

Employment and aggregate demand

1. Introduction

National accounts data suggest that the economic slowdown of 2001-2003, though rather prolonged, was not particularly sharp. However, recent surveys (for the first quarter of 2005) have underlined the risks posed, for example, by increases in energy prices, which have clearly heightened the danger of a “double-dip” cyclical downturn¹. This bears out the assessment made in the Commission’s Spring 2005 forecast that the balance of risks was tilted towards the downside.

Although in the EU-15 both the output gap and the dynamism of domestic demand during the 2001-2003 period compare favourably with the previous cyclical downturn of 1992-1994, Germany stands out as a major cause for concern because of the weakness and even decline in all major expenditure components and in employment in recent years. This concern also reflects the potential impact on the EU as a whole through the usual knock-on effects (i.e. cross-border trade and financial links).

It is against this backdrop that this chapter examines a number of issues related to economic activity in general, and employment and aggregate demand in particular, beginning with the level of economic activity and short-term prospects (based mainly on survey data). Then, for the seven largest EU Member States², economic developments are compared between the cyclical downturns of 1992-1994 and 2001-2003, with a particular

focus on domestic demand and its components. This is followed by an analysis of the quarterly national accounts data for some of the largest EU-15 Member States³ to assess cyclical trends, with a particular emphasis on the links between output/demand/exports and employment outcomes. Then, following broadly consensual findings in the literature, the impact of aggregate demand (shocks) on labour market outcomes is briefly reviewed. Finally, given the potential role of disequilibrium factors, such as demand shocks, in conjunction with the high persistence of labour market variables, the cyclical properties of budgetary policy are investigated for the euro area as a whole, together with a brief mention of the rationale behind the revised Stability and Growth Pact and some of its essential aspects.

2. Analysis of cyclical developments based on survey data

Although rather prolonged, the economic slowdown of 2001-2003 was not particularly sharp when compared to the economic recession of 1992-1994 (chart 86). The estimated output gap⁴ in the EU-15 for the 2002-2004 period averaged -0.6 percentage points, which compares with -1.4 percentage points for the 1993-1995 period. This general assessment regarding the relative sharpness and duration of the 2001-2003 cyclical downturn is corroborated by a number of indicators, as follow:

- The seasonally adjusted capacity utilisation level in the industrial sector has remained below its historical average since the fourth quarter of 2001 (chart 87).
- The seasonally adjusted consumer confidence indicator deteriorated between early 2001 and the beginning of 2003, but has since steadily improved (chart 88).
- The seasonally adjusted industrial confidence indicator deteriorated markedly between mid-2000 and the end of 2001, but then improved before declining in the first quarter of 2005 (chart 89).
- The euro area business climate index (a composite indicator) declined between the end of 2000 and late 2001. However, the indicator improved significantly between mid-2003 and mid-2004 but then in March 2005 moved back into negative territory (chart 90).

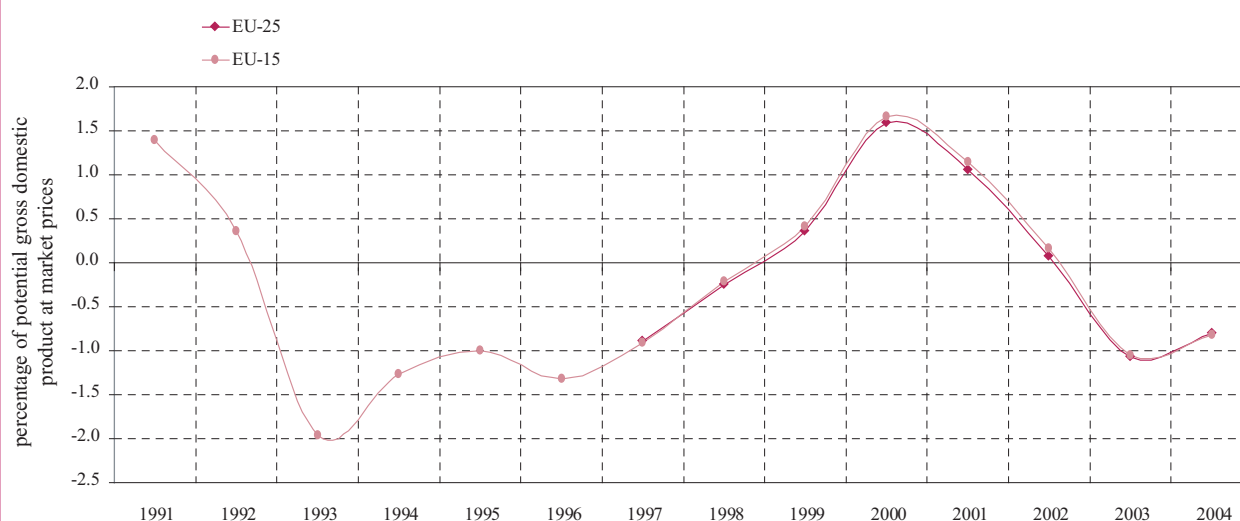
Overall, the available data suggest that the economic slowdown of 2001-2003 was not particularly sharp. However, as recent developments revealed by economic surveys indicate (in the first quarter of 2005), the risks posed by additional rises in commodity prices (chart 91), particularly in the energy sector, have clearly heightened the danger of a “double-dip” economic downturn. In the Commission’s Spring 2005 economic forecast, economic activity in the EU was already projected to decelerate in 2005, largely because of the strong rise in oil prices.

1 For a detailed analysis see the Commission’s forthcoming Autumn economic forecast.

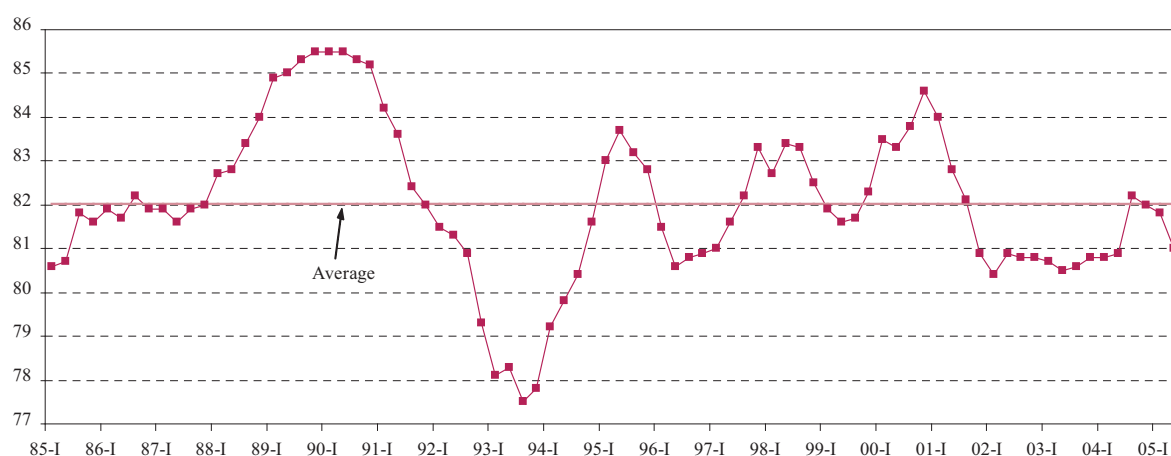
2 DE, ES, FR, IT, NL, PL and UK.

3 DE, ES, FR, IT, NL and UK.

4 Gap between actual and potential gross domestic product expressed as a percentage of potential gross domestic product; Source: DG ECFIN, Ameco.

Chart 86 – Gap between actual and potential gross domestic product at 1995 market prices

Source: DG ECFIN, Ameco.

Chart 87 – Current level of capacity utilisation in the industrial sector (seasonally adjusted percentages)

Source: DG ECFIN, Industrial Survey.

More recent developments seen in economic surveys and oil prices seem to confirm the assessment made in the Commission's Spring 2005 forecast that the balance of risks was tilted towards the downside⁵.

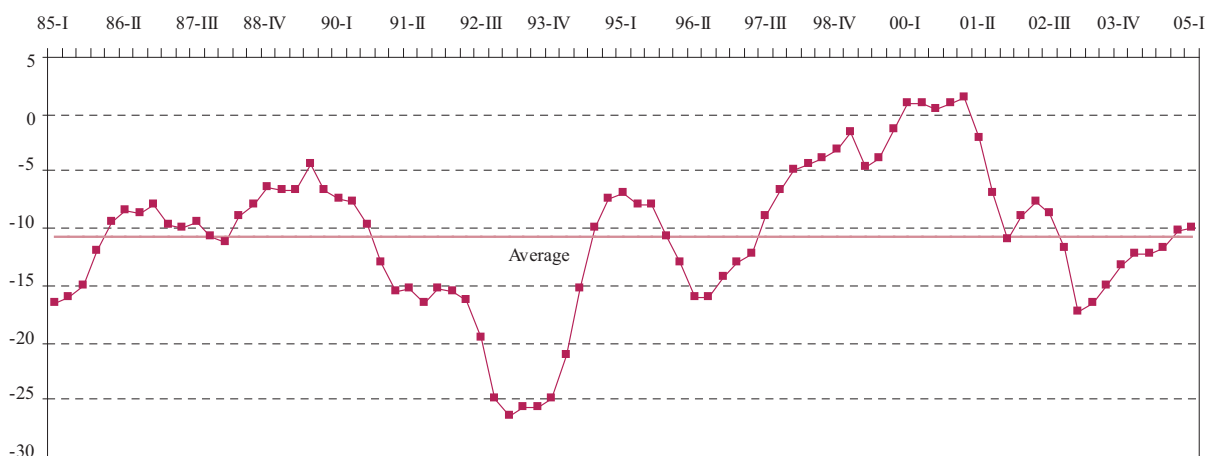
3. Analysis of economic developments based on annual national accounts data

In the EU-15, GDP grew on average at a similar pace in the 2001-2003 period compared to the previous cyclical

downturn of 1992-1994 (1.2 percent and 1.1 percent per year, respectively). However, an analysis by Member State shows a diversity of experiences. Using annual national accounts data, scatter plots have been drawn to relate average growth rates during the last two economic slowdowns for a number of aggregate variables. For practical reasons, this exercise has been car-

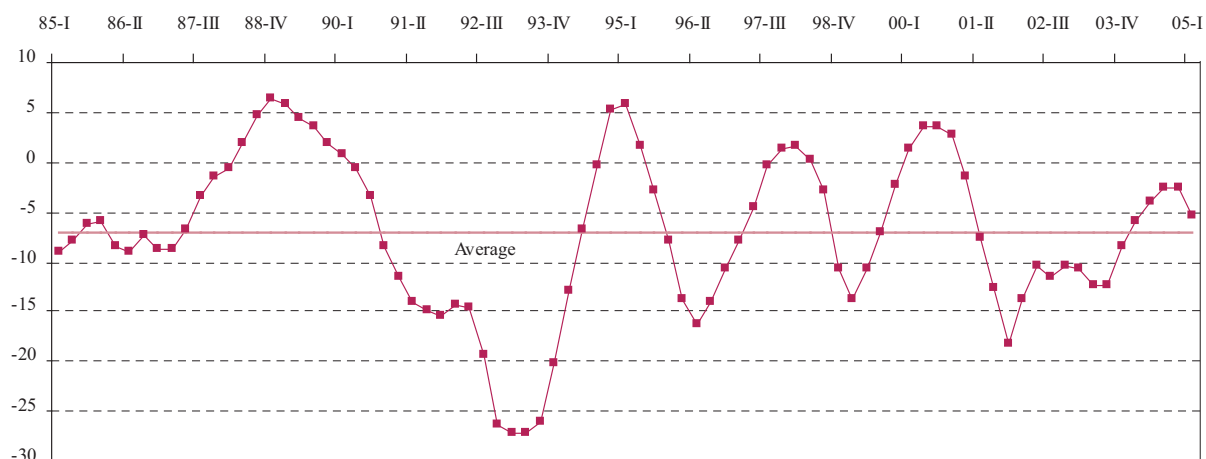
5 For an updated and more comprehensive analysis see the Commission's forthcoming Autumn forecast.

Chart 88 – Consumer Confidence Indicator in the EU (seasonally adjusted)



Source: DG ECFIN.

Chart 89 – Industrial Confidence Indicator in the EU (seasonally adjusted)



Source: DG ECFIN.

ried out for only the seven largest EU economies (DE, ES, FR, IT, NL, PL and the UK), which represent about 80 percent of the total EU economy.

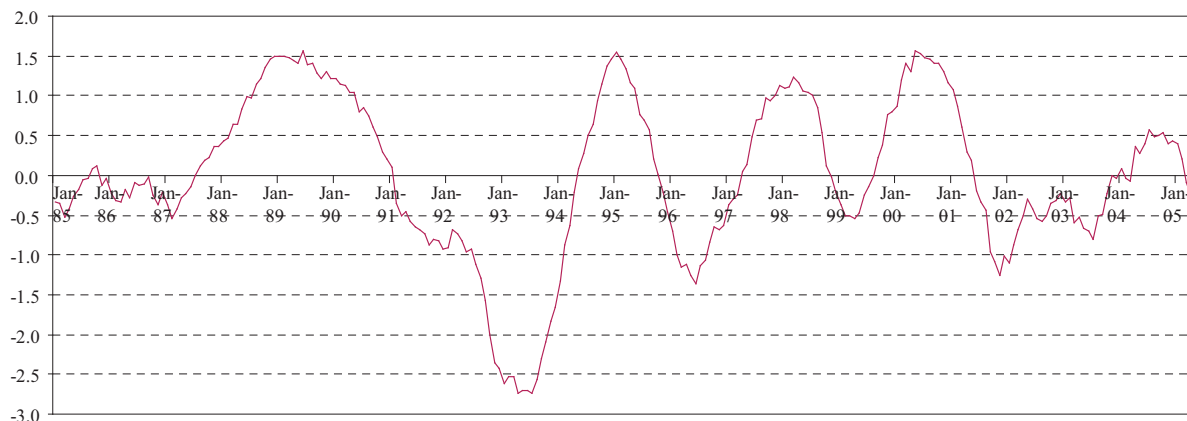
GDP

As regards GDP (chart 92), three Member States performed worse in the last economic slowdown (2001-2003) than in the previous one (1992-1994), namely Germany, the Netherlands, and Poland⁶. In two Member

States (Italy and the United Kingdom), the outcomes were qualitatively similar in the two periods, although the growth rate was significantly higher in the United Kingdom. Finally, two Member States (France and Spain) performed better in the last cyclical downturn, although the improvement

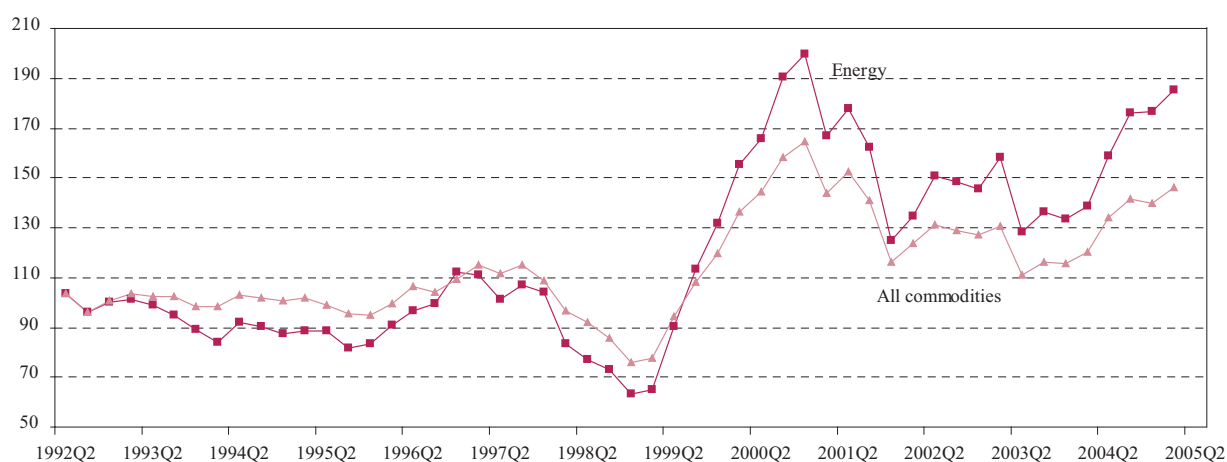
6 It can be argued that the Polish case is qualitatively different from that of the other countries, because Poland is undergoing a protracted period of economic restructuring, which has gathered pace since 1998, first in the aftermath of the Russian crisis and then in the 2001-2003 period with the economic slowdown in the EU-15. Therefore, the recent negative developments in Poland cannot be fully attributed to cyclical conditions as in the other 'mature' economies considered.

Chart 90 – Euro area business climate index



Source: DG ECFIN.

Chart 91 – Price indexes in Euro deflated by the GDP price index in the Euro area (100=1992q2 to 1992q4)



Source: IMF, OECD and own calculations.

was only marginal in France while in Spain it was more significant.

Employment

During the economic slowdown of 2001-2003, employment developments were considerably more favourable than in the previous cycli-

cal downturn in the first half of the 1990s (chart 93). This is in line with the finding that structural improvements in the functioning of European labour markets have occurred in recent years (discussed more fully in Chapter 2), together with the fact that the cyclical downturn of 2001-2003 was less pronounced than the previous

one. The strength of job creation in Spain and Italy over the period 2001-2003 is particularly worth mentioning. Both Member States had introduced significant (labour) market reforms in the second half of the 1990s.

Domestic demand

Comparing the two cyclical downturns, the significantly slower GDP growth in Germany and in the Netherlands largely reflects domestic demand developments⁷ (chart 94). In particular, domestic demand in Germany decreased from an average annual growth rate of 1.5 percent in the 1992-1994 period to -0.6 percent in 2001-2003. Part of this decline does not seem to be associated with changes in cyclical patterns *per se*, but instead results from “levelling-off” effects related to the process of German reunification, including the uninterrupted fall in construction investment since 1995 following the sharp rise in the period immediately after reunification (see below).

Construction

Somewhat unexpectedly (and contrary to some widely held views), domestic aggregate demand was on average stronger during 2001-2003 than during the 1992-1994 cyclical downturn in Spain, France, Italy and the United Kingdom, contributing to higher domestic aggregate demand in the EU-15⁸ as a whole. In particular, investment in construction was higher in a number of Member States (chart 96). The loosening of monetary policy in the euro area since 2000, following the lowering of nominal rates in the run-up to EMU, together with the housing boom in the UK, contributed to the significant growth rates in construction spending during the 2001-2003 period, which are especially significant given the cyclical position in the EU at the time. In the 2001-2003 period, annual spending on construction grew on average by 4.9 percent in

Spain, 2.6 percent in Italy, and 10.3 percent in the United Kingdom, while it stabilised in France.

In Germany and (to a lesser extent) the Netherlands, trends in construction spending diverged from those in the other Member States. In the 2001-2003 period, construction spending in Germany fell on average by 4.6 percent per year, compared to an average positive growth rate of 6.4 percent during the period 1992-1994⁹. In the aftermath of German reunification, between 1991 and 1994, the level of construction investment increased by an overall 20 percent, but since 1995 it declined year on year (with the exception of 1999) to reach in 2004 a level (at constant prices) 6.5 percent below that of 1991. Consequently, the decline in construction expenditure in Germany has been exerting a considerable drag on total investment and domestic aggregate demand since the second half of the 1990s.

Equipment

Equipment spending fell in nearly all the large Member States during both periods (chart 97), although, apart from the UK (where spending grew in the early period), the drop was smaller in the period 2001-2003.

Private consumption

Overall, developments in private consumption expenditure corroborate the assessment that the economic slowdown of 2001-2003, although rather prolonged, was not particularly sharp when compared to the economic recession of 1992-1994. In France, Spain and the UK, the average growth rate of private consumption in the

2001-2003 period exceeded that in 1992-1994, while the average growth rate in Poland was a vigorous 2.8 percent in the 2001-2003 period (chart 98). However, Germany stands out again as having the weakest average growth rate of only 0.3 percent per year in the 2001-2003 period. Moreover, in the years 2001 to 2004, private consumption in Germany fell by an overall 1.1 percent. Since 2000, the household savings rate has increased significantly in Germany (chart 103) following a marked deterioration in consumer confidence.

Government consumption

In the EU-15 as a whole and in a number of large Member States (Spain, France, Italy and the United Kingdom), the average growth rate of government consumption increased during the 2001-2003 period compared to 1992-1994 (chart 99). In Germany and Poland the opposite occurred, although in Germany the average growth rate of government consumption in the 2001-2003 period was considerably higher than that of GDP (1.0 percent and 0.3 percent, respectively), while in the 1992-1994 period it was boosted by outlays related to reunification.

The German singularity

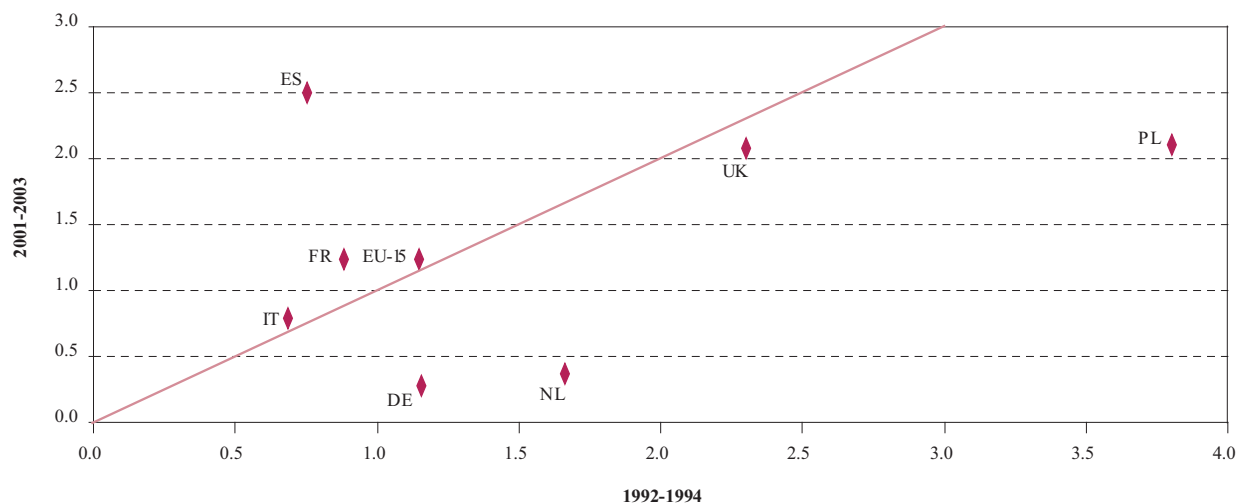
An analysis of open economies requires a comprehensive assessment of the drivers of economic growth and employment creation without this being limited to a discussion of the factors affecting total and domestic aggregate demand. Foreign demand, and in particular the ability of countries to remain competitive and secure an adequate level of exports and mar-

7 Domestic demand excluding stocks.

8 EU-25 data for the 1992-1994 period are not available.

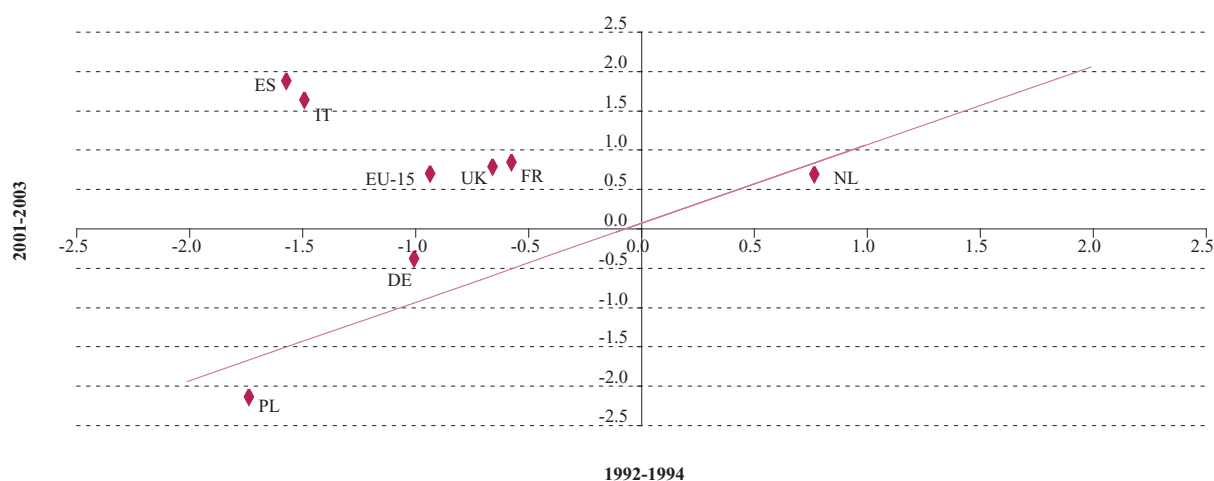
9 In the Netherlands, -2.1 percent and 1.0 percent, respectively.

Chart 92 – GDP, average growth rates (percentages)



Source: Ameco.

Chart 93 – Employment, average growth rates (percentages)



Source: Ameco.

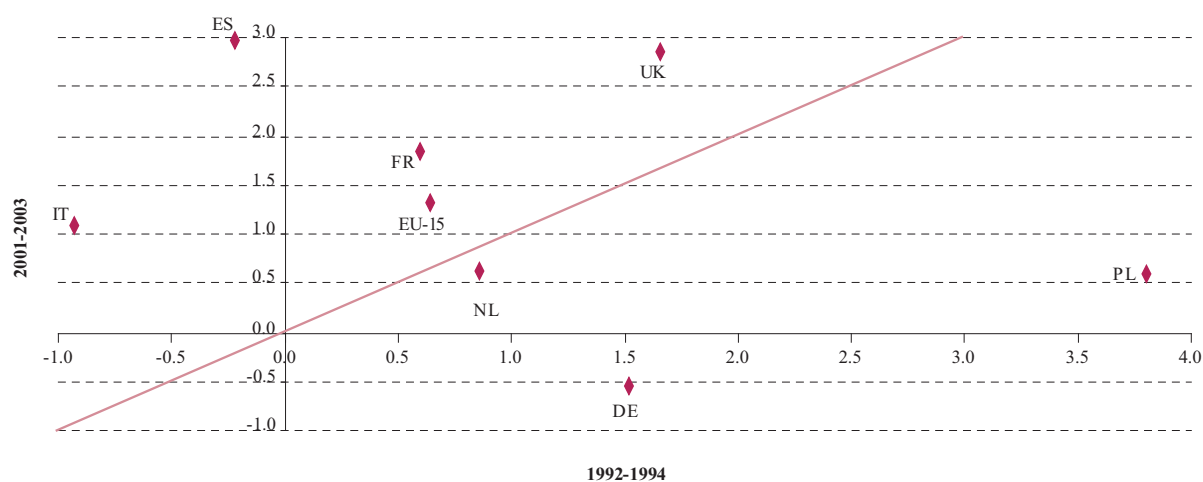
Note: PL: 1993-1994.

ket share, are also issues that have to be addressed. Although in the EU-15 as a whole both the output gap and the dynamism of domestic demand during the 2001-2003 period compare favourably with the previous cyclical downturn of 1992-1994, Germany stands out as a major cause for concern because of the weakness or even decline in all major expenditure com-

ponents during the 2001-2003 period. This special concern is not only for this country *per se* but is also due to the potential impact on the EU as a whole through the usual knock-on effects. However, assessment of domestic demand developments in Germany calls for two important qualifications to be made.

Firstly, since the mid 1990s, Germany has been gaining price competitiveness particularly against other EU Member States (chart 101). In recent years, very low growth in nominal wages has translated into price competitiveness and market share gains, despite the appreciation of the euro. Exports of goods and services in real terms have increased on average by

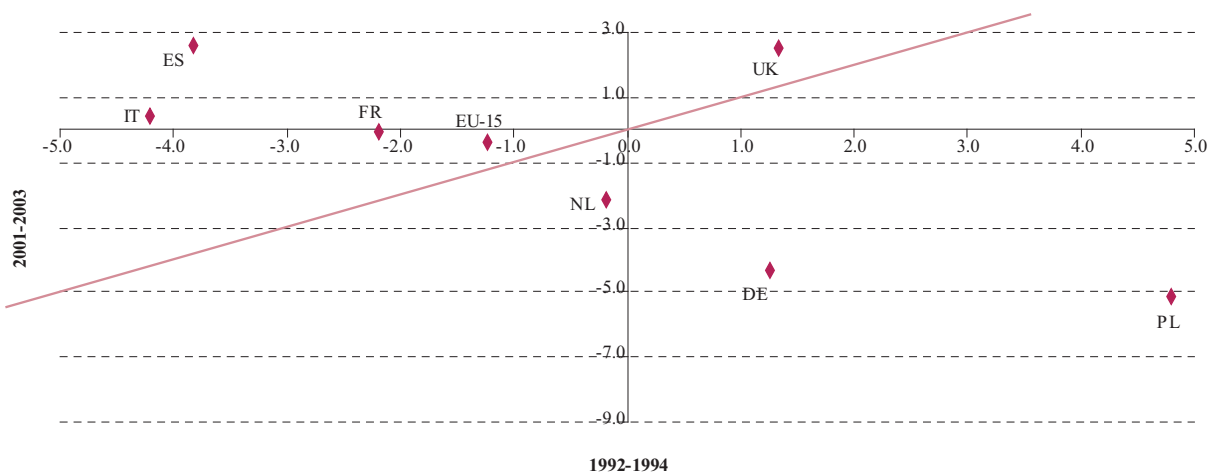
Chart 94 – Domestic Demand (a), average growth rates (percentages)



Source: Ameco.

Note: (a) Domestic demand excluding stocks.

Chart 95 – Gross Fixed Capital Formation, average growth rates (percentages)



Source: Ameco.

close to 4 percent per year (chart 100). According to calculations reported in Jansen (2005)¹⁰, nearly all of the 6 percent cumulative growth in GDP in the six-year period from 1999 to 2004 is due to the net external contribution. Clearly, this foreign impulse has not been translated into higher employment and domestic demand. The for-

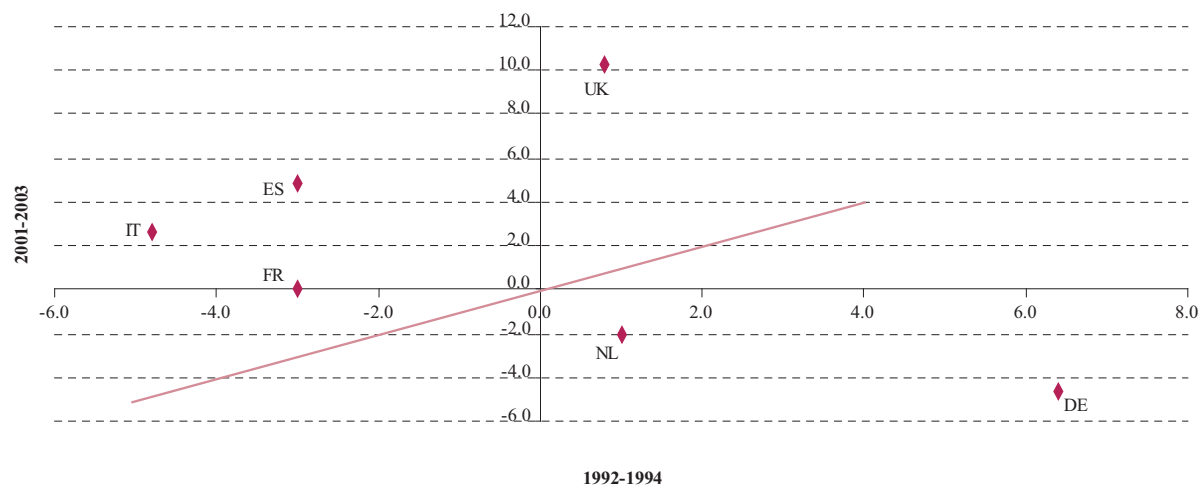
mer declined between the second quarter of 2001 and the second quarter of 2003 (chart 105), while the latter has stagnated since the end of 2000.

The dynamism of German export performance stands alone among the largest EU Member States, and only some new Member States have regis-

tered a better performance. Therefore, part of the weak domestic demand in Germany seems to reflect a significant reorientation of resources towards tradeable sectors of the economy, encouraged by the substantial gains in price competitiveness.

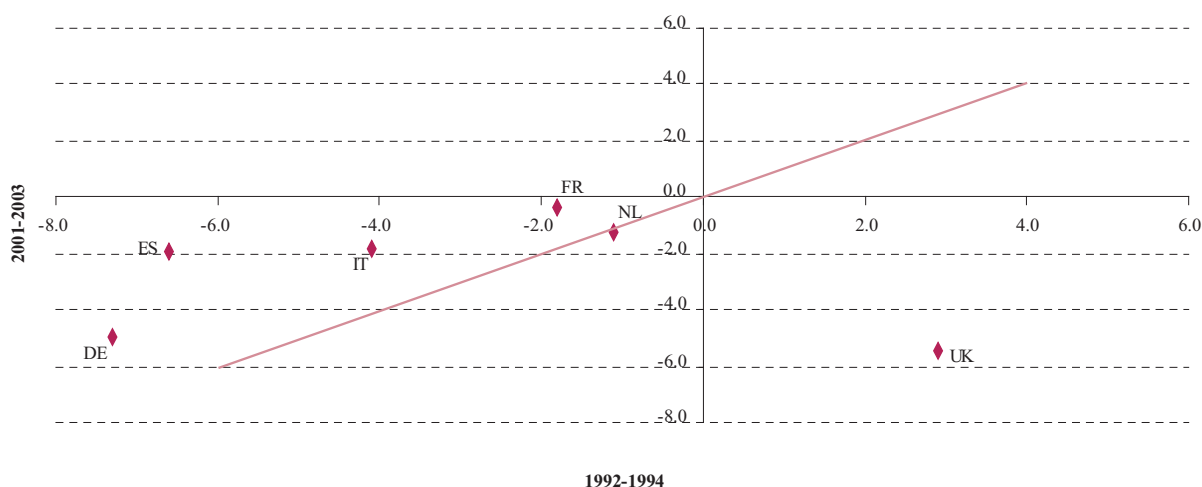
10 Jansen (2005), 'Domestic gloom and export boom: a look at German competitiveness', *ECFIN Country Focus*, v.2, No 6.

Chart 96 – Construction, average growth rates (percentages)



Source: Ameco.

Chart 97 – Equipment, average growth rates (percentages)

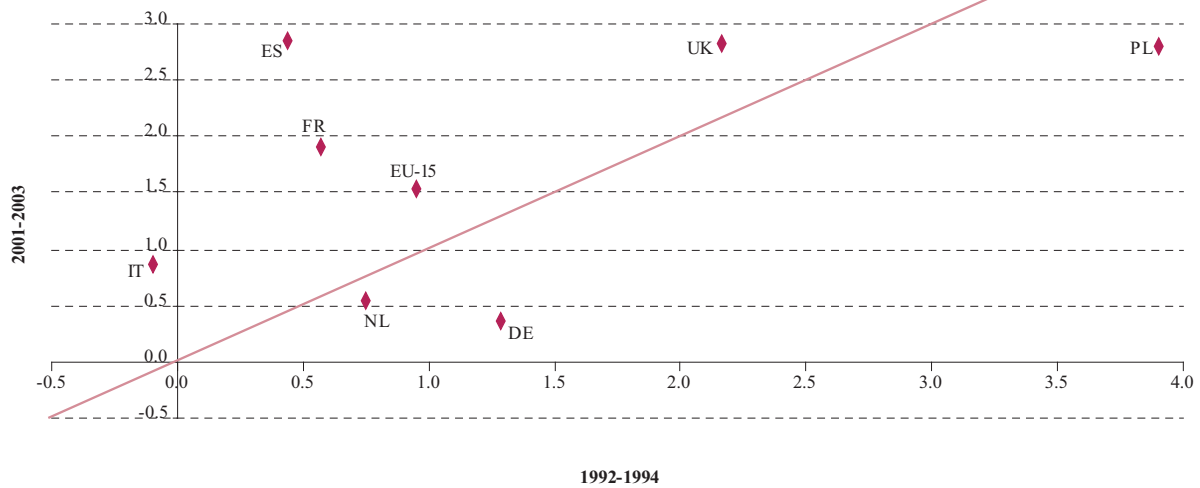


Source: Ameco.

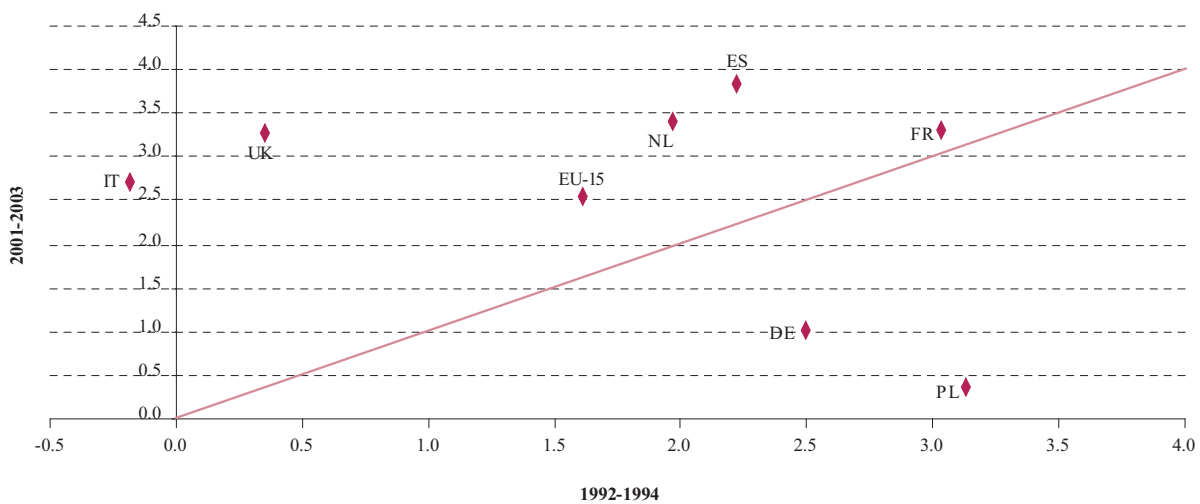
Secondly, in the early 1990s, reunification represented a huge economic shock with long-lasting consequences in terms of both the dynamics of adjustment and equilibrium variables. For example, the large (labour) productivity differentials between the western and eastern parts of Germany had a considerable and lasting impact on employment outcomes, partly due

to the adoption of a one-to-one exchange rate for German monetary union at the time of reunification. The overvalued exchange rate for the eastern part of Germany, coupled with access to generous unemployment insurance and social assistance schemes, effectively priced out of the labour market, or else discouraged, a large number of low-skilled workers.

In addition, buildings in the eastern part of the country were generally in a comparatively poor condition and a huge investment effort was needed to bring them up to standard, leading to an upward shift in spending during the first half of the 1990s. The correction of this level shift brought about a prolonged period of negative growth rates.

Chart 98 – Private Consumption, average growth rates (percentages)

Source: Ameco.

Chart 99 – Government Consumption, average growth rates (percentages)

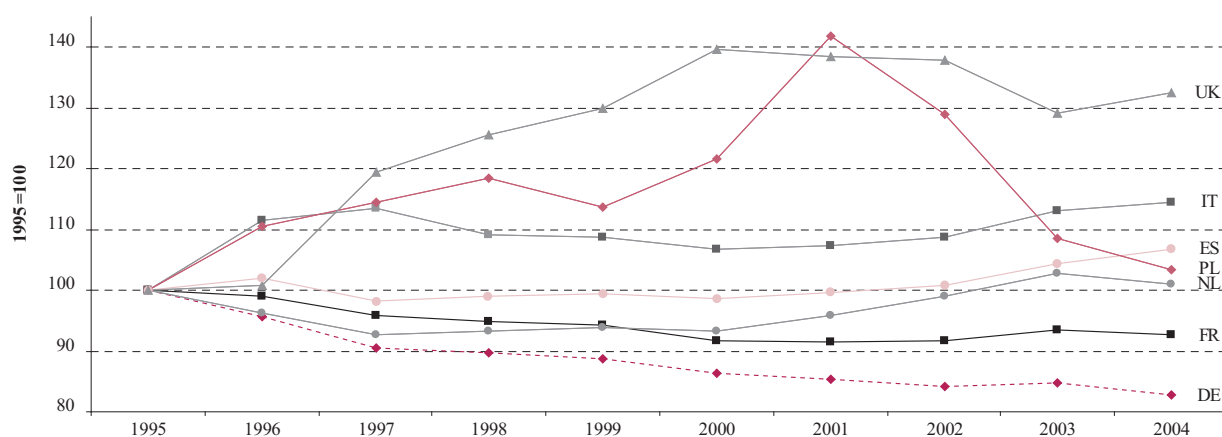
Source: Ameco.

Chart 100 – Exports of Goods and Services, average growth rates (percentages)



Source: Ameco.

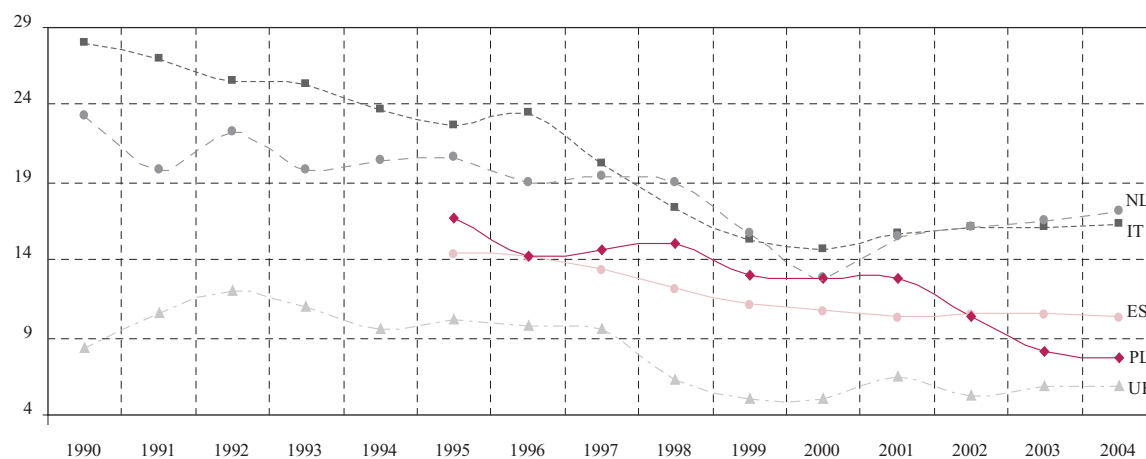
Chart 101 – Nominal unit labour costs (a), total economy – relative to EU-25



Source: Ameco.

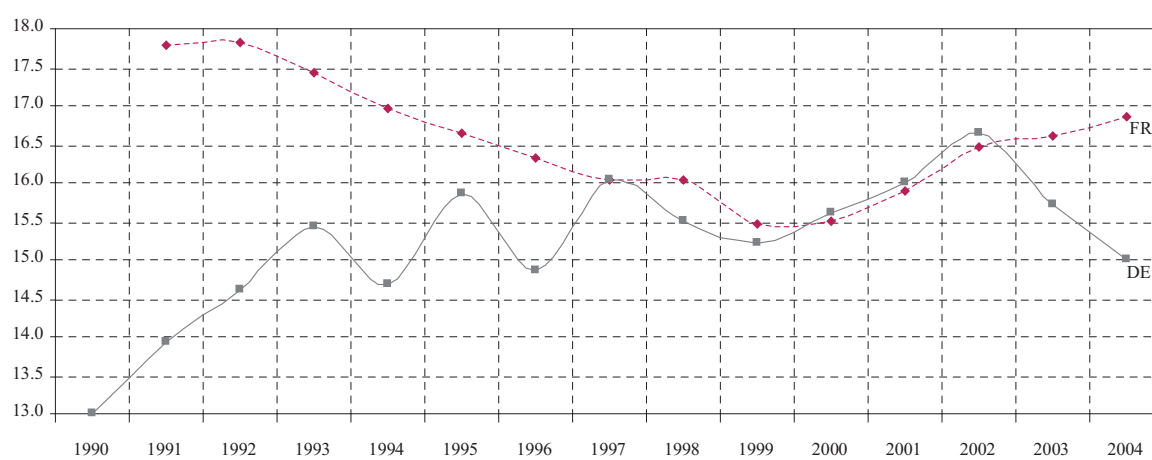
Note: (a) Ratio of compensation per employee to real GDP per person employed.

Chart 102 – Saving rate, gross; households and NPISH (a)



Source: Ameco.

Chart 103 – Saving rate, gross; households and NPISH (a)



Source: Ameco.

Note: (a) Gross saving as percentage of gross disposable income.

4. Analysis of cyclical developments based on quarterly national accounts data

The EU-15

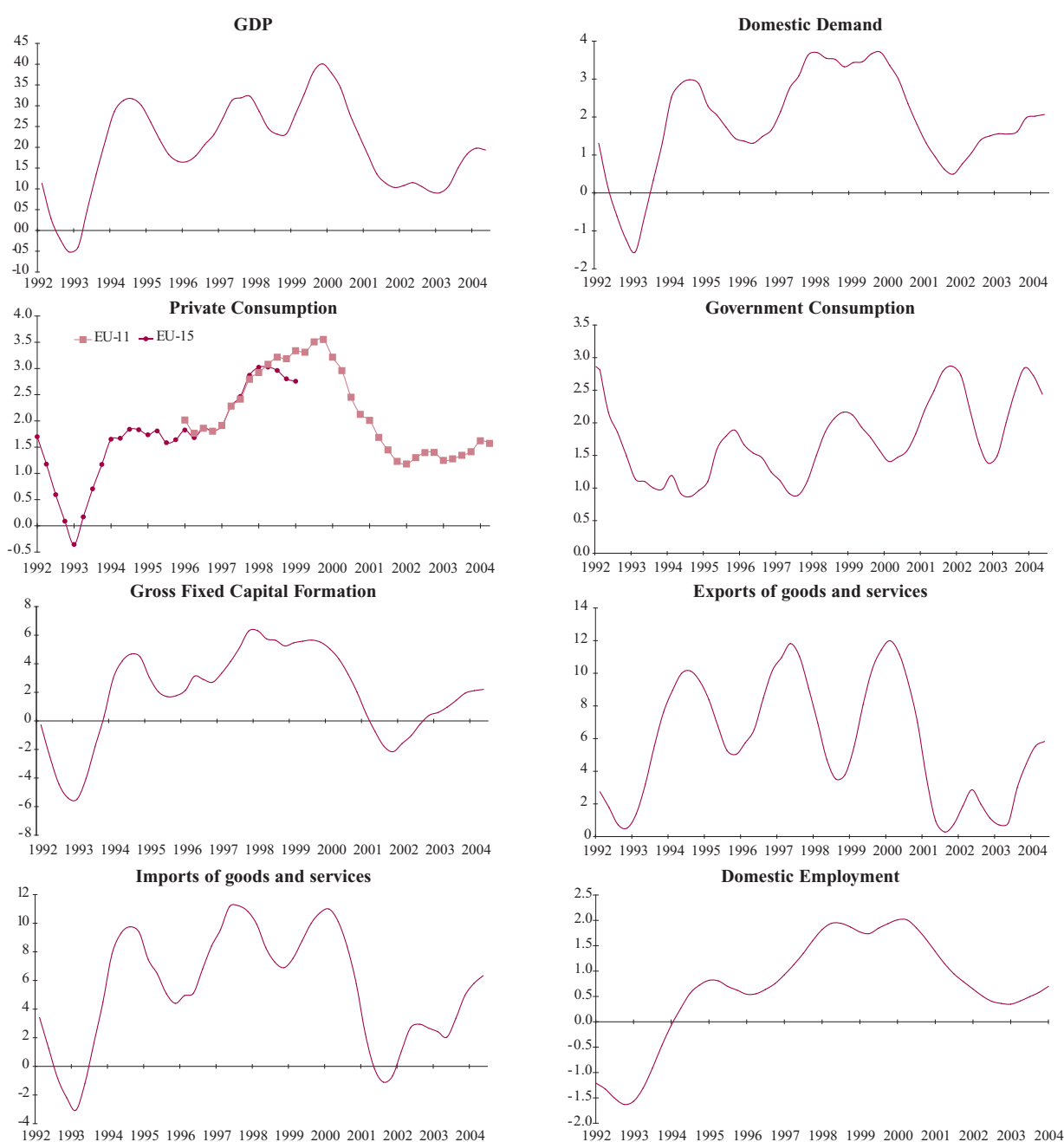
In order to assess cyclical developments, quarterly national accounts data for the *EU-15* and a selected

number of Member States are presented in charts 104 to 110. In order to identify cyclical patterns, the data are smoothed by calculating year-on-year growth rates for the year ending in the current quarter.

In the *EU-15* (in the year ending in the first quarter of 2005) domestic demand increased by 2.1 percent (chart 104). In fact, domestic demand has been increasing since the low of

0.5 percent reached in the third quarter of 2002, although it tapered off somewhat in the fourth quarter of 2004. Since 2004, export growth in the EU-15 has accelerated to around 6 percent (on an annual basis by the first quarter of 2005). Employment growth remains subdued, which can be partly attributed to the uncertainty surrounding the strength and duration of the present economic recovery, together with the usual lags in economic activity.

Chart 104 – Data for EU-15 – Year-on-year real growth rates for the year ending in the current quarter



Source: Eurostat, Quarterly National Accounts; EU-11: AT, BE, DE, DK, ES, FI, FR, IT, NL, PT, UK.

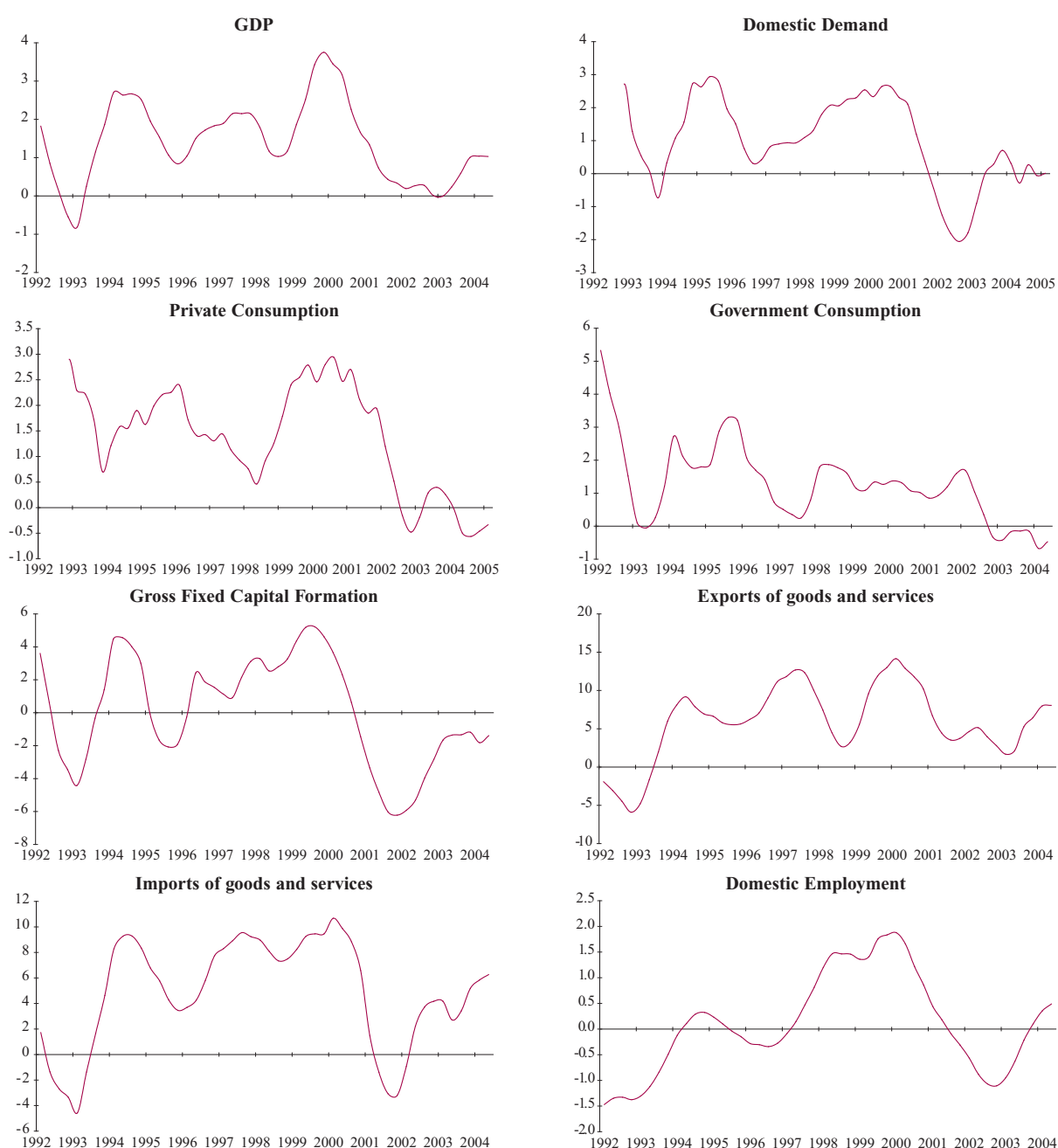
Germany

In Germany, the growth rate of domestic demand (in the year ending in the current quarter) moved from +2.6 percent in the second quarter of 2000 to -2.1 percent in the third quarter of 2002 (chart 105). This big swing mainly reflects developments in private consumption, although the growth rates of gross fixed capital formation and gov-

ernment consumption have also moved into negative territory. Although private consumption and investment expenditures have recovered somewhat in recent quarters, domestic demand remained virtually unchanged in the year ending in the first quarter of 2005. Employment growth also registered a swing comparable to that in domestic demand (from an annual growth rate close to 2 percent in 2000 to -1.1 percent in the year ending

in the third quarter of 2003). Since late 2003, employment has risen in parallel with the trend in GDP, which contrasts with the trend in domestic demand. In fact, despite the near stagnation in domestic demand, GDP increased by 1 percent in the year ending in the first quarter of 2005, reflecting buoyant exports of goods and services, which progressed by 8.1 percent over the same period.

Chart 105 – Data for Germany – Year-on-year real growth rates for the year ending in the current quarter



Source: Eurostat, Quarterly National Accounts.

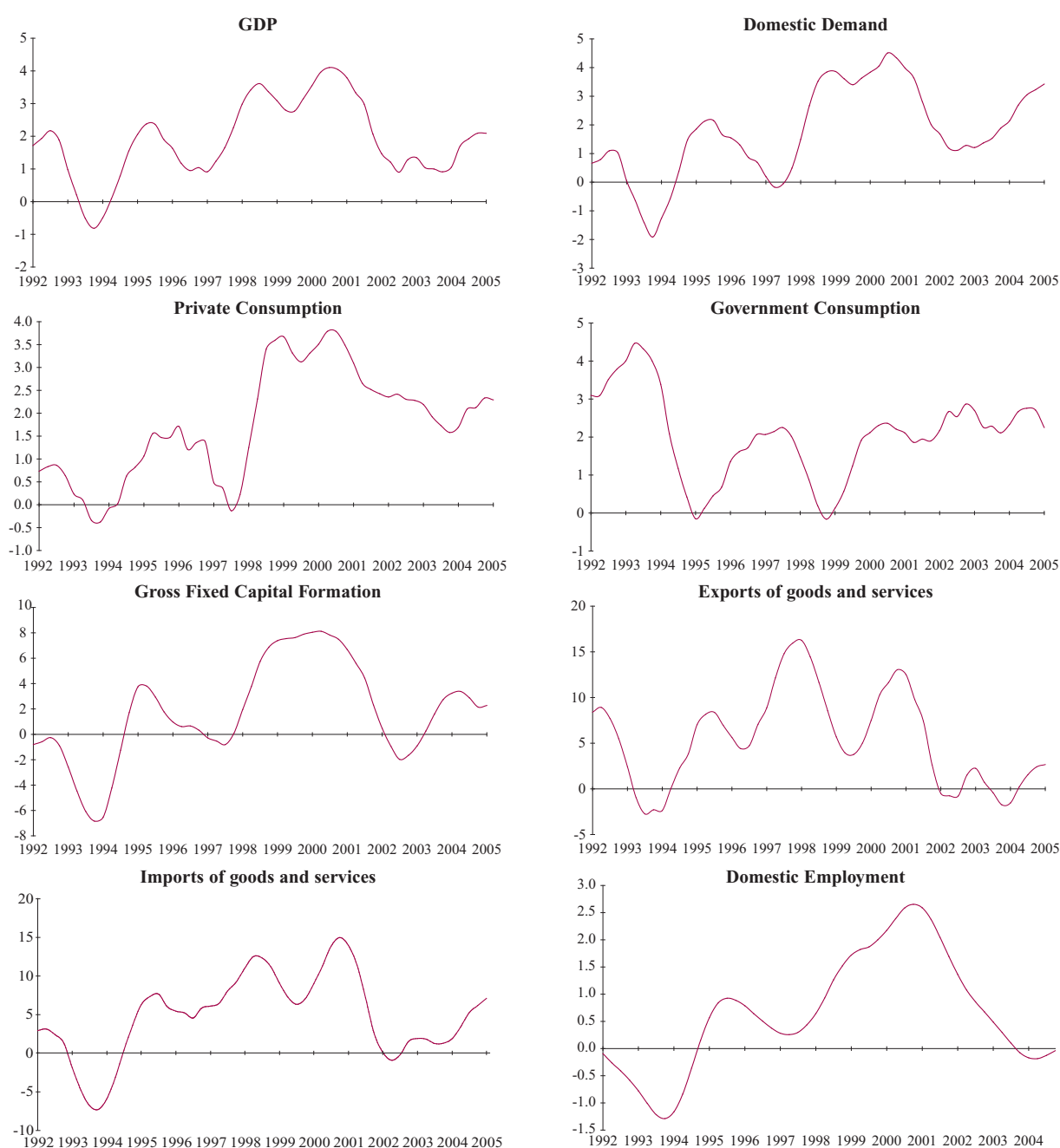
France

Economic activity has been stronger in France than in Germany (chart 106), with the main driving force of economic growth in France being domestic demand, while in Germany it is export growth¹¹. During the 2001-2003 cyclical downturn, the growth rate of domestic demand never fell

below 1 percent in France, while private consumption showed a remarkable resilience with the annual growth rate remaining above 1.5 percent even at the low point of the cyclical downturn (i.e. the fourth quarter of 2003). With economic recovery, the growth rates of domestic demand and private consumption increased to 3.4 percent and 2.3 percent, respectively (in the

year ending in the first quarter of 2005). The relatively good performance of domestic demand in France compared to Germany can partly be explained by lower job losses in the former, together with more favourable developments in terms of consumer confidence. Yet employment outcomes remain relatively unfavourable overall.

Chart 106– Data for France – Year-on-year real growth rates for the year ending in the current quarter



Source: Eurostat, Quarterly National Accounts.

11 The annual growth rate of exports of goods and services in France has been increasing since the beginning of 2004, reaching 2.7 percent in the year ending in the first quarter of 2005, compared with 8.1 percent for Germany.

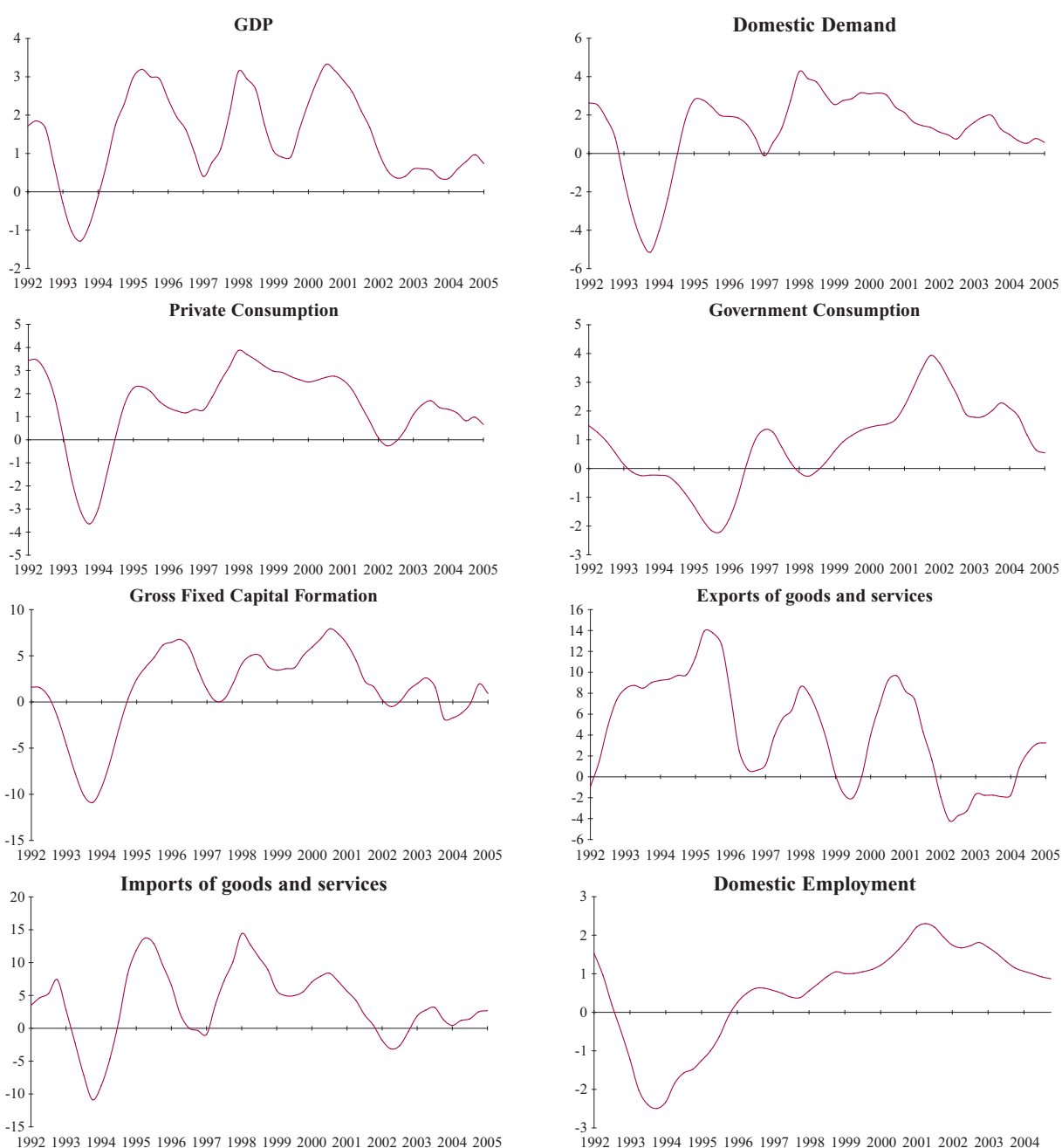
Italy

Following two years of near stagnation, economic growth in Italy picked up in 2004 (chart 107). The main driving force for this growth is exports of

goods and services, while domestic demand remains subdued. Employment developments since the mid-1990s have been particularly favourable following a number of labour market reforms. However,

although the pace of job creation has slowed down with the cyclical downturn, the annual growth rate (for the year ending in the current quarter) remained close to 1 percent in the fourth quarter of 2004.

Chart 107 – Data for Italy – Year-on-year real growth rates for the year ending in the current quarter



Source: Eurostat, Quarterly National Accounts.

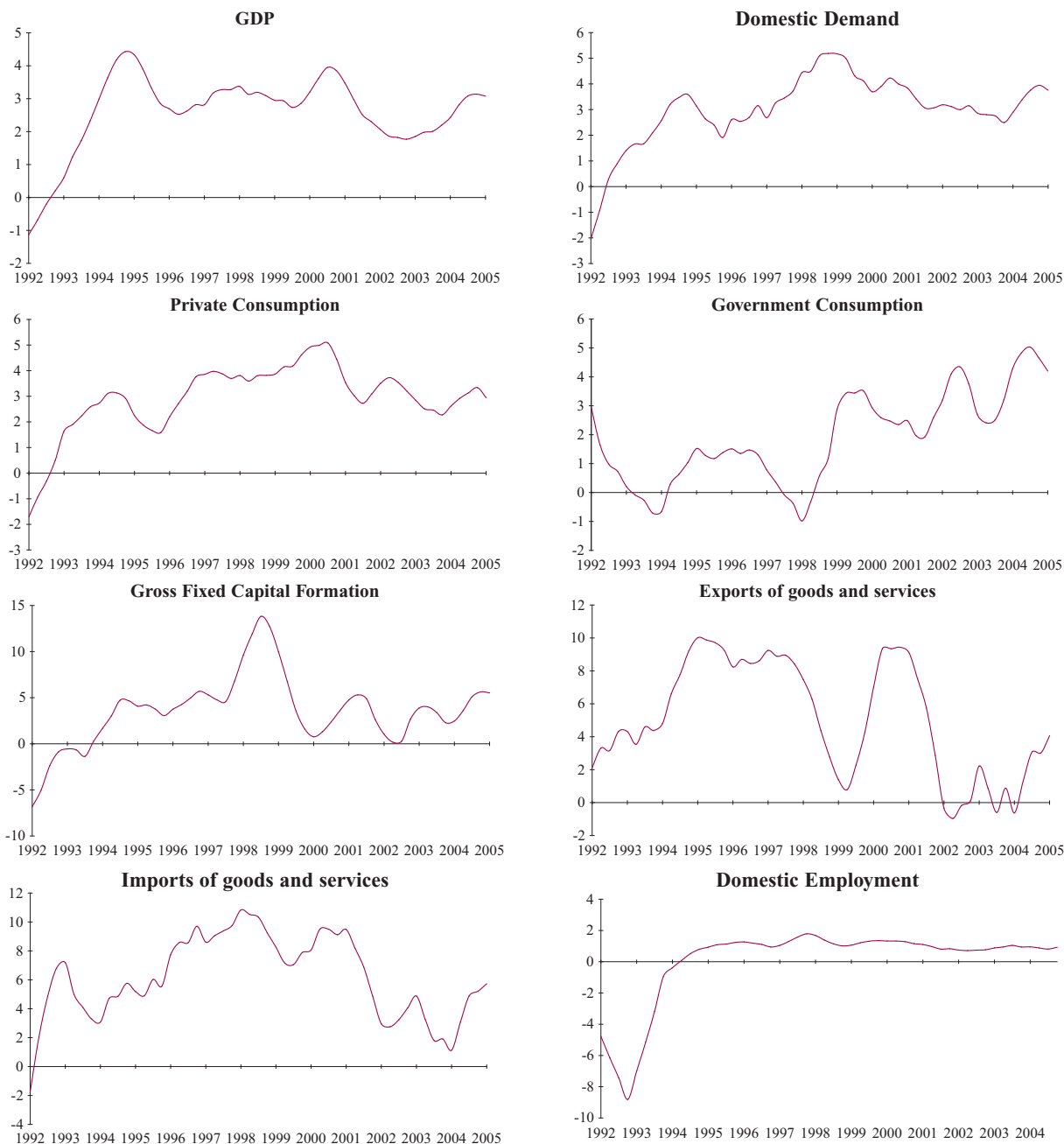
The United Kingdom

In the last ten years or so, GDP growth in the United Kingdom has stayed close to or above 2 percent (chart 108),

with domestic demand as the key driver of this favourable performance. Both private and government consumption have sustained domestic demand on a regular basis, while

investment has been subject to the normal cyclical fluctuations. Since the economic recession of the early 1990s, employment performance has remained very favourable throughout.

Chart 108 – Data for the United Kingdom – Year-on-year real growth rates for the year ending in the current quarter



Source: Eurostat, Quarterly National Accounts.

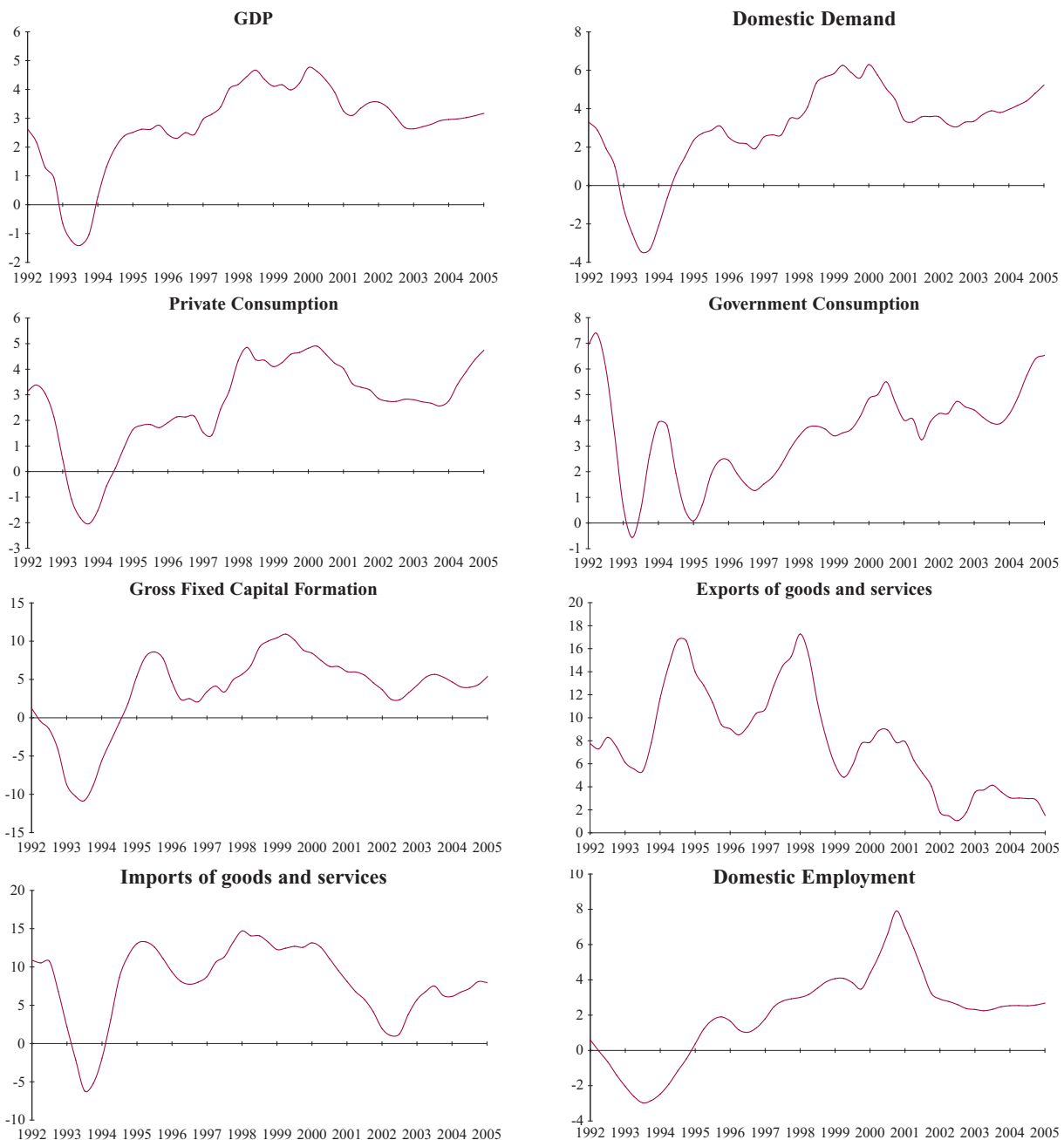
Spain

The dynamism of economic activity in Spain since the mid-1990s has been remarkable (chart 109). All the main

components of domestic demand have contributed positively to GDP growth. Net trade, in contrast, has acted mainly as a drag on growth, particularly since the beginning of 2003. Since the

mid-1990s, employment growth has remained very positive throughout following a number of labour market reforms.

Chart 109 – Data for Spain – Year-on-year real growth rates for the year ending in the current quarter



Source: Eurostat, Quarterly National Accounts.

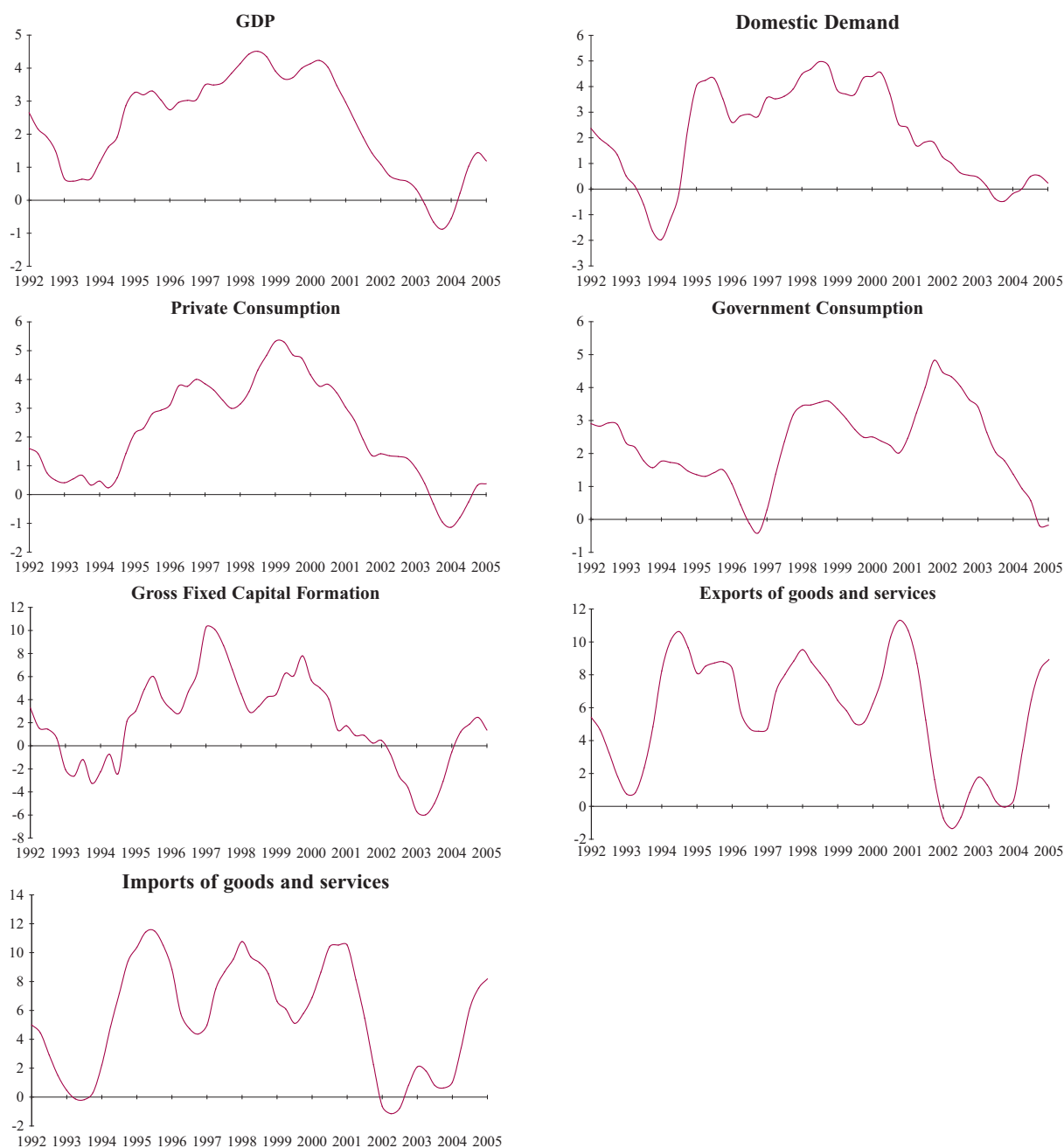
The Netherlands

Economic developments in the Netherlands are highly synchronised with those in Germany. During the economic slowdown of 2001-2003, domestic demand in general and private consumption in particular weak-

ened substantially compared with the very high growth rates registered at the end of the 1990s (chart 110). As in Germany, the economic recovery has been driven by buoyant export growth. Exports of goods and services increased by close to 9 percent in the year ending in the first quarter of

2005. In Germany and the Netherlands, substantial gains in price competitiveness are shifting resources to tradeable sectors, yielding an overall strengthening in the net trade contribution to growth and a reduction in the domestic absorption contribution.

Chart 110 – Data for the Netherlands – Year-on-year real growth rates for the year ending in the current quarter



Source: Eurostat, Quarterly National Accounts.

5. Labour market outcomes – the role of aggregate demand

Policy concerns

One of the three overarching objectives of the Employment Guidelines for 2005 to 2008 – Integrated Guidelines 17 to 24¹² – is *full employment*, together with *improving quality and productivity at work*, and *strengthening social and territorial cohesion*. *Full employment* is to be achieved by a balanced approach aiming to increase both the *demand* for and *supply* of labour.

This section briefly reviews the role of aggregate demand (i.e. demand shocks) on the evolution of labour market variables, relying for most of the analysis on some well-known (and broadly consensual) results published in the academic literature. The motivation here is the general concern about the potential impact of unfavourable demand shocks on labour market outcomes which, in current circumstances, seems to be particularly relevant for some EU economies, notably Germany (cf. the preceding analysis, and see charts 111 and 112).

The interplay between demand and supply

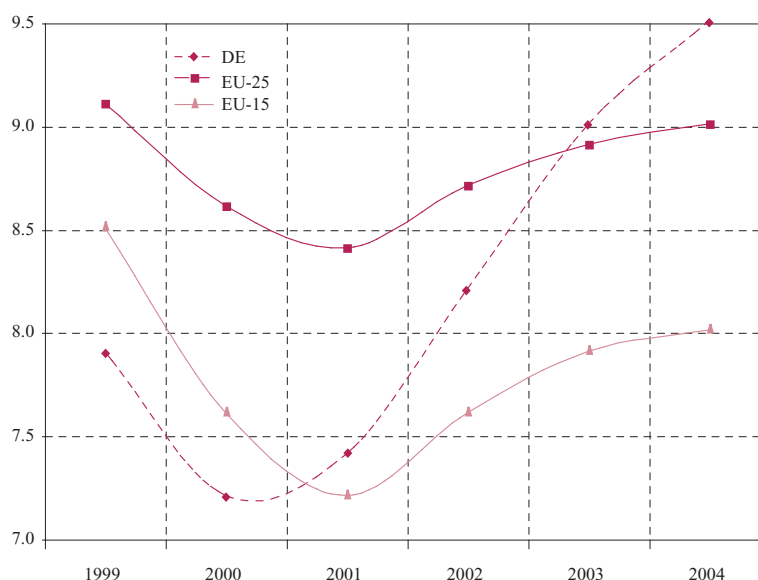
In the long-run, unemployment is determined entirely by supply factors and tends towards the Nairu/Nawru¹³. However, in the short to medium-run, unemployment is determined by the interplay of demand and supply factors¹⁴. Seen as a succession of short-

Chart 111 – Domestic demand excluding stocks at 1995 prices



Source: DG ECFIN, Ameco.

Chart 112 – Unemployment rate; total – Member States: definition EUROSTAT



Source: DG ECFIN, Ameco.

12 Council Decision of 12 July 2005 on guidelines for the employment policies of the Member States (2005/600/EC).

Council Decision of 12 July 2005 on guidelines for the economic policies of the Member States and the Community (2005/601/EC).

13 The non-accelerating inflation/wage rate of unemployment. This concept captures the theoretical prediction that over the long-run real demand and unemployment generally tend towards the level consistent with stable inflation.

Layard, Nickell and Jackman (2005), *Unemployment - Macroeconomic Performance and the Labour Market*, Oxford University Press.

14 In the labour market, the medium-run horizon can be relatively long due to the high persistence of endogenous variables (e.g. wages, unemployment rates, etc.).

run equilibriums, labour market variables are largely determined by aggregate demand factors. However, the fact that unemployment is mainly determined by aggregate demand factors is fully consistent with the notion that unemployment is on average across economic cycles (i.e. in the long-run) influenced mainly by supply factors, such as terms-of-trade, and (the interaction of) labour market institutions, such as tax structures and their interplay with benefit systems, hence emphasising the importance of structural reforms.

Factors influencing the long-run equilibrium level of unemployment

According to Layard et al. (2005): *the long-run equilibrium level of unemployment is affected, first, by any variable which influences the ease with which unemployed individuals can be matched to available jobs and, second, by any variable which tends to raise wages in a direct fashion despite excess supply in the labour market. Variables in the first group impact on the position of the Beveridge Curve¹⁵, whereas those in the second do not do so in any direct fashion. Any variable shifting the Beveridge Curve to the right will increase equilibrium unemployment.*

Economic analyses usually list the following factors and labour market

institutions as those variables influencing the long-run equilibrium unemployment rate (through their impact on the effectiveness with which the unemployed are matched to available vacancies): (i) the unemployment benefit system; (ii) active labour market policies (ALMPs); (iii) the real interest rate; (iv) employment protection laws (EPL); (v) barriers to labour mobility; (vi) systems of wage determination; (vii) product market competition; (viii) labour taxes; and (ix) real wage resistance.

Demand versus supply shocks

Blanchard and Quah (1989)¹⁶ use a bivariate Structural Vector Autoregressive (SVAR) methodology with equations for output and the unemployment rate to break down the relative contributions of demand and supply disturbances to output fluctuations. A number of restrictions are sufficient to identify the two types of disturbances, and their dynamic effects on the joint behaviour of output and unemployment. The identification assumptions are: (i) each disturbance is uncorrelated with the other; (ii) neither has a long-run effect on unemployment; and (iii) the supply disturbance has a long-run effect on output while the demand disturbance does not¹⁷. One of the main conclusions of this analysis is that although demand disturbances do not have a long-run

effect on either output or unemployment, they do make a substantial contribution to output fluctuations in the short and medium-term horizons¹⁸.

The dynamics of unemployment

Several approaches have been used to explain the dynamics of unemployment across countries (Layard et al., 2005). Firstly, there are econometric studies versus calibrated models¹⁹. Secondly, a distinction may be made between studies that consider the interaction between economic shocks, or baseline variables, and stable labour market institutions and those that focus on changes in labour market institutions.

Well-known examples of studies that interact stable institutions with shocks or baseline variables include Blanchard and Wolfers (2000)²⁰, Bertola et al. (2001)²¹ and Fitoussi et al. (2000)²². All these studies use panel data techniques to explain long-run changes in unemployment rates, which depend on long-run shifts in a set of baseline variables/shocks and their interaction with labour market institutions.

In order to explain the evolution of European unemployment, two stylised facts must be accounted for, namely the general rise in unemployment since the 1960s; and the heterogeneity of individual country experiences

15 The loci of unemployment and vacancy rates.

16 Blanchard and Quah (1989), 'The dynamic Effects of Aggregate Demand and Supply Disturbances', *American Economic Review*, Vol. 79, pp. 655-673.

17 Even where demand disturbances may have some long-run effect on output, the identification assumptions used are close to the correct ones when the size of the long-run effect of demand disturbances becomes arbitrarily small relative to that of supply disturbances. Another issue is the possible non-stationary nature of the unemployment rate. In this case, both output and unemployment could be affected even in the long-run by demand and supply disturbances. This is predicted by models with a 'hysteresis' effect, Blanchard and Summers (1986), 'Hysteresis and European Unemployment', *Macroeconomics Annual*, pp. 15-78.

18 However, Blanchard and Quah (1989) were unable to quantify this contribution with any great precision.

19 Calibrated models reproduce major stylised facts characterising an economy or group of economies.

As an example see Ljungqvist and Sargent (1998), 'The European Unemployment Dilemma', *Journal of Political Economy*, vol. 106, No 3.

20 Blanchard and Wolfers (2000), 'The Role of Shocks and Institutions in the Rise of European Unemployment: the Aggregate Evidence', *The Economic Journal*, 110 (March), C1-C33.

21 Bertola, Blau and Kahn (2001), 'Comparative Analysis of Labor Market Outcomes: Lessons for the US from International Long-Run Evidence', *NBER Working Papers* No 8526.

22 Fitoussi, Jestaz, Phelps and Zoega (2000), 'Roots of the Recent Recoveries: Labor Reforms or Private Sector Forces?', *Brookings Papers on Economic Activity*, Summer, pp. 237-311.

(Blanchard and Wolfers, 2000). Adverse shocks alone cannot explain much of the heterogeneity in country experiences, because there is insufficient variation in the shocks affecting the different countries. Conversely, while explanations focusing on labour market institutions can account well for cross-country differences, many of these labour market institutions precede the rise in unemployment and have been relatively stable since. Using a panel of labour market institutions and economic shocks for twenty OECD countries since 1960, Blanchard and Wolfers (2000) find that the interaction between shocks and institutions is crucial to explaining both key facts²³. This finding reflects the varying persistence of unemployment in response to shocks depending on the labour market institutions in place in the different countries²⁴.

As regards studies that rely on changing institutions to explain unemployment developments, Nickell et al. (2003)²⁵ use panel data techniques in a dynamic setting. In order to explain the evolution of unemployment, this model also includes factors that might explain the short to medium-run deviations from its equilibrium level, in addition to the long-run determinants of the equilibrium level. The main idea behind this analysis is to explain unemployment by: (i) those factors that impact on equilibrium unemployment (i.e. the usual list of labour market institutions²⁶); and (ii) those

shocks that cause unemployment to deviate from equilibrium unemployment. The latter include aggregate demand shocks, productivity and other labour demand shocks, and wage shocks. A standard co-integration test does not reject the hypothesis that the regression explains unemployment in the long-run despite the rather high value of the coefficient on the lagged dependent variable. This reflects the high persistence of labour market variables in general, and unemployment in particular, but also the unsatisfactory quality of data for labour market institutions.

Dynamic simulations of the estimated model²⁷ track the actual data relatively well. It suggests that the institutional variables included in the unemployment regression explain about 55% of the individual country changes in unemployment from the 1960s to the early 1990s. Therefore, other factors not captured by the institutional variables considered, such as demand and supply shocks, other institutions not included in the analysis, the interaction between demand shocks and institutions, or lack of quality of data for institutions, account for the remaining half of the unemployment changes.

Consequently, in the short- to medium-run a potentially important role is played by disequilibrium factors such as demand shocks/disturbances (Blanchard and Quah, 1989, and Blanchard and Wolfers, 2000). In conjunction

with the (consensual) finding that labour market outcomes in general, and the unemployment rate in particular have a high persistence, the question emerges whether cyclical fluctuations are detrimental to employment performance. Related to this question are two issues:

- First, is there an asymmetric impact of business fluctuations on employment performance?
- Second, in the affirmative, would this motivate attempts to counteract the impact of shocks on economic activity through macroeconomic policies?

A detailed investigation of these two issues is beyond the scope of this report. Analysis on the first question was published in *Employment in Europe 2002*²⁸. As regards the second issue, the reluctance of many economists to advocate active use of macroeconomic policy to stimulate economic activity is rooted in negative experiences with these policies between the 1960s and the 1980s. Moreover, modern economic theory emphasises the importance of long-term sustainability and confidence effects as crucial determinants for the success of macroeconomic policy. Policies that are detrimental to long-term sustainability risk a response of private sector expectations that runs counter to the initial policy objectives and as a result is likely to jeopardise the effectiveness of macro-

23 The interaction explanation of unemployment is attractive because it has the potential to explain not only the increase in unemployment over time (through adverse shocks), but also the heterogeneity of unemployment evolutions (through the interaction of the shocks with different labour market institutions).

24 For example, if labour market institutions lead to a labour market with long unemployment duration, adverse economic shocks are more likely to result in some of the unemployed becoming disenfranchised, reducing the pressure of unemployment on wages, thereby slowing and possibly even halting the return to lower unemployment.

25 Nickell, Nunziata, Ochel and Quintini (2003), 'The Beveridge Curve, Unemployment, and Wages in the OECD from the 1960s to the 1990s', published in *Knowledge, Information, and Expectations in Modern Macroeconomics: In Honor of Edmund S. Phelps*, Princeton University Press.

26 Including (some) interactions between labour market institutions.

27 Labour market institutions are fixed at their 1960s values.

28 Chapter 2.

economic policies²⁹. Against this background, the following sections analyse the cyclical properties of budgetary policy and the motivation of the revised Stability and Growth Pact.

6. The cyclical properties of budgetary policy

In a monetary union, monetary and exchange-rate policies are determined by taking into consideration the collective situation throughout the participating countries. Therefore, the role of budgetary policy is of central importance in bringing about stabilisation through tackling country-specific developments. Consequently, EMU brings with it an increased need to achieve and maintain sound budget positions over the cycle in order to provide a sufficient budgetary margin to absorb (or even to respond to) cyclical fluctuations or economic shocks with an asymmetric impact³⁰.

As regards the cyclical properties of budgetary policy, some preliminary econometric evidence (see Annex), using macro-pooled data for the EU-15, suggests that on average since 1993, the cyclically-adjusted primary balance (CAPB) of participants in EMU shows no significant reaction to

variations in the output gap after controlling for a monetary conditions indicator (MCI). This is consistent with findings elsewhere.

For example, Jordi and Perotti (2003)³¹ argue that the quality of macroeconomic stabilisation in the euro area increased in comparison to the 1980s, when, on average, discretionary budgetary policies were strongly pro-cyclical. Debrun and Masson (2004)³² also found that, on average and in most of the EU-15 Member States, (discretionary) budgetary policy, although remaining pro-cyclical, has become less so since EMU. The estimated coefficients of the equation in the Annex are in line with these results, pointing to an overall pro-cyclical stance for fiscal policy, although this has been less pronounced since the start of EMU. Debrun and Masson (2004) also suggest that the recent reduction in the pro-cyclical nature of budgetary policy can be attributed to a change in behaviour during cyclical downturns³³.

7. The revised Stability and Growth Pact

In order to strengthen the economic rationale behind the existing frame-

work for budgetary surveillance, together with the need to reinforce the stabilisation role of budgetary policy³⁴, the Commission issued a Communication³⁵ that considered several elements for strengthening the Stability and Growth Pact (SGP). These included the following:

- *Placing more focus on debt and sustainability in the surveillance of budgetary positions;*
- *Allowing for more country-specific circumstances in defining the SGP's medium-term deficit objective of "close to balance or in surplus";*
- *Considering economic circumstances and developments in the implementation of the Excessive Deficit Procedure; and*
- *Ensuring earlier actions to correct inadequate budgetary developments.*

The Commission's proposals have been largely adopted by the Council in its report of 20 March 2005³⁶. As expressed in the broad guidelines for the economic policies of the Member States and the Community for 2005 to 2008 *op. cit.*, in the present economic circumstances, *for those Member States that have already achieved*

29 The following two examples illustrate the argument: i) an increase in long-term interest rates in response to a reduction in short-term rates by the central bank; and ii) a reduction in private consumption spending or investment in reaction to expansionary fiscal policy.

30 Council Decision of 12 July 2005 on guidelines for the economic policies of the Member States and the Community (2005/601/EC).

31 Jordi and Perotti (2003), 'Fiscal policy and monetary integration in Europe', *Economic Policy*, No 37, October.

32 Debrun and Masson (2004), 'L'UEM et son cadre macroéconomique: plus grand, plus haut, ... plus fort?', contribution au XVI congrès des économistes belges de langue française.

33 Pisani-Ferry (2005) advances two ideas to explain this change: (a) during cyclical downturns the SGP has been relatively accommodating to higher deficits; and (b) the disappearance of the disciplinary exchange-rate mechanism.

Pisani-Ferry (2005), *La réforme du Pacte de stabilité: ni règles, ni discrétion?*, Rapport préparé pour le XVI congrès des économistes belges de langue française.

34 By securing a sound budgetary position which will allow the full and symmetric play of the automatic budgetary stabilisers over the cycle with a view to stabilising output around a higher and sustainable trend.

Council Decision of 12 July 2005 on guidelines for the economic policies of the Member States and the Community (2005/601/EC).

35 Communication from the Commission to the Council and the European Parliament *Strengthening economic governance and clarifying the implementation of the Stability and Growth Pact*, COM(2004) 581 final.

Communication from the Commission to the Council and the European Parliament, *Public finances in EMU—2005*, ECFIN/C2/REP/51021-EN.

36 *Improving the implementation of the Stability and Growth Pact* – Council Report to the European Council, (21.3.2005) 7423/05.

sound budgetary positions the challenge is to retain that position; while for the remaining Member States, it is vital to take all the necessary corrective measures to achieve their medium-term budgetary objectives, in particular if economic conditions improve, thus avoiding pro-cyclical policies and putting themselves in a position in which sufficient room for the full play of automatic stabilisers over the cycle is ensured prior to the next economic downturn.

Moreover, it can be argued that the EU surveillance framework for fiscal policy has been given a broader perspective as economic and budgetary policies thus need to set the right priorities towards economic reforms, innovation, competitiveness and strengthening of private investment and consumption in phases of weak economic growth³⁷. The improved governance of the budgetary surveillance process should contribute towards achieving the economic objectives for growth and employment set out in the Lisbon strategy³⁸.

Debt sustainability and country-specific circumstances

The increased focus on debt sustainability, together with the increased weight given to country-specific economic and budgetary circumstances in defining the SGP's medium-term objectives, is expected to foster invest-

ment in physical and human capital, thereby raising the productive capacity of the economy in the medium to long-term³⁹. A one-size-fits-all medium-term balanced budget requirement, independent of country-specific circumstances, could lead in some Member States to an excessive reduction in government debt levels⁴⁰ which could, among other things result in sub-optimal expenditure on infrastructure and on education and training (De Grauwe, 2005⁴¹). There is strong empirical evidence that investment in infrastructure and in human capital are key drivers of long-term economic growth⁴².

The revised SGP allows the short-term costs of major reforms to be taken into account.

It is often claimed that the Stability and Growth Pact neglects a possible trade-off between short-term budgetary objectives and the implementation of reforms that could durably improve public finances over the medium to long-term. One reason why there could be a trade-off between reforms and budgetary objectives is the fact that reforms have direct budgetary costs. This is the case of pension reforms that introduce a funded pillar classified outside the government sector. In this case, budgets would normally undergo a temporary deterioration (due to lost social security contributions by the government), offset by

long-term improvements (associated with lower government expenditure on pension payments). A second reason for a trade-off is the fact that reforms can be politically costly, weakening the drive for fiscal consolidation as policymakers attempt to overcome resistance to reforms via, for instance, tax cuts or government transfers⁴³.

Under the revised SGP, the budgetary costs of major structural reforms which have a verifiable positive impact on the long-term sustainability of public finances will be taken into account in assessing of the adjustment to the medium-term budgetary objective. In particular, structural reforms that unequivocally improve the long-term sustainability of public finances should not be hampered in order to meet the targets of the SGP. *In order to enhance the growth-oriented nature of the Pact, structural reforms will be taken into account when defining the adjustment path to the medium-term objective for countries that have not yet reached this objective and in allowing a temporary deviation from this objective for countries that have already reached it, with a clear understanding that a safety margin to ensure respect of the 3% of GDP reference value for the deficit has to be guaranteed and that the budgetary position would be expected to return to the medium-term objective within the programme period⁴⁴.*

37 Council of the European Union, ECOFIN 104, 21 March 2005.

38 For an overview of the (revised) Lisbon strategy, see the Commission's Communication entitled *Integrated Guidelines for Growth and Jobs (2005-2008)*, COM(2005) 141 final.

39 The medium-term objective should be differentiated and may diverge from 'close to balance or in surplus' for individual Member States on the basis of their current debt ratio and potential growth, while preserving sufficient margin below the reference value of -3% of GDP, COM(2004) 581 final.

40 Leading to a potentially inefficient inter-temporal/dynamic allocation of resources. Blanchard and Fischer, (1989) *Lectures on Macroeconomics*, MIT press.

41 De Grauwe (2005), 'The Stability and Growth Pact in need of reform', ETUC conference on 'Delivering the Lisbon Goals: the Role of Macroeconomic Policy Making', 1-2 March 2005.

42 For a general reference see Barro and Sala-i-Martin (2003), *Economic Growth*, MIT Press.

43 For an analysis of the link between structural reforms and budgetary policy, see European Commission (2005): *Public Finances in EMU 2005*.

44 *Improving the implementation of the Stability and Growth Pact* – Council Report to the European Council (21.3.2005) 7423/05.

Discretionary fiscal policy has some potential drawbacks

According to some authors⁴⁵, another limitation of structural reforms under EMU is their potential deflationary impact which, for political economy reasons, might reduce their attractiveness to policymakers. They argue for discretionary budgetary expansion to accompany structural reforms. Others, however, argue that reforms can also have a direct positive impact on demand through confidence effects⁴⁶.

Although it is clear that, under the new EMU policy regime, the role of budgetary policy is now of central importance for stabilisation purposes, particularly in the presence of cyclical fluctuations or economic shocks with an asymmetric impact, a note of caution is necessary regarding the effectiveness of discretionary fiscal policy.

Fiscal policy is subject to various lags, including the time needed to recognise the situation requiring attention, to propose appropriate action and to carry it through the political process. In addition, the ideal timing of discretionary fiscal policy would depend not only on the position in the domestic economic cycle, but also on the conditions prevailing in the euro area and the policy response of the European Central Bank. As a result of these

drawbacks, discretionary fiscal policy might possibly have a destabilising effect on economic activity. However, automatic stabilisers do not suffer from the many potential problems of discretionary fiscal policy, although, by their nature, they can only attenuate and not fully offset the effects of shocks.

8. Summary and Conclusions

The main conclusions of the foregoing analysis are as follows:

- In the EU-15 during the period 1997-2000, economic growth was particularly rich in jobs, and in the cyclical downturn of 2001-2003 employment levels showed a remarkable resilience compared to the previous cyclical downturn of 1992-1994⁴⁷. The current broad consensus⁴⁸ is that structural improvements have occurred in the functioning of labour markets, resulting from a number of factors, such as: (a) past and ongoing reforms in labour, products and services, and financial markets; (b) development of certain types of labour contracts (e.g. part-time work); (c) changes in the sectoral composition of employment⁴⁹; and (d) wage formation

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- 45 Silbert and Sutherland (1998), "Monetary Regimes and Labour Market Reform", *CEPR Discussion Paper* No 1731.
Calmfors (1998), "Macroeconomic Policy, Wage Setting and Employment – What Difference Does EMU Make?", *Oxford Review of Economic Policy*.
Saint-Paul and Bentolila (2000), "Will EMU increase Eurosclerosis?", *CEPR Discussion Papers* No 2423.
- 46 See Public Finances in EMU 2005.
- 47 In the EU-15 during the 1992-1994 recession, employment declined by nearly 3 percentage points. This contrasts with an increase in cumulative terms of about 2 percentage points during the period 2001-2003.
- 48 For example see recent issues of the European Economy Review and of the Employment in Europe publications (http://europa.eu.int/comm/economy_finance/publications/the_eu_economy_review_en.htm and http://europa.eu.int/comm/employment_social/news/index_en.html, respectively).
- 49 Resulting from high employment (and GDP) growth rates in most service sectors with a higher weight in total employment in the late 1990s than a decade earlier; conversely, sectors with low or negative employment growth, such as agriculture and industry excluding construction had a lower weight in total employment in the late 1990s than a decade earlier.
- 50 The risk of a jobless (or even of a 'jobs-loss') economic recovery is mentioned in 'Labour Market and Wage Developments in 2004, with a Special Focus on the Risk of Jobless Growth', *European Economy Special Report* No 3/2005.
- 51 In recent years, unfavourable/unsustainable starting positions have prevented a number of countries from making full use of automatic stabilisers and even more from introducing discretionary counter-cyclical measures.

mechanisms that take better account of prevailing (competitive) conditions in the economy.

- The economic upswing that started in the second half of 2003 has been characterised by the slow response of employment, which mirrors the limited labour market response during the prolonged downturn. The risk of an upward cycle with low employment growth overall cannot be excluded⁵⁰. The persistent weakness of domestic demand in Germany poses a major downside risk to the current economic recovery in Europe in general, and job creation in particular. The present surge in energy prices could damage economic confidence, adding further to the impact of the uncertainty surrounding the strength and duration of the present economic recovery. Across EU Member States and over the cycle, the poor track record of budgetary policy with respect to economic stabilisation⁵¹ and the difficulties in undertaking a coherent and comprehensive strategy of structural reforms are also likely to weigh negatively on economic confidence, yielding lower investment expenditure and job creation. In the present circumstances, firms might not want to expand (at least early on in the upswing), fearing a possible “double-dip” in the economic cycle.
- While in the EU-15 GDP grew at similar rates during the cyclical downturns of 2001-2003 and 1992-1994, an analysis of individual Member States shows diverse experiences, which are reflected in employment outcomes. For example, Germany, the Netherlands and Poland displayed a weaker performance in the 2001-2003 slowdown than in 1992-1994, mainly because of the weakness or stagnation of domestic demand. Conversely, in

France, Spain, Italy and the United Kingdom, domestic demand was stronger on average during the 2001-2003 period (compared to the recession in the first half of the 1990s), contributing to higher domestic demand growth in the EU-15 as a whole.

- Econometric results suggest that although demand disturbances do not seem to have a significant long-run effect on either output or unemployment, they make a substantial contribution to output fluctuations in the short- and medium-term. In the short- to medium-run a potentially important role is played by disequilibrium factors such as demand shocks/disturbances. This, together with the (consensual) finding that labour market outcomes in general, and the unemployment rate in particular, have high persistence, raises the important issue of the quality of macroeconomic policy stabilisation.
- As regards the usefulness of macroeconomic policies, and in particular budgetary policy in stabilising economic activity, a note of caution is necessary especially regarding the effectiveness of discretionary fiscal policy. Fiscal policy is subject to various lags, together with the varying policy response of the monetary authorities. Therefore, discretionary fiscal policy might possibly have a destabilising effect on economic activity and hence also a negative impact on the labour market. However, automatic stabilisers do not suffer from the numerous drawbacks of discretionary fiscal policy, although, by their nature, they can only attenuate and not fully offset the effects of shocks.
- With the revised SGP, the EU surveillance framework for fiscal policy has been given a broader perspec-

tive as economic and budgetary policies need to set the right priorities for economic reforms, innovation, competitiveness, and strengthening of private investment and consumption in phases of weak economic growth. The improved governance of the budgetary surveillance process, also thanks to the increased attention paid to the quality of public finances, should contribute towards achieving the economic objectives set out in the renewed Lisbon strategy for both growth and employment.

- In particular, the increased focus on debt sustainability, the extra weight given to country-specific economic and budgetary circumstances in defining the Pact’s medium-term objectives, and the enhanced role of structural reforms are expected, on the one hand, to foster investment spending on physical capital and knowledge (both human capital and R&D), thereby raising the productive capacity of the economy over the medium to long-term and, on the other, to establish a political economy mechanism more favourable to the process of structural reform and ultimately act to boost employment creation.
- Successful implementation of the re-launched Lisbon strategy, encompassing guidelines for macro-, micro-economic and employment policies at national level and for structural action at EU level, would make European economies more resilient and able to adjust faster to shocks, thereby strengthening and sustaining confidence among economic actors and reducing the need for stabilisation policies.

Annex I

Box 9 – Estimation of a ‘reaction’ function for budgetary policy

The general government cyclically-adjusted primary balance (CAPB) aims to measure the discretionary impulses of budgetary policy⁵². The adjustment is based on the estimated average impact on government revenue and expenditure of the deviation between actual and potential GDP⁵³. An increase/decrease in the CAPB represents a fiscal tightening/loosening. The monetary conditions indicator (MCI) is a weighted average of changes in domestic real interest rates and real effective exchange rates⁵⁴. An increase/decrease in the MCI represents a monetary tightening/loosening.

Using macro-pooled data for the EU-15⁵⁵, the following equation is estimated to explain the cyclically-adjusted primary balance (*capb*):

$$capb_{it} = \alpha_i + \beta_1 mci_{it} + \beta_2 d(gap_{it}) + \beta_3 dum_j d(gap_{it}) + u_{it}$$

where i and t are respectively the country and period indices; α_i is the fixed effects coefficient; mci_{it} is the monetary conditions indicator; gap_{it} is the cyclical component of output using the production function approach (i.e. the output gap); dum_j is a dummy that equals one after 1993 for EMU participants and zero otherwise⁵⁶; u_{it} is a first order autoregressive stochastic process; and d is the first difference operator.

The source of the data is DG ECFIN, Ameco. Data for the MCI are derived from calculations made in DG EMPL using Ameco data for real interest rates and real effective exchange rates.

The pool equation for the EU-15 (excluding Luxembourg), covering the 1970-2004 period, is estimated using *ordinary least squares*.

A note of caution is necessary regarding the estimation method. Due to the possible endogeneity of regressors, it would have been preferable to use the *two-stage least squares* estimation method. Lack of adequate instruments prevented this. Therefore, the results should only be taken as illustrative, because the estimates might be both biased and inefficient.

The estimates of this equation are used to test the following hypothesis. On average across EMU countries, and after controlling for monetary conditions (MCI), discretionary fiscal policy (CAPB) has not been actively/systematically used to

counteract cyclical fluctuations since the onset of the EMU project (1993). This hypothesis corresponds to testing for $\beta_2 + \beta_3 = 0$. With a *p-value*^a of 60%, this hypothesis cannot be rejected.

a) The *p-value* indicates the probability of obtaining a test statistic whose absolute value is greater or equal to the sample statistic if the (null) hypothesis is true.

The estimation results:

Coefficient	Estimate
β_1	-0.10 (-1.4)
β_2	-0.20 (-3.6) *
β_3	0.18 (2.7) *
AR(1)	0.76 (20.6) *
R ² adjusted	0.76
Standard error of the regression	1.4

The t ratios are in parentheses. * coefficient significant at 1%.

52 It excludes variations in the general government primary balance due to cyclical fluctuations and the impact of automatic stabilisers. However, in recent years the systematic recourse by many Member States to one-off/transitory budgetary measures has introduced a bias between this indicator and the underlying fiscal stance.

53 Source: DG ECFIN, Ameco.

54 $MCI_t = \omega(r_t - r_b) + (1 - \omega)(q_t - q_b)$, where r_t is the short-term real interest rate, q_t is the log of the real effective exchange rate (where a rise in q_t represents an appreciation), ω is the weight of the interest rate component, and r_b and q_b are the levels of the real interest rate and the log of the real effective exchange rate in a given base period. The data source is DG ECFIN, Ameco. ω is set to 2/3, which is a value commonly used. Batini and Turnbull (2000), *Monetary Conditions Indices for the UK: A Survey*, Bank of England.

55 EU-15, excluding Luxembourg.

56 It is implicitly assumed that in a number of EU Member States a break in fiscal policy might have occurred around 1992/1993 (the Maastricht Treaty was signed in 1992), as at that time future participants in EMU embarked on a budgetary consolidation path to reduce by 1997 their general government deficits below the reference value of 3% of GDP, and thereby qualify for the first wave of monetary union. Later dates for the starting year of the ‘EMU effect’ (i.e. the dummy in the regression) were tested without significant changes in the results.