Box 5

Euro area exports and imports of goods according to national accounts and external trade statistics

National accounts data on the composition of euro area real GDP growth, as reported in "Output, demand and labour market developments" of the ECB Monthly Bulletin, now include a breakdown of exports and imports into goods and services. At the same time, these data continue to refer to total external trade, i.e. the sum of intra-euro area and extra-euro area trade. However, as a result of the new breakdown it is now possible to compare developments in total exports and imports of goods in the national accounts with those in the external trade statistics. The trade statistics, as reported in "Exchange rate and balance of payments developments" of the Monthly Bulletin, only record external trade in goods but provide a breakdown of total trade into intra-euro area and extra-euro area trade. This box explains the methodological differences between the two types of statistics and assesses whether the two data sources provide a consistent picture on the external side. If a consistent picture emerges, developments in intra-euro area and extra-euro area trade reported in the external trade statistics can be used to improve our understanding of developments in total exports and imports based on national accounts data. It should be noted that the balance of payments statistics provide another source of data for trade, both in goods and services, but these statistics refer to values only and do not provide volume and price measures.

National accounts and external trade statistics subject to methodological differences

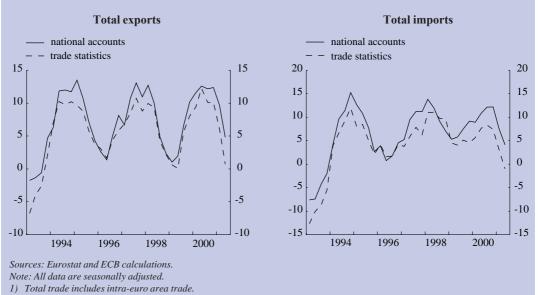
External trade statistics are an important input to the compilation of national accounts. However, when comparing the developments in exports and imports of goods in the national accounts with those in the external trade statistics, it should be noted that there are methodological differences between the two sets of statistics. Some of these differences are explained in this section. One difference lies in the valuation of exports and imports. In national accounts, both exports and imports of goods are valued free on board (f.o.b.), i.e. the value of the goods when they leave the exporting country including transport costs up to the border of that country. By contrast, in the external trade statistics only exports are measured on an f.o.b. basis, while imports are reported on a cost insurance freight (c.i.f.) basis, essentially the value of imported goods at the first port of arrival in the importing country before the payment of any import duties or other taxes on imports. Another difference relates to the fact that the data in euro area-wide national accounts and trade statistics are subject to different underlying methods of adjustment for seasonal and working day effects. This might account for some differences in the quarter-on-quarter changes in the respective series in the national accounts and those in the external trade statistics, and also for small differences in the year-on-year changes if they are calculated from seasonally and/or working day adjusted data. Importantly, as trade statistics data are published monthly, while national accounts data are published quarterly, the data in the two sets of statistics also differ with regard to the times of the updating and revising of data. This might in particular account for some differences for the most recent observations. In addition, the respective volume series in the two statistics reflect differences between the deflators used in the national accounts and those used in the external trade statistics.

Pattern of growth in exports and imports of goods similar in national accounts and external trade statistics

Against the background of the methodological differences, the growth in exports and imports of goods in national accounts cannot be expected to display a pattern which is fully congruent with that of the corresponding growth rates obtained from the external trade statistics. However, there is a high degree of similarity between the actual pattern of export and import growth in both sets of statistics. The main point of interest in this comparison is the volume series, as these data are used in the context of the analysis of euro area real GDP

Chart A: Euro area total exports and imports of goods 1)

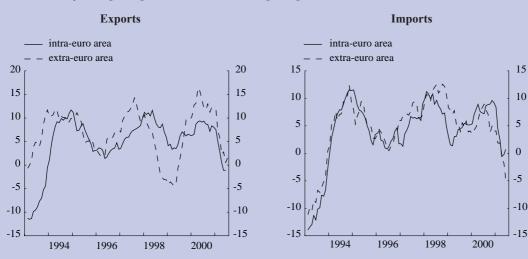
(volumes, annual percentage changes, quarterly data)



growth. For the period from 1993 to 2000 a high degree of co-movement can be observed between the year-on-year growth rates in national accounts and trade statistics (both including intra-euro area trade flows), for export and import volumes of goods (see Chart A). In particular, the turning points occur at approximately the same time, although this is more strongly the case for exports than for imports. The two series tend to move in the same *direction* over the economic cycle, but there are clear differences in the *magnitudes* of the respective rates of growth, which tend to be higher around turning points. These differences in magnitude in the volume series can essentially be explained by differences in the movements of the deflators in national accounts and trade statistics, while developments in the respective values series are very similar, even at turning points. Overall, given the similarities in the growth pattern of total trade in national accounts and the external trade statistics, data from the trade statistics can shed light on the contributions from intra-euro area and extra-euro area trade flows to the growth of total export and import volumes of goods in national accounts.

Chart B: Euro area exports and imports of goods in the trade statistics

(volumes, annual percentage changes, three-month centred moving averages)



Sources: Eurostat and ECB calculations. Note: All data are seasonally adjusted.

Looking at the developments of extra-euro area and intra-euro area export growth since 1999, the increase and subsequent decline in the year-on-year rate of growth of extra-euro area export volumes has been higher than that of intra-euro area export volumes (see Chart B). This reflects the different underlying determinants of extra-euro area and intra-euro area trade. The strong increase in growth in extra-euro area exports up to the first half of 2000 was primarily due to the positive impact of strong foreign demand and the increased price competitiveness in connection with the depreciation of the euro. At the same time, growth in intra-euro area exports increased to a lesser extent as the high euro price of oil led to a loss in real income in the euro area and thus dampened the expansion of internal demand. In the second half of 2000, the growth of both extra-euro area and intra-euro area exports started to slow due to the deceleration in foreign and euro area demand. On the import side, intra-euro area and extra-euro area import volumes tend to move more closely together as both are primarily determined by demand in the euro area.

Overall, while data on exports and imports (including intra-euro area trade) differ between national accounts and trade statistics for methodological reasons and temporarily display noticeable differences in the respective rates of growth, there is a high degree of similarity in the general pattern of growth in total exports and imports. This implies that a better understanding of euro area trade developments can be achieved by complementing the analysis of total exports and imports in "Output, demand and labour market developments" of the Monthly Bulletin with the analysis of intra-euro area and extra-euro area trade according to the external trade statistics in "Exchange rate and balance of payments developments".