

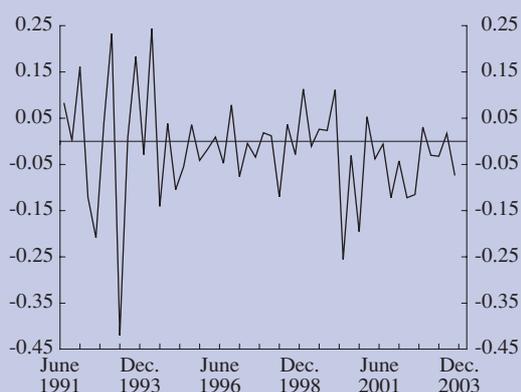
Box 6

What is behind discrepancies between growth in GDP and gross value added?

GDP is the main summary indicator of economic activity and can be compiled using different approaches. On the output side, GDP measures the sum of the gross value added created through the production of goods and services in the individual sectors of the economy. On the income side, it measures the sum of all incomes generated by the production of goods and services, and on the expenditure side, it measures the sum of domestic and (net) external demand for the produced goods and services. Developments in real GDP growth based on measures of expenditure components and sectoral output in volume terms are regularly presented in the section of the Monthly Bulletin entitled "Economic and monetary developments in the euro area". Quarter-on-quarter rates of growth in real GDP and total real gross value added tend to be very similar, but, at times, there can be relatively large and persistent discrepancies (see Chart A). This box explains the conceptual differences between GDP and total gross value added and studies these discrepancies in terms of their real rates of growth since the early 1990s.

Chart A: Real GDP and real gross value added

(percentage point difference between the quarter-on-quarter growth rates)



Source: Eurostat.

Conceptual differences between GDP and gross value added

There are two important differences between GDP and total gross value added. First, the gross value added of a sector includes the financial intermediation services indirectly measured (FISIM) by this sector. FISIM denote the payments for services rendered by financial intermediaries to their customers, such as reflected in charges and interest margins, and are treated as intermediate consumption. In the national accounts for the euro area, FISIM are not allocated to individual user sectors, but treated as a fictitious separate sector deducted from total gross value added.¹ Second, the gross value added of a sector is measured net of taxes (for instance VAT) and subsidies on products. In the national accounts for the euro area, product taxes (minus subsidies) are recorded for the economy as a whole and added to the total gross value added.

The separation of FISIM and product taxes (minus subsidies) from gross value added can have implications for comparisons across sectors as well as for comparisons between sectoral and economy-wide developments. If, for instance, the share of FISIM and its movement over the economic cycle is very different across sectors, the value added is not fully comparable across sectors and may somewhat distort measures such as productivity and unit labour costs. Moreover, if the share of product taxes (minus subsidies) in GDP varies significantly over the economic cycle, economy-wide developments in productivity and unit labour costs based on GDP will deviate from those implied by sectoral developments.

Empirical discrepancies between real GDP growth and total real gross value added growth

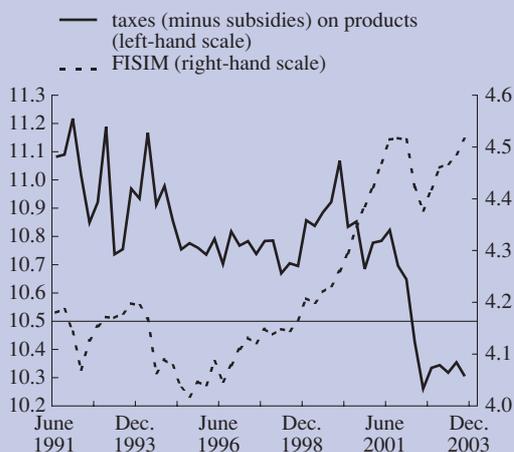
Since the early 1990s, real GDP and total real gross value added have grown at roughly the same pace, with an average absolute difference in quarter-on-quarter growth of only 0.02 percentage point. In individual quarters the absolute difference was up to 0.42 percentage point, but such large discrepancies were usually counterbalanced

¹ Commission regulation (EC) 1889/2002 of 23 October 2002 requires that Member States allocate FISIM in the national accounts according to a harmonised methodology as of 2005.

during subsequent quarters (see Chart A above). In this respect, the years 2000 and 2001 were markedly different, as growth in total real gross value added was consistently higher than real GDP growth. This implies that the level of total real gross value added gradually rose relative to that of real GDP. Two factors are behind these developments. First, product taxes (minus subsidies) per unit of total real gross value added declined sharply at the end of the 1990s and continued to do so during most of the slowdown from 2000 onwards. National data suggest that this essentially reflects developments in Germany. Second, FISIM per unit of real gross value added rose strongly in the late 1990s and up to 2001, reinforcing the effect of developments in product taxes (minus subsidies). The relative rise of FISIM in volume terms reflects, to a large extent, the effect of declining prices for financial intermediation services, given that, in nominal terms, FISIM per unit of gross value added has continued to decline over the past few years.

Chart B: Taxes (minus subsidies) on products and FISIM

(as a percentage of real gross value added)



Source: Eurostat.

Note: FISIM denotes financial intermediation services indirectly measured.

Overall, the lower growth in real GDP compared with that in total real gross value added in 2000 and 2001 is explained by the fact that, relative to total real gross value added, product taxes (minus subsidies) declined and FISIM increased. Since mid-2002 growth in real GDP and in total real gross value added has, however, been broadly similar.