



Statistics in focus

ECONOMY AND FINANCE

THEME 2 – 38/2003

NATIONAL ACCOUNTS

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Contributions to economic growth in 2002 by GDP component

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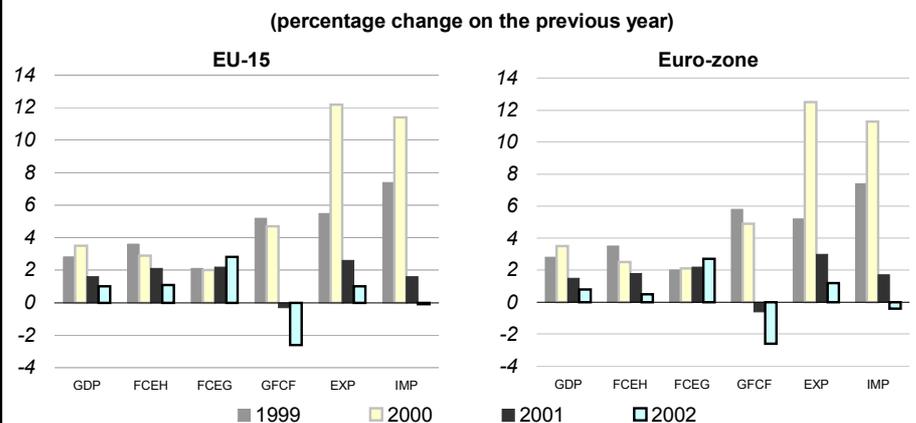
Economic growth is usually expressed by the growth of gross domestic product (GDP). This measure reflects a country's general economic performance but, in fact, GDP consists of various components. These are, first and foremost, domestic demand and the external balance – the former, in turn, comprising household and government final consumption expenditure, and investment. All these components exhibit different characteristics and different development over time and contribute differently to GDP growth. This issue of Statistics in focus examines the growth, size and contributions for the EU15, the euro-zone, the United States and Japan. For data on EU15 Member States, please consult Statistics in focus Theme 2 - 35/2003.

Fall of investment limits European Union growth in 2002

Annual real GDP growth for the EU15 and the euro-zone was respectively 1.0% and 0.8% in 2002, down from 1.6% and 1.5% in 2001. Compared with 2001, lower GDP growth in 2002 was accounted for by a weaker contribution of domestic demand to economic activity. Modest domestic demand was in turn due to a significant reduction of investment, which decreased by 2.6% in 2002, contracting for the second consecutive year both for the EU15 and euro-zone. This was only partially counterbalanced by a moderate acceleration in government consumption.

After a strong growth in exports and imports in 2000, external trade showed slower growth in 2001, that deteriorated further in 2002: annual real growth of exports of goods and services (including trade between Member States) was down to 1.0% in the EU15 and to 1.2% in the euro-zone, while imports even fell, by 0.1% and 0.4%, respectively.

Fig. 1. Growth rates of GDP and its main components



Growth of GDP components

As already noted, **European Union** domestic demand components saw lower growth rates in 2002. This is particularly true for household consumption that had shown a growth rate of 2.1% in 2001, which then dropped to 1.1% in 2002. Government expenditure showed a modest acceleration, moving from 2.2% growth in 2001 to 2.8% in 2002. Investment (i.e. gross fixed capital formation) contracted for the second consecutive year (-0.3% in 2001, -2.6% in 2002). The external balance in 2002 amounted to 1.9% of GDP and was thus 0.7 percentage points up from the balance observed in 2001. It should be noted that imports and exports cover both inter- and extra-community trade.

For the **euro-zone**, the decline of growth in household expenditure, down from 1.8% in 2001 to 0.5% growth in 2002 was one reason for slower growth of GDP in 2002. GDP growth has been supported to some extent by the external balance, which turned out to be consistently

more favourable for the euro-zone than for the EU15.

Compared with 2001, GDP growth in the **United States** accelerated considerably in 2002, rising from 0.3% to 2.4%. This was mainly due to accelerating growth in the consumption items, while growth of investment was negative in 2002 again, but the rate was still less negative than in the European Union, and showed an improvement with respect to 2001 can be detected. The external balance, however, deteriorated further, to -4.1% of GDP.

GDP was nearly stagnant in **Japan** in 2002, even if both household and government expenditure grew by 1.4% and 2.3% respectively, which contrasts with the strong reduction by 4.9% of investment in 2002, almost twice as great as the EU15 and euro-zone rates. Exports, on the other hand, increased by 8.2% in 2002, which is by far the highest rate among the countries considered here.

Tab.1. GDP components, volume growth rates (% change on the previous year), 2001 and 2002

EU-15							Euro-zone								
	GDP	FCEH	FCEG	GFCF	EXP	IMP	EB*		GDP	FCEH	FCEG	GFCF	EXP	IMP	EB*
2001	1.6	2.1	2.2	-0.3	2.6	1.6	1.2	2001	1.5	1.8	2.2	-0.6	3.0	1.7	1.6
2002	1.0	1.1	2.8	-2.6	1.0	-0.1	1.9	2002	0.8	0.5	2.7	-2.6	1.2	-0.4	2.5

US							Japan								
	GDP	FCEH	FCEG	GFCF	EXP	IMP	EB*		GDP	FCEH	FCEG	GFCF	EXP	IMP	EB*
2001	0.3	2.5	3.8	-2.7	-5.4	-2.9	-3.5	2001	0.4	1.7	2.6	-0.9	-6.1	0.1	0.6
2002	2.4	3.1	4.5	-1.9	-1.6	3.7	-4.1	2002	0.1	1.4	2.3	-4.9	8.2	2.0	1.3

NB:* The trade balance is expressed as a percentage of GDP.

GDP: Gross domestic product; **FCEH:** Household final consumption expenditure; **FCEG:** Government final consumption expenditure, **GFCF:** Gross fixed capital formation; **IMP:** Imports (gross); **EXP:** Exports (gross); **EB:** External balance.

Contributions to GDP growth

Another way of summarising component dynamics when evaluating their effect on GDP growth is to identify the **contributions** they give to annual economic growth. Growth contributions have the advantage of providing an indication of both the dynamics and the absolute size (importance) of a component. They also allow more straightforward accounting for the effect of the external balance.

The growth contributions for each component can be computed as a percentage of the GDP growth rate or as an absolute contribution (equal to the annual variation of each component expressed as a percentage of GDP). In figure 2, the second option has been chosen, so that contributions will add up to the GDP growth rate.

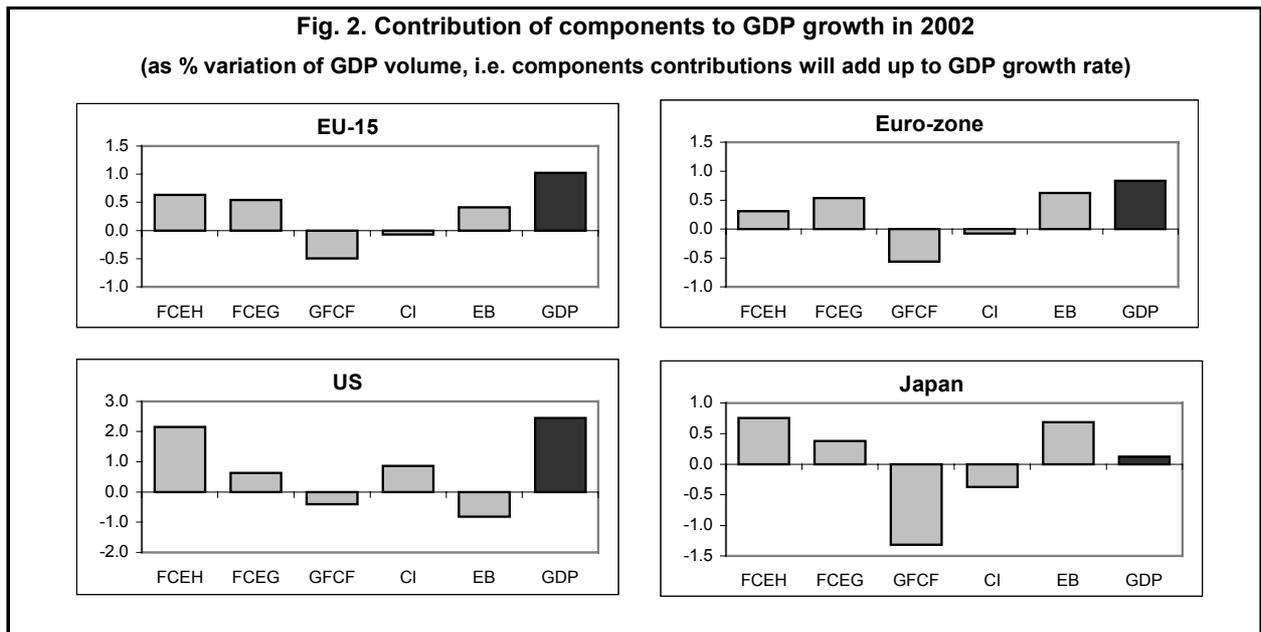
In the **European Union**, household consumption and government consumption were the main factors behind GDP growth: their respective contributions were 0.6 and 0.5 percentage points (p.p.). The relatively low overall growth in 2002 is mainly attributable to investment,

which reduced the growth rate of GDP by almost 0.5 percentage points.

In the **euro-zone**, household consumption had a smaller impact (0.3 p.p.) than in the EU, and the negative effect of the contraction in investment reduced GDP growth by 0.6 percentage points, counterbalanced by a positive contribution from government consumption expenditure (0.6 p.p.).

In both areas, the external balance supported GDP growth: in the EU15, it accounted for 0.4 p.p. and in the euro-zone for 0.6 p.p. of GDP growth (i.e. 75% of total growth for the euro-zone).

Household consumption made a significantly greater contribution in the **United States** than in the EU, but overall US growth was adversely affected by the external balance and by investment, even if less so than for European Union. The **Japanese** economy was driven by the two consumption items and the external balance, but restrained by the decline of investment.



Legend: see Table 1; **CI**: Change in inventories.

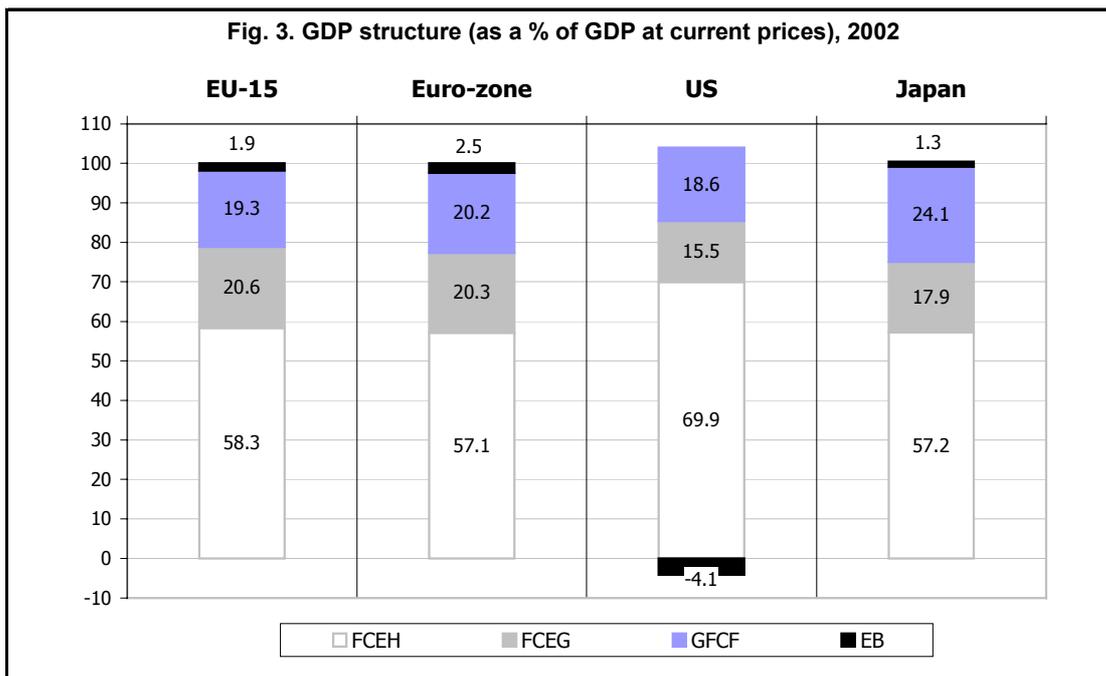
GDP structure

When considering the structure of GDP in the **European Union**, household consumption accounted for the largest share in 2002 (58.3%), followed by government consumption (20.6%) and investment (19.3%). Together those three components of domestic demand nearly accounted for total GDP (98.1% of GDP).

The breakdown is obviously quite similar in the **euro-zone**, where the figure for household consumption was slightly lower (57.1%) and the respective figure for investment slightly higher (20.2%).

In the **United States** the GDP structure is marked by a particularly large share for household consumption (69.9%), a smaller share for government consumption (15.5%) and a negative external balance (-4.1%). Investment occupied a relatively smaller share (18.6%) than in the EU15.

In **Japan** investment accounted for 24.1% of GDP, the highest percentage among the countries under consideration here. On the other hand, compared to the EU15 figure, the share of government consumption was lower at 17.9%.



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