minimum wage to average wage ratio](image)

**Source**: OECD, Labour statistics database; Ministry of Labour and Social Policy.

The minimum wage exceeds the reservation wage of many unskilled workers. According to the Labour Force Survey, a third of the unemployed were willing to work for less than the legal floor in 2008,
compared to only 11% in 2007. A high minimum wage discourages labour demand for youth and unskilled workers when it is not commensurate with their productivity levels and may promote informal employment. These risks are particularly acute in the case of Poland, given the combination of high youth unemployment (17.3% versus 7.2% for the total unemployment rate in 2008), a large share of the workforce with low skills, strong disparities in regional unemployment rates and a low degree of internal labour mobility related to weaknesses in housing and transport infrastructure (OECD, 2008a). The authorities might consider introducing heterogeneity in the level of the legally imposed nominal minimum wage by differentiating it on a regional basis, as is the case in Canada and the United States. In particular, the differentiation should explicitly take into account conditions on local labour markets.

The restrictiveness of employment protection legislation in Poland is assessed to be close to the OECD average and less stringent than in the largest euro-area countries (Figure 10). It is nevertheless tighter than in Ireland and the United Kingdom and regional peers of Hungary, the Slovak and Czech Republics. Moreover, the average stringency of regulation has increased since 2003 as welcome changes in regulation of collective dismissals (reduction of notification periods by more than half) were more than offset by a tightening in legislation of temporary contracts (the introduction of a limit of two successive fixed-term contracts, to conform with EU policies when joining in 2004) (Venn, 2009). Furthermore, while in most other OECD countries there is no notice period during the trial period, there is such protection in Poland (not captured by the EPL index). However, labour legislation has been temporarily relaxed (until end-2011) as part of the anti-crisis package of the government. Net benefit replacement rates for prime-age individuals were very low in 2007, only some 16% on average over a spell of joblessness lasting five years (42% in the first year, 16% in the second and 8% in the remaining three years), compared to 45% in France and Germany and a median of 28% for OECD countries (OECD, 2009e). While the automatic stabilisers could be made more powerful by raising low unemployment benefit replacement rates, the gap in safety nets is nevertheless much less pronounced once other components related to housing and social assistance benefits are included. Indeed, in that case net replacement rates in 2007 were 52% in Poland as against 63% in Germany and 60% in France and the median OECD country.

![Figure 10. Employment protection in a selection of OECD and non-OECD countries](image)

Figure 10. **Employment protection in a selection of OECD and non-OECD countries**

Scale from 0 (least restrictions) to 6 (most restrictions), 2008¹

<table>
<thead>
<tr>
<th>2008 (Scale 0-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection of permanent workers against (individual) dismissal</td>
</tr>
<tr>
<td>Regulation on temporary forms of employment</td>
</tr>
<tr>
<td>Specific requirements for collective dismissal</td>
</tr>
</tbody>
</table>

OECD average

1. 2009 for France and Portugal.

Source: OECD, Indicators of employment protection.

A major challenge for the authorities to ensure real convergence is to increase labour supply. The participation rate of around 64% compared to the euro-area average of 71.5% was one of the lowest among the EU member countries. The gap is particularly high in the group of older workers (aged between 55
and 64), with only a third working in Poland vs. 47% in the euro area. Poland is also confronted with the problem of a low and decreasing labour supply of women, with a 7 percentage points gap relative to the euro area for prime-age workers and 16 percentage points regarding older women. While the access to pre-retirement benefits and disability pensions was largely unrestricted in the 1990s, eligibility conditions have been tightened subsequently along with the creation of programmes targeted at older workers. Yet the pension reform has to be continued and the legal retirement age further increased. Other steps to enhance the labour supply of women would include the creation of additional nurseries and kindergartens, but also of nursing and retirement homes for older generations, the lack of which forces many women to retire so as to care for elderly parents. Finally, measures aimed at promoting inflows of foreign workers and return migration would also support higher labour utilisation and thus contribute to smoothing the process of convergence of GDP per capita and the price level. In particular, while cross-border emigration has been high and could represent an important channel of adjustment in the face of asymmetric shocks down the road, return migration seems to have been very limited so far despite Poland’s relatively better economic performance in recent years.

**Heading off the risk of a boom-bust cycle**

The convergence of interest rates would provide an important benefit for the Polish economy, likely to spur gross investment, potential growth and the convergence of GDP per capita. Adopting the euro should generate a significant reduction in long-term interest rates as exchange-rate-risk vanishes. With enhanced macroeconomic credibility and financial-market integration, the liquidity and sovereign components of the overall risk premium can be expected to diminish as well (NBP, 2009a). In late 2009, the spread between short-term interbank (3 months) and long-term government (10 years) interest rates in Poland and Germany amounted to around 350 and 300 basis points, respectively (Figure 11). The reduction in nominal interest rates that should start even before Poland joins the euro area will represent a significant expansionary impulse for the economy and will be accompanied by an even sharper drop in real interest rates stemming from the positive inflation differential relative to the euro area due to price-level convergence.

![Figure 11. Short and long-term interest rates](image)

While the reduction in interest rates creates significant benefits by encouraging investment, it does represent a concern for macroeconomic stability as well. The risk is related to the structural inadequacy between the level of real interest rates required by economic fundamentals and the one that will actually
prevail. More specifically, with euro-area membership the real interest rate might drop below its natural domestic level, *i.e.* the rate stabilising inflation and keeping output at potential. This equilibrium rate can be influenced by various factors, but most likely exceeds the euro-area benchmark notably because the marginal productivity of capital is higher in Poland.\(^{11}\) Indeed, the natural real policy interest rate is estimated to be around 2% in the euro area, while it might be closer to 4% in Poland (NBP, 2009a). In accordance with the golden rule (under which the natural real interest rate is equal to the long-run real GDP growth rate) and under a plausible scenario, this gap could persist over a relatively lengthy period. Indeed, assuming a linear convergence in GDP per capita to the euro-12 level in 30 years, this corresponds to a long-run GDP growth rate of almost 4% in Poland vs. 2% for the most affluent euro-area countries for the period 2006-2036 (Benassy-Quéré and Turkisch, 2009). Therefore, while the natural interest rate will converge to the euro-area level in the long term, in the short and medium terms the Polish economy will be exposed to the risk of a boom-bust cycle.

Assuming that a spread of around 350 basis and 220 basis points in market short-term and long-term interest rates prevails respectively for an output gap close to zero (a scenario that occurred in 2004-05) and considering that the inflation differential could amount to 1.5-2 percentage points once the euro is adopted (Benassy-Quéré and Turkisch, 2009), this would imply that the drop in real interest rates could be as large as in the case of Spain and Ireland. Indeed, while the average real short-term and long-term interest rates were around 5.0% in Ireland and Spain over the period 1991-98, short-term rates fell to almost zero and long-term rates settled slightly above 1% between 1999 and 2008 (Table 3). In comparison, short- and long-term interest rates in Germany declined only by around 130 basis points between the two sub-periods. There is also a potential for a decline in retail banking interest-rate spreads between Poland and the euro area (Figure 12). In fact, the reduction in bank loan rates *vis-à-vis* the euro-area benchmark between 2005 and 2007 coincided with strong domestic excess-demand pressures as attested by the extent of output and unemployment gaps in Poland. This is probably another indication that the level of the natural interest rate is higher than in the euro area and that the adoption of the single currency may trigger excessive lending and business-cycle volatility if not adequately addressed through structural, macro-prudential and fiscal-policy measures.

### Table 3. Decline in interest rates in Ireland, Spain and Germany

<table>
<thead>
<tr>
<th></th>
<th>Inflation(^1)</th>
<th>Nominal short term rate(^2)</th>
<th>Nominal long term rate(^3)</th>
<th>Real short term rate(^4)</th>
<th>Real long term rate(^4)</th>
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<td></td>
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<tr>
<td>1991-98</td>
<td>2.2 4.1 2.7 7.9 9.1 5.8 7.6 9.4 6.6 5.5 4.7 3.0</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1999-08</td>
<td>3.4 3.2 1.7 3.4 3.4 3.4 4.4 4.4 4.3 0.0 0.1 1.6</td>
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<tr>
<td>(\Delta)</td>
<td>1.1 –0.9 –1.0 –4.5 –5.7 –2.4 –3.2 –5.0 –2.4 –5.5 –4.6 –1.3</td>
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<tr>
<td></td>
<td>–4.2 –3.9 –1.3</td>
<td></td>
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</tbody>
</table>

1. Harmonised index of consumer prices (year-on-year growth rate).
2. 3-month LIBOR rates.
3. 10-year government bond rates.
4. Deflated by the harmonised index of consumer prices.

*Source:* OECD, Economic Outlook 86 database.

\(^{11}\) The Czech Republic is also a catching-up economy, though it exhibits a level of nominal interest rates comparable to that of the euro-area average. However, this might be due to a combination of much higher trade openness, significantly stronger appreciation of the real exchange rate as well as better anchored inflation expectations than in Poland over the last decade.
Figure 12. Retail banking interest-rate spreads between Poland and the euro area
Percentage points, monthly data

A. Spreads for new lending

B. Spreads for outstanding amounts

C. Economic slack¹

1. Monthly data calculated by linear interpolations of OECD quarterly estimates.

Source: National Bank of Poland and European Central Bank (Panels A and B); OECD, OECD Economic Outlook 86 database (Panel C).
Developments in some catching up economies that have either adopted the single currency in 1999 (Portugal, Ireland, Spain) or plan to do so by belonging to the ERM II with a fixed exchange-rate (Estonia, Latvia, Lithuania) illustrate the important risks linked to a boom-bust scenario (Box 2). Although much lower real interest rates played a major role, greater financing available to the private sector and overstated perceptions of permanent income gains contributed as well. In this downturn, all these economies are suffering a very deep and painful adjustment (with, for instance, falling nominal wages in Ireland and an unemployment rate of almost 20% in Spain), which may last longer than elsewhere. This highlights how unbalanced their economic growth really had been over the last decade or so, notably leading to a misallocation of resources. More generally, the combination of high foreign capital inflows, a fixed exchange rate and lower interest rates on foreign and/or domestic denominated loans fuelled a dramatic increase in domestic-credit-to-GDP ratios in many Central, Eastern and Southeastern European economies prior to the current crisis (OENB, 2009). Overconfidence about rapid membership in the euro area might have also led to a premature discounting of expected income gains by the private sector. Although the euro has eased access to international capital markets for catching-up countries, it may have amplified current account deficits at the same time, with surging private and external debt in foreign currencies, the build-up of excess-demand pressures and an inefficient use of foreign capital channelled to the housing sector (Nowotny, 2009). Such developments occurred not only in the Baltic countries, but also in Bulgaria and Slovenia. Indeed, empirical research confirms that financial deepening might have occurred at a pace overshooting fundamentals in various countries of the region before the crisis, which suggests a protracted and painful process of adjustment going forward; although Poland also witnessed vigorous lending growth between 2006 and 2008, this seems to have reflected a catch-up with improving fundamentals (Zumer et al., 2008).

There are several lessons and policy implications that can be drawn from the stylised facts for Spain and Ireland presented in Box 2.2. Declines in real interest rates do not necessarily result in an increase in “productive” investments conducive to a lasting pick up in potential growth. Such a scenario is all the more likely as the absorptive capacity of FDI inflows (business environment, R&D incentives, etc.) is insufficient, a framework that still needs to be improved in Poland (OECD, 2010b). Remedying such weaknesses is therefore essential for achieving a sustainable increase in potential growth following the reduction in interest rates.

Lending developments can add a significant boost to activity and propel economic growth to excessive rates, as the experience of Spain and Ireland indicates. It is essential that the authorities work toward preventing a lending boom, defined as a faster build-up in credit-to-GDP ratios than implied by improving economic fundamentals. In this respect, Eichengreen and Steiner (2008) consider that there is a risk of an unsustainable lending boom developing in Poland around the time of euro adoption, in particular in the segment of loans to households. There is indeed a significant potential for further financial deepening in Poland. While the ratio of private credit to GDP is close to 100% in the euro area, it is less than 50% in Poland. At the same time, mortgage loans represent 40% of GDP in the euro area versus only around 17% of GDP in Poland. This is despite the mortgage boom that led to an increase in foreign-currency lending (essentially in Swiss francs) in 2006-08, but the latest information indicates that new loans are again overwhelmingly in domestic currency. Moreover, the housing market is suffering from an important structural shortage as corroborated by indicators of the density of the dwelling stock, average living area and housing quality (OECD, 2008a). Therefore, even if an increase in residential supply is desirable, there is a risk that, with a much lower cost of capital and overly optimistic expectations of permanent income gains by households, the speed of bridging the housing gap exceeds what is consistent with the pace of improvement in economic fundamentals. In this context, the Polish Financial Supervision Authority has recently undertaken steps to supplement the “Recommendation S” introduced in 2006,
notably by creating a new recommendation ("Recommendation T"). The purpose is to harmonise credit standards when assessing borrowers’ creditworthiness and introduce a limit on loan instalment repayments at 50% that in any case should not be higher than 65%. However, the cap is nevertheless high, especially if it applies for foreign-currency lending, compared, for instance, to the unofficial practice in France where it does not exceed a third of income in domestic currency.

Box 2. The boom-bust cycles in Spain and Ireland

In the case of Spain (Figure 13), the decline in real long-term interest rates in the wake of euro adoption led to a significant boost in the investment rate, in particular when real interest rates became lower than real potential growth at the end of the 1990s. The investment rate increased from around 21% of GDP in the second half of the nineties, to above 30% in 2006-07. This development was concomitant with a rapid deterioration of the current account as domestic savings were insufficient to finance the investment boom, with net household saving declining and fiscal policy not contributing enough to close the financing gap. However, the increase in gross fixed capital formation was mostly driven by residential investment. Although business investment increased as a share of GDP, it declined as a share of total investment and, in the 2000s, this drop was mainly fuelled by a falling share of non-construction investments (metal products, machinery and transport equipment). Therefore, in this bubble-prone environment the contribution of vibrant investment growth to the "productive" capital stock was low and the growth of aggregate multi-factor productivity was actually slightly negative on average between late 1990s and 2007, according to OECD estimates. Productivity gains were at a standstill, despite rapid capital accumulation, though very strong increases in the labour input contributed as well. The pre-crisis period was also marked by a strong appreciation of house prices beyond what fundamentals would have suggested, with expectations of additional increases further encouraging residential construction. It was also marked by a sharp increase in households’ debt and growing costs of servicing it (absorbing most of household savings), while bank loans contracted at variable interest rates may have amplified the boom-bust cycle (OECD, 2008b). Nevertheless, the statistical provisioning scheme allowed a build-up of a cushion during the boom that strengthened the resilience of the banking sector. As from 2002, unit labour costs in manufacturing were growing at the same pace as for the total economy. This suggests a kind of Dutch disease effect, with rising wages in the non-tradables sector triggering wage adjustments in the traded-goods sector (Zemanek et al., 2009). However, the share of exports of goods relative to euro-area countries (excluding Germany, which has witnessed an outstanding export performance) has not deteriorated, even though it stopped improving in the 2000s. Yet, with the absence of a major worsening of Spain’s actual export performance, this may suggest the fragility of traditional competitiveness indicators based on unit labour costs, notably because they fail to account of quality improvements of exported goods and pricing policies of firms.

The example of Ireland (Figure 13) presents some similarities with the Spanish case: declining real short- and long-term interest rates along with a steadily falling (but positive) net household savings ratio and a sharp increase in the investment rate overwhelmingly driven by housing investment. Although the economy witnessed a continuously strong positive output gap between the mid-1990s and 2007, potential growth has actually followed a downward trend since the beginning of the current decade. The exceptional productivity growth rates of the second half of the 1990s faded away in the 2000s, domestic demand continued to grow very quickly, leading to a pick-up in inflation and hence very low real interest rates. As demand switched from tradables to non-tradables, this hampered competitiveness and favoured a reallocation of resources to the latter sector. Finally, export potential has been also negatively affected by the turnaround in unit labour costs of the manufacturing sector, though the existence of some sectors with very high measured productivity may not reflect the extent of incurred losses in the majority of industries.

Box 2. The boom-bust cycles in Spain and Ireland (continued)

12. “Recommendation S” aimed at strengthening credit-risk management at banks with regard to housing loans (notably in foreign currencies) and providing adequate information for customers about related risks (OECD, 2008a).
Figure 13 The boom-bust cycles in Spain and Ireland

Spain

1. Ratio of (Spain’s/Ireland’s) exports of goods in value to the sum of goods exports of countries belonging to the euro area (except Germany), in percentage. The series is smoothed by applying a four-quarter moving average.
2. Relative unit labour costs of the manufacturing sector.
3. As a percentage of gross fixed capital formation.

Source: OECD, Economic Outlook 86 database.
In order to rein in any unwelcome lending developments the authorities should consider further strengthening the macro-prudential framework once financial-market conditions and credit growth normalise fully. Given the dominant role of banks in financial intermediation in Poland, drawing on the experience of Spain, one measure would be to adopt an explicit dynamic (or statistical) provisioning scheme to deal with pro-cyclicality in banking. Indeed, international banking practices indicate that loan-loss provisions can be very low during periods of expansion and very high during recessions due to pro-cyclical pricing of risk. According to the framework applied in Spain over the last ten years, the regulator has required the implementation of dynamic provisions that are the sum of specific provisions and general provisions with a counter-cyclical component. Indeed, the latter corresponds to both latent credit losses in a cyclically neutral year and average specific provisions for a full lending or business cycle (Saurina, 2009). Such a backward-looking but transparent rules-based system allows a smoothing of the overall profile of total loan-loss provisions over the cycle. In doing so, it increases the banks’ cushion to absorb losses in a cyclical downturn and therefore the resilience and stability of the banking system. Indeed, in the absence of such a measure Spain would probably have experienced an even more acute lending boom and probably a greater deterioration in banks’ and households’ balance sheets in the ongoing bust. Yet, Spain’s experience also shows that dynamic provisioning is not an all-encompassing remedy as it may not prevent a major lending cycle from occurring. Moreover, given the unprecedented depth of the current recession, it is not certain that the amounts provisioned will be sufficient to absorb all losses that banks are exposed to. As a result, higher capital buffers could effectively complement dynamic provisioning (CEBS, 2009). These could be used to cover unexpected losses. Moreover, given that equity is the most expensive form of funding, they would also contribute to tame the decrease in bank lending rates once Poland joins the euro area. Finally, if tighter domestic rules lead to regulatory arbitrage, for instance through loans granted to the non-financial private sector directly by branches of foreign banks, financial supervision authorities should consider introducing binding limits on loan-to-value and loan-to-income ratios, backed by a comprehensive system of credit registry.

The risk of a housing boom and real estate prices overshooting fundamentals could be headed off by eliminating all fiscal incentives to promote home ownership. This would include the elimination of a reduced 7% VAT rate on the purchase of new apartments and houses (based on a very generous definition of social housing) and the programme of subsidised mortgage interest rates for low-income households introduced in late 2006 (OECD, 2008a). To scale down excessive mortgage lending developments the authorities could even consider introducing tax disincentives, such as the taxation of mortgage interest payments, which would further reduce households’ ability to take on debt (FitzGerald, 2009). At a minimum, housing-market policies should avoid creating a negative tax wedge between after- and pre-tax real interest rates on mortgage loans, as this may contribute to housing market instability (van den Noord, 2005). Market-value-based property taxes would also automatically help cool the market. If complemented by other measures, an increased price elasticity of supply for housing would also help to stabilise housing prices (OECD, 2008a): the establishment of municipal zoning plans has to be made compulsory, vocational training to ease capacity constraints in construction should be further encouraged and the functioning of the rental market improved. Some progress on renting is being achieved with a recent draft law which creates a new segment on the market for “occasional renting”, without restrictions on rent increases and curtailed tenant protection. It also generalises the lower tax rate of 8.5% (instead of 20% above EUR 4 000) on rental income for all type of contracts with the aim of reducing tax avoidance. However, competition between housing developers has to be strengthened as well, as there is evidence of very high profit margins.

Even though consistency must be insured between dynamic provisioning and international accounting rules, the Spanish example illustrates that this is feasible. Indeed, the scheme was adjusted in 2004 to respond to the introduction of the International Financial Reporting Standards.
The experience of Ireland and Spain illustrates that net household saving rates may diminish as households take advantage of new borrowing opportunities. The biggest potential for a lending boom in Poland is in consumer loans as attested by the size of the spreads in bank loan rates between Poland and the euro area, which is the highest for this category of lending (Figure 12). Coupled with unleveraged households’ balance sheets, this suggests that loan demand could expand following a drop in interest rates around the date of euro adoption. To promote saving, rather than excessive consumption, the authorities could consider enhancing tax facilities promoting voluntary long-term savings, even though this would have the downside of reducing tax revenues and possibly leading to a regressive tax structure.14

In the boom phase of the cycle an asymmetric expansionary demand shock linked to falling real interest rates may not be sufficiently offset by the competitiveness channel. From the theoretical point of view, the risk of cycle amplification is elevated when expectations are backward-looking and the output gap is more sensitive to the real interest rate than to the real exchange rate, in particular when labour and product markets are not flexible enough to swiftly react to changes in the latter (Toroj, 2009). Indeed, in a bubble-prone environment there might be a progressive reallocation of resources from the tradables (manufacturing) to non-tradables sectors (services, construction and real estate) driven by higher rates of return on capital and labour, as the examples of Ireland and Spain seem to suggest (Bover and Jimeno, 2007; FitzGerald, 2009). Such reallocation prolongs the expansionary phase insofar as the impact on activity of deteriorating competitiveness is offset by the boom in the shelter sector. This is all the more problematic as in the monetary union current account deficits can get a long way away from fundamentals with little constraint on their financing. However, when the bust occurs the challenge is to swiftly reallocate resources to other sectors of the economy. Yet, as this process might be difficult and protracted, it would be preferable to prevent ending up with an oversized sector (such as construction) in the first place. While macro-prudential and fiscal-policy measures can be important levers to address this issue, promoting economic education of the citizenry would be an additional way of preventing an excessive wave of optimism that could be triggered by the adoption of the euro. In particular, it is important that households bear in mind that income prospects cannot be expected to improve dramatically solely as a consequence of the membership in the common currency area. Such public awareness would help to slow down private debt dynamics and avoid the build-up of macroeconomic imbalances going forward.

Box 3. Main recommendations for preparing for euro adoption

Meeting the Maastricht criteria in a credible way

- Avoid setting any new official date for euro-area entry; establish and periodically assess a checklist of economic reforms that will allow the Maastricht criteria to be met in a credible and sustainable way and ought to be implemented prior to joining the euro area.

- Reduce the structural general government deficit to 1% of GDP or lower.

Measures to build a rules-based counter-cyclical policy

- Make consistent the definition of the public debt with Eurostat’s, notably by including the debt of the National Road Fund in the domestic definition.

- Introduce a rule in the Public Finance Act in terms of a ceiling on the structural general government balance consistent with the medium-term objective (MTO) of the Stability and Growth Pact of a deficit no greater than 1% of GDP. This would create room for the operation of automatic stabilisers, but

14. Long-term savings are not very popular in Poland as, for instance, is illustrated by weak development of the current voluntary (third-pillar) TEE pension savings scheme. TEE stands for “taxed-exempt-exempt” and describes a system that forces the taxpayer to pre-pay income tax on pension savings (the first T), but accrued income (the second E) and withdrawals at or shortly after retirement are exempted (the final E).
Discretionary fiscal policy would be possible only if the structural balance is kept at a safe distance from the MTO. Implement an expenditure rule with multi-year ceilings on general government expenditure in nominal terms.

- **Create an independent fiscal council** that will conduct regular surveillance of public finances and provide *ex ante* and *ex post* evaluations of the government’s performance with regard to the deficit and expenditure rules. The council could allow for discretion *vis-à-vis* the expenditure and deficit rules but should act in strict respect of the constitutional rule on the debt-to-GDP ratio.

- Before joining the ERM II, **correct major discrepancies in the level of regulated prices *vis-à-vis* the euro area**, in particular in sectors with prices below cost-recovery levels, and introduce a system of efficient incentive-price regulation to keep costs under control.

### Enhancing labour-market flexibility

- **End the rule that the ratio of the legal minimum to average wage should reach 50% at some point in the future** and refrain from further increasing the ratio. **Consider differentiating the minimum wage across regions depending on local labour-market conditions.**

### Heading off the risk of a boom-bust cycle

- **Strengthen macro-prudential financial regulation**, notably by introducing a dynamic provisioning scheme for banks and increasing their capital buffers. Consider adopting limits on loan-to-value and loan-to-income ratios.

- **To prevent a housing boom, remove fiscal incentives supporting the residential sector** such as the reduced VAT rate on new purchases and subsidised mortgage interest rates for low-income households. The implementation of market-value-based property taxes could also prevent the market from overheating. **Strengthening the supply side of the market is necessary as well** notably by making compulsory the establishment of municipal zoning plans, encouraging vocational training and strengthening competition in the construction sector. **Tighten fiscal policy if needed**, should economic imbalances start to develop, especially if driven by excessive residential investment and/or private consumption.

- **Promote the financial and economic education of the citizenry** in part in order to prevent an excessive wave of optimism triggered by the adoption of the euro.
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