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SPEECHES

Address by Governor Vítor Manuel Ribeiro Constâncio at his sworning-in ceremony on 20 June 2006

ADDRESS BY GOVERNOR VÍTOR MANUEL RIBEIRO CONSTÂNCIO AT HIS SWORNING-IN CEREMONY ON 20 JUNE 2006

Mr. Minister of State and Finance

Messrs. Secretaries of State

Ladies and Gentlemen

In my name and in the name of my colleagues of the Board of Directors I would like to thank the Government for the confidence placed on the team that is going to govern Banco de Portugal. To a large extent, this is a continuity team. It is therefore appropriate to recall some aspects that marked the tasks of the previous mandate. We started office shortly after the creation of the euro and coincided with the preparation of the large cash change over operation, of introducing euro denominated banknotes and coins, which was successfully completed. However, given the competencies of Banco de Portugal within the scope of European Monetary Union, our major concerns focused on the imbalances emerging in the economy and in the banking system itself.

In 2000 we were still at the phase of euphoric economic growth underpinned by booming domestic demand. Some signals, however, were already giving cause for concern, stemming from a budget deficit that was becoming inadequate and from evidence of increasing losses in competitiveness. Clearly, the economic agents, including the State, had not yet interiorised the key rules of participation in a monetary union. The banking system, in spite of its high efficiency patterns, fuelled an excessive credit expansion with a decrease in the solvency ratio and a deterioration in the liquidity situation disproportionately dependent on resources with maturities below 1 year obtained in the international interbank market.

It is therefore understandable that in addition to the management of the demanding aspects related to our participation in the European System of Central Banks, intended to ensure a dignifying position for the country, the mandate was marked both by the efforts made to improve the behaviour of the economic agents within the framework of monetary union and by the measures for the regulation and supervision of the banking system.

As regards the first aspect, I recall that already in my sworning-in speech in 2000 I stated that "(…) if private expenditure remains unabated and growth continues to be strong, the State will have to maintain fiscal tightening. Considering that no interest rate cuts are foreseen in the short run, this implies that public consumption cannot go on increasing at the same pace of the past years". Turning to the real economy and to competitiveness problems, I said then that low financing costs and increased capital access promoting modernising and productive investment were the "(…) greatest opportunity created by the euro. Advantage ought to be taken of it, with a view to leading to an indispensable structural repositioning of the Portuguese economy. Companies are now competing on the basis of a strong currency and cannot let themselves be misguided by short-term facilities. The unions shall also be responsible for calibrating their claims in compliance with the new competitive context before us, if they are effectively trying to defend employment. There will be no devaluations or subsidies to support companies that have lost their competitive position because they have not taken modernisation initiatives, or because they have not increased the technological content of their production processes or the

quality of their products. The path we are following is demanding and beyond the point of no return, but it is the best way to ensure our future progress."

The situation of public finances deteriorated in the course of 2000. In the December 2000 issue of the *Economic Bulletin*, I criticised the fiscal policy, suggested a structural reform of the wage bargaining procedures, and listed four major fundamental principles of macroeconomic management, indispensable for the successful participation in a monetary union. At the time, under the anaesthesia of strong economic growth, these issues were not included in the public debate and caused some surprise and some criticism. As I stressed then "These principles may seem the expression of an orthodox thinking, but they simply correspond to the recognition of a fundamental reality, which is currently the Portuguese one".

Today, these principles are common in public discussion. This does not mean that they have been adequately interiorised in general economic behaviour. Therefore, in its publications, Banco de Portugal has continued to insist on the pedagogy of the principles that make it possible to cope with the new paradigm we are facing: an economic system in which European monetary policy controls inflation and in which the national incomes policy should aim at protecting employment within the scope of a strongly competitive international system. This conceptual reversal from past decades is highlighted by the effects of the inevitable globalisation process on all economies. In macroeconomic terms, a successful participation in the monetary union requires the acknowledgement by economic agents of the need for permanent anti-cyclical utilisation of fiscal policy and of the control of unit labour costs in terms that are consistent with the evolution of productivity and with the behaviour of our EU partners. Portugal has not fully met these principles, to an extent and with consequences that I have frequently reviewed. Given the importance of the fiscal issue, I have twice accepted to chair technical Commissions to look into the public finance problem. The first time, after the refusal by the European Commission to validate Portugal's data, because it was important that pending problems were clarified by an independent Portuguese institution. The second time, after the unwinding of the effect of extraordinary measures, because the fiscal problem revealed itself to be particularly serious. Indeed, last year Portugal was faced with an unrealistic budget with significant sub-budgeting, which was heading towards a deficit of large proportion, unless urgent and significant measures were taken. This was a serious cause for concern for any analyst with a sense of responsibility examining the Portuguese economy. The European Commission was about to decide on the existence of an excessive deficit situation in Portugal merely based on its own forecasts, as it had done previously in the German case. I believe the intervention of an independent Commission to revise the fiscal deficit forecasts was important to persuade all the parties involved, as well as, public opinion, that it was vital to approve actual budget consolidation measures. In fact, although such measures were taken in the wake of the supplementary budget, the deficit did eventually go up to 6%, the highest level in recent years.

Albeit not unexpectedly, there were some curious reactions to the above interventions. Notwithstanding the clear technical nature of the issues involved, some analysts came to the point of commending one intervention and criticising the other one. This only proves the usefulness for a country of the existence of some independent institutions that may express themselves outside the political sphere. In my opinion, on both occasions, Banco de Portugal served the national interest within the framework of its clear public service tasks.

The most relevant aspect, however, is that the important and courageous measures taken by the Government indicate that we are probably in the process of actual fiscal consolidation. I believe I have gained sufficient experience in this problem to assert that success will require further determination from you, Mr. Minister. I would like to particularly advise you to fully exercise the powers of your office to restrain public expenditure in the latter part of the current year, which is decisive for the implementation

of the whole Stability Programme. I fully support the measures that you may deem adequate to take, as I have supported all previous Finance Ministers who have adopted effective measures intended to contain the fiscal deficit.

In spite of the inevitable restrictive effect exerted by fiscal consolidation in the short term, this, *per se*, does not explain the period of weak growth experienced by the economy. We have also been facing the effect of the inevitable deceleration that followed the initial overheating resulting from the boom of domestic demand related to the permanent shock triggered by the new low interest-rate regime. In that period, the imbalance generated between overall demand and supply contributed to fuel a real appreciation related to an inflation differential of costs and prices *vis-à-vis* the other member countries. This inevitable real appreciation, if exceeding an equilibrium appreciation, together with the indebtedness ceilings set by the financial system, will be the essential mechanisms to curb the initial boom and the deceleration in domestic demand. The fall in investment was also reinforced by the reversal in the cycle of investment in housing, in particular the 20% drop in 2003. The deceleration of domestic demand since 2001 was the largest in the euro area as a whole, which can only be related to the decline in expectations driven by the outbreak of the fiscal crisis in 2002.

In addition to the domestic factors, some adverse external shocks have also contributed to the recent weaker performance of the economy. The effects of enlargement and trade globalisation on our export share in central European markets are well known, as are the consequences of the oil price developments. If we were to disregard some of the temporary factors affecting the current juncture, economic growth this year would be closer to the European average. No conjunctural public policy could possibly raise economic growth in the short run. Some economists claim that it would be necessary to promote some kind of real devaluation as a result of lower growth of Portuguese unit labour costs than in our trading partners. I do not believe that the relative cost factor is the key explanation for our problem, and therefore it would not be a significant solution. The problem does not lie in competing with the same products and with the same countries with which we had previously been in a balanced position. Enlargement and globalisation have led to a change in economic regime, wherefore the problem consists of a structural shock emerging from the new labour cost international arbitrage. The only possible response will be a real adjustment that may change the specialisation pattern. This has been actually happening, but it is necessarily a slow process. The solution lies consequently in a broadly based increase in productivity, within the framework of a process of innovation in the type of production and in technologies focusing on tradable goods and services that may change our productive structure. The concentration of efforts on tradable goods and services sectors should be a matter of concern for all policies that have a bearing on investment decisions in order to avoid wasting resources and also because productivity level requirements are higher in these sectors. Structural reforms must be pursued, intended to improve the economic activity environment, eliminate bureaucracy and foster innovation. The solution, however, will depend on the response by the business sector, either Portuguese or foreign. Recent signals in the economy point to a slight recovery in economic activity, reflecting positive developments of the economic agents confidence levels. A faster recovery of private investment than projected in existing forecasts may lead to higher-than-expected growth. We must wait to the second quarter data before we conduct a final assessment of whether growth will stand clearly above 1%. In my opinion, the unwinding of some more recent negative effects will only be felt from 2008 onwards, enabling the economy to grow at more normal rates within the European context.

Favourable financing conditions will most certainly support economic activity. In spite of the recent interest rate increase, financing costs, particularly medium term rates, remain at historically low levels, which is an undeniable advantage of our participation in the euro. Against this background, it is of the utmost importance to ensure financial stability, i.e., the robust and effective operation of institutions

and financial markets, thereby contributing to the appropriate channelling of savings to better investment opportunities.

One of the major tasks of Banco de Portugal consists in ensuring financial stability concerning the sector under its supervisory responsibility. Similarly to other central banks, even those with no supervisory powers, the Bank started to publish a *Financial Stability Report* that reviews the major risks to the banking system and reflects the internal works of macro-prudential analysis. I believe it is important to underline the special importance of the banking system within the Portuguese economy. As I have already mentioned, the adjustment to a new intertemporal equilibrium level corresponding to a regime of lower interest rates implied a rational rise in economic agents indebtedness, both for households and corporates. The increase in expenditure and private indebtedness were the major factors behind the widening of the external deficit and led banks to intermediate external financing, which permitted an increase in credit well above the rise in deposits. The International Investment Position (IIP) of the Portuguese economy, including debt instruments, shares and other equity, turned from a negative balance of 10% of GDP in 1996 to 65.9% last year, while the banking system intermediated and assumed 60% of this total in the international monetary and financial markets. In order to keep this role and to ensure the financing of the economy, the banking system must maintain a sound position in terms of liquidity, solvency and profitability. This led us to act early in our mandate to reduce the excessive dependence on short-term interbank financing, defining new regulations on liquidity ratios. The coverage of short-term interbank liabilities by highly-liquid assets moved from only 86.8% in 2000 to 132.1% in 2005 in the domestic banks supervised by Banco de Portugal. The solvency ratio of Portuguese banks reached only 8.9% in 2000 and has increased since then to stand at 11.4% last year. We have also introduced changes in provisioning rules, penalising high loan-to-value ratios in real-estate operations and widening the concept of non-performing loans subject to provisions. We have prepared the introduction of new statistical or anti-cyclical provisions which in the end we were unable to apply due to the deceleration of the economy, but that we used merely for analytical purposes. Provisions or own funds deductions were also introduced, intended to cover latent losses on financial participations previously recorded at historical cost. The policy measures taken by the Bank, the economic developments and the improvements in risk management by banks have contributed to strengthen their robustness and also to decelerate credit. From an average growth rate of 23% from 1996 to 2000, credit moved to average growth of 8.3% from 2001 to 2005. The banking system, despite the deceleration of the economy, is today in a solid position from the liquidity and solvency perspective and maintains adequate profitability levels.

Other important regulatory changes were introduced or prepared in this period: the adoption of International Accounting Standards enforced by the European Commission and the preparation of proposals for the transposition into national legislation of a number of European Directives, such as those on financial conglomerates, on the reorganisation and winding-up of financial institutions, on the prevention of money laundering or on remote marketing of consumer financial services. The National Council of Financial Supervisors played a major role in all these tasks. It was created in 2001 and is composed of Banco de Portugal, Comissão do Mercado de Valores Mobiliários (Securities and Exchange Commission) and Instituto de Seguros de Portugal (Portuguese Insurance Institute). Its main purpose is to coordinate their respective activity, while each institution fully maintains its own responsibilities. The works of the Council have been very useful to harmonize positions, coordinate interventions in European bodies and prepare legislation. Its role has also been rather important in the coordination of the preparatory works of the Financial Sector Assessment Program (FSAP) recently conducted by the International Monetary Fund. This exercise, which involved the three abovementioned supervisors, was intended to evaluate the extent to which Portugal observes the international codes and patterns for the supervision of the financial sector and to assess the situation, vulnerabilities and stability of monetary

and financial institutions and insurance corporations. The IMF's final Report will be published soon. The IMF considered that the present supervisory institutional structure in Portugal is appropriate, including the role played by the Council, and made a favourable appraisal of the national financial system. The Portuguese system is reported to be modern and efficient which is the result of the degree of competition prevailing in the sector, of the management standards prevailing and of the capacity to attract a large share of the best human capital in the country. It is important to preserve the soundness of the system, in order to ensure the stability of the economy in general. For this reason, the major concern of the mandate now starting will be to further enhance the banking supervision system. A substantial modernisation effort will be required, within the framework of the implementation of the New Capital Accord, also known as Basle II, as of next year. This effort will translate into new Directives to be issued soon and transposed into national legislation by December. The new capital ratio regulation is more sensitive to a thorough evaluation of the risks incurred by the institutions, allows for the utilisation of sophisticated models to carry out such evaluation, to be adopted by the most important banks, and assigns an increased role to the intervention of the supervisor. Supervision shall, *inter alia*, be able to validate the whole risk control system prevailing in the institutions, have an overview of its strategy and vulnerabilities, evaluate the governance and internal control system, and obtain a general and prospective view on its future developments. In short, the adjustment effort to the new regulatory framework implies more demanding organization requirements for credit institutions and also for Banco de Portugal. We shall also monitor the development of the Payment System, as the entry into force of the new European real-time gross settlement system (Target 2) and the implementation of the Single Euro Payments Area (SEPA) will also imply important changes in the utilisation of the card systems and bank transfers, favouring consumers in terms of consumer-friendliness and price harmonisation.

Anticipating these future tasks, I would like to emphasize here that Banco de Portugal has the appropriate technical staff, resources and sense of public service to continue to be an institution of excellence, able to represent the country in the European Monetary Union institutions and to carry out efficiently and independently the important tasks for the Portuguese that assigned to the institution.

Lisbon, 20 June 2006

Vítor Constâncio

ECONOMIC POLICY AND SITUATION

Outlook for the Portuguese Economy: 2006-2007

OUTLOOK FOR THE PORTUGUESE ECONOMY: 2006-2007

1. INTRODUCTION

This article presents the macroeconomic scenario for the Portuguese economy projected by Banco de Portugal for the period 2006-2007. This scenario is an updated version of the projection prepared by Banco de Portugal in the context of the June 2006 Eurosystem projection exercise, which was based on information available up to mid-May. The current projection includes an update of the assumptions for oil prices developments, interest rates and exchange rates, based on data available at the beginning of June, as well as background data disclosed thereafter. One must stress that, for the first time, the main scenario of the current projection is based on the assumption that short-term interest rates evolve in line with financial market expectations. In the previous projections, by contrast, the main scenario assumed constant short-term interest rate over the projection horizon. Since markets expect a rise in interest rates, the use of the new methodology has a dampening effect on gross domestic product (GDP) growth in the current projection. Therefore, these projections are not strictly comparable with those published in the Winter 2005 Economic Bulletin, in special for 2007, since for instance the projection for GDP growth for 2007, with the constant interest rate assumption, could be revised to 1.7 per cent instead of the 1.5 per cent herein disclosed. The box entitled "Technical assumption on short-term interest rate developments" presents an analysis of this methodological change.

The main scenario of the current projection foresees moderate economic growth until the end of the forecasting horizon. Thus, after the GDP growth of only 0.3 per cent in 2005, a 1.2 per cent growth is projected for 2006, followed by a slight acceleration in 2007 to 1.5 per cent (Table 1.1).

Table 1.1

PROJECTIONS OF BANCO DE PORTUGAL 2006-2007
Rate of change in percentage

	Weights in 2005	Current projection			EB Winter 2005		
		2005	2006	2007	2005	2006	2007
Gross domestic product	100.0	0.3	1.2	1.5	0.3	0.8	1.0
Private consumption	65.2	1.8	1.3	1.2	1.8	1.2	1.1
Public consumption	21.2	1.9	0.7	0.5	1.1	0.7	0.4
Gross fixed capital formation	21.7	-2.7	-1.2	0.5	-3.1	-1.1	-0.8
Domestic demand	108.8	0.6	0.8	0.9	0.6	0.6	0.6
Exports	28.6	0.9	8.4	4.7	1.8	4.0	5.2
Imports	37.3	1.7	5.7	2.3	2.4	2.8	3.2
Contribution to GDP growth (in p.p.)							
Net exports		-0.4	0.3	0.5	-0.4	0.1	0.3
Domestic demand		0.7	0.9	1.0	0.6	0.7	0.7
of which: change in inventories		-0.2	0.1	0.0	-0.1	0.0	0.0
Current + capital account (% of GDP)		-8.1	-9.4	-9.8	-8.2	-8.5	-8.8
HICP		2.1	2.6	2.1	2.1	2.5	2.3

Note: Projections corresponding to the main scenario are shown for each variable (considered to be the most likely value of that variable, depending on the series of assumptions in question). As described in subsection 4 below, probability distributions assigned to the possible values of the variable may be asymmetrical. Therefore, the probability of observing a value below the main scenario may be different from the probability of observing a value above the main scenario.

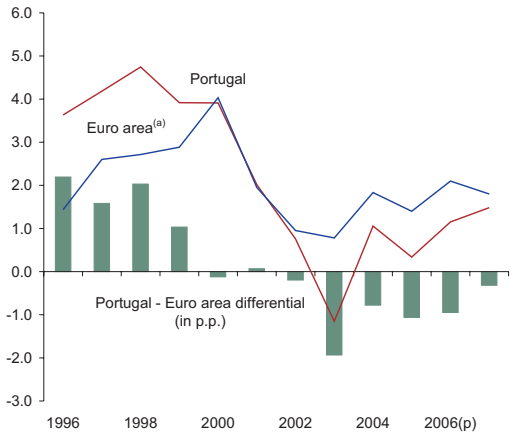
Unlike what happened in the aftermath of the previous recession episodes, the current dynamics of the Portuguese economy has been characterised by the absence of a clear and sustained recovery in overall economic activity. The pick-up in economic activity in 2006 and 2007 is likely to remain strongly conditioned by a number of imbalances that have accumulated over the past years and which are bound to limit the growth of domestic demand in the near future. In particular, the high indebtedness level of the Portuguese households, in the current context of rising interest rates, may lead to a higher share of debt services in household expenditure, conditioning the growth of both private consumption and housing investment. On the other hand, the fiscal imbalance and the consequent need to contain general government expenditure will contribute to lower public consumption and public investment growth.

In addition, and despite a high growth pace in the main markets of destination of Portuguese exports, two phenomena at the international level have hit hard the Portuguese economy: (i) the rise in oil prices to historically high levels, given the high degree of dependence of the Portuguese economy on this commodity; (ii) increased international competition in markets where Portuguese exports reveal strong specialisation, due to the integration in international trade of some emerging market economies.

In this context, the current projections foresee the persistence of the process of real divergence of the Portuguese economy versus the euro area witnessed since 2002 (Chart 1.1). Regarding the composition of growth, the moderate recovery in economic activity projected for 2006 and 2007 is chiefly supported by a more favourable performance of net exports, as the contribution of domestic demand is expected to remain close to the levels estimated for 2005. The performance of net exports over the projection horizon is strongly determined by the acceleration of exports of goods and services in comparison with 2005. As in the first five months of 2006, these are likely to grow more in line with the external demand for the Portuguese economy, following the significant market share losses in 2004 and 2005. The evolution of exports envisaged in this projection is, however, surrounded by a high degree of uncertainty. On the one hand, are developments in the usual competitiveness indicators difficult to interpret, in a context of increasing financial integration, associated with Portugal's participation in the euro area, and of integration of some emerging economies in international markets. On the other

Chart 1.1

GROSS DOMESTIC PRODUCT
Rate of change in percentage



Note: (a) For the euro area for 2006 and 2007, the figures were taken as the midpoints of the projection ranges published in the June 2006 issue of ECB Monthly Bulletin.

hand, exports were exceptionally volatile in the first months of 2006 and therefore introduced a high degree of uncertainty in their projection. The confirmation in the second half of 2006 of the recent signs of recovery in exports is a crucial element of the current projection.

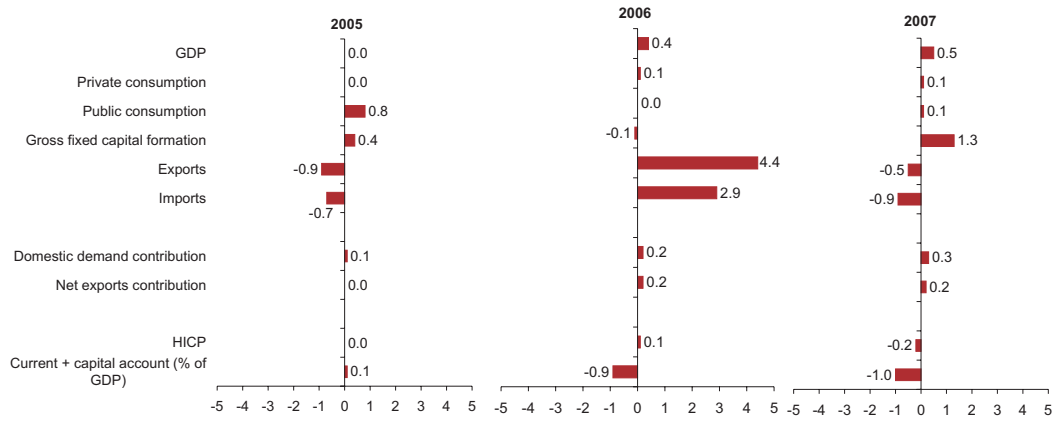
Net financing requirements of the Portuguese economy (as measured by the share of the combined current and capital account deficit in GDP) are likely to increase over the projection horizon (Table 1.1). This deterioration reflects the widening of the deficits in the goods and services and the income accounts, fuelled by both high oil prices – which, based on futures market expectations, are likely to remain at high levels over the projection horizon – and the assumed rise in short and long-term interest rates, which are likely to induce an increase in the foreign debt services in terms of GDP.

As what concerns inflation, the current scenario envisages a rise in the annual average rate of change in the Harmonised Index of Consumer Prices (HICP) from 2.1 per cent in 2005 to 2.6 per cent in 2006, followed by a reduction in the inflation rate to 2.1 per cent in 2007. The temporary rise in the inflation rate projected for 2006 reflects the impact of the tax measures introduced in 2005 and in early 2006, as well as continued high growth of the prices of the HICP energy component, in line with developments assumed for the price of oil. The unwinding of the temporary effect on the inflation rate, resulting in particular from the rises in indirect taxation, along with the stabilisation projected for wage increases, will lead to a reduction in the annual inflation rate as from the second half of 2006. This pattern will be further reinforced by the expected deceleration in oil prices in international markets.

This projection represents an upward revision of the growth prospects of the Portuguese economy in 2006 and 2007 (+0.4 and +0.5 p.p. respectively), in comparison with the projection released in the Winter 2005 Economic Bulletin (Chart 1.2). In 2006, this revision reflects, in part, both the fact that the pace of recovering of economic activity throughout 2005 and in the first quarter of 2006 was stronger than foreseen in the previous projection, and the incorporation of new data on external trade. In fact, this revision mainly reflects higher export growth, in line with developments in the first months of 2006, and a more favourable assumption for the evolution of the external demand for the Portuguese economy, which more than offsets the upward revision of imports. In 2007 the projected higher growth of economic activity largely results from more favourable projections of investment, as well as from a larger contribution of net exports.

Chart 1.2

REVISION VERSUS THE PROJECTION OF THE 2005 WINTER ECONOMIC BULLETIN
In percentage points



The current projection also foresees an upward revision in the net financing requirements of the Portuguese economy resulting essentially from the deterioration of the current account components. These developments in the current account are largely due to the revision of the external assumptions, in particular: (i) an upward revision of euro-denominated oil prices, which lead to an unfavourable revision of the terms of trade; and (ii) an upward revision of short and long-term interest rates, as a result of the recent increases in the current year and also expectations prevailing in financial markets, which imply a deterioration of the income account.

The current projections for inflation embody a slight upward revision in 2006 versus the projection released in the Winter 2005 Economic Bulletin, basically due to more unfavourable developments in oil prices than formerly considered in the main scenario. This led to an upward revision in the inflation of the energy component of the HICP. The downward revision in the inflation rate projected for 2007 is largely due to more favourable developments foreseen for the non-energy component of the HICP, in line with the more moderate growth of import prices.

2. ASSUMPTIONS UNDERLYING THE PROJECTIONS

The current projection exercise relies on a set of technical assumptions, based on data available up to the beginning of June, on developments in interest rates, exchange rates and international commodity prices. As usual, it is assumed that exchange rates will remain unchanged over the projection horizon, at the levels prevailing at the beginning of June. Long-term interest rate and international commodity prices (namely oil prices) are assumed to evolve in line with expectations implied by futures markets. The short-term interest rate will also move in line with expectations in financial markets, assumption that represents a methodological change from the previous hypothesis, where a constant interest rate was assumed over the projection horizon.

In addition, the assumption for the external demand for the Portuguese economy is based on projections prepared for the euro area economies by the respective national central banks in the context of the June 2006 Eurosystem projection exercise, as well as on a set of common assumptions referring to developments in non-euro area economies.

Finally, a series of specific assumptions for the Portuguese economy were also taken into account, in particular those referring to developments in public finance variables and prices subject to regulation.

2.1. Interest rates and exchange rates

The technical assumption about the short-term interest rate (3-month money market interest rate) is based on financial market expectations, translating into a gradual rising profile ending at 3.5 and 3.8 per cent respectively at the end of 2006 and 2007.[1] Developments in the long-term interest rate are also assumed to evolve in line with financial market expectations which envisage a slight rise in 2006 and 2007. Finally, as usual, the bilateral exchange rates over the projection horizon are assumed to remain constant at the levels prevailing at the beginning of June. In annual average terms, this assumption implies an appreciation of the euro in 2006 and 2007, both vis-à-vis the US dollar and in effective terms.

(1) These interest rates assumptions already include the decision of the Governing Council of the European Central Bank of 8 June 2006 to increase by 25 basis points (to 2.75 per cent) the minimum bid rate on the main refinancing operations of the Eurosystem.

2.2. International prices

The technical assumptions on developments in international commodity prices are based on the respective futures market expectations. With regard to oil, current projections envisage a rise in the price of this commodity over the forecasting horizon, albeit less pronounced than in the previous years. In annual average terms, oil prices in international markets are assumed to increase from around 54 US dollars per barrel in 2005 to around 70 US dollars in 2006 and 73 US dollars in 2007.

The profile implied by futures markets for non-energy comodities point to a strong acceleration in international prices in US dollars in 2006 (from 6.1 per cent in 2005 to 27.6 per cent in 2006) and antecipate a more moderate increase in 2007 (5.4 per cent).

With regard to the euro area inflation rate, the Eurosystem projections exercise foresees an average rate of increase in the HICP between 2.1 and 2.5 per cent in 2006 and between 1.6 and 2.8 per cent in 2007, against the 2.2 per cent in 2005. These projections reflect the impact of a number of factors, in particular: (i) developments in oil prices, where the assumed deceleration implies a progressive reduction of the contribution of the HICP energy component; (ii) the maintenance of moderate growth in nominal compensation per employee, which, along with the projected developments in productivity, will lead to a stable growth of unit labour costs over the projection horizon; (iii) the effects on HICP growth of higher indirect taxes in 2007.

2.3. Economic activity abroad and external demand

The assumptions with regard to developments in the external demand for the Portuguese economy were made on the basis of the June 2006 Eurosystem projection exercise. That exercise is the result of the joint projections prepared for the euro area economies by the respective national central banks, based on a common external environment regarding GDP growth and imports for non-euro area economies. Subsequently, the consistency of the aggregate trade flows of goods and services is ensured among all euro area countries.

The assumptions for real GDP growth in non-euro area countries envisage continued strong economic activity growth in 2006 and 2007, albeit at a slightly more moderate pace than in 2005. In the United States, the pace of economic growth is projected to remain robust, despite expectations of a slight deceleration in activity in 2007. In non-Japan Asia, GDP growth is projected to remain well above the average world growth, although slightly lower than in recent years. As for the countries that joined the European Union on 1 May 2004, this exercise assumes that activity will accelerate over the projectiom horizon. In this context, the growth of external demand for the euro area is projected to remain broadly robust in 2006 (7.6 per cent) and in 2007 (6.7 per cent), although more moderate than in 2005 (7.7 per cent).

For the euro area as a whole, the June 2006 Eurosystem projections foresee GDP growth of between 1.8 to 2.4 per cent in 2006 and between 1.3 to 2.3 per cent in 2007, as against the 1.4 per cent in 2005, therefore, implying an acceleration of economic activity in 2006.

Taking into account these assumptions, the external demand relevant for the Portuguese economy is projected to maintain a buoyant growth pace over the projection horizon. In 2006, growth is expected to reach 7.1 per cent (against 6.0 per cent in 2005), chiefly reflecting the acceleration of the external demand for the Portuguese economy by the other euro area countries. In 2007, growth is projected to reduce to 4.9 per cent, mirroring a deceleration in imports from both euro area and non-euro area countries.

2.4. Specific assumptions for Portugal

This projection relies also on a set of specific assumptions for the Portuguese economy, which include developments in public finance variables and prices subject to regulations.

As to projections on general government accounts, it should be stressed that, following the rule used within the framework of the Eurosystem, account was only taken of the fiscal policy measures already legally approved or specified with a sufficient degree of detail. This assumption conditions the projected profile for public consumption. In fact, in line with that rule, in 2006 and 2007 public consumption, in real terms, is projected to decelerate strongly in comparison with 2005. However, it is expected to show a positive change, contrary to the assumption of the December update of the Stability Programme, which takes into account all the effects of the announced fiscal measures. The current projection for public consumption, in real terms, assumes a stabilization for the number of civil service employment and for intermediate consumption. A minor desaceleration for social transfers in kind is also considered, not including therefore the effects of the central administration reforms, for the reason mentioned above.

Public investment is projected to stabilise virtually in real terms in 2006 and to decline in 2007. In 2007, the foreseeable reduction in EU transfers, in line with the generaly observed behaviour in the first year of implementation of a new Community Support Framework, is likely to be only partially offset by a recovery in the public investment that is not co-financed by the EU.

As to indirect taxation, the current projection considers a rise in the tobacco tax in both 2006 and 2007, in line with that embodied in the 2006 State budget and with the measures set out in the Stability Programme. In this projection, all other prices subject to regulations are assumed to evolve in line with developments in previous years.

3. THE PORTUGUESE ECONOMY: 2006-2007

3.1. Economic activity

Overall economic activity is projected to recover moderately over the horizon. Real GDP, following an increase of 0.3 per cent in 2005, is expected to grow 1.2 per cent in 2006 and 1.5 per cent in 2007. The pick-up in economic activity in 2006, in annual average terms, is influenced by the upward profile recorded throughout 2005 and in the first quarter of the current year.[2] As the rate of change of GDP is projected to decline in the second quarter of the year, in year-on-year terms, the quarterly pattern included in the current projection for the second half of 2006 foresees that the year-on-year rate of change of GDP will stabilize close to the average growth projected for 2007.[3]

With respect to the composition of expenditure, the acceleration in economic activity projected for 2006 and 2007, reflects a more positive contribution of net external demand (+0.3 p.p. and +0.5 p.p. respectively), following the negative contributions observed in 2004 and 2005 (-1.0 p.p. and -0.4 p.p.

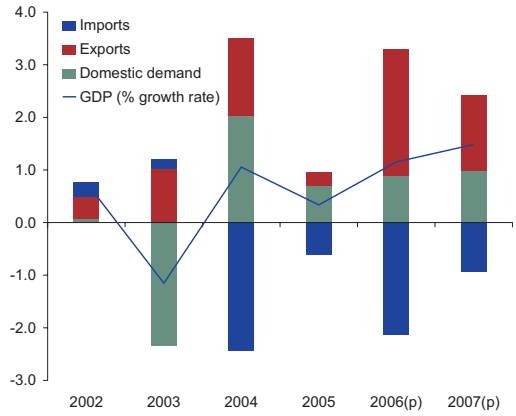
(2) According to the Quarterly National Accounts of the National Statistical Institute (INE), the annual rate of change of GDP stood at 1.0 per cent in the first quarter of 2006, reinforcing the trend of gradual acceleration recorded throughout 2005 – from a growth rate of zero in the first quarter to 0.8 per cent in the last quarter of 2005.

(3) Expectations of a deceleration in the annual rate of change of observed GDP in the second quarter of 2006 are due in particular to the correction of the base effect associated with the significant rise in consumption of durable goods in the corresponding period of 2005, anticipating the increase in prices related with the rise in the VAT rate. Growth projected for the second half of 2006 is particularly conditioned by the confirmation of the acceleration of exports in the first five months of the year. Given the high volatility of exports in the first months of 2006, owing partly to the calendar effects, export developments are an important factor of uncertainty surrounding this projection.

Chart 3.1.1

BREAKDOWN OF GDP GROWTH

Contribution to the rate of change, in percentage points



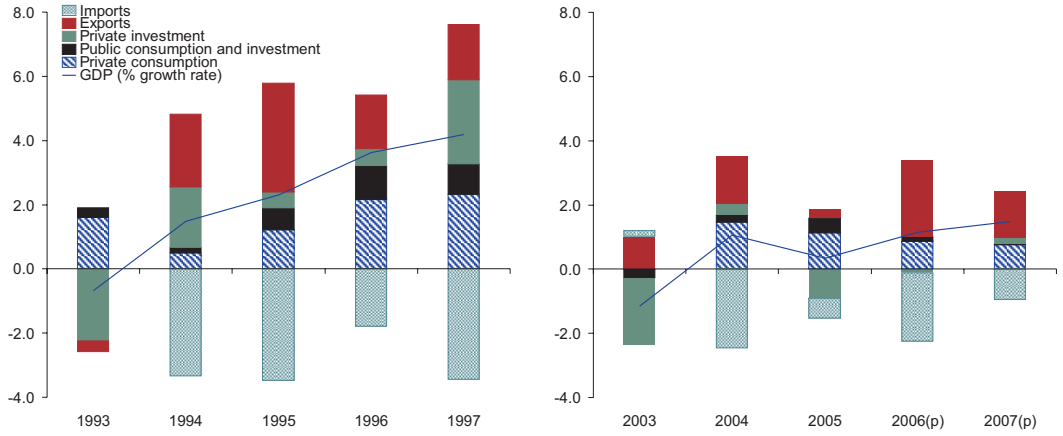
respectively) (Chart 3.1.1). This rise results from developments in exports, more in line with those assumed for external demand that translates into a far higher growth pace for exports than that projected for imports, although the current projection considers an increase in import penetration into the domestic market, as occurred during the past few years. The contribution of domestic demand is projected to be similar to the figure estimated for 2005, as a result of the downwards trend projected for private and public consumption, which will not be offset by more favourable developments in investment.

A comparison between the post-2003 recession period and the post-1993 recession period reveals some characteristics of the recent evolution of the Portuguese economy, as well as of the current projection (Chart 3.1.2). In fact, this evolution has been characterised by the absence of a clear recovery

Chart 3.1.2

BREAKDOWN OF GDP GROWTH DURING AND AFTER THE 1993 AND 2003 RECESSIONS

Contribution to the rate of change, in percentage points



path in activity economic, contrasting with the significant acceleration witnessed after the 1993 recession.[4]

On the one hand, the appreciation of the effective exchange rate relevant for the Portuguese economy and the increasing integration in international trade of developing countries – which have a pattern of productive specialisation similar to that of the Portuguese economy – have played a key role in the weak contribution of exports to the recovery of overall activity, contrasting with developments following the 1993 recession. In that period, besides the fact that competition from those countries was not so striking, depreciation of the exchange rate took place, as well as large inflows of foreign direct investment, which translated into the establishment in Portugal of several export-oriented multinational companies.

On the other hand, this projection embodies the expectation of a limited contribution of both private consumption and public expenditure (consumption and investment) to the recovery of economic activity compared with the post-1993 recession period. This is due, in particular, to the household indebtedness level to and the excessive general government deficit. In the same vein, private investment, which in the post 1993 recession made a positive contribution to the recovery of economic activity, has recorded systematic negative growth in the past years and is only expected to have a marginal contribution to the recovery over the projection horizon. Besides the effects of the assumed stagnant public investment, the projections for investment are influenced by uncertainty about the future developments of demand and how the imbalances that have conditioned the performance of the Portuguese economy will be corrected, as well as – although to a smaller extent – by the rising trend assumed for interest rates.

In this context, it should be noted that besides the differences between the cyclical developments of the Portuguese economy in these two periods, the pace of potential growth also decreased significantly compared with the post-1993 recession period. These developments reflect, on the one hand, the non adoption of rules by the Portuguese economy, at an early stage, resulting from the country's participation in the monetary union and, on the other, an international environment characterised by shocks that affected severely the Portuguese economy, such as the increased competition from some developing countries and the maintenance of oil prices at high levels. The impact of the increasing financial integration, in a context of absence of foreign exchange risk, has smoothed the effects of these shocks on the short-term developments of economic activity, resulting however in the deterioration of the combined current and capital account deficit. These developments reflect an increase in household and general government indebtedness levels, which cannot continue. This, together with the persistence of a low trend productivity growth is likely to dampen a sustained higher growth pace of the Portuguese economy.

3.2. Private consumption, disposable income and household savings

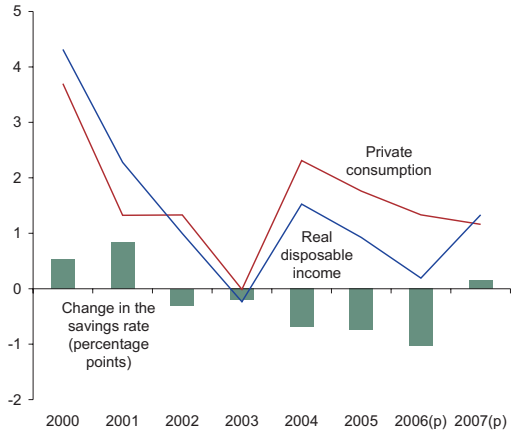
Following the robust growth in 2004 (2.3 per cent), private consumption decelerated in annual average terms to an estimated figure of 1.8 per cent in 2005. However, its growth pace continued to be clearly higher than that of GDP and real disposable income, thus resulting in a reduction in the household savings rate of around 0.7 p.p. in 2004 and 2005 (Chart 3.2.1). These developments took place against a background where nominal and real interest rates remained low, thus fueling consumption. In addition, the increasing diversification of bank loan contracts and the lengthening of the residual maturities of loans, brought about by the increasing competition between banking institutions, made it possible to

(4) The box entitled: "The effects of monetary conditions: a comparison with the post-1993 recession period" presents an assessment of the differentiated impact of the monetary conditions in those two periods.

Chart 3.2.1

PRIVATE CONSUMPTION, DISPOSABLE INCOME AND SAVINGS RATE

Rate of change, in percentage



hold back the growth of the debt services, which generated additional resources that may have been channelled to consumption.

This projection foresees a deceleration in household consumer expenditure, following the trend seen throughout 2005 and in the first quarter of 2006, with the annual rate of change in private consumption dropping from around 3 per cent in the first half of 2005 to close to 1 per cent as from the second half of the year. These developments flow from prospects of a moderate economic recovery, a less favourable labour market situation, the perception of the difficulty in controlling the fiscal situation, and the technical assumption of a rise in interest rates, in line with expectations in financial markets.

Thus, the current projections envisage a deceleration in the pace of growth of private consumption to 1.3 per cent in 2006 and 1.2 per cent in 2007. It should be noted that in 2006 a further drop is projected in the household savings rate of approximately 1 p.p. This drop, which is expected to take place in the current context of financial integration, will reflect the gradual and progressive adjustment of household consumption expenditure to the temporary and sudden deceleration projected for real disposable income in 2006. This profile of real disposable income reflects, in particular, the acceleration of consumer prices foreseen for 2006 and the rise in direct taxes paid by households, as a result of the tax measures introduced in the 2005 and 2006 State Budgets. Notwithstanding the pick-up in real disposable income projected for 2007, the further deceleration envisaged for private consumption is related, on the one hand, to the growth of debt services – in a context of progressive rise in interest rates – and, on the other hand, to the effects of the deterioration of the labour market situation. This gradual deceleration will translate in 2007 into a resumption of consumption to a more sustainable trend over the long term, since the high average indebtedness level of households is expected to lead to an evolution of private consumption more in line with the pace of growth projected for real disposable income, and therefore to a virtual stabilisation of the household savings rate.

3.3. Gross fixed capital formation

The globally negative performance of gross fixed capital formation (GFCF) over the past few years has resulted in a continued and marked reduction in the share of investment in GDP since 2000 (Chart 3.3.1). The projections herein enclosed foresee a further drop in GFCF of 1.2 per cent in 2006, fol-

Chart 3.3.1

INVESTMENT BY INSTITUTIONAL SECTORS
As a percentage of GDP

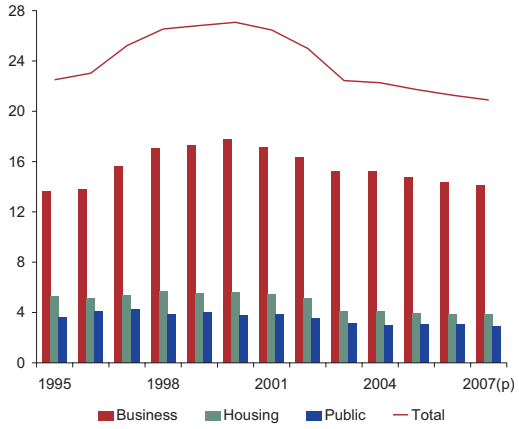
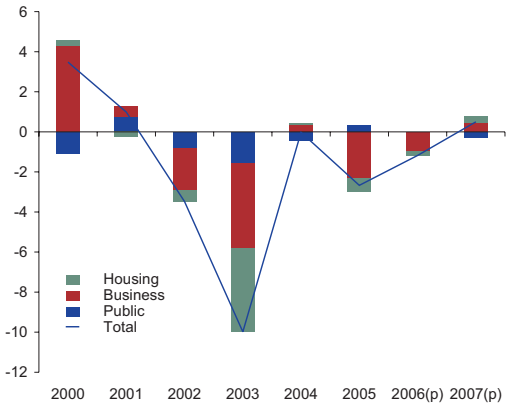


Chart 3.3.2

BREAKDOWN OF INVESTMENT
Contributos para a taxa de crescimento (em p.p.)



lowed by a 0.5 per cent rise in 2007, compared with a reduction of 2.7 per cent in 2005. Thus, GFCF will continue to play a minor role in the recovery of economic activity, with the persistence of lower growth rates than those of GDP. The weak dynamics projected for GFCF will be broadly based across all its components, i.e. public, housing and business investment (Chart 3.3.2).

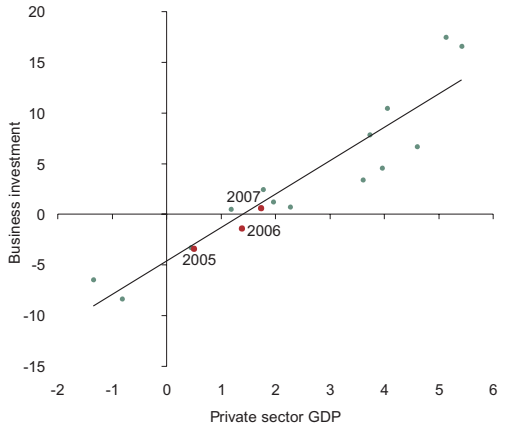
As mentioned above, this projection assumes a slight fall in public investment over the projection horizon, in line with the commitment of the authorities to correct the public accounts imbalances within the framework of the Stability Programme.

With respect to housing investment, the persistence of negative growth rates for the past few years in a row suggests that, in addition to developments in the key macroeconomic determinants, this type of investment may be conditioned by the downwards adjustment to the excessive growth observed in recent years. The average annual growth rate of this component was -5.5 per cent in the 2001-2005 period, following the significant growth in the second half of the 1990s, in the context of a rapid and steep fall in nominal and real interest rates. In parallel with this adjustment, housing investment will continue to be affected by the high household indebtedness level and the consequent financial needs to service the debt. These effects will tend to be magnified by the interest rate hikes assumed in the main scenario of the projection, and the less favourable labour market situation. Under these conditions, the current projection envisages the resumption of positive growth rates by housing investment only in 2007.

The current projection embodies a further drop in business investment in 2006, followed by slight positive growth in 2007. These developments are in line with the empirical pro-cyclical pattern observed historically in the Portuguese economy (Chart 3.3.3). However, the negative developments seen in the recent past and the quite moderate recovery projected in the current scenario may reflect some uncertainty about the magnitude and sustainability of the pace of growth of demand and of the fiscal restrictive measures required for the correction of the general government deficit. The increasing competition faced by the export sector in international markets is an additional uncertainty factor for the development of demand in the future, also contributing to a higher risk premium associated with investment decisions.

Chart 3.3.3

PRIVATE INVESTMENT AND PRIVATE GDP
1991-2007 annual changes, in percentage



3.4. External trade

Real exports of goods and services in the next two years are projected to be the most buoyant component of overall demand. Their growth pace is expected to be more in line with the external demand relevant for the Portuguese economy.

In 2005, exports increased by 0.9 per cent. This implied a loss of market share of around 5 per cent (after a loss of nearly 2 per cent in 2004).[5] The growth of Portuguese exports has been limited by the pattern of specialisation by product, which is still characterised by a high share of goods with low technological and human capital content, translating into deteriorating competitive capacity, namely against the new players in world trade, who have lower unit labour costs. Besides, the growth dynamics of these markets has presented a weaker performance. In addition, the Portuguese economy has experienced difficulties in attracting new foreign investment, in particular to the tradable goods sector, to the detriment of countries with lower production costs, domestic markets with high growth potential, more attractive locations and/or more favourable corporate tax systems.

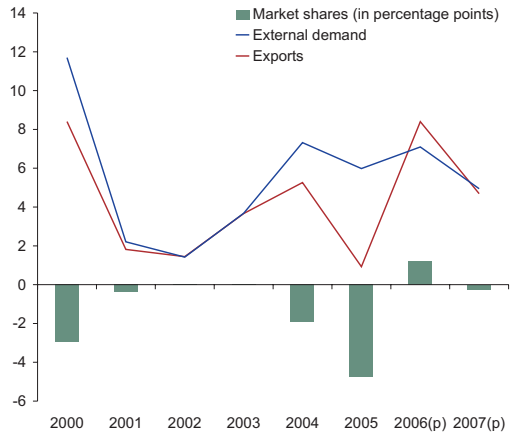
The current projections point to an export growth more in line with the external demand relevant for the Portuguese economy and thus, do not envisage a recovery of the market shares losses registered in the past few years. For 2006, against a background of strong external demand growth and good performance in the first five months of the year, exports are expected to accelerate strongly, from 0.9 to 8.4 per cent. This will imply a gain in market shares of approximately 1 per cent. In 2007, export growth is expected to stand at 4.7 per cent, which implies a virtual stabilisation of the market share (Chart 3.4.1).

The fact that no further market share losses are envisaged over the projection horizon, is chiefly due to the incorporation of available data for the first months of 2006. External trade statistics available up to April and preliminary data on May suggest a significant rebound in exports. Nevertheless, it is difficult to assess its sustainability, given the exceptional volatility of the monthly data on exports in the first

(5) In addition to exports of textiles, clothing and footwear with low technological and human capital content, exports of machinery and transport equipment have also performed poorly in the past few years. For a more detailed analysis of developments in Portuguese exports over the last years, see the article entitled "Portuguese Exports Market Shares: An Analysis by Selected Geographical and Product Markets", by S. Cabral and P. S. Esteves, in this issue of the Economic Bulletin. This article also highlights the similarities between the pattern of specialisation of Portuguese exports and of some Asian and Central and Eastern European countries.

Chart 3.4.1

EXPORTS AND EXTERNAL DEMAND
Rate of change, in percentage



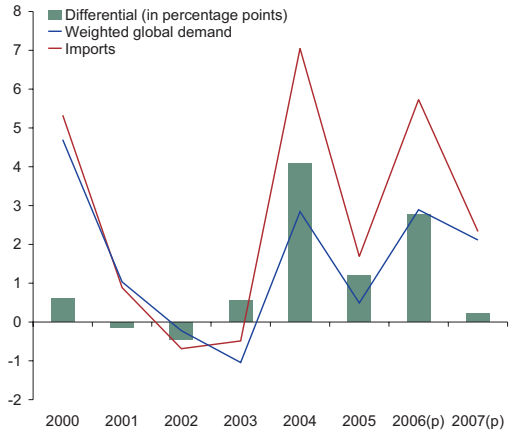
months of 2006. After a yearly annual growth of 6.2 per cent in the first two months of the year, merchandise exports in nominal terms recorded an annual change of 20.4 in March, followed by a 1.4 per cent fall in April. This appears to largely reflect the calendar effect related to the fact that in 2005 and 2006 Easter took place in different months. According to preliminary data for May, exports, in year-on-year terms, increased by 23.5 per cent from the corresponding month in 2005, strengthening the recovery already seen in the first two months of the year and in the average figure for March and April. It should be noted, however, that the rise in the growth rate of activity in the export sector was not so marked as the acceleration implied in this information in nominal terms, as the growth of exports of some sectors, such as energy and intermediate goods, seems to be strongly influenced by the steep rise of their prices in international markets. Thus, the high volatility of the most recent figures for exports, the time lag in the release of the respective deflators, as well as some issues still pending regarding the future production of the automobile sector in Portugal, are important uncertainty sources in the current projection for exports.

Regarding the behaviour of imports of goods and services imports (Chart 3.4.2), the current scenario includes growth rates of 5.7 and 2.3 per cent in 2006 and 2007, respectively (after an increase of 1.7 per cent in 2005). In addition to the incorporation of available data for the first months of 2006, which, like exports data, point to significant import growth, the projected growth rates also reflect the expansion of the GDP components with high import content, namely strong export growth and the return of corporate investment to positive rates of change.

Thus, similarly to the last few years, the current projection envisages a further rise in the penetration rate of imports. In addition to the effects related to the increasing market openness, this evolution seems to have also been influenced by a rise in domestic unit labour costs compared with foreign countries that compete with national producers.

Chart 3.4.2

IMPORTS AND WEIGHTED GLOBAL DEMAND
Rate of change, in percentage



3.5. Current and capital account

The external borrowing requirements of the Portuguese economy (as measured by the ratio of the combined current and capital account on GDP) is likely to continue on increasing over the next two years, from 8.1 per cent of GDP in 2005, to 9.4 and 9.8 per cent in 2006 and 2007, respectively (Chart 3.5.1). These developments result basically from the deterioration projected for the current account, as the capital account surplus is projected to stabilise at around 1 per cent of GDP.

Regarding the current account, it should be emphasized not only the effects of higher oil prices on the goods and services account deficit, but also the effects on the income account of higher interest rates, and of a deteriorating international investment position of the Portuguese economy. Therefore, in the absence of a reversal in the rising trend of oil prices and given the effect of the interest rate on the increasing stock of national equities held by non-residents, a gradual adjustment of the external imbalance would require more moderate domestic demand developments.

Chart 3.5.1

CURRENT AND CAPITAL ACCOUNT
As a percentage of GDP

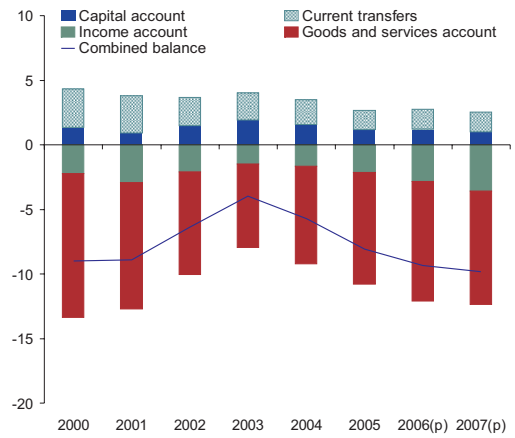
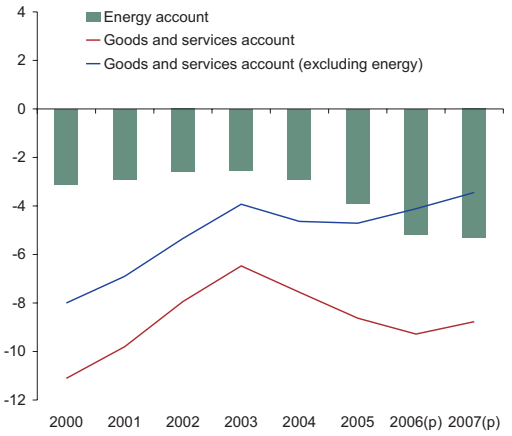


Chart 3.5.2

GOODS AND SERVICES ACCOUNT AND ENERGY ACCOUNT

As a percentage of GDP



The oil price effect is clearly seen in the evolution of the goods and services deficit. The current projections embody a further widening of this deficit from 8.6 per cent of GDP in 2005 to 9.3 per cent in 2006, followed by a slight improvement to 8.8 per cent in 2007. These developments are largely explained by the unfavourable pattern of the terms of trade, driven by the rise in oil prices. In 2005, the terms of trade effect of the energy component seems to have contributed around -1.0 percentage point of GDP to the evolution of the goods and services account. For 2006 and 2007 the projected impact is of -1.3 and -0.3 percentage points of GDP, respectively. Excluding energy exports and imports, the goods and services deficit would narrow from 4.7 per cent of GDP in 2005, to projected figures of 4.1 per cent in 2006 and 3.4 per cent in 2007 (Chart 3.5.2). These developments reflect, on the one hand, the impact of the increasing integration in international trade of countries with low unit labour costs, enables the maintenance of a moderate evolution of non-energy import prices and explains the favourable contribution of the terms of trade (excluding energy). On the other hand, the growth of the export volume at a higher pace than that of imports – in a context of moderate domestic demand developments – will also favour the external trade balance.

Regarding the income account projections, the deficit is projected to widen from 2.1 per cent of GDP in 2005, to 2.8 per cent of GDP in 2006 and 3.6 per cent in 2007. This projection is based on the continued deterioration of the international investment position of the Portuguese economy and on the rise in interest rates, fuelling a stronger surge in income outflows to remunerate national equities held by non-residents.

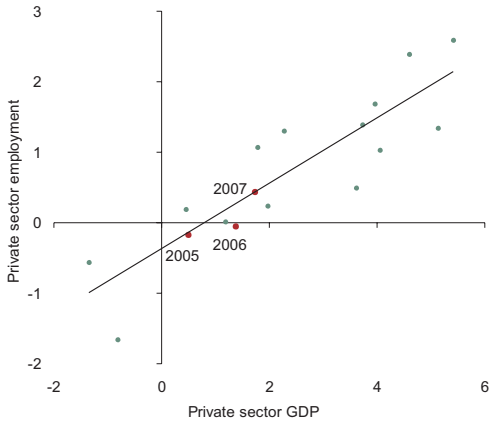
3.6. Employment

In 2005 employment stagnated and the unemployment rate rose sharply as a result of the weak growth of the Portuguese economy. By contrast with the previous recession of the Portuguese economy, the rise in the unemployment rate was not due to a net employment loss, but to an increase in the labour force (by around 1.0 per cent). It should also be mentioned that long-term unemployment rose significatly.

The main scenario of the projection foresees a virtual stagnation of employment in 2006 and a 0.4 per cent increase in 2007, in line with the moderate recovery in economic activity. This growth is exclu-

Chart 3.6.1

PRIVATE EMPLOYMENT AND PRIVATE GDP
1991-2007 annual changes, in percentage



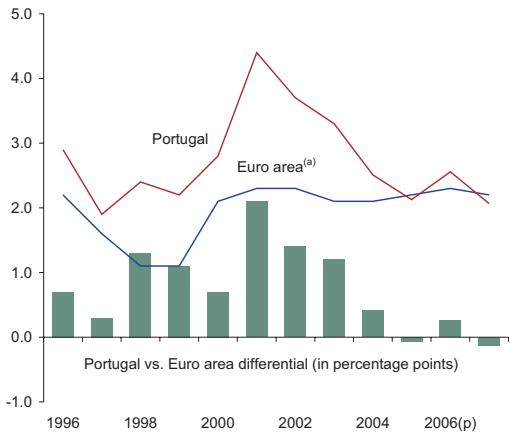
sively explained by developments in the private sector – in line with the average historical relationship between output and employment in this sector (Chart 3.6.1) – as employment in the public sector is assumed to stagnate, in line with the above-mentioned assumptions for the public finance variables.

3.7. Inflation

According to the main scenario of this projection, inflation in Portugal, as measured by the annual average rate of change of the HICP, is likely to increase from 2.1 per cent in 2005 to 2.6 per cent in 2006, returning to 2.1 per cent in 2007. Taking as reference the midpoint of the projection ranges for the euro area inflation of the June 2006 Eurosystem staff projection exercise, the inflation differential vis-à-vis the euro area will remain negligible; it will widen temporarily from -0.1 p.p. in 2005 to 0.3 p.p. in 2006, narrowing again to -0.1 p.p. in 2007 (Chart 3.7.1).

Chart 3.7.1

INFLATION IN PORTUGAL AND IN THE EURO AREA
Annual average rate of change



In intra-annual terms, the annual rate of change in the HICP is projected to decline in the second half of 2006, reflecting the unwinding of the effect of the rise in the standard VAT rate in July 2005, as well as the deceleration of the energy component of the HICP.[6] The reduction in inflation, on year-on-year terms, is set to continue in the course of 2007, in the context of the deceleration of the energy component (in line with the assumptions for oil prices).

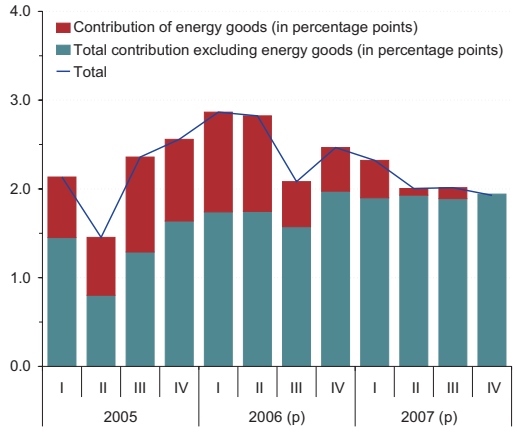
The projected increase in inflation in 2006 is related to the acceleration of the non-energy component of the HICP (from 1.4 per cent in 2005 to 1.9 per cent in 2006), while the energy component is expected to maintain the high growth pace recorded in 2005 (approximately 10 per cent). The acceleration of the non-energy component of the HICP reflects, firstly, the impact on consumer prices of the rises in indirect taxation in mid-2005, particularly, the rise in the standard VAT rate from 19 to 21 per cent, as well as a further rise in the tobacco tax at the beginning of 2006. In addition, this evolution also reflects the acceleration of import prices of non-energy goods, which appears to be partly related to the strong surge in non-energy commodity prices seen in early 2006. According to expectations implied in futures contracts, this surge is not likely to be reversed over the projection horizon. However, these effects will tend to be mitigated by the rise in wages embodied in the main scenario of the projection, which, in a context of some recovery in productivity, will imply a deceleration in unit labour costs in 2006. In Portugal, the growth of unit labour costs is likely to remain above that of the euro area, although this projection embodies the narrowing of this differential.

The projected decline of the inflation rate in 2007 is strongly influenced by the intra-annual price deceleration during the course of 2006. With regard to the energy component, the decrease in the growth rate of prices is likely to persist throughout 2007. This component is projected to contribute around 0.8 and 0.2 percentage points to the annual rate of change in the HICP in 2006 and 2007, respectively (Chart 3.7.2). In turn, the non-energy component of the HICP is projected to record an annual average rate of change very close to that foreseen for 2006 (approximately 2 per cent). These developments incorporate a slightly accelerating intra-annual profile, which is totally due to the rise in import prices (ex-

Chart 3.7.2

INFLATION AND THE CONTRIBUTION OF ENERGY GOODS

Annual rate of change



(6) In addition, the quarterly pattern of the annual rate of change of the HICP is projected to be more volatile than foreseen in the Winter 2005 issue of the Economic Bulletin, in part, due in part to the methodological adjustments incorporated in January 2006 by INE in the collection and treatment of prices of some items included in the clothing and footwear category.

cluding energy), as the growth of unit labour costs in Portugal is expected to stabilise over the projection horizon.

4. UNCERTAINTY AND RISK ANALYSIS

The main scenario of the current projection is based on a series of assumptions presented in Section 2. The non-materialisation of these assumptions, as well as the potential occurrence of specific factors that have an impact on the macroeconomic variables that are being forecasted give rise to a number of uncertainty and risk factors, in particular regarding GDP growth and the inflation rate.[7]

With respect to the assumptions presented in Section 2, the following risk factors were considered: (i) higher oil prices; (ii) stronger appreciation of the euro exchange rate; and (iii) a more moderate growth of the external demand relevant for the Portuguese economy.

4.1. Risk factors

This projection exercise includes the technical assumption that oil price developments are in line with the futures prices contracts with different delivery dates. However, over the past few years, oil prices have been systematically higher than anticipated by the economic agents operating in the futures markets. In addition, options on futures contracts, from which it is possible to derive information on the price distribution asymmetry, indicate that there is a higher probability that oil prices will stand above the main technical assumption, also justifying an upside risk to the price of this commodity.

Regarding the international economic conjuncture, it should be noted that a process of correction of the global macroeconomic imbalances may start, in particular as regards the US external deficit. Such an adjustment process would necessarily imply asset portfolio shifts and it might favour the appreciation of the euro exchange rate against the US dollar. Thus, besides the strong repercussions on global economic activity coming from the contraction of demand in the United States, an exchange rate adjustment would give rise to a loss of competitiveness of the European economies and to more moderate economic activity growth in the euro area. This indirect effect of exchange rate changes, which would imply a reduction in the external demand relevant for the Portuguese economy, would be more significant than the direct effect on Portugal's price-competitiveness, given the concentration of the country's external trade in the euro area.

4.2. Quantification of the risk factors

The quantification of the risk factors is based on a number of subjective probabilities regarding the non-materialisation of the technical assumptions and the potential occurrence of specific impacts that may affect the variables considered in the projection (Table 4.2.1). The impact of the risks on the main variables projected, in particular at the level of GDP and its components, as well as of the inflation rate, are presented in Table 4.2.2 and Charts 4.2.1 and 4.2.2.

With regard to the projection for economic activity, the risks are slightly on the downside. The quantified analysis of the risks allows for the identification of a probability of approximately 55 per cent of a

(7) The definition of confidence intervals for the main macroeconomic variables highlights the degree of uncertainty surrounding the macroeconomic projections, whose main scenario should thus be considered as indicative. The identification of different probabilities of the variables standing above or below the main scenario assumption, in turn, may be an indication of the direction of the revisions to be made in the projection exercises of the Banco de Portugal. For the technical details of this methodology, see A. Novo and M. Pinheiro, "Uncertainty and Risk Analysis of Macroeconomic Forecasts", Banco de Portugal, Working Paper No 19/2003.

Table 4.2.1

SUBJECTIVE PROBABILITIES OF RISK FACTORS

In percentage

Conditioning variables	2006	2007
Oil price	45	45
Exchange rate	60	60
External demand	55	55

Note: Conditioning variables refer to external assumptions and affect endogenous variables only indirectly. A value below (above) 50 per cent indicates that the growth rate of the variable in question has a lower (higher) probability of falling short of the growth rate considered in the main scenario, thus identifying the risk of the variable in question exceeding (falling short) the value considered in the central scenario of this projection.

Table 4.2.2

PROBABILITY OF A LOWER OUTCOME THAN PROJECTED IN THE CENTRAL SCENARIO

In percentage

	Weighs in 2005	2006	2007
Gross domestic product	100	54	56
Private consumption	65	52	53
Gross fixed capital formation	22	52	53
Exports	29	56	57
Imports	37	53	54
HICP		49	51

lower than projected in the main scenario economic activity growth. This result is chiefly determined by the downside risks for the evolution of the external demand relevant for the Portuguese economy.

Inflation risks are more balanced both in 2006 and 2007. This assessment of risks reflects the fact that the upside risk for inflation, resulting from the fact that oil prices may record higher values than those assumed in the main scenario, may be offset by the downside risks resulting from both a potential appreciation of the euro exchange rate and from less favourable developments in economic activity.

Chart 4.2.1

GROSS DOMESTIC PRODUCT

Rate of change, in percentage

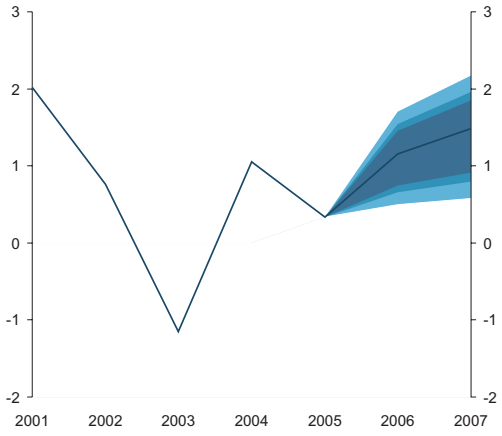
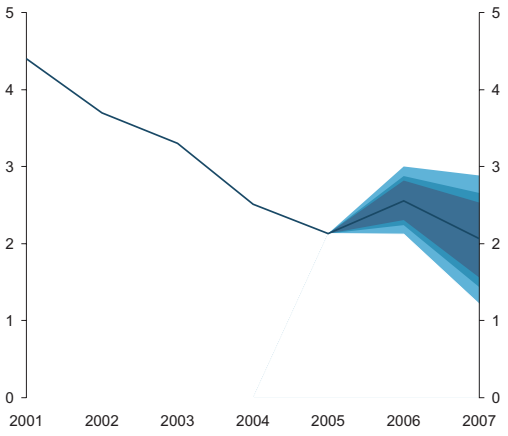


Chart 4.2.2

HARMONISED INDEX OF CONSUMER PRICES

Rate of change, in percentage



5. CONCLUSION

The Portuguese economic growth over the past few years has been disappointing. This has been associated with weak productivity growth and reflects, in part, the effect of external shocks potentially more unfavourable for Portugal. Despite the high expansion of the main markets of destination of Portuguese exports, the strong rise in oil prices and the increasing openness of international markets to emerging market economies, in particular in Asia and Central and Eastern Europe, pose a major challenge for Portugal namely due to the fact that the Portuguese economy is highly dependent on oil and that these countries' specialisation is quite similar to that revealed by the Portuguese exports.

Overall and against a background of increasing financial integration, these factors have translated into the maintenance of a number of imbalances, of which the rise in household and public sector indebtedness is particularly relevant. These imbalances, translated into the widening of the external deficit, strongly prevent the resumption of a stronger pace of growth of the Portuguese economy in the short run. Besides its effects on the growth of consumption, uncertainty about how such imbalances will be corrected does not favour robust investment growth.

The projections published in this Bulletin point to a moderate recovery in economic activity in 2006 and 2007, chiefly based on more buoyant exports, as the contribution of domestic demand is not expected to be significantly different from 2005, reflecting the imbalances accumulated in the past. Contrasting with the past two years, when exports recorded significant market share losses in their main markets of destination, the current projection for 2006 and 2007 assumes an export performance more in line with that projected for the external demand relevant for the Portuguese economy, following the release of data for the first months of the current year. External trade statistics available up to April and preliminary data on May suggest a remarkable rebound in exports. However, it is still premature to conclude that this is a sustained trend, given the exceptional volatility of the monthly trend of exports in the first months of the year. Therefore, the persistence of the higher export growth embodied in this projection is subject to a high degree of uncertainty.

Notwithstanding the more favourable performance of exports and the low growth projected for domestic demand, the main scenario does not foresee a reduction of the external imbalance of the Portuguese economy. In the current context, marked by high oil prices, increased international competition in export markets, and widening of income deficit – as a result of the assumption of a rise in interest rates and in increasing stock of national equities held by non-residents – an adjustment path of the external deficit over the projection horizon would require an even more moderate behaviour of domestic demand, with an impact on economic activity growth. In addition, in this recovery stage, the Portuguese economy is faced with tighter monetary conditions, although nominal and real interest rates remain favourable, at historically low levels.

Despite the reduced growth, the balance of risks with regard to this projection is towards a GDP growth rate lower than projected in the main scenario, given the potential materialisation of a less favourable external environment. Possible further rises in oil prices and an adjustment in global imbalances – in particular, the correction of the US external deficit, which would give rise to an appreciation of the euro exchange rate and to lower growth of the external demand relevant for Portuguese exports – would tend to affect negatively economic activity developments in Portugal.

The return to growth rates that allow the resumption of the real convergence process towards the remaining euro area countries is particularly dependent on stronger productivity growth of the Portuguese economy. Considering that this depends on the evolution of structural aspects, it will tend to be gradually felt over a longer horizon than the one of this projection.

Box 1. Technical assumption on short-term interest rate developments

Like in the June 2006 Eurosystem projection exercise, the current scenario assumes short-term interest rate developments in line with expectations implied in financial markets, to the detriment of the assumption of an unchanged interest rate included in previous exercises. The main reason behind this change was related to the increased consistency of the projections exercise, as market expectations were already used in the assumptions with other variables, such as long-term interest rates and international commodity prices. These market expectations would thus have an implied path for short-term interest rates, which was not necessarily consistent with the previous assumption that interest rates would remain constant.

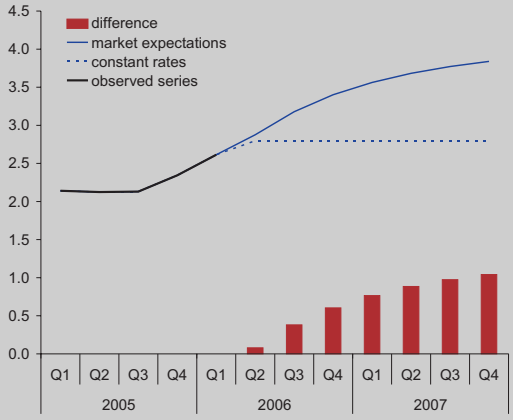
The change in procedure implies that the current projection assumes a gradual rise in the short-term interest rate over the projection horizon, amounting to a cumulative figure of around 100 basis points, compared with the figures recorded at the beginning of June (see Chart 1). Obviously, the incorporation of this rising trend for the interest rate implies changes from the figures that would have been projected if the previous technical assumption of unchanged rates had been maintained. In 2007, the negative effect on GDP may reach 0.2 percentage points.

Projections for the Portuguese economy will tend to be particularly affected by this change in procedure, as most bank rates are indexed to short-term interest rates and given the high indebtedness level of economic agents, related to the significant growth of credit as from the second half of the 1990s. By contrast, in the countries where domestic demand is more sensitive to long-term interest rates, the figures projected will tend to be less affected by this change in procedure, as the assumption for the long-term interest rate was already based on expectations implied in financial markets.

Chart 1

ASSUMPTIONS FOR THE SHORT-TERM INTEREST RATE

Constant rates *vs.* market expectations



Box 2. The effects of monetary conditions: a comparison with the post-1993 recession period

A comparison of the current cyclical position of the Portuguese economy with the post-1993 recession period shows a slowdown in the trend output growth of the Portuguese economy. In addition to structural aspects, which seem to be contributing to a slow and irregular recovery of economic activity after the 2003 recession, a comparison of these two periods of the Portuguese economy is also conditioned by the different role played by monetary policy. In particular, following the participation in the euro area, the interest rates and the exchange rates relevant for Portugal ceased to be directly related to the specific evolution of the Portuguese economy.

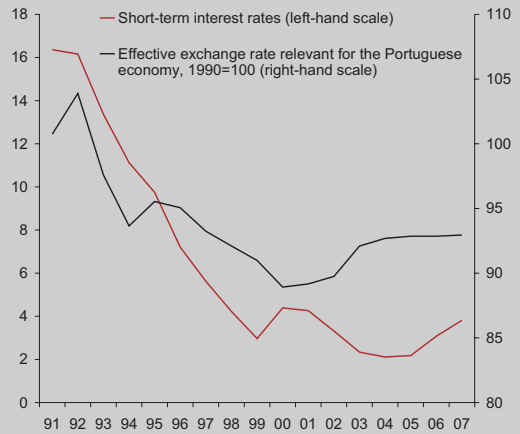
As illustrated in Chart 1, in the 1993 recession episode there was a depreciation of the effective exchange rate and a significant fall in the short-term interest rate. By contrast, the main scenario of the current projection embodies a rise in the interest rate (in line with market expectations) and the continuation of the euro appreciation registered in previous years (corresponding to the assumption that the exchange rates will remain unchanged at the levels prevailing at the beginning of June).

Taking into account a monetary conditions index for Portugal,[1] it is possible to assess the contribution to GDP growth of developments in the short-term interest rate and in the exchange rate in those two periods (Chart 2). This contribution, which may have been 1.0 percentage points in 1993 and in the four subsequent years in annual average terms, declined to around 0.1 percentage point taking into account developments since 2003 and those assumed over the projection horizon.

In particular, the positive contribution of the monetary conditions to GDP growth recorded up to 2005, chiefly reflecting the fall in interest rates in previous years (approximately 2.3 percentage points between 2000 and 2004), is likely to become negative in 2006 and 2007, considering the assumption in the current main scenario about interest rate developments. It should be noted that estimates based on this monetary conditions indicator are obtained taking only into account interest rate changes. Thus, despite the rise in the interest rates, their maintenance at historically low levels - both in nominal and real terms -, as well as the diversification of bank loan contracts and the longer residual maturities of loans may contribute to dampen the effects of the liquidity restrictions, and thus partially mitigate the effects of the rise in interest rates on domestic demand developments.

Chart 1

SHORT-TERM INTEREST RATES AND EFFECTIVE EXCHANGE RATE RELEVANT FOR THE PORTUGUESE ECONOMY

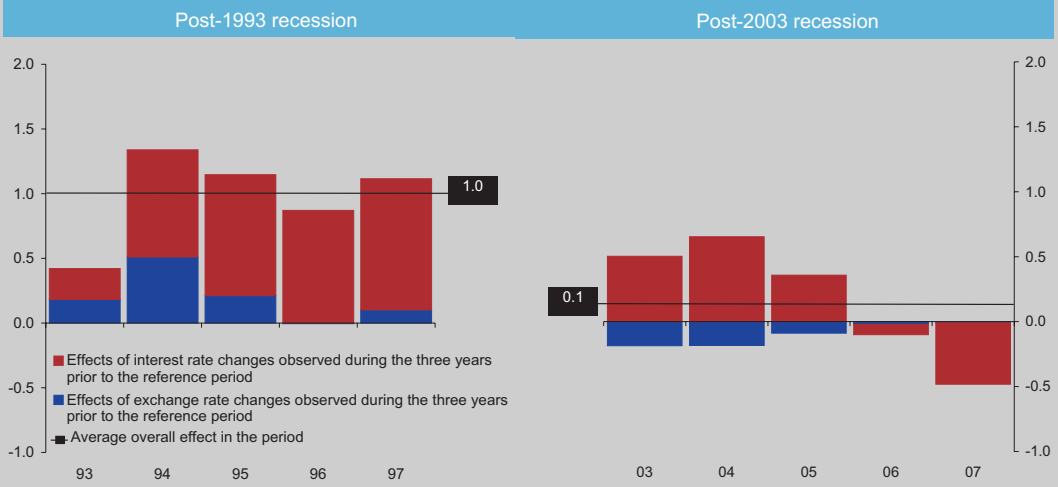


(1) *For details about this index, see P. S. Esteves (2003), "Monetary conditions index for Portugal", in the June 2003 issue of the Economic Bulletin of Banco de Portugal.*

Chart 2

CONTRIBUTION OF MONETARY CONDITIONS TO GDP GROWTH

In percentage points



ARTICLES

Some Issues Concerning the Use of M3 for Monetary Policy Analysis in the Euro Area

Portuguese Export Market Shares: An Analysis by Selected Geographical and Product Markets

Consumption, Disposable Income and Liquidity Constraints

The Impact on Unemployment Duration of a Mandatory Job Search Program

SOME ISSUES CONCERNING THE USE OF M3 FOR MONETARY POLICY ANALYSIS IN THE EURO AREA*

*Nuno Alves***

*Carlos Robalo Marques***

*João Sousa***

1. INTRODUCTION

The broad monetary aggregate M3 is the aggregate used as a reference to assess monetary developments in the euro area. In order for this aggregate to be a useful device to assess medium to long-term risks to price stability two conditions must be satisfied. First, a stable long-run relationship between M3 and its determinants must exist and second, M3 must be a leading indicator of inflation.

During the last five years or so, a significant number of papers aiming at establishing those two conditions for M3 in the euro area was produced. Studies aiming at uncovering a stable long-run money demand equation include the papers by Coenen and Vega (2001), Brand and Cassola (2000), Calza, Gerdesmeier and Levy (2001), Cassola and Morana (2002), Bruggeman, Donati and Warne (2003) and Carstensen (2004a). In turn, studies aiming at establishing the leading indicator property of M3 for inflation include Trecroci and Vega (2000) and Altimari (2001). During this period, the prevalent idea was that money demand in the euro area is stable and that the M3 aggregate exhibits good leading indicator properties with respect to future prices (see the ECB May 2001 and October 2004 Monthly Bulletins).

It is well known that after mid 2001 the monetary aggregate M3 started to grow at a very high rate, significantly above the reference value of 4½ per cent annual growth for M3 defined by the ECB. At first, this fact was mainly explained by portfolio shifts in the stock market. More specifically, an increased uncertainty in this market was seen as giving rise to portfolio adjustments towards more liquid and safer assets included in M3, and thus to an acceleration of this aggregate (see the ECB Monthly Bulletins for this period).

However, after almost five years during which M3 grew on average significantly above the reference value of 4½ per cent in annual terms, in a context of moderate economic growth and a stable and low inflation rate close to two per cent, the question of whether the two above mentioned properties for M3 still stand naturally arises. Thus, this article aims at investigating whether a stable long run money demand function for M3 still exists and to discuss the leading indicator properties of this monetary aggregate for inflation in the euro area.

The remainder of the article is organised as follows. Section 2 re-evaluates two important money demand equations for the euro area and section 3 discusses the implications for the excess liquidity indicators, released by the ECB on a regular basis, stemming from cointegration and/or stability breakdown in the long run money demand equation. Section 4 documents the leading indicator properties of M3 and discusses its robustness, with special focus on the more recent period, which was char-

* The analyses, opinions and findings of this article are those of the authors and do not necessarily coincide with those of the Banco de Portugal.

** Banco de Portugal. Economic Research Department

acterised by a strong increase in M3 growth in a context of relative price stability. Finally section 5 puts forward the main conclusions.

2. STABILITY OF THE LONG RUN MONEY DEMAND EQUATION

Among the models aimed at establishing the existence of a stable long run relationship two of them, one proposed in Calza, Gerdesmeier and Levy (2001) [CGL (2001)] and the other suggested in Carstensen (2004a), deserve special attention. The importance of the CGL (2001) model stems from the fact that it is the model which, with minor modifications, the ECB used in its monetary assessments (see ECB, 2004). The importance of the model suggested in Carstensen (2004a) stems from the fact that it is an extension of the original version of the CGL model which aims at endogenizing the portfolio shifts that occurred after mid 2001 and also because it is the only model, among the set of models investigated by the author, that remained stable when estimated with data until the second quarter of 2003 (maximum sample available at the date) [1].

The original version of the CGL (2001) model is a VAR comprising real M3, real GDP and the opportunity cost of M3 (the spread between the short-term market interest rate and the own rate of M3), with two lags in the levels of the variables. A more recent version of the CGL (2001) model (see, ECB, 2004) includes in addition the following exogenous stationary variables affecting only the short-term dynamics: one quarter-lagged change in oil prices and in the yield curve (defined as the spread between the long-term government bond yield and the short-term market interest rate) and the first difference of the annualised quarterly inflation rate (based on the GDP deflator). In what follows these two models will be denoted as the "original version" and the "revised version" of the CGL model.

The model suggested in Carstensen (2004a) is an extension of the original version of the CGL (2001) model, which besides real M3, real GDP and the spread between the short-term market interest rate and the own rate of M3, also includes two stock market variables. These two stock market variables are the stock market volatility and the spread between equity returns and the own rate of M3. Thus, in the case of the model suggested in Carstensen (2004a) the long run money demand function can be written as

$$(m-p)_t = \beta_0 + \beta_1 y_t + \beta_2\left(r_t^s - r_t^o\right) + \beta_3\left(r_t^e - r_t^o\right) + \beta_4 z_t \qquad (1)$$

where $(m-p)_t$ stands for the log of the real money stock, y_t for the log of real GDP, r_t^s for the short-term nominal interest rate, r_t^o for the nominal own rate of M3, r_t^e for the nominal equity return and for the stock market volatility[2]. The original version of the CGL model obtains by setting $\beta_3 = \beta_4 = 0$. Following Carstensen (2004b) model (1) will be denoted below as the "stock market" specification.

In this model all the individual variables are assumed to be integrated of order one. For the re-evaluation that follows we use data until the fourth quarter of 2005. We start by looking at the cointegration tests in order to investigate whether cointegration holds when more recent data are added to the analysis and then we test formally for cointegration and stability breakdown using the tests recently suggested in Andrews and Kim (2003).

(1) Very recently Dreger e Wolters (2006) claimed to have found a stable long run money demand involving the real stock of M3, real GDP and inflation. However, it seems that the model was not estimated using the official M3 aggregate but rather a monetary aggregate built on the basis of money holdings not adjusted for reclassifications, other re-evaluations, exchange rate variations and variations other than those related to transactions.

(2) The nominal equity returns and the stock market volatility were computed as in Carstensen (2004a). More specifically the nominal equity returns are constructed as the annualised three-year log differences of quarterly nominal stock prices as measured by the Dow Jones Euro Stoxx50. In turn, the stock market volatility is constructed as the two-year average of the conditional variance estimated from a Garch model with t-Student innovations applied to daily yields of the nominal stock price index. Data for the remaining variables were obtained from the ECB.

Table 1

CGL MODEL (REVISED VERSION)

Sample	Johansen cointegration tests				Weak exogeneity of GDP
	Trace test [Prob]	Max test [Prob]	Trace test [Prob, T-nm]	Max test [Prob, T-nm]	$\chi^2(1)$ [Prob]
(1)	(2)	(3)	(4)	(5)	(6)
80Q3-02Q1	32.5 [0.02]*	19.2 [0.09]	30.2 [0.05]*	17.9 [0.14]	0.0 [0.86]
80Q3-02Q4	31.0 [0.04]*	18.4 [0.12]	28.9 [0.06]	17.2 [0.17]	0.1 [0.76]
80Q3-03Q1	29.3 [0.06]	17.9 [0.14]	27.4 [0.10]	16.7 [0.20]	0.5 [0.47]
80Q3-03Q2	27.1 [0.10]	17.6 [0.15]	25.3 [0.16]	16.4 [0.21]	1.5 [0.22]
80Q3-03Q3	27.4 [0.10]	17.4 [0.16]	25.6 [0.15]	16.3 [0.22]	1.4 [0.23]
80Q3-03Q4	26.1 [0.13]	17.2 [0.17]	24.5 [0.19]	16.1 [0.23]	2.2 [0.14]
80Q3-04Q4	21.9 [0.32]	16.4 [0.21]	20.5 [0.40]	15.4 [0.27]	5.3 [0.02]*
80Q3-05Q4	19.9 [0.44]	15.7 [0.21]	18.7 [0.53]	14.8 [0.32]	6.9 [0.01]*

Note: * marks significance at 95% level.

Table 1 displays the results of the Johansen cointegration tests for the null of zero cointegrating vectors against the alternative of (at least) one cointegrating vector (with p-values in brackets) in the revised version of the CGL model, as defined above. The sample starts in 1980Q3 (the first two observations are used to account for the two lags of the model) and the end-of-sample varies from 2002Q1 to 2005Q4. Table 1 reports the p-values using both the asymptotic distribution (columns 2 and 3) and the small sample correction (denoted by "trace test (T-nm)" and "max test (T-nm)" in columns 4 and 5). Following the discussion in the literature that suggests that the conventional asymptotic trace and maximum eigenvalue tests are subject to size distortions in small samples, we focus on the small sample corrected critical values.

The CGL (2001) model was developed under the assumption of a single cointegrating vector. Looking at the cointegration tests in Table 1 we see that cointegration is lost in 2003, as for none of the tests including data for 2003Q2 and thereafter is the null of zero cointegrating vectors rejected (for a 10% test). Moreover, the evidence against cointegration accumulates steadily over the remainder of 2003 and during 2004 and 2005. Using the maximum sample period available (data until 2005Q4) we see that the null of zero cointegration vectors is not rejected even for a 30% test. More specifically the p-values for the null of zero cointegrating vectors are 53% (trace test) and 32% (max test). Those figures are far beyond any acceptable level of significance used in the literature (which usually conducts tests at 1%, 5% or at most 10%).

Overall, given the lack of evidence favouring the existence of cointegration when the last three years of data are added to the sample, we can no longer claim that a long run money demand exists in the context of the "revised version" of the CGL model.

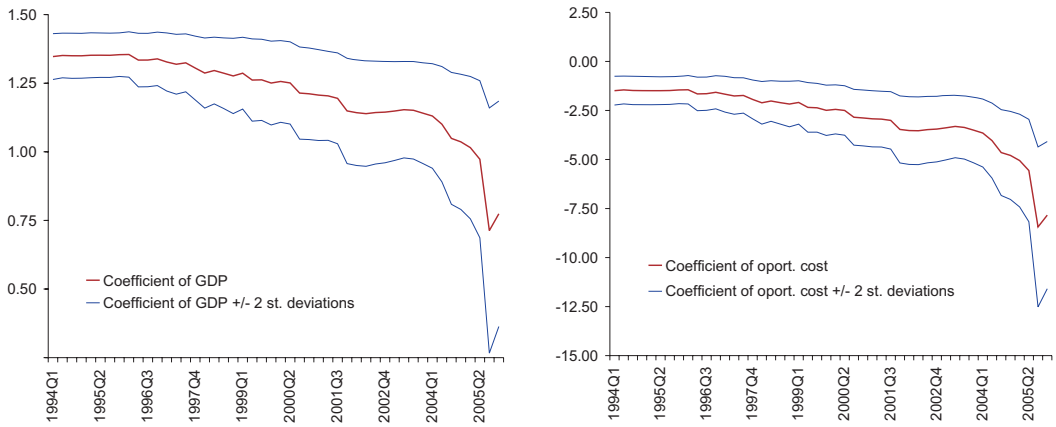
Chart 1 depicts the recursive estimates of the long run parameters associated with GDP and the opportunity cost with 95% confidence bands[3]. Even though simple inspection of recursive graphics does not constitute a formal stability test it nevertheless constitutes a very useful exercise as it allows a quick check of the evolution over time of the parameter estimates. By looking at Chart 1 we see that the recursive estimates change significantly as more recent data enter the sample. For instance, the point estimate for GDP elasticity is 1.31 when data until 2002Q4 are used but drops to 0.77 when data until 2005Q4 are added to the sample. The situation is even more acute as regards the opportunity cost semi-elasticity that increases (in absolute terms) from –1.30 in 2002Q4 to –7.84 in 2005Q4. In both

(3) Charts 1 and 2 were obtained without re-estimating the short-run dynamics during the recursive estimation of the system.

Chart 1

CGL MODEL (REVISED VERSION)

Recursive estimates of the long run coefficients with 95% confidence bands



cases the point estimates in 2005Q4 are clearly out of the 95% confidence interval that surrounds the estimates in 2002Q4, suggesting that a break could have occurred in both coefficients[4].

Let us now look at the model suggested in Carstensen (2004, a, b), i.e. the "stock market" specification. Similarly to Table 1, Table 2 displays the results of the Johansen cointegration tests for the null of zero cointegrating vectors against the alternative of (at least) one cointegrating vector (with p-values in brackets). The tests are for a sample starting in 1980Q3 (the first two observations are used to account for the two lags of the model) and with the end-of-sample varying from 2003Q2 to 2005Q4.

From Table 2 we conclude that the "stock market" specification does a good job, as far as cointegration is concerned, until the first half of 2005. It is only when data for the second half of 2005 are added to the analysis that cointegration seems to be lost.

Intuitively we can understand the outcome of the cointegration tests of the model by looking at Charts A1 to A6 in the Appendix. From Chart A1 we see that the real money stock accelerates after 2001. As this acceleration is not accompanied by an acceleration of real GDP (Chart A3) or by a significant de-

Table 2

CARSTENSEN'S MODEL

	Johansen cointegration tests			
Sample	Trace test[Prob]	Max test [Prob]	Trace test [Prob, T-nm]	Max test [Prob, T-nm]
(1)	(2)	(3)	(4)	(5)
80Q3-03Q4	78.3 [0.01]*	40.4 [0.01]*	70.0 [0.05]*	36.1 [0.02]*
80Q3-04Q4	80.5 [0.01]*	38.8 [0.01]*	72.3 [0.03]*	34.8 [0.03]*
80Q3-05Q1	80.3 [0.01]*	38.5 [0.01]*	72.2 [0.03]*	34.6 [0.04]*
80Q3-05Q2	80.5 [0.01]*	38.3 [0.01]*	72.5 [0.03]*	34.5 [0.04]*
80Q3-05Q3	71.5 [0.04]*	30.0 [0.14]	64.4 [0.12]	27.0 [0.27]
80Q3-05Q4	70.9 [0.04]*	29.4 [0.16]	63.8 [0.14]	26.5 [0.30]

Note: * marks significance at 95% level.

(4) Chart 1 was obtained without imposing any weak-exogeneity restriction. As an alternative one could look at the recursive estimates of the long run money demand coefficients after imposing the weak-exogeneity restriction of GDP, as in ECB (2004). In such a case the situation is more favourable as regards stability of the two coefficients, and this is especially so for the coefficient of GDP that decreases from 1.32 in 2002Q4 to 1.17 in 2005Q4. We note however, that imposing such a restriction is now highly questionable, because as the test of weak-exogeneity in the last column of Table 1 suggests such a restriction ceased to be valid (the restriction is rejected for a 5% test when data after 2004Q3 are added to the model). Moreover the validity of such a test is itself at stake because it is valid only under the assumption of cointegration, which according to Table 1 is difficult to sustain.

cline in the spread between the short term market rate and the own rate (Chart 4), the CGL model starts to perform poorer and poorer and eventually cointegration is lost in the first half of 2003, as Table 1 shows. On the other hand, Charts A5 and A6 show that the spread between the equity returns and the own rate, $\left(r_t^e - r_t^o\right)$, decreases and the volatility, z_t, increases until the beginning of 2003, which explains the good performance of the "stock market" specification, in this period. However, after the first quarter of 2003 the spread increases while volatility decreases. This, all else equal, should have brought about a decrease or at least a deceleration in money growth during this period which did not occur. This is why the model performs poorer in the second half of 2005.

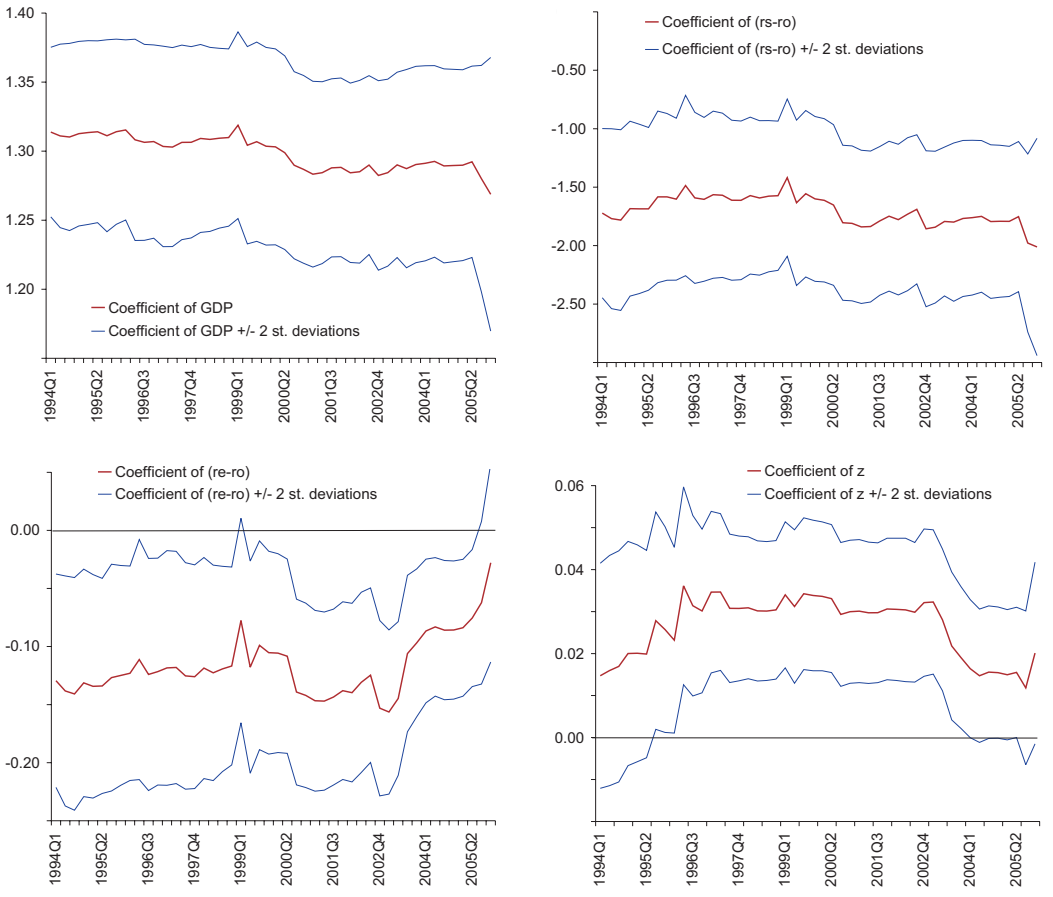
Chart 2 displays the recursive estimates of the long run parameters[5]. As could be expected the estimated coefficient of $\left(r_t^e - r_t^o\right)$ and z_t start to exhibit some instability after the beginning of 2003 converging towards zero, reflecting the fact that during this period the developments in the money market are at odds with the developments in the stock market.

We have just seen that when the most recent data are added to the sample, the evidence on cointegration in the CGL and Carstensen's model weakens and that the estimated long-run coefficients display significant changes. However, against this type of analysis it may be argued that

Chart 2

CARSTENSEN'S MODEL

Recursive estimates of the long run coefficients with 95% confidence bands



(5) Chart 2 was obtained without imposing any weak exogeneity restriction. Imposing weak exogeneity of GDP has no significant implications of the estimated coefficients.

cointegration tests may exhibit power problems and the recursive estimates of the long run parameters with the corresponding 95 percent confidence intervals do not constitute formal stability tests. Thus, we now address the issue in a more formal way by resorting to cointegration and stability breakdown tests recently suggested in the literature.

Andrews and Kim (2003) introduced some tests for cointegration breakdown that may occur at the end of the sample and thus are specially designed to investigate the problem at hand. The tests are conducted under the assumption that cointegration and stability of the long run coefficients hold until a certain point in time and we want to investigate whether there is a cointegration breakdown after that period. Cointegration breakdown may occur due to a shift in the cointegration vector or to a shift in the errors from being stationary to being integrated.

To test for cointegration breakdown Andrews and Kim (2003) developed two families of tests, each family including three alternative statistics. Using Monte Carlo simulations Andrews and Kim found that the statistics R_c and P_c performed slightly better than the other ones in terms of size and/or power. For such a reason, below we stick to these two statistics[6].

For the models under scrutiny the tests are conducted under the assumption that there is cointegration and long run stability when the models are estimated with data until the third quarter of 2001. Thus, the cointegration breakdown is investigated for the period 2001Q4-2005Q4. The choice of this period stems from the fact that the second half of 2001 marks the beginning of high money growth so that 2001Q4 is a date where instability may show up. On the other hand the validity of the tests rests on the assumption that the model is stable before the date of the break and there is evidence that the models are stable when estimated with data until 2001Q3 (see Carstensen, 2004a).

Table 3 presents the simulated p-values of the P_c and R_c tests for the models under investigation, using FM-OLS and FIML to estimate the long-run relationships. From Table 3 we see that there are no strong

Table 3

COINTEGRATION BREAKDOWN TESTS (P-VALUES)

Test	CGL (revised version)	"Stock market"specification
(1)	(2)	(3)
	Break at 2001Q4, sample until 2003Q2	
Pc (FM-OLS)	0.089	0.190
Rc (FM-OLS)	0.076	0.203
Pc (FIML)	0.260	0.166
Rc (FIML)	0.364	0.104
	Break at 2001Q4, sample until 2004Q4	
Pc (FM-OLS)	0.000	0.137
Rc (FM-OLS)	0.000	0.233
Pc (FIML)	0.014	0.394
Rc (FIML)	0.239	0.507
	Break at 2001Q4, sample until 2005Q2	
Pc (FM-OLS)	0.000	0.000
Rc (FM-OLS)	0.000	0.000
Pc (FIML)	0.000	0.044
Rc (FIML)	0.015	0.145
	Break at 2001Q4, sample until 2005Q4	
Pc (FM-OLS)	0.000	0.000
Rc (FM-OLS)	0.000	0.000
Pc (FIML)	0.000	0.000
Rc (FIML)	0.000	0.000

Note: Entries in the Table are the bootstrapped P-values of the Pc and Rc cointegration breakdown tests proposed in Andrews and Kim (2003).

(6) In the computations of the Andrews and Kim tests we used a Rats procedure, which Kai Carstensen kindly made available to us.

signs of instability or cointegration breakdown in the two models, if only the sample until 2003Q2 is considered[7]. When the sample is extended until 2004Q4, cointegration and/or stability is generally rejected in the CGL model (the exception is the R_c test when the model is estimated by FIML), but not in the stock market specification. However, when data until 2005Q4 are considered cointegration and/or stability of the two models is strongly rejected.

Thus, the evidence we get from the Andrews and Kim cointegration breakdown tests is in line with the evidence on the Johansen cointegration tests presented above. When data for the period 2003-2005 are considered cointegration is progressively lost and stability is rejected both in the CGL and in the Carstensen models. The fact that a cointegration breakdown has occurred in Carstensen's model during 2005 casts strong doubts on the idea that excessive money growth can be explained only by the above-mentioned portfolio shifts and suggests that other explanations may need to be considered in order to justify the continuation of M3 excessive growth, in the most recent period.

At a more structural level the emergence of cointegration breakdown or parameter instability implies that there is no longer a stable long-run relation linking M3, prices and the level of activity so that, in the context of these models, this monetary aggregate is no longer a well-suited tool to assess monetary developments. In particular, as shown below, cointegration breakdown also implies that the so-called excess liquidity indicators based on the residuals of the cointegrating regressions lose their information content[8].

3. CONSEQUENCES OF COINTEGRATION BREAKDOWN FOR EXCESS LIQUIDITY INDICATORS

In assessing monetary developments the ECB uses the real and nominal money gaps as excess liquidity measures which are usually interpreted as useful leading indicators of inflation. In their own words "these measures are useful for a comprehensive medium term-oriented monetary analysis, since a protracted upward or downward deviation of the observed money stock from its equilibrium level may bring about risks to price stability which might not be visible in the annual growth rate of M3" [see, for instance, ECB, 2001, and ECB, 2004].

In this section we briefly review the different excess liquidity indicators and address the consequences for such indicators stemming from cointegration breakdown or parameter instability in the underlying money demand equations.

In line with the relevant literature let us assume that the "desired level" of (log) real balances, $(m-p)_t^*$, is given by the "the static long run money demand equation":

$$(m-p)_t^* = \alpha + \beta y_t + \gamma r_t \qquad (1)$$

where y_t is the log of real GDP and the opportunity cost of money.

The *monetary overhang/shortfall* (MO) is defined as the difference (in logs) between the actual real money balances and its "desired" level:

(7) This is the sample used in Carstensen (2004a,b).

(8) As a complement to the official M3 aggregate the ECB has built a new aggregate, the so-called "M3 corrected for the impact of portfolio shifts" [see ECB, 2004]. However, using such an aggregate for monetary analysis raises several important questions. First, the correction is completely ad-hoc, based on simple non-causal time series models, implying that in fact we do not know what the money stock would have been in the absence of such portfolio shifts. Second, it is used under the assumption that the existing models (including the estimates of the parameters) would have remained valid after 2001/2002 in the absence of such shifts, something that cannot be investigated. Finally, as we have seen, cointegration breakdown in the long run money demand, for the most recent period, cannot be explained by portfolio shifts, because it also occurs in the "stock market" specification.

$$MO_t = (m - p) - (m - p)^*_t = (m - p) - \alpha - \beta y_t - \gamma r_t \quad (2)$$

and reflects developments in money not explained by macroeconomic variables of the long-run money demand model. In practical terms, MO_t corresponds to the residuals of the static money demand equation (1).

The *nominal money gap* (NMG) is defined as the difference between the actual nominal money stock and the "equilibrium" nominal money stock:

$$NMG_t = \left(m_t - m_t^{eqn}\right) = m_t - \left(p_t^* + \alpha + \beta y_t^* + \gamma r_t^*\right) \quad (3)$$

where y_t^* and r_t^* stand for the equilibrium values of output and the opportunity cost, and p_t^* is the price level consistent with price stability as defined by the ECB. In turn, the *real money gap* (RMG) is the difference between the actual real money stock and the "equilibrium" real money stock:

$$\begin{aligned} RMG_t &= (m_t - p_t) - m_t^{eqr} = (m_t - p_t) - \left(m_t^{eqn} - p_t^*\right) \\ &= (m_t - p_t) - \alpha - \beta y_t^* - \gamma r_t^* \end{aligned} \quad (4)$$

In theory both the nominal money gap and the real money gap should be computed using the right hand side of (3) and of (4), respectively[9].

In monetary assessments the above monetary indicators are frequently used as measures of excess liquidity, which in turn is seen as a potential source of future inflation (see, for instance, ECB, 2004). The use of such measures as leading indicators of inflation has been legitimated with some empirical evidence. For instance, Gerlach and Svensson (2003) and Trecroci and Vega (2000) conclude that the real money gap has substantial predictive power for future inflation. However, such evidence was obtained using data until 2000. Thus the relevant question is whether such evidence still stands once more recent data are considered in the analysis. This issue is particularly relevant because as we have seen above the strong monetary developments that took place after 2001 cannot be explained in the context of the money demand equation and this may be expected to have important consequences for the leading indicator properties of the monetary indicators based on money demand equations.

To see how the lack of cointegration in the money demand equation may have important consequences for the properties of the estimated real money gap, we start by noticing that the real money gap may be written as

$$RMG_t = MO_t + \beta\left(y_t - y_t^*\right) + \gamma\left(r_t - r_t^*\right) \quad (5)$$

where MO_t stands for the "monetary overhang/shortfall" indicator. As MO_t is estimated as the residuals of the cointegrating regression corresponding to the underlying money demand equation (see, equation 2) it is immediate to recognize that cointegration or stability problems of the underlying long run money demand equation will show up directly on the properties of the real money gap through the monetary overhang component.

If the underlying money demand equation exhibits cointegration, then by definition, MO_t is a stationary variable and so would be the estimated real money gap. This is expected to have been the case until 2001/2002, which corresponds to the maximum period of data used in the papers by Trecroci and Vega (2000), Altimari (2001) and Gerlach and Svensson (2003). However, we have seen that as data

(9) As an alternative the nominal and real money gaps may also be computed using the constant money growth rate corresponding to the reference value for M3 growth (4½% in annual terms) and the constant inflation rate corresponding to monetary authority's definition of price stability (see, ECB 2001, 2004). However, such money gaps do exhibit some limitations stemming from the fact that they coincide with the actual money stock up to a linear time trend and thus, their information content does not differ from the information content of the actual money stock itself.

after 2002 are added to the analysis the evidence on cointegration for the CGL model disappears, and this, by definition, implies that the monetary overhang/shorfall indicator ceases to be a stationary variable. As a consequence, the estimated real money gap also ceases to be stationary.

The first implication of such a situation is that the real money gap itself, similarly to what happens to the underlying money demand equation, loses its economic meaning. This applies, in particular, to its interpretation as an excess liquidity indicator. In fact, since this is an I(1) variable, it does not exhibit mean-reversion. In other words, there is no longer any meaningful equilibrium level of real money balances corresponding to zero excess liquidity, to which the real money gap can be expected to return on a regular basis.

The second important implication is that the corresponding estimated real money gap is also likely to lose its leading indicator properties of inflation. To see that let us take a look at the model estimated in Trecroci and Vega (2000):

$$\Delta\pi_t = \theta_0\left(\pi_{t-1} - \hat{\pi}_t\right) + \theta_1 RMG_{t-1} + \theta_2\left(y - y^*\right)_{t-1} + \theta_3\left(r - r^*\right)_{t-1} + \ldots + v_t \qquad (6)$$

where, π_t, $\hat{\pi}_t$ and y^* stand for inflation, inflation target and potential GDP respectively. Given that θ_1 is found to be significantly different from zero (and positive) the authors conclude that the real money gap exhibits substantial predictive power for future inflation in the euro area[10].

Now, under the assumption of cointegration in the underlying money demand model, (6) is a balanced equation in which the regressand ($\Delta\pi_t$), as well as, all the regressors (in particular RMG_{t-1}) are stationary. However, in the absence of cointegration, (6) is unbalanced from a statistical point of view, because a stationary regressand is being regressed on a set of regressors where all but one (RMG_{t-1}) are stationary. Statistically we should thus expect to have $\theta_1 = 0$. Thus, we conclude that cointegration breakdown in the money demand equation, brought about by monetary developments not explained by the determinants included in the money demand equation, is also likely to imply that the corresponding real money gap would lose its leading indicator properties.

4. M3 AS A LEADING INDICATOR OF PRICES IN THE EURO AREA

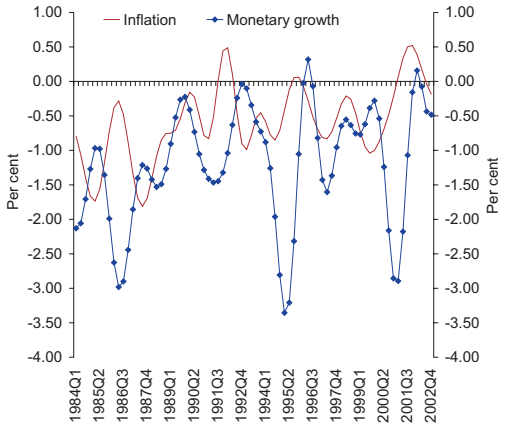
The previous section showed that given the breakdown in cointegration in the long-run money demand function it is likely that the properties of excess liquidity indicators as leading indicators of inflation deteriorate once the more recent data is included in the estimation of the models. The cointegration breakdown in money demand could have similar consequences in terms of the properties of the M3 aggregate. In fact, it could imply that M3 may no longer be a good instrument to analyse the medium to long-term prospects for inflation. Against this background, this section aims at documenting and discussing the leading indicator properties of M3 in the medium to long-term. The emphasis in the medium to long-term stems from two arguments. On one hand, this is the relevant horizon in terms of the current monetary policy strategy of the ECB. On the other hand, it is consensual that the relation between M3 and prices in the short-run is fragile, of an ambiguous sign and not relevant for the conduct of monetary policy. This fact has been stressed in many studies (see ECB, 2004)[11]. The lack of a short-run relation between M3 and inflation can also be seen looking at Chart 3, which presents the year-on-year rate of change in the short to medium-term component of M3 growth and inflation (fre-

(10) Gerlach and Svensson (2002) carry out a similar analysis in a slightly different model.

(11) The reason underlying this result is immediate: the response of M3 and prices varies as a function of the shocks that are continuously hitting the economy (such as, just to name a few representative examples, monetary policy shocks, technological shocks, velocity shocks, consumer preference shock and fiscal shocks).

Chart 3

FREQUENCY COMPONENTS BETWEEN 6 AND 32 QUARTERS OF MONEY GROWTH AND INFLATION (CHRISTIANO-FITZGERALD FILTER)



quencies between 6 and 32 quarters) computed with the Christiano-Fitzgerald (2003) filter, in its symmetric version.

The most quoted work in favour of the existence of a leading indicator role for money to inflation in the euro area is Altimari (2001) who applies the methodology proposed by Stock and Watson (1999) to the euro area. This methodology compares the forecast performance of univariate models of inflation with that of bivariate models including monetary growth as an additional explanatory variable. According to the results of Altimari (2001), money growth has leading indicator properties for inflation in the two to three year horizon. However, the conclusions of this study should be qualified. First, the results obtained with the methodology of Altimari (2001) are based on specifications which assume that M3 growth and inflation were stationary variables during the sample period. This hypothesis is, however, rejected by the data, which suggest that both inflation and money growth are better classified as integrated variables of order 1. Second, when the specification of the Altimari (2001) test takes into account the properties of the series in the sample period, the information content of monetary aggregates completely disappears[12]. This outcome suggests that the finding of significant indicator properties of money may be associated with the disinflation period seen in the euro area, which contributed to a common declining trend of the growth of both M3 and prices.

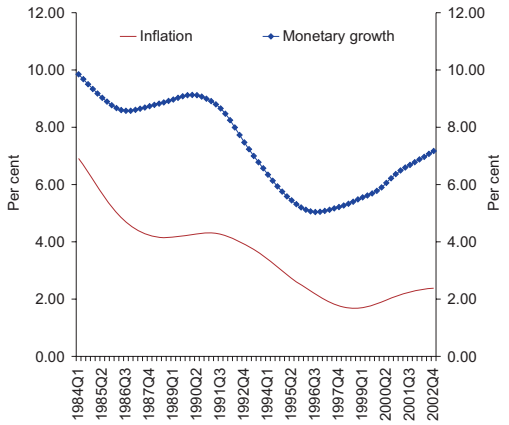
In addition, at this stage, given the breakdown of cointegration, one can expect that the medium-term leading indicator properties of M3 have been affected. However, this conjecture cannot yet be tested on the basis of the methodology of Altimari (2001) given that the data for 2004/2005 are exactly those which have to be left out when assessing the leading indicator properties for horizons above two years.

An alternative way for assessing the leading indicator properties of money in the medium to long-term is to investigate to what extent the money growth trend has exhibited a close and leading relation with the inflation trend (see ECB, 2004). In descriptive terms, this relation is visible in Chart 4 which presents the year-on-year rate of change in the long-run component of M3 growth and inflation computed with the Christiano-Fitzgerald (2003) filter (frequencies above 32 quarters), in its symmetric version. Chart 4 suggests two important considerations regarding the relation between the very long-term trends (frequencies above 8 years) of M3 growth and inflation. First, there seems to be a close relation

(12) This finding is reported in Altimari (2001), but usually is not duly emphasised in the quotations of the paper.

Chart 4

LONG RUN TRENDS IN INFLATION AND MONEY GROWTH (CHRISTIANO-FITZGERALD FILTER; FREQUENCIES>32 QUARTERS)



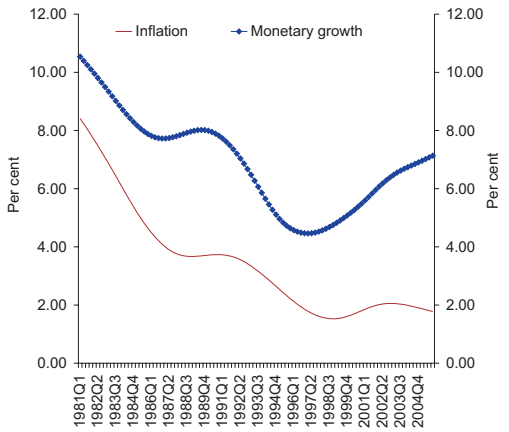
between the long-run evolution of money and prices, even though there is a marked deterioration in the more recent period, probably related to the breakdown in cointegration shown in section 2. The weakening of the relation is particularly noticeable if more conventional measures of trends that also take into account the more recent period such as, for example, the Hodrick-Prescott filter, are used instead (see Chart 5). Second, Charts 4 and 5 suggest that the trend component of money growth leads the inflation trend component by about 6 to 8 quarters.

Despite these findings, there are several arguments that suggest that trend measures of money growth are difficult to interpret as leading indicators of inflation.

First, the existence of a leading indicator relation has a complex interpretation when dealing with low frequencies. In fact, the construction of trend measures for a certain period using Christiano-Fitzgerald or HP filters takes into account not only the past information of the variables but future information as well (crudely, these measures can be interpreted as weighted averages of past and future values of

Chart 5

TRENDS IN MONEY GROWTH AND INFLATION (HODRICK-PRESCOTT FILTER; LAMBDA=1600)



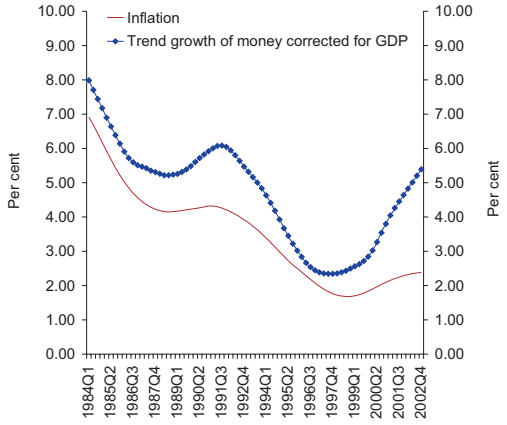
monetary growth and inflation). This supports the claim that it is difficult to discuss leading indicator properties in this context. In addition, and on more operational grounds, it should be noted that the correlation between money and prices only arises at very low frequencies, which implies that trend money measures are not too responsive, being difficult to relate to short and medium term economic developments.

Second, it is important to note that the quantity theory of money suggests that the long run relation between money and prices should take into account the trend evolution of output. However, the empirical relation between the long run component of money and prices in the euro area presents a peculiar feature: when one takes into account the trend evolution of GDP, the relation between M3 (corrected for the trend growth in GDP) and prices ceases to be seemingly leading and becomes contemporaneous. This conclusion emerges equally from recent contributions on structural filters for monetary analysis (see Bruggeman et al., 2005). This contemporaneous relation in evident in Chart 6, which presents the trend growth of the ratio of M3 to GDP and trend inflation in the euro area[13].

Third, and from a monetary analysis perspective, it is important to understand the structural factors that may underlie the relation between monetary developments and inflation. In particular, it is important to ask what type of shocks may generate an empirical leading indicator relation from money to prices in the longer-run. In this time frequency, the main candidate is a change in expectations concerning the price stability objective of the monetary authority, either via a deliberate change in that objective or via a change in the credibility of the monetary authority in pursuing its goals[14]. In this case, money growth could be a leading indicator of inflation. This mechanism may actually explain why there exists an empirical leading indicator property in the disinflation period in the euro area in the 80s and 90s. However, this should not be a relevant phenomenon in the context of a price stability regime. In other words, in case the ECB is successful in pursuing its price stability objective, one should not ex-

Chart 6

TREND GROWTH OF MONEY CORRECTED FOR GDP AND TREND INFLATION (CHRISTIANO-FITZGERALD; FREQUENCIES >32 QUARTERS)



(13) The series in the Chart were computed using the Christiano-Fitzgerald filter applied to the difference between the logarithm of nominal M3 and the logarithm of real GDP in the euro area. The results are robust to the postulation of a non-unitary coefficient of GDP (for example, 1.3, which corresponds to the GDP-elasticity of money demand estimated in CGL, 2001). This latter case would correspond to incorporate in the analysis the downward trend of M3 velocity observed in the sample period.

(14) For example, in models with a significant degree of real and nominal rigidity, as well as in models where agents learn the behaviour of the central bank, a permanent decrease in nominal interest rates (and the corresponding permanent reduction in monetary growth) could be accompanied by a slow response of prices to the new level of steady state inflation.

pect money to exhibit any empirical relation of leading indicator of prices in the long-run. In fact, in this context, changes in trend money should only reflect changes in trend GDP or in the trend velocity of money, without any counterpart in trend prices. This assertion illustrates once more the fact that empirical monetary indicators cannot be expected by themselves to identify the nature of risks to price stability.

5. CONCLUSIONS

This article reassesses the role of the M3 monetary aggregate for monetary policy purposes. The analysis leads to the conclusion that the money demand models suggested in Calza, Gerdesmeier and Levy (2001) and Carstensen (2004a,b) show strong signs of instability or cointegration breakdown when data up to the end of 2005 are considered. The cointegration breakdown implies that there is no longer a stable long-run function relating M3 and the level of prices, activity and its opportunity cost. Therefore, the monetary aggregate M3 has ceased to be a good instrument for monetary analysis. The cointegration breakdown also implies that, in the context of these models, the concept of "excess liquidity", based on an equilibrium value for M3, lost its meaning and the so-called excess liquidity indicators based on the residuals of the cointegration regression in those models might have lost their information content.

A second conclusion of this study, which confirms the one of previous studies, is that there seems to be a relation between the long-run trend of the M3 aggregate and long-run movements of inflation, which, however, seems to have deteriorated in recent years reflecting the cointegration breakdown in the money demand models. However, the existence of a leading relation between money and prices in the long-run is difficult to assess and hardly exploitable for monetary policy purposes given that the frequencies over which the two variables are correlated are extremely long.

In sum, the recent evidence raises serious doubts regarding the use of M3 as an indicator for evaluating the risks to price stability. However, this does not imply that the analysis of money, and in a broader sense, monetary analysis is not useful. In this respect, one should mention the importance of credit – and its components – as a relevant indicator for the analysis of financial stability, the analysis of the transmission mechanism of monetary policy and for signalling possible episodes of asset price overvaluation. In turn, money can be useful in the identification of certain shocks or in characterising the portfolio adjustment of economic agents. In this context, a careful modelling of money in general equilibrium models is a route that may, in the future, deepen our understanding of the importance of monetary developments in the context of a monetary policy strategy.

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ANNEX

Chart A1

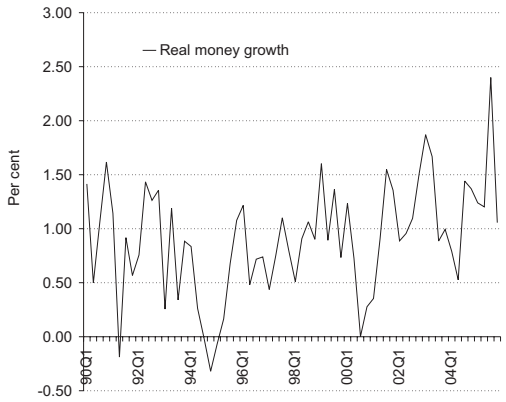


Chart A2

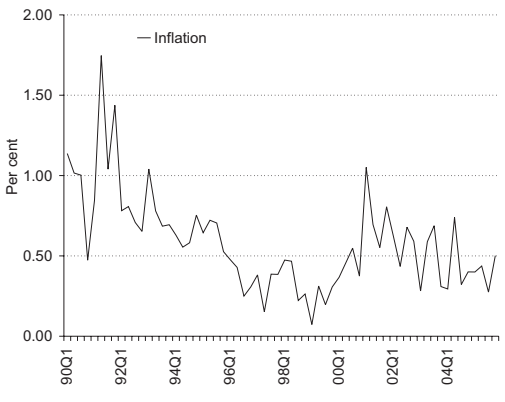


Chart A3

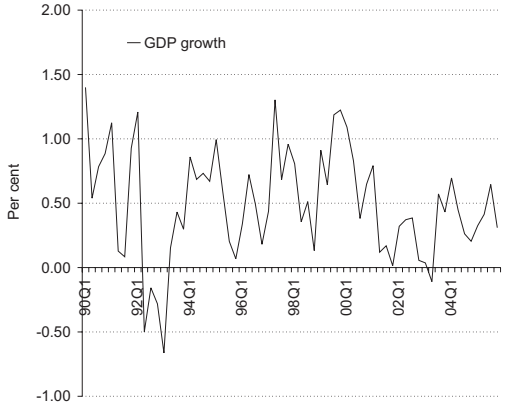


Chart A4

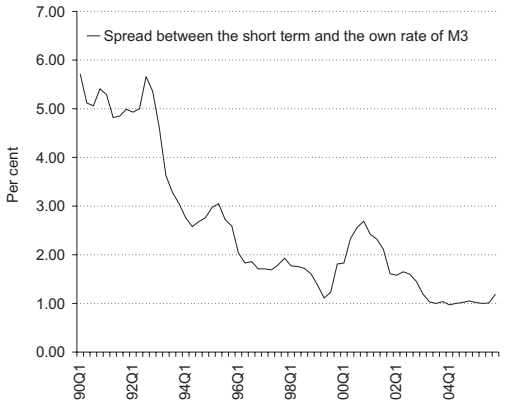


Chart A5

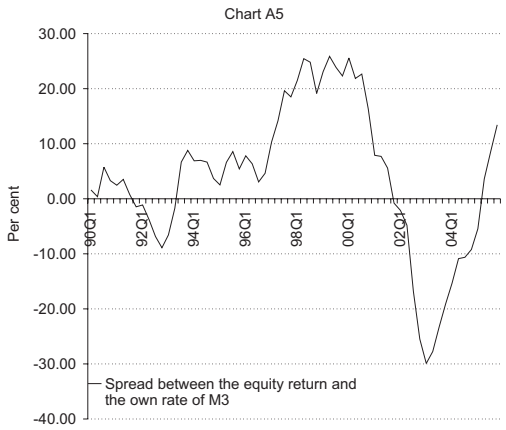
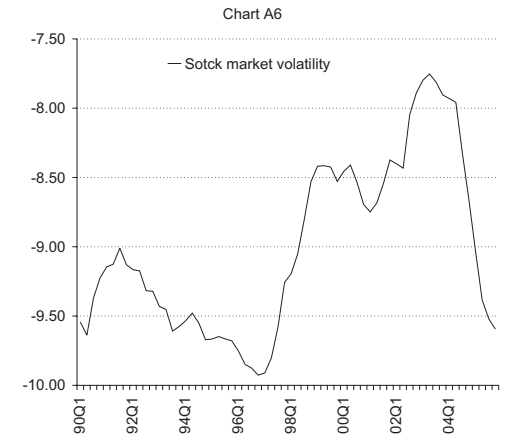


Chart A6



PORTUGUESE EXPORT MARKET SHARES: AN ANALYSIS BY SELECTED GEOGRAPHICAL AND PRODUCT MARKETS*

*Sónia Cabral***

*Paulo Soares Esteves***

1. INTRODUCTION

Portuguese export market shares have been showing a disappointing behaviour recently, with substantial reductions in the last two years. This fact is often considered as a signal of deteriorating external competitiveness and as a hinder to growth in a small open economy like Portugal, thus contributing to the real growth divergence against the euro area observed since 2002. Besides being determined by a country's capacity to compete effectively with other supply sources, market share growth depends also on other factors, like a country's geographical and sectoral specialization and its ability to adapt its exports to demand changes.

This article analyses the evolution of Portuguese export shares in a sample of selected product and geographical markets, taking into account the impact of product and geographical composition on the aggregate behaviour of export shares. For this purpose, the percentage change of the aggregate Portuguese export market share is decomposed into three main additive and analytically interpretable terms: a market share effect, taking into account the effective changes of share in each product/geographical market, and two additional terms that analyse how the geographical and product composition of Portuguese exports affected developments in the overall market share. Eight countries and twelve products are considered as the relevant market in the period from 1999 to 2005, representing together more than 70 per cent of total Portuguese manufacturing exports.

Our analysis is basically a modified version of the traditional constant market share analysis, as it also allows to isolate the effective changes of export share in each individual market from the effects related with the product and geographical structure of exports. Applications of constant market share analysis to Portuguese exports can be found in Manteu and Abreu (1993) and Cabral (2004), and ECB (2005) shows an analysis of this type for euro area exports. The information of our sample, covering the selected 96 individual markets, helps to understand if losses of market share were a generalised phenomenon or if they can be attributed to some specific product or geographical destination. Additionally, the use of this detailed dataset, not only for Portugal but also for all other countries, permits to detect the ones that compete the most with Portuguese exports in each individual market of our sample. This kind of analysis is related to Esteves and Reis (2005) where the computation of the Portuguese effective exchange rate index with a triple-weights scheme for exports with a product breakdown for each country allowed the identification of some of the main competitors of Portuguese exports in 2004.

In our sample of 96 individual markets, Portuguese exports show a considerable cumulative loss of total market share in the 2000-2005 period, 16.2 per cent. This decline of Portuguese total export share stems essentially from effective market share losses in specific markets (product-country), with a con-

* The analyses, opinions and findings of this article are those of the authors and do not necessarily coincide with those of the Banco de Portugal. The authors thank Ildeberta Abreu, Marta Abreu and Cristina Manteu for their suggestions and comments. The usual disclaimer applies.

** Economic Research Department.

tribution of 19.6 percentage points (p.p.) to the total loss, pointing to a decline of Portuguese external competitiveness. Looking only at the geographical dimension, there was a generalised effective loss of export shares across the countries analysed. As regards the product dimension, the effective losses of market share were not so generalised and some gains, albeit small, were observed in certain goods.

Assuming the 96 individual markets as the only ones relevant for the Portuguese economy, the contribution of the relative specialisation by products was negative, as in Cabral (2004). This negative product structure effect resulted mainly from the higher relative export share of Portugal in products whose markets grew below average, in particular the so-called traditional sectors like textiles, clothing and footwear. However, the negative effect of the product specialization was offset by a positive contribution of 5.4 p.p. related with the geographical distribution of Portuguese exports in this sample. The positive impact of the geographical distribution of exports across the eight developed countries included in the analysis was mostly related to the Spanish market: a market with above average growth in this period and where Portugal has a high and sustained share.

In period from 2000 to 2005, the effective losses of market share did not result from an abnormal behaviour of Portuguese exports in specific markets. Despite some gains of share in certain markets, the losses were relatively widespread across the 96 individual markets, suggesting an overall deterioration of external competitiveness. The main gainers in the markets where Portugal registered stronger market share losses were essentially developing countries from Central and Eastern Europe and from East Asia. The main losers in the same markets were essentially developed economies, including some euro area countries. These results are not surprising and reflect the significant increase in worldwide competition resulting from the intensive participation of new players in international trade. However, in line with Esteves and Reis (2005), the product specialization of the Portuguese exports is quite similar to the one of these countries, suggesting that the increased competition in third markets from new trading partners may be particular challenging for the Portuguese economy.

This article is organized as follows. Section 2 presents the dataset and the methodology used to breakdown the overall change of export market share. Section 3 analyses the evolution of Portuguese export shares according to that methodology and Section 4 tries to identify the main competitors of Portuguese exports in this period. Finally, Section 5 concludes.

2. DATA AND METHODOLOGY

The annual information on import and export values in euros was obtained from the World Trade Atlas (WTA) database and covers the period from 1999 to 2005. Export market shares were calculated in nominal terms given the lack of information on external trade flows in volume with the suitable product and geographical detail. Thus this article focus on manufacturing trade, as the traditional high volatility of commodities prices tends to distort the nominal market shares for total goods.

As regards product groups, they were constructed from the Harmonised System (HS) Nomenclature at the 4-digit detail level in order to exclude accurately non-manufacturing products[1]. These exhaustive data was subsequently re-grouped together at a 2-digit level, leading to 72 product aggregates, covering only the respective subcomponents classified as manufactures[2]. Subsequently, some of these product groups were aggregated in order to reflect the sectoral specialisation of Portuguese exports

(1) The Harmonized Commodity Description and Coding System, commonly known as HS Nomenclature, is an international nomenclature which was elaborated under the auspices of the World Customs Organization (WCO). The HS Nomenclature comprises about 5,000 commodity groups identified by a 6-digit code. The Combined Nomenclature of the European Union integrates the HS Nomenclature with additional 8-digit subdivisions. For further information, see the website of Commission's Taxation and Customs Union Directorate-General or the website of the WCO.

(2) The products classified here as manufactures represent around 85 per cent of total Portuguese exports of goods.

and the most relevant products in total Portuguese exports were selected for this analysis[3]. In the end, the relevant markets selected correspond to the main eight destination countries and the main twelve products, i.e. 96 individual markets, representing together more than 70 per cent of total Portuguese manufacturing exports and more than 60 per cent of total Portuguese exports of goods (Table 1).

Considering these 96 individual markets as the ones relevant for the Portuguese economy, Portuguese total export market share (Q) can be expressed as follows[4]:

$$Q = \frac{\sum_i \sum_j X_{ij}}{\sum_i \sum_j M_{ij}} = \sum_i \sum_j X_{ij} \frac{1}{\sum_i \sum_j M_{ij}} = \sum_i \sum_j Q_{ij} \frac{M_{ij}}{\sum_i \sum_j M_{ij}} \quad (1)$$

where X_{ij} are the Portuguese exports of product i to country j, M_{ij} are the imports of country j of product i and the ratio between these two variables, Q_{ij}, is the Portuguese export market share of product i in country j.

The percentage change of the total export market share can be expressed as:

$$\frac{\Delta Q}{Q} = \underbrace{\sum_i \sum_j \frac{\Delta Q_{ij}}{Q_{ij}} \frac{X_{ij}}{\sum_i \sum_j X_{ij}}}_{(i)} + \underbrace{\sum_i \sum_j \Delta \frac{M_{ij}}{\sum_i \sum_j M_{ij}} \frac{Q_{ij}}{Q}}_{(ii)} + \underbrace{\sum_i \sum_j \frac{\Delta Q_{ij}}{Q} \Delta \frac{M_{ij}}{\sum_i \sum_j M_{ij}}}_{(iii)} \quad (2)$$

Following this expression, the growth rate of the overall market share can be broken down into three terms:

(i) Market Share Effect – The change of the export share in each individual market weighted by the relative importance of this market on total Portuguese exports. This term is usually interpreted as a measure of external competitiveness, as it results from effective gains/losses of share in each specific market.

(ii) Combined Structure Effect – The relative evolution of each destination market (defined as the change of its weight in total imports) weighted by the relative importance of that export share for Portugal. This effect determines which part of the total change of market share resulted from the influ-

Table 1

PORTUGUESE MANUFACTURING EXPORTS
In percentage of total, 1999-2005 average

	Chemicals	Pharmaceuticals	Plastics	Wood and paper	Cork	Textiles and clothing	Footwear	Metal products	Non-electrical machinery	Electrical machinery	Vehicles	Furniture	Total
Spain	0.8	0.1	1.5	1.5	0.3	3.6	0.3	2.9	1.5	1.8	3.0	0.8	**18.0**
France	0.1	0.1	0.4	0.6	0.8	2.9	1.3	0.4	0.9	1.6	2.5	0.9	**12.4**
Germany	0.2	0.2	0.2	0.5	0.4	2.7	1.6	0.5	1.8	4.1	4.2	0.2	**16.4**
United Kingdom	0.1	0.2	0.1	0.4	0.1	3.0	1.2	0.3	0.4	1.3	2.2	0.1	**9.5**
United States	0.2	0.0	0.0	0.1	0.6	1.3	0.2	0.1	0.8	1.0	0.1	0.0	**4.5**
Belgium	0.4	0.0	0.1	0.1	0.0	0.5	0.1	0.1	0.2	0.9	2.0	0.0	**4.5**
Italy	0.1	0.0	0.2	0.4	0.2	0.9	0.1	0.1	0.3	0.5	1.1	0.0	**3.8**
Netherlands	0.5	0.0	0.1	0.2	0.0	1.0	0.6	0.0	0.2	0.3	0.3	0.0	**3.2**
Total	**2.4**	**0.6**	**2.6**	**3.8**	**2.3**	**15.7**	**5.4**	**4.4**	**6.0**	**11.5**	**15.3**	**2.0**	72.2

Sources: World Trade Atlas and own calculations.

(3) A description of the products included in each group with the respective HS codes is included in Table 1 of the Annex.
(4) The notion of individual market used here refers to each ij market measured as imports of country j of product i.

ence of the productive/geographical specialisation of the country. The overall export market share is positively influenced if the country is relatively more (less) specialized in markets that grow above (below) average. The specialization indicator (Q_{ij} / Q) is given by the relative value between each market share and the overall export share, which is equivalent to compare the weigh of each market on total exports with the weight of the same market in total foreign demand[5].

(iii) Residual – The cross variations term that simply ensures a 100 per cent breakdown of the overall market share change.

The Combined Structure Effect (ii) can be further decomposed into three terms to account for the effects on exports of both the geographical and product specialization separately:

(iia) Geographical Structure Effect that determines which part of the total change in the market share resulted from the geographical specialisation of Portuguese exports,

$$\sum_j \Delta \frac{M_j}{\sum_j M_j} \frac{Q_j}{Q}, \text{ where } M_j = \sum_i M_{ij} \text{ and } Q_j = \frac{\sum_i X_{ij}}{M_j} \tag{3}$$

(iib) Product Structure Effect that determines which part of the total change in the market share resulted from the product specialisation of Portuguese exports,

$$\sum_i \Delta \frac{M_i}{\sum_i M_i} \frac{Q_i}{Q}, \text{ where } M_i = \sum_j M_{ij} \text{ and } Q_i = \frac{\sum_j X_{ij}}{M_i} \tag{4}$$

(iic) Mixed Structure Effect, which is a residual term that results from the fact that the sectoral and geographical structures are not independent and thus the sum of the product and geographical effects does not match the combined structure effect. In fact, for each geographic market (product), the sectoral (geographical) distribution of exports differs from the product (geographical) distribution of total exports. The option here was to calculate and display this interaction effect separately, hence controlling for its magnitude.

This kind of arithmetic analysis, like the traditional constant market methodology, has been criticised both for the lack of strong theoretical foundations and for its empirical applications[6]. In our case, the selection of the 96 individual markets was made exclusively according to their importance in Portuguese exports. Some information on additional products and geographical markets was available, but it was not included due to their low weight in Portuguese exports. Thus, this approach considers the export specialization as exogenous, computing the structure effects across the markets considered as relevant, and thus ignoring the potential effects of a specialization in other markets with different growth rates. Regarding the product dimension, this sample selection issue should not be very significant, as the twelve products considered cover more than 80 per cent of world manufacturing trade. In what concerns the geographical dimension, the eight countries selected represent only around 40 per cent of total world trade of goods[7], while the share of developing countries on world trade increased steadily in recent years, reflecting mainly the strong growth of trade flows of some countries from Asia and from Central and Eastern Europe (Chart1). The non-specialization of Portuguese exports in most

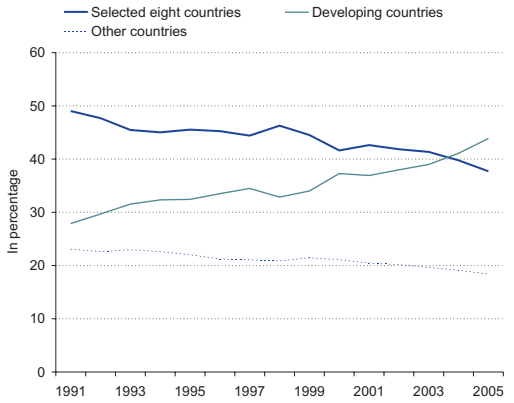
(5) This specialization indicator is similar to the traditional Balassa index of revealed comparative advantage. In our case we compare the Portuguese export structure with the structure of total imports of the relevant market, instead of comparing relative export structures as in the Balassa indicator.

(6) For instance, the constant market share analysis can be applied at several product/geographical breakdown levels. In particular, the breakdown level used can be especially relevant for products with a high degree of heterogeneity, like machinery items. The results are not independent from this choice, although the discretionary decision on the level of disaggregation used is generally determined by the availability of information. See Richardson (1971) for a detailed discussion of the main criticisms and Cheptea et al. (2005) for a recent shift-share analysis of trade competitiveness.

(7) This number should be seen as a lower bound to the importance of these countries in manufacturing world trade. This weight was computed using information for total world trade of goods and thus includes oil exports, which are not very relevant to the eight countries selected.

Chart 1

WORLD TRADE OF GOODS
Shares in total exports (values in US$)



Source: CPB (Netherlands Central Planning Bureau).

of the dynamic emerging market economies can potentially hamper the future growth of Portuguese exports, as the benefits of strong domestic demand in these countries are not being captured[8]. However, this kind of effects is not accounted for by this approach, where the markets considered as relevant were selected exclusively according to their importance in Portuguese exports.

3. EVOLUTION OF PORTUGUESE EXPORT MARKET SHARES

Table 2 and Chart 2 show the evolution and breakdown of the total change of Portuguese export market shares using the methodology described in the previous section[9]. In our sample of 96 individual markets, the results reveal a considerable total loss of export share in the 2000-2005 period, higher than 16 per cent in cumulative terms. After a significant market share gain in 2001, the gains became progressively smaller in the two subsequent years and finally turned into substantial losses in 2004 and 2005. The breakdown of this total effect over the whole period shows that there were large effective losses of market share, which contributed with 19.6 p.p. to the total share loss. In particular, the effective losses of share became increasingly significant in the last three years. The contribution of the combined structure was positive, due to a rather positive effect of the geographical specialization across the selected sample. However, the contribution of the geographical specialisation of Portuguese exports decreased steadily from 2003 onwards, turning even into a negative figure in 2005. In turn, the specialisation by products had a unfavourable impact on the overall developments of Portuguese export market shares in the 2000-2005 period, showing negative contributions in almost all years analysed, although more significant in the last two years.

It is important to analyse the evolution of Portuguese export market shares in each of the 96 individual markets that make up total foreign demand and determine the contribution of each one to the effects calculated above. Table 3 shows the contribution of each individual market to the total market share

(8) Considering data for manufacturing exports in 2004, Portuguese exports have a relatively low specialization in most developing countries. For instance, non-Japan Asia and the ten new EU member states represent 4.6 and 1.5 per cent of total Portuguese manufacturing exports, respectively, against values close to 10 and 5 per cent observed in the non-weighted average of the twelve euro area countries. More information concerning the different export specialization across euro area countries can be founded in Esteves and Reis (2005).

(9) See Table 2 in the Annex for detailed annual data on Portuguese export market shares (levels, changes and contributions).

Table 2

ARITHMETIC BREAKDOWN OF THE TOTAL CHANGE OF PORTUGUESE EXPORT MARKET SHARES

Nominal, manufacturing

	Total Change	Market Share Effect	Combined Structure Effect	of which: Geographical Structure Effect	Product Structure Effect	Mixed Structure Effect	Residual
2000	-10.4	-7.1	-3.5	-2.6	-0.8	-0.1	0.2
2001	6.7	3.0	3.3	2.5	1.1	-0.2	0.3
2002	3.6	2.8	1.1	0.7	-0.3	0.7	-0.3
2003	1.7	-3.4	5.4	5.2	-0.4	0.7	-0.4
2004	-7.3	-7.1	-0.2	1.6	-1.8	0.1	0.0
2005	-10.2	-7.8	-2.6	-1.7	-1.4	0.4	0.2
2000-2005	-16.2	-19.6	2.2	5.4	-4.7	1.5	1.2
2003-2005	-15.4	-17.8	1.9	5.1	-4.1	0.8	0.5

Sources: World Trade Atlas and own calculations.

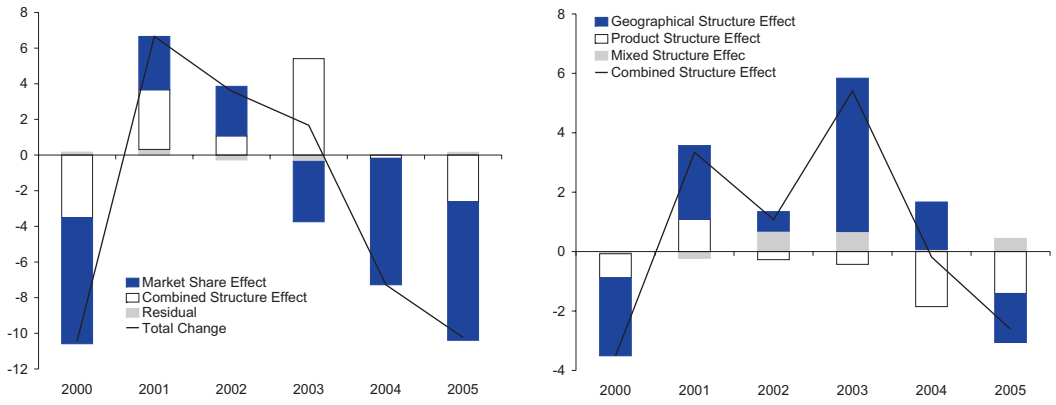
loss of 16.2 per cent in the 2000-2005 period. Contributions with an absolute value higher than 1.5 p.p. are highlighted in the table. Seven individual markets stand out for the very high contributions to the loss of market share in this period: textiles and clothing in France, Germany and the UK, footwear in the UK, electrical machinery in Germany and the UK and vehicles in Germany. On the contrary, there was a significant positive contribution of Portuguese exports of metal products and plastics in the Spanish market, and of vehicles in France.

Looking only at the geographical dimension, there was a generalised decline of export shares during the period considered[10]. In the period from 2000 to 2005, the only two countries that did not contribute to the reduction of the total market share were the US and, specially, Spain, where a very high gain was recorded. The gains of market share in the Spanish market were, not only, high but relatively wide-spread across the different products. On the opposite side, the most impressive loss was observed in

Chart 2

ARITHMETIC BREAKDOWN OF THE TOTAL CHANGE OF PORTUGUESE EXPORT MARKET SHARES

In percentage points



Source: World Trade Atlas and own calculations.

(10) The total contribution of a specific country j (product i) can be taken as the sum over i (j) of the ij individual contributions.

Table 3

CONTRIBUTIONS TO THE TOTAL CHANGE OF PORTUGUESE MARKET SHARE, 2000-2005

In percentage points

	Chemicals	Pharmaceuticals	Plastics	Wood and paper	Cork	Textiles and clothing	Footwear	Metal products	Non-electrical machinery	Electrical machinery	Vehicles	Furniture	Total
Spain	0.53	0.05	1.55	-0.02	0.06	0.60	0.22	2.70	-0.03	-0.11	1.02	0.73	**7.3**
France	0.03	-0.01	0.13	-0.06	-0.19	-2.65	-0.52	0.04	0.34	-1.04	1.77	0.67	**-1.5**
Germany	0.15	-0.07	0.06	0.17	-0.25	-3.12	-1.37	-0.07	1.42	-4.30	-4.19	-0.13	**-11.7**
United Kingdom	0.00	0.05	-0.08	-0.17	-0.04	-2.33	-1.70	0.15	-0.12	-1.75	-0.05	-0.05	**-6.1**
United States	-0.19	0.07	-0.01	0.31	-0.14	-0.80	-0.20	0.00	0.64	0.49	0.04	0.00	**0.2**
Belgium	0.29	0.10	0.00	0.03	-0.02	-0.13	-0.03	0.00	-0.26	-0.97	-0.49	-0.01	**-1.5**
Italy	-0.03	0.00	-0.01	0.14	0.00	-0.58	-0.05	0.03	0.03	0.30	-0.80	0.02	**-1.0**
Netherlands	-0.35	0.02	-0.02	0.06	-0.04	-0.90	-0.22	-0.04	0.01	-0.04	-0.48	-0.03	**-2.0**
Total	**0.4**	**0.2**	**1.6**	**0.5**	**-0.6**	**-9.9**	**-3.9**	**2.8**	**2.0**	**-7.4**	**-3.2**	**1.2**	**-16.2**

Sources: World Trade Atlas and own calculations.

Germany, with an accumulated loss of more than 45 per cent since 2000 that gave a negative contribution of 11.7 p.p. to the overall share loss in this period. In fact, from being the main destination of Portuguese manufacturing exports in 1999, the German market is currently less important than the Spanish and French ones. Additionally, the losses of share in the UK market made also a significant contribution to the loss in the total export share.

Looking now at the product dimension, the decline of market shares was not so generalised and important gains were observed in some goods. In particular, Portuguese gains of share in metal products, non-electrical machinery, plastics, furniture, and, to a lesser extent, chemicals and wood and paper contributed positively to the overall evolution of export shares. In contrast, the negative contributions were particularly expressive in the usually called traditional sectors (textiles and clothing, and footwear), in electrical machinery and in vehicles.

The contribution of each individual market to the sizeable market share effect in the 2000-2005 period is illustrated in Table 4. As mentioned previously, this effect results from effective changes in the market share of each product in each destination market, excluding the impact of the relative specialization of the country in terms of geographical distribution and product composition The losses of share in the German markets of electrical machinery and of vehicles were the main individual contributors to the highly negative market share effect observed in this period. The losses of export share in textiles and clothing in France, Germany and the UK, and in footwear and electrical machinery in the UK also contributed strongly to the total effective loss of market share over the 2000-2005 period. The gains of market share in vehicles in France and in non-electrical machinery in Germany gave the highest positive contributions in this period. Overall, the effective losses of share did not seem to result only from the evolution of Portuguese shares in some specific markets but were relatively widespread across individual markets, indicating a deterioration of the external competitiveness of the Portuguese economy during the recent years.[11]

Taking into account only the geographical component[12], the effective losses of export share in the German market were the major explanation for the overall losses over this period. However, most other

(11) To better analyse this feature some simple core measures, as trimmed means, were constructed. The behaviour of the trimmed means computed is very similar to the total market share effect. If anything the "core market share effect", i.e. excluding outliers, seems to be somewhat more negative that the headline measure.

(12) Again, the total contribution of a specific country j (product i) can be taken as the sum over i (j) of the ij individual contributions.

Table 4

BREAKDOWN OF THE MARKET SHARE EFFECT, 2000-2005

Contributions in percentage points

	Chemicals	Pharmaceuticals	Plastics	Wood and paper	Cork	Textiles and clothing	Footwear	Metal products	Non-electrical machinery	Electrical machinery	Vehicles	Furniture	Total
Spain	0.24	-0.01	0.84	-0.10	0.04	-0.71	0.00	0.97	-0.22	-0.32	0.50	0.05	**1.3**
France	0.02	-0.04	0.10	0.05	0.04	-2.28	-0.67	-0.04	0.54	-0.89	1.53	0.47	**-1.2**
Germany	0.15	-0.20	0.03	0.26	-0.04	-2.39	-1.01	-0.15	1.50	-4.72	-4.21	-0.11	**-10.9**
United Kingdom	-0.02	-0.02	-0.08	-0.08	0.06	-2.08	-1.61	0.11	-0.02	-1.59	0.18	-0.08	**-5.2**
United States	-0.20	0.03	-0.02	0.33	-0.01	-0.66	-0.16	-0.02	0.90	0.60	0.06	-0.01	**0.9**
Belgium	0.10	0.00	0.00	0.05	-0.02	-0.04	-0.03	-0.02	-0.26	-0.89	-0.56	-0.01	**-1.7**
Italy	-0.03	-0.01	-0.03	0.16	0.00	-0.63	-0.06	0.00	0.07	0.32	-0.80	0.01	**-1.0**
Netherlands	-0.41	-0.01	-0.02	0.15	-0.03	-0.65	-0.25	-0.05	0.02	-0.09	-0.43	-0.02	**-1.8**
Total	**-0.2**	**-0.2**	**0.8**	**0.8**	**0.0**	**-9.4**	**-3.8**	**0.8**	**2.5**	**-7.6**	**-3.7**	**0.3**	**-19.6**

Sources: World Trade Atlas and own calculations.

destination markets gave also negative contributions to the market share evolution in the period 2000-2005, especially the UK. On the opposite side, there were effective export share gains in the Spanish market, but smaller than the total effect could lead us to expect.

Considering now only the product dimension, the picture is more mixed. Four sectors show significant effective market share losses: textiles and clothing, footwear, electrical machinery, and vehicles. The losses of effective share in the textile, clothing and footwear sectors are visible in all destination countries considered (with the exception of the footwear market share in Spain that remained unchanged), while in the last two products the losses are mostly concentrated in Germany. Nevertheless, Portuguese exports of other products analysed seem to have been able to maintain or even increase their effective market shares, with emphasis on the gains in non-electrical machinery. Products like plastics, wood and paper, metal products and furniture gave also positive, albeit small, contributions to the market share effect in this period.

Tables 5 and 6 illustrate the geographical and product structure effects separately to determine the impact of relative specialisation in the overall developments of total market shares. Starting with the geographical dimension, Table 5 shows that, besides the positive evolution of effective shares in the Spanish market, Portuguese exports were also much favoured by having a high market share (around 4 per cent against an average value close to 1 per cent) in a country whose imports grew above the average of the sample considered[13]. This specific impact of the Spanish market basically explains the positive effect of the geographical structure and hence prevented an even deeper decline of the Portuguese overall export shares over this period.

In contrast to the geographical distribution, the product specialization did not help to improve the overall market share evolution (Table 6). The product structure effect was negative, with the most important contribution arriving from the textiles and clothing sector: a market where Portugal has high shares but that grew below average in the period from 2000 to 2005. Other negative contributions, as wood and paper, cork, footwear and vehicles, resulted also from the fact that Portuguese exports were relatively more specialised in these slow-growing products. In addition, Portuguese exports have a bad positioning in most fast-growing products, like chemicals, pharmaceuticals, plastics and metal products, which leads to a rather small contribution of these sectors despite their strong demand growth, especially in

(13) For more details, see Table 2 in the Annex.

Table 5

BREAKDOWN OF THE GEOGRAPHICAL STRUCTURE EFFECT

In percentage points, 2000-2005

Total	5.4
Spain	4.5
France	-0.2
Germany	1.0
United Kingdom	-1.3
United States	-0.3
Belgium	1.4
Italy	0.2
Netherlands	0.0

Sources: World Trade Atlas and own calculations.

Table 6

BREAKDOWN OF THE PRODUCT STRUCTURE EFFECT

In percentage points, 2000-2005

Total	-4.7
Chemicals	0.3
Pharmaceuticals	0.8
Plastics	0.3
Wood and paper	-0.5
Cork	-0.6
Textiles and clothing	-3.0
Footwear	-0.7
Metal products	0.9
Non-electrical machinery	-0.7
Electrical machinery	-0.5
Vehicles	-1.2
Furniture	0.2

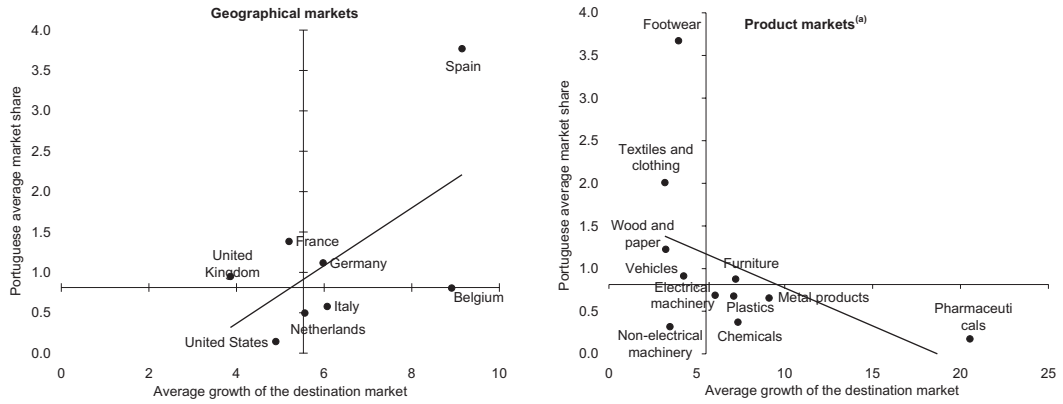
Sources: World Trade Atlas and own calculations.

the case of pharmaceuticals. Among the most dynamic markets during the recent years, Portugal is only relatively more specialised in furniture.

The relative geographical and sectoral specialization of Portuguese exports is also illustrated in Chart 3. It's again clear from the chart that the positive contribution of the geographical specialization in our sample was mostly due to the evolution of the Spanish market. In the period from 2000 to 2005, a correlation coefficient of 60 per cent is obtained between the average growth of the geographic destinations and the Portuguese average shares in those markets, but this coefficient decreases sharply to 1 per cent if we exclude the Spanish market. The product specialization acted in the opposite direction, as most of the markets where Portugal exhibits some specialization grew less than average in this period. A negative correlation coefficient of 33 per cent is obtained between the average growth of im-

Chart 3

GROWTH OF DESTINATION MARKET AND PORTUGUESE EXPORT MARKET SHARE, 2000-2005



Source: World Trade Atlas and own calculations.

Note: (a) Excluding cork.

ports of the selected goods and Portuguese market shares in the same products[14]. When only the last three years are considered, this negative correlation coefficient associated with product specialization is reinforced, increasing to more than 60 per cent.

4. MAIN COMPETITORS

Given the considerable total market share loss of Portuguese exports, it seems interesting to see which countries exhibit gains of export share in the same individual markets, thus identifying the main competitors of Portuguese exports. Table 7 illustrates this aspect by showing the countries that have a higher gain of share in the ten and twenty individual markets were Portuguese exports lost the most[15]. Among the "main gainers" are some of the most important emerging market economies in Eastern Europe and Asia, which pose an increasing challenge to the export performance of developed countries[16]. As refers to developing Asian economies, the main gainers in this period were China, Vietnam, Bangladesh and India. The countries from Central and Eastern Europe whose shares grew the most, on average, in the same individual markets where Portuguese exports show the higher losses were Turkey, Romania, Slovakia and Bulgaria. Chart 4 illustrates further this aspect by displaying the four main gainers in some of the individual markets where Portuguese losses of share were more severe. Overall the same countries are identified as the main competitors of Portuguese exports. Looking at the twelve individual markets included in Chart 4, competition from Central and Eastern European countries tends to be relatively more intense in the vehicles sector, a sector where the presence of developing Asian economies is still not very strong. In the other three products, China is the main gainer in all geographical markets considered. Nevertheless, emerging Asia still appears to gain more market shares in traditional low-tech, low-skill products, like textiles, clothing and footwear, in spite of the gains of China and South Korea in electrical machinery, especially in the German market.

Table 7

PORTUGUESE EXPORT MARKET SHARE LOSSES, 2000-2005

		10 markets with higher share losses (average)		20 markets with higher share losses (average)
Portugal´s loss of share (percentage points)		-2.8		-1.7
Main economies gaining shares in the same markets (percentage points)	China	10.3	China	7.5
	Vietnam	1.2	Turkey	1.3
	Turkey	1.1	Belgium	1.0
	Netherlands	0.9	Romania	0.7
	Romania	0.9	Vietnam	0.6
	Belgium	0.7	Netherlands	0.5
	Bangladesh	0.7	India	0.5
	India	0.6	Bangladesh	0.4
	Slovakia	0.3	Poland	0.3
	Bulgaria	0.2	Czech Republic	0.3

Sources: World Trade Atlas and own calculations.

(14) The computation of the correlation coefficients related to product specialization was done excluding cork, where Portugal has an abnormally high market share of around 70 per cent. However, the growth of total imports of cork products was around 1.5 per cent in the 2000-2005 period, i.e. below the total yearly average growth of around 5.5 per cent.

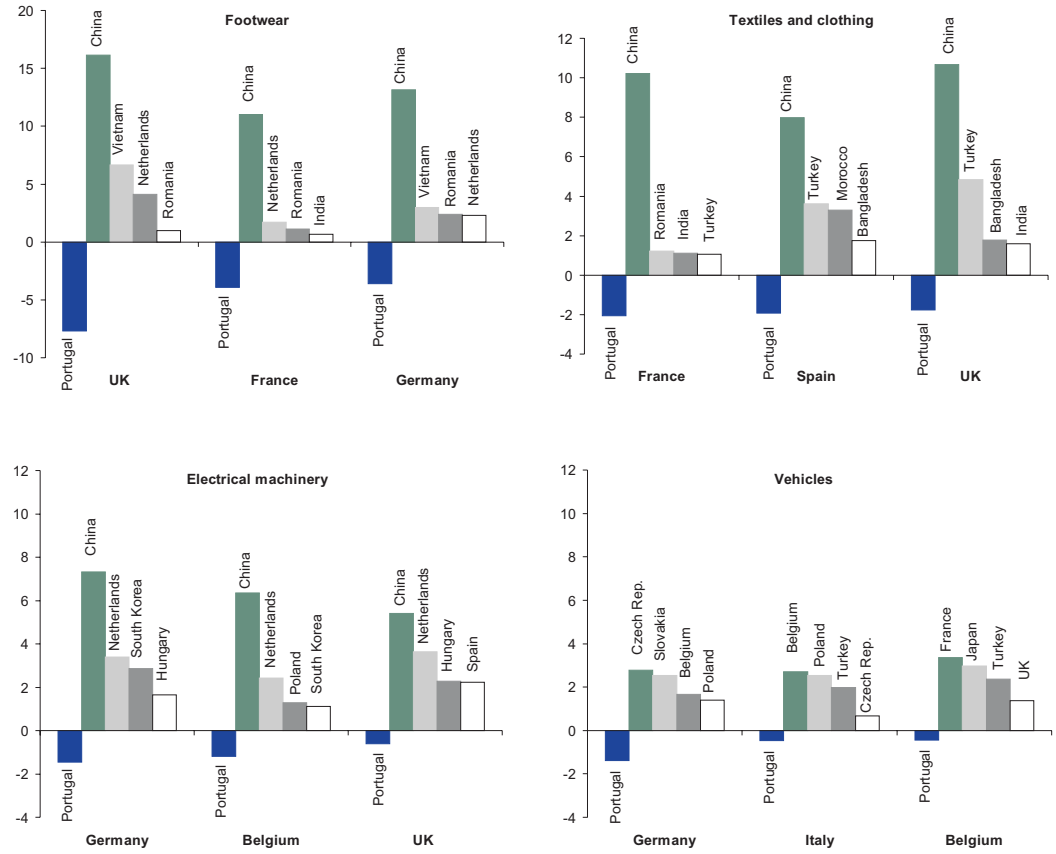
(15) The detailed information about the ten individual markets considered is shown in Table 3 of the Annex.

(16) Although our work focuses on the export market shares of Portugal in a specific sample of 96 individual markets and hence analyses the competition effects from emerging market economies, the complementary effects (related to demand factors in these countries) deserve also important attention. Taking advantage of the increased opportunities for exports to these new and expanding markets appears to be crucial to gain market share in a progressively more integrated world.

Chart 4

PORTUGUESE EXPORT MARKET SHARE LOSSES, 2000-2005

In percentage points



Source: World Trade Atlas and own calculations.

Were Portuguese market share losses in our sample of 96 individual markets an isolated phenomenon? Or did the same happen to other euro area countries? Table 8 shows the countries that had the higher losses of market share in the same individual market as Portugal[17]. The most interesting result is related with the Italian economy. Although the selection of the ten and twenty individual markets was made considering the ones where Portugal had the sharper market share losses, Italian exports suffered an even more pronounced decline of share in these markets over this period. Other developed countries had also a negative export performance in these markets, in particular Japan, the UK and the US, and among the euro area, Spain and Germany.

The market share gains of emerging market economies in detriment of developed countries are not surprising and reflect mainly the significant increase in worldwide competition resulting from the intensive participation of new players in international trade[18]. A way to see if Portuguese exports could be more affected by this increasing competition is to compare the export structure of Portugal with other countries, by looking at the correlation coefficients between the market share of Portugal and of the different countries that export to the same individual markets. Table 9 shows the top ten positive and neg-

(17) The detailed information about the ten individual markets considered is shown in Table 4 of the Annex.

(18) For a detailed analysis on the challenges of globalisation, see European Commission (2005b).

Table 8

PORTUGUESE EXPORT MARKET SHARE LOSSES, 2000-2005

	10 markets with higher share losses (average)		20 markets with higher share losses (average)	
Portugal´s loss of share (percentage points)	-2.8		-1.7	
Main economies losing shares in the same markets (percentage points)	Italy	-3.7	Italy	-1.8
	Hong Kong	-1.5	United States	-1.6
	Japan	-1.2	United Kingdom	-1.3
	United Kingdom	-1.2	Japan	-1.2
	Spain	-1.1	Germany	-1.1
	United States	-0.7	Hong Kong	-1.0
	Thailand	-0.7	France	-0.9
	Taiwan	-0.7	Spain	-0.5
	Germany	-0.6	Indonesia	-0.4
	Indonesia	-0.5	Thailand	-0.4

Sources: World Trade Atlas and own calculations.

ative correlation coefficients in the cross structure (considering the 96 individual markets), by product (considering only the twelve products selected), by country (considering only the eight destinations). All countries whose average export share in these 96 individual markets was above 0.1 percent in the 1999-2005 period were included.

Table 9

AVERAGE PORTUGUESE EXPORT MARKET SHARES (1999-2005) - CORRELATION COEFFICIENTS

Cross-markets (96 markets)		Product (12 products)		Geographic (8 countries)	
10 countries with the highest correlation coefficients with Portugal					
Italy	0.69	Romania	0.96	Italy	0.78
Vietnam	0.52	Vietnam	0.92	France	0.69
Morocco	0.51	Indonesia	0.89	Morocco	0.68
India	0.42	China	0.80	United Kingdom	0.30
Indonesia	0.37	Brazil	0.76	Germany	0.24
Pakistan	0.22	Tunisia	0.76	Finland	0.23
Bangladesh	0.21	Bulgaria	0.71	Turkey	0.16
Thailand	0.20	Italy	0.70	Netherlands	0.13
Tunisia	0.19	Thailand	0.69	Switzerland	0.12
Turkey	0.16	Dominican Republic	0.67	Belgium	0.11
10 countries with the lowest correlation coefficients with Portugal					
Germany	-0.18	Israel	-0.42	Japan	-0.47
Mexico	-0.19	Australia	-0.43	Hong Kong	-0.48
Australia	-0.19	Ireland	-0.43	Thailand	-0.49
Israel	-0.20	Netherlands	-0.44	China	-0.50
Singapore	-0.21	Denmark	-0.46	Malaysia	-0.50
Ireland	-0.25	Switzerland	-0.55	Philippines	-0.52
United Kingdom	-0.28	United States	-0.65	Singapore	-0.52
Japan	-0.28	France	-0.67	Russia	-0.53
Switzerland	-0.28	United Kingdom	-0.68	Taiwan	-0.53
United States	-0.31	Germany	-0.68	Indonesia	-0.56
Some developing countries aggregates					
NMS10	-0.05	NMS10	0.00	NMS10	-0.02
Developing Asia	0.25	Developing Asia	0.77	Developing Asia	-0.51
CEECs	0.05	CEECs	0.55	CEECs	-0.16

Sources: World Trade Atlas and own calculations.
Notes: NMS10 includes the 10 new member states of the European Union. Developing Asia includes Bangladesh, Bhutan, Brunei, Cambodia, China, East Timor, Hong Kong, India, Indonesia, Korea D P Rp., Korea Rp. Laos, Macau, Malaysia, Maldives, Micronesia, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan, Thailand and Vietnam. CEECs (Central and Eastern European Countries) includes the Commonwealth of Independent States (CIS), Former Yugoslavia, Central Europe (Albania, Bulgaria and Romania) and Turkey, excluding all new member states of the European Union.

Among the countries that show a higher correlation coefficient with Portugal across the 96 individual markets are some of the main emerging market economies, being Italy the only developed country ranked[19]. Notwithstanding the positive geographical correlation between Portuguese export shares and the ones of other European countries, these correlation coefficients decrease substantially when the product dimension is considered. In fact, the identification of some developing countries as the main competitors of Portuguese exports becomes even clearer if we focus only on the product specialization, with Romania, Vietnam, Indonesia and China showing the higher coefficients. On the opposite, the more negative correlation coefficients emerge when developed countries are considered, reflecting a different product structure of exports. Thus, it seems that the relatively high share of low-tech exports in Portugal, mainly from the textile, clothing and footwear sectors, may create some extra challenges for Portuguese exports, given the strong revealed comparative advantage that some of the new low-cost competitors from Asia and Eastern Europe have in these products.

5. CONCLUSIONS

This article analyses the evolution of Portuguese export shares in a selected sample of individual markets, taking into account the influence of product and geographical composition on the aggregate behaviour of export shares. Our results should be interpreted with care and not directly extrapolated as they are not independent of the individual markets chosen. Eight countries and twelve products were selected according to their weight in Portuguese exports and considered as the only relevant markets for Portuguese exports in the period from 1999 to 2005, representing together more than 70 per cent of total manufacturing exports.[20]

In this sample of 96 individual markets, Portuguese exports showed a considerable cumulative loss in total market share in the 2000-2005 period, higher than 16 per cent. After a significant gain in 2001, the gains became progressively smaller in the two subsequent years and finally turned into a substantial loss in 2005. The breakdown of this total share loss shows that there were high effective losses of share in the individual markets analysed, which contributed with 19.6 p.p. to the total export share loss over this period. Even if there were some export share gains in certain markets, the results indicate that the effective losses of share were relatively widespread across individual markets. Such a negative and widespread market share effect suggests a considerable deterioration of the relative competitiveness of Portuguese exports in these markets vis-à-vis major competitors over this period.

The product composition of Portuguese exports made also a significant contribution to the strong loss of total market share in the period. The negative contribution of the relative specialisation by products resulted mainly from the higher relative export share of Portugal in products whose markets recorded below average growth, in particular the so-called traditional sectors like textiles and clothing. In addition, the under-specialisation in fast-growing products, such as pharmaceuticals, resulted in a smaller growth potential of Portuguese exports.

In contrast, considering the eight major destinations of Portuguese exports as the only ones relevant, the geographical structure effect was positive in the 2000-2005 period, more than offsetting the negative impact of product composition. This positive geographical effect was mostly related with the Spanish market: a market that grew, on average, more than the other seven countries included in our sample and where Portugal has a high market share. This result highlights the relevance of the Spanish market for Portuguese exports, drawing also the attention to a high sensitivity of the Portuguese

(19) This is mainly connected with a similar product composition of Portuguese and Italian exports [see Esteves and Reis (2005)].

(20) The external demand indicator usually computed by the Banco de Portugal is based in a sample comprising the total imports of 17 countries, representing around 90 per cent of total Portuguese exports.

economy to the Spanish business cycle. In fact, the negative geographical effect obtained for 2005 results mainly from the fact that Spanish imports of the products included in our sample grew below average in that year. It should be mentioned that the current analysis does not consider the effects of Portuguese non-specialization in some developing economies, which are growing clearly above world average.

The countries that displayed the higher gains of export share in the same individual markets where Portuguese exports showed the sharper losses were essentially developing countries from Central and Eastern Europe and from East Asia. The Portuguese share losses in these individual markets were not an isolated phenomenon, as the same happened to other developed countries, some of them from the euro area. These results are not surprising and reflect essentially the increased overall competition from new trading partners that are gaining market shares in international markets and creating a significant competitive challenge to most developed countries. However, the product composition of Portuguese exports may create some extra challenges in the short to medium term, since these low-cost competitors have a strong revealed comparative advantage in some of the products where Portugal specializes. This pattern of specialization may pose some risks for the future of Portuguese exports, especially if firms face constraints in moving resources to expanding activities due to structural rigidities. In that sense, it is necessary to deepen the structural reform process to favour the performance of the Portuguese economy[21].

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(21) For details of reforms suggested by the European Commission in this context, see European Commission (2005a).

ANNEX

Table 1

MANUFACTURED GOODS INCLUDED IN THE ANALYSIS

HS codes	Designation
28-29, 31-32, 38	Chemicals
30	Pharmaceuticals
39	Plastics
44,48	Wood and Paper
45	Cork
50-63	Textiles and clothing
64	Footwear
72-80	Metal products
84	Non-electrical machinery
85	Electrical machinery
87	Vehicles
94	Furniture

Sources: World Trade Atlas and own aggregation.

Table 2

PORTUGUESE EXPORT MARKET SHARES

Nominal, manufacturing

	Level									Percentage change								Contribution, in percentage points							
	1999	2000	2001	2002	2003	2004	2005	2000 -05	2003 -05	2000	2001	2002	2003	2004	2005	2000 -05	2003 -05	2000	2001	2002	2003	2004	2005	2000 -05	2003 -05
Total	0.87	0.78	0.83	0.86	0.87	0.81	0.73	0.81	0.80	-10.4	6.7	3.6	1.7	-7.3	-10.2	-16.2	-15.4	-10.4	6.7	3.6	1.7	-7.3	-10.2	-16.2	-15.4
Spain	3.54	3.41	3.45	3.75	4.15	3.91	3.95	3.79	4.00	-3.7	1.3	8.5	10.7	-5.6	1.1	11.7	5.6	-0.4	1.2	2.4	5.6	-0.4	-0.9	7.3	4.4
France	1.47	1.28	1.33	1.46	1.42	1.45	1.36	1.38	1.41	-13.4	4.1	9.6	-2.3	2.1	-6.4	-7.7	-6.6	-2.9	0.8	1.4	0.2	0.4	-1.4	-1.5	-0.7
Germany	1.44	1.25	1.36	1.36	1.05	0.90	0.78	1.11	0.91	-13.3	9.0	-0.3	-22.6	-14.4	-13.0	-45.7	-42.3	-4.7	3.4	-0.6	-4.3	-2.9	-2.5	-11.7	-9.6
United Kingdom	1.12	0.98	1.00	1.03	1.05	0.91	0.73	0.95	0.89	-12.5	1.6	2.8	2.8	-13.9	-19.4	-34.8	-28.7	-2.5	0.2	0.4	0.2	-1.8	-2.6	-6.1	-4.2
United States	0.12	0.12	0.14	0.15	0.17	0.15	0.13	0.14	0.15	2.6	9.8	10.5	9.2	-8.7	-10.9	10.8	-11.1	0.5	0.4	0.6	0.1	-0.7	-0.6	0.2	-1.2
Belgium	0.94	1.14	0.98	0.76	0.73	0.64	0.58	0.79	0.65	21.3	-14.0	-22.2	-4.4	-12.3	-9.5	-38.4	-24.2	1.1	-0.6	-1.0	0.0	-0.6	-0.4	-1.5	-1.1
Italy	0.60	0.54	0.63	0.68	0.64	0.51	0.47	0.57	0.54	-10.7	18.4	6.8	-5.2	-19.9	-9.3	-22.2	-31.1	-0.8	1.1	0.5	0.0	-1.0	-0.6	-1.0	-1.6
Netherlands	0.59	0.52	0.56	0.55	0.53	0.48	0.34	0.49	0.44	-11.5	7.8	-1.0	-4.1	-9.3	-29.5	-42.0	-38.7	-0.8	0.3	-0.1	0.0	-0.3	-1.2	-2.0	-1.5
Chemicals	0.36	0.38	0.31	0.34	0.41	0.43	0.37	0.37	0.40	6.1	-18.5	12.0	18.4	4.8	-14.0	3.4	6.7	0.2	-0.4	0.3	0.6	0.1	-0.4	0.4	0.3
Pharmaceuticals	0.24	0.25	0.22	0.15	0.15	0.15	0.14	0.16	0.14	5.3	-13.5	-28.6	-4.6	-1.2	-3.1	-40.6	-8.7	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.1
Plastics	0.55	0.56	0.57	0.63	0.72	0.79	0.79	0.68	0.77	2.5	1.4	11.2	14.2	9.6	0.5	45.5	25.9	0.0	0.1	0.4	0.6	0.4	0.2	1.6	1.2
Wood and paper	1.06	1.16	1.09	1.24	1.37	1.19	1.31	1.22	1.29	10.0	-6.3	13.8	10.2	-12.7	10.1	24.3	5.9	0.2	-0.2	0.6	0.5	-0.9	0.2	0.5	-0.2
Cork	69.47	68.56	68.04	71.28	72.95	71.12	69.96	70.30	71.38	-1.3	-0.8	4.8	2.3	-2.5	-1.6	0.7	-1.9	-0.2	0.0	0.1	0.2	-0.3	-0.4	-0.6	-0.6
Textiles and cloth.	2.40	2.07	2.14	2.15	2.09	1.95	1.65	2.01	1.89	-13.6	3.1	0.7	-3.1	-6.5	-15.3	-31.2	-23.3	-4.3	1.4	0.0	-0.9	-2.7	-3.6	-9.9	-7.0
Footwear	4.67	4.04	4.09	3.84	3.72	3.48	2.86	3.67	3.34	-13.5	1.2	-6.2	-3.2	-6.3	-17.8	-38.8	-25.5	-1.7	0.8	-0.5	-0.5	-1.0	-1.1	-3.9	-2.5
Metal products	0.55	0.57	0.58	0.62	0.71	0.72	0.74	0.66	0.72	2.9	2.6	7.6	13.1	1.3	3.3	34.4	18.3	0.3	-0.1	0.3	0.8	1.1	0.4	2.8	2.3
Non-electr. machi.	0.24	0.23	0.28	0.32	0.37	0.37	0.35	0.32	0.36	-5.7	23.1	12.9	17.5	-0.1	-4.7	46.6	11.8	-0.6	1.3	0.7	1.2	-0.1	-0.4	2.0	0.8
Electr. machi.	0.86	0.70	0.71	0.77	0.79	0.63	0.52	0.68	0.64	-18.2	0.2	9.6	1.9	-19.5	-17.4	-39.2	-32.3	-1.2	-1.5	0.2	-0.1	-2.7	-2.3	-7.4	-5.0
Vehicles	0.92	0.84	1.00	1.01	0.93	0.89	0.83	0.91	0.88	-8.8	18.8	1.2	-8.2	-4.1	-6.9	-10.3	-18.1	-3.0	4.7	1.2	-1.9	-1.5	-2.3	-3.2	-5.6
Furniture	0.68	0.62	0.73	0.74	1.04	1.15	0.99	0.89	1.06	-9.5	17.5	1.5	40.5	11.4	-13.8	45.5	34.9	-0.2	0.4	0.2	1.0	0.3	-0.5	1.2	0.8

Sources: World Trade Atlas and own calculations.

Table 3

PORTUGUESE EXPORT MARKET SHARE LOSSES ACROSS INDIVIDUAL MARKETS, 2000-2005

In percentage points

Individual market	Portuguese share losses	Main economies gaining shares									
64uk	-7.7	China	Vietnam	Netherlands	Romania	Germany	France	Tunisia	Brazil	Hong Kong	Luxembourg
		16.1	6.7	4.1	1.0	0.8	0.5	0.4	0.4	0.4	0.2
64fra	-3.9	China	Netherlands	Romania	India	Switzerland	Vietnam	Germany	Bangladesh	Belgium	Bosnia Herzegovina
		11.0	1.7	1.1	0.7	0.6	0.4	0.4	0.3	0.3	0.2
64ger	-3.6	China	Vietnam	Romania	Netherlands	Belgium	India	Denmark	United Kingdom	Slovakia	Cambodia
		13.2	3.0	2.4	2.3	1.7	1.3	1.3	1.0	0.7	0.3
64nl	-2.5	China	Belgium	Vietnam	Brazil	India	Turkey	Luxembourg	Sweden	Finland	Israel
		17.1	8.1	1.4	0.5	0.4	0.2	0.1	0.1	0.1	0.0
50-63fra	-2.1	China	Romania	India	Turkey	Bangladesh	Bulgaria	Cambodia	Lithuania	Pakistan	Luxembourg
		10.2	1.2	1.1	1.1	0.9	0.7	0.2	0.1	0.1	0.1
50-63sp	-1.9	China	Turkey	Morocco	Bangladesh	India	Bulgaria	Pakistan	Tunisia	Denmark	Romania
		8.0	3.6	3.3	1.8	1.5	0.7	0.4	0.4	0.4	0.4
50-63uk	-1.8	China	Turkey	Bangladesh	India	Romania	Spain	Vietnam	Bulgaria	Tunisia	Pakistan
		10.7	4.8	1.8	1.6	1.1	0.3	0.3	0.3	0.2	0.2
85ger	-1.5	China	Netherlands	Korea,South	Hungary	United Arab Emirates	Switzerland	Czech Republic	Romania	Finland	Poland
		7.3	3.4	2.9	1.7	1.0	0.8	0.7	0.6	0.4	0.4
87ger	-1.4	Czech Republic	Slovakia	Belgium	Poland	United States	Austria	Finland	Brazil	Korea,South	Romania
		2.8	2.5	1.7	1.4	1.0	0.9	0.8	0.5	0.5	0.5
50-63ger	-1.3	China	Bangladesh	Turkey	Luxembourg	Bulgaria	Cambodia	India	Denmark	Romania	Spain
		8.8	2.1	1.2	0.9	0.6	0.6	0.5	0.4	0.4	0.3

Sources: World Trade Atlas and own calculations.

Table 4

PORTUGUESE EXPORT MARKET SHARE LOSSES ACROSS INDIVIDUAL MARKETS, 2000-2005

In percentage points

Individual market	Portuguese share losses	Other main economies losing shares									
64uk	-7.7	Italy	Thailand	Spain	Belgium	Indonesia	Taiwan	India	Korea,South	Philippines	Denmark
		-8.4	-2.6	-2.5	-2.0	-1.8	-1.2	-1.0	-0.5	-0.5	-0.5
64fra	-3.9	Italy	Spain	Morocco	Thailand	United Kingdom	Czech Republic	Taiwan	United States	Philippines	Tunisia
		-3.6	-2.5	-1.6	-1.6	-1.3	-0.7	-0.7	-0.5	-0.4	-0.3
64ger	-3.6	Italy	Spain	Hungary	Czech Republic	Korea,South	Macau	Poland	Taiwan	France	Malta
		-9.5	-4.1	-2.7	-1.2	-1.0	-0.8	-0.7	-0.7	-0.5	-0.5
64nl	-2.5	Hong Kong	Italy	Taiwan	Spain	Germany	France	Thailand	Poland	Czech Republic	Indonesia
		-11.1	-3.0	-2.0	-1.8	-1.6	-1.2	-0.8	-0.8	-0.7	-0.6
50-63fra	-2.1	Italy	United Kingdom	Morocco	Germany	Belgium	Taiwan	Mauritius	Hong Kong	United States	Thailand
		-1.7	-1.6	-1.5	-1.2	-0.8	-0.6	-0.6	-0.4	-0.4	-0.4
50-63sp	-1.9	Italy	United Kingdom	Germany	Korea,South	Netherlands	Indonesia	United States	Belgium	Hong Kong	Japan
		-3.7	-2.7	-1.8	-1.4	-1.4	-1.2	-1.0	-0.8	-0.8	-0.8
50-63uk	-1.8	Germany	Hong Kong	Italy	Ireland	United States	Israel	France	Korea,South	Indonesia	Netherlands
		-2.3	-1.9	-1.5	-1.5	-1.4	-1.2	-1.2	-1.2	-1.1	-1.0
85ger	-1.5	United Kingdom	Japan	United States	France	Malaysia	Austria	Denmark	Italy	Thailand	Sweden
		-4.8	-3.9	-3.6	-2.5	-0.7	-0.6	-0.5	-0.5	-0.4	-0.4
87ger	-1.4	Japan	United Kingdom	Italy	South Africa	Spain	Hungary	Netherlands	Slovenia	Mexico	Canada
		-6.6	-2.2	-1.1	-1.0	-0.7	-0.5	-0.4	-0.4	-0.3	-0.1
50-63ger	-1.3	Italy	Poland	Greece	Hong Kong	France	Hungary	Slovenia	Tunisia	Korea,South	United Kingdom
		-3.8	-1.6	-1.0	-1.0	-0.9	-0.8	-0.7	-0.6	-0.5	-0.5

Sources: World Trade Atlas and own calculations.

CONSUMPTION, DISPOSABLE INCOME AND LIQUIDITY CONSTRAINTS*

*Gabriela Lopes de Castro***

1. INTRODUCTION

During the last 20 years major changes have occurred in the Portuguese economy. From 1986, when Portugal joined the European Union, until the third stage of Economic and Monetary Union, with the introduction of the Single Currency, profound changes have conditioned the development of the Portuguese economy and the behaviour of economic agents. A new economic regime emerged in Portugal characterized particularly by a strengthening of macroeconomic stability, which was made possible by the effect of price stability and the reduced risk premium in euro area interest rates. The Portuguese participation in the European Union also implied profound reforms in some sectors of the economy, among them the financial sector. The reforms in this sector started in the mid-80's and culminated with complete liberalization of international capital movements in 1992. These measures implied far reaching changes in the Portuguese banking sector and this paved the way to far greater competitiveness. New financial credit instruments were created and financial intermediation spread was drastically cut. Moreover, the prospects of Portuguese participation in the euro area and the expectation of the reduction in the volatility and in the level of interest rates have also conditioned the behaviour of economic agents, specially the demand for credit. Indeed, in 2005 household indebtedness as a percentage of disposable income in Portugal was 117%, which contrasts with levels of 20% in the beginning of the 90's. The only country in the euro area to record higher levels of household indebtedness as a percentage of disposable income was Holland in 2004.

The literature available on the impact of financial liberalization on economic activity is vast, particularly regarding the impact on consumption and on the relation between consumption and disposable income. Some of the literature uses models based on Life-Cycle/Permanent Income Hypothesis and consider the possibility that some consumers are unable to smooth consumption over the life-cycle, that is, some consumers do not want to or cannot borrow in order to finance their current consumption. In practice, some obstacles may prevent consumers from accessing credit, for example, legal restrictions on bank loans, the need for guarantees or interest rates which are too high. By preventing consumers from borrowing to smooth consumption over the life-cycle, credit constraints could give rise to a high percentage of households taking their consumption decisions, at each point in time, based on their current income rather than on their expected income. This article analyses the sensitivity of consumption to disposable income in Portugal – which will be used as an indicator of liquidity constraints - and its evolution over the last years relating it with the economic conditions, among them the major changes carried out in the financial market.

The literature in Portugal on this subject is scarce. Luz (1992) presents an estimation for the percentage of consumers with liquidity constraints for the period 1959-1986, using a process of constant coefficients estimate based on the model described in Jappelli and Pagano (1989). Botas (1999) presents a consumption function with agents having liquidity constraints and estimates the evolution of the per-

* The views expressed in this article are those of the author and do not necessarily reflect those of Banco de Portugal.

** Banco de Portugal. Economic Research Department.

centage of disposable income received by this type of consumer between 1958 and 1997, using a linear trend as a proxy for the impact of financial liberalization on liquidity constraints. This article uses more recent data with quarterly periodicity, for the period 1980-2005, and relates the evolution of liquidity constraints with variables from the financial sector and the economic cycle.

The article is organized as follows: section 2 presents a model for consumption with rational expectations and introduces the concept of liquidity constrained consumers. Section 3 presents the results for the estimation of the percentage of disposable income received by liquidity constrained consumers, considering both fixed and time-varying coefficients. Tests are also carried out on some variables that could be correlated with the evolution of liquidity constraints. Section 4 summarizes the main conclusions.

2. A CONSUMPTION MODEL WITH RATIONAL EXPECTATIONS AND LIQUIDITY CONSTRAINTS

Modelling consumption function has always been at the heart of macroeconomic analysis, not only because private consumption represents more then two thirds of Gross Domestic Product (GDP) in developed countries but also because consumption decisions are simultaneously saving decisions and consequently determine the availability of funds for capital accumulation and investment.

One of the main references in studying consumption is Hall (1978) which combines the Life Cycle/Permanent Income Hypothesis (LC-PIH)[1] with rational expectations and concludes that in certain precisely stated conditions consumption follows a random walk. In other words, the author concludes that the best way to forecast consumption in the next period is current consumption; disposable income (current and past) does not help to forecast consumption. Later studies analyse the results of Hall (1978). Flavin (1981), for example, concludes that consumption responds not only to changes in permanent income signalled by innovations in the current income process but also to changes in current income itself. To describe the response of consumption to expected changes in current income Flavin (1981) uses the term "excess sensitivity" of consumption to current income.

Several studies pointed out the existence of liquidity constraints in the economy as the main reason for the "excess sensitivity" of consumption to current income, that is, the inability of some individuals, taking into account their expected future income, to borrow whatever they need to finance their current consumption expenditures. [2] One strand within these studies attempts to establish a link between consumption path and financial market liberalization, in other words, the key idea is that financial liberalization could have a direct impact on the consumption of those individuals who had credit restrictions and can now borrow by giving their future labour income as a guarantee.[3]

This article uses the overlapping generations model presented in Blanchard (1985) and introduces the possibility that some consumers are liquidity constrained. Blanchard (1985) assumes that all consumers have the same instantaneous probability of death, which is independent of age. In spite of different ages and different levels of wealth, all consumers have the same expected lifetime and the same propensity to consume. In this manner and even with the existence of an infinite number of generations, the economy behaves if it has only one representative consumer. This makes the aggregation of all generations straightforward.

(1) Life Cycle Hypothesis is described in Modigliani and Brumberg (1954) and the Permanent Income Theory is presented in Friedman (1957).

(2) See, for example, Hayashi (1982), Jappelli and Pagano (1989) and Campbell and Mankiw (1991).

(3) See, for example, Bayoumi and Koujianou (1989), Blundell-Wignall, Browne and Tarditi (1995), Bai and Whitley (1997), Sefton and Veld (1999) and Fernandez-Corugedo and Price (2002).

Individuals face a maximization problem under uncertainty about life span, subject to intertemporal budget constraint and a No-Ponzi-Game condition. Summing over generations the following consumption function could be derived,

$$C_t = \Pi \left[V_{t-1} + H_t \right] \tag{1}$$

where $\Pi = 1-(1-p)\beta$ and p and β stand for the probability of death and the discount factor, respectively. V_{t-1} is non human wealth, composed of real and financial assets, and H_t represents human wealth, that is, the sum of discounted future labour income.

This consumption function assumes that all consumers have a sufficient level of wealth or/and may accede to external finance in order to smooth consumption through their lifetime, that is, it assumes the inexistence of liquidity constraints in the economy. Considering the hypothesis of some consumers to be liquidity constrained and assuming, for simplicity and according with other empirical studies[4], that these individuals in every period consume all their labour income, the consumption for the individuals with liquidity constraints is defined as,

$$C_t^R = Y_t^R = \lambda Y_t \tag{2}$$

where λ stands for the percentage of income received by consumers who are unable to do consumption smoothing.[5]

The aggregate consumption function is then,

$$C_t = \lambda Y_t + \Pi \left[V_{t-1} + H_t^{NR} \right] \tag{3}$$

where H_t^{NR} represents human wealth of forward-looking consumers.

The above model can be rewritten to obtain the following consumption function,

$$C_t = \frac{1-p}{1-\Pi+\Pi p}\left[\frac{C_{t+1}}{1+r_t} - \lambda_{t+1}\frac{Y_{t+1}}{1+r_t}\right] + \frac{\Pi p}{1-\Pi+\Pi p}V_{t-1} + \left[\frac{\Pi p\left(1-\lambda_t\right)}{1-\Pi+\Pi p} + \lambda_t\right]Y_t \tag{4}$$

3. ESTIMATION AND EMPIRICAL RESULTS

3.1. Estimation of λ parameter

The consumption function is estimated using quarterly data for the period 1980 to 2005. Data for non durables consumption and services, for household disposable income and for private consumption deflator correspond to the quarterly series published within this Economic Bulletin, which follows the methodology described in Castro and Esteves (2004). Data for wealth is composed of housing stocks and financial assets held by households and was computed using the information published in Cardoso and Cunha (2005). Finally, the interest rate on loans for 31 to 90 days is based on information from Money and Banking Statistics from the Banco de Portugal. All series were deflated using the private consumption deflator.

In estimating the consumption function, the parameters which stand for the instantaneous probability of death (p) and the discount factor (β) were calibrated at 0.00417 and 0.998, respectively, using re-

(4) See, for example, Hayashi (1982) and Campbell and Mankiw (1991).

(5) It is assumed that constrained consumers hold no net wealth, they only have their current income. In the case of holding assets, for example housing assets, it is assumed they are exactly offset by their mortgage debts.

sults from other studies[6]. To assure that results don't change significantly with different calibrations of these parameters, a sensitivity analysis was made considering values of 0.00625, 0.005 and 0.00417 for the instantaneous probability of death and 0.998 and 0.995 for the discount rate.

The consumption function presented in the preceding section for the case of a constant λ could be re-written as,

$$\frac{C_t}{Y_t} - \frac{1-p}{1-\Pi+\Pi p}\frac{C_{t+1}}{(1+r_t)Y_t} - \frac{\Pi p}{1-\Pi+\Pi p}\frac{V_{t-1}}{Y_t} - \frac{\Pi p}{1-\Pi+\Pi p} = \\ = \lambda\left[1 - \frac{\Pi p}{1-\Pi+\Pi p} - \frac{1-p}{1-\Pi+\Pi p}\frac{Y_{t+1}}{(1+r_t)Y_t}\right] + \varepsilon_{t+1} \qquad (5)$$

The above equation was estimated by using the Generalized Method of Moments (GMM) of Hansen (1982)[7], using as instruments the lags 2 to 6 from the endogenous regressor.[8]

First, the λ is estimated as a constant parameter throughout the entire horizon (Hip.1). Next the parameter λ is estimated for different sample periods (Hip. 2), using a step dummy variable (SD91) and replacing λ by $\lambda + \lambda_{SD}$ SD91, where

$$\begin{cases} \text{SD91} = 0 \text{ for t} < 1991 \\ \text{SD91} = 1 \text{ for t} \geq 1991 \end{cases}$$

In this way, it is intended to check for the existence of evidence of a structural break in parameter λ during the period under consideration.[9] The estimation through the use of a step dummy variable assumes that the transition between the periods is made at one time and not gradually. Despite this limitation, this type of analysis allows for a first indication of whether there exists a break in the parameter to be estimated.

Table 1 presents the results. For the whole sample and for p and β equal to 0.00417 and 0.998, respectively, a value of 66% for the percentage of disposable income received by liquidity constrained consumers is obtained. This result compares with 63% presented in Botas (1999) for the period 1958-1997 and 62% and 64% presented in Luz (1992) for the sample 1959-1986.[10]

In the estimation with the step dummy the values obtained were 69% for the period 1981-1990 and 55% for 1991-2005. This points to a reduction in the percentage of disposable income received by liquidity constrained consumers from the 80's to 90's.

For a better evaluation of liquidity constraints as they evolve through time, the λ is estimated using a Kalman filter (see graph 1). The λ parameter is considered to follow a random-walk process, as in Bacchetta and Gerlach (1997) and in Takala (2001),

$$\lambda_t = \lambda_{t-1} + \zeta_t \qquad (6)$$

(6) See Athanasoulis (2001), Annicchiarico (2003) and Sefton and Veld (1999).

(7) Following the methodology presented in Sefton and Veld (1999), the covariance matrix was estimated using the Bartlett kernel with 6 lags [see Newey and West (1987)] and White robust standard errors were computed [See White (1980)].

(8) It should be noticed that given the above mentioned calibration, the only parameter to estimate is λ_t.

(9) This methodology was used, for example, in Bayoumi and Koujianou (1989).

(10) Besides the sample period it is worth mentioning some other differences among these studies. Botas (1999) starts with a similar model, but considers $C_t = \lambda Y_t + [(1+r_t)V_{t-1} + (1-\lambda)H_t]$ and the consumption variable used is total consumption and not non-durables consumption and services. Luz (1992) uses the model described in Jappelli and Pagano (1989), that is, a Euler equation given by $C_t = a_0 + a_1 C_{t-1} + \lambda\left(Y_t^a - a_1 Y_t^a\right) + e_t$ to estimate the percentage of disposable income received by consumers with liquidity constraints.

Table 1

ESTIMATION OF λ WITH CONSTANT COEFFICIENTS

	Hip.1						Hip.2	
	λ						λ	λ_{sd}
	β = 0.998			β = 0.995			β = 0.998	
	p = 0.00417	*p* = 0.005	*p* = 0.00625	*p* = 0.00417	*p* = 0.005	*p* = 0.00625	*p* = 0.00417	
Coefficients	0.663	0.669	0.677	0.700	0.706	0.716	0.692	-0.145
p-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.048)
R^2	0.529	0.519	0.504	0.486	0.475	0.454	0.530	
Tests of the instruments								
R^2	0.573						0.588	0.488
Hansen's test	3.787	3.632	3.666	3.796	3.826	3.876	5.955	
p-value	(0.436)	(0.458)	(0.453)	(0.434)	(0.430)	(0.423)	(0.652)	

where the disturbance error term $\zeta_t \sim N\left(0, \sigma_\zeta^2\right)$ is assumed to follow a white-noise process with $\sigma_\zeta^2 = 0.0025$.[11]

In λ_t estimation the fitted values were used for the non-predetermined regressor in a way analogous to the two-step instrumental variables estimation procedure. In the first step, the non-predetermined variable is regressed on the instruments and in the second step the Kalman filter is used to estimate the parameter λ_t.

According to the results the percentage of disposable income available to consumers with liquidity constraints was about 70% at the end of the 80's. At the beginning of 90's liquidity constraints started to ease. By the second half of the decade they had reached values near 40%. This result is consistent with the idea that financial market liberalization, in parallel with the fall in nominal interest rates, reduced credit restrictions, allowing some individuals who had liquidity constraints before to increase their consumption through loans from the credit market.

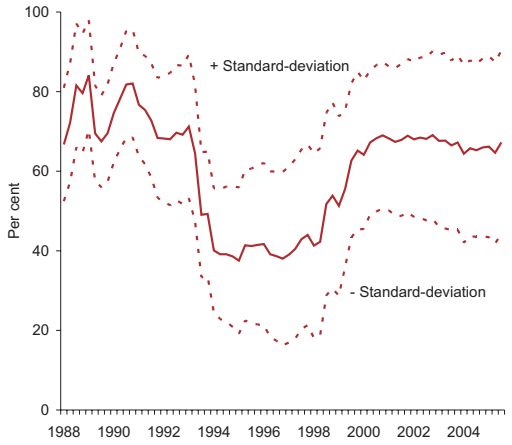
The results also suggest that liquidity constraints increased at the end of 90's, turning to a relatively smooth path from 2001 onwards. Thus, the increase in the percentage of households whose consumption decisions depend on current income could be associated to the strong rise in this sector's indebtedness during the 90's, which led to a sharp increase in household debt servicing. Moreover, the rise in nominal interest rates from mid-1999 until the end of 2000 (about 2 p.p.) also contributed to the increase in household debt servicing as a percentage of their disposable income.

As mentioned before, the results presented in Chart 1 pointed to a relative stabilization of liquidity constraints at the end of the sample period and to a small increase in the uncertainty related to the λ estimation, reflected in the widening of the fluctuation bands defined through the standard deviation of the estimation. To explain this result, it is important to bear in mind some forces that might have acted in opposite directions, contributing to the apparent stabilization of this parameter. On the one hand, the increase in debt servicing was contained in the last years, after a period of strong increase. The low level of nominal interest rates (during this period nominal interest rates were cut by 2 p.p., reversing the rise observed during 1999 and 2000) and some measures carried out by financial institutions, for example, the lengthening of bank loan terms and the introduction of new products in the credit market, had contributed to interrupt the increasing trend in liquidity constraints. These changes allowed house-

(11) With the purpose of studying the sensitivity of the final results to changes in σ_ζ^2, other values were tested for this parameter. It was concluded that the λ profile does not change significantly with different values of σ_ζ^2.

Chart 1

λ ESTIMATION WITH TIME-VARYING COEFFICIENTS



holds to continue to obtain bank loans, although at a more moderate pace vis-à-vis the recent past, and to pay lower instalments. On the other hand, the high level of the unemployment rate and the low growth of the Portuguese economy observed in the last years must have contributed to the deterioration in consumer expectations, pulling in the opposite direction by increasing credit restrictions from the demand side and not allowing, for a given proportion of consumers, a smoother path for consumption in relation to changes in disposable income.

The high level of indebtedness in Portuguese households, allied to the possibility of another increase in interest rates could give rise to an increase in liquidity constraints in the next few years. It is worth mentioning that the impact of an interest rate increase is likely to be relatively heterogeneous, mainly affecting those households with high levels of indebtedness and those with lower income and with a higher probability of suffering from the effects of unemployment.

In this context, it is important to mention the study of Benito and Mumtaz (2005) which uses microeconomic data for the United Kingdom and concludes that beyond a certain point, further increases in debt are associated with a rising probability of facing liquidity constraints. This result is likely to reflect a high probability of credit constraints, including a self-imposed credit constraint associated with a reluctance to increase the level of indebtedness. According to the authors, this result suggests that there are limits, both on the demand and the supply side of the credit market, for the role of debt in consumption smoothing.

Lastly, the results can be compared with others presented in the literature for different countries. A majority of studies have concluded that the reduction in liquidity constraints took place during the 80's, which is in accordance with the fact that the liberalization of financial market in Portugal took place a decade later than in most other countries that the studies refer to. For example, Blundell-Wignall et all. (1995) concludes that econometric results for the United States, Canada and Japan clearly pointed to a reduction in liquidity constraints in 80's and 90's compared to the 60's and 70's. Bayoumi and Koujianou (1989) reached a similar conclusion for the United States, Canada, Japan and France using information for the 70's and 80's.

3.2. Liquidity constraints and economic conditions

In this section the aim is to test empirically whether the evolution of liquidity constraints could be partly explained by the major changes that have occurred in Portugal during the 80's and 90's, specially the financial market liberalization and the decrease in interest rates. The aim is also to test whether liquidity constraints could be related to the economic cycle and to the unemployment rate. The consumption function (4) could be rewritten in the form,[12]

$$\frac{C_t}{Y_t} - \frac{1-p}{1-\Pi+\Pi p}\frac{C_{t+1}}{(1+r_t)Y_t} - \frac{\Pi p}{1-\Pi+\Pi p}\frac{V_{t-1}}{Y_t} - \frac{\Pi p}{1-\Pi+\Pi p} = \\ = \lambda_t\left[1-\frac{\Pi p}{1-\Pi+\Pi p}\right] - \lambda_{t+1}\left[\frac{1-p}{1-\Pi+\Pi p}\frac{Y_{t+1}}{(1+r_t)Y_t}\right]\varepsilon_{t+1} \qquad (7)$$

with

$$\lambda_t = \alpha_0 + \alpha_1 X_t \qquad (8)$$

where X_t stands for the different proxies considered in the explanation of liquidity constraint evolution.

In the existing literature there are some studies for the United Kingdom, for example, Darby and Ireland (1994), Bai and Whitley (1997) and Fernandez-Corugedo and Price (2002) where an equation of the form $\lambda_t = \exp^{(\alpha_0+\alpha_1 FLIB_t)}$ is used for the evolution of liquidity constraints, where FLIB represents an exogenous proxy for financial market liberalization. In the case of Portugal it was not possible to develop a similar proxy due to the inexistence of information essential to construct time-series data. It was decided to test the ratio of assets owned by Monetary and Financial Institutions (MFI) to GDP as a measure of the degree of financial market liberalization. Also tested was the nominal interest rate as an indicator of consumer accessibility to the credit market liberalization. Lastly, the unemployment rate was tested to explain the evolution of liquidity constraints. Table 2 synthesises the indicators tested and the expected effects on liquidity constraints.

Equations (7) and (8) were estimated jointly using the Generalized Method of Moments, considering as instruments the lags 2 to 6 of the endogenous regressor. The results are presented in Table 3. For the sake of simplicity, Table 3 only presents the results for the estimation of the evolution of liquidity constraints considering the three variables jointly. The estimation of α_1 allows us to conclude that the variables considered in the explanation of the evolution of the liquidity constraints are statistically significant at a 5% level and the signs obtained are as expected. Actually the results point to a reduction of liquidity constraints with the degree of financial market liberalization and with the reduction in the level of nominal interest rates. The results also indicate a negative correlation between the evolution of li-

Table 2

PROXIES FOR LIQUIDITY CONSTRAINTS

X_t	Expected effect in liquidity constraints
Nominal interest rates	positive
MFI assets / GDP	negative
Unemployment rate	positive

(12) To simplify it was considered a linear relation between liquidity constraints and economic conditions.

Table 3

ESTIMATION OF λ WITH $\lambda_t = \alpha_0 + \alpha_1 X_t$

	α_0	α_1			R^2	Hansen's test
		Interest rates	MFI assets / GDP	Unemployment rate		
Coefficients	0.720	0.331	-0.059	0.676	0.551	8.181
p-value	(0.000)	(0.027)	(0.031)	(0.005)		(0.943)

quidity constraints and economic activity, that is, liquidity constraints increase with a high unemployment rate.

There are some studies that relate liquidity constraint evolution with financial market liberalization. For example, Sefton and Veld (1999) use a time trend to measure the degree of financial liberalization and conclude that in the United States, Canada, the United Kingdom and Germany consumers with liquidity constraints decreased after financial market liberalization. Darby and Ireland (1994) estimate the λ parameter for the United Kingdom, using the FLIB indicator mentioned before, and conclude that labour income received by consumers with liquidity constraints have decreased to half the value after financial market liberalization. Bai and Whithey (1997) estimate also the evolution of the λ parameter for the United Kingdom, using a time trend as a proxy for financial market liberalization, and show that there is a big fall in the percentage of consumers with liquidity constraints from 1980 to 1991.

4. CONCLUSION

This article studies the sensitivity of consumption to disposable income in Portugal using macroeconomic data for the period 1980-2005. The excess sensitivity of consumption to disposable income is interpreted as the existence of liquidity constrained consumers, that is, consumers without wealth and/or those who cannot or may not want to make use of credit market to smooth consumption throughout the life cycle, according to expected future income.

The results suggest that for the whole sample period, 66% of disposable income is received by liquidity constrained consumers. When the 80's are considered separate from the period 1991-2005, the findings indicate that the percentage of disposable income received by these consumers decreases almost 15 p.p..

A more detailed time evolution for the coefficient that measures the liquidity constraints in the economy suggests that this parameter decreases during the 90's, from levels near 70% at 80's to almost 40% in the second half of the 90's. This result is consistent with the idea that the reduction in liquidity constraints occurred after financial liberalization and in line with the decrease in interest rates. The results also point to an increase in liquidity constraints at the end of 90's. This could be related with the big increase in household indebtedness as a percentage of disposable income, which led to a big rise in households' debt service. From 2001 onwards a relative stabilization of liquidity constraints is observed and this could be related with a set of forces that probably acted in opposite directions. On the one hand, debt servicing was held in check by the decrease in nominal interest rates and by some measures carried out by financial institutions, for example, the lengthening of bank loans terms and the introduction of new products in the credit market. On the other hand, the deterioration in consumers' expectations related to the high level of unemployment and to the low growth of the Portuguese economy, probably contributed to increase credit restrictions from the demand side, not allowing, for a

given proportion of consumers, a smoother path of consumption in relation to changes in disposable income.

Lastly, the results presented in this study suggest a correlation between the evolution of liquidity constraints and variables related with financial liberalization and with the economic cycle, as well as the nominal interest rate. Considering a linear relation between liquidity constraints and financial liberalization, measured by the ratio of assets owned by Monetary and Financial Institutions (MFI) to GDP, the parameters obtained in the estimation are statistically significant and allow us to conclude that the higher the degree of financial liberalization the smaller is the percentage of disposable income received by liquidity constrained consumers. On the other hand, when a linear relation is considered between liquidity constraints and the level of nominal interest rates or the unemployment rate, the results indicate that these variables are also statistically significant and have positive signs, that is, it could be concluded that the higher the level of interest rates or the unemployment rate, the higher the percentage of disposable income received by liquidity constrained consumers.

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THE IMPACT ON UNEMPLOYMENT DURATION OF A MANDATORY JOB SEARCH PROGRAM*

*Mário Centeno***

*Álvaro A. Novo***

1. INTRODUCTION

Long term unemployment is rather common in several European countries and is associated with growing difficulties in finding a new job due to the long period away from the labor market. In Portugal, despite the low levels of unemployment, the long-term unemployment is very common, resulting in a social and economic problem. This pattern of unemployment spells may be seem as a trap, hindering the transitions after long periods in this state, both due to the depreciation of the workers' productive skills and also because the long unemployment spells transmit a negative sign to the labor market.

In response to the high unemployment figures for specific labor market groups, such as young workers, women and those aged 45 or more, European Union countries increased their spending on active labor market policies, targeting these groups. The Portuguese programs had a preventive character, aiming at increasing the employability of the long-term unemployed (the *Reage* program) and to act earlier on youth unemployment, preventing episodes of long-term unemployment at the beginning of their labor market career (the *Inserjovem* program). These programs were implemented in Portugal starting in June 1998, foreseeing interventions before *Reage*'s participants reached 12 months of unemployment and before reaching 6 months in the case of *Inserjovem* targeted individuals.

The goal of this paper is to determine the average effects of these programs compared to the outcome in the absence of the job search support provided by the program. This is referred to as the average treatment effect on the treated. The focus is on the direct effects of the programs; no attempt is made to assess the general equilibrium implications.

With this objective in mind and the estimation issues that arise in non-experimental studies, mainly due to the problem of missing data, we apply a set of methods developed to address such settings. These methods suggest different solutions to the problem of generating conveniently designed comparison groups necessary to perform program evaluations. Given the non-experimental feature of these programs, the feasibility of any evaluation exercise depends crucially on the ability that researchers have to generate such comparison groups from the data available on the program implementation. The methodology used combines matching methods (see Rosenbaum, 1983) with difference-in-differences (D-in-D) (see Meyer, 1995). This methodology, initially proposed by Heckman (1997) is usually termed as difference-in-differences matching and is used to eliminate potential sources of bias present in the simple matching (DDM) or D-in-D approaches (see Smith and Todd, 2005).

Previous microeconometric studies of active labor market programs in European countries, taking place at around the same time period, include Blundell (2004) and Larsson (2003). The results of these studies are mixed. Whereas Blundell (2004) for the UK find an important "program introduction effect", the program effect is much greater in the first quarter than later on, Larsson finds no significant effect in

* The analyses, opinions and findings of this article are those of the authors and do not necessarily coincide with those of the Banco de Portugal.

** Banco de Portugal, Economic Research Department.

the Swedish programs. If anything, she finds a negative impact of certain aspects of the program, namely on wages.

Our assessment of the Portuguese program points to a small, non-significant, reduction on unemployment duration. We conclude also that this reduction is dominated cancellations of registrations of unemployment spells. The cancellations were particularly significative in *Reage*, namely for women. The resulting reduction suggests that more attention was paid by the system to the registration requirements (for example, unemployed who did not reply to solicitations by the employment offices saw their registrations cancelled).

The paper is organized as follows. The labor market program is described in Section 2. The evaluation problem, as well as the identification and the estimation of the average treatment effects are addressed in Section 3. Section 4 presents the data and results. Finally, concluding remarks are presented in Section 5.

2 . THE PROGRAM: A BRIEF DESCRIPTION

We study a large-scale program, implemented in Portugal in the context of the European Employment Strategy. Similar programs in other European countries have also been subject of evaluation. Larsson (2003) studies the Swedish Youth Practice Program, and Blundell (2004) and DeGiorgi (2005) assess the British New Deal Program. The Portuguese program is fundamentally a job search support program and its main goal is to improve the employability of two target groups: those aged less than 25 years, who had been unemployed for more than three months (the *Inserjovem* program) and those over 25 and unemployed for longer than 6 months (the *Reage* program).

Participation is compulsory; all eligible individuals who refuse to enter face a loss of entitlement to benefits. The program is composed of intensive job-search assistance and small basic skill training, for example, writing a CV. Each individual is enrolled in a number of interviews with placement officers to help her improve her job-search skills. If deemed necessary by the placement team, the individuals can enter a number of vocational or non-vocational training courses. The whole process of job-search assistance ends in most cases, but not necessarily, with the elaboration of a "Personal Employment Plan" (PEP) that includes detailed information on the unemployed individual's job search effort. According to this Plan, the unemployed individual is expected to meet on a regular basis with the placement officer at the local Employment Office (EO) and to actively search for a job. Unjustified rejection of job offers leads to the cancellation of any subsidies. The program is mandatory in the sense that failing to comply with it results in the cancellation of the worker's registration. The benefits of being registered at the EO are not confined to receiving unemployment insurance, but also include special access to health services and other programs offered by the EO, namely training programs.

The program was launched in June 1998 and was gradually extended to all EOs in the country. It involved about 1.5 million Portuguese workers by December 2002, of which roughly 60% are women and 40% are young (less than 25 years). These numbers give an idea of the general implementation of the program in the country.

The Portuguese EOs collected data from all registered unemployed individuals regardless of their status in the program. The *SIGAE* dataset covers the January 1998 through December 2002 period, and comprises over 2 million observations for over 1.5 million individuals. *SIGAE* monitors the different features of the program and individuals during their complete spells of unemployment. The information in the dataset includes most demographic variables used in labor market studies (age, sex, nationality, schooling, place of residence), and a large number of variables related with previous labor market ex-

perience (previous occupation, desired sector of employment, unemployment duration, reason for job displacement). The unemployed individual is observed for the complete duration of the unemployment spell and, at the moment of termination, we can observe her destination state (either employment, training or out of the labor force).

The program was launched in June 1998, but initially only on a limited number of EOs. These offices were not chosen in "a pilot-type" of setting. Instead, they were selected because they were the ones logistically set to comply with the technical requirements of implementing the program (for example, computers and professionals/staff available). The conditions to evaluate the impact of the policy in such a setting are not perfect and identification of the treatment effect requires stronger conditions than if these EOs would have been assigned in a random fashion. The counterfactual must in our case be drawn either from a different labor market or from a different group in the same labor market.

Active job search programs are aimed at easing/speeding the transition from unemployment to employment. Thus, this study seeks to evaluate the impact of such a program on the duration of unemployment spells of the targeted population. The study analyses the impact of the programmes on the duration of complete unemployment spells for individuals exiting unemployment in the 6 months after being subjected to the program. We will pay particular attention to the flow into employment, but we will also examine the flows into other labour market destination states.

3. IDENTIFICATION AND ESTIMATION METHODS

We take advantage of the characteristics of the dataset and of the program implementation to construct treatment and control groups using different criteria. In particular, we explore (i) the existence of data for the pre-and post-program periods, and (ii) the two sources of variation in the eligibility criteria and the different implementation phases (which generate spatial and time differences).

The program design and implementation generated a natural way to construct treatment and control groups along two dimensions. One such dimension is the eligibility criteria (based on age and unemployment duration) and the other is the phased implementation of the program across the country, which generated a sequence of implementation areas. The local EOs were assigned to the program at different moments in time – starting in June and October of 1998, and continuing through February, May, July and November of 1999, in April, June and September of 2000 and finally in January 2001.

The treatment group includes all individuals eligible to participate in the *Inserjovem* and *Reage* programs in the first six months of their implementation in each EO. This generates a large group of individuals already unemployed at the moment the programs were initiated in each office.

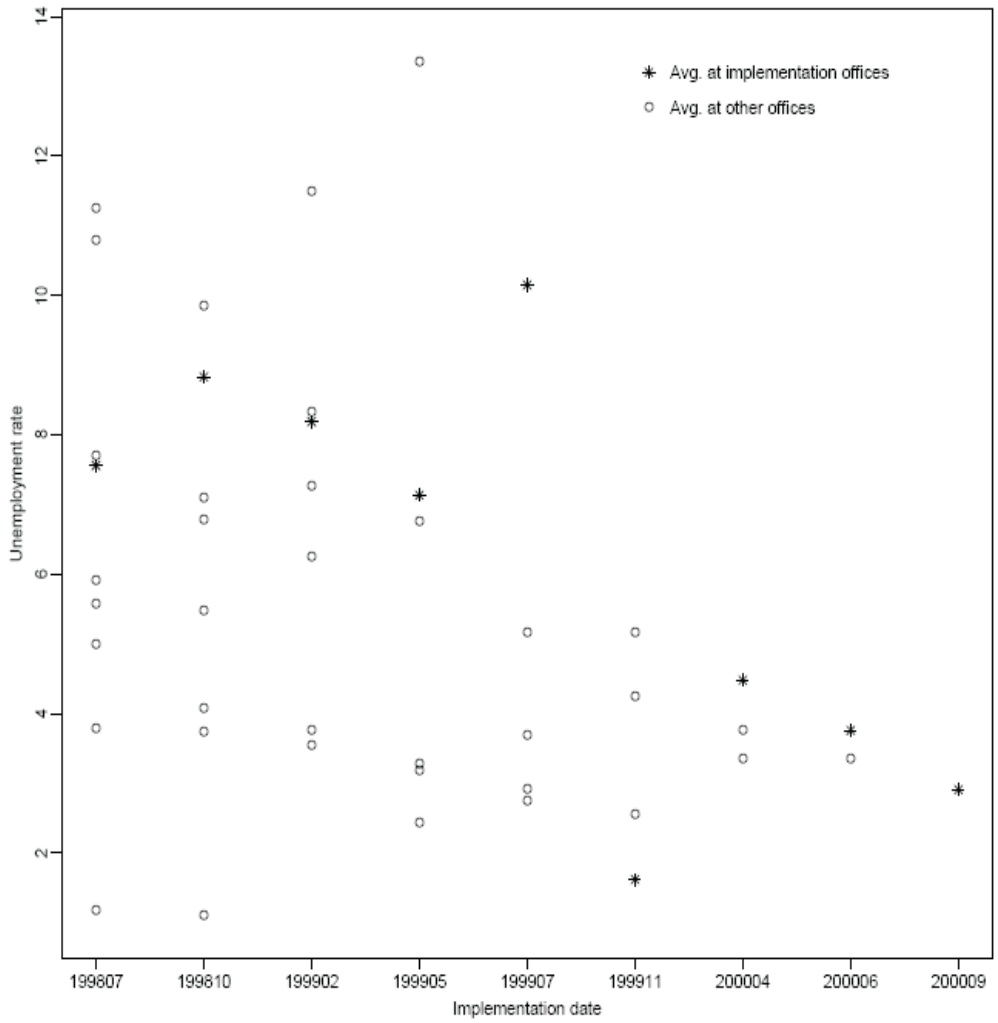
The construction of the comparison group was determined by the same eligibility criteria, but considering, instead, locations outside the areas already implementing the program. Thus, for the same six-months time windows, the control group comprises all eligible individuals living in the areas covered by EOs that did not implement the programs.

Given the non-experimental nature of the program, the timing of implementation at each EO is a concern. However, the sequencing of enrolment of each EO was not dictated by the specific labor market conditions prevailing at the regional level, thus inducing no bias on our estimates. For example, as can be seen in Chart 1, selection into the program of the various EOs was not dictated by the relative level of unemployment prevailing at the local level. This suggests that the treatment and control groups can be thought of as a "random" draw from the set of EOs at any point in time.

In Table 1, we present summary statistics for the two groups of interest. The two groups are not very different according to the characteristics presented in the table. However, treated individuals are

Chart 1

AVERAGE UNEMPLOYMENT RATE AT THE IMPLEMENTATION DATES



Note: The chart shows at each moment the unemployment rate at the treatment EO 's (stars) and at the control EO's (empty circles).

slightly younger, and they are more likely to be female. Among treated individuals the share of unemployment insurance (UI) recipients is smaller. The control group has a slightly larger fraction of workers with college education, but the two groups are not very different along this dimension. The greatest differences can be found in the "reason to register" attribute. The unemployed individuals who were subject to treatment were more likely to have ended a temporary job than those in the control group, who are much more likely to have been laid-off prior to registration. Overall, these summary statistics are reassuring in terms of our ability to match individuals in the two groups in order to perform our evaluation exercise.

3.1. Implementation

The problem of evaluating active labor market programs has been extensively studied in the literature (Heckman,1999). In recent years, a wealth of methods to address the main problem of missing data,

Table 1

SUMMARY STATISTICS BY TREATMENT AND CONTROL GROUPS

	Group			
	Treatment		Control	
Variable	Average	St. deviation	Average	St. deviation
Age (in years)	31.9	12.8	33.4	13.2
Male	0.37	0.48	0.41	0.49
Unemployment insurance recipients	0.23	0.42	0.28	0.45
Marital status				
Married	0.48	0.50	0.49	0.50
Single	0.47	0.50	0.47	0.50
Other	0.05	0.21	0.05	0.22
Schooling				
4 years	0.28	0.45	0.28	0.45
6 years	0.24	0.43	0.22	0.42
9 years	0.17	0.38	0.17	0.38
11 years	0.09	0.29	0.10	0.30
12 years	0.10	0.30	0.10	0.30
3 years college	0.03	0.16	0.03	0.16
Bachelor	0.03	0.16	0.04	0.21
Master degree	0.00	0.01	0.00	0.01
Ph. D.	0.00	0.00	0.00	0.00
Illiterate	0.07	0.25	0.06	0.25
Reason to register				
Student	0.11	0.32	0.10	0.30
Finished school	0.06	0.24	0.05	0.22
Finished training	0.01	0.10	0.00	0.07
Worked at home	0.01	0.12	0.01	0.12
Laid off	0.20	0.40	0.26	0.44
Quitted	0.03	0.18	0.04	0.18
Ended job by mutual agreement	0.02	0.13	0.03	0.16
End of temporary job	0.34	0.47	0.29	0.46
Others	0.22	0.42	0.21	0.41
Number of observations by destination state[1]				
Placed by employment offices or self placement	12 398		41 026	
Cancelled registration	37 176		146 684	
Total	53 400		201 113	

Source: SIGAE.
Note: The treatment group includes all individuals eligible to participate in the program in the first 6 months of the implementation in each Employment Office. The control, for the same time window, comprises all eligible individuals living in areas covered by Offices that did not implement the program.

common in all non-experimental studies, has been proposed. These methods suggest different solutions to the problem of generating conveniently designed comparison groups necessary to perform program evaluations. Given the non-experimental feature of these programs, the feasibility of any evaluation exercise depends crucially on the ability that researchers have to generate such comparison groups from the data available on the program implementation. Typical methodologies proposed to tackle these issues include: matching on observables (Heckman, 1998), regression approaches to evaluation and a wide variety of difference-in-differences approaches (Meyer, 1995, Gruber, 1992).

We have, therefore, alternative sets of treatment and control groups to check the robustness of the results to common sources of bias (observable and unobservable characteristics) in the evaluation of such type of policies. We apply a combination of econometric methods suited to this type of evaluation. In particular, we report results based on a combination of the following methods: (i) matching methods (Rubin, 1977, and Rosenbaum, 1983), in which the propensity score matching can be based on different definitions of neighborhood; (ii) the difference-in-differences estimator (see, for example, Meyer, 1995). The junction of these two methods results in the difference-in-differences matching estimator

proposed by Heckman (1997) and Heckman et al. (1998). This method recently reviewed and compared with the other methods by Smith and Todd (2004) has the potential benefit of eliminating some sources of bias present in non-experimental settings, improving the quality of evaluation results significantly.

Let Y_{it}^{D} be the potential outcome for individual *i* at time *t* given that he/she is in state *D*, where *D* equals 1 if treatment is received and 0 otherwise. Let treatment take place at time $t = 1$. The fundamental identification problem lies in the fact that we do not observe, at time $t = 1$, individual i in both states. Therefore, we cannot compute the individual treatment effect, $Y_{i1}^{1} - Y_{i1}^{0}$. One can, however, estimate the average effect of the treatment on the treated, $E\left[Y_{i1}^{1} - Y_{i1}^{0} \mid D = 1\right]$. In order to achieve identification, the following assumption is necessary:

$$E\left[Y_{i1}^{0} - Y_{i0}^{0} \mid D = 1\right] = E\left[Y_{i1}^{0} - Y_{i0}^{0} \mid D = 0\right] \quad (1)$$

It states that the temporal evolution of the outcome variable of treated individuals $(D = 1)$, in the event that they had not been exposed to the treatment, would have been the same as the observed evolution for the individuals not exposed to the treatment $(D = 0)$. If the assumption expressed in (1) holds, then the average treatment effect on the treated can be estimated by the sample analogs of

$$\left\{E\left[Y_{i1} \mid D = 1\right] - E\left[Y_{i1} \mid D = 0\right]\right\} - \left\{E\left[Y_{i0} \mid D = 1\right] - E\left[Y_{i0} \mid D = 0\right]\right\} \quad (2)$$

There are two threats to the validity of the difference-in-differences estimator. First, if cross-sectional data are used, compositional changes over time may invalidate the results. Second, if there are non-parallel dynamics. In particular, if such dynamics are not explained by (adding) observables and at the same time the outcome variable depends on non-observables, identification breaks down.

Table 2 presents this exercise. Reading in row, the difference between the two rows gives a measure of the impact of the treatment on the treated. That is, it corrects the evolution of the outcome variable of treated individuals (1st row) with the effect on pseudo-treated (the control group that was defined using the same eligibility criteria) observed in a different space R=0; it corrects for common factors influencing the target group.

In order to further reduce possible sources of bias in non-experimental settings we supplement the D-in-D by first matching treatment and control elements (see Smith and Todd, 2004). Matching is very intuitive process presented by Rubin and Rosenbaum (1983) and deals with the selection process by constructing a comparison group with observable characteristics similar to those of the treated. If possible would like to perform exact match, i.e., choosing individuals with exactly the same characteristics, but when multivariate detailed information is available a better option would be to compute a statistic that condenses the multidimensionality of the available information into a single indicator, this statistic is called the "propensity score". Intuitively, the propensity score is associated with the "probability of being treated". The combination of the matching process with the D-in-D estimator results in the D-in-D matching (DDM) estimator.

4. EMPIRICAL RESULTS

We use the pre- and post-program cross-sectional dimensions of our data to study the impact of the program on the average unemployment spell duration. The Portuguese employment agency collected data from all registered unemployed individuals regardless of their "treatment status". The *SIGAE* dataset, described above, monitors the different features of the program and individuals during their complete spells of unemployment. This allows us to begin the analysis by using propensity scores to

Table 2

DIFFERENCE-IN-DIFFERENCES ESTIMATOR

	Before (t=0)	After (t=1)	
Treatment	Y^1_{i0}	Y^1_{i1}	$D_1 = E\left[Y^1_{i1}\right] - E\left[Y^1_{i0}\right]$
Control	Y^0_{i0}	Y^0_{i1}	$D_2 = E\left[Y^0_{i1}\right] - E\left[Y^0_{i0}\right]$
	$D_3 = E\left[Y^1_{i0}\right] - E\left[Y^0_{i0}\right]$	$D_4 = E\left[Y^1_{i1}\right] - E\left[Y^0_{i1}\right]$	
		Estimators D-D	$D_1 - D_2$ **or** $D_4 - D_3$

match individuals in the treatment and control groups, controlling for their observed characteristics. We then control for unobserved characteristics (and common trends) by comparing the differences before and after the program in the outcome variable of our matched samples. If the common trend assumption holds, this will deliver an unbiased estimate of the average treatment effect on the treated.

An explicit aim of active labor market policies is to improve the employability of the unemployed. Hence, shorter unemployment duration, a higher probability of future employment or higher employment attachment – that can operate through better matches, and higher earnings – are possible measures of a program's success.[1]

The implementation of the matching method follows the algorithm presented in Becker and Ichino (2002), while the D-in-D matching estimator follows Smith and Todd (2005). Due to the heterogeneity of the individuals in each of the groups and, not independently, the fact that there are two programs (*Inserjovem* and *Reage*), we split the sample into these two subsamples. The two subsamples are then analyzed according to: (i) the type of exit from the pool of registered unemployed — all exits, placed and cancelled[2] and (ii) the gender — female, male and all.

The propensity score matching results are based on the stratification method, imposing the common support option. The matching process typically led to balanced treatment and control groups in terms of the distributions of observable characteristics included in the estimation of the propensity score[3].

In Table 3 the D-in-D estimates based on individuals that participated in the program (treatment group) and on the individuals that had the potential to participate in the program, but lived outside the implementation areas (control group). Each entry in the table is computed as the difference between the 'after implementation' and the 'before implementation' propensity score matching estimates of the treatment effects on the treated.

(1) However, increasing the speed of transition out of unemployment can be made at the expense of lower wages, both because there might be a payoff to longer job search periods (Centeno, 2004 and Centeno e Novo, 2006), or due to shifts in labor supply that are not matched by the demand side of the labor market. In this context, it is crucial to study the impact of the program on wages after leaving unemployment. This is however left for a different exercise (results are available from the authors upon request).

(2) The exit category placed includes all individuals who either through the EOs or by themselves are reported has having been placed in the labor market or in a training program; the exit category cancelled includes all individuals who saw their registration cancelled by the EOs due to having failed to fulfil one or more criteria.

(3) For the entire set of estimates presented below, there are some cases where the two groups are unbalanced along some of the dimensions of the X vector. However, despite the fact that the balancing property failed to hold in statistical terms, the economic dimension of the difference in averages on the variable age was not significant. The differences in average age between the treatment and control groups were typically of a few months, which clearly do not affect the required comparability of the two groups. These balancing property difficulties tended to arise more often in the *Reage* program analysis.

Our results in Table 3, suggest a negligible impact on the employability of those receiving treatment (youth unemployed and older long term unemployed). The program's impact on the average unemployment spell ranges from a reduction of slightly less than one month to an increase of about 0.2 months. The analysis by gender and type of exit from registered unemployment reveals some differences, but still the impacts are rather small. While younger males tend to benefit more than do younger females, older females benefit the most from the treatment. In Chart 2, the plots summarize these results of the D-in-D matching estimator, providing 95% confidence intervals.

The following results are worth highlighting:

- The impact of the *Inserjovem* program is lower than *Reage*'s. Furthermore, the impact on the youth is statistically (and economically) insignificant. This result confirms the findings obtained for similar programs in other European countries (see Blundell *et al.*, 2004 and Larsson, 2003);

- The effect is stronger for females in *Reage*, that is, the DDM estimates are more negative (or less positive) than those observed for males. In the younger population, the gender differences are rather small, but slightly in favor of men;

- In terms of the type of exit, the results are mixed, highlighting the importance of such disaggregation.Thus, when analyzing exits from the pool of registered unemployed to employment, the DDM estimates for both programs are typically positive, resulting in longer unemployment spells, but statistically insignificant. The impact on duration is negligible, reaching in the best case a reduction of -0.04 months and in the worst case an increase of 0.4 months. When analyzing the group of individuals who entered inactivity (the class "cancelled"), the estimates are negative and statistically significant. Somehow, the new rules applied with the programs seem to make the system more aware of the "irregularities", leading the EOs to take action earlier. Whether this is a desirable result, it is questionable – it may have a positive (warning) impact on the individuals, leading them to correct their behavior, but it can also be associated with increasing welfare stigma. Overall, pooling all types of exits, the programs seem to have reduced unemployment duration, but only statistically significant for the Reage program, resulting, at best, in an unemployment reduction of about one month.

5. CONCLUSIONS

The purpose of this study has been to evaluate active job search labor market programs for youth and long-term unemployed in Portugal, using as measures of effectiveness the impact on average unemployment duration.We identified the average treatment effect on the treated based on the hypothesis that participation in the various treatments, including the no-treatment state, is independent of the post-program outcomes conditional on observable exogenous factors, as well as, non-observable factors in our D-in-D implementation. The mandatory and phased implementation characteristics imposed on the design of the program allow us to be confident about our identification strategy, namely, the comparability of our treatment and control groups.The results from our analysis point to a positive, but rather small, effect of the treatment on unemployment duration on the treated group. We estimate a reduction of less than 1 month in unemployment duration. Given the generally high levels of unemployment duration in Portugal (which can reach several years), these numbers are not impressive. Indeed, they are in line with what has been obtained for other countries and surveyed in Heckman (1999). Overall, even ignoring the costs of implementation, we conclude that the program effectiveness can be questioned.

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Table 3

EFFECTS ON UNEMPLOYMENT DURATION (IN MONTHS): AVERAGE TREATMENT EFFECT ON THE TREATED ESTIMATED BY DIFFERENCE-IN-DIFFERENCES MATCHING

INSERJOVEM

	All						Male						Female					
	Before		After		DinD		Before		After		DinD		Before		After		DinD	
Type of exit																		
All	0.06	(.05)	-0.09	(.08)	-0.15	(.16)	-0.32	(.08)	-0.54	(.12)	-0.22	(.23)	0.24	(.07)	0.14	(.11)	-0.10	(.12)
Placed	0.45	(.12)	0.63	(.18)	0.18	(.22)	-0.23	(.16)	-0.27	(.25)	-0.04	(.16)	0.84	(.15)	1.05	(.23)	0.21	(.26)
Cancelled	0.01	(.06)	-0.35	(.10)	-0.36	(.36)	-0.23	(.09)	-0.61	(.15)	-0.38	(.39)	0.13	(.08)	-0.22	(.13)	-0.35	(.36)

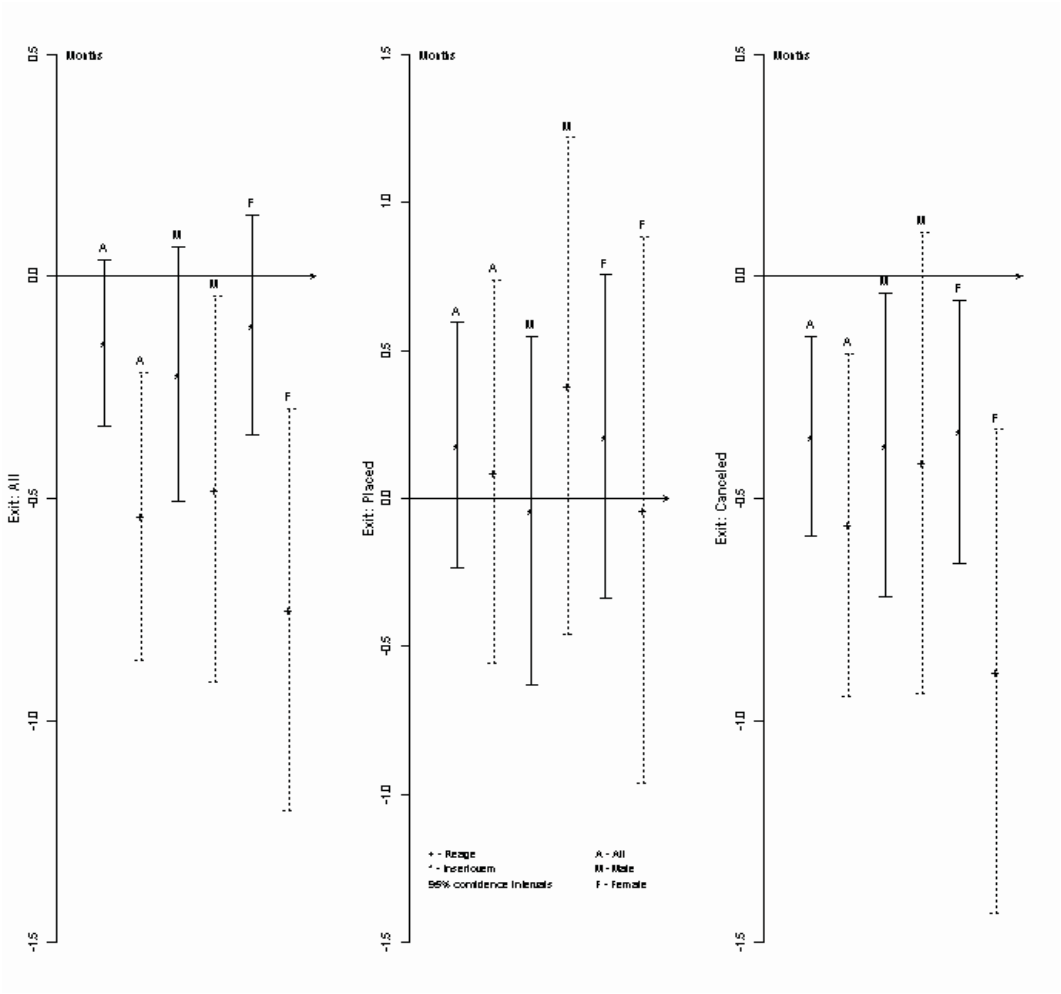
REAGE

	All						Male						Female					
	Before		After		DinD		Before		After		DinD		Before		After		DinD	
Type of exit																		
All	-1.74	(.09)	-2.29	(.14)	-0.55	(.56)	-1.79	(.11)	-2.27	(.19)	-0.48	(.49)	-1.63	(.13)	-2.37	(.19)	-0.74	(.75)
Placed	-0.97	(.18)	-0.88	(.28)	0.09	(.20)	-1.57	(.22)	-1.19	(.37)	0.38	(.44)	-0.50	(.27)	-0.54	(.39)	-0.04	(.27)
Cancelled	-1.89	(.10)	-2.45	(.17)	-0.56	(.57)	-1.78	(.14)	-2.19	(.23)	-0.41	(.43)	-1.82	(.15)	-2.71	(.24)	-0.89	(.90)

Notes: (1) *Inserjovem* and *Reage* are the programs targeting young and older unemployed, respectively (2) "Placed" refers to individuals (re-)entering employment or training. "Cancelled" refers to individuals whose registration was cancelled. (3) Standard error in parentheses. (4) A negative is synonymous with a reduction in the average unemployment spell for the treated.

Chart 2

D-IN-D MATCHING ESTIMATES BY TYPE OF EXIT AND GENDER



x -	Reage	A -	All
+ -	Inserjovem	M -	Male
99% -	Confidence intents	F -	Female

QUARTERLY SERIES FOR THE PORTUGUESE ECONOMY

Updating 1977–2005

QUARTERLY SERIES FOR THE PORTUGUESE ECONOMY: 1977-2005

As usual in the Summer Bulletin, this section releases an update of the quarterly series for the Portuguese economy. The series now presented are based on the annual figures disclosed in the 2005 Annual Report of Banco de Portugal and on the quarterly indicators available in June. The update of the quarterly series released within this bulletin comprises the inclusion of the year 2005 and the usual statistical revisions of the most recent data for both the annual series and the associated intra-annual indicators. In particularly, it is important to mention the inclusion of the new series of Portuguese National Accounts (base 2000) for the 1995-2003 period released by the National Statistical Institute (INE) in March 2006, which implied an increase in the levels of the main components of expenditure.[1]

These revisions give rise to changes in the quarterly series, which in some cases do not only affect the recent years, owning to the sensitivity of the parameters used in the quarterly interpolation procedure to revisions of both the annual series and the associated intra-annual indicators. However, besides the effects related to the inclusion of the new base of the National Accounts, these revisions are in most cases minor, since there are no major changes in the methodology that was described in detail in the June 2004 Economic Bulletin. The only exceptions are the correction of seasonal fluctuations in some quarterly indicators, mainly related to the evolution of the expenditure components deflators, and the use of data from changes in stocks from the Quarterly National Accounts from INE as the relevant indicator for the quarterly interpolation of this variable, as opposed to the method used previously where a simple spline interpolation procedure was used.

Quarterly series for the 1977-2005 period are presented in the following tables, with the same degree of detail as in the previous publication. An electronic version of the series is made accessible on the Banco de Portugal's website (www.bportugal.pt\publish\bolecon\docs).

(1) For more details see "The base 2000 of Portuguese National Accounts" included in the 2005 Annual Report of Banco de Portugal.

MAIN EXPENDITURE COMPONENTS

	1977				1978				1979			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption (residents)	575.3	612.6	648.1	672.3	704.5	732.5	777.1	827.8	855.3	903.6	968.5	1059.6
Public consumption	121.3	123.7	128.4	135.7	145.7	155.4	164.9	174.2	183.1	194.4	208.1	224.5
GFCF	264.5	297.1	305.0	312.8	302.4	322.9	345.0	378.5	430.3	482.7	526.2	531.6
Change in inventories	27.7	30.5	36.1	44.5	55.7	56.2	46.1	25.4	-6.0	-15.8	-4.1	29.2
Exports of goods and services	135.8	149.1	156.2	168.4	179.5	194.4	219.2	256.1	287.9	332.7	371.7	411.1
Goods	87.9	96.5	100.0	106.2	111.5	123.7	136.0	164.0	182.1	210.5	234.4	259.6
Services	47.8	52.6	56.2	62.2	68.0	70.8	83.2	92.1	105.9	122.2	137.4	151.5
Imports of goods and services	227.0	266.7	276.1	296.9	302.4	306.0	334.2	358.7	384.9	436.6	506.5	562.8
Goods	194.9	229.8	237.2	255.5	258.5	260.5	284.6	305.4	326.7	371.5	426.9	475.0
Services	32.2	36.9	38.9	41.4	43.9	45.5	49.5	53.3	58.2	65.1	79.6	87.9
GDP	897.5	946.3	997.6	1036.8	1085.3	1155.5	1218.3	1303.3	1365.8	1460.9	1564.0	1693.2
Previous year prices (EUR million)												
Private consumption (residents)					651.4	650.5	658.7	667.2	781.9	791.6	804.9	819.8
Public consumption					130.7	132.6	134.7	136.8	166.4	169.5	173.1	177.0
GFCF					274.8	278.7	280.5	288.1	371.9	394.4	407.8	387.7
Change in inventories					52.3	54.3	46.5	28.7	1.2	-11.9	-10.5	5.4
Exports of goods and services					162.9	167.6	178.7	196.3	251.6	275.5	290.4	299.9
Goods					100.5	105.7	109.3	122.9	156.7	171.3	179.5	185.2
Services					62.4	61.9	69.4	73.4	94.9	104.1	110.8	114.6
Imports of goods and services					273.7	266.4	266.3	271.4	327.1	345.3	368.4	381.0
Goods					235.0	228.7	227.9	232.5	277.3	292.6	308.0	318.7
Services					38.7	37.8	38.4	39.0	49.7	52.7	60.3	62.3
GDP					998.3	1017.3	1032.7	1045.8	1245.9	1273.9	1297.2	1308.7
Volume (base year 2000)												
Private consumption (residents)					7687.1	7675.8	7772.4	7873.7	7971.0	8069.6	8204.7	8357.3
Public consumption					2181.5	2213.7	2247.7	2283.4	2320.9	2364.2	2413.2	2468.1
GFCF					2974.5	3017.5	3036.8	3119.3	3349.0	3552.6	3672.8	3491.5
Exports of goods and services					1350.8	1389.8	1482.0	1628.2	1733.5	1897.6	2000.2	2065.6
Goods					742.4	780.9	807.1	908.0	948.3	1036.6	1086.2	1120.7
Services					690.7	685.2	768.9	813.0	893.8	980.6	1043.7	1079.5
Imports of goods and services					1769.3	1722.2	1721.3	1754.5	1751.4	1848.7	1972.4	2040.2
Goods					1429.4	1390.9	1386.2	1413.9	1405.7	1482.9	1561.1	1615.3
Services					346.9	338.4	344.0	349.2	356.7	377.8	432.7	446.7
GDP					13720.1	13980.8	14192.5	14372.8	14720.4	15050.3	15326.0	15461.9
Deflator (2000=1)												
Private consumption (residents)					0.0916	0.0954	0.1000	0.1051	0.1073	0.1120	0.1180	0.1268
Public consumption					0.0668	0.0702	0.0734	0.0763	0.0789	0.0822	0.0862	0.0910
GFCF					0.1017	0.1070	0.1136	0.1213	0.1285	0.1359	0.1433	0.1522
Exports of goods and services					0.1329	0.1399	0.1479	0.1573	0.1661	0.1753	0.1858	0.1990
Goods					0.1502	0.1584	0.1685	0.1807	0.1920	0.2030	0.2158	0.2317
Services					0.0985	0.1033	0.1082	0.1133	0.1185	0.1246	0.1316	0.1403
Imports of goods and services					0.1709	0.1777	0.1941	0.2044	0.2198	0.2362	0.2568	0.2759
Goods					0.1808	0.1873	0.2053	0.2160	0.2324	0.2505	0.2735	0.2940
Services					0.1266	0.1343	0.1440	0.1527	0.1631	0.1723	0.1839	0.1966
GDP					0.0791	0.0826	0.0858	0.0907	0.0928	0.0971	0.1021	0.1095

MAIN EXPENDITURE COMPONENTS

	1980				1981				1982			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption (residents)	1139.3	1222.0	1286.3	1345.4	1423.5	1497.5	1590.2	1674.7	1749.1	1838.3	1905.3	1977.2
Public consumption	243.8	262.4	280.1	296.8	312.3	328.1	344.3	360.7	377.3	397.0	419.9	446.3
GFCF	530.6	538.6	558.7	612.1	700.1	759.9	814.2	828.6	876.2	903.2	928.3	948.1
Change in inventories	84.0	117.8	130.4	122.0	92.5	77.2	76.1	89.3	116.7	128.0	123.1	102.0
Exports of goods and services	447.4	464.4	476.1	482.9	497.0	525.4	539.6	551.1	569.9	594.9	673.9	710.8
Goods	285.4	292.5	294.4	296.4	302.9	317.9	329.5	340.7	360.7	384.9	451.0	477.2
Services	162.0	171.8	181.7	186.5	194.1	207.5	210.0	210.3	209.1	209.9	222.9	233.6
Imports of goods and services	627.9	682.6	729.3	773.0	815.9	931.0	942.2	953.3	1020.9	1097.1	1150.3	1141.5
Goods	518.5	567.0	599.8	635.1	666.3	769.6	780.8	785.7	855.9	921.1	973.7	962.3
Services	109.3	115.6	129.5	137.9	149.5	161.3	161.4	167.5	165.0	176.0	176.6	179.2
GDP	1817.2	1922.6	2002.3	2086.2	2209.5	2257.1	2422.1	2551.1	2668.4	2764.2	2900.2	3042.8
Previous year prices (EUR million)												
Private consumption (residents)	1003.6	1026.9	1043.2	1051.5	1271.5	1282.9	1288.8	1296.0	1576.2	1590.7	1593.9	1591.5
Public consumption	214.1	218.8	222.9	226.6	282.0	285.3	288.0	290.2	342.6	345.3	348.6	352.8
GFCF	462.3	438.1	444.9	465.6	616.4	636.0	666.7	673.0	800.7	785.6	778.2	765.8
Change in inventories	35.7	56.8	68.6	71.1	64.3	65.7	75.4	93.4	119.7	125.2	110.1	74.2
Exports of goods and services	386.0	387.7	385.8	375.6	454.8	460.1	459.5	458.0	520.6	526.1	550.2	577.1
Goods	244.9	242.6	238.6	230.0	278.9	279.7	284.3	288.5	332.8	343.9	369.5	392.5
Services	141.1	145.0	147.2	145.6	175.9	180.4	175.2	169.5	187.8	182.2	180.7	184.6
Imports of goods and services	546.4	559.5	578.1	583.7	724.8	732.6	754.0	771.7	966.8	970.5	954.4	948.2
Goods	451.3	462.3	473.6	478.1	595.0	601.2	625.1	640.4	815.1	818.6	810.6	805.0
Services	95.1	97.2	104.6	105.6	129.8	131.5	128.9	131.3	151.7	151.9	143.8	143.2
GDP	1555.4	1568.9	1587.3	1606.8	1964.2	1997.4	2024.5	2038.9	2393.1	2402.3	2426.6	2413.3
Volume (base year 2000)												
Private consumption (residents)	8639.6	8840.9	8981.3	9052.7	9044.1	9125.3	9166.7	9217.9	9314.4	9400.0	9418.6	9404.6
Public consumption	2528.8	2583.6	2632.7	2676.0	2713.4	2745.3	2771.5	2792.2	2807.3	2828.6	2856.2	2890.1
GFCF	3299.4	3127.1	3175.3	3322.8	3556.4	3669.5	3846.9	3882.9	3859.4	3786.5	3751.1	3691.5
Exports of goods and services	2117.2	2126.1	2115.8	2060.0	2046.7	2070.5	2068.0	2061.1	2031.7	2053.1	2147.3	2252.3
Goods	1158.2	1147.3	1128.2	1087.5	1078.9	1081.8	1099.9	1116.1	1128.1	1165.7	1252.6	1330.6
Services	1091.2	1121.6	1138.4	1126.3	1121.9	1150.8	1117.3	1080.9	1021.6	991.2	982.9	1004.2
Imports of goods and services	2200.0	2252.6	2327.7	2349.9	2352.7	2378.1	2447.3	2504.8	2570.1	2580.1	2537.2	2520.6
Goods	1710.7	1752.2	1794.9	1812.0	1812.8	1831.6	1904.4	1951.2	2036.0	2044.9	2024.7	2010.7
Services	528.0	539.6	580.6	586.2	589.1	596.8	585.0	595.7	561.1	561.9	532.0	529.6
GDP	15481.7	15616.3	15800.2	15993.4	15779.8	16046.7	16264.7	16379.9	16344.0	16407.3	16573.1	16482.3
Deflator (2000=1)												
Private consumption (residents)	0.1319	0.1382	0.1432	0.1486	0.1574	0.1641	0.1735	0.1817	0.1878	0.1956	0.2023	0.2102
Public consumption	0.0964	0.1016	0.1064	0.1109	0.1151	0.1195	0.1242	0.1292	0.1344	0.1403	0.1470	0.1544
GFCF	0.1608	0.1722	0.1760	0.1842	0.1968	0.2071	0.2116	0.2134	0.2270	0.2385	0.2475	0.2568
Exports of goods and services	0.2113	0.2184	0.2250	0.2344	0.2428	0.2538	0.2609	0.2674	0.2805	0.2897	0.3138	0.3156
Goods	0.2464	0.2550	0.2610	0.2726	0.2808	0.2939	0.2996	0.3053	0.3198	0.3302	0.3600	0.3586
Services	0.1484	0.1532	0.1596	0.1656	0.1730	0.1803	0.1880	0.1946	0.2047	0.2118	0.2268	0.2326
Imports of goods and services	0.2854	0.3030	0.3133	0.3290	0.3468	0.3915	0.3850	0.3806	0.3972	0.4252	0.4534	0.4529
Goods	0.3031	0.3236	0.3342	0.3505	0.3676	0.4202	0.4100	0.4027	0.4204	0.4504	0.4809	0.4786
Services	0.2071	0.2143	0.2231	0.2352	0.2538	0.2704	0.2759	0.2813	0.2940	0.3133	0.3319	0.3383
GDP	0.1174	0.1231	0.1267	0.1304	0.1400	0.1407	0.1489	0.1557	0.1633	0.1685	0.1750	0.1846

MAIN EXPENDITURE COMPONENTS

	1983				1984				1985			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption (residents)	2125.2	2239.1	2403.7	2580.5	2688.9	2850.9	3040.2	3106.9	3249.4	3367.5	3455.1	3616.6
Public consumption	476.3	505.4	533.1	559.1	583.1	611.7	645.5	684.7	730.1	775.6	821.3	867.2
GFCF	1028.1	1093.4	1176.8	1170.9	1100.3	1194.7	1238.0	1328.9	1338.1	1364.9	1419.0	1495.1
Change in inventories	64.8	35.1	12.8	-2.1	-9.5	-12.0	-9.8	-2.7	9.3	16.8	20.0	18.8
Exports of goods and services	790.8	873.5	999.8	1101.9	1206.9	1321.4	1446.2	1549.8	1692.8	1760.3	1773.9	1836.8
Goods	530.9	597.3	687.0	761.5	839.8	917.5	1011.0	1081.5	1169.5	1228.8	1234.7	1268.7
Services	259.9	276.1	312.8	340.4	367.1	403.9	435.2	468.3	523.3	531.5	539.3	568.1
Imports of goods and services	1172.8	1222.2	1360.9	1475.1	1533.5	1615.9	1752.9	1818.9	1916.5	1942.1	1905.7	2003.2
Goods	979.8	1024.2	1143.5	1247.9	1284.6	1355.8	1470.4	1522.3	1601.4	1610.8	1583.4	1661.8
Services	193.0	198.0	217.4	227.1	248.9	260.1	282.5	296.5	315.2	331.3	322.3	341.4
GDP	3312.5	3524.2	3765.3	3935.3	4036.1	4350.9	4607.3	4848.8	5103.1	5343.1	5583.6	5831.1
Previous year prices (EUR million)												
Private consumption (residents)	1868.5	1860.2	1853.8	1838.0	2307.0	2301.8	2310.1	2307.6	2904.1	2915.8	2925.9	2968.7
Public consumption	422.3	426.1	427.9	427.7	517.9	517.7	520.0	524.7	645.5	654.5	663.7	673.3
GFCF	916.3	924.1	912.0	838.5	975.9	1007.8	988.4	998.4	1201.1	1190.7	1207.9	1225.1
Change in inventories	17.7	-21.0	-41.9	-44.9	-30.1	-21.0	-17.5	-19.7	-27.6	-25.6	-13.6	8.4
Exports of goods and services	720.0	739.7	766.9	794.3	1021.3	1068.1	1105.0	1139.3	1506.4	1516.0	1504.8	1528.7
Goods	490.9	508.8	528.2	549.7	703.4	732.7	761.3	784.5	1041.5	1061.5	1052.7	1066.7
Services	229.0	230.8	238.7	244.7	318.0	335.4	343.7	354.8	464.9	454.5	452.0	461.9
Imports of goods and services	1078.4	1039.2	1026.1	986.8	1260.5	1267.4	1304.4	1305.9	1728.0	1753.7	1744.1	1810.8
Goods	911.8	878.0	863.8	829.6	1046.9	1053.5	1081.2	1082.5	1446.8	1468.2	1472.1	1528.2
Services	166.7	161.2	162.3	157.2	213.6	213.9	223.2	223.4	281.3	285.5	272.0	282.7
GDP	2866.4	2889.8	2892.6	2866.9	3531.5	3606.9	3601.6	3644.3	4501.4	4497.7	4544.6	4593.3
Volume (base year 2000)												
Private consumption (residents)	9389.6	9347.8	9315.4	9236.4	9202.0	9181.2	9214.3	9204.5	9145.0	9181.8	9213.5	9348.5
Public consumption	2930.3	2956.7	2969.3	2968.0	2952.9	2951.7	2964.6	2991.4	3032.1	3074.3	3117.7	3162.5
GFCF	3782.0	3814.0	3764.1	3460.9	3236.4	3342.1	3277.9	3310.9	3252.7	3224.7	3271.3	3317.9
Exports of goods and services	2396.0	2461.6	2552.3	2643.5	2726.5	2851.3	2949.9	3041.5	3154.7	3174.8	3151.4	3201.4
Goods	1430.4	1482.5	1539.0	1601.6	1652.4	1721.2	1788.6	1843.0	1895.1	1931.6	1915.6	1941.0
Services	1046.2	1054.6	1090.5	1117.7	1152.1	1215.4	1245.3	1285.7	1360.0	1329.4	1322.3	1351.3
Imports of goods and services	2496.4	2405.6	2375.2	2284.2	2304.0	2316.7	2384.2	2387.0	2414.7	2450.5	2437.1	2530.4
Goods	1993.0	1919.3	1888.1	1813.4	1813.4	1824.9	1872.8	1875.1	1897.0	1925.1	1930.3	2003.8
Services	522.5	505.4	508.9	492.8	518.8	519.6	542.2	542.7	548.9	557.1	530.8	551.6
GDP	16581.7	16717.2	16733.3	16585.1	16183.4	16528.9	16504.4	16700.2	16629.3	16615.7	16788.9	16968.7
Deflator (2000=1)												
Private consumption (residents)	0.2263	0.2395	0.2580	0.2794	0.2922	0.3105	0.3299	0.3375	0.3553	0.3668	0.3750	0.3869
Public consumption	0.1625	0.1709	0.1795	0.1884	0.1975	0.2072	0.2177	0.2289	0.2408	0.2523	0.2634	0.2742
GFCF	0.2718	0.2867	0.3126	0.3383	0.3400	0.3575	0.3777	0.4014	0.4114	0.4233	0.4338	0.4506
Exports of goods and services	0.3300	0.3548	0.3917	0.4168	0.4426	0.4634	0.4903	0.5096	0.5366	0.5545	0.5629	0.5738
Goods	0.3711	0.4029	0.4464	0.4755	0.5082	0.5330	0.5652	0.5869	0.6171	0.6362	0.6445	0.6536
Services	0.2484	0.2618	0.2869	0.3046	0.3186	0.3324	0.3495	0.3642	0.3848	0.3998	0.4078	0.4204
Imports of goods and services	0.4698	0.5080	0.5729	0.6458	0.6656	0.6975	0.7352	0.7620	0.7937	0.7925	0.7819	0.7917
Goods	0.4916	0.5336	0.6056	0.6882	0.7084	0.7430	0.7851	0.8119	0.8441	0.8367	0.8203	0.8293
Services	0.3694	0.3917	0.4272	0.4609	0.4798	0.5005	0.5211	0.5464	0.5742	0.5947	0.6072	0.6189
GDP	0.1998	0.2108	0.2250	0.2373	0.2494	0.2632	0.2792	0.2903	0.3069	0.3216	0.3326	0.3436

MAIN EXPENDITURE COMPONENTS

	1986				1987				1988			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption (residents)	3817.1	4062.8	4198.8	4400.1	4515.6	4757.6	4883.1	5084.5	5464.5	5749.0	6045.3	6400.2
Public consumption	913.2	955.6	994.1	1028.4	1058.2	1097.4	1146.4	1206.0	1277.0	1350.4	1426.3	1504.6
GFCF	1472.4	1597.5	1669.5	1821.6	1934.4	2102.0	2194.0	2385.4	2529.8	2709.6	2866.3	2975.5
Change in inventories	13.2	18.8	35.8	64.1	103.7	134.4	156.2	169.1	173.1	163.0	138.8	100.6
Exports of goods and services	1860.4	1945.7	2036.0	2168.2	2255.9	2416.5	2511.8	2630.1	2737.0	2777.4	2975.9	3159.4
Goods	1263.4	1332.4	1378.2	1469.4	1526.8	1611.8	1681.3	1766.2	1848.9	1910.4	2041.7	2150.0
Services	597.1	613.3	657.8	698.8	729.1	804.7	830.5	863.9	888.0	867.1	934.2	1009.4
Imports of goods and services	1989.9	2018.3	2074.7	2334.8	2493.6	2706.2	2950.6	3159.3	3420.1	3524.1	3845.6	3926.0
Goods	1671.1	1667.6	1728.1	1946.2	2095.0	2268.8	2494.6	2668.2	2893.5	2984.1	3265.8	3299.7
Services	318.8	350.7	346.6	388.5	398.6	437.4	455.9	491.0	526.6	540.0	579.8	626.4
GDP	6086.3	6562.1	6859.4	7147.6	7374.3	7801.6	7940.9	8315.9	8761.2	9225.3	9607.0	10214.2
Previous year prices (EUR million)												
Private consumption (residents)	3521.4	3638.8	3683.7	3783.1	4295.8	4429.7	4448.3	4520.1	5129.4	5238.6	5310.3	5446.3
Public consumption	827.4	837.5	845.9	852.4	991.8	1001.9	1016.6	1035.8	1180.6	1206.9	1233.3	1259.5
GFCF	1397.4	1440.9	1493.0	1555.5	1839.5	1946.5	2021.2	2113.4	2385.0	2496.0	2528.6	2600.2
Change in inventories	40.3	71.8	102.9	133.6	164.0	181.3	185.7	177.0	155.2	135.4	117.5	101.5
Exports of goods and services	1808.0	1858.7	1929.8	2000.8	2165.8	2253.0	2277.3	2298.6	2527.3	2551.1	2681.0	2823.1
Goods	1246.6	1292.8	1332.1	1379.7	1471.4	1501.5	1519.2	1531.3	1699.4	1759.4	1848.1	1947.1
Services	561.4	565.9	597.7	621.0	694.4	751.5	758.1	767.3	827.9	791.7	832.9	876.0
Imports of goods and services	2075.8	2220.0	2348.4	2556.9	2451.4	2599.7	2736.4	2881.8	3247.9	3393.7	3512.4	3600.0
Goods	1767.2	1889.4	2023.8	2200.0	2070.8	2192.2	2319.0	2435.0	2743.8	2883.0	2973.6	3032.1
Services	308.6	330.6	324.7	356.9	380.5	407.5	417.4	446.7	504.2	510.7	538.8	567.9
GDP	5518.6	5627.6	5706.7	5768.6	7005.6	7212.7	7212.6	7263.1	8129.6	8234.4	8358.3	8630.6
Volume (base year 2000)												
Private consumption (residents)	9489.6	9806.1	9926.9	10195.1	10275.7	10595.8	10640.3	10812.2	11283.2	11523.3	11681.1	11980.3
Public consumption	3208.6	3247.8	3280.2	3305.7	3324.3	3358.2	3407.3	3471.7	3551.4	3630.8	3710.0	3788.8
GFCF	3250.7	3351.8	3473.0	3618.5	3839.4	4062.7	4218.7	4411.1	4576.3	4789.3	4851.8	4989.2
Exports of goods and services	3246.0	3337.1	3464.7	3592.1	3687.9	3836.4	3877.7	3914.1	3944.2	3981.3	4184.0	4405.7
Goods	1954.1	2026.4	2088.1	2162.7	2225.0	2270.5	2297.2	2315.6	2350.3	2433.3	2555.9	2692.8
Services	1392.4	1403.7	1482.5	1540.4	1574.2	1703.6	1718.6	1739.5	1727.4	1651.9	1737.9	1827.7
Imports of goods and services	2627.6	2810.3	2972.8	3236.7	3391.9	3597.2	3786.3	3987.5	4239.6	4429.9	4584.9	4699.2
Goods	2122.7	2269.5	2430.8	2642.5	2795.0	2958.8	3129.9	3286.5	3505.1	3683.1	3798.7	3873.4
Services	515.4	552.2	542.3	596.1	597.7	640.1	655.6	701.7	733.8	743.2	784.2	826.5
GDP	16914.4	17248.4	17490.9	17680.5	18222.3	18761.0	18760.8	18892.2	19303.5	19552.4	19846.6	20493.1
Deflator (2000=1)												
Private consumption (residents)	0.4022	0.4143	0.4230	0.4316	0.4394	0.4490	0.4589	0.4703	0.4843	0.4989	0.5175	0.5342
Public consumption	0.2846	0.2942	0.3030	0.3111	0.3183	0.3268	0.3365	0.3474	0.3596	0.3719	0.3844	0.3971
GFCF	0.4530	0.4766	0.4807	0.5034	0.5038	0.5174	0.5201	0.5408	0.5528	0.5658	0.5908	0.5964
Exports of goods and services	0.5731	0.5831	0.5876	0.6036	0.6117	0.6299	0.6478	0.6720	0.6939	0.6976	0.7113	0.7171
Goods	0.6465	0.6575	0.6600	0.6794	0.6862	0.7099	0.7319	0.7627	0.7867	0.7851	0.7988	0.7984
Services	0.4288	0.4369	0.4437	0.4536	0.4632	0.4723	0.4833	0.4967	0.5141	0.5249	0.5376	0.5523
Imports of goods and services	0.7573	0.7182	0.6979	0.7213	0.7352	0.7523	0.7793	0.7923	0.8067	0.7955	0.8388	0.8355
Goods	0.7873	0.7348	0.7109	0.7365	0.7496	0.7668	0.7970	0.8119	0.8255	0.8102	0.8597	0.8519
Services	0.6185	0.6350	0.6391	0.6518	0.6669	0.6834	0.6955	0.6998	0.7176	0.7266	0.7393	0.7579
GDP	0.3598	0.3804	0.3922	0.4043	0.4047	0.4158	0.4233	0.4402	0.4539	0.4718	0.4841	0.4984

MAIN EXPENDITURE COMPONENTS

	1989				1990				1991			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption (residents)	6513.1	6694.6	6976.1	7178.8	7572.2	7974.4	8383.4	8782.3	9242.7	9701.6	10106.1	10407.1
Public consumption	1585.6	1666.4	1746.7	1826.3	1904.7	2004.2	2126.9	2274.8	2450.5	2604.4	2733.5	2835.1
GFCF	3024.0	3105.0	3219.4	3352.3	3455.0	3587.2	3704.3	3812.4	3853.6	3942.7	4122.5	4251.0
Change in inventories	48.2	43.0	84.9	173.9	310.0	367.9	347.6	249.0	72.1	-45.6	-104.2	-103.8
Exports of goods and services	3413.1	3533.0	3749.8	3987.6	4183.5	4327.3	4348.6	4438.0	4348.0	4455.7	4504.7	4522.4
Goods	2344.8	2458.2	2590.5	2741.3	2868.1	2943.5	2971.3	2950.6	2917.9	2910.6	2982.9	3027.4
Services	1068.3	1074.8	1159.3	1246.4	1315.4	1383.8	1377.3	1487.4	1430.1	1545.1	1521.8	1495.0
Imports of goods and services	4087.4	4183.0	4421.5	4604.4	5032.3	4952.1	5248.7	5475.2	5450.7	5511.6	5755.8	5762.1
Goods	3492.4	3508.2	3708.1	3888.8	4225.7	4143.8	4359.3	4606.4	4585.6	4589.9	4730.2	4760.9
Services	595.0	674.8	713.4	715.5	806.6	808.3	889.5	868.7	865.2	921.7	1025.6	1001.3
GDP	10496.6	10858.9	11355.4	11914.5	12393.0	13308.9	13662.0	14081.4	14516.4	15147.3	15606.8	16149.7
Previous year prices (EUR million)												
Private consumption (residents)	6048.1	6093.0	6191.4	6279.4	7156.7	7328.7	7510.8	7656.3	8661.8	8891.6	9085.3	9188.9
Public consumption	1464.2	1489.5	1510.3	1526.6	1752.6	1779.8	1820.7	1875.4	2234.7	2291.1	2325.3	2337.2
GFCF	2816.0	2844.5	2840.1	2911.9	3264.9	3347.8	3387.8	3465.3	3686.2	3720.0	3812.4	3889.4
Change in inventories	87.4	103.5	149.9	226.5	333.3	381.4	370.8	301.5	173.5	89.1	48.5	51.6
Exports of goods and services	3247.6	3304.4	3469.1	3634.6	4043.0	4141.2	4116.5	4160.9	4241.8	4352.5	4363.9	4402.5
Goods	2245.5	2320.5	2429.1	2533.3	2793.9	2856.5	2871.1	2856.8	2903.0	2931.6	2990.5	3063.5
Services	1002.0	983.9	1040.1	1101.4	1249.2	1284.7	1245.5	1304.1	1338.7	1420.9	1373.4	1339.0
Imports of goods and services	3816.2	3921.6	4054.6	4202.3	4831.8	4972.9	5163.2	5212.8	5365.4	5522.1	5745.3	5869.7
Goods	3252.5	3297.4	3407.3	3562.0	4055.5	4204.9	4332.8	4411.8	4529.4	4641.4	4768.9	4915.9
Services	563.6	624.2	647.3	640.3	776.2	767.9	830.4	801.0	836.0	880.7	976.5	953.8
GDP	9847.2	9913.3	10106.2	10376.7	11718.8	12006.1	12043.4	12246.6	13632.5	13822.2	13890.0	13999.9
Volume (base year 2000)												
Private consumption (residents)	11879.0	11967.0	12160.4	12333.2	12643.3	12947.1	13268.7	13525.8	13870.9	14238.9	14549.1	14715.0
Public consumption	3867.4	3934.2	3989.1	4032.1	4063.3	4126.3	4221.2	4347.8	4506.4	4620.1	4689.0	4713.1
GFCF	4880.9	4930.2	4922.6	5047.1	5084.9	5213.9	5276.3	5397.1	5309.9	5358.7	5491.8	5602.7
Exports of goods and services	4603.9	4684.5	4918.0	5152.6	5330.4	5459.9	5427.3	5485.8	5322.3	5461.2	5475.4	5523.9
Goods	2833.3	2927.9	3064.9	3196.4	3314.3	3388.6	3405.9	3388.9	3339.5	3372.4	3440.2	3524.1
Services	1881.5	1847.5	1952.9	2068.0	2128.2	2188.7	2121.9	2221.9	2083.8	2211.7	2137.7	2084.2
Imports of goods and services	4655.8	4784.4	4946.7	5126.8	5451.2	5610.3	5825.1	5881.0	5898.9	6071.3	6316.7	6453.4
Goods	3884.4	3937.9	4069.3	4254.0	4485.6	4650.8	4792.3	4879.6	4914.2	5035.8	5174.1	5333.6
Services	765.7	848.0	879.4	869.9	967.3	956.9	1034.8	998.2	980.8	1033.2	1145.5	1118.9
GDP	20626.8	20765.3	21169.3	21735.9	22136.8	22679.4	22750.0	23133.9	23135.3	23457.2	23572.2	23758.8
Deflator (2000=1)												
Private consumption (residents)	0.5483	0.5594	0.5737	0.5821	0.5989	0.6159	0.6318	0.6493	0.6663	0.6813	0.6946	0.7072
Public consumption	0.4100	0.4236	0.4379	0.4529	0.4687	0.4857	0.5039	0.5232	0.5438	0.5637	0.5830	0.6015
GFCF	0.6196	0.6298	0.6540	0.6642	0.6795	0.6880	0.7021	0.7064	0.7257	0.7358	0.7507	0.7587
Exports of goods and services	0.7413	0.7542	0.7625	0.7739	0.7848	0.7926	0.8012	0.8090	0.8170	0.8159	0.8227	0.8187
Goods	0.8276	0.8396	0.8452	0.8576	0.8654	0.8686	0.8724	0.8707	0.8738	0.8631	0.8671	0.8591
Services	0.5678	0.5818	0.5936	0.6027	0.6181	0.6323	0.6491	0.6694	0.6863	0.6986	0.7119	0.7173
Imports of goods and services	0.8779	0.8743	0.8938	0.8981	0.9232	0.8827	0.9011	0.9310	0.9240	0.9078	0.9112	0.8929
Goods	0.8991	0.8909	0.9112	0.9142	0.9421	0.8910	0.9096	0.9440	0.9331	0.9114	0.9142	0.8926
Services	0.7771	0.7958	0.8113	0.8226	0.8339	0.8447	0.8596	0.8703	0.8822	0.8921	0.8953	0.8948
GDP	0.5089	0.5229	0.5364	0.5481	0.5598	0.5868	0.6005	0.6087	0.6275	0.6457	0.6621	0.6797

MAIN EXPENDITURE COMPONENTS

	1992				1993				1994			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption (residents)	10685.8	11141.5	11343.4	11603.9	11783.4	11891.2	12189.5	12436.5	12586.2	12889.5	13075.4	13354.2
Public consumption	2906.5	2976.8	3046.5	3115.8	3185.0	3248.6	3306.5	3359.0	3405.8	3461.4	3526.1	3600.0
GFCF	4500.5	4576.3	4622.5	4540.0	4330.3	4409.0	4181.0	4209.1	4295.6	4402.1	4386.0	4831.6
Change in inventories	-44.3	-20.8	-33.5	-82.2	-167.0	-193.4	-161.4	-70.9	78.1	181.4	239.1	251.1
Exports of goods and services	4628.8	4621.9	4529.4	4422.5	4413.6	4405.2	4742.7	4851.2	4897.7	5154.3	5336.1	5585.4
Goods	3135.7	3158.9	3098.4	3052.7	3053.7	3094.6	3275.3	3396.9	3531.9	3751.9	3982.7	4194.0
Services	1493.1	1463.0	1431.0	1369.8	1359.9	1310.6	1467.4	1454.2	1365.8	1402.3	1353.4	1391.4
Imports of goods and services	5930.0	5933.8	5975.0	5866.9	5923.0	5808.8	5983.2	6267.6	6311.2	6502.2	6787.4	7204.0
Goods	4933.6	4954.5	4923.1	4858.7	4715.2	4681.8	4808.5	4994.4	5237.5	5419.0	5712.3	5943.7
Services	996.4	979.3	1051.8	1008.2	1207.7	1127.0	1174.7	1273.2	1073.7	1083.2	1075.1	1260.2
GDP	16747.4	17361.9	17533.4	17733.2	17622.4	17951.7	18275.1	18517.2	18952.0	19586.4	19775.3	20418.3
Previous year prices (EUR million)												
Private consumption (residents)	10224.8	10393.2	10445.5	10588.4	11429.9	11402.5	11481.7	11488.4	12041.8	12163.9	12179.4	12273.2
Public consumption	2690.5	2682.3	2677.9	2677.1	3009.3	3017.1	3029.3	3045.8	3319.6	3341.3	3361.9	3381.5
GFCF	4382.7	4434.4	4432.1	4298.6	4264.4	4265.5	4010.6	3945.2	4174.2	4262.9	4251.9	4617.9
Change in inventories	98.4	121.6	121.3	97.5	50.0	23.8	18.7	34.7	72.0	100.3	119.6	130.1
Exports of goods and services	4618.6	4601.2	4565.6	4471.2	4423.3	4368.7	4572.5	4633.3	4761.6	4912.2	5075.8	5227.6
Goods	3153.0	3199.1	3198.9	3161.8	3091.5	3090.1	3171.6	3272.6	3450.4	3582.6	3797.5	3929.9
Services	1465.6	1402.2	1366.7	1309.5	1331.8	1278.6	1400.9	1360.7	1311.2	1329.6	1278.2	1297.6
Imports of goods and services	6084.0	6231.8	6377.8	6308.9	6068.4	5881.1	5878.9	6061.4	6118.5	6310.3	6621.3	6979.8
Goods	5077.2	5226.0	5291.7	5245.7	4834.9	4735.5	4734.2	4832.8	5076.9	5263.5	5571.1	5741.1
Services	1006.7	1005.8	1086.1	1063.2	1233.5	1145.5	1144.7	1228.6	1041.6	1046.8	1050.2	1238.7
GDP	15931.0	16001.0	15864.6	15823.9	17108.6	17196.4	17233.9	17086.1	18250.8	18470.4	18367.4	18650.4
Volume (base year 2000)												
Private consumption (residents)	14867.5	15112.3	15188.4	15396.2	15460.7	15423.5	15530.7	15539.8	15445.9	15602.5	15622.4	15742.6
Public consumption	4692.4	4678.2	4670.5	4669.2	4674.4	4686.4	4705.3	4731.1	4763.7	4794.8	4824.4	4852.5
GFCF	5898.7	5968.3	5965.2	5785.5	5522.0	5523.3	5193.3	5108.6	5202.0	5312.5	5298.9	5754.9
Exports of goods and services	5642.3	5621.0	5577.5	5462.2	5419.7	5352.8	5602.5	5677.0	5702.7	5883.2	6079.0	6260.8
Goods	3642.3	3695.5	3695.4	3652.4	3647.9	3646.2	3742.4	3861.6	4009.6	4163.2	4413.0	4566.8
Services	2083.3	1993.2	1942.7	1861.4	1823.0	1750.3	1917.7	1862.6	1724.2	1748.4	1680.9	1706.4
Imports of goods and services	6695.6	6858.2	7019.0	6943.2	7043.8	6826.4	6823.8	7035.7	7074.4	7296.2	7655.8	8070.3
Goods	5564.4	5727.5	5799.5	5749.1	5614.2	5498.9	5497.3	5611.8	5876.0	6092.0	6448.1	6644.7
Services	1129.4	1128.3	1218.5	1192.7	1427.0	1325.3	1324.3	1421.4	1197.4	1203.3	1207.2	1424.0
GDP	24361.6	24468.7	24260.0	24197.9	23992.1	24115.2	24167.8	23960.5	24270.5	24562.5	24425.6	24801.9
Deflator (2000=1)												
Private consumption (residents)	0.7187	0.7372	0.7468	0.7537	0.7622	0.7710	0.7849	0.8003	0.8149	0.8261	0.8370	0.8483
Public consumption	0.6194	0.6363	0.6523	0.6673	0.6814	0.6932	0.7027	0.7100	0.7149	0.7219	0.7309	0.7419
GFCF	0.7630	0.7668	0.7749	0.7847	0.7842	0.7983	0.8051	0.8239	0.8257	0.8286	0.8277	0.8396
Exports of goods and services	0.8204	0.8223	0.8121	0.8097	0.8144	0.8230	0.8465	0.8545	0.8588	0.8761	0.8778	0.8921
Goods	0.8609	0.8548	0.8385	0.8358	0.8371	0.8487	0.8752	0.8797	0.8809	0.9012	0.9025	0.9184
Services	0.7167	0.7340	0.7366	0.7359	0.7460	0.7488	0.7652	0.7807	0.7921	0.8021	0.8052	0.8154
Imports of goods and services	0.8857	0.8652	0.8513	0.8450	0.8409	0.8509	0.8768	0.8908	0.8921	0.8912	0.8866	0.8926
Goods	0.8866	0.8650	0.8489	0.8451	0.8399	0.8514	0.8747	0.8900	0.8913	0.8895	0.8859	0.8945
Services	0.8822	0.8679	0.8632	0.8453	0.8463	0.8504	0.8871	0.8958	0.8967	0.9002	0.8906	0.8850
GDP	0.6874	0.7096	0.7227	0.7328	0.7345	0.7444	0.7562	0.7728	0.7809	0.7974	0.8096	0.8233

MAIN EXPENDITURE COMPONENTS

	1995				1996				1997			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption (residents)	13610.3	13932.0	13890.3	14051.7	14418.1	14582.0	14916.0	15077.0	15394.0	15472.2	15890.2	16100.2
Public consumption	3683.3	3764.1	3842.4	3917.6	3989.1	4063.7	4142.0	4224.6	4311.7	4394.4	4472.6	4546.3
GFCF	4708.2	4798.2	4775.4	4876.7	4892.9	5020.1	5342.4	5585.6	5922.7	6065.5	6310.3	6393.4
Change in inventories	215.3	193.2	173.1	153.7	130.2	133.0	135.7	147.2	122.3	125.3	111.1	119.2
Exports of goods and services	5999.7	5909.5	6055.9	6391.4	6402.1	6390.4	6317.9	6395.4	6495.2	6944.6	7085.5	7456.0
Goods	4486.9	4377.2	4502.8	4828.2	4892.5	4903.3	4830.4	4856.9	4947.1	5256.5	5366.7	5659.1
Services	1512.8	1532.3	1553.0	1563.2	1509.6	1487.2	1487.4	1538.6	1548.1	1688.0	1718.8	1796.9
Imports of goods and services	7429.3	7513.4	7276.3	7579.0	7716.5	7805.8	7986.6	8288.8	8404.8	8715.2	9195.0	9519.5
Goods	6200.6	6288.1	6058.7	6291.5	6491.0	6525.1	6691.8	6952.7	7106.1	7358.3	7758.6	7982.5
Services	1228.8	1225.2	1217.6	1287.5	1225.4	1280.7	1294.8	1336.1	1298.7	1356.9	1436.3	1537.1
GDP	20787.5	21083.7	21460.8	21812.1	22116.0	22383.5	22867.4	23141.1	23841.1	24286.8	24674.8	25095.6
Previous year prices (EUR million)												
Private consumption (residents)	13116.2	13308.6	13192.5	13245.3	14158.4	14213.0	14449.4	14505.0	15075.7	15119.5	15405.8	15503.3
Public consumption	3549.4	3569.7	3591.1	3613.4	3861.1	3888.6	3918.8	3951.7	4190.7	4223.9	4252.7	4277.2
GFCF	4610.9	4678.8	4624.6	4645.7	4776.7	4912.8	5180.6	5368.0	5766.3	5898.6	6035.5	6116.4
Change in inventories	131.6	136.1	143.8	154.5	176.8	158.0	133.2	122.0	71.1	67.9	58.3	62.8
Exports of goods and services	5809.1	5652.9	5814.9	6163.1	6354.9	6482.1	6477.2	6467.0	6440.0	6790.5	6778.3	7069.5
Goods	4348.9	4170.1	4281.9	4643.2	4867.3	5027.6	5046.4	4999.4	4916.5	5164.6	5142.9	5405.9
Services	1460.2	1482.8	1533.0	1519.9	1487.5	1454.5	1430.8	1467.6	1523.5	1625.9	1635.4	1663.5
Imports of goods and services	7330.5	7424.8	7181.8	7420.9	7604.3	7645.2	7900.8	8174.3	8327.4	8579.8	8818.6	9183.8
Goods	6085.7	6196.4	5970.2	6144.0	6368.7	6385.2	6655.1	6916.8	7042.9	7279.6	7445.9	7754.9
Services	1244.8	1228.4	1211.6	1276.9	1235.6	1260.1	1245.6	1257.5	1284.5	1300.2	1372.7	1428.9
GDP	19886.7	19921.3	20185.1	20401.1	21723.6	22009.2	22258.4	22239.2	23216.4	23520.5	23711.9	23845.4
Volume (base year 2000)												
Private consumption (residents)	15771.6	16002.9	15863.4	15926.8	16220.4	16282.9	16553.7	16617.4	16783.1	16831.8	17150.5	17259.1
Public consumption	4879.1	4907.0	4936.3	4967.0	4999.1	5034.7	5073.7	5116.3	5161.7	5202.6	5238.1	5268.2
GFCF	5551.1	5632.8	5567.6	5592.9	5571.0	5729.7	6042.1	6260.6	6530.6	6680.4	6835.5	6927.1
Exports of goods and services	6626.8	6448.6	6633.4	7030.6	6976.6	7116.3	7110.9	7099.7	7146.4	7535.3	7521.8	7844.9
Goods	4824.9	4626.5	4750.5	5151.4	5177.1	5347.7	5367.6	5317.6	5352.2	5622.4	5598.8	5885.1
Services	1817.0	1845.1	1907.6	1891.3	1801.3	1761.3	1732.6	1777.1	1789.0	1909.2	1920.4	1953.4
Imports of goods and services	8230.7	8336.7	8063.9	8332.2	8412.1	8457.4	8740.1	9042.7	9075.0	9350.1	9610.3	10008.3
Goods	6835.3	6959.6	6705.6	6900.8	7025.7	7043.9	7341.7	7630.3	7671.9	7929.8	8110.9	8447.5
Services	1394.3	1376.0	1357.1	1430.3	1384.8	1412.2	1396.0	1409.3	1400.8	1417.9	1497.0	1558.3
GDP	24768.8	24811.9	25140.5	25409.5	25547.3	25883.2	26176.2	26153.6	26615.8	26964.4	27183.9	27336.9
Deflator (2000=1)												
Private consumption (residents)	0.8630	0.8706	0.8756	0.8823	0.8889	0.8955	0.9011	0.9073	0.9172	0.9192	0.9265	0.9328
Public consumption	0.7549	0.7671	0.7784	0.7887	0.7980	0.8071	0.8164	0.8257	0.8353	0.8447	0.8539	0.8630
GFCF	0.8482	0.8518	0.8577	0.8719	0.8783	0.8762	0.8842	0.8922	0.9069	0.9079	0.9232	0.9230
Exports of goods and services	0.9054	0.9164	0.9129	0.9091	0.9177	0.8980	0.8885	0.9008	0.9089	0.9216	0.9420	0.9504
Goods	0.9300	0.9461	0.9479	0.9373	0.9450	0.9169	0.8999	0.9134	0.9243	0.9349	0.9586	0.9616
Services	0.8326	0.8305	0.8141	0.8265	0.8381	0.8444	0.8585	0.8658	0.8653	0.8841	0.8951	0.9199
Imports of goods and services	0.9026	0.9012	0.9023	0.9096	0.9173	0.9230	0.9138	0.9166	0.9261	0.9321	0.9568	0.9512
Goods	0.9071	0.9035	0.9035	0.9117	0.9239	0.9263	0.9115	0.9112	0.9262	0.9279	0.9566	0.9449
Services	0.8813	0.8904	0.8972	0.9002	0.8850	0.9069	0.9275	0.9480	0.9271	0.9570	0.9595	0.9864
GDP	0.8393	0.8497	0.8536	0.8584	0.8657	0.8648	0.8736	0.8848	0.8957	0.9007	0.9077	0.9180

MAIN EXPENDITURE COMPONENTS

	1998				1999				2000			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption (residents)	16430.1	16730.2	17065.2	17477.3	17842.7	18054.5	18345.1	18577.8	19164.3	19307.3	19730.7	19897.9
Public consumption	4615.6	4703.8	4811.0	4937.8	5085.2	5236.0	5389.9	5546.4	5704.9	5848.7	5977.7	6092.3
GFCF	6881.2	6969.3	7067.7	7325.9	7414.4	7503.7	7771.6	7927.1	8346.9	8109.9	8328.1	8318.3
Change in inventories	194.2	210.5	230.3	250.2	284.9	294.3	284.6	262.0	213.0	189.9	177.8	176.8
Exports of goods and services	7581.0	7791.7	7879.6	7590.9	7724.3	7794.2	8031.4	8322.7	8839.3	8716.6	9194.0	9636.7
Goods	5622.9	5777.7	5733.0	5600.3	5656.1	5709.4	5918.0	6062.1	6530.9	6364.7	6825.3	7053.6
Services	1958.0	2014.0	2146.6	1990.6	2068.2	2084.7	2113.4	2260.7	2308.5	2351.9	2368.7	2583.2
Imports of goods and services	9870.6	10153.7	10126.7	10192.2	10365.4	10544.6	11137.4	11452.6	12463.4	11935.0	12426.8	12876.0
Goods	8234.5	8603.6	8598.3	8576.2	8805.0	8967.6	9539.6	9768.1	10690.5	10095.8	10645.3	10968.1
Services	1636.1	1550.2	1528.4	1616.0	1560.5	1577.1	1597.8	1684.4	1772.8	1839.2	1781.5	1908.0
GDP	25831.5	26251.8	26927.1	27390.0	27986.1	28338.0	28685.1	29183.4	29805.2	30237.4	30981.6	31246.0
Previous year prices (EUR million)												
Private consumption (residents)	16190.3	16411.8	16628.2	16930.7	17627.3	17711.5	17874.3	18001.6	18808.4	18759.3	18957.7	18987.7
Public consumption	4495.7	4534.0	4589.2	4661.3	4952.5	5029.4	5091.8	5139.8	5439.7	5478.7	5521.7	5568.8
GFCF	6791.2	6820.1	6888.9	7084.8	7392.9	7403.1	7568.9	7618.5	8118.0	7819.9	7957.2	7787.4
Change in inventories	209.2	242.5	291.5	337.4	308.2	323.7	308.9	279.7	214.4	182.6	164.6	160.4
Exports of goods and services	7447.5	7571.3	7769.0	7563.3	7767.3	7838.3	8012.5	8145.6	8621.0	8317.8	8638.9	8973.2
Goods	5562.8	5676.6	5761.3	5700.8	5728.0	5780.2	5931.9	5990.7	6345.8	6047.5	6364.2	6495.6
Services	1884.7	1894.6	2007.7	1862.5	2039.3	2058.1	2080.6	2154.9	2275.2	2270.2	2274.7	2477.6
Imports of goods and services	9936.3	10203.2	10287.3	10487.6	10679.3	10759.7	11082.9	11304.4	11819.8	11199.9	11307.1	11490.9
Goods	8319.8	8656.6	8747.4	8840.5	9075.7	9141.3	9444.8	9611.4	10116.9	9476.5	9641.4	9749.3
Services	1616.5	1546.6	1539.9	1647.1	1603.6	1618.4	1638.1	1693.1	1702.9	1723.4	1665.8	1741.5
GDP	25197.7	25376.4	25879.5	26089.9	27368.9	27546.3	27773.5	27880.7	29381.8	29358.3	29933.1	29986.6
Volume (base year 2000)												
Private consumption (residents)	17521.5	17761.1	17995.4	18322.7	18642.2	18731.2	18903.4	19038.0	19450.2	19402.3	19607.7	19640.0
Public consumption	5293.6	5338.6	5403.6	5488.5	5590.4	5677.2	5747.6	5801.8	5840.6	5881.4	5926.3	5975.4
GFCF	7418.8	7450.4	7525.6	7739.6	7887.7	7898.5	8075.4	8128.3	8483.7	8172.6	8312.7	8134.2
Exports of goods and services	7997.7	8130.6	8342.9	8122.1	8208.0	8283.0	8467.2	8607.8	9080.4	8758.9	9099.3	9448.3
Goods	5884.8	6005.3	6094.9	6030.9	6051.0	6106.1	6266.4	6328.5	6728.1	6411.8	6747.6	6887.0
Services	2113.7	2124.8	2251.5	2088.7	2157.4	2177.3	2201.1	2279.7	2352.2	2347.0	2351.7	2561.3
Imports of goods and services	10548.9	10832.3	10921.5	11134.2	11498.2	11584.8	11932.8	12171.3	12822.8	12148.2	12265.9	12464.3
Goods	8858.2	9216.8	9313.5	9412.6	9819.8	9890.8	10219.2	10399.4	11003.3	10306.8	10486.1	10603.6
Services	1686.8	1613.9	1606.9	1718.8	1678.5	1694.0	1714.6	1772.2	1819.5	1841.4	1779.8	1860.8
GDP	27823.8	28021.1	28576.6	28808.9	29125.8	29314.5	29556.3	29670.4	30257.1	30258.5	30852.9	30901.8
Deflator (2000=1)												
Private consumption (residents)	0.9377	0.9420	0.9483	0.9539	0.9571	0.9639	0.9705	0.9758	0.9853	0.9951	1.0063	1.0131
Public consumption	0.8719	0.8811	0.8903	0.8997	0.9096	0.9223	0.9378	0.9560	0.9768	0.9944	1.0087	1.0196
GFCF	0.9275	0.9354	0.9392	0.9466	0.9400	0.9500	0.9624	0.9752	0.9839	0.9923	1.0018	1.0226
Exports of goods and services	0.9479	0.9583	0.9445	0.9346	0.9411	0.9410	0.9485	0.9669	0.9735	0.9952	1.0104	1.0199
Goods	0.9555	0.9621	0.9406	0.9286	0.9347	0.9350	0.9444	0.9579	0.9707	0.9927	1.0115	1.0242
Services	0.9264	0.9479	0.9534	0.9530	0.9587	0.9575	0.9602	0.9917	0.9814	1.0021	1.0073	1.0085
Imports of goods and services	0.9357	0.9374	0.9272	0.9154	0.9015	0.9102	0.9333	0.9410	0.9720	0.9825	1.0131	1.0330
Goods	0.9296	0.9335	0.9232	0.9111	0.8967	0.9067	0.9335	0.9393	0.9716	0.9795	1.0152	1.0344
Services	0.9699	0.9605	0.9512	0.9402	0.9297	0.9310	0.9319	0.9505	0.9744	0.9988	1.0009	1.0254
GDP	0.9284	0.9369	0.9423	0.9507	0.9609	0.9667	0.9705	0.9836	0.9851	0.9993	1.0042	1.0111

MAIN EXPENDITURE COMPONENTS

	2001				2002				2003			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption (residents)	20158.3	20446.1	20527.3	20665.2	21050.8	21268.4	21541.9	21524.0	21680.4	21802.7	22079.5	22291.1
Public consumption	6193.0	6299.8	6412.3	6530.7	6655.7	6758.6	6837.4	6891.9	6923.8	6972.1	7034.2	7109.8
GFCF	8191.6	8529.5	8674.9	8822.4	8639.3	8673.7	8391.6	8136.7	7865.6	7707.6	7719.8	7658.3
Change in inventories	231.4	163.9	339.1	78.7	77.9	13.0	123.6	104.4	11.4	10.8	125.4	264.5
Exports of goods and services	9455.8	9408.9	9109.4	9386.4	9256.0	9587.6	9548.9	9486.8	9732.2	9442.4	9671.8	9717.2
Goods	7048.2	6914.4	6646.4	6773.8	6688.8	7016.8	6935.2	6967.5	7225.5	6979.9	7081.1	7151.1
Services	2407.6	2494.5	2463.0	2612.6	2567.1	2570.8	2613.8	2519.4	2506.7	2462.4	2590.7	2566.1
Imports of goods and services	12688.5	12787.9	12608.5	12231.2	12236.4	12334.5	12425.8	12138.2	12170.3	11554.6	12098.2	12062.7
Goods	10864.6	10886.3	10798.3	10376.9	10408.7	10443.9	10629.6	10303.3	10434.3	9841.1	10347.9	10296.3
Services	1823.8	1901.5	1810.2	1854.3	1827.7	1890.7	1796.2	1834.9	1735.9	1713.5	1750.3	1766.4
GDP	31541.5	32060.3	32454.5	33252.1	33443.4	33966.8	34017.7	34005.7	34043.2	34380.9	34532.4	34978.2
Previous year prices (EUR million)												
Private consumption (residents)	19683.2	19815.6	19801.1	19834.0	20709.9	20738.6	20814.0	20622.7	21210.5	21270.1	21408.5	21485.7
Public consumption	6028.5	6079.7	6129.0	6176.3	6482.3	6518.9	6544.8	6559.9	6813.6	6819.7	6833.7	6855.6
GFCF	8041.0	8370.6	8462.7	8555.3	8551.9	8509.3	8139.7	7825.1	7738.6	7608.3	7619.9	7497.9
Change in inventories	242.3	215.6	331.8	62.7	109.3	82.5	137.9	13.1	87.0	67.9	83.7	100.6
Exports of goods and services	9343.3	9238.2	9089.7	9376.7	9319.7	9573.2	9505.6	9502.1	9776.1	9594.7	9907.7	9989.0
Goods	6953.8	6762.7	6643.4	6821.7	6776.9	7064.5	6974.7	7060.2	7329.9	7180.1	7366.2	7472.0
Services	2389.5	2475.6	2446.2	2555.0	2542.8	2508.7	2530.9	2441.8	2446.1	2414.7	2541.5	2517.0
Imports of goods and services	12460.2	12557.1	12602.2	12522.3	12469.5	12531.5	12642.1	12327.1	12099.7	11905.6	12411.7	12478.8
Goods	10682.2	10705.2	10842.6	10724.7	10649.2	10684.3	10894.0	10566.0	10379.3	10212.8	10674.5	10720.7
Services	1778.0	1851.9	1759.6	1797.6	1820.3	1847.2	1748.1	1761.2	1720.4	1692.8	1737.2	1758.1
GDP	30878.1	31162.6	31212.0	31482.7	32703.5	32890.9	32499.8	32195.8	33526.1	33455.1	33441.9	33450.0
Volume (base year 2000)												
Private consumption (residents)	19683.2	19815.6	19801.1	19834.0	20035.7	20063.4	20136.3	19951.3	19919.2	19975.2	20105.1	20177.6
Public consumption	6028.5	6079.7	6129.0	6176.3	6221.8	6256.9	6281.7	6296.3	6289.8	6295.3	6308.2	6328.5
GFCF	8041.0	8370.6	8462.7	8555.3	8354.7	8313.1	7952.0	7644.8	7378.1	7253.8	7264.9	7148.5
Exports of goods and services	9343.3	9238.2	9089.7	9376.7	9241.7	9493.1	9426.1	9422.6	9699.7	9519.8	9830.3	9911.0
Goods	6953.8	6762.7	6643.4	6821.7	6727.1	7012.6	6923.5	7008.4	7346.7	7196.5	7383.0	7489.1
Services	2389.5	2475.6	2446.2	2555.0	2514.4	2480.7	2502.7	2414.6	2360.7	2330.3	2452.8	2429.1
Imports of goods and services	12460.2	12557.1	12602.2	12522.3	12426.3	12488.1	12598.3	12284.5	12262.8	12066.1	12579.0	12647.0
Goods	10682.2	10705.2	10842.6	10724.7	10656.3	10691.4	10901.3	10573.0	10636.8	10466.1	10939.3	10986.6
Services	1778.0	1851.9	1759.6	1797.6	1770.3	1796.5	1700.1	1712.8	1633.9	1607.6	1649.8	1669.7
GDP	30878.1	31162.6	31212.0	31482.7	31546.9	31727.7	31350.4	31057.1	31112.2	31046.3	31034.0	31041.6
Deflator (2000=1)												
Private consumption (residents)	1.0241	1.0318	1.0367	1.0419	1.0507	1.0601	1.0698	1.0788	1.0884	1.0915	1.0982	1.1047
Public consumption	1.0273	1.0362	1.0462	1.0574	1.0698	1.0802	1.0885	1.0946	1.1008	1.1075	1.1151	1.1235
GFCF	1.0187	1.0190	1.0251	1.0312	1.0341	1.0434	1.0553	1.0644	1.0661	1.0626	1.0626	1.0713
Exports of goods and services	1.0120	1.0185	1.0022	1.0010	1.0015	1.0100	1.0130	1.0068	1.0034	0.9919	0.9839	0.9804
Goods	1.0136	1.0224	1.0004	0.9930	0.9943	1.0006	1.0017	0.9942	0.9835	0.9699	0.9591	0.9549
Services	1.0076	1.0077	1.0068	1.0225	1.0210	1.0363	1.0444	1.0434	1.0618	1.0567	1.0562	1.0564
Imports of goods and services	1.0183	1.0184	1.0005	0.9768	0.9847	0.9877	0.9863	0.9881	0.9925	0.9576	0.9618	0.9538
Goods	1.0171	1.0169	0.9959	0.9676	0.9768	0.9768	0.9751	0.9745	0.9810	0.9403	0.9459	0.9372
Services	1.0258	1.0268	1.0287	1.0316	1.0324	1.0524	1.0565	1.0712	1.0625	1.0658	1.0609	1.0580
GDP	1.0215	1.0288	1.0398	1.0562	1.0601	1.0706	1.0851	1.0949	1.0942	1.1074	1.1127	1.1268

MAIN EXPENDITURE COMPONENTS

	2004				2005			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)								
Private consumption (residents)	22586.3	22926.4	23164.8	23407.9	23639.4	24005.6	23995.1	24257.2
Public consumption	7201.1	7302.7	7413.7	7534.8	7667.8	7767.0	7830.6	7857.5
GFCF	7835.0	8026.4	8018.1	7968.2	7974.6	8066.3	7938.7	7961.5
Change in inventories	68.6	88.4	281.9	420.2	204.2	56.8	313.5	369.8
Exports of goods and services	10086.9	10362.1	10195.5	10243.2	10156.2	10418.7	10684.9	10740.4
Goods	7390.8	7481.5	7473.8	7482.6	7440.3	7647.2	7861.6	7817.0
Services	2696.1	2880.6	2721.7	2760.5	2715.9	2771.5	2823.3	2923.4
Imports of goods and services	12532.5	12934.8	13220.2	13403.2	13440.0	13563.8	13933.4	13954.5
Goods	10745.0	11108.9	11342.0	11465.6	11591.9	11645.2	12029.1	11960.1
Services	1787.4	1825.9	1878.2	1937.6	1848.1	1918.6	1904.3	1994.4
GDP	35245.3	35771.3	35853.8	36171.1	36202.3	36750.6	36829.5	37232.0
Previous year prices (EUR million)								
Private consumption (residents)	22254.4	22436.8	22545.6	22646.8	23352.7	23586.3	23335.0	23432.4
Public consumption	7065.1	7099.2	7136.4	7176.7	7461.0	7494.4	7520.0	7537.8
GFCF	7746.1	7836.0	7755.6	7605.5	7846.7	7907.4	7644.8	7597.9
Change in inventories	180.7	172.6	190.4	209.4	268.4	39.7	114.1	88.7
Exports of goods and services	10142.1	10310.0	10067.1	10074.3	10075.3	10408.9	10386.7	10395.0
Goods	7460.2	7472.2	7381.8	7353.7	7349.0	7631.4	7611.7	7525.6
Services	2681.9	2837.8	2685.3	2720.6	2726.4	2777.6	2775.0	2869.4
Imports of goods and services	12536.6	12784.6	12910.8	13028.3	13263.3	13366.9	13196.4	13143.6
Goods	10734.1	10950.5	11011.2	11053.7	11406.8	11445.0	11323.4	11180.0
Services	1802.5	1834.1	1899.5	1974.7	1856.5	1921.9	1873.0	1963.6
GDP	34851.8	35070.0	34784.3	34684.3	35740.9	36069.8	35804.3	35908.3
Volume (base year 2000)								
Private consumption (residents)	20309.8	20476.3	20575.6	20667.9	20802.6	21010.7	20786.8	20873.6
Public consumption	6355.0	6385.7	6419.2	6455.4	6489.0	6518.0	6540.3	6555.8
GFCF	7269.1	7353.5	7278.0	7137.2	7154.4	7209.7	6970.4	6927.6
Exports of goods and services	10246.6	10416.2	10170.8	10178.1	10105.9	10440.5	10418.2	10426.5
Goods	7716.7	7729.1	7635.6	7606.5	7560.6	7851.1	7830.9	7742.4
Services	2535.4	2682.8	2538.6	2572.0	2546.4	2594.2	2591.8	2680.0
Imports of goods and services	12973.6	13230.2	13360.8	13482.4	13506.8	13612.3	13438.7	13384.9
Goods	11287.4	11515.0	11578.8	11623.4	11749.8	11789.2	11663.9	11516.2
Services	1697.7	1727.4	1789.1	1859.8	1767.8	1830.0	1783.4	1869.7
GDP	31390.0	31586.6	31329.3	31239.2	31369.2	31657.9	31424.8	31516.1
Deflator (2000=1)								
Private consumption (residents)	1.1121	1.1197	1.1258	1.1326	1.1364	1.1425	1.1543	1.1621
Public consumption	1.1331	1.1436	1.1549	1.1672	1.1817	1.1916	1.1973	1.1986
GFCF	1.0778	1.0915	1.1017	1.1164	1.1146	1.1188	1.1389	1.1493
Exports of goods and services	0.9844	0.9948	1.0024	1.0064	1.0050	0.9979	1.0256	1.0301
Goods	0.9578	0.9680	0.9788	0.9837	0.9841	0.9740	1.0039	1.0096
Services	1.0634	1.0737	1.0721	1.0733	1.0666	1.0683	1.0893	1.0908
Imports of goods and services	0.9660	0.9777	0.9895	0.9941	0.9951	0.9964	1.0368	1.0425
Goods	0.9519	0.9647	0.9795	0.9864	0.9866	0.9878	1.0313	1.0385
Services	1.0529	1.0570	1.0498	1.0418	1.0454	1.0484	1.0678	1.0667
GDP	1.1228	1.1325	1.1444	1.1579	1.1541	1.1609	1.1720	1.1814

PRIVATE CONSUMPTION (RESIDENTS)

	1977				1978				1979			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption	575.3	612.6	648.1	672.3	704.5	732.5	777.1	827.8	855.3	903.6	968.5	1059.6
Durables	65.6	72.9	73.5	72.9	78.3	80.4	86.6	87.7	95.9	98.3	110.2	125.1
Non-durables	509.7	539.7	574.6	599.4	626.2	652.0	690.5	740.1	759.4	805.3	858.4	934.6
Previous year prices (EUR million)												
Private consumption					651.4	650.5	658.7	667.2	781.9	791.6	804.9	819.8
Durables					72.5	71.9	74.9	73.8	91.1	88.7	93.1	97.1
Non-durables					578.9	578.5	583.7	593.5	690.8	702.9	711.8	722.7
Volume (base year 2000)												
Private consumption					7687.1	7675.8	7772.4	7873.7	7971.0	8069.6	8204.7	8357.3
Durables					760.0	754.2	785.5	773.5	840.6	818.3	858.9	896.2
Non-durables					6960.5	6955.7	7018.2	7135.1	7158.5	7283.8	7375.5	7488.7
Deflator (2000=1)												
Private consumption					0.0916	0.0954	0.1000	0.1051	0.1073	0.1120	0.1180	0.1268
Durables					0.1030	0.1067	0.1103	0.1134	0.1141	0.1201	0.1282	0.1395
Non-durables					0.0900	0.0937	0.0984	0.1037	0.1061	0.1106	0.1164	0.1248

GROSS FIXED CAPITAL FORMATION

	1977				1978				1979			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Gross fixed capital formation	264.5	297.1	305.0	312.8	302.4	322.9	345.0	378.5	430.3	482.7	526.2	531.6
Machinery and equipment	52.0	68.2	73.5	80.1	78.3	85.8	88.5	85.4	89.2	99.6	112.5	118.2
Transport material	36.9	40.7	41.4	43.6	42.5	45.1	43.1	46.1	44.8	49.0	49.0	53.0
Construction	143.1	148.4	148.8	146.5	140.6	149.2	170.1	205.0	252.5	286.2	312.0	306.3
Others	32.5	39.8	41.2	42.6	40.9	42.8	43.4	41.9	43.8	47.9	52.7	54.1
Previous year prices (EUR million)												
Gross fixed capital formation					274.8	278.7	280.5	288.1	371.9	394.4	407.8	387.7
Machinery and equipment					70.9	74.9	73.6	67.7	79.6	85.8	91.3	88.7
Transport material					35.9	35.3	30.9	30.3	36.3	37.6	35.7	36.7
Construction					132.2	133.0	142.6	160.1	219.3	232.3	240.0	223.2
Others					35.7	35.5	33.4	30.1	36.7	38.8	40.7	39.1
Volume (base year 2000)												
Gross fixed capital formation					2974.5	3017.5	3036.8	3119.3	3349.0	3552.6	3672.8	3491.5
Machinery and equipment					485.5	512.7	503.8	463.5	462.8	498.6	531.2	515.8
Transport material					294.4	289.7	253.1	248.0	222.8	231.0	219.3	225.2
Construction					1883.5	1894.6	2032.3	2280.9	2668.4	2826.8	2920.5	2715.9
Others					450.0	447.5	420.7	378.9	368.1	389.0	408.6	392.3
Deflator (2000=1)												
Gross fixed capital formation					0.1017	0.1070	0.1136	0.1213	0.1285	0.1359	0.1433	0.1522
Machinery and equipment					0.1613	0.1674	0.1756	0.1843	0.1928	0.1997	0.2117	0.2291
Transport material					0.1443	0.1558	0.1702	0.1859	0.2011	0.2122	0.2234	0.2354
Construction					0.0747	0.0788	0.0837	0.0899	0.0946	0.1012	0.1068	0.1128
Others					0.0910	0.0956	0.1033	0.1106	0.1190	0.1232	0.1291	0.1379

PRIVATE CONSUMPTION (RESIDENTS)

	1980				1981				1982			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption	1139.3	1222.0	1286.3	1345.4	1423.5	1497.5	1590.2	1674.7	1749.1	1838.3	1905.3	1977.2
Durables	145.0	155.7	174.2	179.3	187.5	195.7	198.1	209.3	205.4	224.0	221.0	227.8
Non-durables	994.2	1066.3	1112.2	1166.1	1236.0	1301.8	1392.1	1465.4	1543.7	1614.3	1684.4	1749.4
Previous year prices (EUR million)												
Private consumption	1003.6	1026.9	1043.2	1051.5	1271.5	1282.9	1288.8	1296.0	1576.2	1590.7	1593.9	1591.5
Durables	119.9	122.1	128.5	127.2	164.8	164.7	158.3	160.2	189.4	198.3	189.1	188.7
Non-durables	883.6	904.9	914.8	924.4	1106.7	1118.2	1130.5	1135.8	1386.9	1392.5	1404.8	1402.8
Volume (base year 2000)												
Private consumption	8639.6	8840.9	8981.3	9052.7	9044.1	9125.3	9166.7	9217.9	9314.4	9400.0	9418.6	9404.6
Durables	953.6	970.7	1021.7	1011.1	996.6	996.1	957.4	968.9	938.7	982.8	937.2	935.5
Non-durables	7712.5	7897.9	7984.2	8068.2	8076.6	8160.5	8249.7	8288.4	8424.9	8458.9	8533.9	8521.5
Deflator (2000=1)												
Private consumption	0.1319	0.1382	0.1432	0.1486	0.1574	0.1641	0.1735	0.1817	0.1878	0.1956	0.2023	0.2102
Durables	0.1521	0.1604	0.1705	0.1773	0.1882	0.1964	0.2069	0.2160	0.2188	0.2279	0.2358	0.2435
Non-durables	0.1289	0.1350	0.1393	0.1445	0.1530	0.1595	0.1687	0.1768	0.1832	0.1908	0.1974	0.2053

GROSS FIXED CAPITAL FORMATION

	1980				1981				1982			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Gross fixed capital formation	530.6	538.6	558.7	612.1	700.1	759.9	814.2	828.6	876.2	903.2	928.3	948.1
Machinery and equipment	133.4	144.2	154.3	166.5	183.6	191.7	212.0	211.4	224.6	236.5	240.6	237.9
Transport material	53.8	58.1	64.2	69.8	87.9	92.8	98.0	98.4	94.0	95.5	95.3	96.2
Construction	284.5	272.6	272.8	300.8	342.7	382.8	403.9	421.2	458.4	466.8	487.3	507.3
Others	58.9	63.7	67.4	74.9	85.9	92.6	100.3	97.5	99.2	104.4	105.1	106.6
Previous year prices (EUR million)												
Gross fixed capital formation	462.3	438.1	444.9	465.6	616.4	636.0	666.7	673.0	800.7	785.6	778.2	765.8
Machinery and equipment	114.3	114.1	122.1	128.7	168.6	168.7	184.7	185.4	203.1	200.4	197.7	191.9
Transport material	48.2	48.9	53.1	54.8	76.4	76.4	80.0	82.3	90.9	90.0	88.6	87.9
Construction	246.7	222.4	213.1	222.0	296.5	315.6	320.4	324.6	413.4	404.3	401.9	397.8
Others	53.1	52.8	56.6	60.1	74.8	75.2	81.6	80.8	93.2	90.8	89.9	88.2
Volume (base year 2000)												
Gross fixed capital formation	3299.4	3127.1	3175.3	3322.8	3556.4	3669.5	3846.9	3882.9	3859.4	3786.5	3751.1	3691.5
Machinery and equipment	547.4	546.3	584.7	616.2	646.3	646.9	708.3	710.7	689.8	680.7	671.5	651.9
Transport material	221.0	224.2	243.4	251.3	292.2	292.1	305.7	314.5	290.5	287.6	283.2	280.6
Construction	2373.1	2139.3	2050.7	2135.7	2281.1	2428.0	2465.1	2496.7	2578.4	2521.3	2506.9	2481.3
Others	416.8	414.5	444.0	471.7	493.5	496.1	538.0	532.6	510.2	497.2	492.1	482.7
Deflator (2000=1)												
Gross fixed capital formation	0.1608	0.1722	0.1760	0.1842	0.1968	0.2071	0.2116	0.2134	0.2270	0.2385	0.2475	0.2568
Machinery and equipment	0.2436	0.2640	0.2640	0.2702	0.2841	0.2963	0.2993	0.2974	0.3255	0.3475	0.3583	0.3650
Transport material	0.2433	0.2590	0.2636	0.2779	0.3006	0.3176	0.3207	0.3130	0.3237	0.3321	0.3365	0.3429
Construction	0.1199	0.1274	0.1330	0.1409	0.1502	0.1577	0.1638	0.1687	0.1778	0.1851	0.1944	0.2044
Others	0.1413	0.1537	0.1518	0.1589	0.1741	0.1867	0.1863	0.1831	0.1945	0.2099	0.2137	0.2209

PRIVATE CONSUMPTION (RESIDENTS)

	1983				1984				1985			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption	2125.2	2239.1	2403.7	2580.5	2688.9	2850.9	3040.2	3106.9	3249.4	3367.5	3455.1	3616.6
Durables	259.2	265.4	278.3	287.4	282.6	299.7	329.6	334.4	352.3	362.4	374.8	393.2
Non-durables	1866.0	1973.7	2125.5	2293.1	2406.3	2551.2	2710.6	2772.5	2897.1	3005.1	3080.3	3223.4
Previous year prices (EUR million)												
Private consumption	1868.5	1860.2	1853.8	1838.0	2307.0	2301.8	2310.1	2307.6	2904.1	2915.8	2925.9	2968.7
Durables	225.6	219.8	215.4	207.8	252.7	255.1	265.4	263.1	310.2	308.1	309.9	316.0
Non-durables	1642.9	1640.4	1638.3	1630.2	2054.2	2046.6	2044.7	2044.5	2593.8	2607.7	2615.9	2652.8
Volume (base year 2000)												
Private consumption	9389.6	9347.8	9315.4	9236.4	9202.0	9181.2	9214.3	9204.5	9145.0	9181.8	9213.5	9348.5
Durables	974.6	949.7	930.7	898.0	870.0	878.3	913.6	905.7	888.0	881.9	887.2	904.4
Non-durables	8459.1	8445.9	8435.4	8393.5	8391.3	8360.2	8352.2	8351.5	8311.6	8356.0	8382.3	8500.3
Deflator (2000=1)												
Private consumption	0.2263	0.2395	0.2580	0.2794	0.2922	0.3105	0.3299	0.3375	0.3553	0.3668	0.3750	0.3869
Durables	0.2660	0.2794	0.2990	0.3201	0.3248	0.3413	0.3608	0.3692	0.3967	0.4110	0.4224	0.4347
Non-durables	0.2206	0.2337	0.2520	0.2732	0.2868	0.3052	0.3245	0.3320	0.3486	0.3596	0.3675	0.3792

GROSS FIXED CAPITAL FORMATION

	1983				1984				1985			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Gross fixed capital formation	1028.1	1093.4	1176.8	1170.9	1100.3	1194.7	1238.0	1328.9	1338.1	1364.9	1419.0	1495.1
Machinery and equipment	252.5	264.5	299.3	287.4	262.4	304.5	314.3	347.3	336.5	331.4	344.4	385.5
Transport material	111.1	113.7	119.6	118.6	99.2	97.7	98.8	105.1	106.6	104.6	114.9	123.2
Construction	546.6	590.0	617.3	636.5	634.7	677.3	711.4	746.3	767.8	798.2	820.8	825.4
Others	117.8	125.3	140.6	128.3	103.9	115.2	113.5	130.2	127.2	130.6	139.0	161.0
Previous year prices (EUR million)												
Gross fixed capital formation	916.3	924.1	912.0	838.5	975.9	1007.8	988.4	998.4	1201.1	1190.7	1207.9	1225.1
Machinery and equipment	231.1	232.2	234.5	198.2	226.5	251.4	243.9	249.8	305.2	301.3	305.4	323.1
Transport material	102.9	100.7	96.0	85.7	87.8	83.8	80.6	80.5	98.1	96.5	103.7	105.7
Construction	477.2	485.6	477.3	471.7	572.2	577.2	575.1	575.4	681.2	674.3	677.1	666.2
Others	105.1	105.6	104.2	83.0	89.3	95.3	88.8	92.7	116.5	118.5	121.8	130.1
Volume (base year 2000)												
Gross fixed capital formation	3782.0	3814.0	3764.1	3460.9	3236.4	3342.1	3277.9	3310.9	3252.7	3224.7	3271.3	3317.9
Machinery and equipment	662.5	665.7	672.4	568.2	527.2	585.2	567.6	581.4	561.9	554.7	562.1	594.7
Transport material	308.5	301.7	287.7	256.7	218.9	209.0	201.1	200.6	203.1	199.8	214.6	218.7
Construction	2507.5	2551.7	2508.2	2478.7	2405.0	2426.0	2417.0	2418.3	2377.2	2353.2	2362.9	2325.0
Others	501.7	503.9	497.0	396.1	331.3	353.3	329.4	343.8	341.8	347.7	357.3	381.8
Deflator (2000=1)												
Gross fixed capital formation	0.2718	0.2867	0.3126	0.3383	0.3400	0.3575	0.3777	0.4014	0.4114	0.4233	0.4338	0.4506
Machinery and equipment	0.3812	0.3972	0.4452	0.5059	0.4978	0.5203	0.5539	0.5973	0.5989	0.5975	0.6126	0.6482
Transport material	0.3603	0.3768	0.4158	0.4621	0.4530	0.4675	0.4913	0.5239	0.5248	0.5236	0.5353	0.5632
Construction	0.2180	0.2312	0.2461	0.2568	0.2639	0.2792	0.2943	0.3086	0.3230	0.3392	0.3474	0.3550
Others	0.2347	0.2486	0.2828	0.3240	0.3137	0.3261	0.3445	0.3787	0.3722	0.3757	0.3889	0.4216

PRIVATE CONSUMPTION (RESIDENTS)

	1986				1987				1988			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption	3817.1	4062.8	4198.8	4400.1	4515.6	4757.6	4883.1	5084.5	5464.5	5749.0	6045.3	6400.2
Durables	375.3	426.9	455.2	487.3	542.5	602.0	597.6	630.0	746.4	846.7	890.8	987.4
Non-durables	3441.8	3635.9	3743.6	3912.8	3973.1	4155.6	4285.5	4454.5	4718.1	4902.3	5154.5	5412.8
Previous year prices (EUR million)												
Private consumption	3521.4	3638.8	3683.7	3783.1	4295.8	4429.7	4448.3	4520.1	5129.4	5238.6	5310.3	5446.3
Durables	348.1	380.1	392.7	417.0	499.9	537.0	517.8	545.3	683.5	751.2	762.9	823.0
Non-durables	3173.2	3258.7	3290.9	3366.2	3795.9	3892.6	3930.5	3974.8	4445.9	4487.4	4547.4	4623.3
Volume (base year 2000)												
Private consumption	9489.6	9806.1	9926.9	10195.1	10275.7	10595.8	10640.3	10812.2	11283.2	11523.3	11681.1	11980.3
Durables	836.2	912.9	943.3	1001.6	1058.5	1137.0	1096.3	1154.6	1281.1	1408.1	1430.1	1542.6
Non-durables	8722.3	8957.3	9045.8	9252.6	9268.9	9505.1	9597.5	9705.7	10035.6	10129.2	10264.6	10436.1
Deflator (2000=1)												
Private consumption	0.4022	0.4143	0.4230	0.4316	0.4394	0.4490	0.4589	0.4703	0.4843	0.4989	0.5175	0.5342
Durables	0.4488	0.4676	0.4826	0.4865	0.5125	0.5295	0.5451	0.5457	0.5826	0.6013	0.6229	0.6401
Non-durables	0.3946	0.4059	0.4138	0.4229	0.4286	0.4372	0.4465	0.4590	0.4701	0.4840	0.5022	0.5187

GROSS FIXED CAPITAL FORMATION

	1986				1987				1988			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Gross fixed capital formation	1472.4	1597.5	1669.5	1821.6	1934.4	2102.0	2194.0	2385.4	2529.8	2709.6	2866.3	2975.5
Machinery and equipment	372.0	436.6	456.1	518.0	537.2	598.4	642.0	701.6	751.8	799.9	851.8	857.2
Transport material	135.5	153.2	179.8	198.0	230.7	254.1	235.5	274.4	284.2	303.2	313.6	340.0
Construction	809.1	819.7	834.6	875.9	929.3	979.8	1038.3	1096.4	1148.9	1238.4	1303.0	1372.2
Others	155.8	187.9	199.0	229.7	237.2	269.7	278.1	313.0	344.9	368.1	397.9	406.2
Previous year prices (EUR million)												
Gross fixed capital formation	1397.4	1440.9	1493.0	1555.5	1839.5	1946.5	2021.2	2113.4	2385.0	2496.0	2528.6	2600.2
Machinery and equipment	355.6	394.2	412.7	445.9	519.1	570.5	619.1	635.5	710.3	737.2	742.3	752.5
Transport material	129.9	138.5	160.5	165.8	213.8	228.4	211.1	232.5	267.8	282.3	282.7	308.9
Construction	769.9	750.7	753.7	767.2	879.6	897.3	929.5	969.8	1088.2	1140.3	1162.3	1183.0
Others	142.0	157.4	166.0	176.7	227.0	250.3	261.5	275.5	318.7	336.1	341.3	355.8
Volume (base year 2000)												
Gross fixed capital formation	3250.7	3351.8	3473.0	3618.5	3839.4	4062.7	4218.7	4411.1	4576.3	4789.3	4851.8	4989.2
Machinery and equipment	578.3	641.2	671.2	725.1	761.7	837.1	908.4	932.5	985.5	1022.9	1030.0	1044.0
Transport material	241.8	257.8	298.8	308.5	355.0	379.3	350.6	386.1	396.1	417.5	418.0	456.8
Construction	2257.3	2201.1	2209.9	2249.4	2349.1	2396.4	2482.4	2590.0	2642.1	2768.6	2821.9	2872.2
Others	363.7	403.1	425.3	452.6	483.4	532.9	556.8	586.7	626.8	661.1	671.3	699.9
Deflator (2000=1)												
Gross fixed capital formation	0.4530	0.4766	0.4807	0.5034	0.5038	0.5174	0.5201	0.5408	0.5528	0.5658	0.5908	0.5964
Machinery and equipment	0.6432	0.6809	0.6795	0.7144	0.7053	0.7148	0.7067	0.7524	0.7628	0.7820	0.8270	0.8211
Transport material	0.5604	0.5943	0.6019	0.6417	0.6497	0.6699	0.6718	0.7106	0.7176	0.7261	0.7503	0.7442
Construction	0.3584	0.3724	0.3776	0.3894	0.3956	0.4089	0.4183	0.4233	0.4349	0.4473	0.4617	0.4777
Others	0.4284	0.4661	0.4679	0.5076	0.4907	0.5061	0.4995	0.5336	0.5503	0.5568	0.5928	0.5804

PRIVATE CONSUMPTION (RESIDENTS)

	1989				1990				1991			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption	6513.1	6694.6	6976.1	7178.8	7572.2	7974.4	8383.4	8782.3	9242.7	9701.6	10106.1	10407.1
Durables	978.9	901.2	931.8	956.1	1018.3	1072.6	1141.2	1172.7	1241.9	1303.2	1384.1	1390.7
Non-durables	5534.3	5793.5	6044.3	6222.7	6553.8	6901.7	7242.2	7609.6	8000.9	8398.4	8722.0	9016.4
Previous year prices (EUR million)												
Private consumption	6048.1	6093.0	6191.4	6279.4	7156.7	7328.7	7510.8	7656.3	8661.8	8891.6	9085.3	9188.9
Durables	936.7	860.4	872.6	879.2	989.9	1018.3	1066.3	1076.9	1189.8	1234.6	1302.5	1294.2
Non-durables	5111.5	5232.6	5318.8	5400.2	6166.8	6310.4	6444.5	6579.4	7472.0	7657.0	7782.8	7894.7
Volume (base year 2000)												
Private consumption	11879.0	11967.0	12160.4	12333.2	12643.3	12947.1	13268.7	13525.8	13870.9	14238.9	14549.1	14715.0
Durables	1527.8	1403.4	1423.4	1434.0	1520.8	1564.4	1638.1	1654.4	1722.8	1787.5	1885.8	1873.8
Non-durables	10347.0	10592.2	10766.7	10931.5	11143.8	11403.4	11645.6	11889.4	12163.8	12465.0	12669.9	12852.1
Deflator (2000=1)												
Private consumption	0.5483	0.5594	0.5737	0.5821	0.5989	0.6159	0.6318	0.6493	0.6663	0.6813	0.6946	0.7072
Durables	0.6407	0.6422	0.6546	0.6667	0.6696	0.6857	0.6967	0.7088	0.7209	0.7291	0.7340	0.7422
Non-durables	0.5349	0.5470	0.5614	0.5692	0.5881	0.6052	0.6219	0.6400	0.6578	0.6738	0.6884	0.7015

GROSS FIXED CAPITAL FORMATION

	1989				1990				1991			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Gross fixed capital formation	3024.0	3105.0	3219.4	3352.3	3455.0	3587.2	3704.3	3812.4	3853.6	3942.7	4122.5	4251.0
Machinery and equipment	845.6	886.6	918.3	972.7	1024.8	1039.5	1109.4	1129.7	1165.3	1162.0	1173.3	1177.7
Transport material	319.8	307.0	332.0	361.8	348.3	370.0	349.9	381.9	352.3	383.8	397.4	404.8
Construction	1460.0	1502.8	1540.9	1562.2	1616.2	1700.3	1749.3	1773.5	1814.6	1858.1	1995.9	2111.0
Others	398.6	408.6	428.2	455.6	465.7	477.4	495.7	527.3	521.5	538.7	556.0	557.5
Previous year prices (EUR million)												
Gross fixed capital formation	2816.0	2844.5	2840.1	2911.9	3264.9	3347.8	3387.8	3465.3	3686.2	3720.0	3812.4	3889.4
Machinery and equipment	793.7	827.1	842.9	900.8	1012.5	1040.0	1098.7	1145.0	1127.9	1132.4	1140.1	1143.5
Transport material	300.5	294.7	292.1	311.0	339.6	358.2	334.0	361.6	365.0	392.2	391.1	397.9
Construction	1349.4	1341.5	1325.6	1300.3	1473.0	1500.2	1495.6	1462.3	1672.6	1653.1	1731.8	1796.6
Others	372.4	381.1	379.5	399.9	439.7	449.3	459.5	496.4	520.6	542.3	549.4	551.4
Volume (base year 2000)												
Gross fixed capital formation	4880.9	4930.2	4922.6	5047.1	5084.9	5213.9	5276.3	5397.1	5309.9	5358.7	5491.8	5602.7
Machinery and equipment	993.7	1035.6	1055.3	1127.8	1177.1	1209.1	1277.3	1331.1	1309.1	1314.3	1323.3	1327.2
Transport material	408.8	401.0	397.4	423.1	419.3	442.2	412.4	446.4	433.0	465.3	463.9	472.1
Construction	2960.0	2942.6	2907.8	2852.3	2832.1	2884.4	2875.5	2811.5	2788.8	2756.3	2887.5	2995.5
Others	652.8	668.0	665.1	700.8	698.7	713.9	730.1	788.8	776.3	808.5	819.2	822.1
Deflator (2000=1)												
Gross fixed capital formation	0.6196	0.6298	0.6540	0.6642	0.6795	0.6880	0.7021	0.7064	0.7257	0.7358	0.7507	0.7587
Machinery and equipment	0.8509	0.8561	0.8703	0.8625	0.8706	0.8597	0.8685	0.8487	0.8901	0.8842	0.8866	0.8874
Transport material	0.7823	0.7656	0.8355	0.8550	0.8306	0.8368	0.8486	0.8555	0.8135	0.8249	0.8566	0.8574
Construction	0.4932	0.5107	0.5299	0.5477	0.5707	0.5895	0.6083	0.6308	0.6507	0.6741	0.6912	0.7047
Others	0.6106	0.6117	0.6438	0.6501	0.6666	0.6686	0.6790	0.6685	0.6719	0.6663	0.6788	0.6782

PRIVATE CONSUMPTION (RESIDENTS)

	1992				1993				1994			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption	10685.8	11141.5	11343.4	11603.9	11783.4	11891.2	12189.5	12436.5	12586.2	12889.5	13075.4	13354.2
Durables	1488.9	1584.9	1536.5	1639.1	1557.3	1514.1	1535.5	1523.2	1571.6	1616.8	1583.5	1692.0
Non-durables	9196.9	9556.6	9807.0	9964.9	10226.1	10377.1	10654.1	10913.3	11014.6	11272.7	11491.9	11662.1
Previous year prices (EUR million)												
Private consumption	10224.8	10393.2	10445.5	10588.4	11429.9	11402.5	11481.7	11488.4	12041.8	12163.9	12179.4	12273.2
Durables	1461.7	1528.3	1461.0	1532.9	1495.8	1430.9	1422.6	1389.3	1501.5	1529.8	1478.6	1554.5
Non-durables	8763.1	8864.8	8984.5	9055.5	9934.1	9971.5	10059.1	10099.1	10540.3	10634.1	10700.9	10718.6
Volume (base year 2000)												
Private consumption	14867.5	15112.3	15188.4	15396.2	15460.7	15423.5	15530.7	15539.8	15445.9	15602.5	15622.4	15742.6
Durables	1997.5	2088.5	1996.5	2094.8	1957.3	1872.4	1861.5	1817.9	1839.3	1873.9	1811.2	1904.2
Non-durables	12873.6	13023.1	13198.9	13303.2	13511.4	13562.4	13681.5	13736.0	13619.8	13741.0	13827.3	13850.2
Deflator (2000=1)												
Private consumption	0.7187	0.7372	0.7468	0.7537	0.7622	0.7710	0.7849	0.8003	0.8149	0.8261	0.8370	0.8483
Durables	0.7454	0.7588	0.7696	0.7824	0.7956	0.8086	0.8249	0.8379	0.8545	0.8628	0.8743	0.8886
Non-durables	0.7144	0.7338	0.7430	0.7491	0.7568	0.7651	0.7787	0.7945	0.8087	0.8204	0.8311	0.8420

GROSS FIXED CAPITAL FORMATION

	1992				1993				1994			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Gross fixed capital formation	4500.5	4576.3	4622.5	4540.0	4330.3	4409.0	4181.0	4209.1	4295.6	4402.1	4386.0	4831.6
Machinery and equipment	1164.6	1158.5	1174.2	1151.5	1098.0	1180.1	1104.0	1110.2	1093.5	1048.2	1007.4	1060.4
Transport material	449.1	456.7	447.3	414.8	388.7	395.2	354.4	367.0	386.4	433.5	393.7	575.2
Construction	2292.6	2374.3	2402.1	2411.5	2325.8	2276.1	2206.8	2188.5	2239.8	2324.5	2415.1	2538.1
Others	594.2	586.8	598.9	562.2	517.8	557.7	515.7	543.5	575.8	595.8	569.8	657.8
Previous year prices (EUR million)												
Gross fixed capital formation	4382.7	4434.4	4432.1	4298.6	4264.4	4265.5	4010.6	3945.2	4174.2	4262.9	4251.9	4617.9
Machinery and equipment	1185.5	1206.0	1235.7	1208.7	1131.9	1180.5	1112.4	1079.5	1043.5	1002.7	982.8	1012.3
Transport material	439.6	437.4	423.9	388.9	391.5	401.3	353.9	348.7	390.4	434.6	393.0	564.5
Construction	2181.6	2216.9	2199.1	2168.7	2225.9	2143.9	2043.2	2010.2	2174.4	2237.7	2302.6	2385.3
Others	576.0	574.0	573.3	532.3	515.1	539.9	501.1	506.7	566.0	587.9	573.6	655.8
Volume (base year 2000)												
Gross fixed capital formation	5898.7	5968.3	5965.2	5785.5	5522.0	5523.3	5193.3	5108.6	5202.0	5312.5	5298.9	5754.9
Machinery and equipment	1336.4	1359.5	1393.0	1362.6	1327.3	1384.3	1304.5	1266.0	1227.0	1179.0	1155.6	1190.2
Transport material	524.3	521.6	505.5	463.8	446.3	457.4	403.4	397.5	442.0	492.2	445.0	639.3
Construction	3204.8	3256.7	3230.5	3185.8	3023.6	2912.2	2775.5	2730.5	2765.1	2845.6	2928.2	3033.4
Others	854.8	851.9	850.9	789.9	736.2	771.6	716.2	724.2	781.7	811.9	792.2	905.7
Deflator (2000=1)												
Gross fixed capital formation	0.7630	0.7668	0.7749	0.7847	0.7842	0.7983	0.8051	0.8239	0.8257	0.8286	0.8277	0.8396
Machinery and equipment	0.8714	0.8521	0.8429	0.8451	0.8272	0.8524	0.8463	0.8769	0.8912	0.8890	0.8718	0.8909
Transport material	0.8566	0.8755	0.8848	0.8944	0.8709	0.8640	0.8787	0.9232	0.8742	0.8809	0.8847	0.8998
Construction	0.7154	0.7290	0.7435	0.7570	0.7692	0.7816	0.7951	0.8015	0.8100	0.8169	0.8248	0.8367
Others	0.6952	0.6889	0.7039	0.7117	0.7033	0.7228	0.7200	0.7504	0.7366	0.7339	0.7193	0.7263

PRIVATE CONSUMPTION (RESIDENTS)

	1995				1996				1997			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption	13610.3	13932.0	13890.3	14051.7	14418.1	14582.0	14916.0	15077.0	15394.0	15472.2	15890.2	16100.2
Durables	1620.2	1742.5	1706.8	1631.8	1778.6	1771.9	1872.1	1878.2	1948.6	1942.0	2047.5	2052.8
Non-durables	11990.1	12189.5	12183.5	12419.9	12639.5	12810.2	13043.9	13198.8	13445.4	13530.2	13842.8	14047.4
Previous year prices (EUR million)												
Private consumption	13116.2	13308.6	13192.5	13245.3	14158.4	14213.0	14449.4	14505.0	15075.7	15119.5	15405.8	15503.3
Durables	1569.8	1663.9	1616.2	1534.4	1751.9	1738.2	1829.3	1823.3	1915.6	1905.6	2005.0	2003.6
Non-durables	11546.3	11644.7	11576.3	11710.9	12406.5	12474.7	12620.1	12681.6	13160.1	13213.9	13400.7	13499.7
Volume (base year 2000)												
Private consumption	15771.6	16002.9	15863.4	15926.8	16220.4	16282.9	16553.7	16617.4	16783.1	16831.8	17150.5	17259.1
Durables	1804.1	1912.2	1857.4	1763.4	1918.1	1903.2	2002.9	1996.3	2052.0	2041.2	2147.7	2146.2
Non-durables	13984.9	14104.1	14021.2	14184.3	14316.8	14395.6	14563.3	14634.3	14743.0	14803.2	15012.6	15123.5
Deflator (2000=1)												
Private consumption	0.8630	0.8706	0.8756	0.8823	0.8889	0.8955	0.9011	0.9073	0.9172	0.9192	0.9265	0.9328
Durables	0.8980	0.9113	0.9189	0.9254	0.9273	0.9310	0.9347	0.9408	0.9496	0.9514	0.9533	0.9564
Non-durables	0.8574	0.8643	0.8689	0.8756	0.8828	0.8899	0.8957	0.9019	0.9120	0.9140	0.9221	0.9289

GROSS FIXED CAPITAL FORMATION

	1995				1996				1997			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Gross fixed capital formation	4708.2	4798.2	4775.4	4876.7	4892.9	5020.1	5342.4	5585.6	5922.7	6065.5	6310.3	6393.4
Machinery and equipment	1103.0	1119.7	1115.4	1203.5	1200.6	1195.7	1237.5	1300.5	1364.4	1392.9	1448.9	1511.0
Transport material	394.8	440.2	431.7	456.5	477.3	478.5	535.5	537.3	616.4	640.2	685.9	716.6
Construction	2618.2	2643.8	2622.8	2601.9	2582.2	2702.1	2905.3	3061.7	3237.4	3302.1	3412.5	3370.3
Others	592.2	594.5	605.6	614.7	632.8	643.8	664.1	686.0	704.5	730.2	763.0	795.5
Previous year prices (EUR million)												
Gross fixed capital formation	4610.9	4678.8	4624.6	4645.7	4776.7	4912.8	5180.6	5368.0	5766.3	5898.6	6035.5	6116.4
Machinery and equipment	1100.5	1112.2	1115.5	1167.9	1157.1	1146.2	1174.8	1223.0	1337.2	1368.5	1392.2	1471.6
Transport material	379.9	438.0	417.3	430.7	466.2	500.5	548.1	535.4	585.6	637.0	663.3	700.1
Construction	2541.4	2546.3	2514.6	2462.6	2527.3	2635.4	2820.7	2953.0	3160.3	3192.8	3265.4	3204.6
Others	589.1	582.3	577.2	584.4	626.1	630.7	637.0	656.5	683.1	700.2	714.6	740.2
Volume (base year 2000)												
Gross fixed capital formation	5551.1	5632.8	5567.6	5592.9	5571.0	5729.7	6042.1	6260.6	6530.6	6680.4	6835.5	6927.1
Machinery and equipment	1242.2	1255.5	1259.2	1318.4	1293.0	1280.9	1312.8	1366.7	1423.7	1457.0	1482.2	1566.7
Transport material	428.7	494.2	470.9	486.0	508.5	546.0	597.9	584.1	645.7	702.3	731.3	771.8
Construction	3090.1	3096.0	3057.5	2994.3	2949.3	3075.5	3291.8	3446.1	3584.8	3621.7	3704.1	3635.1
Others	808.2	798.9	791.9	801.7	832.6	838.6	847.0	873.0	881.9	904.1	922.6	955.6
Deflator (2000=1)												
Gross fixed capital formation	0.8482	0.8518	0.8577	0.8719	0.8783	0.8762	0.8842	0.8922	0.9069	0.9079	0.9232	0.9230
Machinery and equipment	0.8879	0.8919	0.8858	0.9129	0.9286	0.9335	0.9426	0.9516	0.9583	0.9560	0.9775	0.9644
Transport material	0.9211	0.8906	0.9168	0.9394	0.9386	0.8763	0.8956	0.9200	0.9547	0.9116	0.9380	0.9285
Construction	0.8473	0.8539	0.8578	0.8690	0.8755	0.8786	0.8826	0.8885	0.9031	0.9118	0.9213	0.9272
Others	0.7327	0.7442	0.7648	0.7667	0.7600	0.7677	0.7841	0.7857	0.7988	0.8077	0.8270	0.8325

PRIVATE CONSUMPTION (RESIDENTS)

	1998				1999				2000			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption	16430.1	16730.2	17065.2	17477.3	17842.7	18054.5	18345.1	18577.8	19164.3	19307.3	19730.7	19897.9
Durables	2204.5	2270.4	2402.6	2498.9	2653.5	2697.6	2672.9	2608.8	2874.0	2754.6	2792.8	2813.3
Non-durables	14225.6	14459.8	14662.6	14978.4	15189.2	15356.9	15672.2	15969.0	16290.3	16552.7	16937.9	17084.5
Previous year prices (EUR million)												
Private consumption	16190.3	16411.8	16628.2	16930.7	17627.3	17711.5	17874.3	18001.6	18808.4	18759.3	18957.7	18987.7
Durables	2190.8	2239.1	2361.5	2454.8	2637.9	2658.5	2632.2	2560.4	2840.9	2710.6	2725.6	2726.4
Non-durables	13999.5	14172.7	14266.7	14475.9	14989.4	15053.0	15242.1	15441.2	15967.6	16048.8	16232.1	16261.4
Volume (base year 2000)												
Private consumption	17521.5	17761.1	17995.4	18322.7	18642.2	18731.2	18903.4	19038.0	19450.2	19402.3	19607.7	19640.0
Durables	2299.5	2350.2	2478.7	2576.6	2730.3	2751.6	2724.4	2650.1	2899.9	2768.0	2783.0	2783.8
Non-durables	15228.5	15416.8	15519.1	15746.7	15910.7	15978.2	16178.9	16390.2	16550.3	16634.3	16824.7	16856.2
Deflator (2000=1)												
Private consumption	0.9377	0.9420	0.9483	0.9539	0.9571	0.9639	0.9705	0.9758	0.9853	0.9951	1.0063	1.0131
Durables	0.9587	0.9661	0.9693	0.9699	0.9719	0.9804	0.9811	0.9844	0.9911	0.9952	1.0035	1.0106
Non-durables	0.9341	0.9379	0.9448	0.9512	0.9547	0.9611	0.9687	0.9743	0.9843	0.9951	1.0067	1.0135

GROSS FIXED CAPITAL FORMATION

	1998				1999				2000			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Gross fixed capital formation	6881.2	6969.3	7067.7	7325.9	7414.4	7503.7	7771.6	7927.1	8346.9	8109.9	8328.1	8318.3
Machinery and equipment	1598.4	1709.0	1705.5	1750.1	1739.9	1769.0	1855.5	1923.8	1948.4	1945.6	2014.1	2057.5
Transport material	762.3	768.6	787.2	859.7	849.8	839.8	904.6	901.8	970.3	900.9	903.7	929.0
Construction	3672.1	3603.8	3653.1	3761.6	3798.3	3821.4	3917.6	3988.1	4272.7	4142.6	4277.5	4220.1
Others	848.5	888.0	921.9	954.5	1026.4	1073.5	1093.9	1113.4	1155.5	1120.8	1132.9	1111.8
Previous year prices (EUR million)												
Gross fixed capital formation	6791.2	6820.1	6888.9	7084.8	7392.9	7403.1	7568.9	7618.5	8118.0	7819.9	7957.2	7787.4
Machinery and equipment	1610.5	1681.7	1681.8	1726.2	1792.6	1809.9	1877.3	1934.0	1902.6	1883.8	1933.2	1901.0
Transport material	760.9	780.8	798.6	841.5	823.5	807.7	856.8	861.4	948.7	878.2	881.2	893.3
Construction	3607.4	3526.0	3563.2	3649.1	3794.6	3780.1	3831.0	3827.0	4154.1	3979.2	4067.7	3966.6
Others	812.4	831.6	845.4	868.0	982.2	1005.4	1003.8	996.0	1112.6	1078.7	1075.2	1026.4
Volume (base year 2000)												
Gross fixed capital formation	7418.8	7450.4	7525.6	7739.6	7887.7	7898.5	8075.4	8128.3	8483.7	8172.6	8312.7	8134.2
Machinery and equipment	1670.4	1744.3	1744.3	1790.4	1842.0	1859.8	1929.0	1987.3	1988.7	1969.0	2020.7	1987.1
Transport material	815.8	837.1	856.2	902.3	884.0	867.0	919.8	924.7	975.7	903.2	906.2	918.7
Construction	3938.6	3849.7	3890.4	3984.2	4045.8	4030.3	4084.6	4080.3	4347.6	4164.3	4253.5	4147.4
Others	994.5	1018.1	1034.9	1062.5	1117.4	1143.8	1141.9	1133.0	1171.7	1136.0	1132.3	1081.0
Deflator (2000=1)												
Gross fixed capital formation	0.9275	0.9354	0.9392	0.9466	0.9400	0.9500	0.9624	0.9752	0.9839	0.9923	1.0018	1.0226
Machinery and equipment	0.9569	0.9798	0.9778	0.9775	0.9446	0.9512	0.9619	0.9680	0.9797	0.9881	0.9967	1.0354
Transport material	0.9344	0.9181	0.9194	0.9529	0.9613	0.9686	0.9835	0.9752	0.9945	0.9975	0.9972	1.0111
Construction	0.9323	0.9361	0.9390	0.9441	0.9388	0.9482	0.9591	0.9774	0.9828	0.9948	1.0056	1.0175
Others	0.8532	0.8722	0.8908	0.8983	0.9186	0.9386	0.9580	0.9827	0.9862	0.9866	1.0005	1.0285

PRIVATE CONSUMPTION (RESIDENTS)

	2001				2002				2003			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Private consumption	20158.3	20446.1	20527.3	20665.2	21050.8	21268.4	21541.9	21524.0	21680.4	21802.7	22079.5	22291.1
Durables	2693.4	2738.7	2675.1	2602.3	2659.6	2701.7	2599.7	2474.4	2386.3	2407.3	2462.9	2481.9
Non-durables	17464.9	17707.4	17852.2	18062.9	18391.2	18566.7	18942.2	19049.6	19294.1	19395.4	19616.6	19809.1
Previous year prices (EUR million)												
Private consumption	19683.2	19815.6	19801.1	19834.0	20709.9	20738.6	20814.0	20622.7	21210.5	21270.1	21408.5	21485.7
Durables	2644.6	2671.7	2594.7	2528.6	2635.4	2666.1	2543.2	2394.2	2331.5	2342.3	2390.1	2402.8
Non-durables	17038.5	17143.9	17206.5	17305.3	18074.5	18072.5	18270.8	18228.5	18879.0	18927.9	19018.5	19082.9
Volume (base year 2000)												
Private consumption	19683.2	19815.6	19801.1	19834.0	20035.7	20063.4	20136.3	19951.3	19919.2	19975.2	20105.1	20177.6
Durables	2644.6	2671.7	2594.7	2528.6	2569.0	2598.9	2479.1	2333.9	2229.9	2240.3	2286.0	2298.2
Non-durables	17038.5	17143.9	17206.5	17305.3	17466.0	17464.1	17655.7	17614.8	17682.8	17728.5	17813.4	17873.7
Deflator (2000=1)												
Private consumption	1.0241	1.0318	1.0367	1.0419	1.0507	1.0601	1.0698	1.0788	1.0884	1.0915	1.0982	1.1047
Durables	1.0184	1.0251	1.0310	1.0291	1.0353	1.0396	1.0486	1.0602	1.0701	1.0746	1.0774	1.0800
Non-durables	1.0250	1.0329	1.0375	1.0438	1.0530	1.0631	1.0729	1.0815	1.0911	1.0940	1.1012	1.1083

GROSS FIXED CAPITAL FORMATION

	2001				2002				2003			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Gross fixed capital formation	8191.6	8529.5	8674.9	8822.4	8639.3	8673.7	8391.6	8136.7	7865.6	7707.6	7719.8	7658.3
Machinery and equipment	2092.1	2066.7	2019.3	2029.6	1948.2	1936.0	1878.2	1889.0	1810.6	1758.2	1801.2	1823.6
Transport material	826.1	874.0	830.3	808.3	764.4	736.1	722.6	665.4	633.1	647.5	633.6	620.6
Construction	4187.4	4466.3	4649.4	4752.6	4651.3	4694.0	4489.4	4299.4	4175.9	4092.3	4079.2	4002.0
Others	1086.0	1122.6	1175.9	1231.8	1275.5	1307.5	1301.4	1283.0	1246.0	1209.5	1205.8	1212.1
Previous year prices (EUR million)												
Gross fixed capital formation	8041.0	8370.6	8462.7	8555.3	8551.9	8509.3	8139.7	7825.1	7738.6	7608.3	7619.9	7497.9
Machinery and equipment	2074.3	2079.1	2068.6	2107.6	1978.1	1961.2	1902.3	1891.6	1821.3	1788.5	1841.6	1861.6
Transport material	800.5	850.2	797.6	765.8	775.3	736.8	684.3	652.8	636.7	651.0	637.9	624.5
Construction	4119.5	4360.4	4473.7	4527.0	4547.6	4529.9	4296.8	4074.4	4084.6	4015.8	4005.0	3890.5
Others	1046.7	1080.8	1122.7	1154.9	1250.8	1281.3	1256.3	1206.3	1196.0	1153.0	1135.4	1121.2
Volume (base year 2000)												
Gross fixed capital formation	8041.0	8370.6	8462.7	8555.3	8354.7	8313.1	7952.0	7644.8	7378.1	7253.8	7264.9	7148.5
Machinery and equipment	2074.3	2079.1	2068.6	2107.6	2007.5	1990.4	1930.6	1919.8	1868.2	1834.6	1889.1	1909.6
Transport material	800.5	850.2	797.6	765.8	746.3	709.3	658.8	628.4	604.6	618.1	605.7	593.0
Construction	4119.5	4360.4	4473.7	4527.0	4402.8	4385.7	4159.9	3944.6	3805.0	3741.0	3730.9	3624.2
Others	1046.7	1080.8	1122.7	1154.9	1193.6	1222.7	1198.8	1151.2	1103.2	1063.5	1047.2	1034.2
Deflator (2000=1)												
Gross fixed capital formation	1.0187	1.0190	1.0251	1.0312	1.0341	1.0434	1.0553	1.0644	1.0661	1.0626	1.0626	1.0713
Machinery and equipment	1.0086	0.9940	0.9761	0.9630	0.9704	0.9727	0.9728	0.9840	0.9691	0.9584	0.9535	0.9550
Transport material	1.0321	1.0279	1.0410	1.0556	1.0241	1.0379	1.0969	1.0589	1.0471	1.0476	1.0460	1.0465
Construction	1.0165	1.0243	1.0393	1.0498	1.0564	1.0703	1.0792	1.0899	1.0975	1.0939	1.0933	1.1042
Others	1.0375	1.0387	1.0474	1.0666	1.0686	1.0694	1.0856	1.1145	1.1294	1.1373	1.1514	1.1721

PRIVATE CONSUMPTION (RESIDENTS)

	2004				2005			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)								
Private consumption	22586.3	22926.4	23164.8	23407.9	23639.4	24005.6	23995.1	24257.2
Durables	2452.3	2575.2	2564.4	2633.6	2624.5	2828.1	2577.1	2671.8
Non-durables	20134.0	20351.3	20600.4	20774.3	21015.0	21177.5	21418.0	21585.4
Previous year prices (EUR million)								
Private consumption	22254.4	22436.8	22545.6	22646.8	23352.7	23586.3	23335.0	23432.4
Durables	2440.0	2553.4	2536.0	2587.7	2601.6	2796.6	2534.2	2609.5
Non-durables	19814.4	19883.4	20009.6	20059.1	20751.1	20789.7	20800.7	20822.9
Volume (base year 2000)								
Private consumption	20309.8	20476.3	20575.6	20667.9	20802.6	21010.7	20786.8	20873.6
Durables	2268.6	2374.0	2357.8	2405.9	2393.2	2572.6	2331.3	2400.5
Non-durables	18034.5	18097.4	18212.2	18257.2	18404.1	18438.3	18448.1	18467.8
Deflator (2000=1)								
Private consumption	1.1121	1.1197	1.1258	1.1326	1.1364	1.1425	1.1543	1.1621
Durables	1.0810	1.0847	1.0876	1.0946	1.0966	1.0993	1.1055	1.1130
Non-durables	1.1164	1.1245	1.1311	1.1379	1.1419	1.1486	1.1610	1.1688

GROSS FIXED CAPITAL FORMATION

	2004				2005			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)								
Gross fixed capital formation	7835.0	8026.4	8018.1	7968.2	7974.6	8066.3	7938.7	7961.5
Machinery and equipment	1851.5	1862.5	1873.5	1915.8	1912.6	1917.1	1926.9	1953.5
Transport material	631.0	624.9	622.5	652.6	619.5	607.7	647.1	640.8
Construction	4118.9	4276.4	4246.6	4114.7	4159.3	4244.4	4084.1	4069.9
Others	1233.5	1262.6	1275.5	1285.1	1283.2	1297.1	1280.6	1297.4
Previous year prices (EUR million)								
Gross fixed capital formation	7746.1	7836.0	7755.6	7605.5	7846.7	7907.4	7644.8	7597.9
Machinery and equipment	1848.4	1847.9	1860.7	1875.1	1902.1	1925.8	1888.2	1916.5
Transport material	622.5	624.2	599.4	632.5	618.3	605.0	622.1	618.3
Construction	4061.9	4124.2	4054.3	3879.1	4080.6	4131.4	3920.9	3854.9
Others	1213.4	1239.6	1241.2	1218.9	1245.7	1245.1	1213.7	1208.2
Volume (base year 2000)								
Gross fixed capital formation	7269.1	7353.5	7278.0	7137.2	7154.4	7209.7	6970.4	6927.6
Machinery and equipment	1927.5	1927.0	1940.3	1955.3	1964.6	1989.2	1950.3	1979.6
Transport material	594.6	596.3	572.6	604.2	578.4	566.0	582.0	578.4
Construction	3702.0	3758.9	3695.2	3535.4	3577.7	3622.2	3437.7	3379.8
Others	1057.7	1080.6	1081.9	1062.5	1055.0	1054.5	1027.9	1023.3
Deflator (2000=1)								
Gross fixed capital formation	1.0778	1.0915	1.1017	1.1164	1.1146	1.1188	1.1389	1.1493
Machinery and equipment	0.9606	0.9665	0.9656	0.9798	0.9735	0.9638	0.9880	0.9868
Transport material	1.0612	1.0479	1.0872	1.0800	1.0709	1.0736	1.1119	1.1078
Construction	1.1126	1.1377	1.1492	1.1638	1.1625	1.1718	1.1880	1.2042
Others	1.1662	1.1684	1.1789	1.2095	1.2163	1.2300	1.2459	1.2679

HOUSEHOLDS' DISPOSABLE INCOME

	1977				1978				1979			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Compensation of employees	599.3	604.4	622.4	639.2	678.8	703.1	736.5	763.2	788.2	823.3	869.8	920.7
Domestic transfers	93.7	95.1	97.9	102.1	107.7	112.7	117.3	121.3	124.8	131.7	142.2	156.0
External transfers	49.4	53.9	52.8	53.0	61.0	80.1	88.4	111.8	130.6	134.9	156.4	150.1
Corporate and property income	155.3	162.9	176.0	200.6	211.6	236.9	255.4	274.8	286.6	306.7	325.5	351.2
Direct taxes	29.6	30.2	31.3	33.1	35.4	38.1	41.3	44.9	49.0	52.6	55.7	58.2
Social Security contributions	94.1	95.8	99.1	104.2	110.9	116.9	122.1	126.6	130.4	137.2	147.1	160.1
Disposable income	774.0	790.4	818.6	857.6	912.8	977.9	1034.2	1099.4	1150.8	1206.8	1291.0	1359.6

LABOUR MARKET

	1977				1978				1979			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Thousands												
Labour force	3952.7	3948.9	3982.5	3984.4	4052.3	4061.9	4112.7	4134.5	4154.3	4178.0	4211.6	4226.2
Total employment	3762.2	3755.9	3783.0	3772.5	3841.3	3840.6	3886.9	3906.6	3925.3	3949.1	3982.4	3996.2
Employees	3096.1	3092.8	3125.4	3122.1	3199.2	3202.6	3247.1	3261.2	3269.0	3287.2	3319.5	3337.2
Other forms of employment	666.1	663.1	657.6	650.4	642.1	638.0	639.8	645.4	656.3	661.8	662.9	659.0
Unemployment	190.5	193.0	199.5	212.0	211.1	221.3	225.9	227.8	229.0	228.9	229.2	230.0
EUR thousand												
Compensation per employee	0.194	0.195	0.199	0.205	0.212	0.220	0.227	0.234	0.241	0.250	0.262	0.276
Per cent												
Unemployment rate	4.8	4.9	5.0	5.3	5.2	5.4	5.5	5.5	5.5	5.5	5.4	5.4

HOUSEHOLDS' DISPOSABLE INCOME

	1980				1981				1982			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Compensation of employees	988.8	1048.1	1111.5	1175.3	1228.1	1296.5	1361.6	1434.5	1520.1	1605.6	1689.3	1785.4
Domestic transfers	173.4	190.2	206.5	222.3	237.6	253.2	269.1	285.4	302.0	320.7	341.3	364.0
External transfers	170.6	171.2	182.2	182.9	193.8	219.0	210.2	215.3	222.4	245.5	258.0	275.9
Corporate and property income	372.8	404.2	435.9	472.3	512.4	552.8	593.4	642.0	681.6	731.4	773.2	824.0
Direct taxes	60.3	63.9	69.1	75.8	84.2	92.2	99.9	107.3	114.3	121.9	130.1	138.9
Social Security contributions	176.2	190.7	203.5	214.7	224.3	237.3	253.7	273.5	296.7	320.1	343.7	367.4
Disposable income	1469.2	1559.1	1663.5	1762.2	1863.3	1992.0	2080.7	2196.4	2315.0	2461.2	2588.0	2743.0

LABOUR MARKET

	1980				1981				1982			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Thousands												
Labour force	4260.5	4254.8	4270.5	4281.9	4267.0	4283.3	4273.6	4278.9	4301.4	4313.4	4286.0	4283.3
Total employment	4035.2	4037.7	4051.1	4062.2	4037.1	4048.1	4039.0	4043.0	4072.7	4080.1	4064.4	4055.8
Employees	3386.7	3398.1	3418.0	3434.3	3414.6	3425.1	3412.8	3408.1	3421.1	3420.1	3403.5	3401.6
Other forms of employment	648.5	639.6	633.1	627.9	622.5	623.0	626.1	634.9	651.5	659.9	660.8	654.2
Unemployment	225.3	217.1	219.4	219.7	229.9	235.2	234.6	235.9	228.7	233.3	221.7	227.5
EUR thousand												
Compensation per employee	0.292	0.308	0.325	0.342	0.360	0.379	0.399	0.421	0.444	0.469	0.496	0.525
Per cent												
Unemployment rate	5.3	5.1	5.1	5.1	5.4	5.5	5.5	5.5	5.3	5.4	5.2	5.3

HOUSEHOLDS' DISPOSABLE INCOME

	1983				1984				1985			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Compensation of employees	1861.0	1942.5	2000.4	2044.4	2088.2	2143.8	2223.6	2331.5	2446.6	2580.4	2702.3	2837.8
Domestic transfers	388.7	411.2	431.4	449.2	464.8	487.5	517.1	553.8	597.6	632.7	659.1	676.8
External transfers	270.3	268.0	290.6	297.0	355.0	349.5	379.5	396.9	374.5	395.0	428.8	485.7
Corporate and property income	848.0	936.6	1036.2	1130.6	1222.2	1309.7	1371.8	1458.6	1489.3	1561.0	1661.8	1698.0
Direct taxes	148.2	157.9	167.8	178.1	188.7	202.5	219.4	239.6	262.9	276.6	280.8	275.3
Social Security contributions	391.3	412.7	431.7	448.2	462.3	479.9	501.0	525.6	553.7	583.2	613.9	646.1
Disposable income	2828.5	2987.6	3159.0	3294.9	3479.3	3608.1	3771.7	3975.7	4091.4	4309.3	4557.3	4776.9

LABOUR MARKET

	1983				1984				1985			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Thousands												
Labour force	4234.1	4238.7	4242.4	4258.2	4302.3	4324.4	4343.9	4364.3	4352.0	4355.5	4338.6	4336.0
Total employment	3990.3	3981.2	3970.4	3974.5	4017.1	4034.3	4045.6	4059.0	4042.1	4045.7	4027.0	4018.6
Employees	3351.8	3351.1	3343.4	3344.9	3378.3	3387.1	3392.3	3399.8	3379.1	3382.6	3366.7	3366.2
Other forms of employment	638.5	630.0	627.1	629.5	638.8	647.2	653.3	659.1	663.0	663.2	660.3	652.5
Unemployment	243.8	257.5	272.0	283.8	285.2	290.1	298.3	305.3	309.9	309.8	311.6	317.3
EUR thousand												
Compensation per employee	0.555	0.580	0.598	0.611	0.618	0.633	0.655	0.686	0.724	0.763	0.803	0.843
Per cent												
Unemployment rate	5.8	6.1	6.4	6.7	6.6	6.7	6.9	7.0	7.1	7.1	7.2	7.3

HOUSEHOLDS' DISPOSABLE INCOME

	1986				1987				1988			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Compensation of employees	2957.4	3096.6	3235.3	3374.5	3514.6	3655.7	3797.2	3926.5	4068.7	4214.3	4411.3	4613.6
Domestic transfers	685.9	706.9	739.8	784.5	841.2	888.3	925.6	953.3	971.3	998.7	1035.5	1081.7
External transfers	462.3	463.3	460.8	472.8	538.8	554.6	574.3	587.7	597.7	607.3	615.9	625.6
Corporate and property income	1831.8	1894.6	1968.1	2030.7	2127.9	2186.0	2262.9	2324.3	2377.2	2460.4	2581.9	2738.0
Direct taxes	260.2	247.6	237.5	229.8	224.7	229.9	245.5	271.5	308.0	349.5	396.1	447.9
Social Security contributions	679.5	716.3	756.4	799.8	846.5	887.6	922.9	952.6	976.5	1009.4	1051.2	1102.0
Disposable income	4997.7	5197.5	5410.3	5632.9	5951.4	6167.2	6391.6	6567.7	6730.4	6921.8	7197.3	7509.0

LABOUR MARKET

	1986				1987				1988			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Thousands												
Labour force	4307.4	4312.9	4322.8	4337.6	4363.7	4391.2	4413.4	4417.7	4433.5	4437.1	4467.2	4485.7
Total employment	3983.3	3986.5	4002.2	4027.3	4063.9	4099.2	4130.2	4145.5	4169.4	4178.2	4215.2	4240.9
Employees	3343.7	3350.2	3360.3	3374.5	3393.1	3415.7	3441.6	3458.7	3490.6	3505.2	3544.7	3567.6
Other forms of employment	639.6	636.3	641.9	652.8	670.8	683.4	688.6	686.8	678.8	673.0	670.5	673.2
Unemployment	324.1	326.4	320.6	310.3	299.9	292.0	283.3	272.3	264.0	258.8	252.0	244.8
EUR thousand												
Compensation per employee	0.884	0.924	0.963	1.000	1.036	1.070	1.103	1.135	1.166	1.202	1.244	1.293
Per cent												
Unemployment rate	7.5	7.6	7.4	7.2	6.9	6.7	6.4	6.2	6.0	5.8	5.6	5.5

HOUSEHOLDS' DISPOSABLE INCOME

	1989				1990				1991			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Compensation of employees	4888.6	5121.0	5377.5	5614.7	5839.7	6105.9	6354.8	6694.5	6958.8	7306.0	7595.0	7935.2
Domestic transfers	1137.4	1195.2	1255.1	1317.3	1381.6	1455.5	1539.0	1632.1	1734.8	1843.9	1959.2	2080.9
External transfers	692.7	686.6	696.2	687.5	684.3	761.4	789.2	764.9	725.5	861.3	761.3	782.7
Corporate and property income	2941.9	3097.7	3246.4	3334.8	3435.1	3503.9	3641.3	3780.1	3969.0	4128.7	4268.6	4411.1
Direct taxes	504.7	549.4	581.9	602.3	610.5	627.2	652.5	686.3	728.6	783.5	851.2	931.6
Social Security contributions	1161.7	1220.9	1279.6	1337.9	1395.7	1458.0	1525.0	1596.5	1672.6	1760.3	1859.8	1970.9
Disposable income	7994.1	8330.2	8713.6	9014.1	9334.4	9741.5	10146.8	10588.9	10987.1	11596.0	11873.0	12307.4

LABOUR MARKET

	1989				1990				1991			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Thousands												
Labour force	4551.4	4574.7	4604.7	4609.9	4601.8	4615.9	4614.4	4664.0	4662.3	4684.5	4661.3	4655.8
Total employment	4309.0	4331.7	4364.0	4372.5	4365.1	4379.8	4378.6	4429.7	4427.9	4459.7	4445.1	4448.7
Employees	3629.3	3648.5	3679.4	3689.8	3686.8	3700.4	3691.5	3728.0	3707.8	3728.2	3709.1	3711.4
Other forms of employment	679.7	683.2	684.6	682.7	678.3	679.4	687.1	701.6	720.1	731.5	736.1	737.3
Unemployment	242.4	243.0	240.7	237.4	236.7	236.1	235.8	234.4	234.4	224.8	216.1	207.0
EUR thousand												
Compensation per employee	1.347	1.404	1.461	1.522	1.584	1.650	1.721	1.796	1.877	1.960	2.048	2.138
Per cent												
Unemployment rate	5.3	5.3	5.2	5.1	5.1	5.1	5.1	5.0	5.0	4.8	4.6	4.4

HOUSEHOLDS' DISPOSABLE INCOME

	1992				1993				1994			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Compensation of employees	8334.8	8626.4	8886.2	9079.3	9152.4	9265.3	9260.1	9350.9	9317.2	9447.0	9611.1	9813.9
Domestic transfers	2208.8	2315.5	2400.9	2465.1	2508.0	2552.7	2599.3	2647.7	2697.8	2756.4	2823.2	2898.5
External transfers	780.7	744.8	751.0	738.4	805.6	655.0	702.4	727.7	700.0	688.3	596.8	714.5
Corporate and property income	4492.5	4600.0	4670.7	4678.1	4737.0	4771.0	4823.8	4839.7	4937.2	5056.3	5217.1	5379.5
Direct taxes	1024.6	1089.6	1126.4	1135.1	1115.8	1106.0	1105.8	1115.3	1134.4	1151.8	1167.4	1181.3
Social Security contributions	2093.7	2202.4	2296.9	2377.4	2443.8	2485.9	2503.6	2497.1	2466.2	2482.2	2545.2	2655.1
Disposable income	12698.5	12994.8	13285.5	13448.3	13643.5	13652.1	13776.1	13953.6	14051.7	14313.9	14535.6	14970.0

LABOUR MARKET

	1992				1993				1994			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Thousands												
Labour force	4658.0	4646.0	4653.1	4648.2	4626.5	4641.5	4614.9	4648.2	4641.9	4677.7	4700.4	4705.9
Total employment	4476.1	4468.1	4472.4	4464.8	4424.3	4419.3	4376.8	4395.8	4376.5	4401.4	4415.3	4415.7
Employees	3736.9	3729.7	3728.3	3716.4	3670.9	3655.8	3601.4	3599.9	3556.4	3560.1	3556.1	3546.9
Other forms of employment	739.1	738.4	744.1	748.4	753.4	763.6	775.5	796.0	820.1	841.3	859.2	868.8
Unemployment	181.9	177.9	180.7	183.4	202.2	222.2	238.1	252.3	265.3	276.3	285.1	290.2
EUR thousand												
Compensation per employee	2.230	2.313	2.383	2.443	2.493	2.534	2.571	2.598	2.620	2.654	2.703	2.767
Per cent												
Unemployment rate	3.9	3.8	3.9	3.9	4.4	4.8	5.2	5.4	5.7	5.9	6.1	6.2

HOUSEHOLDS' DISPOSABLE INCOME

	1995				1996				1997			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Compensation of employees	10082.8	10307.6	10523.6	10733.7	10933.9	11060.8	11271.7	11454.4	11658.2	11928.7	12167.7	12394.8
Domestic transfers	2982.0	3063.6	3143.2	3220.8	3296.4	3364.3	3424.4	3476.8	3521.5	3578.4	3647.7	3729.3
External transfers	554.0	580.3	608.4	653.6	690.5	674.4	683.9	675.5	728.2	754.8	758.3	749.2
Corporate and property income	5542.6	5663.8	5721.7	5735.7	5679.8	5619.5	5643.4	5707.8	5864.1	5916.7	5949.0	5943.0
Direct taxes	1193.4	1214.3	1244.0	1282.5	1329.8	1364.9	1387.6	1398.1	1396.3	1399.7	1408.3	1422.1
Social Security contributions	2811.9	2934.2	3022.1	3075.5	3094.4	3131.2	3186.0	3258.7	3349.3	3434.7	3515.1	3590.4
Disposable income	15156.1	15466.7	15730.7	15985.6	16176.3	16222.8	16449.9	16657.8	17026.5	17344.2	17599.3	17803.9

LABOUR MARKET

	1995				1996				1997			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Thousands												
Labour force	4707.1	4708.8	4715.6	4751.8	4788.4	4791.6	4811.3	4811.6	4813.4	4840.4	4867.6	4877.5
Total employment	4414.4	4414.6	4423.9	4450.0	4484.9	4480.7	4506.2	4511.6	4519.8	4557.4	4582.8	4605.5
Employees	3543.7	3537.4	3540.9	3554.8	3577.1	3569.2	3588.1	3593.3	3602.3	3634.6	3656.0	3673.8
Other forms of employment	870.7	877.3	882.9	895.3	907.8	911.4	918.1	918.3	917.5	922.9	926.8	931.8
Unemployment	292.6	294.1	291.7	301.8	303.5	311.0	305.1	300.0	293.6	283.0	284.7	271.9
EUR thousand												
Compensation per employee	2.845	2.914	2.972	3.020	3.057	3.099	3.141	3.188	3.236	3.282	3.328	3.374
Per cent												
Unemployment rate	6.2	6.2	6.2	6.4	6.3	6.5	6.3	6.2	6.1	5.8	5.8	5.6

HOUSEHOLDS' DISPOSABLE INCOME

	1998				1999				2000			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Compensation of employees	12698.3	12935.1	13133.3	13388.5	13666.2	13881.0	14195.2	14479.2	14840.8	15125.5	15407.9	15640.7
Domestic transfers	3823.3	3913.6	4000.3	4083.4	4162.9	4253.6	4355.5	4468.7	4593.2	4715.5	4835.8	4953.9
External transfers	774.8	789.3	783.4	757.6	784.4	779.2	856.0	789.7	833.3	904.7	849.9	979.7
Corporate and property income	5848.1	5831.7	5888.0	5997.0	6183.9	6296.3	6424.0	6523.4	6645.5	6720.6	6828.1	6916.2
Direct taxes	1441.0	1462.4	1486.1	1512.2	1540.7	1576.4	1619.5	1669.8	1727.4	1775.5	1814.0	1842.9
Social Security contributions	3660.6	3720.3	3769.4	3808.1	3836.2	3891.3	3973.4	4082.5	4218.5	4332.6	4424.6	4494.6
Disposable income	18042.9	18287.1	18549.5	18906.2	19420.4	19742.3	20237.9	20508.7	20966.9	21358.3	21683.0	22153.0

LABOUR MARKET

	1998				1999				2000			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Thousands												
Labour force	4930.2	4922.5	4925.8	4954.7	4977.1	4988.4	5004.7	5017.1	5054.7	5069.7	5108.7	5121.8
Total employment	4659.5	4685.6	4691.1	4720.2	4752.3	4756.7	4790.2	4808.6	4846.9	4870.7	4905.4	4933.0
Employees	3716.8	3738.0	3747.0	3774.7	3809.7	3817.5	3848.5	3862.7	3892.7	3908.4	3932.3	3950.6
Other forms of employment	942.7	947.7	944.1	945.4	942.6	939.2	941.7	945.9	954.3	962.2	973.1	982.4
Unemployment	270.7	236.9	234.7	234.6	224.9	231.6	214.5	208.5	207.7	199.1	203.3	188.8
EUR thousand												
Compensation per employee	3.416	3.460	3.505	3.547	3.587	3.636	3.688	3.748	3.812	3.870	3.918	3.959
Per cent												
Unemployment rate	5.5	4.8	4.8	4.7	4.5	4.6	4.3	4.2	4.1	3.9	4.0	3.7

HOUSEHOLDS' DISPOSABLE INCOME

	2001				2002				2003			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Current prices (EUR million)												
Compensation of employees	15774.3	15958.0	16189.2	16437.6	16745.4	16929.0	17029.2	16941.3	17119.3	17135.4	17252.7	17382.7
Domestic transfers	5070.0	5191.0	5317.1	5448.1	5584.2	5711.3	5829.4	5938.5	6038.6	6156.5	6292.1	6445.4
External transfers	930.3	962.0	903.8	910.7	786.5	689.0	703.1	658.0	695.1	585.0	596.4	604.3
Corporate and property income	7004.5	7083.8	7126.0	7165.2	7151.1	7199.3	7241.1	7308.9	7333.1	7369.8	7376.7	7338.0
Direct taxes	1862.3	1878.7	1892.1	1902.5	1910.0	1912.8	1911.2	1905.0	1894.3	1892.2	1898.7	1913.7
Social Security contributions	4542.5	4597.9	4660.8	4731.2	4809.1	4869.3	4911.6	4936.3	4943.2	4975.0	5031.7	5113.5
Disposable income	22374.3	22718.1	22983.1	23327.8	23548.2	23746.5	23980.0	24005.4	24348.6	24379.5	24587.5	24743.2

LABOUR MARKET

	2001				2002				2003			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Thousands												
Labour force	5141.8	5157.1	5177.8	5194.1	5220.4	5246.2	5264.7	5258.2	5298.6	5297.8	5297.8	5293.2
Total employment	4940.7	4952.1	4968.9	4982.4	4997.1	4999.2	4994.7	4949.0	4975.7	4966.3	4968.1	4953.0
Employees	3949.4	3959.3	3979.2	4000.1	4032.6	4042.6	4041.0	3999.8	4012.8	4000.3	4004.0	3999.9
Other forms of employment	991.2	992.8	989.8	982.3	964.5	956.6	953.7	949.2	962.9	966.0	964.1	953.1
Unemployment	201.1	205.1	208.8	211.8	223.3	247.0	270.0	309.2	322.9	331.5	329.7	340.1
EUR thousand												
Compensation per employee	3.994	4.030	4.068	4.109	4.153	4.188	4.214	4.236	4.266	4.284	4.309	4.346
Per cent												
Unemployment rate	3.9	4.0	4.0	4.1	4.3	4.7	5.1	5.9	6.1	6.3	6.2	6.4

HOUSEHOLDS' DISPOSABLE INCOME

	2004				2005			
	T1	T2	T3	T4	T1	T2	T3	T4
Current prices (EUR million)								
Compensation of employees	17720.9	17909.2	18171.9	18364.4	18542.2	18707.3	18836.5	18942.6
Domestic transfers	6616.5	6773.8	6917.3	7047.1	7163.1	7275.4	7384.1	7489.1
External transfers	612.3	643.4	629.1	607.6	575.3	605.9	495.3	506.8
Corporate and property income	7279.7	7213.2	7177.9	7159.6	7156.8	7166.6	7187.6	7224.7
Direct taxes	1937.4	1960.5	1983.0	2004.9	2026.3	2053.8	2087.6	2127.5
Social Security contributions	5220.1	5315.3	5399.0	5471.1	5531.8	5564.4	5569.0	5545.4
Disposable income	25071.8	25263.9	25514.3	25702.6	25879.3	26136.8	26246.9	26490.3

LABOUR MARKET

	2004				2005			
	T1	T2	T3	T4	T1	T2	T3	T4
Thousands								
Labour force	5305.9	5309.4	5338.6	5344.5	5358.9	5370.2	5387.9	5399.2
Total employment	4974.5	4961.7	4973.2	4972.6	4966.6	4970.9	4970.7	4972.8
Employees	4037.8	4040.2	4064.4	4072.9	4077.9	4086.7	4091.2	4094.6
Other forms of employment	936.7	921.5	908.7	899.7	888.6	884.2	879.5	878.2
Unemployment	331.4	347.7	365.4	371.9	392.3	399.3	417.2	426.4
EUR thousand								
Compensation per employee	4.389	4.433	4.471	4.509	4.547	4.578	4.604	4.626
Per cent								
Unemployment rate	6.2	6.5	6.8	7.0	7.3	7.4	7.7	7.9

CHRONOLOGY OF MAJOR FINANCIAL MEASURES

January to May 2006

January

- **3 January (Circular Letter No 1/06/DSBDR)**

  Expresses Banco de Portugal's availability to launch the (informal) application procedure for the use of internal rating systems (credit risk) as well as standard approaches and advanced mediation (operational risk), in the context of the future transposition into national law of Directives 93/6/EEC and 200/12/EC.

- **9 January (Opinion of the European Central Bank 2005/C 323/10, Official Journal of the European Union No 323, Series C)**

  Opinion of the European Central Bank at the request of the Council of the European Union on a proposal for a directive of the European Parliament and of the Council amending Directive 2004/39/EC on markets in financial instruments as regards certain deadlines (CON/2005/53).

- **16 January (Instruction of Banco de Portugal No 33/2005, BNBP No 1/2006)**

  Amends Instruction No 23/2004, on accounting reporting prepared according to International Accounting Standards (IAS) and Adjusted Accounting Standards (AAS).

- **16 January (Instruction of Banco de Portugal No 34/2005, BNBP No 1/2006)**

  Amends Instruction No 18/2005, on the reporting of financial statements and other items for the presentation of accounts of institutions that adopt International Accounting Standards (IAS) and Adjusted Accounting Standards (AAS).

- **16 January (Instruction of Banco de Portugal No 35/2005, BNBP No 1/2006)**

  Establishes the accounting items to be reported to Banco de Portugal by institutions adopting IAS and AAS, in addition to those required by Instructions No 23/2004 and No 18/2005.

- **16 January (Instruction of Banco de Portugal No 36/2005, BNBP No 1/2006)**

  Amends Instruction No 19/97, updating the list of Zona A countries, for the purpose of the solvency ratio.

- **19 January (Circular Letter No 2/2006/DPG)**

  Urges all card issuers to check whether their regulations comply with the minimum standard general provisions for the use of bank cards, substantiated in regulatory provisions as set out in paragraphs 6 to 8 of Notice of Banco de Portugal No 11/2001, of 20 November.

- **20 January Circular Letter No 12/06/DSBDR)**

  Provides clarification on the impact framework of the recognition of liabilities with long-service rewards for active staff, resulting from the transition to International Accounting Standards (IAS) or Adjusted Accounting Standards (AAS).

February

- **15 February 2006 (Circular-letter no. 5/2006/DPG)**

  Clarifies doubts as to the opening of bank deposit accounts by individuals who are not engaged in a professional activity. In the view of Banco de Portugal, such fact shall not constitute a valid ground for refusal by credit institutions.

- **15 February (Instruction of Banco de Portugal No 2/2006 Official Gazette No 3)**

  Amends Instruction No 4/2002, introducing a new data reporting to Banco de Portugal, as regards the coverage of the commitment to pay retirement and survivors pensions.

- **15 February (Circular Letter of Banco de Portugal No 12/2006/DSB)**

  Clarifies doubts as to the accounting framework of commitments to pay seniority bonuses to the active staff.

- **21 February (Law No 3/2006 of 21 February (Series I-A, No 37)**

  Authorises the Government to issue legislation in the field of consumers' rights, in order to transpose into national law Directive 2002/65/CE of 23 September concerning the distance marketing of consumer financial services.

March

- **15 March (Decree-Law No 52/2006 Official Gazette No 53 Series I, A)**

  Transposes into national law Directive 2003/6/CE on insider dealing and market manipulation (market abuse), and Directive 2003/71/CE on the prospectus to be published when securities are offered to the public or admitted to trading.

- **15 March (Instruction of Banco de Portugal No 3/2006 Official Gazette No 3/2006)**

  Introduces changes in Instruction No 19/2005 on interest rate risk in the banking book.

- **20 March (Decree-Law No 59/2006 Official Gazette No 56 Series I, A)**

  Lays down the new system applicable to mortgage bonds and to mortgage credit institutions, as well as to public-sector collateralised bonds. Revokes Decree-Law No 125/90 of 16 April.

- **24 March (Notice of Banco de Portugal No 1/2006, Official Gazette No 66, Series I - B)**

  Amends Notice No 10/94 of 18 November, defining with a higher degree of accuracy the values of the asset items that shall be taken into consideration in the calculation of the large exposures of institutions subject to the supervision of Banco de Portugal.

- **29 March (Decree-Law No 76-A/2006 Official Gazette No 63 Series I, A)**

  Introduces changes, *inter alia*, in the Code of Commercial Companies.

April

- **3 April (Circular Letter of Banco de Portugal No 6/2006/DPG)**

  Recommends that all credit institutions insert the expiry date in each cheque supplied to their clients. For the purpose, they shall also disclose the set of good practices approved by Comissão de Coordenação Interbancária para os Sistemas de Pagamento - CISP (Interbank Coordination Commission for Payment Systems). This measure shall be implemented within a maximum period of three months.

- **4 April (Notice of Banco de Portugal No 2/2006, Official Gazette No 74, Series I - B)**

  Establishes with a higher degree of accuracy the conditions under which the provisions for general credit risks may be considered positive items of consolidated own funds, amending Notice No 12/92 of 29 December.

- **4 April (Law No 10/2006 Official Gazette No 67, Series I - A)**

  Authorises the government to extend the breach of regulations regime applicable to the insurance activity to holding companies subject to the supervision of Instituto de Seguros de Portugal (Portuguese Insurance Institute) and to mixed financial companies regarding the violation of the legal and regulatory rules governing the supplementary supervision of financial conglomerates. This authorisation is valid for a period of 180 days.

- **6 April (Joint Decision No 357/2006 of the Presidency of the Council of Ministers; Ministry of Finance and Public Administration; Ministry of Justice; et. al., Official Gazette No 83, Series II)**

In accordance with the provisions laid down in Article 4 (1) of Regulation (EC) No 2006/2004 of the European Parliament and of the Council of 27 October, designates the Consumer Institute as the single liaison office responsible for the coordination of the application of the said regulation, as well as the competent authorities with specific powers to enforce consumer protection legislation within their specific field of competence.

May

- **3 May (Notice of Banco de Portugal No 3/2006, Official Gazette No 89, Series I - B)**

Provides for the internal control system of credit institutions and financial companies, as well as financial groups. Integrates into a single regulatory instrument the current provisions of Instruction No 72/96 and the internal control procedures applicable to activities and tasks centralised in groups or carried out by subsidiaries abroad.

- **9 May (Notice of Banco de Portugal No 3/2006, Official Gazette No. 89, Series I - B)**

Lays down that credit institutions and financial companies shall have an internal control system covering the definition of their organisational structure, the methods and the procedures required for the achievement of the objectives set out in paragraph 6 of this Notice, in order to minimise the financial, operational, legal and reputational risks - including the risk of fraud, irregularities and errors - guaranteeing their timely prevention and detection. Revokes Instruction No 72/96 of 17 June.

- **15 May (Regulation No 67/2006 of the Ministry of Finance and Public Administration and Instituto de Seguros de Portugal (Portuguese Insurance Institute) (Legal Provision No 4/2006-R), Official Gazette No 105, Series II)**

Amends legal provision No 5/2005-R of 18 March, which defined the subjective scope and the enforcement regime of international accounting standards (IAS) adopted in accordance with the provisions laid down in Article 3 of Regulation (EC) No 1606/2002 of the European Parliament and of the Council of 19 July.

- **29 May (Law No 18/2006, Official Gazette No 103, Series I - A)**

Authorises the government to legislate in the field of reorganisation and winding up of credit institutions and financial companies within the scope of the transposition of Directive No 2001/24/EC of the European Parliament and of the Council of 4 April 2001 on the reorganisation and winding up of credit institutions. This legislative authorisation is valid for a period of 120 days.

- **29 May (Decree-Law No 95/2006 of the Ministry of Finance and Public Administration of 29 May, Official Gazette, Series I)**

Establishes the legal framework applicable to distance contracts for consumer financial services, transposing into Portuguese law Directive No 2002/65/EC of the European Parliament and of the Council of 23 September 2002 concerning the distance marketing of consumer financial services. Pre-contractual information and distance financial services contracts shall subsidiarily be regulated by Decree-Law No 7/2004 of 7 January and the Securities Code, approved by Decree-Law No 486/99 of 13 November. This Decree-Law shall enter into force 30 days following its publication.

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