The external trade of the euro area economy: stylised facts and recent trends

This article aims to provide a clear understanding of the importance of extra-area trade for the euro area, as well as its composition in terms of direction and category, thereby highlighting how external factors may influence the economy of the euro area. Although relatively closed by comparison with the individual constituent countries, the euro area is somewhat more "open" than either the United States or Japan. Typical of an advanced industrialised economy, the euro area is a substantial importer of raw materials and energy, while specialising in the trade of manufactured goods. In terms of geographical breakdown, more than 40% of the euro area's trade in goods is with four countries: the United Kingdom, the United States, Switzerland and Japan. For the euro area as a whole, extra and intra-area trade flows are roughly comparable in size, while the degree of external openness, and the importance of intra-area trade, differ markedly across the individual euro area countries. All of these data are useful in helping to understand how fluctuations in the trade of specific goods, or in trade with particular countries, might influence euro area trade. Finally, recent developments in the current account of the euro area are described – particularly the decline in the surplus for trade in goods – in terms of their main determinants and in the context of global current account imbalances.

1 Stylised facts of the external sector of the euro area

By contrast with the individual euro area countries, the euro area is a relatively closed economy, with a degree of openness closer to that of the United States and Japan. Nevertheless, a clear understanding of the external trade sector of the euro area is important and necessary, especially in the context of a rapidly changing external environment characterised by increasing globalisation and market integration. Furthermore, given that many commentators tend to provide information on the individual, and usually more open, countries which comprise the euro area, such an analysis is crucial in order to understand how external shocks may influence the euro area economy as a whole, particularly as monetary policy is based on area-wide economic developments.

The external trade sector of the euro area can thus be characterised by the following "stylised facts" which will be discussed in more detail in the remainder of this section:

- the euro area is one of the world's major economies, similar in size to the United States and considerably larger than Japan. However, the euro area is somewhat more open than either of the other two economies;
- typical of an advanced industrialised economy, the euro area is a substantial importer of raw materials and energy, while specialising in the trade of manufactured goods;
- in terms of geographical breakdown, slightly more than 40% of the euro area's trade in goods is with four countries: the United Kingdom, the United States, Switzerland and Japan;
- for the euro area, extra and intra-euro area trade flows are roughly comparable in size; and
- the importance of external trade differs markedly across individual euro area countries, with extra-area exports ranging from around 7% to more than 40% when expressed as a percentage of GDP (although "transit trade" explains a large proportion of external trade in the case of some smaller countries).

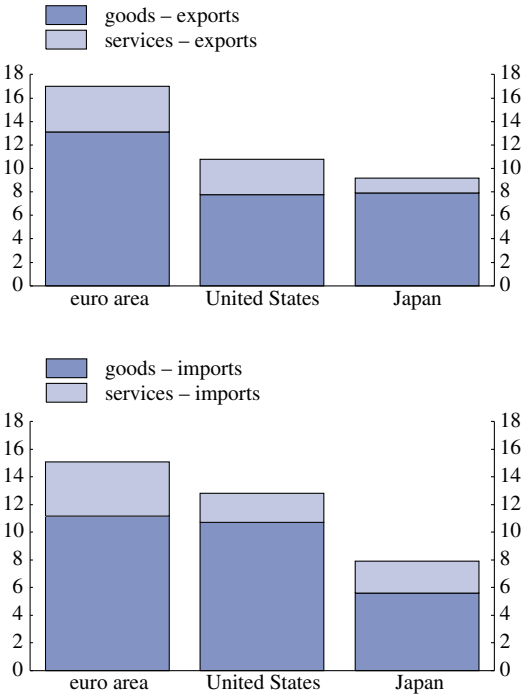
Degree of openness

The area-wide characteristics of the external trade of the euro area are substantially different from the features of the countries participating in the euro area. The degree of openness of the euro area – as measured by extra-area trade flows as a proportion of GDP in nominal terms – is considerably

Chart 1

Relative openness of the euro area compared with the United States and Japan

(exports and imports as a percentage of GDP, average 1997-99)



Sources: ECB, Eurostat, BIS and the IMF.

smaller than that of the euro area countries, because internal cross-border trade does not count as part of the external transactions of the euro area.

Although the individual euro area countries are generally small or medium-sized economies, the euro area – consisting of a large internal market bound together by a single currency – is one of the major world economies, comparable to that of the United States or Japan and, like those economies, relatively closed. The euro area accounts for around 15.5% of world GDP, which is somewhat below that of the United States (20.75%), but approximately twice as large as that of Japan (7.5%). By contrast, the euro area has the highest share of world trade, accounting for around 19.5% of world exports, compared with 15% and 8.5% for the United States and Japan respectively.

Accordingly, the euro area is somewhat more open than either of the other two major economies, as its exports of goods and services represent around 17% of its GDP, compared with just over 11% for the United States and 9% for Japan, while its imports are equivalent to around 15% of its GDP, compared with around 13% and 8% for the United States and Japan respectively (see Chart 1). Hence, in terms of exports, one could say that the euro area is approximately 50% more "open" than the United States, while it is almost twice as "open" as Japan in terms of imports. A similar pattern holds for trade in goods. As a proportion of GDP, the euro area's exports and imports of services amount to almost as much as those of Japan and the United States combined.

Although around half the trade of each of these three major economies is with industrialised countries, while the other half is vis-à-vis emerging market economies, there are considerable differences in terms of their trade relations with specific countries and regions. More than half of Japanese exports destined for industrialised countries go to the United States, while a quarter go to the euro area. Around one-quarter of euro area exports to industrialised countries are directed to the United States, with less than 8% going to Japan. Similarly, a quarter of US exports to industrialised countries go to the euro area, with around 17% going to Japan.

Around half of the emerging market economy trade of the euro area is concentrated among both Asian economies and the accession and transition countries of eastern Europe, while trade between eastern Europe and the United States and Japan is negligible, thereby highlighting the importance of geographical proximity in determining the degree of trade integration (see Chart 2). Similarly, Japan and the euro area have only limited trade links with the Latin American countries, whereas a significant part of US trade is with this region. As a proportion of GDP, Japanese exports to Asia are around three times as large as those of the United States and the euro area,

Table 1

Shares of euro area exports and imports of goods for the main trading partners

(in percentages; average 1995-98)

	Exports	Imports	Average of exports and imports
United Kingdom	18.27	17.22	17.77
United States	13.41	13.83	13.61
Switzerland	6.65	5.84	6.27
Japan	3.61	6.70	5.07
Sweden	3.93	4.28	4.09
China	1.88	4.00	2.88
Russia	2.49	3.22	2.83
Denmark	2.65	2.59	2.62
Poland	2.65	1.84	2.27
Norway	1.43	2.66	2.01
Turkey	2.25	1.48	1.89
Czech Republic	1.88	1.63	1.76
Brazil	1.61	1.57	1.59
Hungary	1.60	1.54	1.57
Taiwan	1.31	1.76	1.52
South Korea	1.43	1.41	1.42
Hong Kong SAR [1]	1.82	0.87	1.37
Canada	1.24	1.33	1.28
Greece	1.80	0.64	1.26
Singapore	1.22	1.18	1.20
Total	**73.13**	**75.59**	**74.28**

Sources: ECB calculations based on Eurostat trade data.
1) Special administrative region.

whereas the trade links in terms of imports from this area are virtually the same for both the United States and Japan, but somewhat smaller for the euro area.

Characteristics of euro area trade

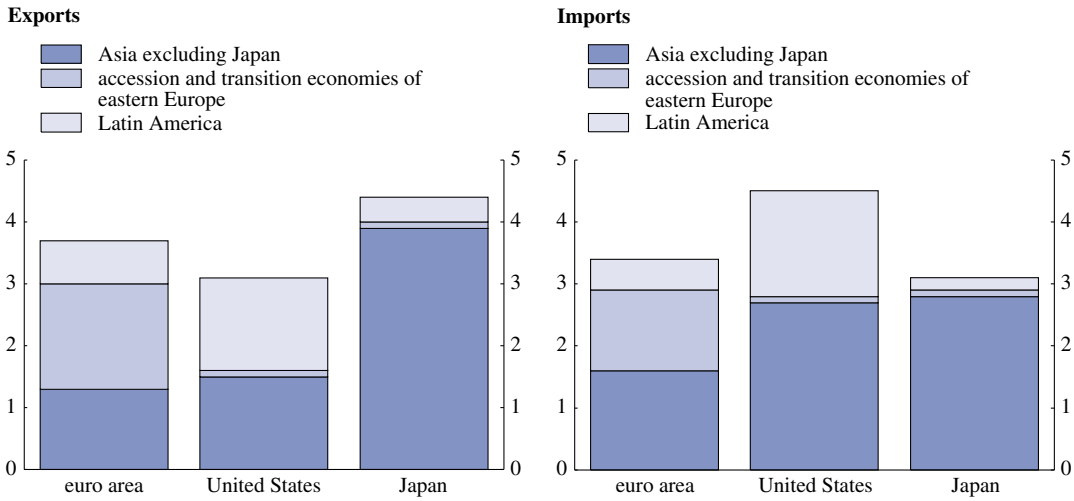
Trade in goods

The euro area is a typical advanced industrialised economy, importing substantial quantities of raw materials and energy –

Chart 2

Exports and imports of goods vis-à-vis three major emerging market economy regions

(exports and imports as a percentage of GDP, average 1995-98)



Sources: ECB calculations based on preliminary data from Eurostat and the IMF.

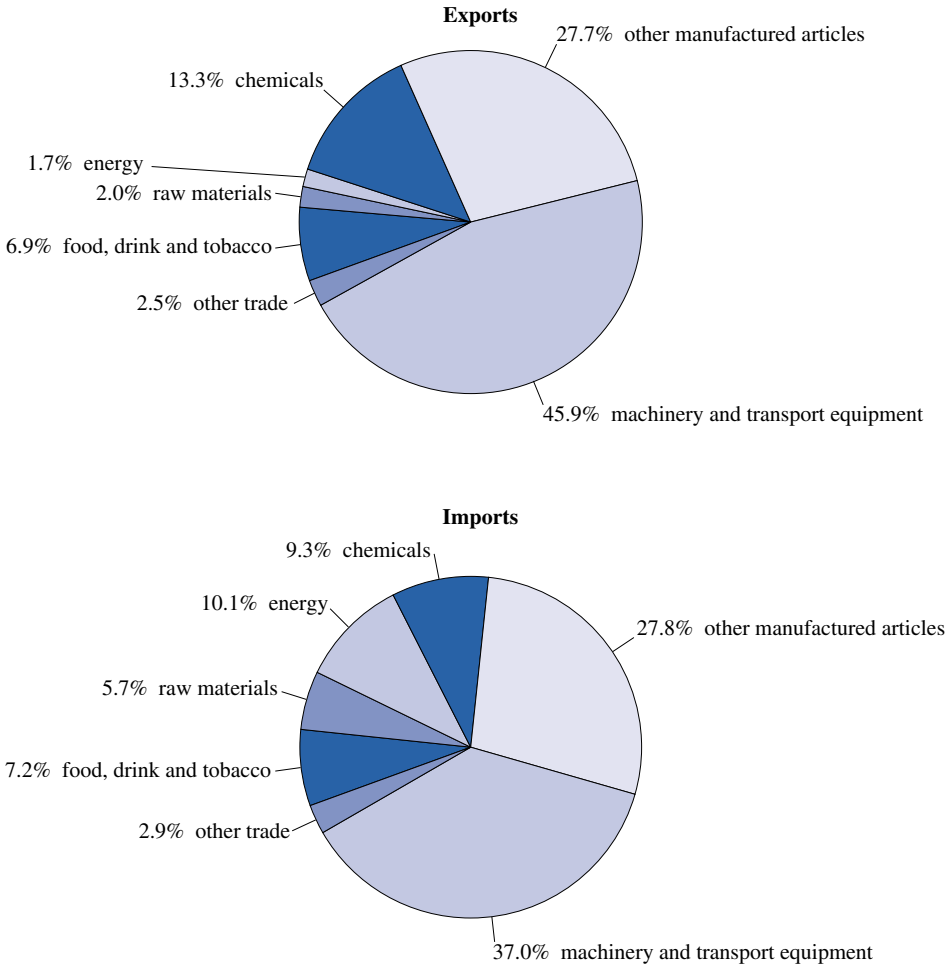
which account for around 16% of euro area imports (compared with around 4% of exports) – while specialising in the trade of manufactured articles (see Chart 3). The three major manufacturing categories – machinery and transport equipment, chemicals and other manufactured articles – account for almost 90% of exports and 75% of imports. Specific trade categories also vary in importance across the individual euro area countries; for example, the share of oil in Portuguese imports is almost three times as large as that for Austria, Germany plays a major role in euro area exports of machinery and transport, while the Netherlands is important in terms of exports of chemicals, food and energy.

As for geographical origin/destination, more than 40% of extra-euro area trade in goods is with four countries: the United Kingdom, the United States, Switzerland and Japan, while another 8% is accounted for by the remaining European Union countries which are not part of the euro area (see Table 1 and the Box). Russia and China also fall within the top ten trading partners of the euro area, each accounting for almost 3% of euro area trade, while Taiwan, South Korea, Hong Kong SAR and Singapore together account for almost 6% of the total. Notably, the transition economies of central and eastern Europe account for around 12.5% of the euro area's total trade.

Chart 3

Extra-euro area exports and imports by categories of goods

(average 1997-99)



Sources: ECB and Eurostat.

Box

Methodological issues regarding trade data

Data for the components of the current account of the euro area are derived by the ECB following balance of payments standards (see Charts 1 and 6 and Table 2 of this article). The remaining charts and tables are based on External Trade Statistics – see the description of "Extrastat" and "Intrastat" below – which are not fully comparable with the goods item in balance of payments statistics. Part of the difference between these series arises from the inclusion of insurance and freight services in the recording of goods imported.

External Trade Statistics for both the EU and the euro area are compiled by the European Commission (Eurostat) from Extrastat and Intrastat data transmitted by Member States. Extrastat data are derived from customs documentation relating to trade in goods between EU Member States and non-EU members. Intrastat data relate to transactions between EU Member States and originate from specific reporting systems which were first set up in January 1993, following the abolition of intra-EU customs controls. One deficiency of Intrastat data is that the value of dispatches is consistently higher than that of arrivals and is equivalent to around 5% of intra-EU gross trade flows; the impact on extra-euro area net trade in goods – i.e. the trade balance between the euro area and other EU countries – is an overestimation in the order of around €10 billion on an annual basis.

Other points to note regarding the External Trade Statistics used in this article are as follows:

- "transit trade" affects the trade data of some euro area countries. In these countries, primarily the Netherlands and Belgium, a large amount of trade is related to the transit of goods both within and outside the euro area;
- trade "price" data are not available for the euro area. Consequently, throughout this article, unit value indices are used as a proxy for trade prices.

Although this article makes use of a substantial amount of data, there is considerable scope for improvement regarding euro area trade data and, more generally, the statistical data relating to all areas of economic analysis for the euro area.

Exports and imports of euro area countries expressed as shares of the euro area's exports and imports

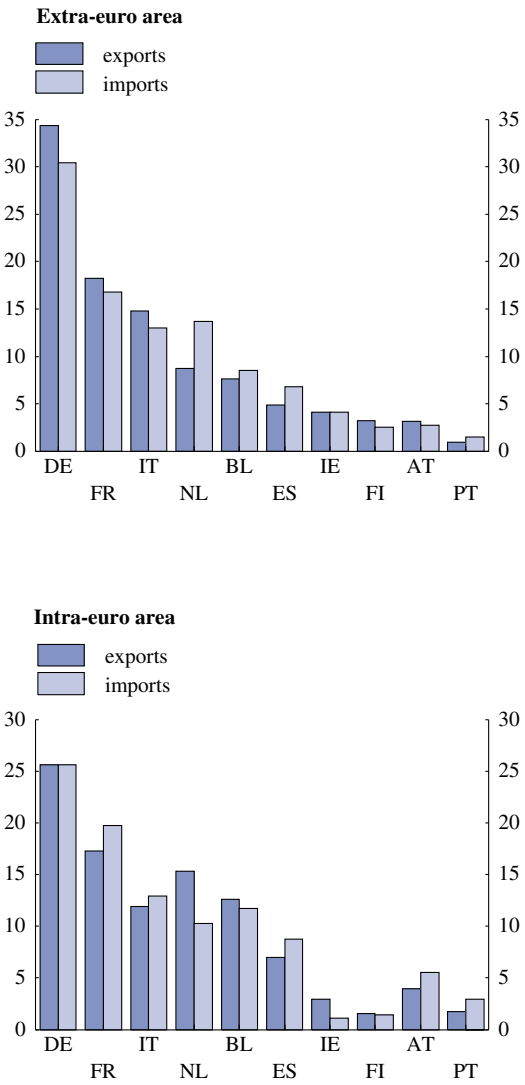
In order to gain a rough understanding of the relative magnitudes of the trade flows of the individual euro area countries, Chart 4 shows the imports and exports of goods for each country, expressed as a proportion of the euro area's exports and imports (the top panel of the chart shows extra-area trade, while the bottom panel displays intra-area trade). The larger countries, such as Germany, France and Italy, account for the largest shares of both intra and extra-area trade. Although some smaller euro area countries, such as Belgium/Luxembourg and the Netherlands, account for a greater proportion of trade than some larger countries, this should be seen in the light of the importance of the "transit trade" activity for these smaller countries.

Also interesting are the differences between intra and extra-area shares. For example, Germany's extra-area exports are almost twice as large as those of France, whereas they are more similar in size in the case of intra-area trade. Obviously, part of the explanation for these smaller differences between countries in terms of intra-area trade is that Germany, for example, is the largest euro area economy and cannot, by definition, export to itself.

Chart 4

Intra and extra-euro area exports and imports for each euro area country expressed as shares of the euro area total

(average 1997-99)



Source: Eurostat.
Note: Separate data for Belgium and Luxembourg are not available for some years, hence data for these two countries are combined under the abbreviation "BL".

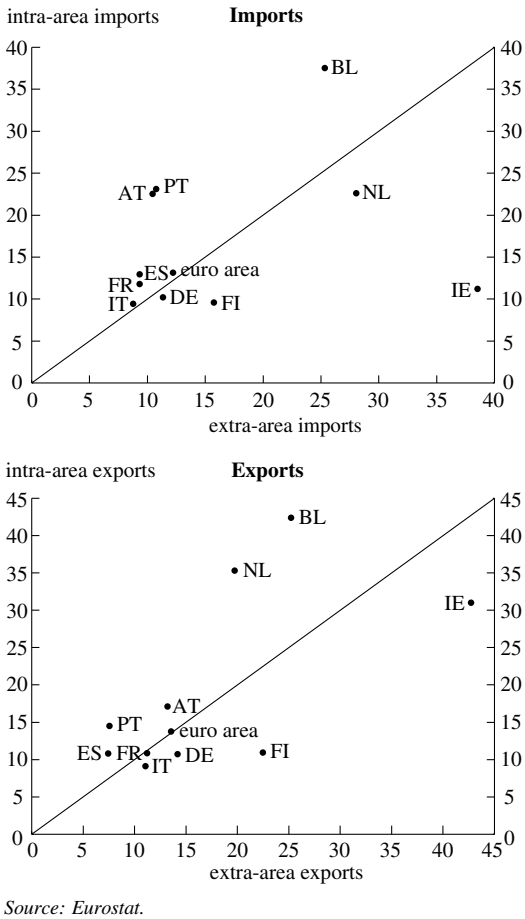
"Openness" of the euro area countries and relative magnitudes of intra and extra-area trade

After discussing the degree of "openness" of the euro area, the importance of external trade for the euro area can be put into perspective by comparing its magnitude relative to intra-area trade. Accordingly, Chart 5 shows intra and extra-area imports and exports of goods as a percentage of GDP for both the euro area and the individual euro area countries. For both exports and imports, intra and extra-euro area trade are roughly the same size, with each corresponding to around 12-14% of euro area GDP. However, particularly in terms of extra-euro area trade, one can see that the degree of openness differs quite markedly across the individual euro area countries. For example, those countries plotted to the right of the euro area in Chart 5 have a higher degree of external openness than the average for the euro area, while those to the left embody a relatively lower degree of external openness.

Chart 5

Extra and intra-euro area exports and imports as a percentage of GDP for each euro area country

(average 1997-99)



Source: Eurostat.

It is clear that Belgium/Luxembourg, Ireland and the Netherlands are, in relative terms, more "open" than the countries clustered around the euro area in the chart, but one should bear in mind that, in some cases, "transit trade" activity accounts for a significant part of these differences.

These scatter diagrams also provide an interesting insight into the relative importance of intra and extra-area trade as a proportion of GDP, as these also differ quite substantially between the euro area countries. For example, extra-area imports are around three times the size of intra-area imports for Ireland, while intra-area imports are roughly twice as large as extra-imports for both Austria and Portugal. On the export side, we see that intra-area exports are considerably larger than extra-area exports in the case of the Netherlands and Belgium/Luxembourg, while the opposite is true for Finland and, to a lesser extent, Ireland. Of course, these differences partly reflect the importance of specific trading partners for the euro area countries. For instance, extra-area trade is relatively more important than intra-area trade in the case of Ireland, partly because of the strong historical trade links with the United Kingdom – which again highlights the importance of geographical proximity in explaining the degree of trade integration.

2 Recent developments in euro area trade

Current account

Trade in goods tends to be the driving force behind developments in the current account, as goods account for almost 60% of total credits and debits, while both services and income each account for just under 20% and transfers amount to approximately 5%. Current account data for the euro area are only available from 1997 onwards and show a declining current account surplus over this period, falling from ECU 76.2 billion in 1997 to €22.8 billion in 1999, equivalent to 0.4% of GDP last year, compared with 1.4% of GDP in 1997 (see Table 2). Almost half of this decline was attributable to a lower surplus for trade in goods, while deteriorations in the balances for both services and income account for most of the remainder.

Table 2

Euro area current account

	Current account [1]					Current account as a percentage of GDP		
	Goods	Services	Income [2]	Current transfers	Total	Euro area [3]	United States [4]	Japan [4]
1997	124.8	7.1	-15.2	-40.5	76.2	1.4	-1.7	2.2
1998	118.8	-0.9	-28.8	-45.8	43.3	0.7	-2.5	3.2
1999	99.5	-7.5	-26.4	-42.8	22.8	0.4	-3.7	2.5
1999 Q1	21.5	-3.2	-6.4	-5.5	6.4	0.4	-3.0	2.7
1999 Q2	24.8	0.2	-7.1	-9.3	8.6	0.6	-3.5	2.6
1999 Q3	26.6	-1.1	-6.4	-14.6	4.5	0.3	-3.8	2.5
1999 Q4	26.5	-3.3	-6.5	-13.4	3.4	0.2	-4.0	2.2
2000 Q1	9.3	-5.3	-6.3	-5.5	-7.9	-0.5	-4.2	3.0

Sources: ECB, Eurostat, BIS and the IMF.

1) EUR billions (ECU billions to end-1998); not seasonally adjusted. Figures may not add up due to rounding.

2) Some earlier data have been partly estimated and may not be fully comparable with more recent observations.

3) ECB and Eurostat data. GDP data are seasonally adjusted, while the current account balance data are not seasonally adjusted.

4) For the United States and Japan, figures refer to seasonally adjusted data for both GDP and the current account.

It is informative to view this trend in the current account of the euro area in the context of global current account imbalances (see Table 2). By contrast with the small, but diminishing, surplus of the euro area, the United States is running a large, and growing, current account deficit greater than 4% of GDP, while the current account surplus for Japan amounts to around 3% of GDP. Of course, these quite different current account positions partly reflect differences in factors such as relative growth rates and cyclical positions. For example, exceptionally strong GDP growth rates for the United States in recent years, resulting in a significant rise in import penetration, partly explain the widening of the US deficit. By contrast, Japanese imports actually registered a significant decline on account of falls in expenditure and weak economic growth over this period. By comparison, the euro area has remained relatively stable, exhibiting a steady expansion of demand and, until very recently, a fairly "neutral" cyclical position.

The counterpart to the worsening of the US current account balance is the rising gap between private sector saving and investment, which has increasingly offset the continued and considerable improvement in general government savings. In the case of Japan, by contrast, the emergence of a growing current account surplus in recent years coincided with a fall in investment as a proportion of GDP, while household savings have grown. These developments have therefore offset the impact of a large public sector deficit for Japan. The small current account surplus for the euro area over the past few years has been associated with steady output growth, along with an excess of savings over investment. An improvement in the government saving-investment balance, resulting from the fiscal consolidation efforts associated with the process of Economic and Monetary Union, has partly contributed to the latter.

The declining goods balance

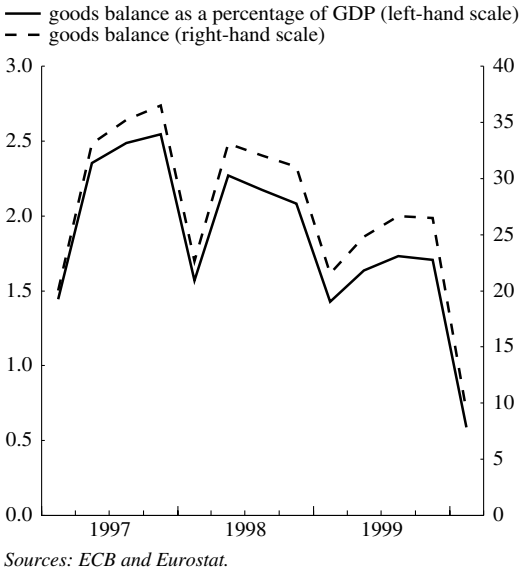
By comparison with the previous year, the current account surplus declined by €20.5 billion in 1999, which is almost entirely explained by a €19.3 billion fall in the surplus for trade in goods over the same period (see Chart 6). Despite significant growth in the value of exports of goods, which rose by €23.6 billion (or around 3.1%) in 1999, imports increased by €42.9 billion (or around 6.5%). Two major factors underlie this decline in the goods surplus: first, the low level of export values during the first half of 1999, resulting from the steep decline in foreign demand in 1998, along with the appreciation of the ECU; and, second, the strong growth in import prices owing to the higher price of oil and the decline in the exchange rate of the euro during 1999.

After a strong increase in 1997, euro area export volumes fell as a result of a slowdown in external demand as well as a loss in price competitiveness associated with the appreciation of the ECU (see Chart 7) in the second half of 1998. Exports began to recover at the start of 1999, exceeding their previous peak in the third quarter of last year in

Chart 6

Euro area goods balance

(monthly/quarterly data; ECU/EUR billions; percentage of GDP)



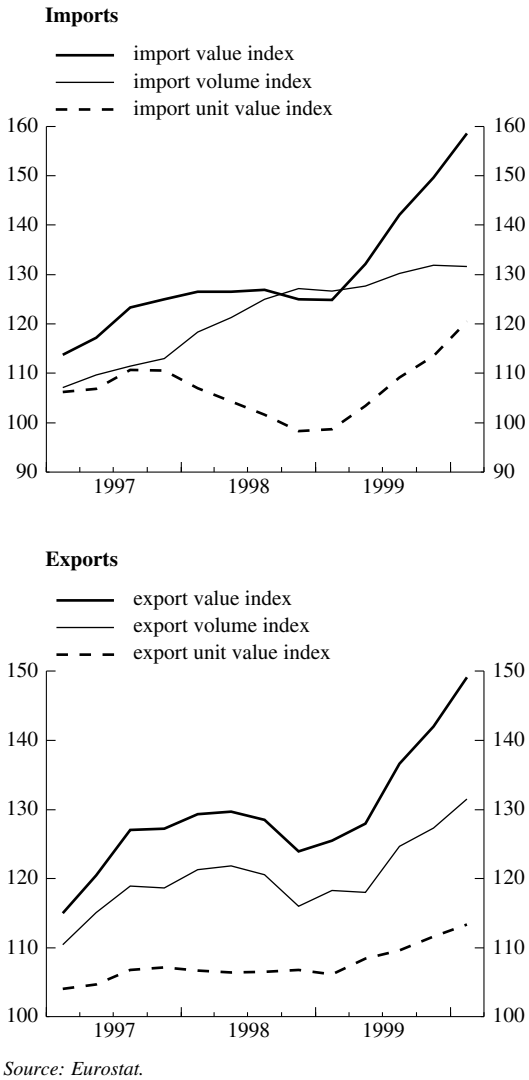
Sources: ECB and Eurostat.

response to renewed growth in foreign demand and gains in export price competitiveness resulting from the decline of the euro. Strong negative growth rates of import demand in Japan and the rest of Asia, together with a deceleration in import growth in the United Kingdom, the United States and central and eastern Europe, explain a large part of the decline in foreign demand in 1998. Similarly, the rebound in demand in most of these regions, particularly Asia (including Japan), as well as continued robust import growth in the United States, correspond with the recovery in export values for the euro area in 1999. Chart 7 shows that the recovery in export values is primarily the result of strong growth in export volumes. However, the depreciation of the euro has also been associated with a significant rise in export prices – proxied by unit value indices – in excess of rising costs, suggesting that euro area exporters have increased their profit margins.

Chart 7

Euro area import and export values, volumes and unit values in levels

(seasonally adjusted; index: 1995=100)



Source: Eurostat.

When calculating weights which capture the degree of competition exerted by different countries/regions vis-à-vis the euro area in world markets, one should also consider the importance of competition in third markets of both rival exporters and domestic producers (i.e. calculate weights for competitiveness which are based on "third market" effects). Such calculations – based on trade in manufactured goods – are carried out when deriving the individual country weights for the effective exchange rate of the euro (see the article entitled "The nominal and real effective exchange rate of the euro" in the April 2000 issue of the ECB Monthly Bulletin). Although trade weights including third market effects still show that the United Kingdom is the euro area's most important competitor with a weight of 17.9%, followed by the United States (17.1%) and Japan (10%), when compared with the weights based on simple trade shares, these third market effects decrease the relative weights and importance of the United Kingdom and the United States, while increasing the weight of Japan and the "Asian tigers".

Chart 8 shows that the depreciation of the euro has resulted in improved price competitiveness as the real effective exchange rate of the euro has significantly declined since the end of 1998. The chart also shows a clear relationship between the real effective exchange rate of the euro and the euro area's export market shares – where the latter is defined as euro area export volumes relative to a weighted average of the import volumes of the euro area's main export markets. Export market shares declined during 1998 as the ECU appreciated – partly driven by

the large depreciation of the currencies of emerging market economies during the "Asian crisis" – while the decline of the euro helped to regain some of this loss in share last year. Given that export volumes have not yet fully responded to the improvement in competitiveness arising from the depreciation of the euro, one might expect a further rise in export market shares in the future. However, it should be noted that exchange rate-driven improvements in competitiveness may prove to be temporary, and more importance should be attached to the medium-term price competitiveness position of the euro area.

On the import side, a virtually constant level of imports (in value terms) during 1998 resulted from a combination of substantially higher import volumes and a large fall in import prices (see Chart 7). By contrast, during 1999 and in the first months of 2000, the sustained rise in import prices, which was attributable to higher oil prices and the decline of the euro, explains the steep rise in import values, given that import volumes remained fairly flat (Chart 8 suggests that the latter is partly related to improvements in price competitiveness). Preliminary estimates suggest that around half of the 20% rise in import prices during the 12-month period up to December 1999 was a result of the increase in the US dollar price of oil, while the weakening of the euro and other factors – such as increases in the producer prices of import suppliers – accounted for the other half.

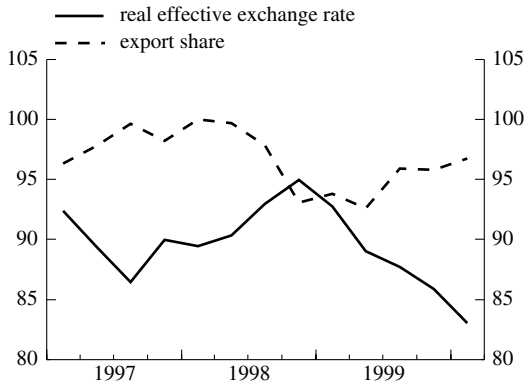
During the 12-month period up to December 1999, oil prices increased from €8.8 per barrel to €24.8 per barrel. This was associated with an increase in the oil trade deficit of the euro area from around ECU 34.8 billion in 1998 to approximately €50 billion in 1999, and it is projected to rise further this year. If the oil price moves in line with oil futures prices during the second half of this year, the rise in the oil trade deficit of the euro area may amount to between approximately ¾% and 1% of GDP when comparing 2000 with 1998.

Whether the past depreciation of the euro will eventually correspond to an overall improvement in the goods balance depends partly on the extent to which it offsets the impact of higher oil prices which, in turn, is dependent on the future path of both the euro and oil prices. However, the improvement in competitiveness arising from the depreciation of the euro is not the only

Chart 8

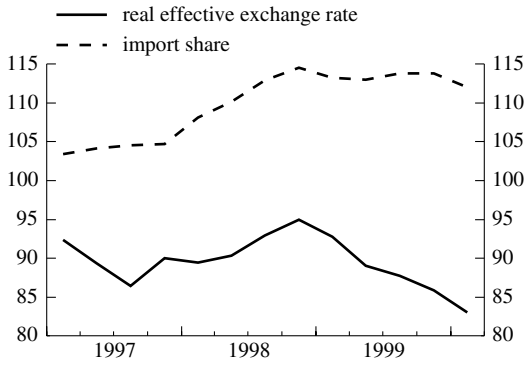
Euro area export market share and the real effective exchange rate

(index: 1995=100)



Euro area import volumes as a share of real total final expenditure and the real effective exchange rate

(index: 1995=100)



Sources: ECB and Eurostat.

Note: The euro area export market share is defined as the euro area export volume divided by export demand (both expressed as indices where 1995=100), where the latter is defined as a weighted average of the import volumes of the euro area's main export markets. The real effective exchange rate is the broad effective exchange rate index deflated by relative consumer price indices (see the article in the April 2000 issue of the ECB Monthly Bulletin entitled "The nominal and real effective exchange rates of the euro").

reason behind the increase in the growth of net trade volumes for the euro area, as exports are also growing in response to more robust growth in major export markets. Furthermore, the current upturn in growth in the euro area seems to be a well-balanced recovery, with internal and external factors reinforcing one another in terms of their contribution to growth. Finally, it should be noted that the contribution to GDP growth of net exports is fairly limited when compared with the impact of domestic demand, as the degree of openness of the euro area is relatively small.

3 Concluding remarks

The main objective of this article is to clarify the issue of how external factors may influence the economy of the euro area as a whole, particularly as monetary policy is based on area-wide developments. The importance of external trade for the euro area is put into perspective by showing that extra and intra-area trade are roughly comparable in size. This, in turn, implies that while the openness of the euro area is considerably smaller than that of the individual euro area countries, the extent of competition within the euro area is quite considerable. Given the relatively small degree of openness of the euro area, the economic activity of the euro area is more dependent on domestic factors than external developments. Nevertheless, extra-area imports and exports, along with the exchange rate of the euro, are important factors, which can have a significant impact on growth. Within this context, one should note that the recent exchange rate-driven improvements in price competitiveness may prove to be transitory, resulting in only temporary positive impacts on net exports. More importantly, a depreciation which lasts longer carries dangers for price stability, primarily via higher import prices, which might in the longer run have a negative impact on price competitiveness and thereby adversely affect net exports.