Macroeconomic adjustment in the euro area: The cases of Ireland and Italy

1. Introduction

The introduction of the euro and globalisation of real and financial markets have changed the economic landscape in which national policymakers operate in Europe. How are the countries in the eurozone adapting to the new economic policy environment? The analysis in this chapter focuses on adjustment in response to country-specific shocks. The main analysis concerns Ireland and Italy. These countries are chosen to provide representative case studies, encompassing adjustment to excessive monetary stimulus as well as to recessionary effects of a loss of competitiveness and a fall in foreign demand for the country's products.

While the macroeconomic adjustment problem is the subject of a vast literature, it is useful to begin our chapter by reconsidering once again the essential issues at stake. We will do so by comparing an ideal monetary union where prices and wages are fully flexible with a union with nominal rigidities.

In a monetary union among countries with fully flexible prices and wages (and efficient financial markets), an asymmetric demand boom in a country would lead to an increase in the price and wage *levels* there, reflecting the relative scarcity of its domestic output. The prices of both non-tradable and tradable goods would rise, strengthening the real exchange rate (the country's price level relative to the price level abroad, both measured in the same currency) as well as the terms of trade (the price of the country's exports in terms of its imports). Clearly, a higher relative price would reduce the foreign demand for domestic output. The country would generally run a trade deficit, raising external debt, hence debt service in the long run.

In the presence of nominal rigidities, the short-run response to a country-specific demand boom instead "overheats" the economy hit by the shock: A demand surge raises output above the natural rate. If the shock is persistent, excess demand still increases domestic prices and wages, but over time rather than on impact. Obviously, a slow price adjustment translates into a temporary increase in expected inflation in the short run. So, for a given nominal interest rate, the real interest rate tends to fall on impact, temporarily reinforcing the boom in demand, a point stressed by the so-called "Walters critique" of the European Monetary System.[1] But ultimately, an adjustment occurs because of the increase in the price *level*, just as is the case in a flexible price economy.

Similar considerations apply to country-specific supply shocks. Consider the macroeconomic effect of a positive productivity disturbance to domestic tradable goods. Without nominal rigidities, output prices would fall, stimulating domestic and foreign demand. With price stickiness (and a common monetary policy which responds to country-specific shocks only marginally), instead, productivity gains imply that (other things equal) current demand can be satisfied with less inputs: Employment and capacity utilisation (inefficiently) fall.

To the extent that firms and households expect productivity gains to persist (or occur) in the future, productivity disturbances also cause temporary fluctuations in current demand: Anticipation of income gains and improvement in production efficiency raise current private consumption (people feel richer) as well as current domestic investment demand. Hence, domestic aggregate demand experiences a boom in the short run, which typically worsens the trade balance and causes a current account deficit. With flexible prices, or a flexible exchange rate, the short-run demand effect of anticipated productivity gains can be so strong that the country's terms of trade actually appreciate on impact (see Corsetti et al. 2006 for time series evidence). Over time, as new capital is installed (and to the extent that the expectations of higher productivity are

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[1] See Walters (1994) and Miller and Sutherland (1990). European Commission (2006) provides a recent empirical appraisal of the interest rate effect.

realised), supply "catches up" with demand. Because of the increasing domestic output, the trade balance improves, the terms of trade deteriorate and the real exchange rate depreciates.

A drawn-out process of nominal price and wage adjustment interferes with the dynamics described above. Prices and wages are likely to "overshoot" and cause a large real appreciation at a late stage in the process, when the increased productive capacity would actually require declining prices. The consequence is "competitiveness problems", which are aggravated if the experience of relatively high output growth in the short run translates into (over-optimistic) expectations of growth in the medium run, causing excessive spending and sustained dynamics of wage and price inflation.

A further dimension of the adjustment process reflects differences in the degree of nominal rigidity across sectors within a country. Plausibly, prices tend to be less rigid in sectors highly exposed to international competition. These sectors tend to react swiftly to demand and supply shocks. Conversely, adjustment in protected and imperfectly competitive sectors is typically sluggish. The delayed adjustment in these sheltered areas of the economy, however, affects production costs and efficiency of all firms in the economy, raising aggregate macroeconomic risks. In this respect, market-oriented reforms, including liberalisation and deregulation of utilities and services, are an essential part of the policy adjustment to the new economic environment.

The adjustment problem described above is at the heart of the seminal contributions to the literature on Optimal Currency Areas (OCA), including Mundell (1961), McKinnon (1963), Kenen (1969) and Ingram (1973). This literature stresses the costs of adopting a common monetary policy and giving up exchange

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Box 2.1

The costs of asymmetric shocks in a monetary union reconsidered

Recent literature reconsiders the fundamental issues raised by OCA theory in the framework of a new generation of stylised, choice-theoretical models (see Obstfeld and Rogoff 2002, Devereux and Engel 2003, Benigno 2004, Corsetti and Pesenti 2005a, 2005b, Adao et al. 2006 and Corsetti 2006a,b among others). These contributions have emphasised at least three channels through which adopting a common currency can decrease national welfare, relative to the benchmark case in which stabilisation policy is carried out by efficient and credible national policy makers.

First, if pricing decisions by firms are staggered (that is, only a fraction of firms set a new price every period), efficiency losses from a common currency stem from an increase in misalignment of relative prices. The explanation is that, relative to the case of a common currency, national monetary policy can better stabilise demand and target the national natural rate of output *at the current level of prices*. This means that, without a common currency, domestic firms resetting their product prices at any given point of time have little or no incentive to deviate significantly from the prices charged by the other domestic firms (which do not change their prices). In a monetary union, instead, country-specific shocks will have a stronger impact on pricing decisions. To the extent that firms adjust prices at different times, then, shocks will cause the price of similar products to diverge more substantially in a common currency area than with nationally conducted monetary policy, causing a greater (inefficient) dispersion in the market valuation of goods within and across product categories (see, for example, Woodford 2003).

Second, pricing decisions by firms will be affected by the fact that stabilisation policy in a common currency area will not necessarily react to shocks affecting demand or costs in the right direction, or with the same intensity, as with nationally differentiated monetary policies. Demand and cost uncertainty translates into suboptimal levels of prices and mark-ups. For instance, in Corsetti and Pesenti (2005a), firms react to demand and marginal cost uncertainty by raising mark-ups and reduce their supply ex ante. Other models have analysed how increased price uncertainty will cause trade unions to demand a "risk premium" and hence under collective bargaining lead to higher real wages and lower employment, on average, over the business cycle (see, for example, Andersen and Sörensen 1988 and Calmfors and Johansson 2004). Recent work has further extended the analysis encompassing firms' dynamics: In Corsetti and Bergin (2005) insufficient stabilisation discourages the creation of new firms and products. Combining all these results, the literature points to the possibility that output, employment, consumption and investment in a monetary union will be, on average, lower than with nationally differentiated, optimally conducted monetary policies.

Third, monetary policy that is appropriate for the union as a whole may be destabilising in some of its regions. It is well understood that monetary shocks destabilise demand and asset markets ex post. However, monetary noise (unrelated to a country's fundamentals) is also consequential ex ante. Specifically, monetary noise is likely to affect the price level and economic activity in similar ways as insufficient stabilisation (the second case discussed in this box). Empirical evidence on the effects of insufficient stabilisation *and* monetary noise on the price level is provided by Broda (2006). The empirical test builds on the idea that monetary policies in countries adopting a regime of fixed exchange rates are less effective in stabilising domestic marginal costs and the output gap, and moves noisily with nominal and financial shocks originating abroad. Broda's results suggest that the price level in these countries is indeed higher than in countries with a flexible rate regime: the difference is as high as 20 percent for emerging markets, somewhat smaller (and not statistically significant) for developed countries.[a]

[a] Broda (2006) shows that alternative explanations, including overshooting, inertia and fiscal policies, appear to play a lesser role in accounting for price level differences than the exchange rate regime.

rate flexibility, because of asymmetric (country-specific) temporary shocks. By logical extension the analysis also applies to asymmetric short-run responses to symmetric (common) shocks, including unexpected components of monetary policy. Recent theoretical analysis of these costs of a common currency is reviewed in Box 2.1. Specifically, the argument is that these asymmetries weaken the case for a common currency, as members of a monetary union lose the benefits from (i) monetary policy autonomy as well as from (ii) stabilising movements in the exchange rate.

The literature however also emphasises that the costs of joining a monetary union are low if at least one of the following is true: (a) prices and wages are sufficiently flexible; (b) fiscal policy effectively stabilises national economies; (c) consumption risk is sufficiently diversified across borders (or international financial markets work efficiently, so that agents can easily smooth consumption); (d) factors are sufficiently mobile also in the short run, at low private and social costs; (e) there are little asymmetries in shocks and in macroeconomic transmission.[2] This framework underlies most analysis of stabilisation policy design and reform. In what follows, the analysis of Ireland and Italy will mainly focus on points (a) and (d) above.

To facilitate comparison, Table 2.1 reports a set of indicators of the macroeconomic performance of the two countries in our sample, as well as of the euro area as a whole, based on the official Autumn 2006 forecast by the European Commission. This Table will be referred to throughout the analysis.

2. Ireland

Ireland entered the euro area well into a sustained period of economic expansion marked by profound changes in the structure of the economy and its place in the global economy. The most apparent indicators

of the Irish success are the rapid rise in per capita GDP and national income, now well above the EU average, and the fall of unemployment rates, from the double-digit figures in the 1980s to record lows around four percent in recent years. Rapid growth continued after the adoption of the euro, despite many changes in the international and domestic environment.

What makes the case of Ireland especially interesting in an analysis of adjustment is the country's strong macroeconomic performance, clearly asymmetric relative to the rest of the euro area. The asymmetry in macro performance is, to a large extent, explained by income convergence and catching-up. But because of this country's real and financial openness income convergence occurred along an unusually fast and successful path, as a steady inflow of FDI led Ireland to specialise in high-tech sectors with a highly elastic demand with respect to world growth.

At cyclical frequencies, many of the global exogenous shocks hitting the Irish economy were common to the rest of the euro area (for example, commodity price disturbances), although in some cases they might have hit the Irish economy more directly: This is the case of the collapse of the ICT share prices in 2000. An example of country-specific shocks is the foot-and-mouth disease starting in 2001. None of these shocks appear to have been particularly consequential.

The most apparent and controversial source of macroeconomic imbalance for Ireland has instead been the strong monetary stimulus since the end of the 1990s, when European monetary policies became strictly coordinated in the last stage of nominal convergence before the introduction of the euro. (Soon afterwards, the monetary stimulus was compounded by a weakening currency.) A relatively loose monetary stance was motivated by the cyclical conditions in the euro area as a whole, but arguably inappropriate for Ireland: It created undue demand pressures in the Irish economy. Indeed, as shown in Table 2.1, estimates of the output gap in the first years of the euro point to overheating. Correspondingly, estimates of the appropriate policy interest rate implied by a Taylor Rule for Ireland have been consistently above the ECB rate (see the analysis in Section 4.2 of Chapter 1 in this report).

A well-understood consequence of low interest rates is their effects on property prices. Ireland is one of

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[2] Potentially large benefits of a monetary union include those from policy delegation, gains from political integration (reflecting the opinion that this is more likely in the presence of monetary union), and saving on transaction costs (increasing cross-border trade). These arguments have played an important role in the debate on EMU. It is well understood that they can explain why some small European countries, whose specific cyclical conditions have a very limited weight in the European Central Bank's decisions, have nonetheless been eager to adopt the euro. Most importantly, they can explain why some countries that are currently suffering from competitiveness or fiscal problems do not find it attractive to leave the euro area, as life outside it would expose them to large financial shocks. See, for example, Calmfors et al. (1997) or HM Treasury (2003) for surveys and assessments of the arguments for and against EMU entry.

Table 2.1

Real GDP growth

	1997–2001	2002	2003	2004	2005	2006
Ireland	9.9	6.1	4.4	4.5	4.7	4.9
Italy	2.1	0.3	0	1.1	0	1.3
Euro area	2.8	0.9	0.8	2.1	1.3	2.1

Output gap

	1997–2001	2002	2003	2004	2005	2006
Ireland	3.2	3.5	1.7	0.1	− 0.5	-1.4
Italy	0.5	1.1	0	− 0.2	− 1.4	-1
Euro area	0.5	0.5	− 0.6	− 0.5	− 1.1	-0.6

Inflation (change in HICP)

	1997–2001	2002	2003	2004	2005	2006
Ireland	3	4.7	4	2.3	2.2	2.9
Italy	2.1	2.6	2.8	2.3	2.2	2.3
Euro area	1.7	2.3	2.1	2.1	2.2	2.2

Growth in real compensation per head

	1997–2001	2002	2003	2004	2005	2006
Ireland	0.8	-0.3	0.7	4.5	3.3	2.4
Italy	− 0.3	-0.1	0.9	0.8	0.5	0.4
Euro area	0.6	0.9	0.7	0.4	− 0.1	0

Change in real effective exchange rate

	1997–2001	2002	2003	2004	2005	2006
Ireland	− 5.5	1.6	8.1	6.9	2.4	2.5
Italy	− 2	3.5	8.1	3.1	0.3	1.4
Euro area	− 5.5	3.2	10.4	2.3	− 2.8	− 1.8

Note: relative to 35 countries (EU24 excl. Luxemburg, Australia, Bulgaria, China, Japan, Mexico, New Zealand, Romania, Russia, Turkey, UK, US).

Fiscal balance of general government (as a percentage of GDP)

	1997–2001	2002	2003	2004	2005	2006
Ireland	2.3	− 0.4	0.3	1.5	1.1	1.2
Italy	− 2.2	− 2.9	− 3.5	− 3.4	− 4.1	− 4.7
Euro area	n.a.	− 2.5	− 3.1	− 2.8	− 2.4	-2

Cyclically adjusted fiscal balance of general government (as a percentage of GDP)

	1997–2001	2002	2003	2004	2005	2006
Ireland	1.1	− 1.8	− 0.3	1.4	1.3	1.7
Italy	− 2.5	− 3.4	− 3.5	− 3.3	− 3.4	− 4.1
Euro area	n.a.	− 2.8	− 2.7	− 2.5	− 1.9	− 1.7

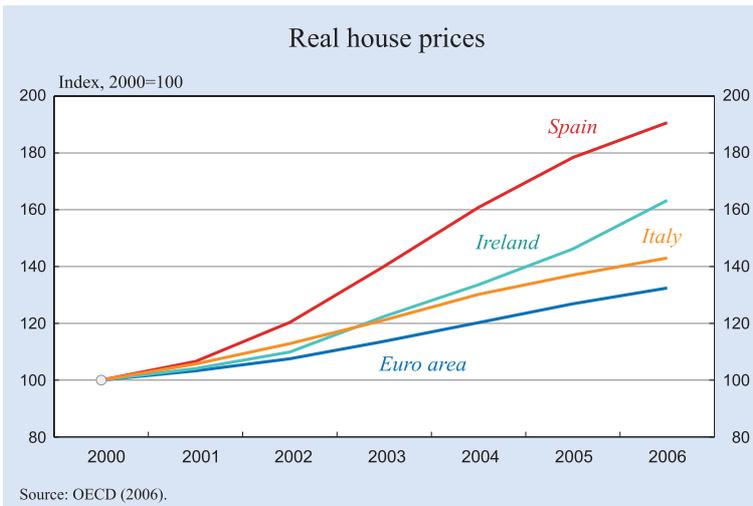Note: Real effective exchange rates are defines as real unit labour costs.

Source: European Commission (2006b).

the countries with the strongest housing price dynamics. Figure 2.1 displays the evolution of housing prices in real terms for Ireland, Italy, Spain and the euro area as a whole since 2000. In Ireland, the price of housing is apparently growing well above the euro area average, although not as fast as in Spain (see the analysis in Chapter 5 of the 2005 EEAG report). By fuelling the property price boom, low interest rates stimulated the demand for new housing in Ireland,[3] being one of the main determinants of the strong expansion of the construction sector.

In 2005, the construction sector in Ireland accounted for approximately 20 percent of the country's GDP and employed more than 10 percent of the labour force (see European Commission 2006a). To the extent that the growth of the construction sector is due to an inappropriate monetary stance, this is an

[3] In real terms, Irish housing prices grew at an average rate of 17.6 percent per annum between 1995 and 2000. After 2000, housing prices have continued to appreciate in real terms at the average rate of 8.3 percent (data are from OECD 2006). The dynamics of Irish housing prices is obviously driven to a large extent by the ongoing process of income convergence. Nevertheless, persistently low interest rates have arguably played a key role in keeping the real rate of appreciation high.

Figure 2.1

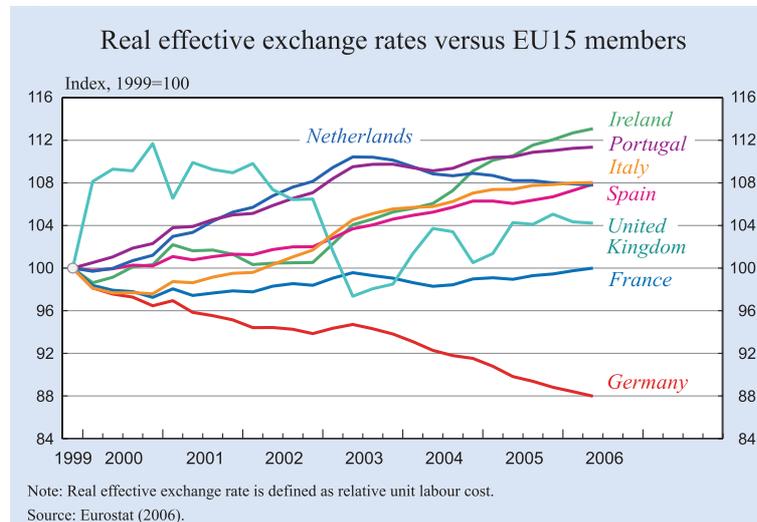### Real house prices

Index, 2000=100

Source: OECD (2006).

How did the Irish economy cope with the prolonged period of expansionary macroeconomic policy? In response to booming demand, Irish labour costs relative to the Irish trading partners, which were on a downward trend between 1985 and 2000, have increased fast in the years of the euro. According to the European Commission data shown in Table 2.1, in the period 2004 to 2006, the rate of growth of real compensation per worker in Ireland exceeded by 10 percentage points the average for the euro area.[6] Due to the high productivity growth, relative unit labour costs have increased by less, but the rises have still been significant.[7] Figure 2.2 displays an index of the real effective exchange rate between 2000 and 2006 for a sample of European countries based on unit labour costs relative to 15 trading partners. Two countries stand out most vividly: Germany, which recorded the largest fall in relative unit labour costs (hence the largest gain in competitiveness), and Ireland, which recorded the largest rise.

Figure 2.3 shows the level of hourly labour costs in 2005 for a selected sample of European countries. For 2005, the hourly labour costs in Ireland are compara-
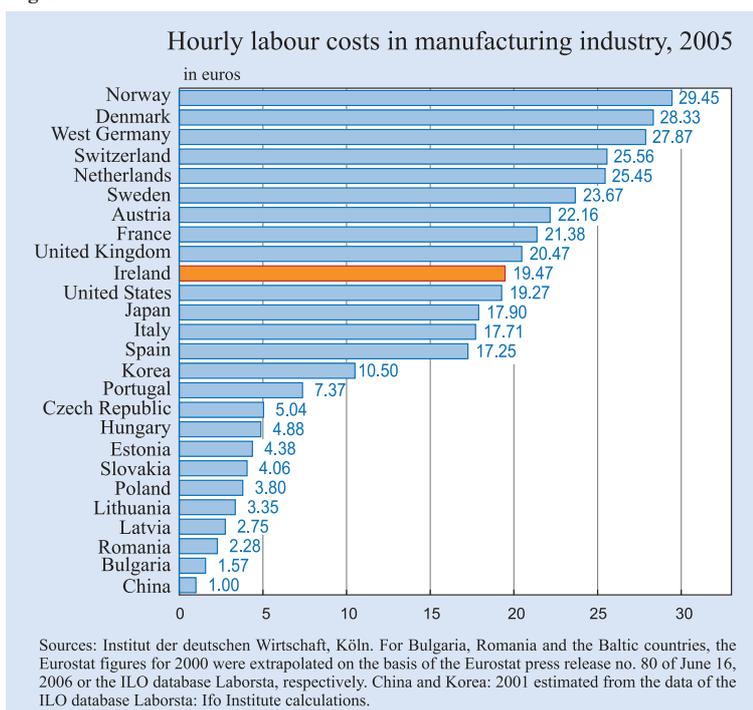
example of a real macroeconomic cost, in terms of misallocation of capital and resources.[4]

In addition, while fiscal developments overall in Ireland have been remarkably sound, in the early years of the euro, fiscal policy was pro-cyclical. Table 2.1 shows that, up to 2004, the Irish cyclically corrected balance was stronger than the actual balance. At the European level, the Irish fiscal stance was criticised in the past on the ground that fiscal stimulus was inappropriate in the presence of already strong private demand growth and positive monetary stimulus.[5] Yet high spending on infrastructure is arguably desirable along the convergence process, especially when high growth translates into a falling public debt-to-GDP ratio. In addition, one may argue that "procyclical spending" is appropriate if the cyclical movements are driven by productivity fluctuations. When output expands in response to high productivity, it is efficient to increase production of all goods, both private and public.

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[6] Honohan and Leddin (2005) report that hourly earnings relative to trading partners rose by approximately 25 percent between 2000 and 2004.
[7] See Chapter 2 of EEAG (2006) for an analysis of the causes of the high productivity growth in Ireland.

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[4] Similar considerations apply to Spain. Currently, Spain's main problem is the sustainability of a growth that has so far delivered results well above the euro area average, but is based on a construction and real estate boom. Investment in housing currently amounts to 1/3 of total investment. With an inflation rate well above the euro area average (even widening since 2003), the country is losing competitiveness, as can be seen in Figure 2.2. Different from Ireland, however, Spain is lagging in productivity growth, and experiencing large external deficits.
[5] In the meeting of the Ecofin Council on 12 February 2000, Ireland's budgetary plan for 2001 was judged inconsistent with the Broad Economic Policy Guidelines, because it was inappropriately expansionary. The Ecofin Council issued a recommendation to Ireland to correct its budgetary position.

Figure 2.2

Real effective exchange rates versus EU15 members

Index, 1999=100

Note: Real effective exchange rate is defined as relative unit labour cost.
Source: Eurostat (2006).

Figure 2.3

Hourly labour costs in manufacturing industry, 2005

in euros

Country	Value
Norway	29.45
Denmark	28.33
West Germany	27.87
Switzerland	25.56
Netherlands	25.45
Sweden	23.67
Austria	22.16
France	21.38
United Kingdom	20.47
Ireland	19.47
United States	19.27
Japan	17.90
Italy	17.71
Spain	17.25
Korea	10.50
Portugal	7.37
Czech Republic	5.04
Hungary	4.88
Estonia	4.38
Slovakia	4.06
Poland	3.80
Lithuania	3.35
Latvia	2.75
Romania	2.28
Bulgaria	1.57
China	1.00

Sources: Institut der deutschen Wirtschaft, Köln. For Bulgaria, Romania and the Baltic countries, the Eurostat figures for 2000 were extrapolated on the basis of the Eurostat press release no. 80 of June 16, 2006 or the ILO database Laborsta, respectively. China and Korea: 2001 estimated from the data of the ILO database Laborsta: Ifo Institute calculations.

ble with those in the UK and France, higher than the Italian ones, although still substantially below the German ones (about 25 percent lower).

The loss of cost competitiveness relative to the other European countries, as well as relative to the world at large (especially after the euro started to appreciate in 2002), has not so far translated into a notable slowdown in exports. Arguably, this is due to the fact that Irish exports are concentrated in sectors, like ICT, which respond quite positively to the current high growth in the global economy.

Honohan and Leddin (2005) have stressed an additional element in the Irish dynamic adjustment. In principle, a strong demand expansion should have created a severe labour shortage. But the booming economy stimulated a strong migratory inflow, with two major effects: first, the increasing supply of labour contained upward pressures on wages somewhat, especially in low-skill occupations.[8] Second, the additional workers in the economy raised aggregate demand, reinforcing the expansionary macroeconomic stance for

the economy as a whole. Since the availability of jobs acts as a strong driving force for migratory decisions, a sustained economic boom created incentives for further migration. Figure 2.4 illustrates the strong acceleration of net inflows of people in recent years. In 2006, 86,900 people immigrated into Ireland, which is equivalent to 2.1 percent of the Irish population and 4.1 percent of the labour force.

Overall, then, during the long-lasting phase of high growth, adjustment seems to have worked as predicted by theory, through real exchange rates and migratory movements. An overall expansionary policy mix caused real appreciation, although adjustment through wages and labour costs was arguably contained because the strong migratory inflow reduced excess demand in the labour market.

The concentration of Irish exports in dynamic sectors with a high elasticity with respect to world demand makes Ireland's export performance vulnerable to changes in the world trade pattern, or to a global

[8] Barret and McCarthy (2006) have shown that the education level of immigrants to Ireland is actually quite high relative to the Irish population. However, migrants are found to earn 18 percent less than natives, controlling for education and years of work experience (this average reflects large differences across immigrants from English-speaking and non-English speaking countries).

Figure 2.4

Migration Ireland

Source: Central Statistics Office Ireland (2006).
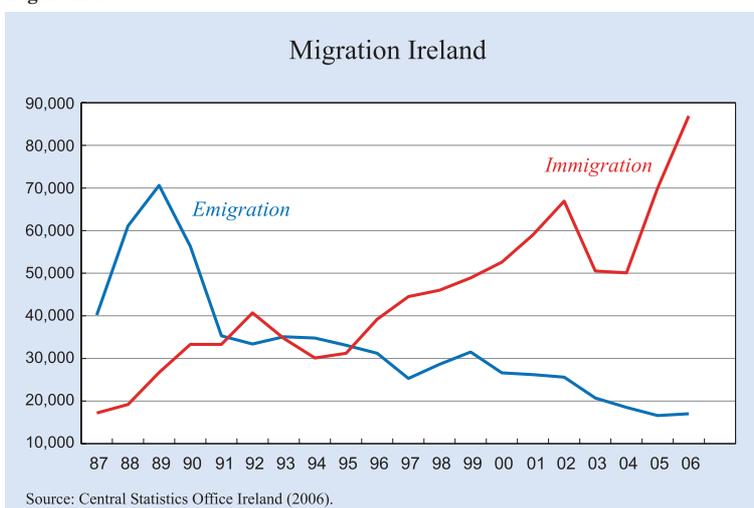
slowdown. By the same token, the macroeconomic performance of Ireland would be heavily exposed to a correction in property prices, likely to cause a severe drop in activity in the construction sector (see, for example, Roche 2003). For these reasons, there is substantial macroeconomic risk built into the current state of the Irish economy.

Already in our 2002 EEAG report, we discussed adjustment problems with specific reference to the Irish case (see Chapter 4). In that report, we emphasised macroeconomic risks due to asymmetries in the adjustment process via factor prices and the real exchange rate. Adjustment to demand shocks via this channel tends to work effectively in response to expansionary shocks. It tends to be sluggish in response to negative shocks. In the case of Ireland, the risk is that recent high growth rates would translate into sustained expectations of growth in labour compensation, which may become incompatible with macroeconomic stability, especially once the process of income convergence comes to an end. There is thus a risk that the real exchange rate will overshoot. An important issue raised by the Irish case is the extent to which overvaluation in the goods market can interact with property prices and developments in the construction sector. The demand boom phase has been reinforced and arguably prolonged by the increases in property prices and a construction boom. The issue is whether and to what extent a possible output downturn can be exacerbated by a fall in property prices reducing consumption demand, but also generating a crisis in the construction sector.[9]

In the case of a sharp slow down of the construction sector, adjustment would require some combination of migratory outflows and changes in the sectoral composition of employment. Such a slowdown would also raise the demand for public support of unemployed foreign workers, putting pressure on the Irish welfare state. In this respect it is worth stressing that a large fraction of migrants to Ireland are from the EU10 countries. In 2005, for instance, 26,200 out of 70,000 immigrants came from the EU10; in 2006, it was 37,400 out of 86,900 (Central Statistics Office 2006).

The Irish experience raises interesting issues regarding the contribution that labour mobility from outside the euro area can make to macroeconomic adjustment within the area. Clearly, migration flows from outside the euro area have helped contain labour shortages, especially for low-skilled workers. Absent the flow, we would have observed an even faster wage and price adjustment.[10]

However, to some extent, the contribution of migration to adjustment is hampered by its indirect, destabilising effect on demand, due to the fact that, as mentioned above, new workers also raise domestic aggregate spending. For instance, Honohan and Leddin (2005) have stressed that migration actually can magnify (rather than bridge) demand imbalances. In Ireland, the demand for new housing by migrants is one of the factors contributing to the strong dynamics of the real estate market, hence to the prolonged boom in the construction sector.[11]

The macroeconomic risk of a hard landing after a strong expansionary period is illustrated by the experience of the Netherlands in the last decade, as reviewed by the European Commission (2006). This country is similar to Ireland as regards its degree of openness. (Although the high volume of exports and imports reflects to a large extent the importance of Dutch ports in Europe.) In contrast to Ireland, however, its growth is arguably no longer driven by income convergence.

The Netherlands experienced a strong economic boom in the second half of the 1990s, when strong wealth effects from asset price appreciation in the housing[12] and the stock markets drove up domestic demand. The unemployment rate fell to extraordinary low levels – around 2 percent in 2001. The boom led to a period of strong wage and price adjustments around 2000, causing inflation to peak at above 5 per-

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[9] Putting it another way: In Ireland there are two potential sources of crisis, the strength of the real exchange rate, which may become a problem if a global slowdown reduces external demand for the country's products, and a collapse in house prices, which would reduce consumption (via wealth effects) as well as the level of activity in the construction sector.

[10] The original contributions to OCA theory emphasised migration flows *within* the currency area, which have stabilising effects in both the country of origin and the country of destination. Adjustment via net migratory flows *from outside* the currency area still mitigates imbalances in specific countries, but also affects the tightness of the labour market for the monetary union as a whole.

[11] Honohan and Leddin (2005) present a model in which, because of the additional demand expressed by migrant workers, adjustment through migration can be subject to long lags and complex dynamics, including a succession of self-fulfilling expansion and contraction equilibria. A similar model could be applied to Spain, where migrants have provided cheap labour for the construction sector (as well as the tourist sector). Strictly speaking, however, adjustment via labour mobility at cyclical frequencies should work via *temporary* changes in *net* migration flows in response to demand shocks (see Buiter et al. 1998). In other words, it should affect net migration flows in the short run, without influencing the stock of workers in the long run (arguably, it is the latter that drives the demand for housing).

[12] Between 1995 and 2001, house prices in real terms grew by 10.7 percent per annum in real terms in the Netherlands, against 1.5 percent in the euro area. In the period 2002 to 2005, however, the real appreciation of house prices was only 3.2 percent per annum (against an average 5.2 percent increase for the euro area).

cent in 2001.[13] Thus, over the turn of the millennium, the Netherlands rapidly lost price and wage competitiveness, especially relative to Germany, its main trading partner. When the boom in internal demand faded away, low competitiveness exacerbated the slowdown.[14]

3. Italy

The Italian case is in many dimensions the opposite relative to the Irish one. While Ireland has enjoyed rapid growth and income convergence through specialisation in dynamic, high-tech sectors, Italy's long-term growth has slowed down considerably. Italian manufacturing firms, largely specialising in traditional low-tech industries, have been facing increased competition from emerging market economies. Ireland is a small, very open economy, with substantial foreign direct investment and financial portfolio diversification. Italy is a medium-sized, open economy with substantial barriers to foreign capital. Before the EMU, Ireland had built a strong fiscal framework. Italy entered the EMU with a substantial stock of public debt, which has constrained the scope for adjustment policies, implying short-run fiscal costs. The structural fiscal stance has actually deteriorated after joining the euro area (see Table 2.1). The monetary stance at the onset of the common currency, excessively expansionary for Ireland, was neutral for Italy. It became instead too tight over time (see the analysis in Section 4.2 of Chapter 1).

Our analysis focuses on Italy as an example of slow adjustment in response to shocks reducing foreign demand. The creation of a common European currency

[13] The European Commission (2006a) pointed out that "as high economic growth persisted, most estimates of Dutch structural economic growth were revised upwards. With the benefit of hindsight, it can be concluded that the economic boom period from 1996 onwards was not structural, but of a temporary nature" (p. 224).
[14] The real exchange rate kept appreciating during the recession. In part because of the euro appreciation vis-à-vis the dollar, it appreciated by 3.9 percent in 2002 and 4.8 percent in 2003, years in which the growth of the Dutch GDP ground to a halt (0.1 and – 0.1, respectively).

Figure 2.5

Share in world merchandise exports in volume terms

Source: Banca d'Italia (2006b).

coincided with a strong crisis in competitiveness and productivity in Italy, exacerbated by the appreciation of the euro since 2002.

The Italian export crisis has not erupted suddenly but has been developing since the mid-1990s. Between 1995 and 2005, the share of Italian exports in world exports at constant prices fell from 4.6 to 2.7 percent, a 40 percent drop. The comparison with Germany, shown in Figure 2.5, is striking: Over the same period, the German export share grew by 15 percent. If exports shares are instead calculated at current prices, the share of Italian exports in world exports fell from 4.6 to 3.7 percent (see De Nardis and Traù 2005). Of course, Italy is not the only developed country to lose market shares over the period, as there is a trend shift in favour of the emerging market economies. Figure 2.6 plots the evolution of the share of national exports in world exports at current prices for most
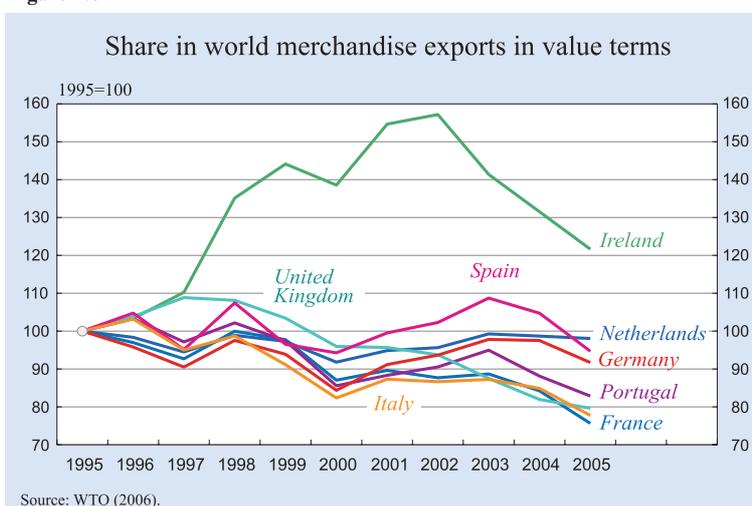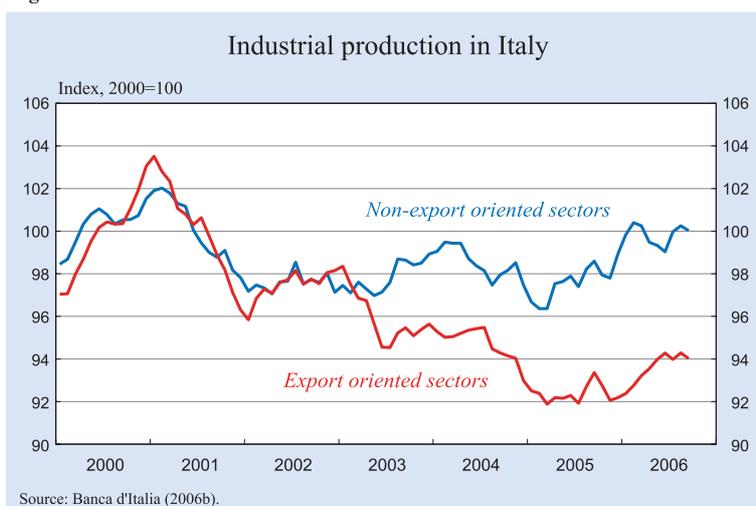
Figure 2.6

Share in world merchandise exports in value terms

Source: WTO (2006).

Figure 2.7

Industrial production in Italy

Index, 2000=100

Non-export oriented sectors

Export oriented sectors

Source: Banca d'Italia (2006b).

European countries. With the exception of Ireland, most countries lost positions over the period 1995 to 2005. Italy and France recorded the largest drops, closely followed by the UK.

Nonetheless, the Italian competitiveness crisis substantially worsened after 2002, coincident with the appreciation of the euro. Figures 2.7 and 2.8 display industrial production and capacity utilisation distinguished among sectors. It is apparent that the Italian export crisis became acute after 2002. The index of industrial production for the exporting sectors lost approximately 6 points relative to non-exporting sectors from 2003 on. A similar gap can be detected for capacity utilisation.

In response to the large external shock to export demand, adjustment would require real depreciation. This has not yet occurred in Italy. The real exchange rate of Italy has been appreciating rather steadily since the introduction of the euro, as shown by Table 2.1 and Figure 2.2. Focusing on manufacturing only, the Bank of Italy reports that between 2000 and 2005, unit labour costs in Italy increased by approximately 30 percent relative to the country's main trading partners; in the same period, relative unit labour costs in manufacturing rose by 10 percent in France and remained stable in Germany.

In part, the relative increase in Italian unit labour costs is due

to the growth of wages. While low in real terms, wage growth was positive overall and above the euro area average (see Table 2.1). In a significant way, however, the increase in relative unit costs is also a consequence of the other striking dimension of the Italian competitiveness crisis, which is the disappointing performance of productivity. As shown in Table 2.2, after growing by 1 percent per year in the second half of the 1990s, labour productivity in Italy stopped growing in 2000 (against positive although low growth for the euro area as a whole), and actually fell in three years. The Italian productivity problem encompasses virtually all sectors of the economy. In the period 2001 to 2005, labour productivity contracted in manufacturing (at the rate of 0.8 percent per annum), as well as in the service sector (Banca d'Italia 2006a). Similar developments have also characterised total factor productivity.[15]

The combination of positive growth in compensation and negative growth in productivity has raised unit labour costs at rates clearly incompatible with the goal of improving competitiveness. By way of exam-

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[15] According to Tables 4.4 and 4.5 in Chapter 4 of this report, GDP per hour contracted by, on average, 0.4 percent and total factor productivity in the overall economy by 1.2 percent per annum in Italy over the 2000 to 2004 period. These developments have no counterparts in other European countries. See also Chapter 2 of the 2006 EEAG report for a more detailed analysis of different growth (or non-growth) models in Europe.
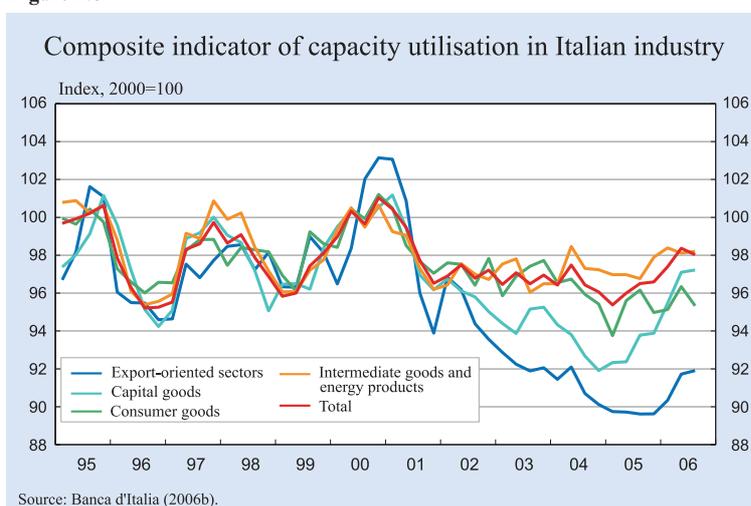
Figure 2.8

Composite indicator of capacity utilisation in Italian industry

Index, 2000=100

Export-oriented sectors
Capital goods
Consumer goods
Intermediate goods and energy products
Total

Source: Banca d'Italia (2006b).

Table 2.2

Labour productivity growth (real GDP per hour, percentage change)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Ireland	4.5	4.3	9.7	5.3	5.3	4.1	3.9	4.9	4.0	1.4	1.0
Italy	3.0	0.4	1.4	0.9	0.7	1.4	0.6	– 1.3	– 0.4	0.7	– 0.9
Netherlands	2.4	– 0.5	– 0.1	3.0	1.7	2.0	1.3	1.8	0.7	2.9	1.3
Spain	0.4	– 0.1	0.0	– 0.8	0.1	– 0.4	– 0.6	0.7	– 1.1	– 0.7	– 1.3
Euro area	2.1	1.1	2.1	1.1	1.6	2.5	0.9	1.3	0.4	1.1	0.4

Source: Groningen Growth and Development Centre, Total Economy Database, calculations by the EEAG.

ple, in Italian industry, labour costs increased by 2.4 percent in 2005, and 4.5 percent in the first half-year of 2006. Labour productivity fell by 0.7 percent in 2005, and only grew by 0.2 percent in the first half-year of 2006 (Banca d'Italia 2006b). As a result, unit labour costs rose by 3.1 and 4.4 percent, respectively. For the economy as a whole, labour costs rose by 2.4 percent in 2005, and 3.2 percent in the first half of 2006.

It is worth stressing that, over the last few years, Italy underwent notable changes in the labour market. The Italian unemployment rate dropped from double-digit figures in the 1990s to 7.1 percent in 2006,[16] well below the average of the euro area. To a large extent, employment growth was driven by the diffusion of part-time and irregular jobs. For example, in 2005, full-time jobs increased by 1.3 percent, part-time jobs by 7.2 percent (accounting for 13 percent of dependent employment). Employment on fixed-term contracts also rose by 6.2 percent (accounting for 12.3 percent of dependent employment). Similar patterns characterised 2006.[17] These developments follow recent labour market reforms (especially the so-called 'legge Biagi' from 2003,[18] which have increased the flexibility of labour contracts. Increasing flexibility in

the labour market has clearly contributed to the adjustment process, insofar as it has created opportunities for firms to save on overall labour costs (including both labour compensation and administrative costs such as firing costs). Nonetheless, it has also created an economic and social divide between workers with permanent contracts (the "insiders") and workers with fixed-term renewable contracts.

The strong dynamics of labour costs correspond to that of inflation, which has remained above the euro area inflation until 2005 (see Table 2.1). There are notable differences in the evolution of prices in the tradables and non-tradables sector. Between 2002 and 2005, the HICP-based inflation rate was as high as 2.5 percent per annum, on average (see Table 2.1). Over the same period, the average annual increase in the price of services was 2.9 percent per annum, whereas that of the price of goods (excluding foods and energy) was only 1.8 (see Banca d'Italia 2006a).

In the presence of country-specific competitiveness problems in a monetary union, national fiscal policy faces a well-known trade-off. Gaining competitiveness requires disinflation, hence a fiscal contraction; supporting output and employment requires a fiscal expansion. As shown by Table 2.1, Italy did not follow the first option: The general stance of the government remained expansionary.

Before the euro, Italy's policymakers responded systematically to competitiveness losses with nominal devaluation accompanied by some measures of fiscal consolidation and contraction of domestic demand. This was the case in the 1970s, in a high inflation environment, as well as throughout the 1980s, in an environment of declining inflation. The currency crisis of 1992 to 1993 showed that the recipe could work relatively well for Italy as well as for other European countries, including the UK, Spain, Portugal, Finland and Sweden (see the discussion of the latter two countries in Section 5 of Chapter 4). Devaluation allowed these countries to gain competitiveness with surpris-

[16] This fall in unemployment corresponds to an increase in the share of dependent workers in total employment. In 2005, for instance, dependent employment increased by 2.6 percent; self-employment contracted by 4.1 percent. Banca d'Italia (2006a) emphasises the record magnitude of the drop in self-employment in 2005, driven by a reduction in activity by members of family businesses (– 25.7 percent) and cooperatives (– 28.3 percent), as well as by a reduction in temporary jobs (– 24.3 percent) usually performed by young women. About 15 percent of previously self-employed workers found a permanent job.

[17] At the same time as the rest of Europe, Italy experienced a steady inflow of migrants from outside the area. Recorded resident workers have increased significantly after the regularisation by law of 650000 irregular immigrants in 2002 (Law 189, July 2002).

[18] This 'legge Biagi' (legge delega 30/2003) regulates a number of novel types of labour contracts, including apprenticeship, occasional employment, part-time jobs, job sharing, staff-leasing and job on call (see Montuschi et al. 2004 and Pirrone and Sestito 2006). An interesting question is the extent to which (if any) the growth of temporary and fixed-term jobs over permanent jobs can explain the disappointing productivity performance. On the one hand, workers without tenure may have a strong incentive to raise their efforts (see Ichino and Riphahn 2005). On the other hand, to the extent that turnover of workers increases, there could be a loss of firm-specific and/or occupation-specific human capital (see Marimon and Zilibotti 1999 and Autor et al. 2006).

ingly little effects on domestic prices and financial stability, despite a regime of high capital mobility (see Buiter et al. 1998 for a discussion).

With the euro, it is still possible to adopt a similar policy strategy, engineering a so-called *internal devaluation.* This consists of fiscal measures aimed at reducing the labour costs faced by firms. Indeed, the coalition that won the election in spring 2006 placed an internal devaluation at the centre of its electoral programme in the form of a cut (up to five percentage points) of the "tax wedge" between the take-home pay by the workers and the firms' cost of employing them. Such an internal devaluation is being gradually implemented in the form of deductions from the Italian tax on regional productive activities (IRAP), whose base includes labour costs, over the period 2007 to 2009. Deductions are selective and benefit only non-financial firms (excluding public utilities). As part of the tax cut benefits the workers, the measure reduces firms' labour costs by about 3 percent.

But internal devaluation, which the EEAG group endorses, can only compensate, in small part, for the positive inflation differential vis-à-vis the rest of the euro area experienced by Italy in the last few years. Because cuts in firms' payroll taxes need to be financed through increases in other taxes or through cuts in government expenditures, an internal devaluation can only be small and have the character of a one-off measure. Hence, its effectiveness is very limited. However, this is not only a disadvantage. The constraint that a government cannot use this instrument repeatedly prevents firms from delaying adjustment on expectations of further adoption of the same measure, as argued, for example, by the Calmfors Commission in Sweden (Calmfors et al. 1997) and Calmfors (1998).

Most crucially, however, there are apparent reasons why internal devaluation alone cannot be the solution to the current Italian crisis. Substituting internal devaluation for exchange rate devaluation cannot address the problems arising from increasing competition from emerging markets. Italian exports have been traditionally strong in light manufacturing (machinery and mechanical utensils), as well as in textiles, apparel, leather products and shoes, now increasingly supplied by emerging markets at low prices. Italian firms have mainly lost ground in the market for low- to medium-quality varieties of these products. The crucial issue is then: What prevents Italian industry from redirecting the use of its

human and physical capital towards the production of different products or high-quality varieties of the above products? The current crisis clearly reflects structural constraints, which limit the ability of Italian firms to innovate and acquire new technologies (for example, the slow acquisition of ICT technology was highlighted in Chapter 2 of last year's EEAG report).[19]

What is the "right" product specialisation for Italian firms? To put it simply: There is no answer to the above question other than the one given by international markets. It would be a mistake to design policies under the presumption that the public sector is a better judge than private markets in identifying profitable and dynamic activities. The Italian government may at one point be tempted to adopt programmes of subsidies and public investment to the benefit of specific firms and sectors, using the misleading label of industrial policy. The substantial body of evidence on failures of such "dirigisme" makes it clear that such an approach would plainly result in misallocation and social waste. However, the weak fiscal conditions in Italy impose a natural constraint on such policy option.

There are instead structural measures that could substantially help Italian firms. While a thorough analysis of these measures is outside the scope of a chapter on cyclical adjustment to shocks, we stress the lessons from the recent experience of Scandinavian countries reviewed in Chapter 4 of this report. This chapter points to the benefits of market liberalisation and pro-competition policies as cornerstones of successful policy strategies. In the last decade, Sweden and Finland have benefited very much from high productivity growth and innovation, which have helped them improve their competitive positions in the presence of fairly high rates of wage growth. Chapter 4 argues

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[19] A well-known feature of the Italian industrial structure is the small average dimension of Italian firms or, more precisely, the abnormally low share of medium-sized enterprises. In principle, falling trade costs and advances in ICT technology should have been good news for Italy, to the extent that small firms could take advantage of low fixed costs to acceding larger markets for firms' output and inputs. However, as argued by Rossi (2005), Italian firms are perhaps too small to benefit from globalisation: For a number of technical, organisational and economic reasons, benefits from low trade costs and ICT are better reaped by medium-sized firms, which is the category that is vastly under-represented in Italy (see Trento and Warglien 2003). There is no scarcity of studies on the structural determinants of firm size in Italy that stress both economic and sociological factors. The consensus view appears to emphasise two inter-related factors (see Barca et al. 1994). On the one hand, Italian entrepreneurs seem extremely reluctant to grow using external finance and thus to lose or dilute their control over the business. This attitude may be partly cultural, but clearly also reflects deficiencies in both the structure of the Italian financial markets and intermediaries *as well as* in the normative and judicial system. On the other hand, a larger size raises the fiscal visibility of a firm, reducing the room for tax evasion (see also Onida 2004).

that product market deregulation was an important factor behind this development.

Deregulation policy would involve large benefits also for short-run output stabilisation and adjustment of competitiveness. The reason is that with the euro and globalisation of real and financial markets, the divide between firms exposed to external competition, on the one hand, and firms and activities enjoying rents due to the lack of competition, on the other hand, becomes deeper. The latter firms have a much lower incentive to raise efficiency and reduce prices in response to external (foreign demand) shocks. Examples are provided by Italian public services, energy, telecommunications and transportation industries. The lack of efficiency and competitive pricing in these sectors creates a cost disadvantage for *all* firms operating in the country; privileges and monopoly rents in protected sectors translate into high costs for the entrepreneurs in the tradable sector, reducing their ability to compete in the international markets (see the economic analysis of economic nationalism in Chapter 6 of this report).

Moreover, to the extent that increasing competition leads to innovation and adoption of new technology, liberalisation should increase the rate of productivity growth. In this respect, the Scandinavian experience reviewed in Chapter 4 points to the importance of the interplay between a well-educated workforce and investment in ICT technology (capital-skill complementarity). This is not an item usually discussed in relation to macroeconomic adjustment in a currency area. However, in the case of Italy, slow or negative growth in labour and total factor productivity is an important dimension of the competitiveness problem. A change in this trend is an essential component of adjustment. For all these reasons, deregulation measures are a natural complement to traditional stabilisation measures, such as internal devaluation.[20]

In light of these considerations, the long delay in the pace of structural product market reform in Italy has been highly unfortunate. According to the Global Competitiveness Index of the World Economic Forum (Lopez-Claros et al. 2006) Italy's rank still fell by four positions between 2005 and 2006. Italy's rank

is now 42 ahead of Greece (47), but behind Portugal (34) and Spain (28).

At the end of 2006, there are several indicators of improvements in the macroeconomic outlook in Italy. In some sectors, this turnaround could reflect the end of a restructuring phase in which firms invested in higher quality product lines and outsourced some segments of their production process (a view suggested by anecdotal rather than hard evidence). The positive outlook should be taken as an opportunity for the Italian government to accelerate the implementation of reforms and deregulations promised in its electoral programme, so as to create the premise for a return to growth.

However, another possibility is that positive cyclical growth, to a large extent driven by the dynamics of the global economy as well as of the rest of Europe, could generate complacency and defence of the status quo. In the past few years, for instance, a positive macroeconomic outlook and low interest rates gave the Italian government an opportunity to proceed towards fiscal consolidation. As the analysis in the previous EEAG reports and Chapter 1 of this report shows, the fiscal outlook actually worsened. Complacency would be quite damaging in the present situation.

4. Conclusions

The first years in the life of the euro have witnessed a variety of country-specific experiences as regards macroeconomic adjustment in the new policy environment of EMU. The two case studies, of Ireland and Italy, in this chapter shed light on the adjustment problems in response to both expansionary and contractionary shocks.

The main conclusions of the chapter, which square quite well with the received wisdom in academic and policy analyses, can be summarised as follows. First, stabilising movements of the real exchange rate are asymmetric: Appreciation is faster in response to a booming demand than depreciation in response to negative shocks, which is delayed in time and sluggish. In the Irish case, labour costs have increased very rapidly in the context of the expansionary monetary and policy mix of the first years of the euro. In Italy, the slowdown has not prevented labour costs from increasing in real terms. Due to slow or negative productivity growth, the Italian real exchange rate

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[20] As a cautionary note on the potential impact of deregulation policies on stabilisation, it is worth stressing that these policies may have perverse effects on prices and efficiency in the short-run, for a number of economic and political-economy considerations. However, this is not an argument against implementing them.

continued to appreciate during a prolonged period of demand and growth slowdown. Adjustment is asymmetric across sectors: It is faster in sectors exposed to international competition.

Second, in the short run, adjustment dynamics may paradoxically move demand in the same direction as shocks. This point was emphasised early on in the so-called Walters critique of the EMS. In response to a demand boom, adjustment does require an increase in the price level, although this is delayed because of nominal rigidities. But this means that, in the short run, expectations of higher inflation can further stimulate aggregate demand. As suggested by the Irish experience, similar considerations may apply to the adjustment via labour movements. Immigration of workers can contain labour shortages caused by demand shocks, reducing the pressure on prices. Yet, new migrants also increase expenditure at the aggregate level.

Third, asset prices, especially housing prices, appear to play a large quantitatively relevant role in the dynamics of adjustment. Through their impact on real estate prices, low real interest rates can fuel sustained construction booms, which outlast the initial demand shock and contribute to continued real appreciation. One could argue that the growth of the housing stock in Ireland is at least in part due to a convergence process for the capital/population ratio. Yet, the strong rate of expansion and the high market valuation of the housing stock clearly point to the risk of a significant reversal in the rate of activity at some point in the near future. At that point, the strong real exchange rate resulting from the ongoing real appreciation will need to be corrected.

The general lesson for the countries in the monetary union is that, without exchange rate flexibility, the inherent dynamics of adjustment are likely at some point to cause "competitiveness problems". As we argued in the introduction, real appreciation and depreciation via changes in relative inflation are an essential part of the adjustment process. Yet, because of rigidities, their timing and size may give rise to large fluctuations in output and employment. In response to a negative shock, real depreciation is slow to materialise, creating macroeconomic stress. In response to a demand boom, real appreciation is delayed and overshooting is probable. Real appreciation during and after a demand boom can thus contain the seeds of a very serious slowdown, entailing large macroeconomic costs.

These macroeconomic costs could – and should – be reduced using fiscal policy to affect aggregate demand. Internal devaluation, exchanging cuts in firms' payroll taxes for rises in other taxes and cuts in government expenditures, are appropriate policies. In practice, however, the scope for such fiscal intervention is limited. An alternative which is especially relevant for countries like Italy is to pursue pro-competition policies that reduce monopoly power in the sectors of the economy least exposed to international competition. To the extent that such policies result in more competitive pricing and greater efficiency in service sectors, this would enhance Italy's external competitiveness. The diverging experiences of countries with high productivity growth, such as Ireland and the Scandinavian countries on the one hand, and countries like Italy, Portugal and Spain, on the other, point to the importance also for short-run adjustment dynamics that could be played by policies that beef up productivity growth.

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