2009

Annual Report 2009

Bank of Spain

https://elischolar.library.yale.edu/ypfs-documents2/3828

This resource is brought to you for free and open access by the Yale Program on Financial Stability and EliScholar, a digital platform for scholarly publishing provided by Yale University Library. For more information, please contact ypts@yale.edu.
The cut-off date for the information included in this report was 31 May 2010.
In accordance with Community practice, the EU countries are listed using the alphabetical order of the country names in the national languages.

BE Belgium EUR (euro)
BG Bulgaria BGN (Bulgarian lev)
CZ Czech Republic CZK (Czech koruna)
DK Denmark DKK (Danish krone)
DE Germany EUR (euro)
EE Estonia EEK (Estonian kroon)
IE Ireland EUR (euro)
GR Greece EUR (euro)
ES Spain EUR (euro)
FR France EUR (euro)
IT Italy EUR (euro)
CY Cyprus EUR (euro)
LV Latvia LVL (Latvian lats)
LT Lithuania LTL (Lithuanian litas)
LU Luxembourg EUR (euro)
HU Hungary HUF (Hungarian forint)
MT Malta EUR (euro)
NL Netherlands EUR (euro)
AT Austria EUR (euro)
PL Poland PLN (Polish złoty)
PT Portugal EUR (euro)
RO Romania RON (New Romanian leu)
SI Slovenia EUR (euro)
SK Slovakia EUR (euro)
FI Finland EUR (euro)
SE Sweden SEK (Swedish krona)
UK United Kingdom GBP (Pound sterling)
JP Japan JPY (Japanese yen)
US United States USD (US dollar)
## CONTENTS

1 OVERVIEW

1 Introduction 15
2 The world economy’s emergence from the crisis 15
3 Monetary policy in the euro area 17
4 The challenges Spain faces to emerge from the crisis 21
   4.1 The real estate adjustment 24
   4.2 The contraction in credit 27
   4.3 Job destruction 30
   4.4 The decline in domestic expenditure 30
5 Economic policies 31
   5.1 Budgetary consolidation and the sustainability of public finances 32
   5.2 Other structural reform policies 35

2 THE CRISIS AND THE POTENTIAL GROWTH OF THE SPANISH ECONOMY

1 Introduction 39
2 The supply of production factors 40
   2.1 Physical capital 40
   2.2 Human capital 41
   2.3 Technological capital 49
3 Efficiency in the use of factors of production 53
4 Policies to boost potential growth 57

3 THE EXTERNAL ENVIRONMENT OF THE EURO AREA

1 Introduction 63
2 Economic and financial developments 67
   2.1 Starting situation: slump in activity and markets at a standstill 68
   2.2 Market recovery and stabilisation of activity 72
   2.3 Market consolidation and recovery of activity 77
3 The post-recovery environment 81
   3.1 The legacy of the crisis 81
   3.2 Economic outlook 84
   3.3 Additional considerations 86

4 THE EURO AREA AND THE COMMON MONETARY POLICY

1 Introduction 91
2 The intensity of the crisis and the economic policy measures implemented 91
3 The improvement in financial conditions, the beginning of the recovery and the Greek fiscal crisis 96
   3.1 The improvement in financial conditions and the beginning of the recovery 96
   3.2 The deterioration of public finances and the Greek fiscal crisis 98
4 Outlook and economic policy challenges 102
   4.1 Monetary policy 103
   4.2 Budgetary consolidation and the sustainability of public finances 104
   4.3 Other structural reform policies 105

5 THE SPANISH ECONOMY

1 Monetary and financial conditions 113
2 Economic policies 116
   2.1 Fiscal policy 116
   2.2 Other economic policies 119
3 Demand 120
  3.1 National demand 120
  3.2 External demand 128
4 Activity 129
5 The labour market 129
6 Prices and costs 132
7 The nation's net borrowing and the capital account of the institutional sectors 134

6 FINANCIAL DEVELOPMENTS IN SPAIN
1 Introduction 141
2 The Spanish financial markets 143
  2.1 The primary markets 143
  2.2 Secondary market activity 146
  2.3 Secondary market prices 146
3 Spanish financial intermediaries 147
  3.1 Credit institutions 147
  3.2 Institutional investors 149
4 The financial flows and balance sheet position of the non-financial sector 152
  4.1 Households 152
  4.2 Firms 154
  4.3 General government 157
5 External investment and financing of the Spanish economy 159

7 BANCO DE ESPAÑA MANAGEMENT REPORT FOR 2009
1 Introduction 163
2 Activities of the Banco de España as a member of the Eurosystem 163
3 International activities 165
  3.1 International relations 165
  3.2 International conferences, meetings and seminars organised by the Banco de España 169
4 Economic analysis and research 170
  4.1 Priority areas of analysis 170
  4.2 Relations with academia and conferences 172
  4.3 Dissemination and communication 172
5 Banking supervision and regulation 172
  5.1 Supervisory activity 172
  5.2 Imposing of sanctions 175
  5.3 Regulatory activity and changes 176
  5.4 Financial and prudential reporting 179
  5.5 Central credit register 180
6 Operational functions 180
  6.1 Monetary policy and management of the Banco de España's assets 180
  6.2 Functioning and oversight of payment systems 181
  6.3 Banknote management 182
  6.4 Transactions of the fund for the acquisition of financial assets 183
7 The statistical function of the Banco de España 183
  7.1 Main changes introduced in 2009 184
  7.2 Work relating to the collection, management and dissemination of statistical information 185
8 Claims Service 185
9 External communication 186
  9.1 Media relations 186
  9.2 Institutional communication programme 187
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Internal organisation and administration</td>
<td>189</td>
</tr>
<tr>
<td>10.1 Human resources and organisation</td>
<td>189</td>
</tr>
<tr>
<td>10.2 Procurement and general services</td>
<td>190</td>
</tr>
<tr>
<td>10.3 Maintenance and construction</td>
<td>191</td>
</tr>
<tr>
<td>10.4 Corporate document management</td>
<td>191</td>
</tr>
<tr>
<td>10.5 Information systems and processes</td>
<td>192</td>
</tr>
<tr>
<td>10.6 Control, budget and accounting</td>
<td>193</td>
</tr>
<tr>
<td>10.7 Internal audit</td>
<td>193</td>
</tr>
</tbody>
</table>

**ANNUAL ACCOUNTS OF THE BANCO DE ESPAÑA 2009**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Introduction</td>
<td>197</td>
</tr>
<tr>
<td>2 Balance sheet and profit and loss account</td>
<td>198</td>
</tr>
<tr>
<td>3 Notes on the accounts</td>
<td>201</td>
</tr>
<tr>
<td>4 Specific information required by Article 4.2 of the Law of Autonomy of the Banco de España of 1 June 1994</td>
<td>236</td>
</tr>
</tbody>
</table>

**INDEXES**

- Index of Tables 243
- Index of Charts 245
- Index of Boxes 247

**COMPOSITION OF THE GOVERNING BODIES OF THE BANCO DE ESPAÑA**

- Organisation Chart 251
- Governing Council 252
- Executive Commission 253
Overview

1 Introduction

The world economy has experienced the most serious shock since the Second World War. The ensuing economic policy responses have been on an unprecedented scale. Their reaction has averted a catastrophic spiral and has managed to activate the start of the recovery, although the legacy of the crisis will have far-reaching and multi-faceted repercussions. In Spain, the traumatic impact of this episode has compounded the difficulties stemming from the imbalances that had built up during the previous expansion and from some of the inefficiencies still weighing on the economy. Accordingly, exiting the crisis will be a complex task posing specific challenges.

This chapter addresses the main difficulties Spain faces in emerging from the crisis and the economic policy requirements this imposes. The following chapter, which complements this chapter with a more selective theme-based approach, delves into the medium-term problems related to potential growth and supply-side policies.

2 The world economy’s emergence from the crisis

Following the biggest contraction since the end of the Second World War...

... the world economy appears to have embarked on a path of recovery, strongly supported by the swift and forceful economic policy response

The stabilising action of economic policies was also discernible in the financial markets, which tended to normalise

Forecasts point to a progressive recovery in private-sector demand, which would provide a sounder basis for more dynamic activity...

The growth profile over the course of the year was, however, one of mild recovery. This was thanks above all to the rapid and forceful economic policy response, which managed to check the negative feedback loop between the real and financial sectors into which the world economy had entered. Although the measures adopted were not simultaneous across the different regions, they were generally aimed at providing support to the financial system, to sustaining agents’ confidence and to boosting aggregate demand. The first quarter of 2009 saw a continuation of the trends marking the close of 2008, namely extreme fragility on international financial markets and a marked decline in economic activity and foreign trade. But in Q2 there was a turnaround and growth resumed positive rates in the second half of the year. The recovery, nonetheless, is uneven across the different geographical areas, proving more robust in the emerging countries (especially Asia) and weaker in the developed economies.

The stabilising action of economic policies was also discernible in the financial markets, which tended to normalise as governments’ and central banks’ resolve acted managed to head off the more extreme risks. Volatility and risk-aversion declined significantly from their peak in late 2008, asset prices picked up and certain segments of the capital markets progressively re-opened, having remained closed when the crisis was at its worst. Nonetheless, the process of normalisation was interrupted on several occasions by episodes of instability, related in some cases to the perception of sovereign risk, which evidence the persistence of certain factors of fragility. These episodes heightened markedly in the opening months of 2010 in the wake of the Greek fiscal crisis and its repercussions on financial markets not only in Europe but also worldwide.

The forecasts available point to a central scenario in which private-sector autonomous demand should progressively take up the baton from the eminently temporary (exceptionally expansionary economic policies and changes in the inventory cycle) and, therefore, insufficiently sound foundations on which the recovery has hitherto been based. As a result, growth
will continue strengthening during 2010 and 2011, although the debt that has built up will weigh on private-sector demand. That augurs a slow exit from recession and levels of economic activity substantially below potential which, in turn, has also been adversely affected by the crisis. Inflation will hold – at least in the developed countries – at very moderate rates, consistent with the overcapacity generated by the crisis.

However, the uncertainty and risks surrounding this outlook remain high. The severe shocks at the root of the crisis have exposed significant vulnerabilities on the balance sheets of financial institutions, companies and, in certain cases, households. Absorbing these imbalances may prove slower than the central scenarios envisage. The repercussions of the Greek fiscal crisis reveal that the risks associated with a possible resurgence of financial tension, with adverse consequences for growth and employment, have not been fully overcome. Also, the uneven spread of the recovery across regions may affect commodities prices or the volatility of exchange or interest rates in ways other than those considered in the central scenarios.

The soundness of the recovery will also hinge on governments’ and central banks’ ability to suitably regulate the pace of withdrawal of the exceptional measures adopted and to draw the pertinent lessons from this crisis and duly undertake the necessary reforms.
After using – and using up in the case of the developed countries – the room for manoeuvre available in conventional monetary policy conduct, and against a background in which distortions persisted in relevant segments of the transmission mechanism, central banks implemented exceptional measures aimed at reinforcing the transmission of interest-rate cuts to agents’ financial costs and at easing their accessibility to financing. As a result, their balance sheets expanded notably and the composition of their assets changed. Depending on the respective operational frameworks from which central banks departed, the innovations entailed an increase in the number of institutions with access to central bank funding, the extension of the collateral acceptable in monetary policy operations, the lengthening of the maturities at which liquidity was supplied to the market, and public and private asset purchase programmes (or loans to the private sector for the purchase of such assets). Some of these support measures were gradually withdrawn as the markets progressively normalised, although the pressures associated with the Greek crisis meant some had to be reactivated. In any event, the absence of inflationary pressures on the immediate horizon eases matters, although it would be hazardous to underestimate the risks which, in the medium term, might arise from the earlier mentioned uneven pace at which the recovery is spreading across the different regions or from potentially insufficient headway in consolidating public finances. Nor can it be ruled out, a priori, that the lessons of this crisis may advise retaining some of the measures adopted.

Indeed, the extraordinary measures adopted and the subsequent volume of funds committed have been on an unprecedented scale, exhausting all available room for manoeuvre and giving rise to a marked deterioration in public finances. As necessary as these measures were to reduce uncertainty over the long-term solvency of financial institutions and to boost aggregate demand, they now clash with the need to ensure the medium-term sustainability of public finances. It is essential that governments should prevent the build-up of risks in the public sector from ultimately disanchoring inflation expectations and raising long-term interest rates, with the subsequent harm for growth and employment that would entail. The design and implementation of budget consolidation strategies which, without jeopardising the incipient recovery, allow healthy public finances to be achieved in the medium run, are today the main challenges fiscal policy faces in most developed economies.

Governments also face other challenges in the financial area. It is important that the deleveraging processes under way in a good number of financial systems should be orderly, thereby avoiding potential accidents that might endanger the availability of the funds needed to sustain the pick-up in demand. The financial crisis has also highlighted various flaws in the design of financial regulation. The first steps to correct these deficiencies, within an appropriate framework of international coordination, have begun to be taken in the G20 and the Financial Stability Council (see Box 3.3). But much remains to be done in designing a regulatory framework that reinforces the system’s overall security without unduly hampering its development.

The euro area economy was likewise affected by the aforementioned trends. The recession was especially acute in 2008 Q4 and 2009 Q1. Thereafter, the effects of the forceful monetary and fiscal policy measures adopted, the change in the inventory cycle, the stabilisation of international financial markets and the recovery in the world economy – with the subsequent pick-up in international trade flows – all combined to temper the downturn in domestic spending and to boost exports, despite the fact that the euro appreciated over the course of the year. Accordingly, although GDP shrank by 4% over the year as a whole, it posted low but positive quarter-on-quarter growth rates in the second half.

Inflation developments were largely determined by the course of commodities prices on international markets, against a background of sluggish demand and further excess productive
The forecasts available point to a period of slow recovery, weighed down by the high degree of slack in the economy (low capacity utilisation and high unemployment), low business margins, the necessary restructuring of private-sector balance sheets and the progressive waning of the impulse of the policies applied, all factors which will check the pick-up in consumption and private productive investment. Growth will also be uneven across the euro area countries. Against this backdrop, prices will continue moving at notably contained rates.

The risks and uncertainties surrounding these forecasts remain high. The final scale of the recovery in the world economy and trade, the effects on commodities prices and on the global imbalances built up before – and insufficiently corrected during – the crisis, and the headway in normalising international financial conditions will undoubtedly influence the dynamism of prices and activity in the euro area. And so too will the decisions that the fiscal and monetary authorities have to adopt, in a particularly complex setting.

The absence of inflationary pressures in the medium term, set against the notable downturn in economic activity, led the Eurosystem to adhere to the accommodative monetary policy stance it had initiated in October 2008, progressively cutting official interest rates until they reached 1% in May 2009. A total of 325 bp was thus shaved off rates in seven months, marking a monetary impulse on an unprecedented scale.

At the same time, to mitigate the dysfunctions the global financial crisis caused in interbank markets and, therefore, in the monetary policy transmission mechanism, the Eurosystem continued adopting new unconventional expansionary measures which prolonged the enhanced credit support policy initiated at the end of the previous year. Unlike other central banks, these measures were aimed exclusively at the banking system, the importance of which in the intermediation of financing in the euro area is notably greater than in other regions.

More specifically, the demand for funds in all open-market operations continued to be met in its entirety, the expanded list of eligible collateral was extended (to late 2010) and the European Investment Bank was included as an additional counterparty. Furthermore, three new operations maturing at 12 months (double the previous maximum term in force) were conducted. In the first of these tenders a record amount of €442 billion was injected. Mention should also be made of the start-up in July of a covered bonds purchase programme, aimed – inter alia – at improving the liquidity of this market segment, which was strongly affected by the crisis and is of great importance for the funding of banks and their customers. An envisaged maximum sum of €60 billion will be allocated to the programme, which will run until June 2010.

This set of measures has helped the marked easing of the monetary policy stance progressively pass through to the rates applied by banks on their lending and deposit operations. In addition, it has meant that the Eurosystem, in the face of the virtual non-functioning of the interbank markets, has directly met the gross liquidity needs of individual institutions, later mopping up the subsequent excess on top of the system’s net structural needs through drainage operations or via the deposit facility. As a result, there was a substantial expansion in central bank balance sheets which was, however, less than in other regions, and which began to be reversed when the first signs of financial normalisation started to emerge, by means of the straightforward procedure of not rolling over operations on their maturity.

capacity. Inflation averaged 0.3% for the year, although it posted negative rates in the summer months that rose in the final stretch of the year and in the opening months of 2010 (1.4% in March 2010).
The financial normalisation initiated in the second half of 2009 and the brighter economic outlook accompanying it allowed the ECB to announce, at the end of the year, the progressive interruption of its 12-month and 6-month extraordinary refinancing operations, and the resumption at the original monthly frequency of 3-month operations. Later, in March 2010, the return to the system of variable-rate tenders for 3-month operations was announced. However, faced with renewed market pressures arising from the Greek crisis, the ECB decided to reinforce once more liquidity provision at three and six months and to resume US dollar operations. And, at the same time, it adopted a programme based on intervention in the government and private debt markets whose dysfunctionality was jeopardising the normal operation of the monetary policy transmission mechanism. These interventions are being sterilised so as not to affect the monetary policy stance and not to interfere with expectations about the future course of official interest rates.

Accordingly, the single monetary policy is facing major challenges as to how to regulate the return to a normalised operational framework. This first involves preventing the excessive prolongation of the exceptional measures that might generate risks to price stability, but further entails avoiding interfering in the ongoing normalisation of international financial markets. In addition, the appropriate lessons should also be drawn from this crisis, although it should be said that the original operational framework has proven to be sufficiently flexible and robust, meaning that, at least a priori, far-reaching changes do not appear necessary.

In the medium term, the biggest challenges appear to be associated with the need to calibrate the risks to price stability, in a scenario of slow growth and high uncertainty, which will also hinge greatly on the measures implemented in other economic policy areas. The Greek fiscal crisis has highlighted how the ongoing normalisation of the financial system may yet be subject to occasional tensions that hamper attempts to meet the demand for credit that will be generated when the pick-up in activity takes root. But, above all, it has illustrated the pressures to which insufficient headway in the announced fiscal consolidation programmes might give rise.

Fiscal policy also contributed decisively to halting the dangerous spiral of real and financial deterioration by means of discretionary measures to support specific industries (such as the financial sector and car manufacturing) and more general demand-boosting measures (some of which extend to 2010), and through the free operation of the automatic stabilisers. But these measures have exhausted the room for manoeuvre available and have given rise to an unprecedented deterioration in the euro area countries’ public finances, which must now be redressed. On European Commission January 2010 estimates, the euro area budget deficit stood in 2009 at 6.3% of GDP, the highest figure recorded in recent decades and one far above that of 2% for 2008. Thirteen euro area countries have an excessive deficit and the debt/GDP ratio has also moved onto a path of marked growth, and is expected to stand at around 84% of GDP in 2010, compared with 69.4% in 2008. Nor can it be forgotten that these figures do not factor in the contingent liabilities associated with population ageing or those incurred under the plans providing assistance to the financial system.

Under these conditions, it is vital that governments should lay down ambitious and credible fiscal consolidation plans to eliminate uncertainty over the sustainability of public finances. These plans should seek to act on the supply side of the economy (in particular on employment and saving incentives), and also on innovation and enhanced human capital. Experience also shows that the most successful fiscal consolidation processes have been those based more on spending cuts than on tax increases.
On the basis of the Ecofin recommendations in November 2009, all countries in an excessive deficit situation would have to undertake a major consolidation drive, at the very latest, from 2011. The measures envisaged in the updated Stability and Convergence Programmes presented at the start of this year were a step in the right direction. But the Greek fiscal credibility crisis added a further factor of pressure that clearly highlighted how necessary it was to establish sufficiently ambitious and credible fiscal consolidation commitments, and what the costs of not doing so might be for the countries concerned and for the euro area as a whole. This episode has also exposed certain procedural weaknesses in economic policy governance in the euro area and shortcomings in crisis resolution mechanisms, which must be revised and corrected. In the case of the former, to prevent the build-up of imbalances which, while primarily and fundamentally affecting the economy involved, have adverse consequences too for the area as a whole that must be taken into consideration. And in the case of the latter, to reinforce the soundness of the euro area.

The European authorities have responded decisively and forcefully to these challenges. Firstly, they agreed on a programme of assistance for Greece, the initial scope of which was extended to envisage an amount of up to €110 billion. This programme was activated at the request of the Greek authorities, once they had adopted an ambitious and credible fiscal consolidation programme agreed previously with the EC, the IMF and the ECB. Later, in May, in light of worsening tension and uncertainty, national governments’ and European institutions’ commitment to stability in the area was further reinforced by the establishment of the European Stabilisation Mechanism. This programme’s scope was much broader (it could be increased up to €750 billion) and was agreed on by the Ecofin at its extraordinary meeting on 9-10 May. As in the previous case, the strict conditionality of the assistance is a centrepiece of the arrangement. In parallel to this greater aggregate effort, several national governments - including Spain – have taken additional steps to accelerate and shore up their individual fiscal consolidation programmes.

Complementing these actions is the start-up of a process to review economic governance mechanisms, in light of the lessons that may be drawn from this crisis. While the process is still at an early stage, the main areas on which changes may be expected to focus are already discernible. The preventive arm of the Stability and Growth Pact may require some strengthening, with greater relevance being accorded to matters relating to the sustainability of public finances. It would also seem reasonable to move ahead and design better and more effective incentives and mechanisms to ensure stricter compliance with budgetary commitments. Also likely is an extension of the framework for multilateral surveillance of economic developments so as to cover all macroeconomic and competitive imbalances and to establish a systematic procedure for their diagnosis and monitoring, and for greater ex-ante coordination of economic policies. Into the medium term, regard must also be had to the request of the Heads of State and of Government for a permanent mechanism to be set in place for the resolution of potential future bouts of tension, which ensures the necessary financial assistance, subject always to a principle of strict conditionality.

Finally, the crisis has made the need to push through twin-pronged structural reforms more pressing. First, there is the sphere of financial regulation and supervision, where the aim is to prevent circumstances such as those that triggered the current situation, with the necessary coordination in the aforementioned international fora. In this respect, the headway made in creating the European Systemic Risk Board and the European System of Financial Supervisors is to be welcomed. Further, on 3 March the European Commission set out its proposal to renew the Lisbon Strategy, namely the Europe 2020 strategy, thereby initiating the process that should lead to the approval of this reform by the European Council in mid-2010. The proposal
identifies three priorities (for smart, sustainable and inclusive growth), which are expressed as specific goals in terms of increasing levels of employment and of investment in R&D, and of reducing greenhouse gas emissions, school drop-out rates and the share of the population not having completed tertiary education, and alleviating poverty. Mechanisms are also envisaged to strengthen European economic governance. The strategy should contribute more decisively than its predecessor to driving the introduction of a series of structural reforms, the need for which to sustain growth rates and higher and more sustainable employment is all the more pressing after the crisis.

4 The challenges Spain faces to emerge from the crisis

In 2009 the Spanish economy saw the biggest fall in activity in recent decades, although the declines in GDP progressively slackened over the course of the year. The forecasts available point to a weak and gradual recovery, and one not free from difficulties. Beyond the doubts over global recovery, which naturally affect the Spanish economy too, exiting the crisis in Spain poses particular difficulties as a result of the imbalances that had built up during the previous expansionary phase. The stabilisation of financial markets and the recovery under way in some economies, along with the effect of the fiscal stimuli applied during the crisis and of interest rate cuts, allowed for some easing in the declining path of activity from Q1. The result at the end of the year was a cut in GDP of only 0.1 pp in terms of the quarter-on-quarter rate (3.1% when compared with 2008 Q4). The recession in Spain has, therefore, been extensive, and in the first half of 2010 growth has resumed sluggishly and with some delay compared to most of the industrialised countries.

The forecasts available point to a weak and gradual recovery, and one not free from major challenges. Beyond the doubts over global recovery, which naturally affect the Spanish economy too, exiting the crisis in Spain poses particular difficulties as a result of the imbalances that had built up during the previous expansionary phase, the correction of which will influence how growth will resume. These imbalances had taken the form of an excessive concentration of resources in the real estate sector, high private-sector debt and risks to competitiveness, as a consequence of a decade of cost and price rises outpacing those of the euro area coupled with lacklustre productivity. The upshot had been a high external deficit and a continuous increase in external debt. Subsequently, the crisis prompted an extraordinary increase in unemployment and a swift rise in the budget deficit and in public debt, which have compounded the imbalances that must be redressed in order to move back onto a sustained growth path.

This set of factors has meant that the recession in Spain has shown a series of distinctive features. These include most notably the significant role that the decline in domestic expenditure has played in the contraction in output (national demand fell by 6.1% in 2009), driven by the fall-off in household consumption (-4.9%) and by the decline in residential investment (-24.5%), which were joined, with some delay, by corporate productive investment. Conversely, net external demand made a positive contribution of 2.8 pp to GDP growth, softening – as in previous contractionary phases – the impact of the fall in domestic spending on activity. Behind this positive contribution in particular, in a year in which trade flows were subject to major convulsions, lies the reduction in imports, dragged down by the contraction in final demand, although exports regained some momentum in the final months of the year. If the excessive relationship traditionally observed between final demand and imports does not change, it will be crucial, as domestic spending stabilises and the growth rate of imports rises, for the share of exports in world trade to increase. And that, given the stable exchange rate setting of the euro area, is a very demanding aim.

The abrupt containment of domestic expenditure has provided for a reduction in the nation’s net borrowing, which fell from 9.1% of GDP in 2008 to 4.7% of GDP in 2009. A factor that particularly contributed to this was the correction of the trade deficit, owing to the significant fall in imports (see Chart 1.2). The other current account items running a deficit in recent years...
<table>
<thead>
<tr>
<th>DEMAND AND OUTPUT (b)</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>3.3</td>
<td>3.6</td>
<td>4.0</td>
<td>3.6</td>
<td>0.9</td>
<td>-3.6</td>
</tr>
<tr>
<td>Private consumption</td>
<td>4.2</td>
<td>4.2</td>
<td>3.8</td>
<td>3.6</td>
<td>-0.6</td>
<td>-4.9</td>
</tr>
<tr>
<td>Government consumption</td>
<td>6.3</td>
<td>5.5</td>
<td>4.6</td>
<td>5.5</td>
<td>5.5</td>
<td>3.8</td>
</tr>
<tr>
<td>Gross capital formation</td>
<td>5.2</td>
<td>6.5</td>
<td>8.3</td>
<td>4.3</td>
<td>-3.9</td>
<td>-15.0</td>
</tr>
<tr>
<td>Equipment investment</td>
<td>5.1</td>
<td>9.2</td>
<td>9.9</td>
<td>9.0</td>
<td>-1.6</td>
<td>-23.1</td>
</tr>
<tr>
<td>Construction investment</td>
<td>5.4</td>
<td>6.1</td>
<td>6.0</td>
<td>3.2</td>
<td>-5.5</td>
<td>-11.2</td>
</tr>
<tr>
<td>Housing</td>
<td>5.9</td>
<td>6.1</td>
<td>6.2</td>
<td>3.0</td>
<td>-10.3</td>
<td>-24.5</td>
</tr>
<tr>
<td>Other construction</td>
<td>5.0</td>
<td>6.2</td>
<td>8.3</td>
<td>3.8</td>
<td>-0.4</td>
<td>1.6</td>
</tr>
<tr>
<td>Exports of goods and services</td>
<td>4.2</td>
<td>2.5</td>
<td>6.7</td>
<td>6.6</td>
<td>-1.0</td>
<td>-11.5</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>9.6</td>
<td>7.7</td>
<td>10.2</td>
<td>8.0</td>
<td>-4.9</td>
<td>-17.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EMPLOYMENT, WAGES, COST AND PRICES (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total employment</td>
</tr>
<tr>
<td>Employed labour force (d)</td>
</tr>
<tr>
<td>Unemployment rate</td>
</tr>
<tr>
<td>Compensation per employee</td>
</tr>
<tr>
<td>Unit labour costs</td>
</tr>
<tr>
<td>GDP deflator</td>
</tr>
<tr>
<td>Consumer price index (12-month % change)</td>
</tr>
<tr>
<td>Consumer price index (annual average)</td>
</tr>
<tr>
<td>Consumer price differential with the euro area (HICP)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAVING, INVESTMENT AND FINANCIAL BALANCE (e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident sectors: saving (f)</td>
</tr>
<tr>
<td>General government (f)</td>
</tr>
<tr>
<td>Resident sectors: investment</td>
</tr>
<tr>
<td>General government</td>
</tr>
<tr>
<td>Resident sectors: domestic net lending (+) or net borrowing (-)</td>
</tr>
<tr>
<td>General government gross debt</td>
</tr>
<tr>
<td>ECB minimum bid rate on MROs</td>
</tr>
<tr>
<td>Ten-year government bond yield</td>
</tr>
<tr>
<td>Synthetic bank lending rate</td>
</tr>
<tr>
<td>Madrid Stock Exchange General Index (DEC 1985 = 100)</td>
</tr>
<tr>
<td>Dollar/euro exchange rate</td>
</tr>
<tr>
<td>Nominal effective exchange rate vis-à-vis developed countries (h)</td>
</tr>
<tr>
<td>Real effective exchange rate vis-à-vis developed countries (l)</td>
</tr>
<tr>
<td>Real effective exchange rate vis-à-vis the euro area (i)</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
</tr>
<tr>
<td>Liquid assets (l)</td>
</tr>
<tr>
<td>Households: total financing</td>
</tr>
<tr>
<td>Non-financial corporations: total financing</td>
</tr>
</tbody>
</table>

SOURCES: INE, Intervención General del Estado, AMECO and Banco de España.

a. The National Spanish Accounts data are calculated on the basis of base year 2000.
c. Rates of change, except the unemployment rate, which is presented as a level.
d. Employed labour force (16-64).
e. Levels as percentages of GDP.
f. Includes net capital transfers received.
g. Annual average levels for the Stock Exchange General Index, interest rates and exchange rates, and rates of change for financial assets and liabilities.
h. 1999 Q1 = 100.
i. 1999 Q1 = 100.
j. Includes cash equivalents, other bank liabilities and money-market funds.
have also been corrected to some extent, while the tourism surplus has declined. Overall, the reduction in the external deficit has a substantial cyclical component; a permanent correction of the deficit will require far-reaching changes in the productive structure and a significant improvement in competitiveness.

From the standpoint of the financial position of the institutional sectors, the adjustment reflects only partly the significant improvement in the lending capacity of the private sector which, since the start of the crisis, has raised its saving and reduced its investment, since general government borrowing requirements have increased considerably. The improvement in the private sector's lending capacity from 2007 to 2009 amounted to 18 pp of GDP, with a relatively similar contribution by households and firms. As a result of this process, the net lending capacity of households for 2009 as a whole was equivalent to 7.1% of GDP, while the corporate sector balance remained in deficit (2.2% of GDP), albeit for a much lesser amount than in 2008.
labour market response and the adjustment of domestic expenditure. Next, the economic policy requirements emerging from the situation described are set out, leaving for the following chapter a more in-depth and analytical assessment of the medium-term problems related to potential growth and to the role supply-side policies must play in tackling them.

One of the singular features of the contraction in Spain is the severe adjustment in the real estate sector. During the boom period, which ran for almost a decade, the combination of very generous financial conditions, property appreciation expectations, a substantial improvement in future income prospects and an extraordinarily dynamic demographic environment boosted the expansion of the sector to what would prove excessive levels, both from the standpoint of the productive resources assigned to real estate production and of its valuation and the debt tied to residential activity. This made an adjustment inevitable and necessary. It began to unfold gradually before the financial crisis broke in mid-2007, and was driven by the change in the ECB's monetary policy stance during 2006 and by the downward revision of property appreciation expectations. However, the intensity of the crisis meant that the risks of a severe adjustment suddenly materialised.

Activity in the sector has fallen sharply, with a decline in the residential investment/GDP ratio of 2.3 pp to 5.2% since the peak of the cycle in 2006-2007. This figure is below the average level of the past two cycles, and has entailed a drastic loss of jobs and...
prompted a significant knock-on effect on other productive branches. Despite the intensity of the contraction, the adjustment has not yet concluded. On the production side, and due to the lag between housing starts and completions, the overhang in the sector continued to increase during 2009, albeit at an increasingly lower rate. The absorption of this overhang will require some time; the longer it takes, the greater the delay in the recovery in demand or in the completion of the adjustment in prices. Also, it will restrict the potential contribution to growth of residential investment, which will hold below its average historical levels. The price correction has been less sharp, with property prices falling by around 12%, depending on the sources taken, although this is an area in which the quality of the statistics is not yet commensurate with the significance of the sector. While less sharp, the correction has diminished the value of real estate wealth. And this, combined with the effect of unemployment and with the loss of confidence, is contributing to holding back private consumption and to an increase in the saving rate (see Box 5.1).

The continuation of the adjustment in the real estate sector until completion will detract from spending in the coming quarters, thereby limiting the scope of the recovery in the Spanish economy in the short run; but it is a key element for providing a sounder basis for economic dynamism.
Given the role that recourse to bank debt has in the financing of private-sector spending decisions, and in a setting like the present in which these liabilities are contracting, analysis of the outlook for this variable is particularly relevant when assessing the Spanish economy’s possibilities of recovery. It may be useful in this connection to begin by reviewing the relationship between credit and the business cycle in comparable past episodes. In this respect, Panel 1 shows the marked procyclical nature of credit. Specifically, in economic upturns it tends to grow at a higher rate than that of GDP, which reflects the fact that during these periods households and firms generally have favourable expectations about their future income, meaning that their readiness to resort to debt to finance their spending increases. Those supplying these funds during such phases tend to approve the attendant applications to a greater extent, as they usually perceive fewer risks in respect of borrowers’ solvency. In phases of lower economic growth, the same forces operate in the opposite direction.

SOURCES: INE, ECB, Federal Reserve, UK Office for National Statistics and Banco de España.
meaning that the dynamism of debt diminishes with greater intensity than that of output, growing at a lesser pace for some time, which allows debt ratios to decline and agents’ solvency to improve. Thus, for instance, in the 1992-1993 recession credit reached its low for the cycle (the date of lowest expansion) three quarters after GDP did, and it was subsequently growing less than GDP for almost three years (see Panel 1).

These cyclical effects are clearly apparent in the latest credit developments, where the economic crisis has been accompanied by a strong slowdown in these liabilities. Notwithstanding, at end-2009 credit was continuing to grow at a rate which, though negative, was still higher than that of nominal GDP. The simple extrapolation of past behaviour would suggest that, even in a scenario of economic recovery, bank financing should grow for some time at a rate below that of output. Moreover, if the patterns of previous cycles recur, the point of maximum contraction in this variable would not yet have been reached.

But apart from the traditional cyclical factors, credit over the coming quarters will foreseeable also respond to other factors related to certain adjustments needed in the financial position of both the private sector and the financial system. Regarding the former, the debt ratio of households and firms, which departed from a lower level than that of other developed economies, came to exceed the related average ratio for the euro area and the United States, standing close to that of the United Kingdom (see Panel 2), although in the case of households a comparatively greater portion of these liabilities was used to finance house purchases. This excess leverage, in any event, will tend to restrict the demand for resources, given the lesser relative scope of households and of firms to withstand the obligations associated with new liabilities, especially in a setting in which the dynamism of their income is not likely to recover swiftly. These factors will also bear down on the supply of loans insofar as this situation adversely affects the solvency of borrowers.

The need for private-sector balance sheets to be adjusted will foreseeably be greater for certain groups of agents, such as companies linked to the real estate sector, where the excesses accumulated have been greater and the correction is as yet incomplete. As can be seen in Panel 3, real estate companies were, prior to the crisis, the recipients of a significant proportion of the new financing allocated to productive activities, without any reduction in outstanding volumes of debt – something that can be seen in the other branches – having been observed yet. In the household sector, the growth of credit during the years prior to the crisis, while most considerable, did not reach such high levels, and it was moreover used chiefly for house purchases (see Panel 4).

The financial system, which withstood the first wave of the international financial crisis better than intermediaries in other countries, has more recently been increasingly affected by the impact of the economic crisis on the quality of their portfolios. Specifically, the doubtful assets ratio, which had been standing at what were historically very low levels, has risen rapidly, albeit without having yet exceeded the 1992-1993 recession levels (see Chart 5). As a result, the margins available have progressively diminished. Thus, the doubtful assets coverage ratio fell from 260% in 2006 to less than 60% at end-2009. Consequently, it cannot be ruled out that further impairment of credit portfolios may be reflected to a greater extent than hitherto in falling profits. This impact of the crisis, moreover, is proving heterogeneous across institutions, as illustrated, for example, by the high dispersion of doubtful assets ratios (see Chart 6). There is hence a need to undertake the redimensioning of this sector, a need to which the higher levels of capital required by markets and regulators will also contribute. Against this background, credit supply conditions can not foreseeably be significantly eased.

In sum, although difficulties hampering the recovery in credit may persist in the short term, over a longer horizon the adjustments will provide for the reinforcement of the financial system’s soundness, which is a prerequisite for effective financial intermediation that contributes positively to the growth of activity and of employment. The duration and intensity of the phase of sluggish bank lending will depend, in any event, on the speed at which households and firms, on one hand, and the financial system, on the other, complete the adjustments under way.

4.2 THE CONTRACTION IN CREDIT

Credit to households and firms has entered a contractionary phase as a result of a complex set of factors.
lar, a crisis situation entails a downward revision of private-sector spending plans (and therefore less demand for financial resources). But, at the same time, a crisis restricts the ability to pay, thereby reducing solvency, which translates into stricter supply conditions. Such tightening, moreover, is likely to affect households and firms heterogeneously and, among the latter, size will be a further factor. If, as has occurred in this case, an economic crisis coincides with an international financial crisis, the diagnosis difficulties multiply. Nonetheless, viewing recent developments in credit with a sufficiently broad timespan offers very significant aspects for understanding the role credit is playing in this cyclical phase of the Spanish economy.

The cyclical peak as regards credit behaviour was approximately at the end of 2006, and therefore some time ahead of the start of the crisis. The slowdown in bank loans thus responded, at first, to predominantly idiosyncratic factors, including primarily the very exuberance of the expansion in debt. Credit growth rates of 20% or 30% were unsustainable, and made for household and corporate debt ratios which, though they departed from relatively low levels, swiftly exceeded the averages for the other developed countries (see Chart 1.2).

Another specific factor was the marked concentration of bank loans in the house building, property development and house buying sector. As evidence amassed on the overdimensioning of this sector, downward pressures began to emerge on both the supply of funds by institutions increasingly exposed to this source of risks and on the demand for funds by overindebted agents facing the prospect of subdued real estate prices and activity.

The international crisis brought further and likewise contractionary pressures to bear on demand and on credit supply. Spanish household and business confidence fell sharply, as did their expectations about future income and, therefore, wealth. This was against a background of substantially rising uncertainty, and translated into a strong adjustment of agents’ expenditure plans and, therefore, of the demand for funds with which to finance them.

The increase in uncertainty has been accompanied by a generalised reassessment of the level of risk in place in different economies. Before the crisis this level had been clearly underestimated, also by households and firms, whose debt ratios, which may previously have appeared tolerable, now proved clearly excessive. This change affected not only their readiness to apply for new loans, but also their ability to obtain them, given the greater precariousness of their financial position. In this respect, the correction to date in private-sector debt ratios has been limited, even if the conjunctural effect that the 2009 recession has had on these ratios is stripped out. Evidently, more buoyant household and corporate income would contribute positively to mitigating the contractionary effect of this factor on credit supply and demand.

The reassessment of risks also affected financial intermediaries, who are more rigorous in their pricing of risks and who face, in turn, more demanding markets. Spanish credit institutions withstood the initial onslaught of the international financial crisis from a position of relative strength, as a result of the combination of a series of factors. These included most notably the high relative weight of their long-term liabilities, which limited their refinancing requirements at the most critical points; their business model, which is eminently geared to retail banking and relatively unexposed to the losses and liquidity problems associated with the now-infamous toxic assets, and which is easier to exploit to increase the depositor base; and the provisioning buffers built up as a result of a prudential regulatory and supervisory system that is more demanding than in other countries. Evidently, the gradual normalisation of international financial markets has also contributed to easing the pressure on credit supply.
Nonetheless, the duration of the crisis and, above all, its effects on the Spanish economy have progressively eaten away at the buffers available, in a setting in which the leverage levels acceptable to markets and regulators will tend to be lower. Hence the need to pursue the redimensioning of the sector, the effect of which on credit supply will tend to be all the greater the swifter and more orderly this process is. The challenges here are greater for banks that took on more risks during the upturn in the credit cycle, and a more resolute attitude is now expected on their part so that they may appropriately exploit the possibilities at hand to ensure the efficiency of the process. To this end, significant regulatory changes have been made that have substantially broadened the means and tools available to adapt and restructure banks, by means of the new framework provided by the creation of the FROB (Fund for the Orderly Restructuring of the Banking Sector). The reforms introduced, with wide parliamentary backing and the prescriptive approval of the European authorities, have allowed the process to be set in train through the start-up of several bank integration processes. As usual, these matters are addressed in greater depth in the *Report on Banking Supervision in Spain* and in the *Financial Stability Report*, but are also tackled on a broader level in Box 6.1 in this Report.
Future credit developments will be influenced by the habitual cyclical behaviour of this variable and by the restructuring process affecting lenders and borrowers.

Past patterns of credit behaviour show the marked procyclicality of this variable, which in previous comparable episodes has tended to recover with some delay compared with economic activity. On this occasion, future bank loan developments will also be influenced by the need of both credit institutions and of households and firms to rise to the restructuring challenges set out in this section (and which are analysed in greater detail in Box 1.1). Successfully negotiating these challenges will be vital to prevent distortions from arising in the functioning of the financial channels, as such distortions may hamper the resumption of a sustainable path of output and employment growth.

4.3 JOB DESTRUCTION

But as regards overcoming the crisis, the biggest source of difficulties stems from the intensity job destruction has reached (over 2 million people since employment was at its highest, in 2007 Q3) and the rise in unemployment (standing at over 4.6 million people in the opening months of 2010; see Chart 1.5). Labour shedding has affected disposable income most adversely and, by extension, domestic spending. But it has also exerted a most unfavourable effect on confidence and expectations, amplifying the contractionary tendencies of spending. The continuation of such a situation, in which any recovery in employment were to take time and labour prospects failed to improve, would be a major obstacle to the resumption of growth and to the adjustment of public finances.

The scale and speed at which job destruction has come about are proving far greater than in previous recessions. The characteristics of the previous cyclical phase, which was very intensive in generating employment and evidenced substantial biases in respect of sectoral composition, may have influenced this behaviour to some extent. Nonetheless, the only explanation for the severity of the adjustment is the persistence of serious institutional shortcomings in the workings of the labour market, which had remained latent during the upturn, against a background of far-reaching demographic changes and alterations in the composition of labour supply, but which have deployed all their effects as the crisis has unfolded. These shortcomings mean that the labour market adjustment falls disproportionately on employment, and most particularly on temporary employment, the share of which in total employment fell to 24.4% in 2009 Q4.

The deterioration in employment expectations ultimately affected the rate of increase of labour supply (with some delay compared with past experiences), as a result of the sharp slowdown in the working-age population, caused by the reduction in net migrant inflows and by the lower pace of the participation rate. Despite diminished demographic buoyancy, the unemployment rate climbed to 20% of the labour force in 2010 Q1. The rise in unemployment affected the different population segments unevenly; the groups most affected were males, immigrants and youths, particularly those with a lower level of educational attainment, for whom the unemployment rate reached 52.2% in the opening months of 2010. The increase in unemployment is entailing a significant rise in the rate of long-term unemployment. The absorption of labour surpluses from construction and the emergence of processes of hysteresis will entail difficulties that raise the risk of unemployment becoming structural. The materialisation of this risk would be an obstacle to recovery and would have adverse consequences for the prospects for potential growth, which would be further diminished by the foreseeably low long-term growth of labour supply, as analysed in Chapter 2.

4.4 THE DECLINE IN DOMESTIC EXPENDITURE

The magnitude of the contraction in domestic expenditure has been considerable.

The decline in domestic expenditure has been on a particularly large scale in Spain. This has been due, in part, to the significant reduction in residential investment, as earlier discussed; but also of importance has been the contraction in consumption which, for the second year running, has been the domestic demand component that has most contributed to the decline in GDP.
During the adjustment phase disposable income maintained a positive – although moderate – growth rate, underpinned by the sizable transfers of income from general government, lower interest payments and the moderation of prices, which offset the strong fall-off in wage income. Wealth has fallen above all as a result of the decline in real estate prices. Nonetheless, the downscaling of household expenditure plans during this phase has exceeded what the trend of these determinants might have led to expect. Other factors, such as the tightening of lending standards, households’ perception about the need to restore health to their financial position, and the downturn in confidence and in future income expectations (aspects closely tied to the labour market situation) are also playing a decisive role in the contraction of household spending. Only by having regard to these considerations may an explanation be found for the rapid increase in the saving ratio, which stood at 18.8% of disposable income at the end of the year, marking a historical high.

Business investment also reacted sharply, with an unprecedented fall of 20% for the year as a whole. This was amid highly adverse global conditions for this type of expenditure, both because of the demand outlook and the contraction in profits (which, however, is being eased by the reduction in financial charges, unlike in previous recessionary cycles) and because of the tightening of financing conditions. As a result of this disinvestment process, the economy’s capital stock has been eroded, with potential implications for long-term growth that are analysed in the following chapter.

Looking ahead, private-sector spending decisions will be influenced by the need to reduce the still-high level of leverage in a setting in which the scant dynamism of income will slow the correction of debt ratios in the short term. To achieve substantial improvements in the financial position of households and firms will require moderate consumption and investment patterns, but this is a necessary step if the recovery is to be on the basis of a sustainable spending path.

Economic recovery in Spain faces major challenges. Only once the excesses in the real estate sector have been eliminated and financial restructuring in the private sector is complete may
domestic expenditure resume sustained growth. The financial restructuring of the private sector should, moreover, run in parallel with the restructuring of credit institutions, so that financing flows are sufficient to support households’ and firms’ spending plans. But above all, the Spanish economy’s traditional structural problems – whose effects are being felt particularly sharply during the recession – must be resolved, as they restrict the capacity for adjustment and for long-term growth within the euro area. Here, economic policies have an important role to play.

The absence of supporting factors in respect of demand-side policies and the need to lift the obstacles hampering growth capacity in the medium and long term mean that supply-side economic policies play a crucial role in exiting the crisis and in the recovery of potential growth. On the monetary policy front, the foreseeable recovery in activity in the euro area will perhaps lead to some gradual normalisation of interest rates, which remain at all-time lows, meaning that additional stimuli to those already in place would not be appropriate. Nor is there any room to apply expansionary fiscal measures, as the fundamental challenge involves, as analysed below, giving structure to the programme announced to restore budgetary stability and the sustainability of public finances in the medium term. Accordingly, the main area for economic policy conduct lies in the structural measures and reforms that provide for job creation, increase competitiveness, improve efficiency and corporate profitability, and help, all told, to restore spending on solid foundations and to obtain a flexible and efficient response by productive resources.

Fiscal policy has made a great effort to counter private-sector contractionary impulses through the free play of the automatic stabilisers and the adoption of very large-scale discretionary measures, some of which are temporary. Nonetheless, the Spanish budget deficit is eminently structural, as it is due, above all, to a permanent loss of revenue as a result of the redimensioning of the real estate sector. This in turn has compounded a rising trajectory in spending that is outpacing trend growth. Accordingly, a fiscal consolidation to check the rapid deterioration in debt dynamics is unavoidable. The fiscal effort required in this connection, in a situation in which the forecasts available point to a moderate growth scenario, is very great and may become more demanding depending on the course of interest rates. Testifying to this are the latest developments on financial markets, in particular the sovereign debt markets, triggered by the Greek fiscal credibility crisis and the contagion effect towards other vulnerable economies, and by the effects of the crisis on the economy’s potential growth (see Box 1.2).

Mention must also be made, more into the medium term, of the impact on the deficit and debt of the cost of population ageing, which, in the absence of reforms to the public pension system, will be one of the highest in the EU according to the estimates available.

The arguments that make fiscal consolidation a pressing need are manifold. First, high deficit levels and growing rates of public debt may entail interest rate rises, especially when the markets are alerted to the possibility of fiscal crises occurring in some countries and to these spreading tension across the bond markets. This risk has begun to materialise already in the euro area, in the wake of the Greek fiscal crisis. It has led the government bond spreads of the most vulnerable countries to widen significantly, in spite of their different fiscal positions and of the fact that the nature of their risks is not on a par with those of Greece. Second, the significant dynamic effects of the fiscal deterioration must be taken into account. When this is very swift, the financing of the significant increases in the interest burden poses the harsh dilemma of cutting primary expenditure or raising taxes, with both options exerting adverse effects on growth, although these will generally be greater in the long run if the second option is taken. Finally, a high level of public debt reduces the capacity of fiscal policy to respond to future adverse shocks. In this respect, the Spanish experience, at the start of the crisis, is illustrative
According to the updated Stability Programme (USP) presented on 29 January by the Spanish government, general government debt is expected to increase by 38 pp of GDP between 2007 and 2013, in a benign scenario for economic growth and the interest burden. Although the level of Spanish public debt was below the European Union average in 2009, the risks associated with the strong inertial component of this variable should not be forgotten. Specifically, once public debt reaches high levels, it is difficult to break the trend unless significant budgetary adjustments are made. This Box illustrates these aspects drawing on the definition of various alternative scenarios for the path of Spanish public debt to 2013, constructed using alternative assumptions of GDP growth, interest rates and fiscal adjustment.

A change in the public debt/GDP ratio from one year to the next depends on four fundamental factors. First, on the level of the primary public balance, whereby a negative balance in this variable translates into an increase in debt of the same amount. Second, on nominal GDP growth: positive (negative) growth gives rise to a reduction (increase) in the debt/GDP ratio. Third, on the interest payments on public debt that have to be financed. And, fourth and finally, on the debt-deficit adjustment, which reflects, inter alia, the need to finance the acquisition of financial assets.

To illustrate the relative significance of each of these factors, it is useful to analyse the role each played in the process of public debt reduction that began in the 1990s in Spain and which allowed for a 30 pp cut in the public debt/GDP ratio between 1995 and 2007. This period saw an adjustment to the primary balance of the order of 0.8% of GDP a year from 1994 to 1999, and of 0.2% from 2000 to 2007. Conducive to this adjustment were high nominal GDP growth rates, which averaged over 7% in the 1994-2007 period, and the favourable trend of interest rates, which fell by 4 pp over the same period (see accompanying panel).

To assess the impact of these same factors on debt dynamics over the coming years, various scenarios are considered that take as a basis the projections for each of these variables envisaged by the USP. The first scenario considers the public debt projection of the USP’s central scenario, adjusted for the new public deficit path approved by the Spanish government on 20 May 2010 (“Central scenario”), in which average nominal GDP growth stands at 3.4% in the 2010-2013 period, the average implicit interest rate on debt is at around 4% and the adjustment of the primary public balance is 2.4 pp of GDP on average between 2010 and 2013. The second scenario is obtained by jointly considering the two risk factors of the USP (“risk scenario”), which involves assuming lower average nominal GDP growth in 2010-2012, of the order of something over 0.5 pp compared with the central scenario, and interest rates 1 pp higher than those of the base scenario. Thirdly, in addition to the assumptions of the previous scenario, it is assumed that the fiscal adjustment made in each year of the 2010-2013 period is lower and, specifically, similar to the average adjustment made in the last fiscal consolidation process (adjustment of the primary balance of 0.8% of GDP). Finally, to illustrate the risks that not undertaking a budgetary consolidation process would entail, the last scenario assumes that the primary balance holds at the 2009 levels in the 2010-2013 period. It should be noted that, in the last two scenarios, what is purely an accounting exercise is performed, with the remaining assumptions of the USP being retained.

In the central scenario the debt ratio would stabilise at a level of close to 70% of GDP in 2013. The USP risk scenario would raise the public debt ratio/GDP to a level of over 74% in 2013. The USP adjustment scenario would reduce the level of debt to a level of 71% of GDP. Finally, in the last scenario, the level of debt would rise to over 77% of GDP.

1. It is further taken into account that the 2009 deficit/GDP and public debt/ GDP ratios were respectively 0.2 pp and 2 pp lower than the initial estimates in the USP.

2. The sensitivity exercises (risk analyses) for the USP (table 5.2 of the USP) only cover the 2010-2012 period. For 2013, the change in the level of debt provided in the USP (see table 4.5 of the USP) is applied to the level of debt of this scenario in 2012.
of the room for manoeuvre that the starting position of public finances provided, which advocates restoring a healthy budgetary position as soon as possible.

Fiscal consolidation faces the difficulty of pursuing the dual goal of effectiveness in order to reduce the budget deficit and stabilise debt, and of minimising its potential adverse effects on growth in the short term. Past experience shows that the best means of negotiating such a situation is to focus the consolidation drive on cutting current expenditure, although given the scale of the budget shortfall, resort must inevitably be had also to increasing resources through the taxes that generate least distortion. To do this, clear and transparent fiscal rules will be needed, using the full range of provisions offered by our institutional framework: namely, the Budgetary Stability and the Stability Programme Laws, as newly conceived, which will provide for more effective mechanisms to ensure compliance with the commitments made.

In Spain, once expansionary conduct had run its course, the best contribution fiscal policy could make to growth was via the rigorous implementation of the fiscal consolidation plan within the term set by the Stability and Growth Pact. The government undertook to pursue a fiscal consolidation programme, in accordance with the November 2009 Ecofin recommendations, whose guidelines were given specific form in the updated Stability Programme unveiled in January this year. The Programme acknowledged the existence of a high structural deficit and aimed to reduce it in the period 2010-2013, placing the deficit at 3% of GDP at the end of the projection horizon. This would be on the basis of a marked cut in public spending, although the projected macroeconomic scenario taken was relatively benign, meaning that compliance might require additional efforts to those envisaged, as formulated by the Ecofin Council in its opinion on the updated Stability Programme.

Subsequently, as part of the moves to reinforce governments’ and European institutions’ commitment to stability in the area before the tension generated by the Greek fiscal crisis worsened, the Spanish government adopted a more ambitious fiscal consolidation programme on 20 May. It sought thereby to avert a deterioration that would have had grave consequences for the economy and for euro area stability. The programme frontloads a sizeable portion of the
reduction in the deficit in 2010 and 2011, when it would stand at 6% of GDP, and it involves a series of measures that act directly on the structural component, which might be cut by more than half, as described in Chapter 5 of this Report. This austerity drive by the government is in response to the exceptional nature of the situation and to the wish to redress public finances. In any event, it is vital to ensure that the objectives are strictly implemented, since any deviation will give rise to significant credibility problems. To ensure strict compliance, it will be necessary to reinforce monitoring and surveillance procedures, to seek formulas that ensure compliance with the objectives laid down, particularly in the case of territorial governments, and to redress the dynamics of certain spending items.

In the current situation, pension reform is particularly timely.

In circumstances like the present, and given the demands the situation poses, the adoption of pension system reforms, in line with the government’s proposal, is particularly timely; this allows for an improvement in the long-term sustainability of public finances without generating adverse effects on short-term growth.

5.2 OTHER STRUCTURAL REFORM POLICIES

Structural reforms are crucial for boosting long-term growth and amending labour market shortcomings...

The main instrument available to national authorities to boost long-term growth prospects is that of structural reforms. These are all the more pressing after the crisis, as it is vital to resolve as soon as possible the inefficiencies that the crisis highlighted. This will call for some of the institutional frameworks in place and rooted practices to be changed.

The behaviour of employment during the current cyclical phase indicates that the Spanish labour market’s pre-crisis adjustment mechanisms are not working properly, since they have the weight of the adjustment fall excessively on employment. This type of response reveals the presence of major labour relations deficiencies, and this is very costly from the standpoint of long-term economic growth and social well-being.

Excessive labour market segmentation (stemming from the coexistence of a very high degree of protection for employees with a permanent contract and of a wide range of temporary contracts with very low termination costs) determines high costs for stable hiring and job stability, and leads labour mobility to be concentrated, almost exclusively, on a very large group of workers with temporary contracts, who have scant training and recycling options open to them. The collective bargaining system tends to exacerbate, moreover, some of the consequences of labour market segmentation by encouraging uniform wage increases, which show scant cyclical sensitivity and are highly indexed to past inflation. It is a system which, on the whole, largely prevents relative wages from acting as a signalling mechanism for the reallocation of resources towards sectors with greater development potential.

It is therefore a priority to overhaul labour market institutions through reform that simultaneously influences collective bargaining systems and hiring arrangements and which, at the same time, reinforces training and intermediation systems. That would allow for better job reassignment across companies and sectors, it would increase the economy’s capacity for adjustment in the face of shocks and it would help promote a change in the productive model that has prevailed over the past business cycle.

The regulation of the housing market – in particular of those aspects that have hampered the development of the rental segment – coincided with the gestation of one of the biggest imbalances that built up during the economic upturn and it also gave rise to substantial adjustment inefficiencies during the recession. Measures promoting the development of the rental market would contribute to providing an outlet for the stock of unsold housing, to smoothing access to accommodation and to promoting the regional mobility of workers. Various such measures were approved in 2009, including most notably the announcement of a series of initiatives...
aimed at increasing legal efficiency in rental-related cases, and certain aspects of the Leasehold Law were amended. However, the main features of this law relating to mandatory contract duration and to rent control have been retained. The draft sustainable economy legislation, which is in passage through Parliament at the time of this report going to press, and which has been designed to boost long-term growth, proposes a way forward in the re-balancing of the tax treatment of rented and owner-occupied housing. Turning to services, the easing in final prices over the course of the past 18 months reflects a substantial increase in the cyclical sensitivity of these prices, which may be partly due to changes in price-setting arrangements in increasingly competitive environments. The most specific progress in structural reforms has in fact been aimed at the liberalisation of the sector and at the reduction of administrative burdens. In this respect, headway was made in 2009 in the transposition of the Services Directive, with the aim, among other aspects, of providing free access to the provision of specific services and of reducing administrative burdens. It will be attempted to deepen both avenues of reform with the Sustainable Economy Law. Nonetheless, the persistence of obstacles to the free pursuit of certain activities, such as retail trade, remains discernible.

As to the network industries, the effects of the liberalisation processes of the past decade are most visible in the telecommunications sector, although some segments remain in which certain rigidities are still perceptible, and these are of vital importance for harnessing the advantages provided by the development of the information society. In the energy industry, despite the numerous regulatory changes made with greater liberalisation in mind, the degree of de facto competition is far from what it should be if the sector is to be able to deploy its potential synergies to the rest of the economy. Effective improvements in the competitive environment in which energy companies operate must therefore be achieved, in line with the European Commission’s recommendations. Finally, in the transport industry, the draft sustainable economy legislation includes various measures to increase competition in the intercity passenger transport market and to foment railway transport through, for example, the improved interconnection of different modes of transport.

Finally, the reform of the education system and the re-design of incentives for a greater accumulation of technological capital would also contribute to raising the efficiency of factors of production and, therefore, to increasing the economy’s potential growth. These reforms are addressed in greater detail in the following chapter, which also analyses in depth the obstacles posed by the institutional design of labour relations to a prompt and sustained recovery of the Spanish economy.
The crisis and the potential growth of the Spanish economy

1 Introduction

As described in Chapter 1, in the crisis besetting the Spanish economy there has been a combination of external factors and other, domestic factors, linked to the build-up of significant imbalances. These took the form of high private debt, losses in competitiveness and an excessive concentration of resources in the real estate sector, and they were not only due to the factors that drove spending exuberance, but are also related to the persistence of a series of structural obstacles that limit the economy’s growth potential. In turn, the crisis, given its dimension and nature, is exerting effects that go beyond the conjunctural impact on activity and employment and bear down negatively on the level of potential output and its growth in the medium and long term.

The rapid application of expansionary monetary and fiscal policies on the demand side to uphold the level of activity has managed to check in the short term the strong recessionary impulses and to circumvent any dangerous feedback loops. But as useful as these policies are in acting as buffers against economic fluctuations, on their own they do not correct the structural problems underlying the crisis and heightened by it. What is more, the lack of any further available room for additional stimuli and the pressing need to swiftly embark on an ambitious fiscal consolidation strategy mean that, also from a shorter-dated perspective directly linked to exiting the crisis, structural reform policies are of paramount importance.

Supply-side policies are essential for rapidly reabsorbing the imbalances that have built up and removing the obstacles hampering the economy’s growth capacity in the medium and long term, so as to pave the way for a more dynamic recovery. Households, firms and the public sector may thus more readily reduce their debt and restore health to their financial positions so as to resume a sustainable expenditure path in the presence of buoyant national income. In turn, the containment of unit labour costs needed to make headway in improving competitiveness will be easier if the foundations for ongoing productivity gains are laid. Also, reallocating the surplus productive resources in the real estate sector is not conceivable unless there is a more flexible framework that helps provide for shifts in capital and labour towards sectors with greater growth potential.

The goal of supply-side policies is ultimately to promote potential growth, with incentives both for a greater accumulation of productive factors (physical, human and technological capital) and for improving their efficiency. As a result of its habitual procyclical behaviour, private investment in capital goods and in technologically innovative activities has contracted particularly sharply during the crisis, adversely affecting the stock of productive capital actually available. Public investment has offset this to some extent, but is being constrained by the pressing need for fiscal consolidation. The accumulation of human capital is also being impacted. The growth of the labour force has slowed owing to fewer immigrant arrivals and to the reduction in participation rates. The unemployment rate has also risen significantly, while the greater demand for education has come up against education system results that show some room for improvement. The increase in the incidence and duration of unemployment tends to reduce workers’ employability and productivity, thereby lessening the economy’s human capital and placing upward pressure on structural unemployment. Finally, as regards efficiency gains, the regulation of the markets for goods, services and production factors has seen the persistence of certain aspects which contributed, along with other elements, to a sectoral allocation of resources marked by the excessive weight of the real estate sector. Such aspects further contributed to maintaining the productivity growth rate at levels below those in the mid-1990s and,
at present, they restrict competition and detract from the proper management of productive resources, as regards both their sectoral allocation and their organisation within companies. This situation continues to bear down significantly on efficiency.

From this perspective, this chapter analyses the situation regarding the supply of production factors and their efficiency in the Spanish economy so as to identify the obstacles that may be restricting the dynamism of these two sources of growth. This analytical approach helps offer some pointers as to the areas in which the need for supply-side economic policy action is most pressing in order to raise the Spanish economy’s level of potential output and medium- and long-term growth and, thereby, pave the way to exiting the crisis.

2 The supply of production factors

2.1 Physical capital

The Spanish economy increased its stock of physical capital notably during the expansion...

During the 1994-2007 period, total capital grew in real terms at an annual average rate of 4%. This increase was higher in the case of assets related to new technologies (software, communications, etc.), transport equipment and machinery, and capital goods. Both the private and the public sectors contributed in a similar fashion to this dynamism, with respective growth rates of 4.8% and 4.5% for non-residential productive capital. Under private capital, and by sector of activity, there were also notable differences in the increases: 0.9% in agriculture, 3.2% in industry, 6.7% in construction and 6.2% in market services.¹

From a historical perspective and from an international standpoint, this increase in the Spanish economy’s capitalisation was notable. On one hand, the growth rates of capital in the previous decades held up, even increasing in the case of public capital and of new technologies-related assets. On the other, the growth of the total stock of capital was practically twice that of the average for the EU 15. Contributing significantly to this headway in the Spanish economy’s capital endowment were capital transfers from the EU, which will be much less sizeable in the coming years.

Despite high investment, the amount of physical capital per worker (the capital/labour ratio) did not increase significantly. Unlike in previous periods, in which it was more moderate, between 1995 and 2007 the growth of employment was on a similar scale to that of the stock of capital; accordingly, the capital/labour ratio held relatively stable and the Spanish economy’s insufficient capital per worker relative to other European countries was therefore not corrected. Conversely, public capital and residential capital per inhabitant increased more than in the euro area (see Table 2.1).

Not only did aggregate capital intensity relative to other developed countries not increase, but its composition by asset and by sector also continued to differ somewhat from that of the advanced economies (see Chart 2.1). The lower capitalisation of the Spanish economy was traditionally more manifest in respect of non-residential capital, whose growth during the expansion was centred on the construction sector (an annual average growth rate of 6.7%), on transport and communications (7.1%) and on business services (9.3%) and social services (9.9% in private education, 10.8% in health and private social services, and 11.8% in other social activities and services). As a result, private productive capital in the high-technology sectors held constant at

1. The data on the capitalisation of the Spanish economy are taken from BBVA and IVIE, El stock y los servicios de capital en España y su distribución temporal (1964-2007).
around 7% during the 1994-2007 period. Relative to other advanced economies, capital intensity is particularly high in the construction sector and lower in manufacturing and services.

The crisis has exacerbated the shortfall in the Spanish economy’s capitalisation...

As is usually the case in recessions, there has been a sharp fall in gross investment (15.7% in 2009), markedly so in the residential component but also in gross capital formation in capital goods (24% in 2009). Bearing in mind this fall in investment, the likely increase in the rate of capital depreciation during the crisis and the rise in the recorded rate of business closures (see Box 2.1), the stock of non-residential capital may well have declined significantly in the past two years.

The increase in the user cost of capital and the financial position of companies limit the possibilities of recovery in private investment, while the necessary fiscal consolidation will adversely impact public investment. As regards residential investment, any recovery in this variable will be uncertain until the real estate adjustment is over and the excess supply built up has been eliminated. Foreseeably, then, there will be no significant rise in investment demand, meaning that physical capital endowment will continue to be relatively lower than that of other euro area countries.

The main determinant of potential growth, measured in per capita terms, is labour productivity growth, whose level depends in turn on capital per worker and on the efficiency of the factors of production. The low growth of the capital/labour ratio and the scant efficiency gains recorded from 1995 to 2007 help explain the low rise in labour productivity over this period. On the estimates available, each percentage point increase in the capital/labour ratio gives rise to an increase in average labour productivity of 0.35 pp. Consequently, if Spain were to attain the average capital/labour ratio for the euro area (which is 18 pp higher than the Spanish ratio), labour productivity would rise by 6.5 pp, which would bridge approximately 70% of the gap observed in 2007 between European and Spanish labour productivity. The rest of the productivity gap (2.8 pp) would be attributable to the lesser efficiency of the factors of production relative to these countries.

The ten years from 1997 to 2007 were one of the periods of highest growth in the Spanish labour force. Running at an average annual rate of 1.43%, this increase was underpinned by the intensity of immigration flows (see panels 1 and 2 of Chart 2.2). The foreign labour force resident in Spain contributed to this average increase by 0.98 pp, compared with the 0.44 pp contribution of nationals. This latter contribution was chiefly based on the rise in the female participation rate (panel 3 of Chart 2.2). In 2009, the growth of the labour force dipped to

### Table 2.1: Capital Intensity Relative to the Euro Area

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock of productive capital/employment ratio</td>
<td>65.9</td>
<td>84.9</td>
<td>81.5</td>
</tr>
<tr>
<td>Private physical capital/employment ratio</td>
<td>79.7</td>
<td>85.8</td>
<td>81.6</td>
</tr>
<tr>
<td>Public capital/population ratio</td>
<td>32.0</td>
<td>70.0</td>
<td>82.8</td>
</tr>
<tr>
<td>Residential capital/population ratio</td>
<td>61.8</td>
<td>60.5</td>
<td>71.1</td>
</tr>
</tbody>
</table>

Source: Structural indicators of the Spanish economy and of the EU, Banco de España.

2. The estimates of the elasticities of output with respect to physical capital and to human capital are around 0.35 and 0.4, respectively (see A. de la Fuente and R. Doménech (2002), Human capital in growth regressions: how much difference does data quality make? An update and further results, CEPR Discussion Paper, no. 3587).
SECTORAL BREAKDOWN OF THE STOCK OF NON-RESIDENTIAL CAPITAL (a)

SOURCES: The EU KLEMS Growth and Productivity Accounts, November 2009, and Banco de España.

a. The data are expressed as percentages.
BUSINESS CLOSURES IN SPAIN DURING THE ECONOMIC CRISIS

One of the negative aspects of the economic crisis that can most persistently bear on the economy’s growth capacity in the medium and long term arises from the adverse impact of the crisis on the economy’s stock of capital. This impact derives essentially from the sharp adjustment productive investment has undergone. The destruction of the productive system stemming from business closures during the crisis might also have generated a significant negative effect on the stock of capital which, however, is difficult to estimate. This Box attempts to quantify this effect, drawing on information on the exit of firms from industry in Spain.1 Firstly, there is a descriptive analysis of the companies that are exiting the market in the current situation of crisis, paying attention both to their number and their sector of activity, size and legal status. Secondly, an estimate is made of the impact of these business closures in terms of loss in the economy’s stock of capital.

According to the DIRCE data, in 2008 (the latest year for which information is available) the number of companies that exited the market rose to 398,229, signifying 23.5% more closures than in 2007, the year prior to the outbreak of the crisis. In relative terms, the number of firms that deregistered in 2008 accounted for 11.9% of total active companies, an exit rate more than 2 pp higher than that of 20072 (see accompanying chart). Around two-thirds of the total companies that deregistered were sole proprietorships or self-employed workers, a percentage 10 pp lower than the historical average, meaning that the closure of mercantile companies appears to have accelerated in 2008. The scant data available for 2009 indicate that the situation might have worsened, given that the number of mercantile companies wound up increased by around 8% in relation to 2008, according to INE statistics on mercantile companies, and the number of self-employed fell by almost 10%, on the latest EPA (Labour Force Survey) data.

The accompanying table shows the distribution of companies that closed during 2008, according to DIRCE, by sector of activity and workforce numbers, depicting in the first column the rate of change of closures between 2007 and 2008 by sector of activity. As was to be expected, the biggest increase in the destruction of the productive system took place in the construction industry (with a 74% increase in closures), followed by the real estate activities sector. The second column in the table reveals that the construction, other market services and distribution and sale of vehicles sectors amassed two-thirds of total closures. The following columns give the exit rate by size of company. It can be seen that micro-companies, defined as firms with fewer than 10 employees, accounted for more than 98% of total closures. The percentage of closures with fewer than 10 employees was similar in 2007, although the weight therein of companies with employees was much smaller (scarce 30% of total closures, compared with 43% in 2008).

Turning to the estimate of the impact of business closures in terms of loss of installed capital, at least three difficulties are posed. First, DIRCE does not offer information on the fixed capital of companies that close. This is why this Box approaches the capital of companies that have closed under the assumption that such capital is equivalent to the level of property, plant and equipment net of depreciation of compa-

---

1. The data sources used in this Box are, firstly, the DIRCE (Central Directory of Enterprises) maintained by INE, which draws essentially on companies’ fiscal data and, on an annual basis, publishes data on the number of active companies in Spain by sector, legal status and workforce numbers, along with some business demographics data such as the entry and exit of companies during the year under analysis. The latest figure provided by DIRCE is for 1 January 2009, i.e. it refers to the year 2008. The second source used is the Social Security system, which provides monthly data on the deregistration of companies with workers affiliated to the general regime or to the special coal mining regime. Taking these data as a basis and bearing in mind the proportion of companies without employees in Spain, an approximate estimate has been made of the total number of companies that exited the market in 2009. Lastly, the information furnished by the Banco de España CBSO-Mercantile Registers data will be used.

2. The exit rate in 2007 was 9.4%, a very similar figure to the average for the period 2000-2006, which was around 9%.
BUSINESS CLOSURES IN SPAIN DURING THE ECONOMIC CRISIS (cont’d)

...eries with similar characteristics in terms of sector of activity (two digits), workforce numbers and legal status, as drawn from the Banco de España CBSO-Mercantile Registers data. The second difficulty stems from the lack of knowledge about the residual value of the closed company’s installed capital, i.e., about the portion of the installed capital’s value that a company can recover on its closure. In this case, two scenarios have been considered. The first assumes that the residual value of the capital is zero, i.e., it is assumed that there is no possibility to re-sell or re-use the capital to recover part of its value. The second scenario assumes that 60% of the value of the capital can be recovered at the end of the company’s life. Third, no data are available yet on closures for 2009, meaning that an estimate has had to be made drawing on the data provided by the Social Security system.

On the basis of these assumptions, the first column in the second table shows an estimate of the impact, in terms of installed capital, of the closure of companies in 2007. That year the effects of the crisis had still not been felt, meaning that the impact of the exit of companies could be taken as that for a normal year. It can be seen that company closures that year would have entailed the disappearance of 3% of the economy’s installed capital under scenario 1, and of 1% under scenario 2. Columns 3 and 4 in the tables show that the crisis would have generated an increase in the destruction of installed capital, owing to the closure of companies, in relation to that occurring in 2007, of somewhat less than 2 pp per year under scenario 1 and of 0.70 pp year under scenario 2, which would be equivalent in both cases to a temporary increase in the rate of depreciation of aggregate capital of a similar magnitude.

In short, this box shows that the current situation of crisis has raised the number of companies that have been obliged to close. The destruction of the economy’s stock of capital derived from this phenomenon might therefore have been significant. Business closures, according to the diagnostic snapshot for 2008, were concentrated in the construction, other market services and distribution and sale of vehicles sectors. The vast majority of these companies were, moreover, very small.

4. Only firms set up as a mercantile company are obliged annually to file their accounts with the provincial mercantile registers. Accordingly, to make the estimate, it has been assumed that the installed capital of unincorporated companies is zero. The latest data available from the CBSO-Mercantile Registers are for 2007. It will therefore be the value of property, plant and equipment in 2007 that is used as a reference in the estimate. To approximate to the total installed capital of closures each year, the median value of the property, plant and equipment of mercantile companies operating in a specific sector (defined taking the first two digits of the NACE 93) and which have a specific number of employees and legal status has been estimated, with the property, plant and equipment relating to the total closures (or stock of companies) being obtained between 2007 and 2009 by means of their multiplication by the number of companies with these characteristics that have closed (or were active) according to the DIRCE in the year under study. Given that it is reasonable to think that the property, plant and equipment of companies that close is somewhat less than that of the other active companies, an alternative estimate has been made using the median property, plant and equipment of the companies that close in each of the cells defined by a given size, sector and legal status. 5. The estimate of the number of closures in 2009 made using the Social Security system’s data is very conservative; consequently, it should be considered as a floor. Alternative estimates, using EPA data for instance, would considerably raise the number of closures for 2009.

6. This percentage would be considerably lower, and would be around 1% in scenario 1, if the median property, plant and equipment of the companies closing were used, instead of that of all the companies with given characteristics. However, since the estimates of the number of closures for 2009 is clearly conservative, multiplying a lower level of property, plant and equipment by a larger number of closures in 2009 would give an estimate of capital destroyed by the crisis that were very similar to that offered in the second table.

---

1 BREAKDOWN BY SECTOR AND BY WORKFORCE SIZE OF CLOSURES IN 2008 (%)

<table>
<thead>
<tr>
<th>Business closures</th>
<th>Change 2007/2008</th>
<th>Total 2008</th>
<th>By workforce size</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>No employees</td>
<td></td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>12.5</td>
<td>0.0</td>
<td>42.3</td>
<td>56.1</td>
</tr>
<tr>
<td>Manufacturing and energy</td>
<td>18.5</td>
<td>5.2</td>
<td>50.0</td>
<td>46.5</td>
</tr>
<tr>
<td>Construction</td>
<td>74.2</td>
<td>27.2</td>
<td>43.6</td>
<td>54.2</td>
</tr>
<tr>
<td>Distribution and sale of vehicles</td>
<td>4.5</td>
<td>21.9</td>
<td>61.5</td>
<td>37.9</td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>-0.3</td>
<td>9.6</td>
<td>49.6</td>
<td>49.7</td>
</tr>
<tr>
<td>Transport</td>
<td>8.2</td>
<td>4.5</td>
<td>63.2</td>
<td>36.1</td>
</tr>
<tr>
<td>Post and telecommunications</td>
<td>15.1</td>
<td>0.3</td>
<td>60.0</td>
<td>37.9</td>
</tr>
<tr>
<td>Fin. intermediation and insurance</td>
<td>19.3</td>
<td>1.7</td>
<td>77.6</td>
<td>22.2</td>
</tr>
<tr>
<td>Real estate activities</td>
<td>49.8</td>
<td>6.3</td>
<td>47.4</td>
<td>52.1</td>
</tr>
<tr>
<td>Other market services</td>
<td>17.5</td>
<td>13.7</td>
<td>69.6</td>
<td>29.6</td>
</tr>
<tr>
<td>Non-market services</td>
<td>10.4</td>
<td>9.5</td>
<td>64.9</td>
<td>34.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>23.5</strong></td>
<td><strong>100.0</strong></td>
<td><strong>55.8</strong></td>
<td><strong>43.0</strong></td>
</tr>
</tbody>
</table>

SOURCE: DIRCE.
2 ESTIMATE OF THE COST OF BUSINESS CLOSURES

<table>
<thead>
<tr>
<th>Fixed capital</th>
<th>% of stock of capital destroyed by closures (scenario 1)</th>
<th>% of stock of capital destroyed by closures (scenario 2)</th>
<th>Capital destroyed by closures in 2008-2009 as % of 2007 stock (scenario 1)</th>
<th>Capital destroyed by closures in 2008-2009 as % of 2007 stock (scenario 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007</td>
<td>2007</td>
<td>Annual average</td>
<td>Annual average</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>1.1</td>
<td>0.5</td>
<td>0.9</td>
<td>0.4</td>
</tr>
<tr>
<td>Manufacturing and energy</td>
<td>1.6</td>
<td>0.6</td>
<td>1.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Construction</td>
<td>3.9</td>
<td>1.6</td>
<td>7.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Distribution and sale of vehicles</td>
<td>2.3</td>
<td>0.9</td>
<td>2.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>4.0</td>
<td>1.6</td>
<td>4.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Transport</td>
<td>2.1</td>
<td>0.8</td>
<td>2.2</td>
<td>0.9</td>
</tr>
<tr>
<td>Post and telecommunications</td>
<td>4.8</td>
<td>1.9</td>
<td>5.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Financial intermediation and insurance</td>
<td>3.1</td>
<td>1.2</td>
<td>6.1</td>
<td>2.4</td>
</tr>
<tr>
<td>Real estate activities</td>
<td>4.6</td>
<td>1.8</td>
<td>9.1</td>
<td>3.6</td>
</tr>
<tr>
<td>Other market services</td>
<td>3.5</td>
<td>1.4</td>
<td>5.2</td>
<td>2.1</td>
</tr>
<tr>
<td>Non-market services</td>
<td>2.2</td>
<td>0.9</td>
<td>2.7</td>
<td>1.1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3.0</td>
<td>1.2</td>
<td>4.7</td>
<td>1.9</td>
</tr>
</tbody>
</table>

SOURCES: Social Security and Banco de España.

0.59%, with the foreign labour force contributing 0.39 pp, and nationals 0.20 pp, with greatly differing behaviour (panels 3 and 4 of Chart 2.2) between the male (negative contribution of 0.65 pp) and female (positive contribution of 0.92 pp) populations.

An habitual indicator of per capita human capital is the ratio of the weighted sum of the working-age population, with weights based on level of educational attainment, to the figure resulting from this sum assuming that the entire population had reached the maximum level of educational attainment. According to this indicator, the stock of human capital per person of working age is estimated to have increased, between 1995 and 2007, by almost 9 pp, and the gap with the euro area to have narrowed by almost 8 pp, including when adjusted for the relative quality of the educational system (see Table 2.2). The increase in human capital was boosted by notable growth in public spending on education. Weighted by the population aged 16 to 64, such spending increased from 58.3% to 81.3% of that corresponding to the euro area average. During the crisis, however, the youth participation rate fell considerably in relation to 2007, especially in the 16-19 age group (by 5.8 pp for males and by 4.1 pp for females), which is partly associated with an increase in the demand for education.

Despite the notable increase in the average level of educational attainment, a high proportion of the working-age population has still not completed secondary education (49% in 2007, compared with 30% on average in the OECD countries). When the high growth of the population with a university education (29% of the population aged 25-64 resident in Spain in 2007...
HUMAN CAPITAL INDICATORS

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human capital per capita (a) (b)</td>
<td>51.4</td>
<td>60.6</td>
</tr>
<tr>
<td>Quality-adjusted human capital (b)</td>
<td>50.3</td>
<td>59.1</td>
</tr>
<tr>
<td>Population in continuous training (b)</td>
<td>9.6</td>
<td>10.4</td>
</tr>
<tr>
<td>Population with higher education (b)</td>
<td>23.9</td>
<td>37.4</td>
</tr>
</tbody>
</table>

SPAIN RELATIVE TO THE EURO AREA

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human capital per capita (a)</td>
<td>87.5</td>
<td>95.4</td>
</tr>
<tr>
<td>Quality-adjusted human capital</td>
<td>85.6</td>
<td>93.0</td>
</tr>
<tr>
<td>Public spending on education per capita (a)</td>
<td>71.3 (c)</td>
<td>81.3 (c)</td>
</tr>
<tr>
<td>Continuous training</td>
<td>223.4</td>
<td>123.8</td>
</tr>
<tr>
<td>Higher education</td>
<td>122.6</td>
<td>128.7</td>
</tr>
</tbody>
</table>

SOURCE: Structural indicators of the Spanish economy and of the EU, Banco de España.

a. The population comprises persons aged 16-64.
b. Percentages.
c. Refers to 2006 figures.
had a university qualification, compared with 27% on average in the OECD countries) is fac-
tored in, this gives a situation in which the weight of the population with solely a secondary
education is half that relating to the OECD average (22%, compared with 44%). This polarisa-
tion results, therefore, in a notable shortage of medium-skilled workers from the official educa-
tion system’s vocational training programmes.

Another habitual indicator to evaluate the dynamism of human capital accumulation is what is
known as wage returns to education. In short, this measures the increase in wage earnings
that would be obtained as a result of staying in the education system longer, acquiring higher
qualifications before joining the labour market. Insofar as wage earnings were associated with
productivity, this indicator would measure the impact of increases in the level of educational
attainment on quality-adjusted human capital endowment. However, the interpretation of this
indicator should also bear in mind that the recent expansion, by its very nature, may have af-
ected the wages of workers with different skills differently and that the distortions in the Span-
ish labour markets may give rise to a gap between wages and productivity. Accordingly, wage
returns to education are not an exclusive reflection of the effectiveness of the educational sec-
ctor when it comes to accumulating human capital.

In Spain, the values of this indicator are low as a result of two factors, which are illustrated in
Chart 2.3. Firstly, wage levels are somewhat more concentrated than in the average for the
OECD countries (top panel), with only 8.4% of the population with wage income over the double of the median and 9.1% of the population below half the median (compared with 10.5% and 14.7%, respectively, in the reference zone). Secondly, having a university qualification raises to a lesser extent the likelihood of earning wages more than twice the median (around 12 pp in Spain, against 15 pp for the OECD average), which is partly due to a high occupational mismatch among university graduates who, in an excessive proportion, hold jobs whose skills are below their level of educational attainment.

When taking into account also the public financing of education (cost of education, scholarships, etc.) and other economic returns thereto, such as the probability of having a job and the differential impact of direct taxes and of social transfers by income level (unemployment benefits, pensions, etc.), the increase in income resulting from investment in education over the life cycle is even lower in Spain compared with other EU countries: for each additional year of education, the private return to education in Spain is around 7.8%, while in the EU as a whole it is almost 9%. Even so, this return is higher than that of other assets, which justifies private and public investment in education.4

The fact that the wage return to education in Spain is relatively low is the result of the declining trend observed in the past decade. Generally, the studies that use microeconomic data report that it has fallen from around 7% in 1995 to less than 6% in 2006 when a comparison is made of individuals with different levels of educational attainment but with other similar personal characteristics (age, sex, etc.), and who, moreover, perform the same type of work (sector, occupation, type of contract, etc.).5 One important factor that has contributed to this decline is the occupational mismatch arising from the fact that many low-skilled jobs are occupied by workers with a high level of educational attainment. Consequently, when indices of the quality of human capital are constructed, weighting the population’s levels of educational attainment by the wage return to education, the increases prove to have been rather insignificant, since the positive impact of the growth of the level of educational attainment is partly offset by the negative effects of the lower value of education that stems from occupational mismatch.6

Since wage returns to education depend on the relative supply and demand of labour with different skills, and as there is some evidence that the new technologies may have prompted an increase in the relative demand for workers with a higher level of educational attainment, the reduction in wage returns to education is paradoxical. Admittedly, the supply of these workers has also increased considerably; but there has likewise been a similar increase in other countries where, unlike in Spain, increases in wage returns to education have been recorded. Hence, the declining trend of these returns seen in Spain indicates the existence of two potential gaps in the process of human capital accumulation: an insufficient increase in the quality of education, and demand for labour biased towards labour-intensive activities for which the general skills offered by the education system do not prove very productive.

Looking ahead, several factors that may contribute to increasing the supply of human capital are limited. On one hand, the working-age population will stagnate and even fall in the coming decade. On the latest INE demographic projections, the 16-64 population will decline at an annual average rate of 0.3% in the period 2009-2015 and of 0.17% during

the following five years. And on the other, participation rates have little room for growth, given that, except in the oldest cohorts, female cohorts are already very close to those of males. Moreover, the crisis is adversely affecting the youth participation rate, with young people extending their stay in the education system, and the participation rate of older workers, who leave the labour market to a greater extent in recessions and take early retirement. There might be some permanent component to these effects, which could prompt a decline in the labour force, even bearing in mind that, if the current youth population raises its level of educational attainment, in the future their participation rate might be higher. Although immigration might increase once more given the envisaged scenario, where most room for growth in the labour force appears to reside is in the lengthening of working life. Among other measures, this will require changes in the rules governing qualification for and the calculation of retirement pensions, and a reduction in the unemployment rate, for which a labour reform is needed. There is another major factor of risk stemming from the crisis that must be added here, which may adversely affect the accumulation of human capital. As with physical capital, the rate of depreciation of human capital may have increased significantly owing to the longer duration of periods of unemployment. The empirical evidence on the loss of human capital and the subsequent negative effects on the employability and productivity of workers who undergo long periods of unemployment is fairly conclusive (see Box 2.2). While these adverse effects of unemployment duration are likely to materialise to a lesser extent than in previous crises, it cannot be ruled out that the structural unemployment rate, or NAIRU, will increase, with the subsequent reduction in potential output.

Accordingly, under the current demographic and labour scenario, the increase in human capital will tend to be sustained to a greater extent by increases in the working population's level of educational attainment and in the quality of education, and by improved training programmes for the unemployed. There is ample room for improvement in the level of educational attainment by means of lowering the percentage of the population that does not complete secondary education, while improvements in quality require the revision of certain aspects of education policies so as to increase the effectiveness of public spending on education. It would also be advisable to improve the way in which training programmes for the unemployed are managed.

2.3 TECHNOLOGICAL CAPITAL

Technological innovation activities increase potential growth by means of the introduction of product innovations, which may also translate into the emergence of new companies and industries; the introduction of process innovations, normally in parallel with the incorporation of new machines; and organisational improvements, which harness the complementarities between factors of production, thereby providing for greater productive efficiency.

R+D spending as a percentage of GDP rose from 0.8% in 1995 to 1.35% in 2008. Other indicators also show advances in this area: personnel in R&D activities as a percentage of the employed population increased by 0.5% in 1995 to 1.1% in 2008. Consequently, the gap with the euro area regarding the technological capital/GDP ratio narrowed by 23 pp from 1995 to 2007 (see Table 2.3).

However, the technological investment drive has been undertaken with some imbalance between public and private financing. While the public budget for spending on R+D+i showed growth rates of 25% per annum in the period from 2004 to 2008 and private-sector spending on R+D+i increased considerably (from 0.4% of GDP in 1995 to 0.74% in 2008), private financing, as a proportion of the total, fell from 48% in 2004 to 45% in 2008, a figure that contrasts with the target of 66% established under the Lisbon Strategy. Consequently, it may be
Lasting unemployment may lead to an erosion of the skills acquired through work experience, which can affect future wage earnings. According to the EPA data, the proportion of the long-term unemployed has risen from 22% in early 2008 to almost 35% in 2009 Q4, meaning almost 1.5 million more people are jobless.  

Various international studies show that the long-term unemployed have greater difficulty finding a new job and their return to the labour market is associated with permanent wage losses. A long-term wage decline of between 10% and 25% of the initial wage has been quantified in the United States for those workers who lost their jobs in the 1993 and 1982 crises, respectively. In Germany, a comparable estimate for workers who lost their job during the 1982 recession would be around 13%. In Spain’s case, as there have not recently been any appropriate wage statistics to make these calculations, the losses arising from a prolonged spell of unemployment have been evaluated by examining the changes in the likelihood of moving out of unemployment into a job. Arellano, Bentolila and Bover (2002) estimate that the exit rate from unemployment for those who have been jobless for more than one year may be up to 12 pp lower than for those unemployed for three months.

The availability of new statistical sources with wage information for the same workers at different points in time (e.g. the Muestra Continua de Vidas Laborales (Continuous Survey of Working Life) conducted by the Secretariat of State for Social Security, allows a calculation to be made of the differences in wage earnings between two people – one of whom lost their job during 1993 Q1, while the other continued working – in the same sex, age, educational attainment and sector of employment categories. These wage differences are assessed taking into account the fact that, according to the latest Social Security records, the average wage in 1992 was €1,180 and that income takes a value of zero in those years in which the individuals do not work. For the purposes of this comparison, all workers

1. Those who have been out of work for more than one year are considered to be long-term unemployed.  

3. The average shown is expressed in constant 1993 euro and includes the stochastic imputation of those wages that are higher than the maximum contribution base. The conclusions in the medium term are not notably affected by this imputation. Further, if the income derived from benefits were to be taken into account, similar conclusions would be reached. Evidently, in that case, the fall in income during the first three years after job loss (the new-job search period) would be less.
who were at least one year in the company before losing their job and the unemployed who did not return to their initial company following job loss are considered. It can be seen that, before the period of unemployment, the group of those made unemployed received, on average, slightly less than the group who remained in employment. The fact of being jobless considerably increased the differences between the two groups and, as the unemployed progressively moved back into a job, the differences narrowed. However, six years after losing their jobs, wages remained appreciably below those in the group who retained their job, and this difference holds even beyond 10 years (see Panel 1). This loss is more marked for those who were more time unemployed, as can be seen in Panel 2, where wages in the case of

**EFFECTS IN THE LONG RUN OF LONG-TERM UNEMPLOYMENT** (cont’d)

**Box 2.2**

**Panel A: Effect of job loss in 1993 Q1 on average monthly wage between 1998 and 2003 (a) (b)**

<table>
<thead>
<tr>
<th>%</th>
<th>TOTAL</th>
<th>-17.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>-18.8</td>
<td></td>
</tr>
<tr>
<td>Females</td>
<td>-16.6</td>
<td></td>
</tr>
</tbody>
</table>

**Panel B: Percentage of employed losing their job in relation to the average for the quarter (c)**

<table>
<thead>
<tr>
<th></th>
<th>2008 Q4</th>
<th>2009 Q1</th>
<th>1992 Q4</th>
<th>1993 Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEX</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>0.96</td>
<td>0.94</td>
<td>0.90</td>
<td>0.94</td>
</tr>
<tr>
<td>Females</td>
<td>1.00</td>
<td>1.04</td>
<td>1.21</td>
<td>1.13</td>
</tr>
<tr>
<td>AGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-24</td>
<td>2.94</td>
<td>2.56</td>
<td>2.48</td>
<td>2.16</td>
</tr>
<tr>
<td>25-34</td>
<td>1.26</td>
<td>1.33</td>
<td>1.07</td>
<td>1.06</td>
</tr>
<tr>
<td>35-45</td>
<td>0.89</td>
<td>0.96</td>
<td>0.59</td>
<td>0.63</td>
</tr>
<tr>
<td>Over 45</td>
<td>0.57</td>
<td>0.60</td>
<td>0.59</td>
<td>0.73</td>
</tr>
<tr>
<td>SECTOR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>1.07</td>
<td>1.46</td>
<td>1.11</td>
<td>1.49</td>
</tr>
<tr>
<td>Industry</td>
<td>0.83</td>
<td>0.85</td>
<td>0.95</td>
<td>0.94</td>
</tr>
<tr>
<td>Construction</td>
<td>2.11</td>
<td>2.33</td>
<td>1.54</td>
<td>1.70</td>
</tr>
<tr>
<td>Services</td>
<td>1.00</td>
<td>0.98</td>
<td>1.00</td>
<td>0.99</td>
</tr>
<tr>
<td>General government</td>
<td>0.52</td>
<td>0.46</td>
<td>0.69</td>
<td>0.66</td>
</tr>
<tr>
<td>OCCUPATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial and professional</td>
<td>0.42</td>
<td>0.38</td>
<td>0.65</td>
<td>0.55</td>
</tr>
<tr>
<td>Middle-ranking professionals</td>
<td>0.83</td>
<td>0.71</td>
<td>0.73</td>
<td>0.69</td>
</tr>
<tr>
<td>Clerical</td>
<td>1.24</td>
<td>1.10</td>
<td>1.44</td>
<td>1.07</td>
</tr>
<tr>
<td>Manual</td>
<td>1.44</td>
<td>1.58</td>
<td>1.12</td>
<td>1.31</td>
</tr>
</tbody>
</table>

**SOURCES:** INE (EPA) and Social Security MCVL (Continuous Survey of Working Life).

a. Prepared in-house using MCVL.
b. The effect is calculated as the average wage received 5-10 years after job loss, in percentage terms, in relation to the last wage received before becoming unemployed. The median of individual losses is shown.
c. Calculations based on EPA data.
In the long run of long-term unemployment, the unemployed who returned to employment after less than one year are compared with the wages of those who were unemployed for more than one year.

In terms of the median, workers who lost their job in 1993 Q1 saw their wages diminish by close to 17% in the 6-10 years following job loss. There are no major differences between men and women. The loss is very small (3%) for those workers who are unemployed for a short time, but substantial (30%) for those who are jobless for more than one year (Panel A of the accompanying table). These results are consistent with the assumption that permanence in unemployment during the 1993 crisis generated a notable loss of human capital in the medium term.

To extrapolate these results to the current crisis, it would first be necessary to consider the differences between the characteristics of those who became unemployed in the previous crisis and those who have recently become jobless, and between the duration of each of the groups in unemployment, along with the way in which recovery comes about in the current episode of crisis. Concerning the first two points, some evidence can be had from EPA flows. As is specified in Panel B of the accompanying table, the composition of those becoming unemployed in 1993 shows certain similarities with the composition of those in the current crisis, since in both episodes there was both a contraction in the construction industry and a fall in house prices following an expansionary period. Nonetheless, in the current crisis, males, youths, unskilled workers and construction workers are beset by a relatively greater rate of job destruction. Conceivably, a priori, the specific human capital of labour that accumulates in lower-skilled jobs is less than in the remaining occupations, meaning that the estimated effects for the 1993 crisis would be at a higher level than expected. Also, at present, long-term unemployment is less than in 1993 (when, on EPA figures, it amounted to almost 50%), whereby these two directions would suggest an aggregate loss lower than 17% for those who lose their job in the current crisis. However, the recovery of the economy after 1993 was relatively swift and sharp, especially for services, but also for construction, and it was possible to absorb in a relatively short period a sizeable amount of unskilled labour that was unemployed, while in the current situation, not being able to use the exchange rate may lead the real wage adjustment to run for a longer period. Although the exit rate from unemployment remains relatively high (25% in quarterly frequency terms, rising to 56% for the unemployed who have been in this situation for fewer than three months, according to the Labour Observatory of the Economic Crisis4), it will be necessary to wait to observe how developments are unfolding.

... while headway was made in giving backbone to the Spanish innovation system...
technology, which is determined by the experience they have built up in research activities, is scant.\textsuperscript{9} While it is true that the Spanish productive system comprises - to a greater extent than other developed countries - small and medium-sized enterprises specialising in medium or low-technology products and which have a lesser propensity to innovate, large corporations too innovate relatively less, with the difference in services sector companies proving particularly striking.\textsuperscript{10}

As is known, labour skills and the provision of training by companies play an important role in the undertaking of innovative activities and in the assimilation of technological processes generated outside the company. There is evidence in Spain suggesting that temporary hiring has an adverse impact on business innovation, the roots of which lie both in the lesser motivation that derives from the low probability that these workers have of achieving a permanent employment contract, and in the lesser likelihood that they will receive in-house training.\textsuperscript{11}

Significant progress has been made in R+D+i results, with higher growth in the pertinent indicators than in other advanced economies. Thus, for instance, the number of patents per one million inhabitants climbed from 9.9 in 1995 to 28.9 in 2007 (see Table 2.3). Spanish scientific production has also grown swiftly: from 2.5% of the world total in 2000 to 3.2% in 2007.\textsuperscript{12}

However, despite this headway, Spain’s relative position regarding technological and scientific production, once other indicators of its impact are taken into account, does not appear to have changed substantially.\textsuperscript{13}

In addition to the accumulation of physical, human and technological capital, potential growth feeds on advances in the efficiency in the use of such factors of production. To measure productive efficiency, productivity indicators are used. These habitually refer to the labour factor

or, once the contribution of the different types of capital has been discounted, to total factor productivity (TFP). This latter indicator proxies the effects on economic growth of technological progress not incorporated into capital and other advances in the allocation of productive factors to alternative sectoral activities and in their organisation within companies. International comparisons and the changes over time in TFP allow conclusions to be drawn on possible changes in the relative contributions of the various determinants of economic growth. These conclusions, however, should be viewed with some caution, since these indicators are not free from measurement problems either at the aggregate scale or, in particular, in their sectoral decomposition. Further, it should also be taken into account that low TFP growth economy-wide may, on occasions, mask significant progress in management and gains in international competitiveness at specific firms. This is precisely the case of the Spanish economy, in which certain companies have consolidated positions of world leadership in several industries in recent years.

During the 1995-2007 period, economic growth in Spain was essentially based on the increase in employment, while conversely, the increase in TFP was far lower than that recorded in previous periods (Chart 2.4). Although as far as the sources of growth are concerned there are some cross-sectoral differences, the slowdown in TFP in recent years was fairly generalised. Even in manufacturing industry, where the contribution of the growth in employment over the last decade prior to the crisis was practically non-existent, a considerable reduction in efficiency gains can be observed. In construction, it was the contributions of employment and of non-technological capital that provided for the strong growth of output, with the contribution of TFP in this sector proving particularly negative. The increase in TFP in the finance sector was related to specific innovation processes that were developed in step with the strong credit expansion and which, in some cases, did not prove sustainable.

The low growth of TFP was also the outcome of the concentration of productive resources in labour-intensive and low-productivity-growth sectors, to which numerous factors contributed. The excessive expansion of credit proved particularly favourable to sectors, such as construction and real estate development, that produce or trade assets that may be used as collateral for loans. Losses in competitiveness, in turn, made investment opportunities in the tradeable-goods as opposed to the non-tradeable-goods sector less attractive. And, finally, without seeking to provide an exhaustive list, abundant labour supply arising from immigration, the favourable tax treatment of house purchases, and other labour- and property development-related regulatory factors were also particularly propitious for the growth of real estate activity.

The introduction of new information and communications technologies is, in principle, conducive to TFP growth through, above all, changes in working arrangements and improvements in productive efficiency. The empirical studies available highlight that the positive effects of the

---

14. The measurement of TFP requires estimates of the amounts of factors of production (capital, labour, raw materials, etc.) used to obtain a certain amount of output, and of the elasticities of output in respect of each of the factors of production. To measure the labour factor, total hours worked weighted by the quality of the labour factor are used, while for capital an estimate of productive services provided by the stock of installed capital is used. The methodology available to make estimates of inputs and of their elasticities has been internationally developed and harmonised [see, for example, Marcel Timmer, Mary O’Mahony and Bart van Ark (2008), The EU KLEMS Growth and Productivity Accounts: An Overview, University of Groningen and University of Birmingham (www.euklems.net)]. Nonetheless, when using TFP data it must be borne in mind that the difficulties these estimates pose are particularly relevant in the case of some economic sectors. For an assessment of how alternative assumptions used in estimating TFP affect the results obtained in the case of the Spanish economy, see J. Segura (2006), La productividad en la economía española, Fundación Ramón Areces, where it is shown that the low growth of TFP since the mid-1990s cannot be attributed to the use of specific assumptions for its measurement. 15. The well-known difficulties of precisely measuring output in this sector should also be borne in mind. 16. See C. Arce, J.M. Campa and A. Gavilán (2008), Asymmetric collateral requirements and output composition, Documentos de Trabajo, No. 0837, Banco de España.
2. THE CRISIS AND THE POTENTIAL GROWTH OF THE SPANISH ECONOMY

### Total

- Quantity of Labour Factor
- Quality of Labour Factor
- Technological Capital
- Non-Technological Capital
- TFP

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity of Labour Factor</th>
<th>Quality of Labour Factor</th>
<th>Technological Capital</th>
<th>Non-Technological Capital</th>
<th>TFP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-1994</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995-2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001-2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Manufacturing Industry

- Quantity of Labour Factor
- Quality of Labour Factor
- Technological Capital
- Non-Technological Capital
- TFP

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity of Labour Factor</th>
<th>Quality of Labour Factor</th>
<th>Technological Capital</th>
<th>Non-Technological Capital</th>
<th>TFP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-1994</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995-2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001-2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Construction

- Quantity of Labour Factor
- Quality of Labour Factor
- Technological Capital
- Non-Technological Capital
- TFP

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity of Labour Factor</th>
<th>Quality of Labour Factor</th>
<th>Technological Capital</th>
<th>Non-Technological Capital</th>
<th>TFP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-1994</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995-2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001-2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Distributive Trade

- Quantity of Labour Factor
- Quality of Labour Factor
- Technological Capital
- Non-Technological Capital
- TFP

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity of Labour Factor</th>
<th>Quality of Labour Factor</th>
<th>Technological Capital</th>
<th>Non-Technological Capital</th>
<th>TFP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-1994</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995-2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001-2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Financial Activities

- Quantity of Labour Factor
- Quality of Labour Factor
- Technological Capital
- Non-Technological Capital
- TFP

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity of Labour Factor</th>
<th>Quality of Labour Factor</th>
<th>Technological Capital</th>
<th>Non-Technological Capital</th>
<th>TFP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-1994</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995-2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001-2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Social and Personal Services

- Quantity of Labour Factor
- Quality of Labour Factor
- Technological Capital
- Non-Technological Capital
- TFP

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity of Labour Factor</th>
<th>Quality of Labour Factor</th>
<th>Technological Capital</th>
<th>Non-Technological Capital</th>
<th>TFP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-1994</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995-2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001-2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SOURCE:** The EU KLEMS Growth and Productivity Accounts, November 2009.

a. The data depict the contributions of the various factors, by sector, to economic growth.
new technologies on productivity come about, above all, due to efficiency gains arising from the complementarity between technological capital, human capital and the reorganisation of work within companies. In countries such as the United States and the Nordic economies, where the possibilities of staff reorganisation are not especially constrained, a strong acceleration in TFP associated with the introduction of new technologies is observable. In contrast, the greater constraints existing in Spain have meant the introduction of these technologies has been slower and their impact on productivity less, meaning that the gap between labour productivity and TFP between Spain and other advanced countries has widened considerably (Chart 2.5).

In the past two years there has been swift growth in apparent labour productivity, with growth rates of 0.7% in 2007, 1.5% in 2008 and 3.1% in 2009. Nonetheless, it would be mistaken to interpret this rise as a genuine efficiency gain resulting from increases in TFP. The data on the stock of capital needed to calculate this variable are only available with a lag of several years, meaning figures on its most recent behaviour cannot be obtained. In turn, the diminished weight of activities with lower productivity growth, unlike the case during the expansion, would account for a rise in this variable attributable to the temporary effect arising from the change in sectoral composition. Finally, the growth rate of TFP has a very volatile behaviour, whereby its average values over lengthy periods must be taken to detect significant changes.

The recent rise in the productivity growth rate cannot be interpreted as a lasting improvement.
The allocation of production factors to specific productive activities and the more or less efficient mix of such factors within companies may be influenced both by working regulations and by competitive restrictions in the market for goods and services. Such restrictions constrain efficiency gains and raise the cost of business start-ups with productive investment projects, favouring the maintenance of companies with lower productivity.

As regards labour legislation, two aspects are particularly counterproductive. Firstly, the high incidence of temporary hires and their predominant role in employment adjustments not only adversely affect entrepreneurs' and employees' incentives to invest in human capital, but they also make the closer adaptation of working arrangements to new technologies less attractive. Hence, on one hand, companies resort to continuous labour turnover instead of harnessing the productivity gains that arise from the experience that longer employment periods give; and, on the other, faced with the need to shed labour, the jobs that are first destroyed are those held by temporary employees, who are less costly to dismiss, instead of lower-productivity jobs, held by workers with permanent contracts, where the dismissal costs are higher. As to collective bargaining, the prevalence of industry-wide, regional and national agreements as opposed to firm-level agreements, and their scant adaptability to changing conditions stemming, for instance, from the introduction of new forms of production, frequently prevent numerous small and medium-sized enterprises from reorganising their workforce in the quest for greater efficiency. As shown during the crisis, this lack of adaptability, from which mostly large companies with their own collective bargaining agreement draw benefit, has too often resulted in the failure of firms which, in another setting, might have been viable over the medium term.

In a modern economy, economic growth comes about through the continuing reallocation of production factors within companies and production sectors. Largely, this reallocation of resources is carried out through the process of business start-ups and failures, meaning that obsolete companies and business models are replaced by new institutions and more productive models, which generates notable productivity gains. Certain regulations for goods and services markets that impose entry barriers and restrict competition hinder this process of "creative destruction". Various studies have attempted to measure the productivity gains derived from sectoral reallocation and, although the results depend on the measurement method used and on the period, country and economic sector under analysis, a general conclusion may be drawn for Spain's case: to a greater extent than in other countries, productivity growth occurs in pre-existing companies and does not come about so much due to the entry of more efficient companies replacing less productive ones.

To boost potential growth and make productivity more dynamic requires a major drive on the part of all agents to increase efficiency. Entrepreneurs have a particularly important role in improving corporate management, staff training and the upgrading of skills, and in routing investment towards the most competitive sectors. The public authorities can exert influence on household investment decisions in human capital and on business decisions regarding physical and technological capital by means of regulations and budgetary measures that lay down the appropriate incentives. These instruments can affect the costs and benefits of different alternatives in respect of investment and the organisation of factors of production, and promote the channelling of productive resources towards more efficient activities. Among the set of regulations, those governing the markets for goods, services and labour are particularly relevant. Human capital investment decisions depend partly on wage returns to education and on labour stability. And these, in turn, are determined by labour regulations, which also affect

---

efficiency by means of the limitations they introduce into working arrangements and the management of work within companies. As to the regulation of competition in the market for goods and services, decisions to invest in physical and technological capital and on the sectoral allocation of factors of production are influenced by public-sector participation in certain industries, obstacles to business activity through opaque administrative or regulatory rules, the administrative burden weighing on start-ups and barriers to trade.

It is important that the measures implementing supply-side policies should, in order to be effective, be clear (precisely defining objectives and instruments) and straightforward (using the least possible number of instruments per objective). The use of overly complex instruments entailing excessive bureaucratic and administrative obstacles should be avoided. Frequently, the lack of coordination between different general government bodies and between these and local and regional entities leads to an interplay of different instruments that are contrary to simplicity and efficiency. In a situation like the present, in which budgetary consolidation is a high priority, the effectiveness of transfer programmes seeking to influence decisions by private agents or for the provision of public goods (education, training, etc.) should be rigorously assessed.

For supply-side policy measures to be consistent, their complementarity must be taken into account. Budgetary measures prove more effective when the regulatory framework is the appropriate one and, in turn, certain regulatory changes may have a positive budgetary impact, since by helping reduce the public debt they increase the budgetary room for manoeuvre available. For example, on certain estimates, structural reforms would, through their impact on productivity in the medium term, significantly slow the increase in public-sector indebtedness and mitigate the adverse short-term impact on GDP that a fiscal consolidation might have.

The Sustainable Economy Law envisages a raft of measures aimed at creating employment and at achieving a new economic model, through the attainment of five objectives: competitiveness, environmental sustainability, the normalisation of the housing sector, innovation and vocational training, and support to new economic sectors. Along with the development of this legislation, other measures have been announced. These include the Science Law and those envisaged in relation to the modernisation of justice, the reform of the Administration, the overhaul of the financial system, combating fraud and the shadow economy, boosting innovation and competitiveness, sectoral modernisation, the development of a sustainable energy model, transport, employment and the welfare state. The result is a wide-ranging action programme, though desirably it should all be organised by ranking and prioritising the most relevant and pressing reforms.

The implementation of these legislative initiatives offers a fresh opportunity for further progress in improving the regulation of goods and services markets and in setting in place more effective sectoral policies. Such action is essential if potential growth is to pick up.

Among the structural reforms that require tackling, that of the education system is essential for achieving an increase and improvement in human capital. Although the Spanish population’s level of educational attainment has increased considerably, there still remains some room for improvement in areas such as the shortage in the supply of medium-level skills and the raising of the standards of university education, at least in the segments to which most of the student population accede, and in particular among immigrants’ children, who achieve poorer results and are more likely to drop out of the official system than nationals.

The restrictions on public spending on education are not a particularly significant factor when explaining these shortcomings. International evidence shows that there is no clear relationship...
between spending on education and the indicators of education system results. And the Spanish experience shows that results have not closely followed the increase in spending in recent years. Hence the emphasis should be on reforms that enable an increase in the efficiency of the resources earmarked for education. Some aspects of education policies – in particular regarding syllabus design, post-secondary education other than university and the promotion of educational excellence in university teaching – are essential in this respect. It is also important that educational and labour reforms should be consistent and complementary, so as to overcome the evident mismatch between the education system and the labour market.

Likewise, to increase the accumulation of technological capital, changes must be considered to the current system of incentives for R+D+i. Although notable efforts have been made, the level of spending both on R+D+i and on information and communications technologies (ICT) remains significantly lower in Spain than in other advanced countries, and the spillover effects of public financing on private investment appear, on the evidence available, to be fairly low, despite the fact that Spain has one of the OECD's most generous tax credit systems for R+D+i. This clearly indicates that there is room for improvement in the mechanisms for managing incentives for R+D+i and that the setting in place of rigorous evaluation systems for the programmes under way is especially necessary.

The importance of the reform of labour regulations and of employment policies to improve the functioning of the labour market has been addressed in depth in Chapter 1 of this report. It suffices here to indicate some of the consequences in respect of increasing productivity and medium and long-term growth. From this perspective, mention should be made of the importance of active labour market policies. These are aimed at increasing workers’ employability and productivity by means of specific training and the reduction of the duration of unemployment spells, the goal being to address the necessary sectoral reassignment of employment from sectors which, as a result of the crisis, will undergo a permanent adjustment towards alternative sectors with greater growth potential.

From the standpoint of productivity growth, the duality of the current hiring system has adverse consequences for the accumulation of human capital and for the incentives for efficient working arrangements. For both employees and employers, investment in company-specific training is hardly profitable if the duration of the employment relationship is short. This is because both sides anticipate that, in the event of the need for labour shedding, temporary workers will be the first to lose their jobs, irrespective of their productivity relative to permanent employees. Also, business needs regarding regional and occupational mobility are ultimately met through temporary hires, instead of harnessing the efficiency gains arising from the reorganisation of a more stable workforce.

Similarly, the way collective bargaining agreements are structured and their content are not conducive to the reorganisation of productive resources with a view to increasing productivity. Collective bargaining agreements scarcely lend themselves to adaptation to the economic and technological changes that companies must face; they introduce significant wage rigidity mechanisms and restrict regional and occupational mobility. The possibilities of introducing new forms of organising work that enhance efficiency are also constrained by sectoral agreements at the provincial level. The content of these agreements evidences a high degree of inertia and notably restricts both business decision-making capacity concerning the management of human resources and the very competitiveness of companies.
3 THE EXTERNAL ENVIRONMENT OF THE EURO AREA
The external environment of the euro area

3. THE EXTERNAL ENVIRONMENT OF THE EURO AREA

The external environment of the euro area

In 2009 the world economy went through a deep recession and the first fall in global activity since 1946. The recession had its origin in the serious financial crisis unleashed in September 2008, the most virulent since the Great Depression, the consequences of which continued to bear on the performance of the economy and the global financial markets. The most acute point of the fall was in the early months of the year. After stabilising in Q2, the world economy embarked on a progressive improvement which, although showing fluctuations and significant differences between countries, has continued to date.

The collapse of financial and commercial transactions and the slump in domestic demand following the rapid increase in uncertainty accompanying the crisis brought about a contraction of -0.6% in global GDP in the year as a whole, reversing the previous growth trend and causing a substantial loss of output and wealth (see Table 3.1 and Chart 3.1). The fall in activity was particularly sharp in the developed economies (-3.1%), where the deterioration of financial systems was most severe. Among these, the decline in GDP tended to be largest in the more open economies, such as Japan (-5%) and the United Kingdom (-5%), while in the United States it was more moderate (-2.4%). The adjustment gave rise to substantial job losses and to marked rises in unemployment rates in many countries, including the United States.

The fall in activity and employment would have been notably greater had it not been for the rapid economic policy response in the form of well-funded fiscal stimulus plans (amounting to nearly two percentage points of GDP in the advanced economies) and an extraordinarily strong monetary boost through near-zero interest rates in most industrialised countries and a variety of non-conventional measures, which gave rise to unprecedented growth of the balance sheets of the main central banks. Also, the financial sector support measures were decisive in preventing the collapse of the system and in limiting the negative feedback between the lower activity and the worsening situation of financial institutions. This support was deployed in an internationally coordinated drive, and that coordination has been continued in the financial, regulatory and supervisory reforms now being instituted under the auspices of the G20.

Although the emerging economies were also notably affected by the crisis and most went into recession, they posted positive growth in overall terms in 2009 [2.3%, nearly four percentage points (pp) less than in 2008]. Most notable were China and India, which, with growth of more than 8.5% and 5.5%, respectively, were among the few economies which contributed positively to global growth during the recession. By contrast, in other emerging areas – particularly eastern Europe (-4.1%) and Latin America (-2.1%) – activity fell off notably. These economies, with the exception of China, tended to adopt smaller-scale fiscal stimuli than the advanced economies and implement them somewhat later, partly because of the uncertainties associated with the access to finance, but also because of the lower impact of the crisis. The monetary policy response was also notable, although it was generally more conventional than in the developed economies. Interest rates fell substantially, but did not approach the limit of 0%, save rare exceptions. External support (bilateral or multilateral) and the use of international reserves proved to be important factors in cushioning the crisis in many of these countries.

The crisis severely affected international trade and financial flows. The volume of world trade fell by around 13% in the whole of 2009 and international capital flows plummeted (see Chart 3.2), although both recovered during the course of the year, most notably trade from the second quarter of the year. The global imbalances were partially corrected in the year, due particularly...
### MAIN MACROECONOMIC INDICATORS

**TABLE 3.1**

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td><strong>UNITED STATES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP (a)</td>
<td>2.1</td>
<td>0.4</td>
<td>-2.4</td>
<td>-3.3</td>
</tr>
<tr>
<td>CPI (a)</td>
<td>2.9</td>
<td>3.8</td>
<td>-0.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Current account balance (% of GDP)</td>
<td>-5.2</td>
<td>-4.9</td>
<td>-2.9</td>
<td>-4.4</td>
</tr>
<tr>
<td>General government balance (% of GDP)</td>
<td>-2.7</td>
<td>-6.6</td>
<td>-12.5</td>
<td></td>
</tr>
<tr>
<td><strong>JAPAN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP (a)</td>
<td>2.4</td>
<td>-1.2</td>
<td>-5.2</td>
<td>-8.9</td>
</tr>
<tr>
<td>CPI (a)</td>
<td>0.0</td>
<td>1.4</td>
<td>-1.4</td>
<td>-0.1</td>
</tr>
<tr>
<td>Current account balance (% of GDP)</td>
<td>4.8</td>
<td>3.2</td>
<td>2.8</td>
<td>2.6</td>
</tr>
<tr>
<td>General government balance (% of GDP)</td>
<td>-2.4</td>
<td>-4.2</td>
<td>-10.3</td>
<td></td>
</tr>
<tr>
<td><strong>EURO AREA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP (a)</td>
<td>2.7</td>
<td>0.6</td>
<td>-4.1</td>
<td>-5.1</td>
</tr>
<tr>
<td>CPI (a)</td>
<td>2.1</td>
<td>3.3</td>
<td>0.3</td>
<td>1.0</td>
</tr>
<tr>
<td>Current account balance (% of GDP)</td>
<td>0.4</td>
<td>-0.8</td>
<td>-0.4</td>
<td>-1.7</td>
</tr>
<tr>
<td>General government balance (% of GDP)</td>
<td>-0.6</td>
<td>-2.0</td>
<td>-6.3</td>
<td></td>
</tr>
<tr>
<td><strong>UNITED KINGDOM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP (a)</td>
<td>2.6</td>
<td>0.5</td>
<td>-5.0</td>
<td>-5.4</td>
</tr>
<tr>
<td>CPI (a)</td>
<td>2.3</td>
<td>3.6</td>
<td>2.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Current account balance (% of GDP)</td>
<td>-2.7</td>
<td>-1.5</td>
<td>-1.3</td>
<td>-1.7</td>
</tr>
<tr>
<td>General government balance (% of GDP)</td>
<td>-2.7</td>
<td>-4.8</td>
<td>-10.9</td>
<td></td>
</tr>
<tr>
<td><strong>CHINA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP (a)</td>
<td>13.0</td>
<td>9.6</td>
<td>8.7</td>
<td>6.2</td>
</tr>
<tr>
<td>CPI (a)</td>
<td>4.8</td>
<td>5.9</td>
<td>0.7</td>
<td>-0.6</td>
</tr>
<tr>
<td>Current account balance (% of GDP)</td>
<td>11.0</td>
<td>9.4</td>
<td>5.8</td>
<td></td>
</tr>
<tr>
<td>General government balance (% of GDP)</td>
<td>0.6</td>
<td>-0.4</td>
<td>-2.2</td>
<td></td>
</tr>
<tr>
<td><strong>LATIN AMERICA</strong> (b) (c)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP (a)</td>
<td>5.8</td>
<td>4.2</td>
<td>-2.1</td>
<td>-2.8</td>
</tr>
<tr>
<td>CPI (a)</td>
<td>5.4</td>
<td>7.8</td>
<td>6.4</td>
<td>7.6</td>
</tr>
<tr>
<td>Current account balance (% of GDP)</td>
<td>0.7</td>
<td>-0.5</td>
<td>-0.2</td>
<td>-0.7</td>
</tr>
<tr>
<td>General government balance (% of GDP)</td>
<td>-0.3</td>
<td>-0.5</td>
<td>-2.6</td>
<td></td>
</tr>
<tr>
<td><strong>NEW EU MEMBER STATES NOT IN EURO AREA</strong> (b) (d)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP (a)</td>
<td>6.0</td>
<td>4.1</td>
<td>-3.4</td>
<td>-3.6</td>
</tr>
<tr>
<td>CPI (a)</td>
<td>4.4</td>
<td>6.5</td>
<td>3.6</td>
<td>4.2</td>
</tr>
<tr>
<td>Current account balance (% of GDP)</td>
<td>-8.2</td>
<td>-7.2</td>
<td>-1.6</td>
<td>-6.2</td>
</tr>
<tr>
<td>General government balance (% of GDP)</td>
<td>-1.9</td>
<td>-3.5</td>
<td>-8.6</td>
<td></td>
</tr>
<tr>
<td><strong>PRO-MEMORIA: GDP GROWTH (e)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World</td>
<td>5.2</td>
<td>3.0</td>
<td>-0.6</td>
<td>-2.8</td>
</tr>
<tr>
<td>Developed countries</td>
<td>2.8</td>
<td>0.5</td>
<td>-3.2</td>
<td>-4.5</td>
</tr>
<tr>
<td>Emerging economies</td>
<td>8.3</td>
<td>6.1</td>
<td>2.4</td>
<td>-0.6</td>
</tr>
<tr>
<td><strong>PRO-MEMORIA: INFLATION (e)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World</td>
<td>4.0</td>
<td>6.0</td>
<td>2.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Developed countries</td>
<td>2.2</td>
<td>3.4</td>
<td>0.1</td>
<td>0.6</td>
</tr>
<tr>
<td>Emerging economies</td>
<td>6.5</td>
<td>9.2</td>
<td>5.2</td>
<td>4.2</td>
</tr>
</tbody>
</table>

**SOURCES:** Banco de España, International Monetary Fund and national statistics.

a. Annual percentage change.
b. The aggregate for the different areas has been calculated using the weight of the countries making up such areas in the world economy the previous year, in PPP. Based on IMF information.
c. Argentina, Brazil, Chile, Mexico, Colombia, Venezuela and Peru.
d. Latvia, Lithuania, Estonia, Czech Republic, Hungary, Poland, Bulgaria and Romania.
e. Quarterly data based on a sample of countries representing 90% of world GDP.
Inflation rates fell drastically in 2009 due to the opening-up of extraordinarily wide output gaps and to the sharp correction in commodity prices (energy, metals and food) between mid-2008 and 2009 Q1, which gave rise to a fall of 33% on average in the year (see Chart 3.3). Inflation was practically zero in the advanced countries in 2009 as a whole (3.3 pp less than in the previous year) and dropped by more than four pp to 3.1% in the emerging economies. Inflation remained negative in many countries in much of the year, rising from Q4. However, underlying inflation rates were much steadier. This absence of inflationary pressure made it easier to maintain monetary policies supportive of economic and financial activity.

... and inflation rates

The figures for 2009 as a whole mask the gradual improvement in the economic and financial situation which took place during the course of the year. At the beginning of the year, the financial crisis of September 2008 was still spreading virulently: activity plummeted and the financial system was in a critical state. However, by year-end economic recovery was under way, amidst...
a certain financial normalisation, and, despite the scale of the crisis, the reversal was quicker than expected. In any event, although activity has rebounded strongly in the emerging economies, the pace of recovery in the developed economies is slower than on previous occasions. In any event, the recovery, which remains largely dependent on the fiscal and monetary stimuli still in place, is more vigorous in the United States and Japan than in the EU. For this reason, the withdrawal of support measures, particularly in the monetary and financial spheres, is proceeding cautiously and is basically passive, as and when those measures cease to be necessary.

The economic and financial indicators continue to improve in early 2010, although the sharp deterioration in public finances due to the crisis also rekindled some tensions, which have manifested themselves most strongly from April onwards. The medium-term economic outlook is uncertain, since the consequences of the economic and financial crisis will burden the ability of economies (especially the developed ones) to grow in the coming years. Specifically, there are doubts as to whether, once government support is phased out, the recovery will retain sufficient momentum, given the background of high unemployment, financial system downsizing, yet-to-be-completed adjustment of financial balance sheets in the private sector.
and high public-sector financing requirements. However, this adjustment, which, given past excesses, was inevitable, can and should give rise to more sustainable growth for the world economy in the medium term.

2 Economic and financial developments

In 2009 global economic and financial developments went through various phases, beginning from a very difficult starting point in the early months when the effects of the crisis and the extreme uncertainty still held the financial markets and economic activity at a standstill. Towards the end of that first quarter, the economies began to bottom out and move into a phase of financial market recovery and of certain economic stabilisation. Finally, from Q2 the improvement in the financial situation progressively moved on to a firmer footing and activity recovered.
At the outset of 2009 the risk of systemic collapse becoming a reality had not been completely ruled out, and the financial situation was extremely fragile and dependent on the support provided by the authorities. The financial markets remained frozen by the lack of confidence and the extreme uncertainty about the size of the losses to the financial systems of the main economies, as the extent of the impact of the crisis on economic activity became apparent. As shown by Chart 3.4, volatility remained high, the stock markets were falling, interbank spreads reflected the continuing extreme tensions on the bank funding markets and the dollar continued to act as a safe-haven currency. This situation required the reinforcement of the already-substantial financial support measures, which ended up inducing an incipient reactivation of debt issuance, although only in specific segments, such as financial sector issues backed by government guarantees and those of non-financial corporations with high credit ratings. For their part, the emerging financial markets continued under the effects of the paralysis of international capital flows, although the situation tended to stabilise, except in some eastern European economies, where volatility remained high as a result of the high dependence of their financial institutions on external funding and of the high private-sector indebtedness, often denominated in foreign currency.

Meanwhile, economic activity began the year in a phase of paralysis and of sharp contraction in output, trade, investment and employment initiated in 2008 Q4. The fall in world GDP is estimated to have reached an annualised quarter-on-quarter rate of more than 6% in 2009 Q1 (even higher than in 2008 Q4), while job destruction proceeded apace and unemployment rates increased rapidly, most notably in the industrialised economies (see Chart 3.5). Output contracted practically across-the-board and simultaneously, save notable exceptions such as China and India, which, however, did see a slowdown. This sharp fall in activity was reflected especially in industrial output, which fell globally by 11.7% from May 2008 to March 2009, although in the case of Japan it contracted by 33.7%. At the other extreme was the positive performance of output in the two Asian economies mentioned above. In addition, the fall in activity and the decline in trade finance, against a background of growing importance of transnational production chains, led world trade to fall by 19% in the first four months of the crisis, and by 13% in 2009 as a whole (see Chart 3.2). This contraction in trade, the first since 1982, contributed to an extensive reduction in external imbalances, underpinned also by the downward correction of commodity prices.

The recession which had begun in the previous year deepened in the advanced economies. The demand for consumer durables and investment goods, particularly sensitive to heightening uncertainty, underwent the largest adjustment and was the main factor behind the sharp decline in demand and activity in those quarters. The severe labour market deterioration and the credit crunch, derived from the financial situation, contributed to the contractionary behaviour of private-sector demand. Also, inventories commenced a profound process of adjustment. Thus, in 2009 Q1 the fall in investment and inventories explains nearly all the contraction in activity in the four main developed economies, as seen in Chart 3.1. For their part, the emerging economies were impacted simultaneously by the collapse in external demand and the drying-up of capital inflows, to which may be added a fall in commodity prices in some of these economies. Indeed, the emerging economies with greater openness in trade and finance and greater dependence on commodity prices were among those which were most affected. However, notably the impact of the crisis on the banking systems of these economies was limited, given their scant exposure to toxic assets and their limited dependence on external funding, with the exception of eastern Europe.

After peaking in July 2008, inflation embarked on a steep downward path which continued in early 2009, stimulated by the slump in activity and the correction of commodity prices, which dropped by 60% between July 2008 and February 2009 (see Chart 3.3). However, long-term inflation expectations held steady in the advanced economies. In the emerging economies,
a. Index which identifies bouts of financial stress using variables relating to the stock market, the banking sector and exchange rates. An increase (decrease) in the index denotes an increase (decrease) in financial market stress and thus a negative (positive) effect on economic activity.
b. 3-month spread. United States: LIBOR - effective Fed Funds rate OIS swap; United Kingdom: LIBOR - SONIA swap; euro area: EURIBOR - EONIA swap.
c. VIX index (stock market volatility of Standard & Poors 500 index) and CDX credit risk index (5-year US investment grade credit default swap index).
d. EMBI + for Latin America and global EMBI for Asia and central and eastern Europe.
price moderation also continued, although to different extents across regions, being more marked in Asia and less so in Latin America where, moreover, it had begun with a certain lag.

The urgent need to halt the contractionary spiral in which the world economy found itself explains the rapidness, intensity and coordination of economic policy responses from October 2008. These measures were intended to stabilise the markets, safeguard financial institutions, mitigate the fall in private demand and, in short, re-establish a minimum of confidence on which to base the economic recovery.

As regards monetary policy, the central banks of the main developed economies rapidly cut official interest rates following the outbreak of the crisis, on occasions simultaneously and coordinatedly. Hence, by the end of 2009 Q1 most of them had reached their lower limit, close to zero (see Chart 3.6). At the same time they strongly increased the provision of liquidity to the
SOURCES: Datastream, national statistics, IMF, European Commission and Banco de España.

a. Areas analysed: South East Asia-8 (India, Malaysia, South Korea, Indonesia, Thailand, Hong Kong, Taiwan and Philippines), central Europe-3 (Czech Republic, Hungary and Poland) and Latin America-4 (Brazil, Mexico, Chile and Colombia).
b. IMF estimates for 2009 and forecasts for 2010.
c. G20 developed economies.
d. The euro area includes four large economies: Germany, France, Italy and Spain.
e. Weighted aggregate of Brazil, Russia, India and China.
f. Percentage of GDP: Surplus (+) or deficit (−).
g. IMF forecasts.
financial system and implemented a series of unconventional measures, which in some cases included direct support to specific segments of the financial markets and which gave rise to a substantial expansion of central bank balance sheets, as described in Box 3.1 for the cases of the Federal Reserve and the Bank of England.

Government support to the financial sector was provided through bank deposit guarantees, capital injections, guarantees of financial institution debt, bank balance sheet restructuring and impaired asset management, and, on occasions, was provided by central banks and Treasuries acting in coordination (see Chart 3.7). Finally, fiscal measures to support domestic demand were introduced through fiscal stimulus programmes, which represented nearly 2% of the GDP of the advanced economies, although the amount was very different across countries depending on their initial situation, on the power of their automatic stabilisers, on their perceived effectiveness and on their impact on the sustainability of public finances.

The response of emerging economies was generally less intense and somewhat delayed...

... and in protectionist measures did not increase significantly

The authorities of the emerging economies generally responded less strongly and with a certain lag. The reasons for this were various. The differing impact of the crisis, caution in the face of possible difficulty in accessing the international markets and uncertainty about their ability to implement countercyclical policies shaped their response, which finally was also firm. Generally predominating were responses designed to maintain foreign-currency financing (via domestic facilities granted by central banks, governments and public-sector banks), and multilateral facilities, such as swaps with other central banks and new IMF loan types. Some countries, such as China and Chile, took significant monetary and fiscal stimulus measures, although generally the fiscal stimulus in the emerging economies was smaller than in the developed economies, and, moreover, the automatic stabilisers were more limited.

Lastly, on the positive side, few protectionist trade measures were taken in response to the crisis. Much of the reason for this undoubtedly lies in the scale of international cooperation in addressing the crisis from the very start. This prevented a repetition of the upward spiral of barriers to trade which followed the Great Depression and prevented the recovery in output from being accompanied by a recovery in trade.

The strong financial system support – boosted in the second half of March – was conducive to the gradual re-establishment of agents’ confidence and to the stabilisation of the financial markets from then onwards. This improvement was further bolstered in April by the announcement of greater-than-expected first-quarter profits by some of the larger financial institutions and by the maintenance of the international coordination drive. The publication in May of the results of stress tests on the larger US banks confirmed the ability of most of them to withstand a negative scenario, although in some cases this required the existing capital cushions to be raised. These factors contributed to improving the market perception of the sector and of its outlook.

The perception that the worst was over began to take root in the markets and a certain recovery in risk appetite started to become apparent. This change of sentiment was reflected in lower volatility, narrower credit spreads and a stock market recovery from March. Against this background, the high demand for assets considered to have safe-haven status at times of high uncertainty (mainly US Treasury bonds) reversed, leading to depreciation of the dollar and the yen and raising US long-term government bond yields. Consequently, against a backdrop of still-accommodative monetary policy, the slope of the yield curve steepened to historically high levels. This led to a gradual (and slow) normalisation of some wholesale funding markets which had been hard hit by the crisis and strengthened
The central banks have been one of the main actors, often in close coordination with Treasuries, in supporting the financial system and demand in the last two years. During the crisis, the traditional central bank action through interest rate management, with the central aim of maintaining price stability, was supplemented with non-conventional financial stability measures notable for their intensity and scope. This box focuses on the response of the Federal Reserve (Fed) and the Bank of England (BoE), the two central banks of developed countries which, along with the Bank of Japan, implemented the greatest variety of non-conventional measures (see accompanying table) and which, as a consequence of those measures, most expanded their balance sheets as they sought to counteract the effects of the crisis.

As the crisis deepened in late 2008, there was an unprecedented response from central banks in terms of rapidness, intensity and breadth of measures. These measures initially included interest rate cuts (particularly rapid and aggressive in the United States and, subsequently, in the United Kingdom) to levels close to zero and ample liquidity provision to financial institutions at lower cost and for longer terms than usual. The BoE had to adapt its monetary policy operations to broaden the types of collateral accepted in liquidity providing operations and, in the case of the Fed, also the number of counterparties. This response contrasts with that of the monetary authorities of other areas, such as the European Central bank, whose operational design allowed it to respond to the liquidity provision requirements without need for major changes in its operating framework.

The deterioration in the financial markets after September 2008 required governments support specific segments to re-establish confidence, increase their liquidity and reduce interest rates. As a consequence of the importance of the capital markets in the United States, the Fed was particularly active in this kind of action, which included financing the purchase of specific assets (mainly commercial paper and certain securitisations) and outright purchases of other assets, such as securitisations and debt of government sponsored enterprises (to the extent of 8.8% of GDP) with the aim of pushing down mortgage interest rates. The BoE also conducted direct purchases of private-sector financial assets but on an insignificant scale. From 2009 Q1, both central banks started outright purchases of Treasury bonds on the secondary market (the Bank of Japan had been doing so for a long time) to reduce long-term financing costs and lessen

---

### BOX 3.1: ACTION BY THE US AND UK CENTRAL BANKS DURING THE CRISIS

<table>
<thead>
<tr>
<th>Reduction of official interest rates to historically low levels</th>
<th>Federal Reserve</th>
<th>Banck of England</th>
<th>European Central Bank</th>
<th>Bank of Japan</th>
<th>Bank of Canada</th>
<th>Bank of Sweden</th>
<th>Swiss National Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased provision of liquidity to financial institutions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International foreign currency swaps</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct intervention in specific segments of the financial markets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial paper</td>
<td>Financing for purchase</td>
<td>Outright purchases</td>
<td>Outright purchases</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate debt</td>
<td>Outright purchases</td>
<td>Outright purchases</td>
<td>Outright purchases</td>
<td></td>
<td></td>
<td></td>
<td>Outright purchases</td>
</tr>
<tr>
<td>Securitised assets</td>
<td>Financing for purchase</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covered bonds (including mortgage covered bonds)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Outright purchases</td>
</tr>
<tr>
<td>Shares held by banks</td>
<td>Outright purchases</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Outright purchases</td>
</tr>
<tr>
<td>Mortgage-backed securities (MBSs) and government-sponsored enterprises (GSEs)</td>
<td>Outright purchases</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treasury bond purchases</td>
<td>Outright purchases</td>
<td>Outright purchases</td>
<td>Outright purchases</td>
<td>Increased pace of purchases</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support to specific institutions</td>
<td>Bear Stearns, AIG</td>
<td>Northern Rock, RBoS, HBOS</td>
<td>Kaupthing Bank, Carnegie Investment Bank</td>
<td>UBS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**1.** Also, foreign currency swaps were arranged between central banks, particularly with the Federal Reserve, to ensure the international provision of foreign currency liquidity.

**SOURCE:** Organisation for Economic Cooperation and Development.

a. Outright purchase through a special purpose vehicle.
credit market tensions at long time horizons. Purchases by the Fed totalled $300 bn (2.1% of GDP) and those by the BoE amounted to 200 billion pounds sterling (13.7% of GDP). Although the effect of these purchases on interest rates is difficult to calculate accurately, the downward pressure must have been particularly strong in the United Kingdom, where the acquisitions by the BoE in 2009 were even higher than the net issuance of public debt by the Treasury on the primary market. In May 2010, faced with financial tensions caused by the fiscal problems in the euro area, the ECB decided to intervene in the public and private debt markets to ensure they were functioning smoothly as a monetary policy transmission mechanism. Lastly, as can be seen in the accompanying table, both central banks (and the Swedish and Swiss central banks) directly supported some specific institutions, as in the case of Bear Stearns and AIG in the United States and Northern Rock in the United Kingdom.

All these actions were reflected, especially from 2008 Q4, in an increase in central bank balance sheets and a substantial alteration of their traditional composition, especially in the case of the Fed, which accepted higher-risk assets (Chart 1). In particular, from the onset of the crisis to March 2010, the balance sheet of the Federal Reserve grew from 6% to 16% of GDP, while that of the BoE increased from 7% to 17% of GDP. That said, the substantial increases in the monetary bases resulting from these operations did not feed through to increases in other broader monetary and credit aggregates, due to the drastic fall in the money multipliers following the crisis.

As financial market normalisation proceeded (thanks to the measures implemented) and the liquidity tensions decreased, less use was made of the liquidity and credit facilities (the cost of which exceeded that of access to the market in normal conditions). Indeed, many of these facilities expired in the United States as scheduled at the end of 2009 and beginning of 2010, with a scant impact on the markets. Also, the outright purchase of private-sector assets (particularly important in the case of the Fed, which purchased commercial paper for an amount equivalent to 2.5% of GDP) was almost completely reversed and this facility also expired as scheduled.

However, outright purchases of government assets (including, in the United States, the debt and securitisations of the main mortgage securitisation agencies) are keeping the size of the balance sheets of the Fed and the BoE (Charts 1 and 2) at high levels. It was precisely the future prospects of these programmes after purchases stopped at the end of 2010 Q1 which accounted for the main difference between these two institutions: while the Fed indicated that the purchase of these assets had definitively ceased, the BoE left open the possibility of resuming purchases depending on the state of the economy. In any event, these high holdings of outright purchases of assets may give rise to greater difficulties and risks for future monetary policy management due to the impact which their sale may have on long-term interest rates. This is significant different from the practice of the European Central Bank, where outright purchases of assets (covered bonds) have played a minor role.

It is likely that some of the operational changes implemented during the crisis (e.g. expansion of the types of eligible high-quality collateral and of the number of counterparties) will be retained because it has proven to be useful to have flexible liquidity-providing instruments in situations of market tension and even in normal circumstances. Furthermore, as the economic and financial situation normalises, monetary policy will also tend to do so and its central focus will shift towards price stability. In any event, reversing the strong increase in central bank balance sheets will take a long time and has required, particularly in the United States, a wide variety of additional instruments to help smooth the exit strategy.


a. Purchases under the Asset Purchase Facility (APF), mainly Treasury bonds.
the process of recovery of confidence in parts of the financial system. A similar turning point was also seen in stock market indices and in the sovereign spreads of emerging economies. The exchange rates of the main Latin American, South-East Asian and central European currencies appreciated in real terms, while, by contrast, the Chinese currency underwent a notable real depreciation due to its fixed exchange rate with the US dollar (see Chart 3.8).

The turning point in economic activity came at about the end of Q1. In the second quarter of the year the developed economies still had negative, albeit very close to zero, quarter-on-quarter growth rates (some, such as that of Japan, were even slightly positive). The stabilisation of economic activity in this group of economies was based on a strong positive contribution from external demand (particularly in Japan), which offset the still-negative (although much more moderate than 2009 Q1) contribution from inventories and investment. At the same time, the strong monetary and fiscal stimuli started to be reflected in a certain recovery of consumption and in an expansion of public spending.

Since many emerging economies already had positive growth rates in that second quarter, the annualised quarterly world economic growth in that period was 3.6%. Three percentage points of that growth were explained by the Asian economies, particularly China (which contributed 1.9 pp, after annualised quarterly growth of nearly 15% in that period), on the basis of a strong fiscal stimulus and a sharp rise in credit, aimed particularly at financing infrastructure construction.

The change in the trend of activity was reflected in a favourable about-face in the global growth outlook, which in prior quarters had even traced out a central scenario of prolonged global depression. Thus from Q2 onwards growth forecasts for 2010 tended to improve, including those of most emerging economies (mainly Asia and Latin America), whose ability to resist the crisis became clear. In short, the firm economic policy response made it possible to curb the negative interaction between the financial situation and economic activity, and to gradually re-establish confidence. From this starting point, a positive spiral was set in train which progressively gained momentum throughout 2009.

In 2009 Q2 the world economy returned to growth, basically due to the contribution by Asia and, in particular, by China...
### International Reserves (g)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rest of the World</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Oil Exporters</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Latin America</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Emerging Asia</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Japan</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>China</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Current Account Balances (f)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rest of the World</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>China and Emerging Asia</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>European Deficit</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rest of Europe and Japan</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Oil Exporters</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>United States</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Discrepancy</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Emerging Economies (d): Net Capital Flows

- Latin America
- Emerging Asia
- Central and Eastern Europe

### Emerging Economies (d): Other Investment (e)

- Other investment
- Portfolio Investment
- Official Financing
- Net Inflows

**Source:** Datastream and IMF.

a. CPI-based. An increase (decrease) denotes an appreciation (depreciation) of the currency.
b. Areas analysed: South East Asia-9 (India, Singapore, Malaysia, South Korea, Indonesia, Thailand, Hong Kong, Taiwan and Philippines), central Europe-3 (Czech Republic, Hungary and Poland) and Latin America-7 (Argentina, Brazil, Chile, Mexico, Colombia, Venezuela and Peru).
c. Country aggregates based on the IMF (WEO) definition.
d. Africa, Latin America, central and eastern Europe, Confederation of Independent States, Middle East and emerging Asia.e. Includes FDI and bank loans.
f. WEO forecasts for 2010 and 2011.
g. 2009: 2009 Q3 data.
The second half of the year saw the firming of the financial market recovery initiated in previous months. Thus some indicators, such as interbank market credit spreads and the sovereign spreads of numerous emerging economies moved back towards their levels before the bankruptcy of Lehman Brothers, and others, such as stock market prices and volatility indexes, improved substantially, although they did not recoup their previous levels. As a result of this improvement, the signs of recovery of some funding markets first perceived in the second quarter of the year moved on to a firmer footing. This meant that, for example, financial institutions resumed debt issuance without resorting to government guarantees (against a background of high liquidity), and that, from May onwards, some banks started to return the government-owned capital holdings and replace them with private capital. However, the recovery was not across-the-board. In particular, securitisation market activity remained low or nil in the most complex products.

The phase of recovery continued practically uninterruptedly throughout 2010 Q1. However, from end-2009 bouts of instability associated with doubts about the sustainability of public finances in some countries began to emerge. This brought a rise in volatility and uncertainty, which became more marked from the end of April.

Throughout 2009 the situation of the banking sector improved, as reflected in the announcement of higher-than-expected profits also in the second half of the year, as a result of gains from trading and holding financial instruments on the capital markets, particularly government bonds, given the steep yield curve. Nevertheless, lending activity continued to show signs of weakness and credit extension followed a gradually slowing path, to the extent that it contracted in year-on-year terms in late 2009 and early 2010 in the main industrialised economies, as shown in Chart 3.9. Although a part of this contraction reflects a tightening of credit conditions, the weak economic activity also dampened the demand for financing. Furthermore, this weakness continued to affect the traditional business of the banking sector, and bad debts continued to increase in various segments, such as commercial real estate in the United States. Thus smaller financial institutions more dependent on retail business continued to show high vulnerability, reflected in a growing number of institutions subjected to supervisory intervention. The difficulties in borrowing were reflected in a rise in debt security issuance by the non-financial private sector, intended, insofar as possible, to replace bank financing by recourse to the capital markets.
In the second half of 2009, global economic activity rose and the recovery spread to an increasingly large number of economies, including the developed ones. World GDP reached annualised quarterly rates above 4.5% in 2009 Q3 and 2009 Q4, and ended the year at positive year-on-year growth rates around 1.5% (see Chart 3.5), although the output levels still did not reach those prior to the crisis. For their part, trade flows recovered notably (bolstered by the recovery in activity and a certain remission of trade finance problems), although at the beginning of 2010 they were still 8% below those of early 2008.

The recovery in activity was led by the emerging economies, particularly China, India and Brazil, buoyed by the rapid recovery in their domestic demand and favoured by the lesser deterioration of their labour markets and financial system. The revival of trade and, in particular, the increase in commodity prices (particularly sharp in industrial metals) in 2009 H2 also underpinned the recovery in parts of Latin America and in the oil exporting countries. Thus the emerging economies continued growing at an average annualised quarterly rate of around 7.5% in 2009 H2, ending the year with a year-on-year rate of nearly 4.5% in Q4 and accounting for around four-fifths of world growth in the second half of the year. Meanwhile, the recovery of the developed economies continued to be strongly based on the extraordinary measures to support domestic demand (particularly through fiscal stimuli) and on the reversal of the inventory cycle, taking place at the same time as a certain stabilisation in investment. The growth of this group of countries, however, was still fairly weak in Q3 (annualised quarterly rate of 1.4%) and only became more vigorous in Q4, with quarter-on-quarter growth above 3%, led by the United States. Despite this, at the end of the year the GDP of the developed economies was still 1% below its level a year earlier.

Thus one of the features of the recovery in 2009, which became increasingly noticeable during the year, is the differing pace of exit from recession between the developed and the emerging economies, in contrast to the synchronised downturn in late 2008. These differences, however, exist not only between these groups of countries, but also within them. Among the developed economies, the recovery was most vigorous in the United States (annualised quarterly growth of 5.6% in Q4), where the strong boost to consumption by the demand support measures came on top of the aforementioned reversal of the inventory cycle from Q3. For its part, external demand was decisive in the (more moderate) recovery of Japan and the euro area.

In the emerging regions, the recovery (in 2009 Q2) was led by the Asian countries, partly because of the buoyancy of their internal demand and partly because of the recovery of trade. Economies such as China, India and Indonesia, which only slowed, but did not contract, during the crisis, returned to growth rates similar to the average for the decade and, in some cases, near to the rates of the years immediately preceding the crisis. In contrast, the effects of the crisis were greater in the emerging economies with financial systems more dependent on external financing and which had undergone strong credit growth, as in most eastern European countries. Latin America, unlike on other occasions in its recent history, weathered the global financial crisis without succumbing to domestic financial crises. Contributing to this relatively favourable performance were its lower vulnerability (due particularly to sounder financial systems and improved external accounts) in the years preceding the crisis, backed by higher macroeconomic stability and by better terms of trade as a result of higher commodity prices.

As noted above, the recovery of the developed economies in 2009 H2 did not fully offset the fall in activity during the crisis, so in 2010 Q1 the previous levels of output had not yet been recouped. The pace of exit from the recession was slower than in past recoveries, hindered by

### The pace of exit from the recession differed between the developed and the emerging economies, and also within each of these two broad groups

### The dynamism of recovery was limited by a series of factors...
the need for deleverage of private agents, the sharp fall in household wealth and the tightening of credit conditions associated with the adjustments in the financial sector, all of which resulted in marked weakness in the labour market. Some of the negative effects of the fall in activity on the banking sector (e.g. increased bad debts) have a strong inertia, while the adjustments under way in the banking sector and its more cautious approach have led to restrictive credit standards and tighter access to credit in some customer segments. Also, the synchronised nature of the global recession made it harder to resort to exports as the engine of recovery in the different countries. Hence the wide output gaps generated in the crisis have barely narrowed, even taking into account the fall in potential output in most countries (see Chart 3.5).

Turning to the labour market, job destruction continued, albeit at a progressively slower pace, in most economies in the second half of the year, despite the recovery of activity. The most recent data suggest a certain stabilisation in employment behaviour and unemployment rates in the main developed economies. However, the labour market’s response to the crisis also varied somewhat: while in the United States unemployment rose much more than in previous recessions (up 5 pp between early 2008 and late 2009 to 10%), in Japan and the euro area the rise was in the usual range. Furthermore, in the United States the phase of job destruction and sharply rising productivity (up 5.1% year-on-year in 2009 Q4) has been much longer than in previous crises. For their part, the emerging countries again created employment in the second half of the year, except for some eastern European economies, where the main labour market problems are concentrated.

Year-on-year inflation rates, which were even negative for a good part of the year in numerous developed economies, rose sharply from mid-year. Key to this surge were the marked fluctuations in energy product prices, which rose sharply after falling considerably at the end of 2008, thereby giving rise to a strong base effect from that time to the first quarter of 2009. As shown by Chart 3.3, world inflation recorded a minimum slightly above 0% in July 2010, and ended the year above 2%, although, once corrected for the aforementioned base effect, little further upward movement is foreseeable. In fact, underlying inflation remained relatively steady from mid-2009 and inflation expectations, as estimated from surveys and from financial variables, remain anchored on inflation targets, given the underutilised productive capacity and the weak labour market. Japan is an exception to the general recent behaviour of inflation, since its year-on-year rates continued to fall up to October and remain negative, with no change of sign being expected in 2010. At the other extreme is the United Kingdom, where inflation holds at higher rates than in the other developed economies, although the larger rise is attributed to the effect of the VAT rise of 2.5 pp in January.

In the emerging economies, inflationary pressures are now greater, given the greater buoyancy of domestic demand and the less firmly anchored expectations. Although varying notably across countries, inflation in Asia (especially in India) has increased more rapidly than in other emerging regions.

The sum of the current account balances in absolute terms decreased from 4.8% of world GDP in 2007 to 3.1% in 2009 (see Chart 3.8). The United States reduced its current account deficit from 4.9% to 2.9% of its GDP (from 1.2% to 0.7% of world GDP) between end-2008 and 2009 Q4, while in the surplus of the oil exporting countries fell by 70% to represent only 0.3% of world GDP. This partial correction of global imbalances was explained by the relative changes in domestic demand, with a greater contraction in the developed countries, and by the average fall in commodity prices in 2009. However, the factors explaining this adjustment suggest that part of it was of a conjunctural nature. The last two quarters of 2009 also saw a recovery in global capital flows which was particularly conducive to the resurgence of inflows...
to the emerging countries, due to improved growth prospects, increased risk appetite and persistently wide interest rate spreads with respect to the developed economies. These capital inflows, which suggest that the aversion of investors to these regions during the crisis was temporary, may cause domestic economic and financial imbalances to reappear, a threat which has led some countries, such as Brazil, Peru and Taiwan, to introduce measures to restrict the entry of capital, and has prompted many others to start accumulating international reserves again to moderate their currency appreciation and to provide some self-insurance against possible sharp reversals of capital flows. By contrast, in other regions, such as eastern Europe, the recovery of private capital inflows acts as an alleviating factor in the short-term, due to their considerable borrowing requirements.

The financial support measures started to be wound down and preparations were made for withdrawal of the monetary stimulus...

As stability returned following the crisis, most Treasuries and central banks started to withdraw the financial support measures in both developed and emerging economies. The amount of support committed has been decreasing, although it continues to be high (see Chart 3.7). At the same time, many central banks, particularly in the developed economies, began to design their exit strategies and take the first steps in implementing them. Having said this, although there have already been some increases in official interest rates in small commodity-producing economies such as Australia and Norway, most developed economies will foreseeably withdraw the monetary stimulus very slowly.

By contrast, in the Asian and some Latin American economies, the greater dynamism of activity gave rise to monetary policy tightening from end-2009. At first the tightening did not include interest rate hikes, so as to prevent capital inflows from intensifying. Rather, other types of measures were taken, such as raising reserve ratios (as in China) or restricting the entry of external capital (as in Brazil). However, at the beginning of 2010, the first increases in official interest rates took place, beginning with Asia. Finally, as the high foreign currency liquidity needs subsided, the foreign currency swaps between the main central banks (one of the main internationally coordinated measures) were progressively reduced and mostly discontinued by the beginning of 2010, although the resurgence of financial volatility derived from fiscal problems in the euro area led them to be resumed between the central banks of the developed economies in May.

Public finances continued to deteriorate markedly (see Chart 3.6). This worsening has a large structural component in the developed economies and is unlikely to be reabsorbed to a significant extent during the recovery, while in the emerging economies (where the fiscal deterioration has been moderate), it has been of a predominantly cyclical nature. In the advanced economies as a whole, the deficit stood at 10% in 2009, up 5.4 pp on the previous year, and was higher still in the three main developed economies outside the euro area, where the deterioration was more moderate. More than half of this increase has passed through to the structural balance. Although Japan started from a more delicate fiscal situation, the deficit rose more sharply in those countries where the financial system was affected most strongly: the United States, where the deficit doubled to 12.6% of GDP, and the United Kingdom, where it increased by 6.5 pp of GDP to 11.3%. Debt also performed more unfavourably in these economies, where increases – in gross terms – exceeding 20 pp of GDP between 2007 and 2009 (somewhat less in the euro area), took it to levels of nearly 84% of GDP in the United States and of nearly 70% in the United Kingdom in late 2009. Moreover, the increasing trend in debt is expected to persist despite the economic recovery.

The concern over the sustainability of public debt has reduced the scope for expansionary fiscal policy action and has been reflected in bouts of financial volatility and upward pressure on sovereign interest rates in some countries.
Before assessing the short-term economic outlook, it is of interest to step back from the current conjuncture and analyse the legacy left by the crisis, which will largely determine the pace and duration of the economic recovery.

A well-known consequence of the crisis is the contractionary impact on the factors of production (labour and capital) and on potential output. Aside from the cyclical nature of employment, the higher structural unemployment and lower participation rate associated with recessions not only reduce potential output, but may also have a persistent negative effect on its growth rate, thereby limiting the growth capacity of the economy for a prolonged period.

But the crisis will leave another type of fallout in the economic and financial system which may also constrain medium- and long-term growth in the advanced economies, and therefore in the world economy. This legacy is a consequence of the depth of the crisis and of the scale of the authorities’ response, but it also stems from the global imbalances which existed in the growth phase prior to the crisis and to which adjustments are still pending. More specifically, at least three factors may be mentioned which will bear on the economic outlook in the coming years: the downsizing and reorganisation of the financial system, the deleverage of non-financial private-sector agents and the deterioration of public finances.

The damage from recessions accompanied or induced by financial and banking crises is more lasting and deep-seated because they weaken an economy’s financial intermediation capacity. The crisis considerably reduced the size of the financial system because some institutions failed and because the business of the survivors contracted. Part of this contraction is caused by the fall in activity, but another (not necessarily less significant) part may be much more persistent. In particular, some segments of the securitisation markets, particularly those dealing in structured products, were based on inadequate risk allocation structure and market institutions, which lay at the origin of crisis and have ceased to exist.

Moreover, after a crisis, the financial players usually exhibit more cautious behaviour and strategy, in marked contrast to their previous high preference for risk. This will tend to be reflected in a return by financial institutions to a more traditional business model. At a higher level stands the national regulatory development work, coordinated globally and intended to strengthen financial systems and mitigate the recurrence of future crises (see Box 3.2). This will probably give rise to less generous credit conditions than before the crisis, which will probably limit the availability of credit in the economy and entail higher financing costs, not only short-term, but also medium- and long-term. Nevertheless, the reforms are necessary to lay the foundations for a more solid and stable financial system in the future.

The second factor to be considered is the process of deleverage or debt reduction in the non-financial private-sector. After a recession there is usually a readjustment in the financial balance sheets of households and firms, in order to reduce the level of indebtedness. The high levels of debt in numerous developed economies, such as the United States, the United Kingdom or Spain, in the years prior to the crisis were prompted by high economic buoyancy, low borrowing costs, excessive risk-taking and inadequate risk assessment, and rising asset prices, which ultimately proved to be unsustainable. The change in the economic environment following the crisis, the asset price correction (particularly sharp in the case of real estate assets) and agents’ greater preference for saving point to a substantial downward adjustment in debt ratios, particularly those of households. This adjustment is now under way (see changes in debt ratios in Chart 1.2) and, as shown by past experience, could take several years, which would represent an additional drag on growth in that period.
The past year has seen major steps in establishing a new global framework of international coordination in financial system regulation and supervision. This new framework, which arose in response to the financial crisis, seeks to provide a more robust and stable international economic and financial system to help prevent new crises and mitigate the global impact in the future. The basic aims of this coordination are to strengthen the capital base and liquidity of banks; reduce the probability and impact of bankruptcy of systemic institutions; lessen their interconnectivity; avoid excessive risk-taking and promote adequate risk assessment; and broaden and deepen financial supervision and regulation in key segments and in cross-border business. These aims do not generally differ from national financial stability aims, but the increasingly global nature of financial systems requires extensive international coordination to achieve them.

The main impetus to cooperation in the financial area came from the creation of the Financial Stability Board (FSB) at the G20 summit in London in April 2009. The FSB was born out of the now-defunct Financial Stability Forum (FSF) consisting of the G-7 countries plus other countries affected by the Asian crisis. The FSB added the emerging countries of the G20, Spain and the European Commission. The FSB can be considered the new global pillar of financial stability, which supplements the three institutions created at Bretton Woods after the Second World War: the International Monetary Fund (IMF), focused on economic stability; the World Trade Organisation (WTO), entrusted with international trade; and the World Bank, working on development issues. This box briefly describes the architecture of international financial cooperation (see accompanying diagram) and the main tasks (financial regulation, supervision and oversight) being carried out within this framework.

### Box 3.2
**The New Coordination Framework for Global Financial Regulation, Supervision and Oversight**

The main impetus to cooperation in the financial area came from the creation of the Financial Stability Board (FSB) at the G20 summit in London in April 2009. The FSB was born out of the now-defunct Financial Stability Forum (FSF) consisting of the G-7 countries plus other countries affected by the Asian crisis. The FSB added the emerging countries of the G20, Spain and the European Commission. The FSB can be considered the new global pillar of financial stability, which supplements the three institutions created at Bretton Woods after the Second World War: the International Monetary Fund (IMF), focused on economic stability; the World Trade Organisation (WTO), entrusted with international trade; and the World Bank, working on development issues. This box briefly describes the architecture of international financial cooperation (see accompanying diagram) and the main tasks (financial regulation, supervision and oversight) being carried out within this framework.

#### Source: Banco de España.

**Acronyms:**
- BCBS: Basel Committee on Banking Supervision.
- CGFS: Committee on the Global Financial System.
- CPSS: Committee on Payment and Settlement Systems.
The FSB ultimately reports to the G20, instituted as the central forum for global economic and financial coordination. The FSB's members are ministry authorities, central banks and supervisors of the G20 countries (plus Spain, the Netherlands, Switzerland, Singapore and Hong Kong), the European Commission, the ECB, the IMF, other international organisations (OECD, World Bank), the Bank for International Settlements (BIS) and the international standard-issuing committees [the Basel Committee for Banking Supervision (BCBS), the International Organization of Securities Commissions, the International Association of Insurance Supervisors and the International Accounting Standards Board]. Notable in this regard is the work of the BCBS, which coordinates the main central banks and banking supervisors in defining international banking regulatory standards (including most notably the capital accords known as Basel I, II and, now, III). Also, the IMF is cooperating closely with the FSB in certain respects, particularly global financial stability, which add to its habitual tasks of economic and financial oversight of countries and are carried out through Article IV reports and financial sector assessment programmes (FSAP). For its part, the FSB provides input to early warning exercises conducted regularly by the IMF. The new setup strengthens, moreover, the coordination and prioritisation of the reform projects auspiced by the various international committees entrusted with supervision and regulation (banking, accounting, insurance, securities market, etc). In short, the FSB has taken on a function of strategic management of the work of these institutions in the financial sphere. This new arrangement contrasts with their functional independence before the crisis and inaugurates a coordinated approach aimed at developing and implementing a regulatory, supervisory and oversight policy which strengthens national financial systems and ensures the stability of the global financial system.

In the past year, major proposals have been made under the auspices of the FSB to reform the global financial framework on various fronts: regulation, accounting and market infrastructure. The broad objectives of the proposed reforms are: to reduce systemic risk in the area of institutions, markets and instruments; to improve risk management practices in the areas of liquidity and funding; to strengthen accounting standards; to improve international supervision and regulation standards; to review and broaden the scope of regulation and supervision; and to develop a macroprudential supervision framework.

Noteworthy in the more specifically regulatory area is the work of the BCBS, which has given rise to proposals to increase the strength and the quality of the capital and the liquidity of financial institutions and to define the processes of resolution of internationally active systemic institutions. Specifically, the BCBS is reviewing the definition of regulatory capital and the measurement of counterparty risk and is considering the introduction of a leverage ratio, of procyclicality mitigation mechanisms and of a liquidity standard. In the area of markets, there are proposals to strengthen the infrastructure and promote the clearing of over-the-counter (OTC) derivative instruments through the establishment of central counter-parties and to improve information available on agents’ positions. Noteworthy in the area of accounting is the process of convergence between the institutions entrusted with setting accounting standards (IASB and FASB) and the work to improve the treatment of provisions for expected losses and the valuation of financial instruments and of loans, the convergence between the repo clearing and treatment approaches, and the initiatives to improve dialogue between institutions in the accounting, prudential and regulatory areas. In addition, calls have been made to improve the transparency and limit the leverage of hedge funds, and to improve the supervision of credit rating agencies. Lastly, it should be mentioned that some initiatives have sparked broad public debate. These include most notably those relating to the possible establishment of some kind of levy or tax on financial institutions as a means of raising revenue to pay for the government bail-outs in the sector, and those relating to financial institutions’ compensation practices, particularly the schemes expressly backed by governments.

In short, the concerted efforts by countries in response to the deep financial crisis have progressively crystallised in a new framework for global economic and financial coordination which is still in the process of consolidation. In the area of financial system regulation, supervision and oversight, the advances have been notable, although most initiatives are still in the assessment, design and development phase. The challenges to be overcome in order to meet the ambitious objectives set for this new framework are considerable. Firstly, work is advancing on diverse fronts, so only a broad-based approach will achieve a coherent final result that does not straight-jacket the functioning of the financial system (particularly the flow of credit to the economy) or prevent innovation in the system. Secondly, a sustained effort in coordination is required, not only between countries, but also between institutions, such as the IMF or the BIS, which now share tasks and functions with the FSB. As the process advances, the division of work will be clarified and the specific functions will be delimitated more sharply. Lastly, there is a risk that, as the economic and financial situation normalises, the incentives for international coordination will weaken and the process will lose the highly desirable momentum it has reached in the past year.
The sharp deterioration of public finances in many developed economies constitutes a third factor constraining the long-term outlook. Although part of the fiscal imbalance aims to sustain productive activity, the structural portion of the deterioration in fiscal balances will persist after demand has been firmly re-established and the fiscal stimuli have been withdrawn. In these circumstances, there is a risk of upward drift in public debt (amplified by the growing costs derived from population aging) if decisive measures are not taken to prevent it. In any case, public sector borrowing will persistently take a notable amount of funds from the other sectors of the developed economies. For this reason, once activity has been stabilised and monetary policy stance normalised, fiscal imbalances will tend to give rise to higher long-term interest rates. In addition, the doubts as to the debt sustainability in some countries may give rise to a further increase in the cost of borrowing of the public sector (and of the economy in general). It is thus essential for the developed economies to undertake fiscal consolidation (more urgent and intense in those countries which have a worse underlying fiscal situation) to halt and, if possible, reverse the upward trend of debt. Stabilising the debt would also allow greater room for manoeuvre if it were necessary to introduce stimuli in the future. Although this consolidation would have a contractionary affect on activity in the short term, this would not be any greater than that derived from permanently higher financing costs, the likelihood of which will increase as the likelihood of a credible and far-reaching fiscal adjustment decreases.

The emerging economies will be relatively less affected, although they may be prejudiced by lower external demand and lower availability of financing. The fact that this review of the legacy of the crisis has focused on the advanced economies reflects the differing impact of the crisis on the advanced and the emerging economies. Although the economic impact on the emerging economies has been severe, for them the crisis had a predominantly exogenous origin and has not substantially affected their financial systems, while their fiscal situation has deteriorated much less than that of the advanced economies. Hence the potential output of these economies seems to have fallen by less and the impact on the growth rate in the medium term has probably been scant and less persistent, except perhaps in the eastern European economies. Nevertheless, the external demand from the developed economies and the lower global availability of finance will affect their growth capacity in the coming years.

3.2 ECONOMIC OUTLOOK

A gradual recovery of the world economy, surrounded by notable uncertainty, is expected in 2010. Taking into account this medium-term setting, the economic outlook for 2010 is for a central scenario of gradual, albeit fragile, recovery against a background of progressive financial market normalisation, a certain recovery of private-sector demand in the advanced economies and gradual withdrawal of economic policy stimuli and support. However, this scenario is surrounded by high uncertainty, given the fragility which continues to be shown by both the financial system and the economy, the process of adjustment under way and the doubts posed by the factors analysed in the preceding section. Therefore the pace of withdrawal of the economic policy support will depend on the course of events.

Despite the decrease in potential growth, significant output gaps will remain in place. In any event, the growth projections for 2010 have gradually been revised upward (see Chart 3.10). A part of this increase in the projections represents positive carryover effects derived from the strong growth in 2009 Q4, but also the expectation that in 2010 the momentum of domestic demand may exceed that in 2009 in many developed and emerging economies. Hence the projections of the main economic organisations point to world GDP growth of around 4% in 2010 and 2011. These figures are around 1 pp less than the world growth rate in the years before the crisis and represent the maintenance of still-significant output gaps, especially in the developed economies.

The emerging economies will be more dynamic. The emerging economies are projected to undergo a rebound in activity to rates slightly above 6% in the next two years, particularly sharp in Asia (China and India) and Brazil, on the back of a strong surge in domestic demand and greater buoyancy of trade, especially between the
emerging countries themselves. At the other extreme, the emerging economies of eastern Europe are expected to undergo a weak recovery, due to the need to strengthen private-sector balance sheets.

By contrast, according to the IMF projections, the developed economies will expand at a rate of around 2.3% in the next two years, which represents a slow recovery compared with previous recessions. On the one hand, the effect of the fiscal stimuli and of the reversal of the inventory cycle, which determined the dynamism of activity in the late 2009, will peter out during the course of the year. On the other, some of the factors identified above will slow the pace of recovery: the weakness of labour markets (with high unemployment rates in many economies), the still-high household indebtedness and the scant dynamism of credit will continue to curtail the growth of private-sector demand. Nevertheless, as in the case of the emerging economies, there are marked differences in the rate of recovery, with the dynamism of the United States being most notable among the developed economies, partly due to greater headway made by it in the reabsorption of some of its domestic imbalances, and partly due to the stabilisation of its financial system.

In line with the notable under-utilisation of productive capacity in the developed economies, inflationary pressure should, in principle, remain contained despite commodity price increases. What is more, rates are even expected to fall somewhat below the current levels. Contrastingly, the greater dynamism of domestic demand in the emerging economies may push inflation rates upward in 2010.

In this scenario, a progressive recovery of trade and capital flows is expected. The correction of external balances observed during the crisis will foreseeably be interrupted as the domestic demand of the countries with current account deficits recovers, and the global imbalances will foreseeably increase somewhat with respect to 2009. Finally, although capital flows to the emerging economies continue their recovery based on the latter’s improved growth prospects, large differences in returns and a greater global appetite for risk, it is unlikely that they will reach the levels before the crisis and there may be a notable volatility in these flows, particularly as the liquidity conditions of the developed economies change.
The central scenario contains significant sources of uncertainty. First, as happened in the recovery phase, the positive interaction between the improvement in the financial sector and the real sector may have more favourable effects than expected. This will be more likely if the still-unclarified matters associated with the new regulatory framework of domestic and cross-border financial activity are resolved more rapidly.

A first downside risk is that of lower momentum of private-sector demand due to a weak recovery of employment and/or tighter credit. However, the uncertainties that could lessen growth in the coming quarters seem to predominate over the upside considerations. The principal downside risk is unquestionably the buoyancy of private-sector demand and the possibility that the factors weighing on consumption and private investment will be stronger than expected. Firstly, the recovery in employment, particularly in the United States, has been weaker than would be expected from the historical relationship between this variable and the level of activity, with the consequent risk that a larger-than-expected portion of the unemployed will join the ranks of those in structural unemployment (especially in economies with less flexible labour markets) and contribute to holding household consumption at its depressed level. Secondly, the dynamism of private-sector demand may be constrained if lending does not rebound in parallel with the recovery of activity, a prospect which cannot be ruled out given the fragile underlying financial situation and the current move to strengthen regulation. If lending is tighter than expected, the impact will fall mainly on households and small and medium-sized enterprises (which have less direct access to financing through the financial markets), with negative effects on consumption and job creation, the latter strongly influenced by the buoyancy of firms of this type.

A second type of risk derives from economic policy stances and developments in them in the future. The exit from monetary and financial support may run into complications if there are unforeseen economic and financial developments. There is always a likelihood of situations posing economic policy dilemmas with a negative outcome for activity and financial stability. As inflation expectations are generally well anchored, these dilemmas are more likely to arise in the fiscal sphere, which itself is one of the main sources of risk and uncertainty.

The fragile situation of public finances not only has significant implications for the long-term economic outlook, but also contains sources of additional risk for short-term economic recovery and financial stability, which may act through two possible channels. Firstly, an increase in agents’ concern about the sustainability of public-sector debt or net borrowing may either force an earlier-than-expected fiscal adjustment or induce a general rise in credit risk premia and long-term interest rates, which would raise the cost of private-sector borrowing and financial volatility. Secondly, a sudden and unexpected rise in long-term interest rates could cause losses at financial institutions highly exposed to interest rate risk (attracted by the spread between long- and short-term interest rates) and lead to a tightening of credit conditions. This would compromise the recovery of activity and the process of financial normalisation if they were still not on a firm footing. It can thus be concluded that the fragile fiscal position of the developed economies represents one of the main risk factors in the current scenario and that fiscal consolidation is one of the main challenges facing the economic authorities.

Lastly, commodity prices could rise substantially faster than the moderate growth expected in the next few years. This would pose a risk to the recovery of activity (particularly that of the developed economies) and would contribute to higher global inflation than envisaged in the central scenario described above.

The global economy embarking on recovery has weaknesses both in the short term and on a longer time horizon. However, as noted above, the starting point is rather more favourable in the emerging economies than in the developed economies. It can thus be expected that the
The emerging economies will gain weight in the world economy, not only in terms of size or contribution to world GDP growth, but also as a possible factor sustaining global demand.

The challenges facing the global economy (particularly the developed countries) are thus multiple and entail far-reaching structural changes. In the real sector, these changes include, inter alia, adjusting and restructuring the growth drivers of private-sector demand and redirecting public finances to a sustainable path through a credible, well-planned fiscal consolidation strategy. These aims would be easier to achieve if progress in structural reforms (which are different in each country) raised potential growth in the medium term. A major challenge is posed by the restructuring of the financial system to put it on a more solid and stable footing, and, in this respect, an active and effective contribution will have to be made by the new international coordination fora described in Box 3.2.

But it is also essential to uphold the credibility of monetary policies, so future growth rests on a solid foundation. In these difficult circumstances it is essential to have firm and credible economic policies to undertake far-reaching reforms in the real, fiscal and financial sectors which are different in each country. In this respect, it should be noted that preserving the credibility of monetary policy is a key part of economic policy development, since price stability is one of the basic pillars of long-term growth.

Lastly, it should be kept in mind that the crisis resulted from financial excesses and unsustainable growth patterns engendered during the previous expansionary phase. Thus the reforms and structural changes mentioned above (and the consolidation of the previous macroeconomic stability achievements) should allow future growth to take place on firmer foundations than in the past. In the long term, this will benefit the global economy as a whole and the countries which go farthest in making these transformations.
The euro area and the common monetary policy

1 Introduction

In 2009 euro area GDP posted an unprecedented fall of 4.1%. Nonetheless, in the second half of the year a faltering recovery began which, on available projections, should firm up throughout 2010, albeit with relatively moderate increases in activity. Inflation also showed a very pronounced change in trajectory, falling in the first half of the year and subsequently rising, which was largely linked to developments in energy goods prices. The increase in the harmonised index of consumer prices (HICP) averaged 0.3%, its lowest rate since the start of EMU (see Table 4.1). Existing projections point to inflation stabilising at low and slightly higher than current levels against a backdrop of a modest pick-up in activity, under-utilisation of productive capacity and subdued wage growth derived from the sluggish labour market.

In any event, these central scenarios envisaged for GDP and inflation are subject to a high degree of uncertainty, partly linked to factors external to the euro area, such as changes in global activity and commodities prices on international markets, but especially to internal factors related to weak demand, labour market developments and the need for financial institutions to continue to strengthen their balance sheets. Similarly, the fiscal crisis in Greece gave rise to bouts of extreme instability in 2010 H1 posing most considerable challenges and triggering unprecedented institutional reactions in the euro area as a whole. The role of economic policies will be key in determining the pace and speed of the recovery. It is essential to undertake structural reforms and ambitious, lasting fiscal consolidation to ensure the sustainability of public finances and to safeguard financial stability in the euro area, and also to strengthen the institutional framework of economic governance. These are the main issues which will be described in the following sections.

The recession dating from spring 2008 worsened in the half-year from October 2008 to March 2009, turning into a slump in activity –of more than 4%– unprecedented in the history of the euro area (see Chart 4.1). This contraction was not unrelated to the protracted and deep global financial crisis, the resurgence of which from mid-2008 resulted in notably higher risk premia, sharp falls in financial asset prices –with the consequent impact on bank balance sheets and on household wealth– and tighter bank lending standards. As a result of the global and synchronised nature of the crisis, external demand contracted sharply, as evidenced by the strong fall in exports. The recession in the euro area, in conjunction with the additional deterioration in financial conditions, prompted a marked worsening of agents’ expectations as to the behaviour of activity and employment. This spurred household saving to the detriment of household consumption and discouraged spending on house purchases, thus quickening the downward adjustment which had begun previously in residential investment in some euro area countries. For their part, firms sharply restricted productive investment –which fell by nearly 12% between October 2008 and March 2009– and began to run down inventories, following a possibly undesired accumulation associated with the decrease in sales.

GDP fell in all euro area countries, albeit to varying extents largely reflecting the differing weight and degree of deterioration of residential investment and exports (see Chart 4.1). Thus, in countries such as Spain and Ireland, which had seen a bigger real estate boom, the downturn in residential investment was sharper and resulted in greater job losses, which in turn seem to have contributed to a sharper contraction in private consumption (although the impact on GDP was cushioned by the fall-off in imports). In others, such as Germany and Finland, the heaviest strains came from the external sector (given their specialisation in the production of capital equipment, hard hit by the worldwide fall in investment), so the main downward pressure on
activity was from net external demand. Meanwhile, France showed a more moderate contraction of GDP, since it is less exposed to the aforementioned factors. That is in contrast to Italy, where the crisis exacerbated both the lack of vigour of exports (linked to such factors as the pattern of productive specialisation and the cumulative loss of competitiveness) and the persistent sluggishness of domestic demand.

Euro area employment responded to the fall in production with a slight lag, in an adjustment process which has been prolonged despite the slight recovery in activity. This was reflected in a notable increase in the unemployment rate, which reached 10% in the opening months of 2010. The downturn in employment is proving to be relatively subdued, if the sharp fall in output is taken into account. This is clearly different from the recent experience in other economies (including most notably the United States) and from previous

The impact of the crisis on employment was relatively cushioned, with large differences between countries.
recessions in the euro area, and could be a consequence of the reforms stemming from the Treaty of Lisbon, progressively adopted in the labour market over the past decade, and also of the incentives in several countries, such as France, Italy and Germany, to contain job destruction and human capital loss through subsidised reductions in working hours.

The response of employment varied widely from country to country, not only because different economic policy measures were implemented, but also because of the different productive structures and labour market regulations. Thus, in Germany employment fell by practically zero, while in other countries, such as Spain and Ireland, the fall reached figures of around 10%.

The response of employment varied widely from country to country, not only because different economic policy measures were implemented, but also because of the different productive structures and labour market regulations. Thus, in Germany employment fell by practically zero, while in other countries, such as Spain and Ireland, the fall reached figures of around 10%.

Inflation fell sharply, initially affected by the more volatile components of the HICP and subsequently also by the more stable ones.

After reaching a high of more than 4% in July 2008, inflation turned downwards and posted negative values in mid-2009 (see Chart 4.2). This substantial fall was basically due to the decline in commodities prices, particularly those of energy, which fed through to the energy and food components of the HICP. Compounding this was the weakness of domestic demand and the under-utilisation of plant capacity which, along with the lagged effect of lower commodities prices, slowed the rate of change of the less volatile components of the HICP (services and non-energy industrial goods).
Private-sector financing slowed further in 2009 and in the opening months of 2010, in line with its customary cyclical pattern. In the case of non-financial corporations, the slowdown was extensive to all euro area countries and reflects the influence both of demand factors, due to the lesser need for funds to finance diminishing productive investment and current assets, and of supply factors, due to the aforementioned tightening of bank credit standards (see Chart 4.3). For some larger firms it proved possible to partly offset the fall in bank loans, the main component of corporate finance, through direct recourse to the capital markets.

In the case of households, credit eased less sharply, following the strong loss of momentum over the past two years. The slowdown affected consumer loans to a greater degree while house purchase loans began to show muted signs of recovery in 2009 Q4. This pick-up, according to the Bank Lending Survey, would reflect a rise in demand against the backdrop of a marked decrease in interest rates and declines in house prices.

Urgent action taken by European governments following the escalation of the financial crisis in autumn 2008 contributed, together with the Eurosystem’s generous liquidity provision policy, to checking the deterioration of the main financial stress indicators. However, in early 2009 the absence of any signs of improvement in the economic situation and the high uncertainty on financial markets prompted the economic authorities to implement additional support measures. This action, further to specific objectives such as enhancing the interest rate transmission mechanism, containing the slide in aggregate demand and remedying the difficulties of certain banks, sought to sustain and improve private agents’ confidence and to prevent highly unfavourable scenarios from materialising. The measures taken generally fulfilled their aims.

The ECB continued to cut monetary policy rates, lowering the rate on its main refinancing operations to 1% in May, which made for a total cut of 325 bp from October 2008 (see Chart 4.4). These decisions were accompanied by a policy to support credit using non-conventional measures. In particular, certain measures adopted in 2008 were continued, such as the extension of the list of assets eligible as collateral and the supply of funds in longer-term and foreign currency operations, using fixed interest rates with full allotment in all tender operations.

Given the seriousness of the situation, economic authorities continued to apply crisis-combating measures...

Private-sector financing slowed further in 2009 and in the opening months of 2010, in line with its customary cyclical pattern. In the case of non-financial corporations, the slowdown was extensive to all euro area countries and reflects the influence both of demand factors, due to the lesser need for funds to finance diminishing productive investment and current assets, and of supply factors, due to the aforementioned tightening of bank credit standards (see Chart 4.3). For some larger firms it proved possible to partly offset the fall in bank loans, the main component of corporate finance, through direct recourse to the capital markets.

In the case of households, credit eased less sharply, following the strong loss of momentum over the past two years. The slowdown affected consumer loans to a greater degree while house purchase loans began to show muted signs of recovery in 2009 Q4. This pick-up, according to the Bank Lending Survey, would reflect a rise in demand against the backdrop of a marked decrease in interest rates and declines in house prices.

Urgent action taken by European governments following the escalation of the financial crisis in autumn 2008 contributed, together with the Eurosystem’s generous liquidity provision policy, to checking the deterioration of the main financial stress indicators. However, in early 2009 the absence of any signs of improvement in the economic situation and the high uncertainty on financial markets prompted the economic authorities to implement additional support measures. This action, further to specific objectives such as enhancing the interest rate transmission mechanism, containing the slide in aggregate demand and remedying the difficulties of certain banks, sought to sustain and improve private agents’ confidence and to prevent highly unfavourable scenarios from materialising. The measures taken generally fulfilled their aims.

The ECB continued to cut monetary policy rates, lowering the rate on its main refinancing operations to 1% in May, which made for a total cut of 325 bp from October 2008 (see Chart 4.4). These decisions were accompanied by a policy to support credit using non-conventional measures. In particular, certain measures adopted in 2008 were continued, such as the extension of the list of assets eligible as collateral and the supply of funds in longer-term and foreign currency operations, using fixed interest rates with full allotment in all tender operations.
addition, three new twelve-month unlimited liquidity-providing operations and a covered bond purchase programme were introduced. The Eurosystem’s aim hereby was to provide for a swift and sharp fall in market interest rates and in those set by financial institutions in their asset-side operations, to alleviate the lack of activity on wholesale funding markets and, in short, to strengthen the flow of credit to households and firms.

The tax authorities of euro area countries progressively adopted discretionary tax measures to stimulate demand, largely as part of the November 2008 European Economic Recovery Plan. These actions accounted for an estimated amount of 1.1% of GDP in 2009 and will total 0.8% in 2010 as a whole. The provisions adopted included cuts in taxes and social security payments, and increases in transfers and direct government spending, which was largely targeted at construction and infrastructure renewal. The fiscal drive in the various countries gave rise to very different outturns, essentially depending on the initial situation of public finances and the impact of the crisis.
Lastly, governments also deployed plans to support the financial system, approved in many cases during autumn 2008 within the common framework of principles agreed in the EU to ensure effectiveness and avoid the possibility of distorting competition. The measures, which initially focused on the liabilities-side of banks’ balance sheets by applying guarantees to debt issues and capital injections, were subsequently extended to the assets-side with programmes for restructuring impaired assets and guaranteeing their value.

From 2009 Q2, following the far-reaching action of central banks and governments in the euro area and in the rest of the world, financial conditions gradually returned to normal over the year, feeding off the more optimistic signs from the real sector. However, from 2009 Q4 there were some localised bouts of instability, such as that of Dubai World in November, while the deterioration in Greece’s fiscal situation began to generate growing strains in the euro area’s government debt markets.

EURIBOR interest rates reached minimum levels in September 2009 in the wake of monetary policy stimuli and the narrowing of risk premia. The twelve-month EURIBOR stabilised at around 1.2% and the risk premium, measured as the difference between the twelve-month EURIBOR and the twelve-month EUREPO, fell gradually to levels close to 50 bp, after it had exceeded 200 bp at the height of the tension. The abatement of investor uncertainty was also discernible in less volatile financial asset prices and a substantial recovery in share prices for the year as a whole, although they did not reach their pre-crisis levels. In this respect, risk premia fell notably, particularly sharply for debt instruments of poorer credit quality (see Chart 4.5).

As a result of improved financial conditions, banks resorted less to State guarantees for their debt issues and some even repaid the public funds received during the period of greatest instability. Also, the lower cost of financing boosted activity on primary securities markets, par-
The progressive return to financial stability, together with the recovery of external demand and support from economic policies, was conducive to the euro area emerging from recession in 2009 H2.

Inflation turned positive due to the effect of energy prices.

This process of financial market stabilisation during 2009, together with the recovery of some non-euro area economies and the effect of the economic policy stimuli implemented in the euro area, enabled the euro area economy to emerge from the recession in 2009 H2. It posted positive quarter-on-quarter growth rates, although these were low and subject to a certain degree of volatility. This pick-up was underpinned by export growth (in keeping with the momentum of international trade), by the expansion of government consumption and investment, and by the positive contribution of stockbuilding, while household consumption and private investment remained depressed.

Euro-area inflation turned positive in the closing months of the year and reached 1.5% in April 2010, mainly as a result of the rise in the energy component of the HICP (tied to the gradual increase in commodities prices). Conversely, the prices of the less volatile components of the...
HICP (services and non-energy industrial goods) remained on a slowing path against a back-
drop of continued weak domestic demand.

In this setting the euro exchange rate progressively appreciated, a movement interrupted at
year-end due to the worsening of the Greek crisis and the release of some relatively unfavour-
able macroeconomic data. Nevertheless, it was subject to notable fluctuations and did not
perform uniformly against the major currencies. Its appreciation against the US dollar, the yen
and Asian currencies tied to the dollar was partially offset by its depreciation against sterling
and the Swiss franc (see Chart 4.5).

From end-2009 the markets were highly conditioned by the Greek fiscal crisis, which height-
ened sharply in spring 2010. That resulted in a drastic correction of trends on euro area finan-
cial markets. In addition to the strains on sovereign debt markets which are discussed below,
share prices fell sharply, particularly in the banking sector due to its exposure to sovereign
debt. And on the foreign exchange markets there was a correction in the euro in May 2010
that brought it to levels close to those recorded during the Lehman Brothers’ crisis in autumn
2008. This build-up of risks to financial stability in the euro area led European governments
and authorities to adopt further extraordinary measures on 10 May, which are detailed in the
following section.

Government action, which in many cases exhausted the available room for manoeuvre, and,
in particular, the operation of the automatic stabilisers prompted an unprecedented deteriora-
tion in public finances in the euro area countries. The euro area budget deficit stood at 6.3%
in 2009, its highest level in recent decades and considerably up on the figure of 2% posted in
2008 (see Chart 4.6).

This was firstly the result of strong growth in expenditure, which stood at more than 50%
of GDP (4 pp up on the previous year), due to the increase in social benefits, and in govern-
ment consumption and investment. Furthermore, the fall in revenue (to 44% of GDP) was
steeper than that observed in other recessions not only because of the tax cuts introduced
but also because of the sharp contraction in certain sources of revenue which, during the
previous upturn, had shown unusually high elasticity to GDP (such as revenue linked to the
real estate boom in certain euro area countries and that linked to business profits).

As a result, the permanent or structural component of the fiscal downturn has been consider-
able and, on European Commission estimates, it would account for practically half of the total
deterioration. Therefore, neither the gradual withdrawal of the stimulus measures nor the in-
cipient economic recovery will permit a notable reduction in the fiscal imbalance. Furthermore,
forecasts indicate that public debt will rise to close to 85% of GDP in 2010, despite the fact
that government intervention to stabilise the financial system to date has had a limited impact
on debt levels (less than 3 pp) (see Chart 4.6).

The fiscal deterioration was common to all euro area countries and resulted in an excep-
tional situation as far as the application of the Stability and Growth Pact is concerned. In
spring 2009, Econfin resolved to initiate the excessive deficit procedure for Greece, Spain,
France and Ireland, whose deficits had exceeded 3% of GDP in 2008, and in December a
further eight countries (Belgium, Germany, Italy, the Netherlands, Austria, Portugal, Slovenia
and Slovakia) were added. Consequently, 13 euro area member states were subject to this
procedure (including Malta), and in May 2010 the European Commission initiated the same
procedure for the three remaining countries, although when this report went to press the initiation of these proceedings had not been decided upon by the Council.

As shown in Box 4.1, the deterioration of fiscal positions against a backdrop of more prudent risk pricing was reflected in the widening of sovereign spreads in the euro area during 2009. This situation came to a head in spring 2010 as a consequence of the Greek crisis. The high levels of public debt in Greece, together with the deterioration of its economic outlook and its loss of credibility as a result of the serious shortcomings detected in its statistics, heightened uncertainty about the Greek government’s ability to refinance its debt. The Greek authorities were compelled to design various tax adjustment measures at the same time as the Eurogroup, the European Commission, the ECB and IMF made progress in designing a mechanism to support these measures through the provision of conditional financial assistance to the Greek economy. However, these measures did not manage to stabilise the situation. On the contrary, Greek bonds continued to lose value and this trend began to spread to those euro area economies whose public finances had deteriorated most as a result of the crisis.
Since the creation of the European Monetary Union, yield spreads between the various euro area sovereign bonds had held at relatively low values (see Panel 1). With the onset of the financial turbulence in mid-2007, greater spreads began to be observed. These widened notably during the period of most financial instability, following the bankruptcy of Lehman Brothers in 2008. Relatively high sovereign spreads persisted during 2009, and in recent months high tensions prevailed in the area’s public debt markets as a result of the Greek crisis and following revelations of this country’s serious statistical shortcomings, which masked a worrying fiscal situation. In late January and early February 2010, the yield on 10-year Greek bonds rose to 7%, while the German benchmark stood at around 3.2%. The Greek yield shot up to over 12% on 7 May, the day before the approval by the Ecofin and the ECB of a package of measures to preserve stability in the euro area (discussed in the main body of this chapter). The tensions also affected the other sovereign bonds in the euro area, albeit unevenly so depending on the issuer. Irish and Portuguese bonds, after those of Greece, lost most value (with yields standing at 6% on 10-year debt), followed by Italian and Spanish benchmark bonds (whose rates stood at over 4%).

In a monetary union, differing yields on government bonds—with the same maturity— are reflected in liquidity and credit risk premia. The latter would reflect the return demanded by investors for exposing themselves to the risk of a bond default event, a return that could also be approximated by the cost of credit default swaps (CDSs), a financial instrument which enables insurance to be taken against this event. As Panel 2 illustrates, tracking the course of the sovereign CDSs for the euro area countries relative to the German sovereign CDS, default risk premia would account for a major part of the yield spreads over Germany since 2007. These premia will depend both on the amount of sovereign risk perceived by investors, which will be related to the country’s solvency, and on the price of the risk, which will be determined by investors’ readiness to assume risks.

From 2007, then, part of the spreads should reflect the increase in the price of risk, against a global background of high uncertainty, particularly since the bankruptcy of Lehman Brothers. Faced with a situation of unprecedented instability, investors demanded greater compensation for bearing risks, which affected countries with weaker fiscal positions to a greater extent. For this same reason, the finan-
The scale of the increase by country differed greatly. Firstly, a considerable deterioration in the member countries’ fiscal situation and the massive deployment of public aid to the banking system has also exposed their fiscal position to the possible fragilities of financial institutions (see Panel 3). That led to a situation in which several euro area countries saw their credit ratings downgraded during 2009. The Greek credit rating was downgraded on two occasions by Fitch and S&P to BBB+, while Moody’s downgraded it a notch to A2 (equivalent to A). Ireland lost the AAA rating that three agencies had assigned to it, and was downgraded to AA— in the case of Fitch. Finally, S&P downgraded Spain a notch to AA+, and Portugal to A+. The spread of tensions in spring 2010 led to further downgrades in Portugal and in Spain, and above all in Greece, where S&P withdrew the investment-grade rating for Greek debt, assigning it a rating of BB+.

To sum up the significance of the determinants, Panel 4 gives a breakdown of the change in 10-year sovereign spreads since mid-2007 using a simple regression model. The exercise runs only to November 2009, given the information available at the time of this report going to press. As can be seen, the increase in spreads over the German Bund during this period was generalised, though the scale of the increase by country differed greatly. Firstly, a common overall factor of higher risk is identified, which would have pushed yields upwards, and which has been approximated by the implied volatility of the German stock market index, or VDAX. A relevant role is not obtained, however, for liquidity (due possibly to the difficulties of approximating this variable in this framework of analysis), although the common factor might be partly incorporating the presence of higher liquidity premia at a time of greater uncertainty. A positive contribution by the idiosyncratic factors associated with the countries’ fiscal position is obtained. Finally, the volume of public aid to the banking sector would have played a determining role only in the case of Ireland. The presence, nonetheless, of a sizeable unexplained component in the cases of Greece and Ireland might indicate non-linear behaviour by the spreads and, in the case of Greece, the credibility problems that had been disclosed.

Accordingly, sovereign debt yield spreads in the euro area during the crisis, and particularly in spring 2010, illustrate how investors may show enormous sensitivity to weakened fiscal positions, a reaction which is exacerbated at times of global instability and which entails notable financial risks. The persistence of high risk premia may be expected to feed through to the cost of debt when governments refinance it, which will hamper fiscal consolidation plans. A public spending structure entailing higher interest payments might also be detrimental to the economy’s potential growth. This reinforces the importance for governments of safeguarding fiscal stability in the medium term. Further, as a result of the crisis, investors will tend to be more cautious in the face of risks, at a time in which a portion of such risks is feeding through from the private to the public sector. Under these conditions, a greater degree of discrimination on public debt markets may be expected as may, therefore, conditions that are particularly unfavourable for government paper issued by States that do not adopt credible consolidation strategies with the urgency that the situation requires.

On 23 April the Greek government formally requested the activation of the support programme designed by the Eurogroup, which met this request on 2 May through the unanimous approval of a programme of bilateral loans of up to €110 billion over three years (€80 billion from the euro area Member States and the remainder from the IMF). This plan is subject to strict conditionalities and close monitoring, which is detailed in 2 of the April 2010 Economic Bulletin. On the same day, and as part of the strict conditionalities, Greece approved an ambitious fiscal adjustment and structural reform programme jointly negotiated with the IMF, the European Commission and the ECB. The implementation of this programme will be evaluated quarterly. Further, in keeping with its favourable assessment of the Greek government’s ad-

---

1. Support to the financial system is not in the main reflected in the budget deficit and public debt figures. This is due to the nature of these measures—e.g. public guarantees only generate contingent liabilities and, in some cases, to their implementation through companies classified outside the public sector.

2. What is involved here is a linear regression of the sovereign spreads of 10 euro area countries over the German Bund with data from June 2007 to November 2009. Used as explanatory variables are the VDAX—to approximate the overall common factor of uncertainty—and the idiosyncratic factors which show the European Commission’s budget deficit and public debt projections (interacting with the VDAX to capture the greater relevance of the fiscal position at times of instability). A liquidity variable approximated by the weight in the euro area of the country’s long-term issues is included. All the variables are expressed relative to the related German benchmark.

3. Most of the increases in sovereign spreads came about further to the announcement of the financial bail-out plans. Ireland has considerably greater exposure, owing to the fact that in September 2008 its government approved, for a period of two years, a guarantee on the liabilities of the main banks, which initially entailed contingent liabilities close to 200% of GDP.
justment plan, the ECB decided to suspend the application of the minimum credit rating threshold for Greek debt.

Following its initial positive impact, activation of the support plan for Greece was insufficient to halt the worsening of the strains which continued to spread to other member countries. In response, governments undertook on 10 May to bring forward their budgetary consolidation plans and Ecofin announced the creation of a European Financial Stabilisation Mechanism capable of mobilising $500 million of European funds (more than 5.5% of euro area GDP), which will be supplemented by further funding from the IMF and, as in the case of the Greek support plan, will be subject to strict conditionality. Similarly, in order for the monetary policy transmission mechanism to function normally again, the ECB decided to conduct sterilised interventions in the dysfunctional segments of public and private debt markets through a Securities Markets Programme; to strengthen liquidity provision during May and June by reactivating some measures previously adopted in relation to three and six-month tenders; and, in coordination with other central banks, to resume US dollar liquidity-providing operations.

4. Outlook and economic policy challenges

Available forecasts point to a period of weak and gradual recovery, with low inflation, and it will be some time before production reaches its pre-crisis levels.

In the financial field, banks continue to address the repair of their balance sheets and the restructuring of the sector.

Primarily, the international financial crisis and economic recession have severely affected the banking system. As the ECB and the IMF have highlighted, banks remain exposed to potential losses in light of the foreseeable materialisation of credit risk on their books. Further, the banking system, which remains highly reliant on the public aid received, will be subject to regulatory changes and to redimensioning.

To date, the adjustment of bank balance sheets has essentially involved the reduction of their foreign assets and of interbank positions. However, it cannot be fully ruled out that, if the process continues, it will ultimately affect the supply of bank financing and, therefore, the pace of the recovery.

Surplus plant capacity will detract from investment and the labour market situation will hinder a rapid recovery in consumption.

The crisis generated excess plant capacity, which will tend to delay the need for new investment, while the redimensioning needed in certain productive sectors—the car industry, construction and the financial sector—may continue to bear negatively not only on the demand for labour, but also on supply. Potential employees will need to acquire the appropriate skills to improve their employability in the more dynamic sectors. Further, the foreseeable re-establishment of standard working hours poses doubts about the true dynamism of employment during the recently initiated phase of recovery. This unfavourable labour market outlook and the losses in wealth that have built up might translate into greater-than-expected precautionary saving.
In this situation, the robustness of the recovery will hinge crucially on how skilfully euro area governments and the ECB time the withdrawal of the exceptional measures adopted and duly undertake those other measures needed to ensure financial stability in the area, to minimise the risk of a fresh slump in activity and to promote higher potential growth.

Progressive financial normalisation and the improved economic outlook over the course of 2009 meant that the Eurosystem, so as to prevent the market distortions that might arise if the extraordinary measures were maintained longer than needed, was able to begin withdrawing those measures that were no longer necessary, while maintaining a generous liquidity-provision policy. Thus, after holding the third and final one-year refinancing operation in December, six-month injections were not extended after the operation in March this year. Subsequently, the ECB Council decided that, as from 2010 Q2, its regular three-month refinancing operations would resume the habitual variable-rate procedure, while weekly and special one-month tenders would continue to be at a fixed rate with full allotment, at least until October.

This gradual winding down of the extraordinary measures had to be regulated as a result of the market tensions stemming from the Greek crisis. The ECB decided to reinforce once again the provision of liquidity at three and six months and to resume dollar-denominated operations, while it adopted a programme of intervention in those government and private debt market segments whose dysfunctionality was hindering the proper working of monetary policy transmission mechanisms. These interventions are being neutralised so as not to affect the policy stance and not to interfere with expectations as to the future course of official interest rates.

Once the tensions have been overcome, the exit strategy should be resumed in order to converge on an operational framework that reflects the lessons of the crisis; and, in this respect, the initial framework is a good point of reference in light of the flexibility and robustness it has demonstrated.

In addition, monetary policy will have to calibrate the risks to price stability, in a scenario of slow growth and high uncertainty. Moreover, it will be highly dependent on the measures implemented in other economic policy areas.
More specifically, due regard must be had to the risks of the still-ongoing normalisation of the financial system being interrupted by occasional tensions that hamper satisfying the greater demand for credit that will arise once the pick-up in activity takes root. But, above all, the recent experience in Greece illustrates the severity of the problems that would arise from an insufficient commitment by governments to the necessary fiscal consolidation.

The challenge facing fiscal policy is to set in place budgetary consolidation plans that ensure sound public finances in the medium term and which provide the room for manoeuvre needed to withstand future crises and the consequences of population ageing. At the start of the recovery, uncertainty over the economy’s capacity to sustain growth, once the demand-stimulus and credit-support measures were withdrawn, advised regulating the necessary spending cuts and tax increases with prudence. But the recent bout of tensions on European debt markets stemming from the Greek crisis has highlighted a growing sensitivity to the budgetary position of certain countries that advises accelerating the design and, in some cases, the implementation of sufficiently ambitious fiscal consolidation plans.

The EU Council of ministers took these considerations into account when establishing the basic guidelines for the fiscal consolidation process in the coming years. In particular, it was agreed in December 2009 that the adjustment should broadly begin in 2011 and that it would be conditional upon the situation of each country. Under the Stability and Growth Pact, the year 2013 was set as a deadline for the correction of excessive deficits in most cases, except for Ireland and Greece (2014) and Belgium and Italy (2012). The annual structural adjustment that each country must make on average during the established correction period ranges from 0.5 pp in the cases of Germany and Italy to almost 3 pp in that of Greece.

At the start of 2010, all the euro area countries submitted their respective Stability Programmes to the European Commission. The Commission’s assessment at the end of March acknowledged the effort made by the Member States in their response, but expressed certain reservations. In particular, it warned that the fiscal projections in most of the programmes were based on relatively favourable macroeconomic scenarios and, at the same time, it requested more details on the specific measures governments intended to adopt.

According to these Programmes, euro area fiscal policy in 2010 will continue contributing to sustaining the economic recovery and the deficit may rise to almost 7% of GDP, although there are notable differences in the various members’ fiscal exit strategies. In Germany, tax cuts and the other measures agreed upon entail a stimulus on a similar scale to that in 2009 (2 pp of GDP), and in France, too, investment-boosting initiatives have been introduced. Conversely, Ireland, Portugal, Greece and Spain implemented fiscal adjustment plans at the start of the year which were stepped up in the three latter countries in May, against the background of the enormous instability generated by the Greek crisis. The Spanish programme and its subsequent reinforcement are explained in detail in chapter 5 in this Annual Report.

At the behest of Ecofin, Greece submitted additional budgetary measures in mid-March, quantified at 2% of Greek GDP, and on 2 May it approved a new fiscal adjustment package aimed at cutting the deficit by 5 pp of GDP in 2010, placing it below 3% in 2014. Progress in the implementation of this plan is subject to strict monitoring by the IMF and the EC, on a quarterly basis.

In contrast, in later years the adjustment will be of a more generalised nature if the commitments established are met. These posit a gradual reduction in the overall euro area deficit to below 3% in 2013. But most of the countries have yet to undertake the unavoidable task of...
designing, as soon as possible, ambitious and credible fiscal consolidation measures that prevent growing financing needs from pushing long-term interest rates upwards, and thereby hampering the recovery in investment and private consumption.

The implementation of these plans might have an adverse impact on aggregate demand in the economy, which will be less if the greater budgetary discipline contributes to reducing sovereign risk premia and the interest rates on public debt. In this respect, past experience reveals the existence of certain episodes where the effects of fiscal consolidation on economic growth were limited (see Box 4.2).

In addition, in a scenario such as that at present, marked by low potential growth, the implementation of a sustained structural adjustment may prove more complex than in past episodes. It is thus important, firstly, that consolidation should be pursued bearing in mind the impact of the measures on the supply side of the economy (in particular, the potential disincentive effect on employment and saving entailed by some taxes and the effects of public spending on innovation and on education). But it will also be essential to accompany these measures with other complementary reforms. These include most notably the reform of pensions and social security systems to lessen the consequences of demographic changes on spending projections and, above all, those reforms aimed directly at raising the economy's potential growth and at ensuring the area's financial stability.

The economic crisis may conceivably have reduced the euro area's productive capacity. Constricted investment, the greater uncertainty associated with risky projects such as innovation and the loss of human capital linked to high unemployment levels may readily result in a persistent reduction in the level of potential output. There are, in fact, estimates that place this contraction at close to 4% over five years.

To reduce the scale and persistence of this impact, initiatives are needed to promote economies’ ability to create new business opportunities and to ensure the necessary flexibility is in place to reallocate resources towards these market segments. At the same time, it is important to eliminate the support measures for specific sectors that may hold back the adjustment, distorting the competitive conditions of the single market (see Table 4.2). The recovery will only take on self-sustaining dynamism once the effects of the transitory stimulus policies are removed.

To date, the increase in unemployment has been centred particularly on countries that have been subject to marked sectoral restructuring and/or that show high labour market segmentation. But even in those countries where job destruction is proving more moderate, there are groups in which the effects of the crisis have been very virulent: temporary workers, the young and the low-skilled.

Training the unemployed to ease their transition towards new jobs and to prevent unemployment from becoming structural is therefore essential. Lifelong training and the improved education of the young would enhance the capacity of these groups to respond to the needs of the labour market, preventing circumstances such as those at present from leading ultimately to a permanent full-off in their participation rates, with the subsequent adverse effects on the economy’s potential growth. Further, it is advisable to review collective bargaining arrangements, to lessen the downward stickiness of wages in recessions and to allow for a better adaptation by firms to economic conditions.
Over the coming years, European countries will have to effect a highly demanding adjustment of their budgetary imbalances. Indeed, in some instances this has already begun. Although there is broad consensus regarding the benefits of fiscal consolidation in the medium and long run, the short-term effects are subject to greater uncertainty.

The literature on past fiscal consolidation experiences reveals the existence of numerous episodes where the effects on short-term economic growth were limited or even positive. The most closely studied instances are the consolidation processes undertaken in Denmark (1983-1986) and Ireland (1987-1989), which were accompanied by a significant pick-up in economic growth.¹

Other papers suggest that these findings are not confined exclusively to small economies; for example, Giudice et al. (2007) ascertain that approximately half the consolidation processes undertaken by EU countries in the last 30 years have been accompanied by high growth, relative to the prior and subsequent periods.²

But consolidation had never been so global or so demanding; and, therefore, transferring these experiences to the current situation is a questionable exercise. One recent episode was that experienced by the European countries during the 1993-1997 period, when compliance with the convergence criteria governing entry into the euro area entailed a widespread and large-scale fiscal consolidation. Specifically, the correction of the cyclically adjusted primary balance in the euro area countries was 2.2% of GDP (3.1% if the total balance is used). This figure is only slightly down on the reduction of the cyclically adjusted pri-

---

¹ See Giavazzi and Pagano (1990), "Can severe fiscal contractions be expansionary? Tales of two small European countries", NBER Macroeconomic Annual, 5, pp. 75-111.


---

**Table: Fiscal Consolidation Effort**

<table>
<thead>
<tr>
<th>Region</th>
<th>Reduction in the cyclically adjusted primary balance % GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993-1997</td>
<td>1993-2013</td>
</tr>
<tr>
<td>EU Area</td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td></td>
</tr>
<tr>
<td>Italy (a)</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td></td>
</tr>
<tr>
<td>Netherlands (a)</td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td></td>
</tr>
</tbody>
</table>

**Table: Fiscal Consolidation in the 1993-1997 Period**

<table>
<thead>
<tr>
<th>Euro area</th>
<th>Germany</th>
<th>France</th>
<th>Italy</th>
<th>Spain</th>
<th>Greece</th>
<th>Ireland</th>
<th>Portugal</th>
<th>Finland</th>
<th>Belgium</th>
<th>Netherlands</th>
<th>Austria</th>
<th>Japan</th>
<th>United States</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget balance</td>
<td>3.1</td>
<td>0.4</td>
<td>3.1</td>
<td>7.4</td>
<td>3.9</td>
<td>6.0</td>
<td>4.1</td>
<td>4.2</td>
<td>7.0</td>
<td>5.2</td>
<td>1.6</td>
<td>2.4</td>
<td>4.1</td>
<td>5.8</td>
</tr>
<tr>
<td>Structural balance</td>
<td>-2.2</td>
<td>0.1</td>
<td>3.2</td>
<td>6.3</td>
<td>3.9</td>
<td>6.2</td>
<td>1.5</td>
<td>4.2</td>
<td>2.8</td>
<td>4.2</td>
<td>0.7</td>
<td>2.2</td>
<td>-1.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Public spending</td>
<td>-2.8</td>
<td>0.1</td>
<td>-0.8</td>
<td>-6.1</td>
<td>-7.3</td>
<td>-1.5</td>
<td>-8.0</td>
<td>-2.3</td>
<td>-8.5</td>
<td>-3.7</td>
<td>-8.2</td>
<td>-2.7</td>
<td>-1.0</td>
<td>-2.7</td>
</tr>
<tr>
<td>Government consumpt.</td>
<td>-0.7</td>
<td>-0.2</td>
<td>-0.2</td>
<td>-1.7</td>
<td>-1.6</td>
<td>3.2</td>
<td>-2.6</td>
<td>0.7</td>
<td>-1.9</td>
<td>0.1</td>
<td>-1.7</td>
<td>-0.5</td>
<td>1.5</td>
<td>-1.7</td>
</tr>
<tr>
<td>Public investment</td>
<td>-0.6</td>
<td>-0.9</td>
<td>-0.6</td>
<td>-0.4</td>
<td>-1.1</td>
<td>0.3</td>
<td>0.3</td>
<td>0.7</td>
<td>0.3</td>
<td>-0.4</td>
<td>-0.2</td>
<td>-1.3</td>
<td>-0.5</td>
<td>0.1</td>
</tr>
<tr>
<td>Public revenue</td>
<td>0.3</td>
<td>0.5</td>
<td>2.3</td>
<td>1.3</td>
<td>-3.4</td>
<td>4.5</td>
<td>-3.6</td>
<td>1.8</td>
<td>-1.5</td>
<td>1.5</td>
<td>-6.6</td>
<td>-0.4</td>
<td>0.1</td>
<td>1.5</td>
</tr>
<tr>
<td>Direct taxes</td>
<td>0.2</td>
<td>-0.3</td>
<td>1.3</td>
<td>0.1</td>
<td>-0.1</td>
<td>1.9</td>
<td>-0.9</td>
<td>0.9</td>
<td>2.8</td>
<td>1.3</td>
<td>-3.9</td>
<td>1.0</td>
<td>-1.5</td>
<td>1.8</td>
</tr>
<tr>
<td>Indirect taxes</td>
<td>0.5</td>
<td>0.0</td>
<td>1.3</td>
<td>0.5</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
<td>0.7</td>
<td>-0.2</td>
<td>0.8</td>
<td>0.2</td>
<td>-0.4</td>
<td>0.4</td>
<td>-0.2</td>
</tr>
<tr>
<td>Public debt</td>
<td>8.5</td>
<td>13.8</td>
<td>13.0</td>
<td>2.4</td>
<td>8.1</td>
<td>3.5</td>
<td>-30.4</td>
<td>-0.2</td>
<td>-1.5</td>
<td>-12.0</td>
<td>-10.3</td>
<td>3.5</td>
<td>28.6</td>
<td>-4.6</td>
</tr>
<tr>
<td>Average GDP growth</td>
<td>1.7</td>
<td>1.3</td>
<td>1.4</td>
<td>1.4</td>
<td>2.1</td>
<td>1.7</td>
<td>7.6</td>
<td>2.2</td>
<td>3.3</td>
<td>2.0</td>
<td>3.0</td>
<td>1.9</td>
<td>1.4</td>
<td>3.6</td>
</tr>
</tbody>
</table>

SOURCES: European Commission and Banco de España.

a. 2010-2012.
As can be seen in the accompanying table 2, despite the generalised and intense nature of the fiscal consolidation, GDP growth in 1993-1997 was only slightly lower than that observed for the 1980-2009 period on average. Indeed, in Ireland, Finland and the Netherlands, growth was higher than the historical average. Unquestionably, this result reflects the influence of many other factors, such as the improved financing conditions during that period or, in some cases, the impact of the devaluations in the early 1990s. However, the figures at least suggest the absence of a notably adverse impact on economic growth.

The composition of the consolidation plans in that period might have influenced this result, since although the empirical evidence available is not unanimous, various papers show that the likelihood of this circumstance occurring increases if the consolidation is based on primary public spending cuts, as occurred in those years in almost all the countries, with the exception of Greece. There is also evidence that these episodes are more likely when preceded by a fiscal crisis, with high levels of public debt.

To verify the scale and the sign of the macroeconomic effects associated with episodes of fiscal consolidation, one habitual strategy in the literature consists of estimating an equation for private consumption, such as that presented in the accompanying table 1. Here, in addition to the habitual domestic income variables, fiscal variables are included. Dummy variables associated with the fiscal consolidation episodes are introduced into the equation, which interact with the fiscal variables, in order to test whether the impact of the latter on private consumption varies in the consolidation episodes. The choice of private consumption is warranted not only by the significance of this variable in GDP, but also because, from a theoretical standpoint, the fiscal consolidation episodes that have a limited impact on economic growth are based on the presence of agents with rational expectations, who anticipate that the current improvement in the budget balance will be accompanied in the future by tax cuts—and by the attendant distortional effects—and who, consequently, do not change their consumption decisions in the face of changes in fiscal variables.

The first column shows the estimated equation for the 1982-2008 period. On average for the period, the short-term elasticity of private consumption is limited (around 0.06) and significant at the 90% confidence levels. Nonetheless, the second column shows that this parameter is not significant when we confine its calculation to fiscal consolidation episodes. That is to say, the negative impact of a reduction in government consumption on private consumption disappears in times of fiscal consolidation.

In short, the evidence from the 1993-1997 period and the econometric evidence presented in this box point to the existence of fiscal consolidation episodes that may have moderately impacted economic growth in the short run. That said, all due caution is necessary when transferring past experiences to the current situation, since the effects of fiscal policy depend on many factors, such as the country’s economic and financial situation, the composition of the plans and, most especially, the impact of the fiscal consolidation commitments on agents’ expectations and on sovereign risk premia. Indeed, the costs in the short run might be less if the adjustments prove credible and contribute to reducing sovereign risk premia and the interest rates on public debt. Further grounds for caution in this analysis stem from the fact that the fiscal consolidation episodes that may finally be undertaken are not usually accompanied by significant contractions in economic activity, since that would entail the potential risk of such plans being abandoned.
Another key element in the strategy to improve the economy’s potential capacity would involve promoting innovation, which has been much afflicted by the high sensitivity it traditionally shows to the business cycle, and by the increase in risks and the shortage of funding characterising the recent situation. Innovation policy has been highly geared towards increasing public spending on R&D and towards the introduction of deductions and subsidies to raise private spending, and a more comprehensive approach should surely be adopted, accompanying these measures with others aimed at raising the number of science and technology graduates, improving the safeguarding of intellectual property rights and access to funding (via, for example, the development of venture capital funds), and promoting public/private cooperation projects and joint funding.

Lastly, the challenges in the financial sector involve, on one hand, ensuring that the deleveraging of the banking system comes about in an orderly fashion and, on the other, pushing through internationally coordinated regulatory reforms that contribute to setting in place a safer global financial system, but which at the same time do not prevent its development. Box 3.2 reviews the main international developments in this area. Significant progress has been made in Europe towards a new supervisory architecture, based on the recommenda-
Significant steps have been taken towards the creation of the ESRB (European Systemic Risk Board), which responds to the need to establish a macroprudential supervisory framework that allows the risks to the stability of financial systems to be identified. The microprudential realm, geared to the supervision of individual institutions, will also be reinforced by the network of supervisory authorities grouped together in the ESFS (European System of Financial Supervisors). The creation of these agencies and higher levels of capital required of financial institutions are essential elements for preventing crises of this nature from recurring in the future.

On 3 March the European Commission published its Europe 2020 Strategy, aimed at revamping the Lisbon Strategy. This marks the start of a process that should lead to its approval by the European Council in mid-2010. The Strategy aims to achieve economic growth based on knowledge and innovation, the effective use of resources and social and territorial inclusiveness. In this connection it defines a set of specific targets for the 2020 horizon, including an increase in employment and investment in R&D, a reduction in pollutant gas emissions, a reduction in the percentages of early school leavers and people without tertiary studies, and a reduction in those at risk of poverty. In a more resolute way than its forerunner, the Europe 2020 Strategy should drive the implementation of the structural reforms Europe needs.

One of the novelties of the Europe 2020 Strategy is its attention to strengthening governance and the multilateral surveillance procedures so as to ensure that the commitments made under the Strategy translate into effective action on the ground. The need to reinforce the European institutional framework—and, in particular, to improve economic policy coordination in the euro area—has undoubtedly been one of the lessons to be drawn from the recent Greek public debt crisis. Indeed, in mid-May the European Commission unveiled a proposal for reforms in three key areas: the reinforcement of surveillance procedures in respect of competitiveness and macroeconomic imbalances, setting in place a systematic framework for their diagnosis; the reform of the Stability and Growth Pact, to strengthen its preventive arm, to give greater relevance to public debt and to aspects relating to the sustainability of public finances, and to strengthen the incentives and mechanisms that ensure strict compliance with the commitments acquired; and, finally, to push through the design of a permanent mechanism for the resolution of potential future crises in which, inevitably, any financial support decision would be subject to the principle of strict conditionality.
The Spanish economy

The recession that began in Spain in mid-2008 continued into 2009; it was especially virulent in the first half of the year, before gradually losing momentum in the second half. That said, in the year as a whole, there was a substantial fall in GDP (-3.6%). As the top panels of Chart 5.1 show, the fall-off in activity was similar to that seen in the euro area, although the breakdown was rather different. In Spain, the fall in output was accompanied by a severe contraction in national demand, which shrank by more than 6%, very much sharper than the euro area correction. By contrast, in Spain net external demand cushioned the impact of national demand on GDP, making a highly positive contribution of 2.8 pp of GDP, whereas in the euro area the foreign trade crisis led to a negative contribution from this sector in 2009.

The recession was more severe than in previous crises. As the central panels of Chart 5.1 show, the rate of decline of GDP was much more marked in 2009 than during the recession of the early 1990s. This prompted the emergence of a highly significant output gap (albeit one no larger than in the previous recession), in part because, as is analysed in Chapter 2 of this Report, the Spanish economy’s growth capacity was also affected by the crisis, as investment shrank and the unemployment rate rose very rapidly.

Private consumption and investment in housing are probably the two components that performed worst in comparison with similar cycles; however, as in the case of GDP, both are now out of their cyclical trough, and private consumption actually started to post positive rates of growth as from the closing months of 2009. In contrast, net exports made a greater contribution to growth than in 1992 and 1993, despite the absence on this occasion of the impulse previously provided by currency devaluations. True, this positive contribution was due to the severe contraction in imports brought about by the extreme weakness of national demand, as exports were affected by the slump on the international markets. The decline in activity fed through, with great intensity, to employment, which fell very sharply, prompting a surge in the unemployment rate. It also led to an unprecedented slowdown in the rate of inflation, which in 2009 stood below that of the euro area for the first time since the start of Monetary Union. In particular, the year-on-year rate of growth of the CPI excluding unprocessed food and energy has gradually fallen, from more than 3% in 2008 to almost zero at the beginning of 2010.

The gradual improvement in activity continued in the opening months of 2010. GDP rose slightly (0.1%) in Q1, after six consecutive quarters of negative growth rates, and inflation rose, albeit due, above all, to higher oil prices. The outlook for the Spanish economy is for a relatively slow recovery in activity, meaning that although GDP has started to post positive rates of growth, the output gap will remain negative in the coming quarters; this reflects the difficulties of mobilising available productive resources and suggests that inflation will remain moderate. Moreover, as analysed in Chapters 1 and 2 of this Report, the introduction of certain structural reforms could speed the recovery, harnessing idle resources and countering the negative impact of the crisis on the Spanish economy’s growth capacity.

1 Monetary and financial conditions

The cost of borrowing for the private sector has fallen, but the other credit conditions remain tighter than before the financial crisis. The cost of borrowing for the private sector is now low, having fallen since the end of 2008 (see Chart 5.2). Since then, cuts in interbank rates have gradually passed through to lending rates, although only partially, as spreads have widened, mostly in the higher-risk segments (consumer credit and lending to SMEs). Conversely, lending standards and credit conditions other than interest rates remain tighter than before the crisis. These had progressively tightened since the second half of 2007, and although this process came to a halt in mid-2009, there is still no sign of any significant turnaround. In turn, since late 2009 and in 2010 to date, the nominal effective exchange rate has depreciated, helping to ease monetary conditions.
CHARACTERISATION OF THE CURRENT CYCLE (a)

SOURCES: INE and Banco de España.

a. Year-on-year growth rates. Forecasts in broken line.
From a historical perspective, Spanish government debt yields are also relatively low, especially in the case of short-term instruments, in keeping with the expansionary monetary policy stance. In turn, medium and long-term bond yields have been influenced by the changes in market perception and assessment of sovereign risk, especially after the crisis heightened in autumn 2008. During the opening months of 2010, the 10-year bond spread over the German bund fluctuated, widening notably in April and May as a consequence of the heightening of the Greek public finance crisis and the contagion effect on the debt markets of other countries which, like Spain, had high budget deficits.

Household net wealth continued to shrink in 2009 and in the opening months of 2010, due above all to falling house prices, although their rate of decline has moderated in recent quarters.
5. THE SPANISH ECONOMY

Stock prices recovered sharply in 2009, as the IBEX 35 posted gains of almost 30%, although in 2010 to date they have fallen back substantially (and especially in April and May).

The latest data show that household debt has stabilised somewhat, after posting marginally negative growth year-on-year at end-2009. In contrast, corporate debt has continued to shrink in recent months, especially lending by resident institutions (−4.2% year-on-year at March 2010). Notwithstanding, the debt ratios of households and firms have fallen only marginally and remain very high, due to the unfavourable trajectory of income. However, lower interest rates have meant that the debt burden has declined, reducing the pressure on indebted agents. Conversely, the latest data on general government debt reflect a notable increase (with year-on-year rates of growth approaching 30%), linked to the extensive financing needs resulting from the high budget deficit.

2 Economic policies

2.1 Fiscal policy

Fiscal policy was expansionary in 2009, against a backdrop of recession. The State and regional government budgets for 2009 and the outturn during the year included numerous measures, estimated at almost 2 pp of GDP, designed to cushion the effects of the crisis on demand (see Table 5.1). Notable among these, on the expenditure side, were the introduction of the State Fund for Local Investment and the Special State Fund to Invigorate the Economy and Employment, amounting to €11 billion, and on the receipts...
side, the approval of a monthly VAT refund schedule, aiming to enhance firms’ liquidity. Moreover, the heightening of the economic slowdown triggered the automatic stabilisers and unemployment benefits rose to almost 3% of GDP, double the figure recorded two years earlier.

Moreover, in 2009 tax revenue fell sharply, particularly as a result of the disappearance of the extraordinary revenue associated with the real estate boom ...

... while public spending maintained its strong momentum

Tax revenue fell sharply in 2009, by almost 6 pp of GDP against the 2007 figure. This cannot be attributed solely to business cycle-related factors, as it is largely connected with the drop in the extraordinary revenue associated, above all, with the real estate boom of the decade prior to the economic crisis (see Table 5.2). In effect, although revenue from almost all taxes declined, the decrease was especially notable in indirect taxes and corporate income tax.

In turn, public spending continued to grow above the economy’s trend GDP, even discounting the effect of the discretionary measures adopted and the impact of the automatic stabilisers. Government consumption rose particularly sharply; this includes the general government sector wage bill, which was almost 3 pp of GDP higher than in 2007, and pensions, which were 1 pp of GDP higher over the same period. The interest burden rose significantly, owing to the increase in public debt.
As a result, the end-year general government deficit was 11.2% of GDP, signifying an unprecedented deterioration in the budget position of more than 7 pp of GDP on a year earlier and of more than 13 pp in comparison with the 2007 budget surplus. In turn, public debt exceeded 50% of GDP. A substantial part of this debt is structural and will not correct automatically as the economy recovers or as the stimulus measures adopted during the crisis are withdrawn. A more intense fiscal effort will thus be needed to reduce both the deficit and public debt. And this could become even more demanding if, as discussed in Chapter 2 of this Report, the crisis were to prove to have a significant impact on potential growth and the course of interest rates were reversed.

Thus, for the second consecutive year, in 2009 the general government deficit exceeded the limits established in the budgetary stability legislation. In April 2009, under the framework of the Stability and Growth Pact, the European Council declared that Spain was running an excessive deficit and recommended that this situation be corrected by 2012 at the latest. Subsequently, in November 2009, in light of the exceptionally adverse macroeconomic situation, the Council extended the deadline to end-2013. It also asked to see an annual average fiscal adjustment of the general government sector in excess of 1.5% of GDP as from 2010.

In this setting, in January 2010 the government presented a new Stability Programme Update (SPU), incorporating significant budgetary consolidation up to 2013, by which time the general government deficit should stand at 3% of GDP. This would entail deficit cuts of 1.6 pp of GDP in 2010, and of 2.3 pp of GDP per annum between 2011 and 2013. These cuts would be essentially structural, based not only on the tax increases already introduced but also, and above all, on the public spending cuts outlined in the Programme. In particular, in addition to the partial elimination of the €400 earned income tax rebate and the increase in tax rates on savings and VAT rates, the State budget for 2010 and the regional governments’ budgets factored in lower expenditure. The SPU also provided for a further public spending cut of 0.5% of GDP for 2010 (the Immediate Action Plan); this has been approved and includes a reduction, without exceptions, in public-sector vacancies in 2010 to 10% of the replacement rate, together with the decision to make no new temporary hires. The SPU also includes an austerity plan for the period 2011-2013, and framework agreements on the sustainability of public finances with regional and local governments that should signify further public spending cuts of 3.8 pp of GDP up to 2013. The breakdown of the spending cuts envisaged between 2009 and 2013 is as follows: employee compensation (–1.9% of GDP); inputs, transfers and other expenses (–1% of GDP); public investment (–0.9% of GDP); and subsidies (–0.5% of GDP).

Subsequently, in light of the worsening of the Greek public finance crisis and the contagion effect on other countries’ debt markets, the Spanish government, in coordination with the other euro area countries, responded by quickening the pace of the fiscal consolidation programme, to avoid a downturn that would have had serious consequences for the economy and for the stability of the euro area. The package of measures approved in May 2010 entails bringing forward a substantial part of the deficit reduction effort, acting directly on the structural component, which could be cut by more than half, bringing the budget deficit to 6% of GDP in 2011. The specific measures adopted included: cutting general government employees’ wages by 5% in 2010, followed by a wage freeze in 2011; cutting State public investment by €6 billion between 2010 and 2011; freezing pensions in 2011; and removing as from 2011 the existing benefits for birth and adoption of children.
The targets are ambitious and the measures taken and planned are unprecedented, requiring rigorous execution and control and the collaboration of the regional and local governments.

Not only are these ambitious targets, but in many cases the spending cuts envisaged are unprecedented, since in most cases in the past expenditure was simply frozen. Rigorous execution and control will be needed to permit timely identification of possible deviations, with the necessary corrective measures. The collaboration of the regional and local governments will also be needed. In this respect, the new funding system of the ordinary-regime regional governments approved in 2009 improves the allocation of resources to them, as it strengthens the autonomy of the system and the shared responsibility for raising taxes, lifting the tax assignment percentages. For successful fiscal consolidation to be achieved, this should be complemented by an improvement in the regional governments’ fiscal coordination and discipline mechanisms.

High inertia in public spending in the past means measures are needed to redirect underlying trends.

Moreover, given the traditionally high inertia in public spending, if its growth is to be curbed permanently, measures will be needed to interrupt its underlying trends, especially in areas such as pension or health expenditure which will bear the brunt of population ageing. The reform of the pensions system is also especially timely at this juncture, as some changes in the system could enhance the long-term sustainability of public finances, with little impact on growth in the short term. In this respect, the government proposes raising the retirement age and improving the degree of contributiveness of the system. Both these measures are in the right direction and, if applied sufficiently ambitiously, may lead to a significant improvement in public finances in the long term.

2.2 OTHER ECONOMIC POLICIES

All other economic policy actions were geared to mitigating the immediate effects of the crisis.

The main aim of the other economic policies launched in the year was to mitigate the effects of the economic crisis, via measures to sustain income, to support employment and to ease access to credit or demand for certain sectors, largely furthering the steps taken in 2008. Particularly noteworthy were the extension of unemployment benefits for a further six months, the introduction of car purchase incentive schemes and the launch by the ICO (Official Credit Institute) of further extraordinary credit lines for groups that have been especially hard hit by the crisis (see Table 5.1).

However, the severity of the crisis revealed the limitations of these measures in the short term and the need to introduce structural reforms, to prevent the adverse conjunctural situation reducing the future potential growth rate. It is also necessary to ensure that the short-term measures do not become permanent ones, as this could distort the efficient allocation of resources and dissuade job-seekers. The most concrete progress made on structural reforms was connected, above all, with the transposition of the Services Directive, a number of measures relating to the rental market and the draft Sustainable Economy Law.

Regarding the transposition of the Services Directive, two pieces of legislation were passed in 2009, the “Umbrella Law” and the “Omnibus Law”, aimed at reducing the administrative burden on firms and liberalising the sector. Achievement of both these objectives is vital, given the importance of the services sector in the Spanish economy, the characteristics of the productive structure (dominated by small firms that are especially affected by administrative burdens) and the persistence of barriers to entry that particularly restrict competition in some sectors, such as retailing.

Insofar as reductions in the administrative burden are concerned, under the Omnibus Law, among other changes, some authorisation regimes are removed while others are replaced with ex-post controls. The draft Sustainable Economy Law develops this aspect further, proposing measures to simplify and make it easier to establish commercial companies and reducing fees and charges. If effectively applied, these measures could bring about a significant reduction in both the time and money needed for business start-ups.
The success of the reform will depend on the extent to which it is effectively applied in certain key sectors, such as professional services and the retail trade. In this respect, the Omnibus Law amends the legislation on professional institutions and associations, removing, inter alia, restrictions on advertising these services and fee schedule guidelines. However, removal of the requirements to belong to the relevant professional institution or association and to obtain approvals from them has been left for a later date. In 2010 a new “Trading Law” was approved, limiting the circumstances in which regional governments can refuse authorisation for the opening of certain retail formats, though some restrictions remain, connected with “reasons of general interest” that are not sufficiently detailed. Accordingly, the new Law may not be rigorous enough to make any substantial change in the existing authorisation regimes applicable to the retail sector approved by the regional governments, which have effectively restricted competition.

The limited development of the rental market in Spain causes various inefficiencies, as it restricts the geographical mobility of workers and limits housing affordability. Recently, several steps have been taken in an attempt to remedy this. From a fiscal standpoint, the draft Sustainable Economy Law aims to further rebalance the tax treatment of rental and owner-occupied housing, removing the tax credit on purchase of principal residence for high-income taxpayers. In turn, under the 2009-2012 Housing Plan, at least 40% of all new subsidised housing projects must be rental housing. Moreover, the Law on Measures to Promote and Facilitate Renting approved in 2009, amends various provisions of the Civil Procedure Law and of the Urban Rentals Law. These changes could act as a catalyst for rental markets, but the more restrictive aspects of the existing legislation, such as minimum duration of contracts and compulsory rent indexation to consumer price inflation, remain unchanged.

On a longer time scale, the government approved the Sustainable Economy Strategy, which establishes a series of targets for 2020. This broadly signifies extending the targets set in the previous National Reform Plans, designed to foster long-term growth. The Strategy is based on three instruments: a structural reform programme, the draft Sustainable Economy Law and the Sustainable Economy Fund, designed to finance environment, knowledge and innovation, and social projects. The draft law has a broad scope, notably including, in addition to those mentioned above, measures to improve the regulatory environment. It specifically envisages the need for prior analysis of the regulatory impact of all initiatives and proposes several changes to regulatory bodies that could make them more independent, such as placing a six-year non-renewable limit on terms of office.

As regards labour market reform and as at the date of this Report going to press, the outline of the government’s proposed reform is known – including limits on temporary hires and incentives for permanent hires – but not the details of the specific measures that may be applied. Insofar as wages are concerned, an agreement was signed in February 2010 establishing collectively bargained wage settlements of up to 1% in 2010, followed by 1%-2% in 2011 and 1.5%-2.5% in 2012. This will entail some easing in labour costs, especially in 2010. A multi-year wage indexation clause was also agreed, which could mitigate some of the adverse effects of these indexation mechanisms. Discussion of the more structural aspects of collective bargaining reform was postponed.

Lastly, significant regulatory changes were made in the financial system, substantially broadening the range of elements and instruments available for adapting and restructuring institutions. These changes are examined in detail in Box 6.1 of this Report.

3 Demand
3.1 NATIONAL DEMAND

National demand fell by 6% in 2009, as the adjustment that had begun at the end of 2007 heightened. The contraction was extensive to all components of private expenditure (see Chart 5.3),...
which was hit hard by the consequences of the financial crisis on agents’ confidence and on financing conditions. There was a big drop in business investment but, in proportion to the decline in GDP, not out of keeping with past performance. Less in step with past performance was the sharp fall in household expenditure, which was most adversely affected by the worsening expectations stemming from the severe labour market deterioration, and by other factors such as high debt levels. With fiscal policy acting as a buffer, general government demand posted positive growth.

Household consumption fell by 4.9% in 2009, with a decline in all its components. Purchases of consumer durables, which had contracted by almost 20% in 2008 (see Table 5.3), posted a somewhat more moderate rate of decrease in 2009 thanks to the low-emission vehicle purchase incentive schemes that gave a strong boost to new car registrations as from May. By contrast, the rate of decline of household spending on services, which represents 50% of private consumption, steepened as the year progressed.

Moreover, this severe adjustment in household spending contrasted with the positive growth – albeit lower than a year earlier – seen in disposable income (see Chart 5.4). In fact, in spite of the moderation in compensation per employee, of job destruction and of the decline in the surplus of sole proprietors, disposable income rose by 1.1% in real terms in 2009. The notable expansionary effect of fiscal policy helped sustain household income, which also benefited from lower net interest payments and lower inflation.

As a consequence of the foregoing, the household saving ratio rose significantly: in the wake of a 2 pp increase in 2008, it rose again, by 6 pp, to 18.8% in 2009. This growth path contrasts with the more moderate performance seen in other European countries and may be due to several factors, although the relative significance of each is difficult to determine. In particular, lower income growth prospects, as a result of falling employment, and the decline in real household wealth would seemingly have prompted households to save more, so as to moderate the future reduction in spending. Moreover, the growing uncertainty that accompanied the heightening of the financial crisis and the rapid deterioration of the labour market would seem

National demand underwent a severe adjustment in 2009, falling by slightly more than 6%.

Private consumption fell back sharply, mitigated only by the car purchase incentive schemes.

Household consumption fell by 4.9% in 2009, with a decline in all its components. Purchases of consumer durables, which had contracted by almost 20% in 2008 (see Table 5.3), posted a somewhat more moderate rate of decrease in 2009 thanks to the low-emission vehicle purchase incentive schemes that gave a strong boost to new car registrations as from May. By contrast, the rate of decline of household spending on services, which represents 50% of private consumption, steepened as the year progressed.

Moreover, this severe adjustment in household spending contrasted with the positive growth – albeit lower than a year earlier – seen in disposable income (see Chart 5.4). In fact, in spite of the moderation in compensation per employee, of job destruction and of the decline in the surplus of sole proprietors, disposable income rose by 1.1% in real terms in 2009. The notable expansionary effect of fiscal policy helped sustain household income, which also benefited from lower net interest payments and lower inflation.

As a consequence of the foregoing, the household saving ratio rose significantly: in the wake of a 2 pp increase in 2008, it rose again, by 6 pp, to 18.8% in 2009. This growth path contrasts with the more moderate performance seen in other European countries and may be due to several factors, although the relative significance of each is difficult to determine. In particular, lower income growth prospects, as a result of falling employment, and the decline in real household wealth would seemingly have prompted households to save more, so as to moderate the future reduction in spending. Moreover, the growing uncertainty that accompanied the heightening of the financial crisis and the rapid deterioration of the labour market would seem
to have dampened consumption and raised precautionary saving. In turn, tighter bank lending conditions would have had a dual impact, limiting credit purchases and fueling the propensity to save with a view to building up liquidity cushions. Lastly, the deterioration of public finances may also have encouraged consumers to save more, insofar as it may have raised doubts over the sustainability of public finances in the medium term.

Despite the difficulties involved in assessing the relative weight of each of the above-mentioned factors, it seems reasonable to assume that, in a less uncertain climate, the adjustment in consumption would have been less severe and the increase in the saving ratio more modest, as signalled by simulations with models that combine long-term trends in consumption, income and wealth.

Although still short of pre-crisis levels (see Chart 5.4), household confidence indicators began to recover in 2009. Accordingly, the negative impact that uncertainty has had on consumption could foreseeably start to be reversed in 2010. However, income is expected to continue to moderate in the year, as it did in the second half of 2009, in light of the diminished fiscal policy contribution due to both the withdrawal of the stimulus measures applied in previous years and the public-sector wage cut. That means that the household debt ratio will continue on its slow downward path.

The household saving ratio is expected to decline, and consumption to gradually recover, in 2010.
Weak household demand was evident not only in the sharp decline in their consumption spending, but also in their notable reluctance to acquire property. Weighed down by the severe labour market deterioration and the downward revision of expectations for property price appreciation, the cumulative decline in the number of transactions between the last cyclical peak and 2009 is over 50%, and slightly lower (around 40%) in the case of new housing (see Chart 5.5). This, together with the rising volume of finished housing, prompted a decline in housing starts and exacerbated the contraction in residential investment, which fell by some 25% in 2009. That said, housing demand appears to have stabilised in recent months. Box 5.1 presents a detailed analysis of the macroeconomic implications of the housing market adjustment. So far, the adjustment in property prices is proving somewhat slower than in previous downturns.

The weight of subsidised housing is growing considerably. Against a backdrop of weak housing demand, the decline in the volume of works in progress prompted a sharp fall in residential investment.
Between the mid-1990s and 2007 Spain’s real estate market was extremely buoyant. As a result the construction sector gained considerable and increasing weight in the economy as a whole, the debt of households and of construction-related companies climbed swiftly and house prices became overvalued. This upturn has been followed by a strong and ongoing adjustment. The fall in demand, initially driven by higher financing costs and, later, by the recession, following the onset of the international financial crisis, triggered a rapid supply response in the form of a marked drop in housing starts, which has continued until recently. The number of housing starts in 2009 was only 20% of its 2006 level, when it was at its highest (see Panel 1). Nevertheless, given that house building has a long production period, the completion of previously started projects has meant that, between 2007 and 2009, the number of housing completions far outnumbered housing starts and, in any case, vastly exceeded demand.

This decoupling between residential supply and demand has built up a stock of unsold housing units, the quantification of which is complex and not without controversy, given the differences between the various statistical sources. Notwithstanding the uncertainty surrounding these figures, the size of the stock is high, and it can be assumed that it will condition new housing starts over the coming years. That said, since housing is a good that is traded in local markets, the coexistence of a large volume of unsold housing nationwide with local markets that are balanced – or that even have a degree of unsatisfied demand – is, in principle, possible. This would set a lower limit to the number of housing starts in the short and medium term.

These real estate sector dynamics are reflected strongly in the residential investment variable in National Accounts, which includes changes in new works and the refurbishment of existing housing. The contribution of new works has been highly negative since 2008, and remains so.

**1. Own estimates, based on statistics from administrative acts (building completion certificates and notarial records on property transfers), seem to suggest that, at end-2009, the stock of unsold housing units could have been in the range of 2.8%-4.4% of the total housing stock at that time. It is estimated that this percentage would be approximately 2.5 pp higher than at end-2005.**

**SOURCES:** Ministerio de Vivienda, INE and Banco de España.

*a.* Cumulative four-quarter data.

*b.* Forecasts for housing starts and completions are based on a scenario of building permits for the period 2010-2011 close to 2009 levels and a production period of 18 months.
as it depends on the difference between the number of housing starts and completions at any given time, which has declined continuously since 2007 and is not projected to stabilise until 2011. However, the refurbishment component — albeit relatively smaller in size — is performing countercyclically, which is partially buffering the fall in residential investment. As a result of the combined changes of the two components, residential investment posted year-on-year declines of 10% and 25% in 2008 and 2009, respectively, and is forecast to continue to contract, although at an increasingly lower pace until mid-2011. At the end of that year, once the adjustment has ended, it is estimated that the ratio of residential investment to GDP in real terms could stand at approximately 4%, which would be around 3.5 pp below its high in 2007 and less than its low in 1994, giving an idea of the scale of the restructuring of the sector (see Panel 2).

This adjustment is coupled with a correction of house prices, which had increased very notably during the upturn. On Ministry of Housing statistics, until 2009 prices seemingly dropped by 10% on average from the highs posted in 2007; this decline to date is on a slightly smaller scale than that observed in the cycle at the beginning of the 1990s. This process may not yet be over, although in recent quarters the rate of decline in prices has slowed, probably as a result of the improvement in affordability indicators prompted, in particular, by the substantial reduction in mortgage interest rates. Other factors which may be contributing to containing the decline in prices in the short term are the fiscal changes already approved (such as the rise in VAT rates in July 2010) and other measures envisaged (such as the abolition of house-purchase tax credits above a determined income threshold in January 2011).

This housing market adjustment, both in terms of amounts and prices, is having very severe macroeconomic implications in the context of the current recession. A starting point for measuring such effects is to record the figures reflecting the direct impact on Spanish economic activity of residential investment during the adjustment phase, calculated through this component’s contributions to GDP growth. Based on this approach, investment in housing could directly shave approximately 1 pp off average annual GDP growth in the period 2008-2011, the maximum negative contribution per year would be 2 pp in 2009 (see Panel 3). In cumulative terms, the contraction of housing investment would seemingly subtract around 4 pp from GDP in 2001 in comparison with its level at end-2007.

In any event, this calculation provides a lower limit to the size of the effects, since the assessment of the macroeconomic consequences of the housing sector restructuring process must take into account further channels of transmission, which affect the rest of domestic demand and net exports. The Quarterly Macroeconometric Model of the Banco de España (MTBE) was used to approximate the size of the total effects. In this model, the decrease in residential investment leads to a reduction of activity and, consequently, of productive investment. The resulting decline in employment gives rise to second round effects, since it impacts household disposable income and, therefore, their expenditure. Furthermore, lower demand for housing triggers a decrease in house prices, reducing in turn household wealth and having a further negative impact on household spending. According to the MTBE, it is estimated that the total impact of the residential adjustment would be −1.3 pp of GDP, in average annual terms, and −5.4 pp, in cumulative terms, at end-2011 (see Panel 4). It should be noted that this estimate does not include the foreseeable positive effects on GDP growth which will take place when the sectoral reallocation of surplus productive resources in housing construction happens (these effects are not envisaged here because most of them will probably occur outside the timescale considered).

The estimate presented in this box of the macroeconomic impact of the housing market adjustment in 2010 and 2011 is obviously subject to various sources of uncertainty, including the pace at which the surplus supply that has built up is absorbed which, in turn, depends on actual demand for new housing. In respect of the latter, the INE’s most recent demographic projections indicating a significant moderation in population growth suggest that medium-term housing needs will be lower. Nevertheless, the high prices in the final years of the boom and, recently, the less favourable climate for gaining access to finance have probably prevented certain potential buyers from entering this market and, consequently, the existence of pent-up demand cannot be ruled out which could materialise as a result of the ongoing price adjustment and the gradual normalisation of credit conditions in the future.

---

2. According to the Housing Satellite Account, the weight of refurbishment activities in total housing investment is nearly 21%.
3. This impact includes the effect of lower demand for residential investment as a percentage of the value added of construction and of other branches involved in housing production.
4. The exercise performed compares the scenario defined by the values observed for residential investment and house prices until 2009 Q4 and the projections for these two variables until 2011, which are included in the latest Banco de España Projections Report, with another scenario in which residential investment would have remained constant until 2011 at the level observed in 2007 Q3 and house prices would have moved on a path compatible with this alternative level of investment. Lastly, the exercise performed takes into account that lower residential demand does not result in such a strong decline in imports as when there is a fall in domestic demand excluding housing.
starts also fell in the subsidised housing segment, but much more moderately, resulting in a notable increase in their share of all housing starts (up to 50%).

As a result of the shift in saving rates and lower investment in housing, households’ net lending, which had turned slightly positive again in 2008, after several years of net borrowing, rose very significantly in 2009, to 7.1% of GDP.

Business investment fell by an unprecedented 18% in 2009, as the demand situation was adverse (bringing capacity utilisation to an all-time low), the economic outlook (both for Spain and internationally) deteriorated and external financing conditions for firms tightened. Although the costs of bank borrowing declined, credit conditions applied by banks tightened over the year and the user cost of capital rose in real terms, as inflation fell at a faster pace, against a backdrop of weak demand. Financing via the markets was affected by the higher cost of government debt. Moreover, firms’ financial situation worsened, especially as a result of the decline in profit rates, while debt ratios remained high as profits also fell. All these factors act to curb the implementation of investment projects.
The decline affected all private productive investment components, but especially capital goods investment which fell by 28%. Under this heading, there was a particularly severe contraction in investment in machinery, while investment in transport fell less sharply, boosted as from the summer by the launch of the Plan 2000E. In turn, investment in non-residential construction contracted more moderately, sustained by infrastructure investment projects at State-owned companies (see Table 5.3). The decline was widespread across all productive sectors, but was most acute in the industrial branches, in keeping with the sharp contraction in the machinery component. Overall, the adjustment in capital goods investment is proving similar to that seen in the last recession, but somewhat more severe than that recorded in the euro area (see Chart 5.5).

Corporate saving rose moderately in 2009, driven by the sharp drop in interest payments and, to a lesser extent, by the reduction in corporate income tax, which together offset the decline in gross operating profit (see Chart 5.5). This growth in corporate saving, along with the severe contraction in gross capital formation, allowed firms’ net borrowing to be further reduced, to 2.2% of GDP, 9 pp below the high recorded two years earlier.

The decline was particularly significant in capital goods investment, reflected in a contraction in investment in all productive sectors.

Corporate saving rose moderately in 2009, driven by the sharp drop in interest payments and, to a lesser extent, by the reduction in corporate income tax, which together offset the decline in gross operating profit (see Chart 5.5). This growth in corporate saving, along with the severe contraction in gross capital formation, allowed firms’ net borrowing to be further reduced, to 2.2% of GDP, 9 pp below the high recorded two years earlier.
Lastly, general government demand remained highly dynamic in 2009, backed by the growth in public consumption and the strength of public investment, the latter driven by the Local Investment Funds (see Table 5.3). With the consolidation programme introduced by the government in the Stability Programme Update and the new package of measures adopted in May these effects will be reversed in coming quarters.

The positive contribution of net external demand to GDP growth rose significantly in 2009 to 2.8 percentage points (pp), attenuating the adverse impact of domestic expenditure on the economy. The reason for this increase was the sharp decline in imports of goods and services in real terms (−17.9%), on the back of weak final demand, as exports also fell significantly in the year as a whole (−11.5%), against a backdrop of severe contraction of international markets (see Chart 5.6). The pace of decline of both exports and imports slowed as the year progressed, so that the external sector’s contribution to output growth began to moderate in 2009 Q3; however, it is expected to remain positive in 2010.

Despite contracting sharply in the opening months of 2009, goods exports began to record positive quarter-on-quarter growth rates in real terms as from 2009 Q2. This rapid recovery reflected the positive impact not only of the global economic recovery, but also of factors connected with the extraordinary measures taken in a number of countries to encourage demand; notably the car purchase incentive schemes in the EU, which is the market for 80% of Spanish car exports, and the infrastructure development programmes in China, which boosted metals exports. The gradual disappearance of these measures in 2010 will have an adverse impact on Spanish goods exports, but this should be more than offset by the greater dynamism of export markets and by price-competitiveness gains, as the developments seen in 2009 continue (see Chart 5.6).

Spain’s world export share grew, in real terms, in 2009 as a whole, as the gains in share in the euro area more than offset the loss in share in the rest of the world (see Chart 5.7).

Services exports also declined considerably in 2009 (−9.6%), especially in the case of non-tourism services (−12.5%), harshly affected by the slump in goods exports. Tourism receipts fell by 7.1% in the year as a whole, slightly more than the decline forecast by the World Tourism Organization for receipts worldwide. This reflects the weak consumption of tourists from Spain’s main markets, the appreciation of the euro against certain currencies (especially ster-
ling) and rising competition in the sector in light of the growth of new tourist destinations (mainly in the eastern Mediterranean).

Goods imports, like exports, fell significantly in 2009 as a whole, recording a decline of 18.9% in annual terms that is unprecedented in the past thirty years. However, the rate of decline moderated considerably as the year progressed. Imports were initially affected by the fall in domestic expenditure and exports, but in the final stretch of the year both exports and industrial activity in export-oriented sectors recovered, boosting imports, especially of non-energy intermediate goods. As was to be expected, in 2009 import penetration continued to decrease as a proportion of final demand.

In keeping with other transactions with the rest of the world, services imports fell significantly in real terms in 2009 (−14.2%), with little difference in the rates of decline of tourism and of other services. As regards tourism expenditure, the combined impact of the slowdown in Spanish households’ income, the decline in wealth, the rebound in the unemployment rate and uncertainties about job prospects prompted a shift away from foreign travel and in favour of domestic tourism. This would explain the decrease in tourism expenditure in 2009 and would point to a slow recovery.

4 Activity

The contraction in activity affected all sectors of the market economy, prompting a decline in gross value added (GVA) of almost 5% in 2009, 1.3 pp above the decline in GDP. In turn, non-market services’ GVA rose by 2.5%, although the rate of growth eased notably as the year progressed.

The industry and energy sector saw the sharpest contraction in GVA, with a decline of almost 14% in 2009 as a whole (see Chart 5.8). The industrial production index (IPI) shows that the productive branches most affected were intermediate goods and, especially, capital goods. Consumer goods production was less adversely affected, thanks to the food component which proved more resilient to the crisis owing to the lower income elasticity of demand for these goods. The pharmaceutical industry was the only industrial branch to grow, albeit modestly, in 2009.

The rate of decline of the construction sector’s GVA quickened in 2009, to slightly more than 6%, in a setting in which, as discussed in the previous section, civil engineering work (on the back of the State Fund for Local Investment) and residential refurbishment work partly mitigated the decrease in new residential building work. In 2010, the State Fund for Local Environmental Sustainability will temporarily help maintain some degree of dynamism in the construction sector, although the weakness of new housing supply and the large-scale adjustment in public investment suggest that the sector’s GVA will continue to head down.

Activity in market services as a whole showed greater resilience than in other productive sectors, though it was unable to escape the effects of the crisis completely. Thus GVA fell by 2% in 2009 (after growing by 1.6% in 2008). As the services sector activity indicator shows, the contraction was widespread across all branches, but was especially severe in retail trade, transport and business services, with rates of decline of 12%-15%. In retail trade, the poor performance at the beginning of the year was offset as from the summer due to more moderate prices increases and aggressive sales campaigns.

5 The labour market

The labour market amplified the decline in activity: employment fell by 6.7% in 2009, although the pace of decline moderated as the year progressed and continued to do so in the opening months of 2010 (see Chart 5.9). The fall in employment was most acute in the private sector, where almost 2.5 million jobs were lost between the onset of the crisis and the start of 2010. Thus, in 2010 Q1 the employment rate stood at 59.1% and was moving away from the EU target of 65% for the year.
Apparent labour productivity rebounded sharply, to 3.3% in the year as a whole (against 0.4% between 1995 and 2009). This rebound, which is usual in the Spanish economy in a recession, is connected in this case with two factors. First, developments in the construction sector, where the adjustment in the residential segment led to a big increase in average productivity (22%), in comparison with a gain of 2.5% in the services sector and productivity losses (−2.7%) in industry. And second, the concentration of job losses on low-productivity jobs (temporary posts, with below-average years of service and skill levels), thus fomenting productivity gains. In this setting, the increase in the capital-labour ratio stemming from the severe employment adjustment would have been the determining factor of the rise in apparent labour productivity.

The employment adjustment, although broad-based, was particularly severe in the construction sector and among workers with temporary contracts and low skill levels.

Employment in the construction sector fell by almost 24% in 2009. The quarterly pattern showed some moderation in the sharp declines seen at the beginning of the year, mirroring the effects of the State Fund for Local Investment. Job losses were also very high in industry (−11.3%) and in market services (−4.4%). The destruction of jobs was concentrated among temporary employees, whose numbers decreased by 18.4% in 2009 and who accounted for 80% of jobs lost since the start of the crisis. Numbers of permanent employees fell by 0.9%,
with significant declines in construction and industry only. As a result of these changes, the ratio of temporary to total employment stood at 25.4% in 2009, more than 6 pp lower than in 2007 and the lowest level for 20 years. By group of worker, the job destruction particularly affected men, immigrants, younger workers and the low-skilled, partly as a consequence of their greater exposure to the construction sector and temporary employment.

The supply of labour reacted to the pronounced deterioration in the labour market: the participation rate declined in the second half of 2009, slowing the growth of the labour force to 0.8% on average in 2009 (from 3% in 2008). In Q4 the labour force declined at a year-on-year rate of –0.4%, which remained unchanged in 2010 Q1. This slowdown also stemmed from lower net immigrant entries, which reacted strongly to the less favourable labour market conditions. INE estimates show a decline in inflows, but also a sharp rise in outflows, and in 2010 Q1 the foreign population actually fell. As a result, the growth of the population was checked,
until it remained almost stagnant from late 2009. The impact of the cyclical situation on participation decisions was especially strong among men and the younger age groups, among which a lengthening of time spent in education and training seems to be discernible. Women’s participation remained highly buoyant, although it also began to react to the deterioration in the labour market, in particular in the younger and older age groups.

The number of persons unemployed rose by 60.2% in 2009, while the rate of unemployment stood at 20% at the beginning of 2010, following the sharp rises in the two previous years. This increase was mainly a result of the size of the outflows from employment, which were especially large among workers with temporary contracts, while outflows from unemployment, although declining since the start of the crisis, remained at a relatively high level. As a result, although the relative incidence of long-term unemployment rose, it remained relatively low when compared with other recessions (38.7% in 2010 Q1). That said, it already affects almost 1.8 million persons, and further increases can be expected in coming quarters.

As a matter of priority therefore, active labour market policies should focus on increasing the employability of the large group of unemployed persons generated during this crisis, avoiding the build-up of long periods of unemployment, which significantly reduce the probability of finding a job.

Despite the strong deterioration in employment, wages hardly slowed in 2009, beyond a moderation associated with the sharp fall in inflation. This behaviour was closely linked to the limited cyclical reaction of wage settlements under collective bargaining agreements, which stood at 2.4% in 2009, as against 3.6% in 2008. Not even in the newly signed agreements of 2009 were settlements in line with the deterioration in the labour market (the average settlement standing at 2.1%) (see Chart 5.9). In revised agreements – the majority, since most collective agreements are for more than one year – settlements were higher (2.5%). Collective bargaining is still at an early stage in 2010, but the data for settlements in the first four months point to greater wage moderation this year. Collective agreements signed by social agents for the period 2010-12 include wage settlements of 1.3%, and newly signed agreements settlements of close to 1%. The significant cut in the wages of public-sector employees (5% on average), applicable from June 2010, should be reflected in a greater degree of moderation in collective bargaining settlements in the private sector.

QNA estimates of compensation per employee reflect these collective bargaining developments, with an increase of 3.2% in the case of the market economy (3.7% in that of the whole economy), which implies positive wage drift\(^1\) in 2009 (of some 0.7 pp). This may be related to the composition effects arising from the disproportionate destruction of temporary jobs that, on average, pay lower wages. Real wages rose again strongly in 2009, at a rate of over 3%, following the declines in the years of strong employment growth.

The notable fall in private spending during the recession is contributing to a sharp moderation in inflationary pressures in the Spanish economy. This phenomenon is most clearly identified using the IPSEBENE (a price index that excludes the most volatile prices) instead of the overall index. From the start of Monetary Union until summer 2008, the IPSEBENE grew at high year-on-year rates, against a background of strong growth in private spending (see Chart 5.10). Thereafter, the sharp slowdown in private consumption has been accompanied, albeit with some delay, by an equally pronounced deceleration in this measure of inflation. The rate of change of the IPSEBENE had thus fallen to \(-0.1\)% in April 2010, down 3 pp from the average rate in 2008. These developments could be interpreted as reflecting an increase in the sensitivity of inflation to the cycle, compared with its average level of sensitivity in the past.

---

1. Defined as the difference between the increase in compensation per employee according to the QNA and increase in wage rates in collective bargaining agreements.
The greater cyclical containment of prices was the result of two developments. First, there was a substantial deceleration in unit labour costs (ULCs) due, not to the behaviour of compensation per employee (which, as already indicated, only adjusted very partially to cyclical developments), but to the large productivity gains obtained by companies through staffing adjustments. And second, business mark-ups, as a proportion of GVA, tended to stabilise in 2009, in the case of market services, while in industry they decreased significantly.

Services and non-energy industrial goods prices have moderated markedly

Within the IPSEBENE, services prices, historically characterised by a high degree of rigidity, have decelerated sharply, from around 4% in summer 2008 to 0.8% in April 2010. The contraction in spending caused the prices of some services that had been highly rigid – such as those provided by restaurants – to become much less expansive. This may indicate a change of behaviour which, if confirmed, would greatly facilitate the adjustment that must occur before the economy can embark on a new sustainable growth path. The adjustment of the consumer prices of non-energy industrial goods has also been notable (from 0.5% at the end of 2008 to −1.5% in April 2010), against a backdrop of gradual moderation in the industrial prices of this type of good and falling import prices. Noteworthy here has been the reduction in car prices, as a consequence of demand weakness.
In 2009 as a whole, the overall CPI was negative for the first time since 1952. The moderation in the IPSEBENE has been reflected in the overall consumer price index, although the latter has been affected by the volatile path of energy prices. These prices contributed to the steep slowdown in the overall CPI between summer 2008 and mid-2009 (to −1.4% in July), and its subsequent rebound, to 1.4% in March 2010. For the first time since 1952, the CPI for the year as a whole fell in 2009, to stand at −0.3% (down 4.4 pp from 2008). Finally, the easing of inflationary pressures has been reinforced by falling food prices, to which the developments in food commodity prices on international markets and in the prices of imported and domestically produced food products have contributed.

Demand deflators decelerated across the board in 2009, reflecting the contraction in activity, which led to negative rates for all components, with the exception of government consumption. In this context, the GDP deflator rose by 0.2%, as compared with 2.5% in 2008.

Consumer price inflation fell more steeply in Spain than in the euro area countries as a whole, as a consequence, first, of the proportionately larger adjustment in household spending and, second, of the stronger moderation in ULCs. Against this background, the inflation differential (based on the harmonised index of consumer prices) fell in 2009 as a whole to −0.5 pp, a negative value for the first time since the start of Monetary Union, and well below its average level during this period (0.9 pp). Although the differential fluctuated markedly, reflecting the fluctuations in the energy component, Spanish inflation (measured by the IPSEBENE) has been consistently lower than that of the euro area since the beginning of 2009 (see Chart 5.10).

The price-competitiveness and cost indices improved vis-à-vis the main developed countries in 2009 (see Chart 5.6). Also, in the case of the euro area, the favourable differentials mentioned above in terms of consumer prices and ULCs enabled the trend of falling price competitiveness recorded since 1999 to be turned around.

A scenario of inflation moderation can be expected for 2010 and 2011, with slack demand exerting downward pressure on profit margins. Also, private-sector wage demands will be contained by the multi-year agreement for collective bargaining, the high rate of unemployment and the cut in public-sector wages. By contrast, the rise in VAT rates will contribute to raising inflation temporarily, although the size of this effect is expected to be relatively modest, given that weak spending will limit the ability of firms to pass on the tax rise by raising their final prices.

The large external deficit of the Spanish economy during the latest cyclical upturn was significantly reduced in 2009. On National Accounts data, the nation’s net borrowing was equal to 4.7% of GDP, 4.4 pp less than in 2008. In the first half of 2010, net borrowing continued to decline, although at a slower rate than in the previous year. Box 5.2 analyses the extent to which this correction stems from cyclical or temporary factors.

The decline in net borrowing was concentrated in the private sector, since the public sector’s net borrowing increased significantly.
The Spanish economy’s high external deficit at the end of the expansionary phase is being corrected substantially in the current crisis. On National Accounts data, the Spanish economy’s net borrowing, after peaking at 9.6% of GDP in 2007, fell back to 4.7% of GDP in 2009 (see Panel 1). This correction is explained fundamentally by the decrease in the goods and services trade deficit, which amounted to 2.1% of GDP in 2009, a considerably lower figure than that posted only two years earlier (6.8% of GDP). It is important to assess which part of the adjustment is in response to cyclical or temporary factors, or to other more permanent factors whose effects, therefore, will not disappear when the economic situation improves.

Since the economic slowdown began at the end of 2007, the Spanish economy’s cyclical position, approximated by the output gap, has deteriorated to a greater degree than that of its main trading partners. Furthermore, the impact of the crisis on the external deficit is particularly significant in the case of Spain, given that imports are highly sensitive to growth of final demand. Consequently, it can be expected that part of the recent correction of the goods and services trade deficit will be reversed, ceteris paribus, when the Spanish economy resumes a positive growth path. In any event, less buoyant residential investment in the future will certainly mean a more permanent correction of the gap between investment and savings and, consequently, that the external deficit will be lower.

The demand equations for the imports and exports of the Spanish economy, which were recently re-estimated by the Banco de España,¹ can be used to estimate the cyclically adjusted goods and services trade balance. The latter is calculated in this box as the trade balance consistent with closed output gaps.² This adjusted balance only corrects, therefore, for cyclical differences and not for other factors such as fluctuations in oil prices and in price competi-

---

¹. See «Una reestimación de las funciones de exportación e importación de bienes y servicios de España», Boletín Económico, December 2008, Banco de España. ². The potential GDP of Spain’s trading partners is proxied by that estimated by the OECD for its member countries.
tiveness, and should be taken with due caution, given the difficulties of accurately estimating changes in potential GDP. According to Panel 2, during the last expansionary phase of the Spanish economy, the goods and services trade deficit—which is very close to the external primary balance, namely, the total balance excluding interest payments—was systematically higher than the cyclically-adjusted balance and this gap widened significantly in the years of highest growth (2004-2007). From 2008 there has been a sharp drop in the goods and services trade deficit and this decline will foreseeable continue in 2010 and 2011 on Banco de España projections, but according to this estimate such developments are only attributable to a small degree to the improvement in the cyclically adjusted balance.

The importance of the cycle in the reduction of the goods and services trade deficit is seen more clearly in Panel 3, which presents the contribution of various factors to the reduction in the external balance as a percentage of GDP. The substantial contribution of the cycle to the reduction of the deficit in 2008 and 2009 can be seen as well as the role of oil price fluctuations, as a result of which the external balance also improved in 2009. It seems that the other variables—which group together very varied factors such as changes in competitiveness and in expectations—would hardly explain the variations in the last two years, although they could play a part to some extent in the improvement forecast for 2010 and 2011.

Recent changes in the current account balance have mainly been influenced by the trade in goods and services. However, the improvement in the investment income balance and, to a lesser degree, in current transfers have also made a positive contribution to the improvement in the current account balance (see Panel 1). Net income payments decreased notably in 2009 (by 0.6 pp of GDP), due to the positive impact of lower interest rates since the net debit internal investment position (IIP) continued to increase (see Panel 4) and, consequently, further declines in the short and medium term are not expected. Nor does it seem probable that the current transfers deficit will be significantly reduced in future, since transfers to Spain from the European Union will foreseeably continue to decrease.

The performance of the external deficit is essential for the sustainability of the nation’s debt. The dynamics of this debt rely on changes in the relationship between savings and national investment in the future and the economy’s capacity to generate sufficient resources to make the payments arising from debt built up in the past. Accordingly, the primary external balance was in deficit in 2009, both in terms of the balance observed (−2.9% of GDP) and the cyclically-adjusted trade balance (around −5%), and, consequently, the Spanish economy’s net external debt vis-à-vis the rest of the world will tend to continue to grow. According to projections, the primary balance could be close to equilibrium in 2011, but due especially to cyclical reasons. Consequently, in order to halt the expected rise in external debt, it will be necessary to achieve a permanent primary surplus on the current account, which requires improvements to offset the negative impact on the deficit of the upturn in the economic cycle. In short, Spain’s high reliance on imported inputs, on the one hand, and the sensitivity of its exports to changes in competitors’ prices, on the other, suggest that a permanent correction of the Spanish external deficit requires substantial changes in its productive structure and a significant improvement in its competitiveness. In particular, it would be appropriate to reallocate resources to the tradable goods and services sector, which would be bolstered by adopting reforms to increase the flexibility of product and factor markets.

3. The external debt position is proxied by the net international investment position which also includes non-claimable liabilities, such as equity. If this type of instrument were excluded from both assets and liabilities, the net IIP would decrease to 87% of GDP.
normalise allowed the Spanish economy to cover its net borrowing again through greater recourse to portfolio investment in fixed income (in particular, public debt).
Financial developments in Spain

1 Introduction

Financial developments in Spain were influenced by accommodative economic policies and a recessionary environment. The severity of the recession progressively eased and a necessary fiscal consolidation process was initiated. In the first few months of 2010, the normalisation of markets was interrupted by the public finance problems in Greece, which eventually led to a serious fiscal crisis in the Greek economy. Those countries that had suffered the largest deteriorations in their public finances and that had the poorest growth prospects were worst affected by the strains.

Private-sector financing costs have reached low levels, although there have been no signs of any easing in other credit conditions until very recently.

Despite the sharp slowdown in lending to the private sector, which reached negative annual growth rates and was mainly a result of cyclical factors, ... there were no substantial reductions in household and corporate debt ratios owing to sluggish household and corporate income.

The growth rate of the indebtedness of the non-financial private sector has slowed continuously from its cyclical peak in 2006, falling from over 20% into negative territory. However, while corporate debt has continued to contract, household debt seems to have stabilised in recent months.

In the case of firms, their poor results were reflected in a decline in their profitability indicators and a rise in their debt ratios, despite the contraction in the volume of their debt. However, their debt burden was significantly reduced as a result of the decline in financing costs.

The decline in the debt burden has not prevented doubtful assets ratios from continuing to rise, which put pressure on credit institutions’ income statements.

Despite the decline in the private sector’s debt burden, some segments of the sector are currently experiencing a higher degree of financial pressure, reflected in rises in the doubtful assets ratio. Although the latter is rising less sharply in recent months, it still does not appear to have reached its cyclical peak.

This increase in the doubtful assets ratio is having negative effects on the results of Spanish financial intermediaries, reducing their capacity to respond to further deterioration in their as-
sets. The financial system as a whole remains sound, although the position of individual financial institutions varies, both in terms of their exposure to impaired assets and in terms of their capacity to make the necessary provisions. This, along with the fact that the sector is too large, as the crisis has shown, highlights the need for institutions – especially those that pursued more risky strategies during the boom – to restructure.

In addition to the measures taken in 2008, which provided exceptional mechanisms to alleviate the difficulties institutions were having obtaining wholesale financing, through the Fund for the Acquisition of Financial Assets and the granting of government guarantees, a strategy was implemented in 2009 to promote an orderly restructuring of those institutions potentially most affected by the crisis, by means of the creation of the Fund for the Orderly Restructuring of the financial sector.

Exceptional mechanisms have been set up to mitigate financial strains and promote an orderly restructuring of the financial sector.

SOURCES: ECB and Banco de España.

a. Calculated as a weighted average of the interest rates of various operations grouped according to their volume. For loans over €1 million, the interest rate is obtained by adding to the NDER (narrowly defined effective rate), which does not include commission and other expenses, a moving average of these expenses.

b. Cumulative changes in the diffusion index so a positive sign denotes tightening.

c. Year-on-year rates.

d. Calculated as doubtful credit/total credit.
The Banking Sector (FROB). The provisions of the FROB began to be activated in Spring 2010 with the approval of some processes for the restructuring and merger of savings banks (see Box 6.1).

In any case, market recovery and the use of government guarantees for securities issuance enabled institutions to raise a positive net amount of funds on the primary securities markets once again. This helped to boost activity in these markets, although the latter was primarily determined by the behaviour of general government.

The fall in tax revenues, automatic stabilisers and the fiscal stimulus packages designed to offset the contraction in private spending have led to a deterioration of public finances and a significant increase in public debt. This, along with the decline in GDP, has led to a rapid increase in the debt-to-GDP ratio and in the interest burden.

The rise in the general government deficit has partly offset the increase in household net lending and the reduction in corporate net borrowing. Even so, there has been a significant decline in the nation’s net borrowing.

The consequences of rapid growth in general government debt and in the general government debt burden are being exacerbated by the heightened sensitivity of markets to the state of public finances, as shown recently by the strains that arose as a consequence of the Greek fiscal crisis. In this situation, the adoption of an ambitious and credible budget consolidation strategy is essential to avoid the risks to the long-term sustainability of public finances.

The decline in financing costs has alleviated the private sector’s debt burden. However, the recessionary environment is contributing to an increase in the financial pressure on certain segments of this sector. Along with the high level of household and corporate debt and the need to restructure the financial system, this will tend to curb the recovery in financing. The latter will start sooner and on a firmer footing the faster and more orderly the rebuilding of household and corporate balance sheets and the restructuring of banks.

The Spanish securities markets have progressively stabilised since March 2009, reflecting the improvement in agents’ expectations, albeit with certain episodes of instability, the one associated with the Greek public finance crisis in the first few months of 2010 having been especially intense. In the primary markets there has been significant growth in activity, mainly as a result of the expansionary behaviour of general government.

The net issuance of bonds by resident sectors totalled €193 bn, up from €131 bn in 2008 (see Chart 6.1). Around two thirds of this amount corresponded to general government operations, reflecting the higher net borrowing of this sector. By type of instrument, medium and long-term debt continued to be the main means of raising funds. However, the significant growth in Treasury bill issuance led to a slight reduction in the average life of public debt, to 6.4 years (from 6.6 at the end of 2008).

Monetary financial institutions issued, directly or through resident and non-resident subsidiaries, around €27 bn. This was assisted by the improvement in the markets, by the granting of government guarantees for the bond issues of credit institutions – the amounts guaranteed totalling, in gross terms, €48 bn – and by the ECB’s covered bond purchase programme (see Chapter 4) – almost €30 bn of covered bonds were issued in net terms –. Issuance by non-monetary financial institutions fell significantly as a consequence of the decline in securitisation activity, against a background in which, although asset-backed securities had continued...
The financial turmoil which broke out during summer 2007 prompted a sudden fall in the value of a wide range of financial instruments and a drastic contraction in liquidity in many international markets, which caused some of them to actually freeze up. Globally, this first phase of the crisis was therefore financial and, in those countries caught up in it, the institutions most affected were those with greater exposure to so-called “toxic assets” or with larger short-term refinancing needs.

As the financial crisis progressed a negative feedback loop developed between the financial sector and the real economy, which led to a severe global recession. This second phase of the crisis, in which macroeconomic aspects have been combined with the purely financial ones, has had a greater effect on the banking sector’s traditional business in a number of economies, chiefly as a result of the deterioration in credit portfolios. This explains why its impact on income statements has been more gradual, since loan defaults take longer to materialise than losses in a portfolio of financial instruments.

Furthermore, the resultant rapid repricing of risk meant financial and non-financial agents’ debt levels were perceived as excessively high and triggered widespread deleveraging worldwide.

The impact of all these developments on banking systems has highlighted sizeable divergences between countries and, even in the same country, not all institutions have been affected to the

**MEASURES TO SUPPORT SPANISH CREDIT INSTITUTIONS IN THE CONTEXT OF THE INTERNATIONAL FINANCIAL CRISIS**

The financial turmoil which broke out during summer 2007 prompted a sudden fall in the value of a wide range of financial instruments and a drastic contraction in liquidity in many international markets, which caused some of them to actually freeze up. Globally, this first phase of the crisis was therefore financial and, in those countries caught up in it, the institutions most affected were those with greater exposure to so-called “toxic assets” or with larger short-term refinancing needs.

As the financial crisis progressed a negative feedback loop developed between the financial sector and the real economy, which led to a severe global recession. This second phase of the crisis, in which macroeconomic aspects have been combined with the purely financial ones, has had a greater effect on the banking sector’s traditional business in a number of economies, chiefly as a result of the deterioration in credit portfolios. This explains why its impact on income statements has been more gradual, since loan defaults take longer to materialise than losses in a portfolio of financial instruments.

Furthermore, the resultant rapid repricing of risk meant financial and non-financial agents’ debt levels were perceived as excessively high and triggered widespread deleveraging worldwide.

The impact of all these developments on banking systems has highlighted sizeable divergences between countries and, even in the same country, not all institutions have been affected to the

**1 ROE**

<table>
<thead>
<tr>
<th>SPAIN</th>
<th>EURO AREA</th>
<th>UNITED KINGDOM</th>
<th>UNITED STATES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**2 PUBLIC CAPITAL INJECTIONS**

<table>
<thead>
<tr>
<th>SPAIN</th>
<th>EURO AREA</th>
<th>UNITED KINGDOM</th>
<th>UNITED STATES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**3 COLLATERAL AND GUARANTEES**

<table>
<thead>
<tr>
<th>SPAIN</th>
<th>EURO AREA</th>
<th>UNITED KINGDOM</th>
<th>UNITED STATES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**4 DISTRIBUTION OF TOTAL ASSETS OF CREDIT INSTITUTIONS BY ROE INTERVAL (DECEMBER 2009)**

<table>
<thead>
<tr>
<th>ROE Interval</th>
<th>SPAIN</th>
<th>EURO AREA</th>
<th>UNITED KINGDOM</th>
<th>UNITED STATES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SOURCES:** FDIC Quarterly Income Profile Spreadsheets, ECB and Banco de España.

a. The 2009 figure is for the first six months.

b. United States: includes TARP capital injections and the recapitalisation of the mortgage securitisation agencies. United Kingdom: includes the recapitalisation of Royal Bank of Scotland and Lloyds-HBOS, and financing from the Deposit Guarantee Fund received by institutions subject to supervisory intervention. Spain: includes the announced subscription of preference shares by the Fund for the Orderly Restructuring of the Banking Sector as part of the savings bank merger and consolidation plans approved in March, and which is pending disbursement.

c. United States: includes the Temporary Liquidity Guarantee Program and the Asset Guarantee Program. United Kingdom: includes the Credit Guarantee Scheme and the Asset Protection Scheme. In the case of the euro area, the collateral and guarantees include both collateral for debt issued by financial institutions and guarantees for assets on the balance sheets of banks and their subsidiaries.
same extent. This heterogeneity can be explained by a number of factors, such as differences in business models or in the buffers available for absorbing shocks, and has led to governments adopting differing response strategies and financial support measures.

In the case of the Spanish economy, the markedly retail-oriented banking model meant the presence of toxic assets in banks’ portfolios had been kept to a minimum, while more stringent regulation had prevented the creation of off-balance sheet investment vehicles. Consequently, the impact of the first phase of the financial crisis in Spain was very limited (see Panel 1). Moreover, banks’ high provisioning and earnings levels made for strong lines of defence. The funding difficulties in the wholesale markets had a considerable impact, but they were overcome thanks to a financing structure with a large weight of long-term liabilities, to an increase in deposit-taking made possible by extensive branch networks and to the issuance of short-term securities, a segment that had been affected less severely by the turmoil.

By contrast, the first phase of the financial crisis severely affected the profitability of banks in other developed countries, among them the United States, the United Kingdom and some euro area countries (see Panel 1), in many cases resulting in substantial losses due to high exposure to the most affected assets.

A wide range of extraordinary measures were duly implemented. During the last few months of 2008, the governments of the United Kingdom, the United States and several euro area countries made injections of public capital into a number of banks and set up programmes to guarantee debt securities issued by banks. In some cases, they also started developing plans to purchase or protect impaired assets (see Panels 2 and 3). Meanwhile, in October 2008 the Spanish government adopted a series of measures as part of concerted action with the other euro area countries, although their use was more limited than in the other cases mentioned above, given the lesser impact of the first phase of the crisis on the Spanish banking system.1 Out of this came the creation of a fund for the acquisition of financial assets (FAFA) of high quality – a notable difference compared with funds in other countries –, which was deployed by means of tender operations involving potentially interested institutions; an agreement to provide government guarantees for debt issued by banks, although they were not used until January 2009; and authorisation for the government acquisition of securities to bolster institutions’ own resources, which was never used (however, the management of a small institution whose solvency had deteriorated considerably was taken over).

The second phase of the crisis, nonetheless, has affected the Spanish banking system to a greater extent. In particular, the rapid rise in unemployment and the large weight of the real estate sector in the Spanish economy contributed to a surge in doubtful assets, putting more pressure on institutions’ income statements. Although the buffers in place – as a result of the regulation on countercyclical provisioning requirements – have helped cushion the impact, the progressive worsening of the macroeconomic situation has substantially reduced their size. Moreover, the effects vary within the sector, as demonstrated by the sizeable differences between institutions’ doubtful assets ratios and in their capacity to generate earnings (see Panel 4). Under these circumstances it became necessary to adopt a strategy to prompt and support an orderly restructuring of the sector to pave the way for its downsizing, given the prospect of a lower degree of leverage in the private sector in the future, and to boost its robustness to ensure that institutions would be capable of providing the necessary funding as the economy recovered.

In this context, the creation of the Fund for the Orderly Restructuring of the Banking Sector (FROB) was approved in June 2009 as an instrument designed to help see through the necessary adjustment in the banking sector. Its design took into account the particularities of the Spanish financial system – such as the existence of savings banks, with their unique governance structure – and benefited from the considerable supervisory experience and advantages of the tried and tested institutional model in place, which was adapted to the new situation.

The operational framework of the FROB allows different courses of action to be followed depending on the specific situation of the institution in question. It supports two kinds of process: the restructuring of institutions with weaknesses that may affect their future viability, and the consolidation of institutions, with the aim of improving their efficiency in the medium term. The first type involves a staggered approach, whereby an institution submits a viability plan to the Banco de España, which may include different measures (a strengthening of the capital base and capital adequacy, consolidation with other institutions, or a total or partial transfer of business), for which it can request financial assistance. If this approach is unsuccessful, control is taken of the bank and the FROB is appointed as provisional administrator. A restructuring plan then has to be devised with the aim of arranging the institution’s merger or acquisition, or the total or partial transfer of its assets and liabilities.

In the case of consolidation, institutions are required to submit a plan showing efficiency improvements and a restructuring of their capacity. The FROB may temporarily acquire preference shares convertible to ordinary shares, non-voting equity units or share capital contributions. To date, the Banco de España has approved three consolidation plans submitted by savings banks which, together, have involved the FROB subscribing for preference shares convertible to non-voting equity units in the resulting institutions with a total value of €2,155 million,2 and has replaced the directors of one institution.


2. The Fund for the Orderly Restructuring of the Banking Sector has an initial provision of €9 billion and can raise ten times this amount in external funding subject to the authorisation of the Spanish Ministry of Economy and Finance.
MEASURES TO SUPPORT SPANISH CREDIT INSTITUTIONS IN THE CONTEXT OF THE INTERNATIONAL FINANCIAL CRISIS (cont’d)

This approach has considerable advantages. First, it allows the adoption of different solutions, depending on institutions’ needs and, more particularly, it permits different treatment of those institutions that are viable, which receive support tailored to their circumstances, and those that are not, which are placed under official administration. Second, the FROB is structured in such a way that it prioritises preventive action, whereby the initiative stems from the institutions themselves and they retain responsibility for risk management.

In short, the different channel through which the financial crisis affected the Spanish banking system (a deterioration of credit portfolios associated with the unique characteristics of the Spanish economic crisis rather than the fall in value of financial instruments) and different timing (later and more gradual) compared with other developed countries explains the distinct design of the government support to the financial system in Spain. The FROB can thus contribute to the necessary restructuring of the system, if it is used with greater purpose, to address in a speedily and orderly manner the challenges the system faces. In the first instance, institutions have to take the initiative, but recourse to the fund will prepare them to perform their intermediation function efficiently once the economy embarks on a path of recovery.

to be issued after the start of the crisis, these had been purchased by the originator institutions. The net issuance of bonds by non-financial corporations – basically through resident subsidiaries – exceeded €18 bn, which accounted for around one third of the outstanding amount of these instruments and was in marked contrast to the €6 bn issued on average in the period 2006-08.

Issuance of new equity securities totalled €10 bn, which implied a less sharp reduction than in 2008. This was the result of a decline in issues by financial institutions and growth in those of non-financial corporations. Since the second half of 2009, against a background of market recovery, there have been four public offerings, by companies newly listed on the Spanish Alternative Stock Market, although their total amount was small (€0.2 bn).

Activity in the secondary markets in 2009, as in 2008, varied significantly across segments (see Table 6.2). In the AIAF fixed-income market, the volume traded reached almost €3,700 bn, which implies year-on-year growth of 54%, covered bonds and asset-backed bonds being the instruments that grew most. As in 2008, sell/buy-back agreements with the Treasury or Banco de España (Eurosystem loans to Spanish credit institutions) as counterparts were prominent.

By contrast, trading on the public debt market decreased by 7%, mainly as a result of the 9% fall in repo and sell/buy-back transactions, which more than offset the 12% increase in spot transactions. Stock market trading of private fixed income and equities also recorded falls, of 6% and 28% respectively, which in the latter case reflects declines in both the number of transactions and in the average prices. Likewise, the volume of derivatives trading decreased by 34%, primarily as a consequence of the decline in contracts on the IBEX 35 index.

By March 2009 the IBEX 35 index had fallen by more than 57% from its peak in November 2007, in line with the EURO STOXX 50 index of euro area stock markets and the S&P 500 index of US markets (see Chart 6.2). Thereafter stock markets gradually recovered, while volatility declined. By the end of the year volatility had reached similar levels to those of the months preceding the intensification of the international financial crisis in autumn 2008. However, these trends were interrupted by the Greek fiscal crisis in the first few months of 2010, a period in which the Spanish index recorded larger falls than the euro area benchmark index.
Following the decreases in the second half of 2008, public debt yields have fluctuated within a narrower range, while remaining at historically low levels, especially in the case of short-term instruments. From 2009 Q2 the yield on Treasury bills stood below 1%, while from the end of 2008 that on 10-year bonds stood at around 4%. After peaking in February 2009, the spread between this yield and that of the German 10-year bund tended to decline. However this trend was interrupted in the first few months of 2010 by the strains arising from the Greek fiscal crisis, which have been reflected in an increase in this indicator and in high volatility. In this period the spread reached higher levels than those recorded in early 2009.

The credit default swap (CDS) spreads of financial firms and, especially, non-financial firms fell very steeply from the highs reached at the end of 2008, to stand at the levels prevailing prior to the intensification of the crisis in the autumn of that year. The financial market instability in the first few months of 2010 caused CDS spreads, like public debt yields, to rise, especially in the case of financial securities, which were partly affected by their exposure to sovereign risks.

Spanish credit institutions were hardly affected by the initial stages of the international financial crisis, owing to their retail banking model, the absence of toxic assets and off-balance sheet investment vehicles, and the Spanish system of countercyclical provisioning. In addition, they were initially able to avoid the difficulties in the wholesale financing markets owing to the structure of their liabilities, which are concentrated at the longer maturities, an increase in their deposits, which was assisted by their extensive branch networks, and greater issuance of commercial paper. However, subsequently the macroeconomic environment has been particularly weak in Spain owing to the sharp rise in unemployment and the adjustment in the real estate sector. These factors are increasing doubtful assets and putting pressure on credit institutions’ income statements, especially in the case of those intermediaries that assumed greater risks during the expansionary phase.
Against this background, the total volume of credit granted fell for the first time in many years, and total assets stagnated, with nil growth, according to the individual statements, and -0.4% growth at the consolidated level (see Table 6.3), as against increases of 8.6% and 9.5%, respectively, in 2008. Only foreign operations displayed a positive rate of change (8.6%), partly as a result of the acquisition of new foreign institutions by a large Spanish one.

On the liabilities side, the granting of government guarantees and the progressive recovery of investor demand on the primary securities markets, along with the lower need for fresh funds due to the stagnation of activity, helped to reduce the pressure. Institutions were able to issue new medium- and long-term securities, and significantly less new funding was raised on the interbank market and at the central bank compared with the previous year. Net lending by the Eurosystem has thus stabilised at around 2% of total assets since August.

The fierce competition to attract retail deposits continued, however, pushing the average interest rate on new customer operations up to levels generally above the interbank market rate for the same maturity, which has not prevented the overall cost of funds from falling for institutions. In any event, the funds raised from households and non-financial companies in Spain grew by only 3%, clearly slower than in the previous year.

After-tax profit decreased by around 25% (see Table 6.3), a performance similar to that recorded in the previous year. Consequently, the consolidated return on equity decreased further to 9%, although it still compares favourably with that of other banking systems. However, looking forward, there are downside risks to net interest income, related to the tailing off – and possible reversal – of the positive effect on this variable of the decline in the cost of funds. Write-downs and provisions rose sharply again, in line with the increase in doubtful assets, although the rate of growth of the latter has moderated somewhat since March 2009. The reduction in the provisions buffer and the persistence of a scenario of weak economic growth for the coming quarters will mean that this component will continue to put pressure on Spanish credit institutions’ income statements.
As a whole, Spanish credit institutions have a solid financial position. This should have been further strengthened by the increase in equity and the accumulation of a significant volume of liquid assets (fixed-income securities) available for use in the event of financing problems. However, their room for manoeuvre has declined from previous years, as a consequence of the fall in profits and the downside risks to which they are subject. In addition, there is significant variation across institutions in the amount of risk incurred, in the ability to generate profit and in the degree of solvency. This heterogeneity explains the design of the various measures adopted to support the banking system and, in particular, the creation of the FROB, an instrument that is intended to facilitate the necessary streamlining of the Spanish banking system, taking into account the diverse circumstances of the various institutions (see Box 6.1).

3.2 INSTITUTIONAL INVESTORS

The net funds raised by collective investment institutions (CIIs) remained negative in 2009, but substantially less so than in the previous period (see Chart 6.3). Against a background of declining short-term interest rates and an improving financial market outlook, the net withdrawal of funds from the sector was concentrated among those funds that constitute the most direct substitutes for deposits (money market and short-term securities funds). By contrast, insur-
ance and pension funds were, as in the recent past, more stable and raised a net positive amount of funds, which was similar to that recorded two years previously.

... with the most intense adjustment occurring among less traditional instruments

Less traditional instruments – such as hedge funds, real estate funds and venture capital funds – generally continued to adjust more strongly. However, from mid-2009, the former recovered somewhat. In the case of real estate funds, the existence of significant volumes of outstanding redemption requests continued to weigh heavily on their performance and asset valuations carried on adjusting. This could complicate the possibilities for the immediate development of

<table>
<thead>
<tr>
<th>TABLE 6.3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONSOLIDATED</strong></td>
</tr>
<tr>
<td><strong>Dec 2008</strong></td>
</tr>
<tr>
<td><strong>MAIN BALANCE SHEET ITEMS (% of TA)</strong></td>
</tr>
<tr>
<td>TOTAL ASSETS (€bn)</td>
</tr>
<tr>
<td>Credit</td>
</tr>
<tr>
<td>Of which: resident private sector in Spain</td>
</tr>
<tr>
<td>Debt securities</td>
</tr>
<tr>
<td>Other capital instruments and equity interests</td>
</tr>
<tr>
<td>Other assets</td>
</tr>
<tr>
<td><strong>LIABILITIES</strong></td>
</tr>
<tr>
<td>Banco de España and other central banks</td>
</tr>
<tr>
<td>Interbank deposits</td>
</tr>
<tr>
<td>Customer deposits</td>
</tr>
<tr>
<td>Of which: households and non-fin. corps. res. in Spain</td>
</tr>
<tr>
<td>Marketable securities</td>
</tr>
<tr>
<td>Other liabilities</td>
</tr>
<tr>
<td><strong>INCOME STATEMENT (% of ATA)</strong></td>
</tr>
<tr>
<td>(+) Interest income</td>
</tr>
<tr>
<td>(-) Interest expense</td>
</tr>
<tr>
<td>Net interest income</td>
</tr>
<tr>
<td>Return on equity instruments and investees</td>
</tr>
<tr>
<td>(+) Net commissions</td>
</tr>
<tr>
<td>(+) Profits on financial operations</td>
</tr>
<tr>
<td>(+) Other operating income (net)</td>
</tr>
<tr>
<td>Gross margin</td>
</tr>
<tr>
<td>(-) Operating expenses</td>
</tr>
<tr>
<td>(-) Write-downs of and provisions for financial assets</td>
</tr>
<tr>
<td>Operating profit</td>
</tr>
<tr>
<td>(+) Other income (net)</td>
</tr>
<tr>
<td>(-) Taxes</td>
</tr>
<tr>
<td>After-tax profit</td>
</tr>
<tr>
<td>Group net profit</td>
</tr>
<tr>
<td><strong>RATIOS (%)</strong></td>
</tr>
<tr>
<td>Net interbank position/TA (a)</td>
</tr>
<tr>
<td>Solvency</td>
</tr>
<tr>
<td>Doubtful assets/TA</td>
</tr>
<tr>
<td>Coverage of doubtful assets</td>
</tr>
<tr>
<td>Foreign operations/TA</td>
</tr>
<tr>
<td>Efficiency (OE/GI)</td>
</tr>
<tr>
<td>ROE</td>
</tr>
</tbody>
</table>

SOURCE: Banco de España.

a. Includes net assets with central banks.
Spanish real estate investment trusts, which are regulated by Law 11/2009 and intended to be a new way for investors to gain access to the returns on a diversified portfolio of rented property. Finally, the main problem for venture capital funds continued to be the difficulty of obtaining external finance, so that a significant part of their activity was sustained by public-sponsored funds, who are mainly active in the low-value transactions segment.

In any event, these non-traditional instruments continued to represent a minor part of a sector that was still characterised by a high degree of conservatism in its investment policy (see the lower panels of Chart 6.3). Although the relative weight of equities increased slightly – largely as a consequence of price revaluation – it remained low (19.2% in CIIs and 13.2% in insurance companies and pension funds in December 2009). Also, according to the CNMV, illiquid assets (primarily fixed-income securities issued by financial institutions) represented only 8.7% of...
the total assets of financial CIs at the end of last year. Notable too was the increase of €9 bn in the holdings of Spanish public debt by institutional investors as a whole.

The notable resilience of the profits of Spanish insurance companies, against a background of intense economic slowdown, appears to have been the result of this conservative structure of the investment portfolio. Also, the assets managed by other institutional investors recorded price revaluations again during 2009, following the falls observed in preceding periods (see Chart 6.3).

Household debt has slowed sharply during the last three years. The growth rate of household debt stood close to zero at the beginning of 2010, 20 pp down from the peak levels recorded in late 2006. This was the result of very modest growth in financing for house purchase and a slight contraction in that for consumption and other purposes (see Chart 6.1).

The moderation in household income has meant that the slowdown in debt has been translated into a limited decline in the sector’s debt ratio. The high level of this ratio limits the possibility that spending can be financed by means of further recourse to credit (see Box 6.2). This, along with the economy’s cyclical position, reduces the likelihood of a recovery in the sector’s financing in the short term.

Household debt has slowed sharply during the last three years. The growth rate of household debt stood close to zero at the beginning of 2010, 20 pp down from the peak levels recorded in late 2006. This was the result of very modest growth in financing for house purchase and a slight contraction in that for consumption and other purposes (see Chart 6.1).

The moderation in household income has meant that the slowdown in debt has been translated into a limited decline in the sector’s debt ratio. The high level of this ratio limits the possibility that spending can be financed by means of further recourse to credit (see Box 6.2). This, along with the economy’s cyclical position, reduces the likelihood of a recovery in the sector’s financing in the short term.

The decline in interest rates has relieved the financial pressure on indebted households and the uncertainty has led to very high levels of saving.

The rate of decline in household wealth is moderating, thanks to the smaller decrease in house prices and the price revaluation of financial assets ...

The downward path displayed by household net wealth from the second half of 2008, following the sharp growth in the latter stages of the upturn, has slowed since mid-2009 (see Chart 6.4). The deceleration of the decline in house prices (between June and March its year-on-year rate of fall decreased by almost 4 pp, to 4.7%) and the increase in the value of the financial portfolio, driven by the increase in stock prices and the recovery in net investment (acqui-
The financial position of households and firms is a major determinant of the Spanish economy's capacity to recover, given its influence on expenditure decisions. This box aims to assess this position from a historical perspective.

The rapid growth in household borrowing during the period 1995-2007, driven partly by the structural changes accompanying euro area membership, pushed the sector's debt ratio to very high levels (see Panel 1). The subsequent moderation in lending brought about a small correction in this indicator, although it currently remains high in historical terms. The ratio of debt to gross disposable income (GDI) in the sector stood in 2009 at around 125%, 80 pp higher than in the mid-1990s. This steep rise was the result of considerable increases both in the proportion of the population servicing debts and in the average value of their liabilities. Since 1996, the percentage of persons over 18 years old with bank loans and the average value of their debts in relation to the average gross wage have risen by around 20 pp and 100 pp, respectively. The high level of indebtedness suggests that the scope for basing a pick-up in household spending levels on increased borrowing is narrower than in the past. At the same time, households have earmarked a large portion of the debt incurred over recent years to financing investments, particularly in real estate. Consequently, despite the substantial increase in such debt, the net wealth of the sector also increased significantly between 1995 and 2007, contracting somewhat thereafter on account of the fall in

1. Based on surveys of households by the European Community Household Panel and the Spanish Survey of Household Finances for the period 1994-2005, the rise in the proportion of economic agents with debts has occurred across income brackets, but is particularly pronounced in middle-income households. That said, there is still a clear positive relationship between indebtedness and income level.

**SOURCES:** Ministerio de Vivienda, INE and Banco de España.

a. Includes bank credit and off-balance sheet securitised loans.
b. Estimated interest payments plus debt repayments.
c. Balance of use of disposable income account.
d. Gross saving less estimated debt repayments.
e. Calculated on the basis of the firms included in the BACH database. In the case of the euro area, includes firms in Germany, France, Italy and Portugal. Debt includes non-cost-bearing liabilities.
the price of property (the main asset). The result was that in 2009 the wealth/GDI ratio stood at around 360 pp above its 1995 level. Households are therefore wealthier and, in principle, this would allow their precautionary saving to be less than in the past.

As a result of the sizeable increase in household indebtedness, and notwithstanding the fact that it was accompanied by a reduction in borrowing costs and by longer repayment periods, the regular payments associated with debt repayment currently absorb a larger share of household income, to the detriment of the share available for other uses (see Panel 2). In this connection, once obligations associated with liabilities have been taken into account, in 2009 households’ ability to save stood at around mid-1990s levels, even though in recent quarters gross saving – i.e. prior to deducting debt repayments – was 4 pp above its previous high, recorded during the recession of the early 1990s.

The volume of borrowing by firms also rose considerably between the late 1990s and 2007. However, unlike the case of households, less favourable developments in income have prevented their debt ratio from falling during the economic crisis. Accordingly, in relation to income generated (gross operating profit – GOP – plus financial revenue), these liabilities stood at close to 600% in 2009, around 315 pp higher than in the late 1990s (see Panel 3). This aggregate position is, nevertheless, consistent with a wide sectoral dispersion. More specifically, immediately before the onset of the crisis, the real estate services sector had some of the highest levels of borrowing. While this debt is partly attributable to structural differences, it is also the consequence of the rapid growth of these firms’ liabilities during the years of the real estate boom, which pushed the ratio far above the average level in the other euro area countries (see Panel 4). In other sectors, the differences between Spain and the rest of the euro area were not as marked in 2007 (in construction the ratio was actually lower), although increases were also recorded during the upturn.

More recently, the drop in corporate earnings associated with the economic crisis has increased the financial burden on firms with outstanding debts, the more so the higher their leverage.

Despite the decrease in the debt burden, the macroeconomic deterioration and, in particular, the rise in unemployment, the degree of financial pressure on certain segments of the sector has continued to increase. This has been reflected once again in increases in the doubtful assets ratio (although it has slowed since mid-2009), which reached 3.7% at the end of last year, 2.9 pp up from the beginning of 2007.

The sharp slowdown in financing raised by firms since the beginning of 2007 has brought its growth rate down to negative levels. At the beginning of 2010 it was around -2%, 30 pp below its end-2006 level.
Behind this slowdown lies differences in behaviour by instrument, size category and sector. First, while credit granted by Spanish credit institutions slowed very sharply, credit from the rest of the world and the issuance of fixed-income securities, used basically by larger firms, were more dynamic. This was partly related to the better outlook for larger firms, some of which are expanding internationally (see left-hand panel of Chart 6.5). Similarly, there was a larger contraction in financing granted by resident credit institutions to SMEs (compared with that granted to larger companies) in sectors other than construction and real estate services. This develop-
ment was probably a consequence of the more negative behaviour of their profits and of their more problematic financial situation, which would have contributed to further depressing their demand for funds and to increasing the risks associated with lending, against a background of stricter control over credit institutions’ exposure. Finally, there was also significant heterogeneity across sectors. Credit granted to real estate services increased slightly (which could partly be explained by the fact that the falling rate of sale of real estate means that related financing has to be maintained over a longer period), while that granted to the construction and agriculture sectors contracted significantly, as did that to other services (although to a lesser extent).

The strong slowdown in corporate investment led to a rapid correction in the sector’s net borrowing. At the end of 2009 the latter amounted to 0.5% of GDP, 11 pp less than in 2007. The financing gap, which also includes permanent investment abroad, fell even more over this period (by almost 15 pp), in line with the significant fall in Spain’s direct investment in the rest of the world, to stand at the end of 2009 at 1.2% of GDP. There was also a significant decrease in the outstanding amount of trade credit (sharper than that recorded in the recession of the early 1990s), possibly owing to the fact that activity was less buoyant and to the greater reluctance of firms to grant this type of financing.

Source: Banco de España.

a. A positive (negative) sign denotes an increase (decrease) in assets or a decrease (increase) in liabilities.
The contraction in economic activity was reflected in corporate income. In the sample of firms reporting to the Central Balance Sheet Data Office Quarterly Survey (CBQ), in which large firms predominate, the percentage of firms recording negative ordinary net profit increased again in 2009. According to the information available for 2008 from the mercantile registries and the Central Balance Sheet Data Office, the deterioration of results was more acute among smaller firms, except in construction and real estate services, where the decline was more uniform across size categories. However, the latest CBQ data available, for 2009 Q4, would suggest that this deterioration in corporate income has been checked. Likewise, analysts estimate that the profits of listed companies will only decline slightly over the next twelve months, which means that the estimates of previous quarters have been revised upwards.

The unfavourable trend in income meant that, despite the contraction in the sector’s liabilities, the ratio of its debt to income remained on a rising trend, to reach almost 600% (see Charts 3 and 4 of Box 6.2). Notwithstanding this, the reduction in firms’ financing costs enabled the associated debt burden to fall to close to 22.5% of income, down 6.9 pp from a year earlier, when it stood at a historic high. Looking forward, as in the case of households, it is unlikely, given their low level, that financing costs can continue to contribute to alleviating the financial pressure on the sector (see Box 6.2).

As a result of the deterioration in firms’ balance sheets, the indicators of financial pressure on investment and employment have increased significantly, to stand at around the levels observed in the previous recession, although the most recent data point to a moderation in this tendency (see Chart 6.6). Also, the number of insolvent firms and the doubtful assets ratio have increased. The firms in greatest financial difficulty continue to be those in construction and real estate services, whose doubtful assets ratio stood in December at 9.6%, practically three times as high as that for other sectors (see Chart 6.1).

Expansionary fiscal policy led to a marked deterioration in public finances. The general government budgetary position moved from a surplus of close to 2% of GDP in 2007 to a deficit of...
The Social Security System continued to run a surplus, albeit a smaller one than in previous years. The large borrowing requirement and the increase in asset holdings were basically covered through the issuance of securities, at short and especially medium and long maturities. The funds raised by this type of instrument amounted to almost 90% of total funds obtained and, in net terms, were equivalent to 3.2% and 9.4% of GDP, in the case of short-term and medium and long-term securities, respectively, a much larger volume than in preceding years. On the assets side deposits increased, partly reflecting the transfers made to the FROB, while the acquisition of securities fell.

The rapid growth of public debt, which increased by more than 45% in two years, along with the decline in GDP, translated into a notable increase in the debt-to-GDP ratio, which rose by 13.5 pp in 2009, to 53%, 18 pp above the low level reached in 2008 Q1. The issuance of fixed-income securities

... which was largely financed through the issuance of fixed-income securities

The sector’s debt exceeded 50% of GDP, up 17 pp from 2006

11.2% in 2009 (see Chart 6.7). By sub-sector the deterioration was more intense in central government and also, although to a lesser extent, in the regional (autonomous) governments. The Social Security System continued to run a surplus, albeit a smaller one than in previous years.

The large borrowing requirement and the increase in asset holdings were basically covered through the issuance of securities, at short and especially medium and long maturities. The funds raised by this type of instrument amounted to almost 90% of total funds obtained and, in net terms, were equivalent to 3.2% and 9.4% of GDP, in the case of short-term and medium and long-term securities, respectively, a much larger volume than in preceding years. On the assets side deposits increased, partly reflecting the transfers made to the FROB, while the acquisition of securities fell.
income securities by general government has moderated in the first few months of 2010, although the rate remains high.

The decline in average financing costs mitigated the impact of the substantial increase in public debt on interest payments. The latter increased by 10%, year-on-year, to represent 1.8% of GDP, only 0.2 pp more than in 2008.

In 2009 there was a notable reduction in the net borrowing of the nation as a whole, to 4.7% of GDP, in cumulative 12-month terms, well below the levels of close to 9% of GDP observed between 2006 and 2008 (see Chart 6.8). This improvement was a result of the recovery in households’ net lending and the lower net borrowing of firms (reflecting their severely restrained spending plans), which more than offset the rise in the general government deficit (and the lower saving by financial institutions) (see Chapter 5).

Capital inflows maintained the trend decline displayed since the beginning of the crisis, falling to 5.7% of GDP, approximately half their level in 2008 (see Table 6.4). Also, there were notable changes in their composition. The bulk of financing was channelled through general government debt issues, which represented more than 5% of GDP. The net funds raised through the fixed-income securities of credit institutions amounted to 1% of GDP, as compared with -1.9% the previous year, reflecting a certain improvement in wholesale financing markets and the fact that issues of guaranteed securities were well received. By contrast, the net position in the interbank market fell to 2.4% of GDP, from 6.7% the previous year. The inflows arising from the acquisition of shares and other equity by non-residents also declined, to around 1% of GDP, in line with the fall in foreign direct investment in Spain, which also stood at 1% of GDP.

Following sharp falls in the preceding two years, capital outflows decreased slightly (by 1 pp), to 1% of GDP. This decline affected both fixed-income securities and equity. In particular, the acquisition of equity by non-financial corporations fell, to practically zero, from 3.1% of GDP in 2008. In line with this development, Spanish direct investment abroad contracted to 1.1% of GDP, extending the downward trend from the level of 9.5% reached in 2007.

As a consequence of the investment flows and changes in asset prices, the nation’s net liabilities at the end of 2009 represented somewhat more than 90% of its GDP, which is more than 10 pp higher than in the preceding year. Somewhat more than 7 pp of this increase correspond to the rise in the net amount of public debt held by the rest of the world (see Chart 6.8).¹

¹ For further details see the publication The Spanish Balance of Payments and International Investment Position.
1 Introduction

This chapter of the Annual Report, devoted to the management of the Banco de España, is an overall summary of the most notable aspects of the institution’s activity in 2009. Some of these aspects will be addressed in greater detail in the monographic reports published annually by various departments of the Bank (Banking Supervision, Balance of Payments, Claims Service, Central Balance Sheet Data Office, Central Credit Register, Research Activities, Oversight of Payment Systems and Public Debt Market).

2 Activities of the Banco de España as a member of the Eurosystem

The Treaty of Lisbon came into force on 1 December 2009

A notable development is the new EU institutional framework for financial supervision; the legislative proposals were published by the European Commission on 23 September 2009. The framework has two pillars:

— The European Systemic Risk Board (ESRB), an independent body responsible for macro-prudential supervision of the whole EU financial system. The ECB and the national central banks will play a fundamental role, owing to their know-how and their responsibilities in the area of financial stability. The Secretariat of the ESRB will be entrusted to the ECB, which will also provide analytical, statistical, logistical and administrative support. In turn, the Secretariat will receive technical advice from national central banks and supervisory authorities, through the Advisory Technical Committee (ATC).

— The European System of Financial Supervisors (ESFS), made up of national financial supervisors and three supervisory authorities – the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority (EIOPA) – drawn from the existing European macro-prudential supervision committees and endowed with specific powers. This new system will combine responsibility for day-to-day supervision of EU institutions, which will continue to correspond to the national authorities, with specific tasks at the European level, permitting enhanced quality and consistency of supervision, strengthened supervision of cross-border groups and the creation of a single set of European rules.

As in previous years, in 2009 the Banco de España’s activity as a Eurosystem member was intense. The Governor took part in the regular meetings of the Governing Council and the General Council of the ECB at which decisions on monetary policy, inter alia, were taken, as is explained in detail in Chapters 1 and 4 of this Annual Report.

A large number of professionals from the Banco de España participated in the committees, working groups and other Eurosystem bodies, preparing meetings and assisting the ECB’s governing bodies in their decision-taking.

Along with a consolidated structure of committees and working groups, the task forces, which are created to perform tasks in a very specific area and with a limited time span, provide the system with added flexibility. One noteworthy development in 2009 was the creation of the High-Level Task Force on risk management and control in Eurosystem credit opera-
tions, of which the Governor is a member. Several other high-level task forces, in which the Director General of Operations, Markets and Payment Systems participates, were also created or revived.

Moreover, in March 2009, the T2S (TARGET2-Securities) Programme Board was created, to ensure the successful completion of the T2S Programme. The Banco de España has an alternate on this Board.

The Bank participated actively in the Eurosystem forecasting exercises, in the drafting of the report on public finances and in a structural issues report on energy markets and macroeconomics that will be presented to the European Parliament in June 2010.

As a member of the European System of Central Banks (ESBC), the Banco de España was involved in the drafting of the two annual reports of the Banking Supervision Committee (BSC): the Banking Structure report (only the statistical annex has been published) and the Banking Sector Stability report. The Bank also contributed to the Financial Stability Review and to the Financial Stability Table of the Economic and Financial Committee (FST-EFC), both published half-yearly. Moreover, analysis was conducted within the BSC on a number of significant topics, such as bank lending policies and structures and credit market and counterparty risk in Europe.

As regards cooperation between central banks and supervisory authorities, the BSC, in collaboration with the Committee of European Banking Supervisors (CEBS), studied the degree of implementation of the common analytical framework developed in 2008 for assessing the systemic implications of a crisis. Lastly, work continued on the exchange of information between central credit registers and progress was made in the discussion of the use of these registers for macro-prudential purposes.

In accordance with the cooperation objectives implicit in EMU, the Banco de España was actively involved throughout 2009 in the design and implementation of the Eurosystem monetary policy strategies stemming from the special market circumstances experienced since end-2008, and specifically in the launch of 1-year liquidity-providing LTROs and in the creation of covered bond portfolios. In this respect, in May 2009 the ECB informed that it would create a €60 billion portfolio, with each national central bank acquiring a share in proportion to their capital key, as part of a programme that will run to end-June 2010.

In the field of payment systems, and following the successful completion of migration to TARGET2, 2009 was the first full year of operation of this European large-value payment system, which plays an essential role in the implementation of monetary policy and in the functioning of euro money markets. TARGET2 operated satisfactorily in 2009, with an availability level of 99.79% (see Section 6.2). However, TARGET2 was not immune to the effects of the financial crisis, as is shown by the decline both in the number of operations and the amounts processed. The crisis also highlighted the need to encourage the use of market infrastructures for clearing and settlement of OTC derivatives. The Banco de España participates in various public initiatives to this end, for instance, by lending its support, within the sphere of the Eurosystem, to the establishment of central counterparties for clearing and settlement of credit default swaps.

Regarding the Single Euro Payments Area (SEPA), the Banco de España continued to coordinate the efforts for transition in Spain, heading the fora created to this effect and encouraging and facilitating migration by general government. The Bank contributed to the transposition into Spanish law of the Payment Services Directive. This concluded with the enactment of
Payment Services Law 16/2009, published on 14 November 2009, which will facilitate the integration of retail payment markets in Europe.

The Banco de España participated in the Eurosystem’s ongoing projects in the areas of settlement of securities (TARGET2-Securities), collateral central bank management (CCBM2) and market operations (MOP). It also collaborated in the project on information on financial asset prices (CEPH - Common Eurosystem Pricing Hub).

In the area of euro banknotes, the Banco de España continued to perform the functions entrusted to it, including, in particular, those relating to banknote production control, storage, distribution and quality control. And once again it was chosen by the Eurosystem to assess the quality of the banknotes in circulation in the 16 euro area countries. The Bank also continued to hold custody of the Eurosystem’s strategic stock, and thus played an important part in the organisation of international transport of banknotes.

Lastly, the Banco de España, under the leadership of the ECB, played a significant role in the preparation (economic and technical aspects) and tests of the second series of euro notes that will be put into circulation in coming years.

3 International activities

One of the Banco de España’s key objectives is to build its international presence and raise its international profile. In this respect, it has continued to consolidate an image of excellence, to facilitate dialogue with other central banks, financial supervisors and regulators and multilateral organisations. The international financial crisis, which began in the summer of 2007 and heightened in September 2008, revealed the need for global solutions, for which appropriate and smooth dialogue is essential.

Activity in the sphere of the Eurosystem has already been referred to in Section 2 above, so this section focuses particularly on other European and international fora in which the Bank participates. It then goes on to mention bilateral relations, technical cooperation provided to other central banks, supervisory agencies and bank regulators, and international seminars and conferences organised.

In 2009 the work of the international committees with global reach was marked by the action plan drawn up at the G20 summit held in Washington on 15 November 2008. A commitment arose from this summit to strengthen cooperation and to work together to identify and implement the reforms necessary to improve the functioning and solvency of the global financial systems. This commitment was ratified at the G20 summits held in London (April 2009) and Pittsburgh (September 2009). One of the resolutions adopted was to expand the membership of the Financial Stability Forum. Thus, following the summit held in London on 2 April 2009, which gave rise to the “Declaration on Strengthening the Financial System”, the Forum was expanded and re-established, with a stronger institutional base, as the Financial Stability Board (FSB) (see Section 3.1).

In Europe, the Ecofin road map on financial supervision, stability and regulation was a key development, especially its references to the EU’s supervisory architecture and to the prevention, management and resolution of banking crises.

In the realm of the European Union, the Banco de España was involved, as part of the Spanish delegation, in various Community working groups and committees.

As in previous years, the Governor participated, together with the other European Central Bank Governors and Finance Ministers, in the informal Ecofin meetings, the first held in Prague,
in April, under the Czech presidency, and the second in Gothenburg, in October, under the Swedish presidency. At these meetings, key EU economic and financial matters were discussed, including, most notably, issues related to financial stability, the future European supervisory architecture (see Section 2), the stress testing exercise conducted by the Committee of European Banking Supervisors (CEBS) and preparation of the meetings of the International Monetary Fund (IMF).

During the year, the work of the Economic and Financial Committee (EFC) focused primarily on the regular review of the EU’s economic and financial situation and the annual analysis of the stability and convergence programmes. Work on the European financial architecture was completed in 2009 and progress was made on the aspects of financial stability highlighted in the road map approved by the Ecofin in October 2007 in response to the financial crisis (including, inter alia, issues relating to financial transparency, asset valuation, macro-prudential supervision and rating agencies). In addition, national financial support plans were monitored and a European position was adopted for various international meetings (G20, IMF, World Bank, etc.).

In turn, the work schedule of the Economic Policy Committee (EPC) placed particular emphasis on analysis of the impact of the economic crisis on the growth potential of the European economies, and the effect of population ageing on public finances and their sustainability in the long term. Particular attention was also paid to: the update of the Lisbon strategy scheduled for 2010 (EU 2020 strategy); the role of fiscal policy, and of labour market and structural reforms in general, in the crisis recovery strategy; ways to improve the functioning of the single market; and alternative ways to fund climate change worldwide.

The contributions made by the Bank in European financial supervision committees, particularly the CEBS, are also noteworthy. In 2009, the activity of the CEBS was focused mainly on the following areas:

— Provision of technical advice to the European Commission on the exchange of information between supervisors, options and discretion in national regulations, securitisation and custodian banks.

— Cooperation and convergence in supervisory practices, having agreed on a general framework for implementation of guides approved by the Committee. Several documents were also published, including, in particular, *High-level principles for Remuneration Policies* and other guides, at the consultation stage, on the functioning of the colleges of supervisors.

— Work connected with the financial crisis, chiefly the stress testing exercise on the financial sector (coordinated with the ECB and the European Commission), based on a sample of 22 major cross-border banking groups. Also noteworthy was the half-yearly report for the Financial Stability Table on trends, risks and vulnerabilities in the banking sector.

Also in Europe, several analyses were jointly undertaken by the three level 3 committees of European supervisors: the CEBS, the CEIOPS (Committee of European Insurance and Occupational Pensions Supervisors) and the CESR (Committee of European Securities Regulators). Thus, for example, the work conducted by these committees – which have come to be known as the 3L3 – notably included analysis of the implications of the new European supervisory architecture. Lastly, the Joint Committee on Financial Conglomerates (which depends on both the CEBS and
the CEIOPS) advised the European Commission on the review of the Financial Conglomerates Directive and published a document entitled *Colleges of Supervisors – 10 Common Principles*.

In terms of global international activity, particularly noteworthy was Spain’s inclusion on the Financial Stability Board (FSB), where it is represented by the Secretariat of State for Economic Affairs, the Ministry of Economy and Finance and the Banco de España. The FSB aims to coordinate the work of the national financial authorities and of the international standards committees and agencies. To this end, it identifies and analyses the vulnerabilities of the financial system, it coordinates and promotes the response of authorities and committees to these vulnerabilities, it monitors any shortcomings or inconsistencies in international standards and it evaluates the degree of implementation of these standards in each member jurisdiction. Particularly noteworthy is the FSB’s work on the treatment of moral hazard at systemic institutions, on procyclicality in financial regulation and on the relaunch of the securitisation market.

The Banco de España played an active part in the cooperation activities between central banks under the aegis of the Bank for International Settlements (BIS). These activities were especially intense and significant in 2009. Particularly noteworthy were the bi-monthly meetings of governors and the work conducted in the different committees on which the Banco de España is present. These include, in particular, the Committee on the Global Financial System and the Markets Committee; the Banco de España is now formally a full member of both these committees.

The Bank also continued to contribute actively to the work of the Basel Committee on Banking Supervision (BCBS), directing some of its activities. In response to a G20 demand, the BCBS published regulations, guides and consultation documents addressing weaknesses in the banking sector in terms of regulation, supervision and risk management. In particular, proposals were developed to:

- Change the treatment of trading books, in resecuritisations and exposures to off-balance-sheet conduits.
- Strengthen Pillar 2, to address corporate governance weaknesses, and Pillar 3 on market discipline.
- Improve the quality of capital and harmonise capital elements, and strengthen counterparty risk requirements.
- Introduce a leverage ratio and a series of countercyclical measures.
- Introduce a minimum liquidity standard and a set of follow-up indicators.

The BCBS also published other guides and reports, such as the *Principles for sound stress testing practices and supervision*, and the recommendations on cross-border bank resolution. And lastly, in connection with implementation of the Basel II standards, it monitored their impact and possible procyclicality and developed a methodology for assessment of compensation principles and standards.

The Bank was involved in the work of the Joint Forum, which groups together bank, securities and insurance supervisors from around the world, focusing on analysis of several aspects that are at the heart of the crisis, such as the use of credit ratings in the three areas, a report on special purpose entities and a review of the differentiated nature of financial regulation.
The International Monetary Fund (IMF) is another traditional catalyst of the Bank’s global activity. As has become customary, the Bank expended considerable effort preparing the briefing notes for the Spanish representatives at the IMF on the main matters discussed by the Executive Board. Throughout 2009 it paid particular attention to the reforms required for the Fund to adapt to the challenges posed by the financial crisis. These reforms were given a considerable boost after the G20 summit held in London.

The key issues in 2009 included the overhaul of the IMF’s lending facilities and conditionality, the issue of special drawing rights envisaged by the G20, the introduction of additional loan resources on top of quotas, and, in particular, expansion of the New Arrangements to Borrow (NAB), analysis of various options to improve governance, and greater integration of bilateral surveillance via financial sector assessment programs (FSAPs). The Bank also participated in discussions on the customary Article IV reports relating to the countries of most interest to Spain. And, in the field of multilateral surveillance, it contributed to and commented on the IMF’s half-yearly World Economic Outlook and Global Financial Stability Report.

The Bank participated in the meetings of the IMF’s International Monetary and Financial Committee, held in the spring and the autumn. These meetings reviewed the global economic outlook, and also key aspects of the IMF’s policy and governance.

In 2009 the Bank maintained its close collaboration with the main multilateral development banks (the World Bank, the Asian Development Bank and the Inter-American Development Bank) and, at a bilateral level, with other central banks and bank supervisors, through high-level and technical meetings. Also, as in previous years, the Bank was included in the Spanish delegations participating in the periodic meetings of the Paris Club and in OECD and EU working groups on export credit.

The Banco de España continues to preside, along with the Federal Reserve Bank of Philadelphia, the International Operational Risk Working Group (IORWG), whose main aim is to act as a centre of competence for advanced operational risk management among central banks. The Working Group, which meets on an annual basis, brings together operational risk management officers of more than 40 central banks and monetary authorities.

Collaboration with Latin American organisations was stepped up. Thus, in the case of the Center for Latin American Monetary Studies (CEMLA), which is the main forum for coordination of Latin American central banks, the Bank participated in the meetings of governors, of the Alternates Committee and of the Audit Committee. It also participated in CEMLA’s working groups, and in its training activities (where it may be considered one of the chief contributors).

In 2009 the Bank continued its very active participation in the Association of Supervisors of Banks of the Americas (ASBA), which groups together all the institutions responsible for banking supervision in the American continent. As an associate member since October 2006, it participates actively in the Association’s governing bodies, and also in its training plans, working groups and other activities. Four seminars on matters of common interest were organised jointly and the Bank took part in several working groups, most notably in that devoted to operational risk in banking institutions.

One element that makes a decisive contribution to the external projection of the Bank is the provision of technical cooperation and assistance to other central banks and supervisory and regulatory agencies. In recent years this activity has grown steadily, as a result of the increased...
demand for these services, with the Banco de España viewed as a benchmark in the field of central banking and financial regulation and supervision. It provides technical cooperation on a bilateral basis, and also through permanent collaboration with various key multilateral organisations in the field, such as CEMLA, the ASBA, the Central American Monetary Council, the IMF, the World Bank and the BIS Financial Stability Institute.

As in previous years, in 2009 technical cooperation was concentrated in the area of Latin America, on language and cultural grounds and also for financial and economic reasons. This cooperation took several forms, including, in particular, courses and seminars, study visits to the Bank, experts sent to missions in situ and attending to an almost constant stream of consultations. In this respect, the Bank organised training activities individually (e.g. the International Seminar on Central Banking, on Payment and Security Settlement Systems, and on Cash Management) and in collaboration with other organisations (CEMLA, the ASBA, CEDDET, etc.). These included courses on Operational Risk, Financial Instruments and International Financial Reporting Standards (IFRS), Accounting and Valuation of Central Bank Financial Instruments, XBRL Financial Data for Financial Supervision, and seminars on credit risk, inter alia.

In 2009, as in other years, the Banco de España provided cooperation in other geographical areas, such as the Mediterranean and eastern European countries, mainly in conjunction with other central banks and supervisory agencies, participating in several programmes coordinated within the Eurosystem and financed with EU funds. The Bank’s Internal Audit Department is involved in the TACIS III project for Technical Assistance for the Commonwealth of Independent States, in collaboration, together with another eight Eurosystem central banks and the ECB, with the Central Bank of Russia. In turn, experts from the Financial Regulation Department are working on a programme for the Eurosystem, in collaboration with another 14 central banks and the ECB, for the EU accession and potential accession countries.

Throughout 2009, the Banco de España continued its intense activity connected with the organisation of high-level events and meetings, aiming to share knowledge and views on topical issues. Of particular note during the year was the collaboration with the IMF in the organisation of some of these activities.

The key event was the conference on Reforming Financial Regulation and Supervision: Going Back to Basics, organised jointly with the IMF’s Office of the Chief Economist for Latin America and the Caribbean, held at the Banco de España’s headquarters in June. The aim of the conference was to gather together Latin American central bankers and regulators, to discuss financial regulation and supervision reforms with leading researchers and policy experts from around the world.

The Banco de España organised two other conferences in conjunction with the IMF. The first in May, for presentation of two chapters of the Fund’s World Economic Outlook (April 2009). The first session focused on the pattern of recession and recovery in the advanced economies, on how financial crises may generate different types of recessions and how countercyclical macroeconomic policies may be used to ease adjustments. The second session addressed the transmission of financial stress from developed to emerging economies, and how the latter may shield themselves, reducing their vulnerabilities.

The conference held in October, on Economic Outlook for the US, was attended by Nicolás Eyzaguirre, Director of the IMF’s Western Hemisphere Department. The presentation ad-
dressed the global economic situation and the reasons why the US economic recovery is proving to be slower than in previous crises.

In March, the fourth High-Level Seminar of the Eurosystem and Latin American Central Banks was held in Mexico City. The event, which was organised jointly by the ECB, the Banco de México and the Banco de España, was attended by governors and officials of Latin American and Eurosystem central banks, and by representatives of international organisations such as CEMLA and the IDB. It was presided by the Governor of the Banco de México, Guillermo Ortiz, the President of the ECB, Jean-Claude Trichet, and the then Deputy Governor of the Banco de España, José Viñals. The key topics addressed were the financial crisis and the economic policy response, the implications of lower commodity prices for the economies of Latin America and Europe, and the growing need for economic policy coordination as a result of the crisis.

In May, a conference on Procylicity and the Role of Financial Regulation was held at the Banco de España's headquarters, organised jointly with the BIS Financial Stability Institute and attended by authorities from central banks, multilateral organisations, the universities and the financial sector. The aim of the conference was to discuss mechanisms that could be used to successfully address the problems associated with procyclicality, with a view to promoting financial stability. The three sessions focused on: a) the lessons to be drawn from the crisis; b) regulators’ procyclicality approach; and c) the role of valuation and the accounting framework in the cycle.

The workshop on Challenges in banking research was also held in May, organised in conjunction with the Basel Committee on Banking Supervision (BCBS) and attended by academics and by senior officials of regulatory and supervisory agencies. Among the issues addressed were aspects associated with asset securitisation, credit risk measurement and liquidity risk.

Lastly, in October, the Bank hosted CEMLA’s X Meeting on Central Bank Internal Audit. The aim of the meeting was to analyse and share the latest developments and advances in the internal auditing function of the CEMLA associate and collaborating central banks. The meeting was attended by most Latin American and Eurosystem central banks, and by the Central Bank of the Philippines and several international organisations.

During 2009, the Banco de España also organised numerous conferences of a more academic nature (see Section 4.2).

In 2009 several of the Banco de España’s departments carried out analysis and research on the Spanish economy and its international environment, to give advice to the Bank’s governing bodies for performance of the functions entrusted to them.

Over the year, 35 Working Papers and five Occasional Papers were published. A total of 58 papers were published by Banco de España staff in academic journals and specialised books (25 of which in anonymously refereed journals, 22 of these being international in scope). These figures are similar to those of previous years.\footnote{The Banco de España’s Research Memorandum, 2009, available in the «Publications» section of its website at www.bde.es, contains further details of these publications and of its other research activities.}

The research agenda of the Banco de España revolves around five major areas:

- Macroeconomic modelling and forecasting.
— Monetary policy and its transmission mechanisms.

— Financial stability.

— International economy.

— Spanish economy.

In 2009, analysis of the relationships between the real economy and the financial sector, to identify, first, the causes and consequences of the financial crisis, and then possible measures to address the crisis, was one common link between all these areas.

As regards macroeconomic modelling and forecasting, work continued on developing real-time forecasting models such as the BEMOD (the Banco de España’s dynamic, stochastic general equilibrium model); institutional elements of the Spanish economy were incorporated and applications made for the assessment of economic policy measures. An overlapping generations model was also developed, adapted to the Spanish economy, to analyse the impact of fiscal policy and structural reforms, and to assess the macroeconomic implications of the different strategies for recovery from the current recession. In 2009, data gathering was completed and the process of preparation of the third wave of the Survey of Household Finances (EFF) 2008 was begun. The preliminary results of this survey will be available at end-2010.

Regarding analysis of monetary policy and its transmission channels, progress was made on three fronts. First, the consequences of imperfect competition in the banking sector and of several financial restrictions connected with optimal monetary policy were analysed. Second, the impact of interest rate fluctuations on oil prices and, in general, of the effects of different shocks on these prices, was studied, together with the possible monetary policy response. And third, on the basis of the empirical findings of the Eurosystem’s Wage Dynamics Network, estimates and alternative calibrations of several versions of general equilibrium models were made to assess different monetary policy rules.

In 2009, research in the area of financial stability and banking analysis also focused on aspects relating to the crisis. Thus, in-depth analysis continued on the role played by banking relationships in the changes in a firm’s financial position and research was conducted on the impact of the macroeconomic background, the level of capitalisation and bank liquidity for the granting of credit, the role of securitisations in the development of the credit market and the factors behind changes in the aggregate doubtful loans ratio. The question of how banks react to changes in market interest rates was also analysed in depth.

In the case of research on the global economy and financial markets, study of the impact and of the consequences of the crisis on key economic variables and relationships gradually gained ground. Thus, research topics included the fiscal consequences of the crisis from a global perspective, its effects on gross and net capital flows between countries, international lending and trade flows, the different impact of the crisis across regions (particularly across emerging markets) and the factors behind the increase in sovereign and corporate risk. Moreover, parallel avenues of research were embarked upon or continued in modelling and empirical studies. Thus, interaction models were developed on the housing market and monetary policy, on growth and convergence in the long term, and on the oil market. On the empirical front, contributions were made to the evaluation of inflation-targeting regimes in emerging countries and to the relationship between risk and selective bankruptcies.
Lastly, the avenues of research on the Spanish economy included a broad set of topics connected with the residential market adjustment and characterisation of the property cycle (vis-à-vis activity levels and cycles in other countries), the characteristics of export firms, the level of competition in the economy, analysis of fiscal policy and its macroeconomic effects, corporate dynamism, the impact of R&D, immigration and the labour market, and the pensions system.

### 4.2 RELATIONS WITH ACADEMIA AND CONFERENCES

The Banco de España maintains its connections with academia and with the economic analysis and research units of other central banks and international institutions, through the four traditional channels. First, the analysis and research produced by the Bank was presented and discussed at national and international seminars, congresses and academic conferences, and published in the usual professional media.

Second, the Banco de España organises several series of seminars, in which members of the Spanish and international academic community participate, including a weekly economic research seminar. In terms of expert meetings, in 2009 the Banco de España organised, on its own or in conjunction with other institutions, ten international conferences, all held in Madrid. Apart from those already mentioned in Section 3.2, the most notable were: Conference on the 10th Anniversary of Spain’s entry into the euro area, “Spain in EMU” (27 February); Conference on the Estimation and Empirical Validation of Structural Dynamic Stochastic Models for the Spanish Economy (13 March); Seminar on the Status of Women in Economics (COSME, 1-2 June); Conference on Household Finance and Macroeconomics (15-16 October); VIIth Workshop on Emerging Markets (21-22 September); Reforming Financial Regulation and Supervision: Going Back to Basics (15 June); Challenges in banking research (28-29 May); and European Research Workshop in International Trade - 1st EFIGE (European Firms in a Global Economy) Scientific Workshop and Policy Conference (1-3 June). The Bank also sponsored sessions at academic conferences, such as the Congress of the European Economic Association (Barcelona, 23-27 August) and the LAMES-LACEA Meetings (Buenos Aires, 1-3 October).

Third, the Banco de España continued to contribute to research networks within the Eurosystem for analysis of the euro area economy, such as the Wage Dynamics Network and, for Latin America, within CEMLA.

Lastly, there are regular visitor and external adviser programmes promoting projects that may be considered strategic in different areas of analysis and research.

### 4.3 DISSEMINATION AND COMMUNICATION

As mentioned above, the three main channels for the dissemination and communication of the Banco de España’s research findings are the Working Paper and Occasional Paper series and the monthly Boletín Económico which, along with regular articles on the economic situation, includes summaries of completed or ongoing research. All these activities are included in the Economic Research Portal, a section on the Bank’s website whose content was extended and amplified in the year.

### 5 Banking supervision and regulation

#### 5.1 SUPERVISORY ACTIVITY

The Banco de España supervises a total of 353 credit institutions

In 2009, with a view to making its supervisory function more widely known to the public, the Bank published a document entitled *The Banco de España supervisory model*, summarising the activities conducted in order to comply with the provisions of Article 7 of Law 13/1994 of Autonomy of the Banco de España, updated as a result of the New Capital Accord (Basel II). As is reflected in the above-mentioned document, the Bank supervises,

on an ongoing basis, a total of 353 credit institutions (CIs), plus 141 other institutions (see Table 7.1).

The essential objective of the Banco de España’s supervisory activity is to determine and keep updated the risk profile of each supervised institution and to take all measures, as and when necessary, to correct the risk profile. This process requires up-to-date information on all developments at the supervised institutions, including their future business prospects and viability.

For this purpose, the Directorate General Banking Supervision has 21 inspection operating divisions and eight support or cross-departmental divisions, comprising bank examiners, senior analysts, IT auditors, junior analysts and administrative staff, each led by a division head. Each operating division is assigned a number of credit institutions. The supervisory activities conducted include inspection visits, off-site inspection and, where necessary in light of the size and complexity of the group of institutions supervised, continuous monitoring on-site.

Supervisory teams have a permanent presence in ten financial groups of CIs

There are ten Spanish groups of CIs in which supervisory teams have a permanent presence. This is complemented by specific inspection visits for the evaluation of particular areas or aspects of the supervised institutions. The supervisory system is particularly intensive in the case of the two largest banking groups.

Throughout the year, and as in 2008, supervisory activity was influenced by the crisis that broke out in summer 2007. In this setting, supervisory activity focused on close monitoring of lending (especially exposure to property risk), liquidity and the responsiveness of Spain’s credit institutions to situations of stress. There was also in-depth analysis of the ongoing merger and concentration processes. As a result of this priority activity, and of the ordinary ongoing

---

3. As at 31 December 2009, the Directorate General Banking Supervision’s staff comprised 238 bank examiners, 15 senior analysts, 41 IT auditors, 50 junior analysts, 44 administrative assistants and 46 managers and other division heads.
supervisory activity conducted in 2009, a total of 372 inspections were carried out, some of which were still under way at year-end.

These inspections include inspection visits and also special monitoring processes and have involved, inter alia, verification and analysis of restructuring and merger operations, review of credit portfolios (via individual analysis and segmentation of qualities and attributes), business plans, and foreclosed assets, valuation of the investee and fixed-income portfolio and other processes relating to own funds and liquidity. This figure does not include the on-site continuous monitoring conducted in the two big Spanish banking groups. This involves the permanent presence of more than 50 persons, which gives an idea of the scale of the operation.

The letters sent to supervised institutions contained a total of 278 requirements related to matters such as credit risk (including recording thereof and the need to increase coverage as a result of the accumulation of weaknesses among borrowers, and also the appropriate improvements in the processes of lending, monitoring, etc.), internal management and control systems (including capital market activities), own funds and solvency, and other matters (such as customer transparency, shortcomings in information supplied to the Central Credit Register, etc.). As usual, credit risk was the main subject of the recommendations, accounting for 127 requirements, or 46% of the total.

One new feature in 2009 was the receipt and review of the first internal capital adequacy assessment reports. These enhance the capacity of analysis of the Banco de España in its day-to-day workings, as they include significant information on matters such as risk profiles, systems of governance, risk control and management, capital objectives, own fund planning, business strategies, future action programmes, etc.

Regarding the validation processes of the internal models for calculating regulatory capital requirements for credit risk, the conditions of approval and results of the models of the eight Spanish groups of CIs authorised, since 2008, to use, for regulatory purposes, the internal ratings based (IRB) approach, were monitored. In addition, by means of the appropriate authorisations, the use of IRB models in these groups was extended to new portfolios, in line with the roll-out plan presented to the Banco de España. For the first time, some of these models were approved for subsidiaries outside Europe, specifically in Latin America, as the result of close bilateral coordination between the Bank and the Mexican supervisory authority (Comisión Nacional Bancaria y de Valores), which also approved their use for regulatory purposes within Mexico.

As the consolidated supervisor of the two big Spanish banking groups, the Banco de España organised, for the first time, “crisis management meetings” for each of the two groups. Supervisors and central banks from the main host countries took part in these meetings. This is an initiative launched by the G20 and the Financial Stability Board, as a result of the recent international financial crisis, aimed at developing appropriate preventive measures to reduce the likelihood and the impact of a potential crisis on a large institution.

The Bank also continued to work actively in the field of international supervisory cooperation. Fluid collaboration with European, Latin American and North American supervisory bodies was maintained and strengthened, primarily, but not exclusively, through the supervisory colleges. Meetings were held at the Banco de España relating to the colleges of the two big Spanish international banking groups and the Bank took part, as the host country supervisor, in four meetings of colleges of banking groups with a foreign parent company.
During the year, six cooperation agreements were signed, in compliance with the provisions of Article 131 of Directive 2006/48/EC which requires that the competent authorities responsible for the consolidated supervision of a credit institution should have cooperation and coordination agreements, in writing, to permit effective supervision. The Bank has one such agreement in its capacity of home country supervisor and five in its capacity of host country supervisor.

At the domestic level, a new cooperation agreement was signed with the National Securities Market Commission (CNMV).

As a precautionary measure, on 29 March 2009 the Banco de España replaced the directors of Caja Castilla-La Mancha (CCM). This was the only special precautionary measure taken in connection with the supervised institutions in the year.

In 2009 seven sanctioning proceedings were opened against institutions of various kinds: a savings bank; a specialised credit institution; two appraisal companies; and three currency-exchange and cross-border money transfer bureaux. Two proceedings were also opened against companies, for the pursuit of activities reserved to credit institutions. In conjunction with the above-mentioned cases, 43 proceedings were also initiated against their directors or managers. These are quite similar to previous years’ figures.

In turn, in 2009 a total of 12 cases against supervised institutions were resolved, together with 45 cases against members of their boards of directors and management bodies or, where appropriate, against holders of qualifying holdings in supervised institutions. These resolutions involved the imposition of: nine sanctions on institutions, 23 on directors and two on holders of qualifying holdings for the commission of very serious infringements; 24 sanctions on institutions and 85 on directors for the commission of serious infringements; and 18 sanctions on institutions for minor infringements (there being no provision in Spanish law for sanctions to be imposed on directors for the commission of minor infringements). A sanction was also imposed on a legal person for pursuing cross-border money transfer activities without the necessary authorisation.

By type of institution, in the cases referred to above sanctions were imposed on five appraisal companies, six currency-exchange and cross-border money transfer bureaux and one legal person for pursuing cross-border money transfer activities without the necessary authorisation.

The Banco de España’s sanctioning activity also extends to the control of acquisitions of qualifying holdings in supervised institutions. In this respect, sanctions were imposed on one natural and one legal person for acquisition of qualifying holdings in a specialised credit institution without the necessary authorisation.

Regarding appraisal companies and their directors, the infringements analysed in the cases resolved may be split into two groups. It is essential that the appraisal activity conducted by these companies, consisting in issuing reports and certificates for use in the mortgage market, is subject to control, insofar as it constitutes the core of their activity and the reason for their official recognition by the Banco de España. Accordingly, the first group comprises the five cases against these companies in which sanctions were imposed, two for very serious infringements and three for serious infringements, it being considered that the reports and certificates reflected a clear lack of veracity in the valuations and, in particular, a lack of consistency with the data and evidence obtained in the appraisal activity or a departure from the principles established in the applicable regulations, respectively.
The second group comprises nine sanctions for minor infringements, relating to failure by the institution in question to comply with specific obligations imposed by the applicable regulations. For instance, the requirement that internal control measures exist to ensure that appraisals are prepared correctly and that the appraisal companies and their staff act independently, the existence of sufficient civil liability insurance cover for the appraisal activity, correct reporting of data to the supervisory authority, or the requirement of exclusivity in their corporate purpose.

In the case of the currency-exchange and money-transfer bureaux, the infringements analysed in these proceedings may be grouped under three main headings. First, failure to comply with the regulations governing the activity and organisation thereof. These numbered one very serious, ten serious and six minor infringements. Second, failure to comply with the regulations on appropriate capitalisation, recording thereof and auditing and reporting to the Banco de España of accounting and activity data. These numbered three very serious, eight serious and three minor infringements. And lastly, failure to comply with the regulations on relations with customers and with the public in general, numbering two very serious, two serious and one minor infringement.

Both the institutions and their managers and directors were deemed responsible in the serious and very serious infringements identified in the proceedings filed against appraisal companies and currency-exchange bureaux.

Most of the sanctions imposed, within the range envisaged in the corresponding regulations, were in the form of fines. Thus fines were imposed on 45 institutions, 104 managers or directors and two holders of qualifying holdings. Nevertheless, in some cases, according to the conduct of the institution or person concerned, it was decided to opt for sanctions involving public (published in the Official State Gazette) or private reprimand. Moreover, in light of the severity of the facts, it was deemed necessary to revoke the authorisation of two currency-exchange bureaux, and in another case to withdraw official recognition from an appraisal company. These severe sanctions on institutions were accompanied, in general, by sanctions on their managers or directors, disqualifying them from serving in these posts.

Also, a case brought involving revocation of the authorisation of a currency-exchange bureau, on account of its having relinquished such authorisation, was resolved. Strictly speaking, such cases do not involve exercise of the Banco de España’s sanctioning power, but they do represent a form of control over supervised institutions, since they enable entities which, for the reasons established by law, are liable to have their authorisation withdrawn, to be prevented from forming part of the system.

Under its power to develop and implement the organisational and disciplinary regulations applicable to institutions subject to supervision, in 2009 the Banco de España drew up three circulars, improving and harmonising the data to be reported by appraisal companies and currency-exchange bureaux, and that relating to shareholders and senior officers of supervised institutions. The Bank also played an active part in the preparation of rules at different levels on banking and financial matters, issuing the corresponding reports. And, in the same vein, it participated actively in international committees and working groups on banking regulation, especially in matters of solvency and accounting, but also in transparency of banking operations and customer protection, and financial institution management and governance (corporate and self-governance).

As an extension of its regulatory function, the Bank continued to interpret and apply the regulations on the activity of institutions, especially the solvency and accounting regulations, set-
tling enquiries received from institutions or from other regulatory agencies. It also provided technical assistance on regulatory matters both in and outside Spain (participating in various working groups, organising seminars, etc.). At this point, mention should also be made of the checks performed on preference share and subordinated debt issues made by credit institutions involving, in 2009, the resolution of almost 200 proceedings.

As regards exercise of the Bank’s power in the area of transparency and bank customer protection, particularly noteworthy were: the authorisation, prior to publication, of credit institutions’ advertising projects that refer to cost or rates of return (8,376 cases studied in 2009), the verification and registration of brochures that refer to fee and commission charges (prices of bank services) (964 cases); and the Bank Customer’s Portal, a section on the Banco de España’s website that aims to provide guidance and which, in 2009, recorded 2,673,764 page viewings and generated replies to more than 5,500 enquiries.

Lastly, the Bank also plays a part in proceedings for the creation of supervised institutions, and of amendment of their articles of association, advising the Minister for Economy and Finance and drawing up the mandatory reports. And it is responsible for various public registers (such as the register of supervised institutions and their agents), and confidential registers (including, in particular, the register of senior officers). The largest of these is the register of agents, with a total of 22,053 at 31 December 2009. Applications for new entries, modification of details and removal from the register numbered 22,554 in the year.

5.3.1 Regulatory changes

The key changes in 2009 in Spain’s organisational and disciplinary rules applicable to credit institutions and other financial intermediaries subject to Banco de España supervision may be divided, by purpose, into four different groups:

1 Changes that aim to improve the legal regime applicable to credit institutions. These include:

   — **Law 3/2009 of 3 April 2009 on structural changes in mercantile companies.** Among many other issues, this law deals with certain aspects of corporate mergers and spin-offs in the case of credit cooperatives or between credit institutions of different kinds.

   — **Law 5/2009 of 29 June 2009 for the reform of the regime for qualifying holdings in investment firms, credit institutions and insurance companies.** This law clarifies the prudential procedures and criteria applicable in the prudential assessment of acquisitions and increases of qualifying holdings in the financial sector.

   As regards credit institutions in particular, the latter was implemented through Royal Decree 1817/2009 of 27 November 2009, which amended Royal Decrees 1245/1995 and 692/1996.

The Royal Decree on the Fund for the Orderly Restructuring of the Banking Sector (FROB) was published in June

2 Changes that aim to strengthen the solvency of credit institutions and to anticipate restructuring processes. For instance:

   — **Royal Decree-Law 9/2009 of 26 June 2009 on bank restructuring and the strengthening of credit institutions’ capital.** The purpose of this legislation is to establish the guidelines to which any bank restructuring processes that may be necessary should adhere, along with the regime for a new institution created to this effect, namely the Fund for the Orderly Restructuring of the Banking Sector (FROB).
3 Changes that affect the operational framework within which credit institutions and other financial intermediaries work. These include:

— Law 16/2009 of 13 November 2009 on payment services. This regulates the provision of payment services in the EU, it introduces a new category of payment services provider – payment institutions – and it regulates the rights and obligations of payment service providers and users.

— Law 26/2009 of 23 December 2009 on the State budget for 2010. This amends Law 13/1994 of 1 June 1994 of Autonomy of the Banco de España, making minor adjustments to the legal regime applicable to collateral pledged to the Banco de España, the ECB and other national central banks.


— Ministerial Order EHA/3515/2009 of 29 December 2009 establishing contributions to the Savings Bank Deposit Guarantee Fund. This places the calculation basis of the savings banks’ annual contributions to the Fund at 1 per mille.

4 The fourth and final group comprises rules addressed to financial institutions other than credit institutions that are supervised by the Banco de España. For instance:


The changes made to the EU regulatory framework include, for our purposes here and following the same structure as before, the following:

1 Changes affecting the solvency of credit institutions:


2 Regulatory changes in the operational framework of credit institutions:

3 Changes affecting financial institutions subject to Banco de España supervision:

— Directive 2009/110/EC of the European Parliament and of the Council of 16 September 2009 on the taking up, pursuit and prudential supervision of the business of electronic money institutions, which substantially reviews the 2000 Directive, adding greater flexibility to the regime applicable to these institutions.

The Banco de España continued to collaborate actively with the CEBS on the implementation of the impact analysis of financial regulation, in line with the European Commission’s decision to extend this approach to all regulatory initiatives, participating, in particular, in the review of the guides on hybrids and in the debates on own funds and the liquidity regime.

The Bank also gave part of the training seminar on Assessment of the Impact of Financial Regulation, organised jointly with the CNMV and the Ministry of Economy and Finance in October. The aim of the seminar was to make this approach known to Spanish financial regulators, especially to officials who belong to working groups of the level 3 committees (see Section 3.1) and who need to use this approach in their work.

The Banco de España policy to set in place electronic financial reporting was extended during 2009 to cover credit institutions’ financial documentation (annual accounts, actuarial reports and audit reports, etc.), the only information still received on paper. The other supervised institutions will also begin to use this procedure for financial reporting in 2010 for documents corresponding to December 2009.

Similarly, as a result of the gradual introduction of XBRL for the transmission of all financial information to the Banco de España, in 2009 mutual guarantee companies began to send their statements in this language, coinciding with the first-time submission of the new solvency and accounting returns approved, respectively, by Circular 5/2008 of 31 October 2008 and Ministerial Order EHA/1327/2009 of 26 May 2009.

In December 2009 the new formats for the confidential financial returns of currency-exchange bureaux were approved and will have to be submitted in 2010 using XBRL for the first time. The financial returns of appraisal companies were modified and will continue to be transmitted, as they have been to date, in this language. This language will also be used for sending the new returns, which include euro area statistical requirements, and interest rate statistics, which were approved by the Bank in January 2010.

The Banco de España actively participated within the CEBS in preparing the new accounting returns with prudential information (FINREP) which were approved in December 2009 and are planned to come into force in 2012. The CEBS undertook to adapt these formats to the changes announced by the International Accounting Standards Board (IASB) regarding the accounting treatment of financial instruments and rules on the presentation of financial information. The Bank also participated in the work commenced by the CEBS in 2009 to establish standardised formats in the European Union for solvency returns (COREP) which will be compulsory for data as at 31 December 2012. Likewise, it took part in the ECB-CEBS joint working group which prepared a manual on the reconciliation of ECB statistical requirements and CEBS prudential financial reporting (namely, FINREP and COREP). Lastly, in 2009 it collaborated in the analysis begun by the Bank for International Settlements to reformulate the information provided in the semi-annual and triennial survey of derivatives markets.
The Central Credit Register (CCR) contains individualised information on the credit exposure of reporting institutions (basically credit institutions) to their customers. This information is used by the institutions for granting and monitoring exposure, and by the Banco de España, in conjunction with the data from accounting and own funds statements, for prudential supervision and other tasks which are legally entrusted to it, maintaining the confidentiality of the individual data.

In 2009 the number of different borrowers declared to the CCR fell slightly to 17.4 million in December (down 1.14% on one year earlier) and the number of exposures declared decreased to 32.9 million (down 2.9%), although the total amount of these exposures grew to €3.8 billion in December (up 2.7%).

During 2009 the CCR sent a total of 297.2 million automatic reports to reporting institutions, which represents, for the first time, a drop of 1.9% with respect to the previous year. Also, for the second year running, there was a decline in requests for reports for new lending transactions which totalled 5.2 million (14.7% down on 2008). In turn, requests for reports by borrowers also decreased (to approximately 112,000, a decline of 16%) and 2009 marked a turning point in the previous growth trend.

As regards the quarterly exchange of information with the central credit registers managed by six other central banks of EU Member States (Germany, Austria, Belgium, France, Italy and Portugal), to September 2009 (date of the latest available data), the CCR received information on exposures of 3,914 Spanish legal persons (an increase of 0.23% on the same period a year earlier) recorded in the other central credit registers, amounting to €233,243 million (down 2.18%). In turn, the CCR sent to these registers information on 1,831 legal persons resident in the other six countries (down 0.7%), relating to exposures amounting to €45,569 million (down 27.75%).

Lastly, it should be highlighted that in 2009 work was carried out to grant borrowers access to their CCR reports via the Internet, to adapt to the provisions of Law 11/2007 of 22 June 2007 on electronic access to public services. This service will be available in the first half of 2010.

The implementation of monetary policy in the euro area is carried out in a coordinated fashion by the European Central Bank and the national central banks; the former takes the monetary policy decisions, while the latter perform the liquidity providing/absorbing operations and manage the collateral provided by the credit institutions within their purview.

In June the ECB conducted its first one-year refinancing operation to provide liquidity. The volume injected through monetary policy operations into the Eurosystem remained throughout 2009 substantially higher than credit institutions’ liquidity requirements and, consequently, the latter used the deposit facility to drain this surplus. In June the ECB conducted its first one-year refinancing operation to provide liquidity, it was repeated in September and December and was in notable demand by institutions to the extent that it became the preferred term for the bulk of the liquidity injected by the Eurosystem.

Spain’s liquidity requirements grew by 10.4% on average in 2009, at approximately half the speed of those of the euro area as a whole (21.6%). For coverage purposes, Spanish institutions continued along the path they had taken in 2008 which was characterised by increasing their use of Eurosystem funds, clearly beyond their needs, and by acting as net lenders to the rest of the European banking system. Thus, Spanish institutions obtained €73,790 million in Eurosystem monetary policy operations, an increase of 50.1% with respect to 2008. However,
this change was offset to a large extent by the considerable increase in funds delivered through TARGET to the rest of the European system which amounted to €35,251 million. Therefore, Spain’s liquidity requirements totalled €38,539 million in 2009, in comparison with €34,913 million in 2008.

Like other banks, Spanish banks will have to modify their sources of financing during 2010 as and when Eurosystem monetary policy moves back onto a normal footing and, in particular, as one-year operations mature. However, it should be emphasised that Spanish banks obtained financing from the Eurosystem which amounted to 10.1% and 12.5% of the net volumes lent in monetary policy operations in 2008 and 2009, respectively. Both figures are very close to 11.9%, which is Spain’s weight in the Eurosystem as a whole.

In addition to acquisitions of nearly €3,500 million of covered bonds included in the Eurosystem programme referred to in Section 2, and with the objective of achieving a more profitable balance-sheet structure, in 2009 the Banco de España managed a portfolio of euro-denominated fixed-income bonds with an average outstanding balance of €82,540 million in 2009. Holdings of foreign currency denominated assets stood on average at $11,560. As at 31 December 2009, manageable assets in euro, foreign currency and gold totalled €102,088 million.

Throughout 2009 the Banco de España continued to manage part of the ECB’s foreign reserves, taking charge of a portfolio averaging $6,240 million.

As for large-value payments, noteworthy primarily is the soundness and stability demonstrated by the system (one full year after TARGET2-Banco de España came into operation) which was created from the Banco de España Settlement Service (SLBE).

In a year without any significant incidents, the new Spanish component of TARGET2 processed more than 9.3 million transactions, a decline of approximately 13%, which is equivalent to that seen for TARGET2 as a whole. In terms of amounts, TARGET2-Banco de España settled transactions amounting to more than €98 billion which, contrary to TARGET2 overall, is more than 5% up on the previous year’s figures.

With regard to retail payments, during 2009 the Banco de España continued to work on the oversight of the National Electronic Clearing System (SNCE) which is managed by Iberpay, a company owned by the system’s participants. The total of close to 1,545 million transactions processed by the SNCE showed a growth rate of 2.3% (a decline on the rate for recent years of around 5%-6%), amounting to almost €1.7 billion, which was notably lower than the previous year (down 15%).

14.3% of the transfers in December 2009 met SEPA standards, a considerably higher figure than the European average.

The migration of the Spanish retail payments system to SEPA, the Single Euro Payments Area, progressed with the enactment of Payment Services Law 16/2009 which transposes into Spanish Law Directive 2007/64/EC on payment services in the internal market. With the new Law in force, in December 14.3% of transfers compliant with the new SEPA standards had migrated, which was far higher than the average for Europe as a whole. Highly satisfactory figures were also seen in the number of SEPA-compliant ATMs and POSs. However, progress must be made during 2010 in the migration of cards to international EMV standards based on the inclusion of a chip in the card and the use of a PIN to authenticate cardholders. The first
In order to facilitate full access to/from the rest of the Single Area, the Banco de España continued to offer to represent those institutions that are interested at the main pan-European retail payment clearing house currently in existence, thus enabling them to send and receive payments to/from anywhere in the geographical space of SEPA.

The Banco de España continued to perform its task of oversight of payment systems, with the aim of contributing to their security and of achieving their efficient operation. To ensure that this activity is exercised with the greatest transparency, the fourth edition of the annual report on oversight, covering the most notable developments in national payment systems and the oversight activities carried out, was published.

TARGET2 and the SNCE are the main payment systems subject to oversight. The oversight tasks of TARGET2 are undertaken jointly with other Eurosystem central banks and are coordinated by the ECB, while the oversight of SNCE is performed by the Banco de España in accordance with the shared criteria and policies set for the whole Eurosystem. In addition to monitoring these systems, in 2009 Spanish card payment networks were evaluated according to the oversight standards set by the Eurosystem. This exercise is being undertaken in coordination with all Eurosystem central banks and on completion of the analysis, its main general findings are planned to be published.

During 2009 the Banco de España received slightly more than 2,900 million banknotes from credit institutions, an increase of 4% with respect to the previous year’s figure. In turn, the Bank delivered 2,723 million banknotes to credit institutions, representing an annual increase of 6.1%. Consequently, the banknotes received exceeded those withdrawn, although this did not result in a decrease in the number of banknotes in circulation owing to the notes entering Spain from other euro area countries, basically as a result of tourism. The negative difference between the banknotes issued and those withdrawn, in technical terms “negative net issuance”, mainly affected 5, 10 and 20 euro banknotes.

The Bank continued to work in collaboration with the private sector to improve the system of custody and distribution of cash throughout Spain, endeavouring to ensure that operating flexibility and cost reduction targets may be met without impairing the quality and authenticity of the banknotes in circulation. The Bank complied with all the banknote delivery or withdrawal requests that it received and there were no significant incidents in the numerous banknote transportation operations undertaken throughout Spain.

---

4. The first «Status report on the transition to SEPA in Spain» is available at SEPA’s website in Spain at www.sepaesp.es.
The Banco de España’s banknote handling activity covers identifying, counting and authenticating banknotes and checking their fitness. For this activity it uses high tech sorting machines which processed 2,600 million banknotes in 2009, a highly similar volume to that processed in the previous year. 40% of these banknotes were declared unfit to be returned to circulation because they were damaged and were destroyed and replaced by other new or high-quality used banknotes that conformed to the standards set by the Eurosystem.

The process of applying Eurosystem rules to banknote recycling by professional cash handlers, which are included in the European Framework for euro banknote recycling, continued throughout 2009. At end-2009, more than 75% of the ATMs installed in Spain dispensed banknotes which complied with the established requirements and had been previously supplied by the Banco de España or had been selected using a BE-certified machine. The aim is to increase this percentage to 100% of ATMs by 31 December 2010. As a result of the extensive ATM network and the considerable use of cash by the Spanish population, this process is particularly complex. The banks have collaborated considerably with the Banco de España and, without exception, are making investments and equipping themselves with the suitable means to achieve the targets by the deadline. Also, in the context of the above-mentioned framework, the Banco de España is working on reviewing the machinery used and the procedures followed in the processes of verifying banknote authenticity and fitness at private banknote processing facilities authorised by it.

The Banco de España put 972 million coins into circulation and withdrew 310 million coins from circulation in 2009, in the performance of the task entrusted to it by the Treasury.

In accordance with the provisions of Royal Decree Law 6/2008 of 10 October 2008, the Banco de España implements the Fund for the Acquisition of Financial Assets (FAFA), acting as its agent and custodian through the Treasury Special Schemes Support Service.

The third and fourth auctions for the acquisition of assets were held during 2009. The former involved sell/buy back transactions and the latter consisted of the purchase of held-to-maturity securities.

As part of its tasks, the Bank was also responsible for maintaining the Fund’s portfolio of securities. These tasks include the management of the financial flows generated by the securities, the recovery of tax withholdings made due to the payment of regular coupons, the replacement of certain securities by others which are also “eligible” and the valuation adjustments of assets due to changes in prices.

Implementation of the Fund also includes keeping the accounts of the transactions and the preparation of its annual accounts as well as providing detailed information to the Executive Committee of the FAAF.

The statistical function of the Banco de España is established in its Law of Autonomy and in the National Statistics Plan. The Law of Autonomy provides that the Banco de España shall compile and publish statistics relating to its functions and that it shall assist the ECB in the compilation of the statistical information needed for the fulfilment of the ESCB’s functions.

---

6. The National Statistics Plan is established every four years (the current Plan is for 2009-2012) by means of a royal decree, pursuant to Law 12/1989 on the Public Statistical Function. 7. Article 7.5.f.
The main statistics compiled by the Banco de España under the Law of Autonomy relate to financial institutions and markets and to interest rates. The statistics compiled under the current Plan are the Balance of Payments and the International Investment Position, the Financial Accounts of the Spanish Economy, the Survey of Household Finances, and Public Debt, according to the Excessive Deficit Protocol (EDP).

A significant part of the statistics mentioned broadly coincides with the requirements of the ESCB, being compiled using the information that all resident units are obliged to provide by law, although in certain cases the underlying information provided by other supervisory agencies is used. In addition, the Banco de España, through its Central Balance Sheet Data Office, compiles information on the balance sheet position and the results of non-financial corporations, using questionnaires completed voluntarily by the reporting firms, and on the annual accounts filed by non-financial corporations at the Mercantile Registries. All these statistics are published in the Boletín Estadístico, in monographic publications and on the Banco de España’s website.

Apart from compiling and disseminating the above-mentioned statistics, the Bank also uses statistics produced by other Spanish agencies and supervisors (INE, IGAE, ministries, CNMV, DGSFP, etc.) and by international organisations as a source for another area of statistical work that it makes available to its own analysts and to the general public. Moreover, Banco de España representatives take an active part in international statistical fora (within the ESCB, the European Commission through Eurostat, the European Committee of Central Balance Sheet Data Offices, the IMF, BIS, OECD, etc.). The Bank also maintains databases that permit analysis of the evolution of the variables for which data are collected.

During 2009 the statistics were updated and disseminated along with the corresponding methodological notes and notes on changes, in line with generally accepted quality levels, and the data were released in accordance with the calendar which is kept up to date on the Banco de España’s website. The most notable elements of the other work undertaken by the Banco de España are mentioned below.

### 7.1 MAIN CHANGES INTRODUCED IN 2009

#### 7.1.1 Monetary and financial statistics

- The new ECB statistical requirements were included in the regulations governing credit institutions in the form of Circulars 1/2010 and 2/2010, both of 27 January 2010, on credit institutions’ financial returns and the interest rates applied to customers.
- New statistics on mutual funds complying with ECB requirements were compiled and disseminated jointly by the ESCB for the first time.
- Coinciding with the publication of the *Financial Accounts*, the time series was extended to the period 1980-1989 and new tables were disseminated which include the link between the financial balance sheet at the beginning and the end of the period, specifying under each heading the financial transactions, revaluations and other variations in volume.
- Due to the entry into force of the new Spanish National Classification of Economic Activities (CNAE 2009), statistics on lending by economic activity were revised as were those on production, the labour market and prices, at the same time as the information sources were included in the new CNAE.
The main changes in this section are as follows:

- Data from the Investments Register were used for the first time to calculate the direct investment heading of the *International Investment Position* and the time series of Spanish investments abroad was revised from 1992.

- Work began to adapt the information system on cross-border economic transactions to *Regulation 924/2009 on cross-border transactions* and the sixth edition of the *Balance of Payments and International Investment Position Manual* published by the International Monetary Fund in 2009.

2009 saw the completion of the preparatory work undertaken in previous years to adapt the Central Balance Sheet Data Office’s information system and publications to the new 2007 Spanish General Chart of Accounts (PGC 2007) and to the new Spanish National Classification of Economic Activities (CNAE 2009). During the final stage of this adaptation process work was carried out to link the time series avoiding the breaks caused by the introduction in the new chart of accounts of different concepts and measurement basis (especially the adoption of fair value). New tables which use the new CNAE 2009 classification have been disseminated for the first time. As a result, a new sector of activity had to be assigned to the more than 500,000 corporations in the various databases.

In addition to improving the infrastructure for collecting, exchanging and accessing statistical information (partly due to the projects listed in previous sections), work progressed on enhancing the procedure for disseminating data through the website with the installation of a system for searching for statistical information (Biest). The functioning of this system will be refined over the coming years and the process of providing new electronic forms for reporting cross-border transactions continued.

The number of claims received increased by 84%

The most important development for the Claims Service in 2009 was the vast increase in the volume of its work of attending to queries and claims made by the users of financial products and services offered by financial institutions subject to Banco de España supervision. Claims increased by 84%, while the number of enquiries received through the virtual office rose by 19% and the number of telephone enquiries was up by 52%.

As a result of this strong increase in the number of claims received by the Service, it was necessary to review and improve the methodology and organisation of the work and standardised formats were introduced for lodging complaints and receiving submissions from respondents which made it possible to streamline the processing of claims in order to subsequently study and settle them. In conjunction with other factors, this allowed the Claims Service to absorb the rise in the number of claims submitted by issuing 4,666 reasoned reports (up 96% on the previous year).

The Claims Service’s virtual office, which has been in operation since April last year, was increasingly used by the public to submit queries and lodge complaints. More and more institutions have joined the electronic communication system, thus permitting swifter responses.

As a result of the organisational restructuring required to handle the higher number of complaints, the quarterly reports which had been published since 2006 were replaced by a half-yearly report on its activities and the structure and content of the Claims Service’s annual report remained unchanged.
Notable in raising the Service’s external profile at European level was its participation in the two annual meetings of FIN-NET, the European network for settling cross-border financial disputes out of court in the European Union, of which Spain is a founder member.

9 External communication

As a public agency, the Banco de España shares the obligation of accountability vis-à-vis the general public, although in the case of the Bank a balance must be found between this obligation and the discretion required of it in its financial system supervisory duties. The communication policy of the Banco de España has a twofold objective: to explain the functions and activities of the institution and to contribute to the confidence of citizens in the financial system. External communication is necessary for the Banco de España to fulfil its functions under the Law of Autonomy and as a member of the ESCB.

9.1 MEDIA RELATIONS

The Banco de España’s relationship with the media focuses on enhancing knowledge of the institution’s activities and the financial system in general among information professionals, since these are a key link in the mechanism for transmitting messages to the public. For this purpose, in 2004 the Banco de España began a journalist training programme which since its inception has covered, among other subjects, those related to financial regulation, the Bank’s functions, supervision and the statistics compiled by the Banco de España. As part of this plan, in 2009 the Bank collaborated with the ECB in the organisation of a seminar specifically for the media, on aspects such as how the ECB is organised, its functions, monetary policy and economic developments in the euro area. Moreover, in order to publicise the work of the various departments of the Bank, informative meetings were organised to present the results of the public debt report (in May) and of the Central Balance Sheet Data Office (in December).

Notable, in addition to these regular meetings, was the media coverage of other acts organised in the early months of 2009 to commemorate the tenth anniversary of economic and monetary union (see section 9.2.3). To mark this anniversary, a photo shoot was organised at the premises of the National Mint which enabled the media to gain insight into the process of producing banknotes and coins. The Bernácer prize award ceremony in June was also widely reported in the media.

In line with last year’s trend, media interest focused on the consequences of the crisis for Spain’s financial system, which resulted in a high number of requests from the media for interviews. Overall, representatives of the Bank gave around 20 interviews. Some of the interviews in 2009 came within the Bank’s branch network-based communication plan, the purpose of which is to acquaint local and regional media with the Banco de España’s activities.

Nonetheless, as in previous years, the main channel for communicating the Bank’s viewpoint regarding the economic situation and the financial system was its regular publications, such as the Annual Report, the Economic Bulletin and the Financial Stability Report, and the public speeches made by its management. In addition to the Governor’s regular appearances before Parliament (in June, to present the Annual Report, and in October, before the Parliamentary and Senate Budget Committees), he made three further appearances before Parliament: once in February, to explain the government-approved Fund for the Acquisition of Financial Assets of credit institutions; and twice in April, firstly to report on the actions taken by the Bank at Caja Castilla-La Mancha and; secondly, before the Non-Standing Committee of the Toledo Pact, to explain the Banco de España’s view on the reform of the pension system. In addition to these appearances, members of the Bank’s governing bodies participated in more than 40 domestic and international fora.
The Banco de España’s website is its most important direct communication channel, in terms of efficiency and cost, for fulfilling its aim of channelling the information it produces swiftly and reliably to the public and specialist audiences.

The access statistics showed the importance of this channel since there were 2.4 million visitors in 2009, up 16.7% on the previous year. The number of pages visited by users exceeded 23 million, up 6% with respect to the pages consulted in the previous year.

In June 2009, the Banco de España successfully concluded the complete revamp of its website’s design, architecture, usability and accessibility, which made it possible to tailor this channel to the demands of its target audience and to standardise the language employed by using a style manual.

The website currently comprises approximately 2,000 pages and 20,000 files. Progress has been made in the translation of institutional contents into the co-official languages of the autonomous regions, to enable users to navigate in the Catalan, Galician, Valencian and Basque languages, and into English, to satisfy the demand for information from international users.

In addition to the website, the Banco de España has made available to users several information and educational portals, the purpose of which is to cover the specific needs for information and training of certain population segments. Noteworthy among these portals is the Bank Customer’s Portal which was visited by more than 500,000 users whose accesses grew by 5% to 2.7 million in 2009.

During 2009 the Virtual Office of the Banco de España was also developed and since January 2010 it has enabled members of the public, corporations, financial institutions and general government to perform administrative procedures and submit queries electronically to the Bank (see section 10.4).

For those members of the public who visit the Bank’s headquarters and branches, information terminals were installed in the respective operations floors enabling them to access the Banco de España and the ECB’s websites and to consult various data about the services provided.

In 2009 it handled 59,700 requests from corporations and members of the public from various specialised information points. Noteworthy, in terms of volume, were the 43,400 enquiries received from the public by the Claims Service about several aspects of their relationship with banks. In turn, the Bank Customer’s Portal processed 5,500 requests and the Statistical Information Service responded to around 11,600. The most commonly requested information related to interest and exchange rates.

In line with the Banco de España’s wish to make itself better known to different social groups, last year it distributed 56,200 copies of informative materials and 15,000 units of informative and educational products of the Eurosystem and of the European Commission. These items were distributed by post and during visits by certain groups to the Bank and at conferences held by it. Furthermore, there were approximately 5,000 downloads by members of the public of various training materials (brochures, presentations and educational videos) offered by the website.

The Bank, in line with its commitment to communicate with the public in the co-official languages, has a policy of multilingual presentation of the materials which, since they are addressed to the residents of regions with co-official languages, require translation and it ac-
As part of the Banco de España’s commitment to communicate suitably with the public and other segments of society, it ensures that a single, reliable and consistent image is projected in the various communication materials and vehicles it uses.

The signing of an assistance agreement with the Ministry of Education in 2009 marked an important milestone for the Financial Education Plan, a project to improve the financial culture of the population which will last until 2012 and is sponsored by the Bank in conjunction with the CNMV. As a result of this agreement secondary-school students will be given a grounding in the basic concepts involved in saving and personal financial planning. As early as the next academic year (2010-2011) a pilot test will be held at around thirty schools targeted at students in the third year of Compulsory Secondary Education.

During 2009 work progressed on the preparation of the portal finanzasparatodos.es (“finance for everyone”) which has been available to the public since May 2010 and provides practical financial information for the population in general, according to people’s socio-economic profile and financial requirements. The Bank’s aim is for the finanzasparatodos.es portal to be a benchmark in financial education.

During its fourth year of its life, the Virtual Classroom, an educational portal for young people to foster knowledge of the Banco de España and spread awareness of its mission to guarantee the stability of prices, payments and the financial system, became established as a learning tool for the educational community. This is clear from the fact that 290,000 portal pages were consulted by 75,000 visitors during 2009.

The Competition for Schools organised by the Banco de España for upper-level secondary and middle-level vocational training students is an educational instrument which fosters the entrepreneurial spirit of students and has aroused growing interest among schools since the first time it was organised. The 3rd Competition for Schools, held in the 2008-2009 academic year, merited the participation of 1,716 students from 214 schools, which are similar figures to last year when 1,799 students from 228 teams competed.

The 3rd Competition for Schools (dedicated to the 10th anniversary of the euro), in which 214 teams from public and private schools throughout Spain took part, was divided into a first general qualifying round and a second round consisting of a written contribution based on the theme “The Euro: a symbol of European integration”. The winner was the Josep María Cuadrado Secondary School located in Ciutadella (Menorca). The diploma and prize (eight laptop computers) were awarded at a ceremony held at the Banco de España branch in Palma presided by the branch Director and the Chief Officer for Education and Culture of the Balearic Islands Regional Government.

As in previous competitions, due to the Banco de España’s awareness of the importance of co-official languages as vehicles in education, it published a bilingual edition of winning team’s contribution.

The Banco de España created “The Safe”, a game devised for use in the classrooms of upper primary school students. Its aim is to promote basic knowledge about the euro, the Banco de España and the ECB through a game in which students and their teacher represent different agents in the real financial economy. The teams of students face situations, questions and
problems which they must resolve with the help of background information cards which can be acquired from other teams in a sort of information market. Each question is resolved with a transaction involving euro banknotes and, consequently, the game includes specimen euro banknotes enabling students to handle them and identify their characteristics and security features.

The Banco de España distributed the game to schools in the first term of 2009 for use in the 2009-2010 academic year. To supplement this game, the Bank created the Educational Corner in a section of the Virtual Classroom on the website, which enabled primary school teachers to ask for the game to be sent to them, to download the educational support materials and have at their disposal supplementary activities for the students to do in class or at home.

The Banco de España provides for institutional visits to its headquarters and branches. These are open to educational establishments and in 2009 it welcomed more than 2,500 visitors.

In 2009, the Banco de España carried out communication activities as a member of the ESCB. In addition to helping to define and implement the Eurosystem’s communication strategy through its participation in the Eurosystem and ESCB Communications Committee and to publishing ECB press releases and communications on its website, the Communication Department carried out various initiatives under the Eurosystem communication plan, notably including the updating of information materials, in particular, those on euro banknotes and the preparation of interactive educational materials and of a competition on price stability for upper secondary school students.

Several events commemorated the 10th anniversary of the euro

The Banco de España held a number of events to commemorate the 10th anniversary of the euro in 2009. In addition to the International Conference held on 27 February which focused on Spain in EMU, the Bank inaugurated the exhibition of “Ten years of the euro in Spain”. 14,150 people visited this exhibition which explained the developments in the Spanish economy in that period and different aspects of common monetary policy. Similarly, the Banco de España’s Barcelona branch housed the exhibition prepared by the ECB to commemorate this anniversary which had already travelled to several Eurosystem countries. The exhibition, which was presented in Spanish and Catalan, explained the characteristics of euro banknotes and coins, their production process and security features, and included a children’s corner with interactive games. 11,000 people visited the exhibition, including guided visits for schools. Like the other central banks in the Eurosystem, the Banco de España asked the Spanish Post Office to create a commemorative stamp which was issued in June 2009. The stamp, with a face value of €1, represents the reverse of the €2 commemorative coin which was minted to celebrate the first ten years of the euro.

As at 31 December 2009, the Banco de España’s headcount amounted to 2,724 employees, having held at a similar level since 2006, although its employees have become more highly qualified with this group representing 59% of total employees at end-2009 in comparison with 54% in 2005.

This year 13 internal and 7 external selection processes were organised. A recent development in this area is that an Induction Programme was set up for new employees which involves all the Bank’s departments. Collaboration with universities was also stepped up and new educational cooperation agreements were signed in order to contribute to the practical training of more students.
Under the mobility project, 205 employees (8% of permanent employees) moved to another work centre, were promoted to another post or both. As for international mobility, 21 employees were temporarily assigned to other central banks or international organisations, and under secondment arrangements with the latter, 34 employees enjoyed special leave of absence.

As for information on equality, the proportion of females in the workforce grew again in general terms to 38% of total employees, and among management posts, it stood at around 37%. These data corroborate remarks made in previous years about a favourable outlook for gender balance.

As part of the reconciliation of work and family life, the number of employees who benefit from reduced working hours increased from 0.4% of employees in 2005 to 3.2% in 2009.

In the area of in-house training, programmes developed in previous years continued and the Bank’s educational capabilities were expanded with new activities throughout the year which took advantage of the synergies between the various departments.

As for training figures, the number of hours of training given amounted to 141,228 in total which represents an average of 52 hours of training per employee, an increase with respect to the previous year. A total of 5,278 places were taken up on training courses. The number of employees from other central banks participating in training activities offered by the Banco de España to the ESCB and other organisations grew considerably to a total of 172 participants in 2009.

In order to boost training at the Banco de España, during 2009 training needs were analysed exhaustively with departmental representatives and a three-year Training Plan (2010-2012) was drawn up which will include cross-departmental and technical training. As for logistics, a new computer application was launched to facilitate advertising of internal training activities and to make it easier for employees to sign up for them.

With respect to labour relations, activity centred on the implementation of the commitments undertaken in the latest collective labour agreement which is in force for the 2008-2010 period.

By resolution of the Executive Commission dated 17 July 2009, the Procurement and General Services Department was created, which assumed the functions undertaken until then by the Central Procurement Services and part of the functions of the former Administration and Properties Department.

This reorganisation entailed the centralisation of functions, such as the centralised management of tenders above €50,000, with the aim of improving the Banco de España’s general services.

Noteworthy were the considerable efforts made by the Banco de España to analyse and coordinate tender processes, promoting good procurement practices for this purpose, in accordance with the principles of competition, equal treatment, non-discrimination, mutual recognition, proportionality, transparency and public dissemination which are included in Internal Circular 3/2007 on Public Procurement Rules of the Banco de España.

The procedures for procurement of construction work, goods and services continued to be made public in the Official Journal of the European Union, in the national press and on the Banco de España website. The number of email enquiries about tenders increased fivefold.
The Banco de España participated actively in the work of the Eurosystem Procurement Coordination Office. During 2009 it chaired a working group, participated in three other working groups and defined two new series of good procurement practices.

Due to its awareness of the importance of supranational procurements, on 3 November 2009 the Executive Commission authorised the Banco de España’s participation in certain joint tenders.

During 2009, the programme to renovate, overhaul and maintain the Bank’s buildings, both at its central headquarters and at the branches and recreation centres, continued.

At the Cibeles complex, with the completion of the last phase of restoration of the roofing and the inner façades, the refurbishing work on the exterior of the old building concluded. The culmination of this work will be the ornamental illumination of the external façade, the completion of which is scheduled for 2010.

Furthermore, the refurbishment and modernisation of office space progressed, thus facilitating the renovation of facilities and the reorganisation of their use, and the successive phases of the Electrical Integration Plan continued to be implemented. This plan will last for several years because, for technical reasons, it is necessary to stagger the work, thus enhancing the security, reliability and quality of the power supply.

The security of the complex improved with the installation of physical barriers and the identification of vehicles at its entrances.

At Alcalá 522, the structural voice and data cabling was completely replaced and the network’s quality, capacity and speed improved considerably.

As to the branch network, the renovation of electromechanical installations and the updating and extension of fire-prevention systems involving fire detection and automatic extinction is under way and will conclude in 2010, once the subcontractors have completed their work. Similarly, elimination of impediments to public access to the operations floors was completed.

The increase in cash handling equipment at branches led to extending and building new processing rooms at Malaga, Bilbao and Zaragoza and the work is expected to be finished during 2010.

In 2009 the project entitled “Functional extension of Banco de España corporate document management” continued to be implemented. This framework project of the Banco de España will underpin the definition and adaptation of its processes and services so as to provide them electronically to the public.

Similarly, 2009 saw the initial implementation of the electronic administration model designed for the Bank: the first step was taken with the creation of the virtual headquarters, approved by a resolution adopted by the Executive Commission on 23 December 2009, which came into operation on 1 January 2010. Throughout the year the Bank worked intensively to define and roll out the corresponding regulations for starting up this “Virtual Office”.

The Banco de España’s Virtual Office is a portal available to all users who wish to deal with the Bank electronically. It is a new service for the public, a gateway which aspires to centralising
citizens’ electronic communications and promoting use of the Internet as a channel for accessing services provided by the Bank.

This portal publishes a list of the processes and services provided electronically, which will gradually be completed, and provides the related information.

The Information Systems and Processes Department was very active during 2009: it managed 81 projects and received 2,139 requests from users, 2,111 of which it resolved.

The most important and visible Eurosystem projects in which the Banco de España participated were: TARGET2-Securities (T2S), the market operations platform (MOP) and collateral central bank management (CCBM2).

The programmes for reorganising user application systems continued throughout 2009 and included most notably the following:

— In 2009 the final adjustments were made to the reorganisation of the Central Balance Sheet Data Office (new technology platform for the processing of information on the Spanish non-financial sector, in which the website communication channel and the analytical systems for conducting studies are strengthened). In 2010 it will foreseeably be adapted to the latest regulatory and statistical changes and it will be used more extensively both internally and externally.

— The implementation of the Strategic Plan for the Directorate General Banking Supervision (field applications for on-site use in credit institutions, and full development of the Integrated Supervisory Activity Management System, denoted by the Spanish acronym SIGAS, which serves as a common framework for the work of the whole Directorate General) had already reached its final stages, all that remained to be completed was the integration of some of the field applications and the final phases of SIGAS.

— The system of Integrated Management of the Legal Department (denoted by the Spanish acronym GDJ) was introduced and provided this department with the necessary tools for the management and comprehensive monitoring of all legal files.

As for the Bank’s internal management, during 2009 the computer systems which increase management efficiency were updated and extended. In March 2009 the new CTA accounting application was successfully installed, which equipped the Control, Budget and Accounting Department with a flexible and modern management tool that facilitates its working practices and enhances query and selection mechanisms (see section 10.6). Similarly, in this period the work on developing a new Budgetary Monitoring System was finalised, which will make it easier to introduce and process budgetary data, providing monitoring mechanisms for budgetary management units.

The Corporate Document Management application was also developed for documentation generated by international committees and working groups.

The most noteworthy action regarding infrastructures was as follows:

— The data network connecting the Bank’s branches was notably improved and made to work faster, and part of the internal network installations in the buildings in Madrid was replaced.
— The project to improve the Bank’s general connectivity to the internet to improve its redundancy was completed.

— 327 new work posts were installed, 941 were upgraded and the migration to Office 2007 continued.

— The processing capacity of the central computers was increased by 15% and the storage systems were enlarged to a greater degree to cover user demand and accommodate new applications.

During 2009 work also progressed on improving the service of the Bank’s user help desk which handled 46,454 calls and 39,875 incidents.

In the area of business continuity, the first crisis management test was undertaken, in line with the practices of other Eurosystem central banks. The results were satisfactory and made it possible to promote important improvements related to crisis management. In the area of the Financial Stability Committee’s Business Continuity Subcommittee (CEFSI), a protocol was prepared for responding to operating incidents with potentially systemic effects and a crisis management test was performed.

In 2009 the new accounting computer software was implemented and, concurrently, the Bank’s new accounting system came into operation with the entry into force of Internal Circular 9/2008 which made it possible to notably simplify the recording of operations and made it easier to access and prepare the Bank’s financial information.

Similarly, in 2009 the installation of the operational risk management system was completed at all the Banco de España’s premises. Subsequently, an overall map of the Bank’s exposure to this type of risk was prepared and measures for handling it effectively were adopted.

Work to develop a new budgetary monitoring application continued. Its actual installation is planned for 2010 Q1 and will entail important improvements in management and monitoring procedures when the Bank incurs expenses and makes investments.

The Control, Budget and Accounting Department continued to participate in the development of computer projects for the Bank’s operating departments to ensure that suitable measures for the monitoring and accounting of operations were implemented, and particular attention was paid to the projects prepared within the area of the Eurosystem.

Considerable work was undertaken on adapting the cost accounting system to calculate the harmonised cost of Eurosystem projects in which the Bank participates as well as the cost of certain services provided by the Bank to other institutions.

Lastly, as regards the Bank’s international presence, its influence in the areas of NCB accounting and operational risk continued through the organisation of courses and seminars in these fields, especially among members of Latin American central banks.

According to the Statute approved by Internal Circular 4/2007 of 20 July 2007, the aim of internal auditing is to evaluate the efficacy, sufficiency and suitability of all the systems and procedures established for the management and control of risks.

The internal audit function is performed by the Internal Audit Department, which reports directly to the Governor. In addition, the Internal Audit Department must afford the Audit Com-
mittee of the Governing Council all such assistance as it may request and provide it with any information it may need.

The Internal Audit Department and its audit staff shall adhere to the principles of objectivity, impartiality, confidentiality and absence of conflict of interests, and act in keeping with the principles, standards and procedures laid down in the Internal Audit Manual approved by Ordinance 7/2008 of 15 February 2007.

The Internal Audit Department's audit activity is specified in an Annual Plan approved by the Governor and reported to the Executive Commission. In accordance with the 2009 plan, the Internal Audit Department carried out the following main audits: annual accounts of the Banco de España; the report envisaged in Law 44/2002 on Financial System Reform Measures; the Spanish Personal Data Protection Law (compliance with Articles 96 and 110 of the Regulation); security of automated information systems; validation of the risk management models of credit institutions supervised by the Banco de España; international technical cooperation; preparation and publication of official mortgage market benchmark rates; Treasury liquidity tenders; the Claims Service's claims and complaints management process; the Treasury Special Schemes Support Service; recording of accruals and advances; the ECB's strategic stock of banknotes; banknote distribution; governance of information technology; money market operations; management services of Eurosystem reserves; CCBM2 (collateral central bank management) project; monetary and financial statistics; and of the Valencia, Oviedo, Logroño, Pamplona, San Sebastián, Bilbao, Zaragoza and Barcelona branches Also, it monitored the recommendations of the specific audits of the Banco de España and of those common to the ESCB.
1 Introduction

The annual accounts of the Banco de España (“the Bank”) as established by Article 29.1 of its internal rules, approved by a Resolution of the Governing Council of 28 March 2000 (Official State Gazette (BOE) of 6 April 2000), comprise the balance sheet, the profit and loss account and the notes on the accounts. The accounts have been prepared in accordance with the internal accounting rules and principles of the Banco de España. These rules and principles are based on the accounting framework established for national central banks (NCBs) of the European System of Central Banks (ESCB)\(^1\) pursuant to Article 26.4 of the Statute of the ESCB on standardisation of accounting and reporting procedures relating to operations undertaken by NCBs. In the cases not regulated by Eurosystem accounting rules, the Banco de España has established its own internal rules based on generally accepted accounting principles adapted to the special characteristics of the operations and functions of a central bank.

In accordance with the provisions of Articles 29 and 32 of its internal rules, the Bank’s annual accounts have been audited by the Internal Audit Department and analysed and examined by the Audit Committee appointed for the purpose by the Bank’s Governing Council. The accounts have also been audited by independent external auditors, as stipulated by Article 29 of the Bank’s internal rules and Article 27 of the Statute of the ESCB.

Under the provisions of Article 4.2 of Law 13/1994 of 1 June 1994 of Autonomy of the Banco de España, it is for the government, upon proposal by the Minister of Economy and Finance, to approve the Bank’s balance sheet and accounts for the year, which will be sent to Parliament (Cortes Generales) for informational purposes. The Governing Council of the Bank, under the provisions of Article 21.g) of the aforementioned Law, is responsible for formulating the Bank’s annual accounts.

Unless otherwise indicated, the figures are expressed in millions of euro. Those relating to 2008 are presented solely for comparison with 2009. Due to rounding, on occasions the totals included in the balance sheet, profit and loss account and notes on the annual accounts may not equal the sum of the individual figures.

This document presents the accounts for the year 2009. Section 2 includes the balance sheet and profit and loss account at 31.12.09; Section 3 contains the notes on the accounts, with the accounting policies that have served as a framework for their formulation, the explanatory notes on the most important aspects of the balance sheet and profit and loss account, and the changes in capital, reserves, provisions and revaluation accounts; and Section 4, in compliance with Article 4.2 of the Law of Autonomy, details the contributions made to the Deposit Guarantee Funds and the loans and transactions agreed on other than an arm’s-length basis or which in any other way entail a loss of profit or losses for the Bank, giving estimates of those amounts.

Finally, Annexes 1 and 2 include the reports of the external auditors and of the Bank’s Audit Committee on the annual accounts presented in the preceding sections.

---

## Balance sheet and profit and loss account

### Balance sheet of the Banco de España as at 31 December 2009

<table>
<thead>
<tr>
<th>NOTE NUMBER</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gold and gold receivables</td>
<td>6,938.31</td>
</tr>
<tr>
<td>2</td>
<td>Claims on non-euro area residents denominated in foreign currency</td>
<td>12,306.81</td>
</tr>
<tr>
<td>2.1</td>
<td>Receivables from the IFM</td>
<td>4,119.17</td>
</tr>
<tr>
<td>2.2</td>
<td>Balances with banks and security investments, external loans and other external assets</td>
<td>8,187.65</td>
</tr>
<tr>
<td>3</td>
<td>Claims on euro area residents denominated in foreign currency</td>
<td>0.01</td>
</tr>
<tr>
<td>4</td>
<td>Claims on non-euro area residents denominated in euro</td>
<td>1,014.96</td>
</tr>
<tr>
<td>4.1</td>
<td>Balances with banks, securities investments and loans</td>
<td>1,014.96</td>
</tr>
<tr>
<td>4.2</td>
<td>Claims arising from the credit facility under ERM II</td>
<td>—</td>
</tr>
<tr>
<td>5</td>
<td>Lending to euro area credit institutions related to monetary policy operations denominated in euro</td>
<td>90,087.62</td>
</tr>
<tr>
<td>5.1</td>
<td>Main refinancing operations</td>
<td>657.70</td>
</tr>
<tr>
<td>5.2</td>
<td>Longer-term refinancing operations</td>
<td>89,421.45</td>
</tr>
<tr>
<td>5.3</td>
<td>Fine-tuning reverse operations</td>
<td>—</td>
</tr>
<tr>
<td>5.4</td>
<td>Structural reverse operations</td>
<td>—</td>
</tr>
<tr>
<td>5.5</td>
<td>Marginal lending facility</td>
<td>—</td>
</tr>
<tr>
<td>5.6</td>
<td>Credits related to margin calls</td>
<td>8.47</td>
</tr>
<tr>
<td>6</td>
<td>Other claims on euro area credit institutions denominated in euro</td>
<td>1,151.64</td>
</tr>
<tr>
<td>7</td>
<td>Securities of euro area residents denominated in euro</td>
<td>84,340.68</td>
</tr>
<tr>
<td>7.1</td>
<td>Securities held for monetary policy purposes</td>
<td>3,400.37</td>
</tr>
<tr>
<td>7.2</td>
<td>Other securities</td>
<td>80,940.31</td>
</tr>
<tr>
<td>8</td>
<td>General government debt denominated in euro</td>
<td>4,665.45</td>
</tr>
<tr>
<td>9</td>
<td>Intra-Eurosystem claims</td>
<td>13,121.19</td>
</tr>
<tr>
<td>9.1</td>
<td>Participating interest in ECB</td>
<td>663.30</td>
</tr>
<tr>
<td>9.2</td>
<td>Claims equivalent to the transfer of foreign reserves</td>
<td>4,783.65</td>
</tr>
<tr>
<td>9.3</td>
<td>Net claims related to the allocation of euro banknotes within the Eurosystem</td>
<td>7,674.24</td>
</tr>
<tr>
<td>9.4</td>
<td>Other claims within the Eurosystem (net)</td>
<td>—</td>
</tr>
<tr>
<td>10</td>
<td>Items in course of settlement</td>
<td>0.34</td>
</tr>
<tr>
<td>11</td>
<td>Other assets</td>
<td>4,324.48</td>
</tr>
<tr>
<td>11.1</td>
<td>Tangible and intangible fixed assets</td>
<td>240.45</td>
</tr>
<tr>
<td>11.2</td>
<td>Other financial assets</td>
<td>50.45</td>
</tr>
<tr>
<td>11.3</td>
<td>Off-balance sheet instruments revaluation differences</td>
<td>—</td>
</tr>
<tr>
<td>11.4</td>
<td>Accruals and prepaid expenses</td>
<td>2,126.12</td>
</tr>
<tr>
<td>11.5</td>
<td>Sundry</td>
<td>1,907.47</td>
</tr>
<tr>
<td>TOTAL ASSETS</td>
<td>217,951.50</td>
<td>208,987.73</td>
</tr>
<tr>
<td>NOTE NUMBER</td>
<td>2009</td>
<td>2008</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------</td>
<td>---------------</td>
</tr>
<tr>
<td><strong>LIABILITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Banknotes in circulation</td>
<td>16</td>
<td>88,273.78</td>
</tr>
<tr>
<td>2 Liabilities to euro area credit institutions related to monetary policy operations denominated in euro</td>
<td>17</td>
<td>35,089.02</td>
</tr>
<tr>
<td>2.1 Current accounts (covering the minimum reserve system)</td>
<td></td>
<td>24,736.02</td>
</tr>
<tr>
<td>2.2 Deposit facility</td>
<td></td>
<td>10,352.00</td>
</tr>
<tr>
<td>2.3 Fixed-term deposits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4 Fine-tuning reverse operations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5 Deposits related to margin calls</td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>3 Other liabilities to euro area credit institutions denominated in euro</td>
<td></td>
<td>0.09</td>
</tr>
<tr>
<td>4 Debt certificates issued</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Liabilities to other euro area residents denominated in euro</td>
<td>18</td>
<td>32,725.57</td>
</tr>
<tr>
<td>5.1 General government</td>
<td></td>
<td>31,233.05</td>
</tr>
<tr>
<td>5.2 Other liabilities</td>
<td></td>
<td>1,492.52</td>
</tr>
<tr>
<td>6 Liabilities to non-euro area residents denominated in euro</td>
<td>20</td>
<td>264.49</td>
</tr>
<tr>
<td>7 Liabilities to euro area residents denominated in foreign currency</td>
<td></td>
<td>0.69</td>
</tr>
<tr>
<td>8 Liabilities to non-euro area residents denominated in foreign currency</td>
<td>21</td>
<td>0.69</td>
</tr>
<tr>
<td>8.1 Deposits, balances and other liabilities</td>
<td></td>
<td>0.69</td>
</tr>
<tr>
<td>8.2 Liabilities arising from the credit facility under ERM II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Counterpart of special drawing rights allocated by the IMF</td>
<td>22</td>
<td>3,078.08</td>
</tr>
<tr>
<td>10 Intra-Eurosystem liabilities</td>
<td>23</td>
<td>41,033.92</td>
</tr>
<tr>
<td>10.1 Net liabilities related to the allocation of euro banknotes within the Eurosystem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.2 Other liabilities within the Eurosystem (net)</td>
<td></td>
<td>41,033.92</td>
</tr>
<tr>
<td>11 Items in course of settlement</td>
<td>24</td>
<td>103.69</td>
</tr>
<tr>
<td>12 Other liabilities</td>
<td>25</td>
<td>375.92</td>
</tr>
<tr>
<td>12.1 Off-balance-sheet instruments revaluation differences</td>
<td></td>
<td>79.67</td>
</tr>
<tr>
<td>12.2 Accruals and income collected in advance</td>
<td>26</td>
<td>69.06</td>
</tr>
<tr>
<td>12.3 Sundry</td>
<td></td>
<td>227.19</td>
</tr>
<tr>
<td>13 Provisions</td>
<td>27</td>
<td>5,312.04</td>
</tr>
<tr>
<td>14 Revaluation accounts</td>
<td>28</td>
<td>7,020.16</td>
</tr>
<tr>
<td>15 Capital and reserves</td>
<td>30</td>
<td>2,000.00</td>
</tr>
<tr>
<td>15.1 Capital</td>
<td>31</td>
<td>1,000.00</td>
</tr>
<tr>
<td>15.2 Reserves</td>
<td></td>
<td>1,000.00</td>
</tr>
<tr>
<td>16 Profit for the year</td>
<td>32</td>
<td>2,673.18</td>
</tr>
<tr>
<td><strong>TOTAL LIABILITIES</strong></td>
<td></td>
<td>217,951.50</td>
</tr>
</tbody>
</table>
### PROFIT AND LOSS ACCOUNT OF THE BANCO DE ESPAÑA FOR THE YEAR ENDING 31 DECEMBER 2009

<table>
<thead>
<tr>
<th>NOTE NUMBER</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Interest income</td>
<td>1</td>
<td>4,669.85</td>
</tr>
<tr>
<td>2 Interest expense</td>
<td>2</td>
<td>1,005.29</td>
</tr>
<tr>
<td>3 Net interest income (1 – 2)</td>
<td></td>
<td>3,664.57</td>
</tr>
<tr>
<td>4 Realised gains/losses arising from financial operations</td>
<td>3</td>
<td>108.54</td>
</tr>
<tr>
<td>5 Write-downs on financial assets and positions</td>
<td>4</td>
<td>193.12</td>
</tr>
<tr>
<td>6 Transfer to/from provisions for foreign exchange rate, price and credit risks</td>
<td>5</td>
<td>688.14</td>
</tr>
<tr>
<td>7 Net result of financial operations, write-downs and risk provisions (4 – 5 – 6)</td>
<td></td>
<td>-772.72</td>
</tr>
<tr>
<td>8 Fees and commissions income</td>
<td>23.77</td>
<td>23.33</td>
</tr>
<tr>
<td>9 Fees and commissions expense</td>
<td>13.20</td>
<td>11.04</td>
</tr>
<tr>
<td>10 Net income from fees and commissions (8 – 9)</td>
<td>6</td>
<td>10.57</td>
</tr>
<tr>
<td>11 Income from equity shares and participating interests</td>
<td>7</td>
<td>117.94</td>
</tr>
<tr>
<td>12 Net result of pooling of monetary income</td>
<td>8</td>
<td>193.99</td>
</tr>
<tr>
<td>13 Other income and losses</td>
<td>9</td>
<td>-12.93</td>
</tr>
<tr>
<td>14 TOTAL NET INCOME (3 + 7 + 10 + 11 + 12 + 13)</td>
<td></td>
<td>3,201.42</td>
</tr>
<tr>
<td>15 Staff costs</td>
<td>10</td>
<td>230.96</td>
</tr>
<tr>
<td>16 Administrative expenses</td>
<td>11</td>
<td>121.51</td>
</tr>
<tr>
<td>17 Depreciation of tangible and intangible fixed assets</td>
<td>12</td>
<td>25.58</td>
</tr>
<tr>
<td>18 Banknote production services</td>
<td>13</td>
<td>71.45</td>
</tr>
<tr>
<td>19 Other expenses</td>
<td>2.85</td>
<td>2.28</td>
</tr>
<tr>
<td>20 TOTAL OPERATING EXPENSES (15 + 16 + 17 + 18 + 19)</td>
<td></td>
<td>452.35</td>
</tr>
<tr>
<td>21 Transfers and additions to other funds and provisions</td>
<td>14</td>
<td>75.89</td>
</tr>
<tr>
<td>22 PROFIT FOR THE YEAR (14 – 20 – 21)</td>
<td>15</td>
<td>2,673.18</td>
</tr>
</tbody>
</table>

Countersigned by

The Governor,

**Miguel Fernández Ordóñez**

The Comptroller,

**José Miguel García Hernando**
3 Notes on the accounts

3.1 Accounting policies

1 Basic Principles

The annual accounts of the Banco de España present fairly its net worth, financial and economic position. They have been drawn up in accordance with the following accounting principles: prudence, recognition of post-balance-sheet events, going concern, the accruals principle, consistency and comparability, no offset, matching of revenues and expenses, and materiality. These principles conform to those set out in the accounting guides and instructions of the ECB.

2 Basis of Accounting

The accounts have been prepared on a historical cost basis, modified as necessary to include market valuation of trading-book securities, gold and the foreign currency position. Futures shall be valued daily at market price and significant participating interests at underlying book value.

Transactions in assets and liabilities are generally recorded on the settlement date, except that forward transactions in foreign currencies are booked at the spot settlement date. If a period end falls between the trade date and the spot settlement date, both spot and forward transactions are recognised at the trade date.

The specific valuation criteria applied to the various assets and liabilities were the following:

Gold

Gold is recorded at acquisition cost, which is determined by the cash amount paid in the transaction including any related expense.

The cost of sales is obtained by applying the daily net average cost method. In the event that the cash to be paid or received is specified in a currency other than the euro, it is translated into euro at the mid-market exchange rate two business days before the settlement date.

On the last day of each month, gold stocks are valued at the market price in euro per troy ounce of fine gold. Un realised gains or losses (except for unrealised losses at year-end) are reflected in an adjustment account and credited or debited, respectively, to a revaluation or expense account.

Unrealised losses existing at the end of the year are taken to the profit and loss account and the average book value is modified. Such losses are considered irreversible in subsequent revaluations.

Sales of gold against foreign currency under repurchase agreements are recorded as off-balance-sheet items, with no effect on the balance sheet. The foreign currency received by way of consideration is recorded on the assets side, with the obligation to repay it being recorded simultaneously on the liabilities side. Possible differences arising between gold delivered spot and that received forward are recorded as if there had been an independent outright sale or purchase at the time of maturity of the transaction.

Foreign currencies

Spot purchases or sales of foreign currencies are recorded at the settlement date, affecting the foreign currency position from that date. Gains and losses on the spot sale of foreign curren-

2. As at 31/12/1998 its acquisition cost was adjusted to the market price then prevailing and the unrealised gains were credited to revaluation accounts. These gains are subsequently taken to profit and loss when the asset is sold or, alternatively, they are used to offset unrealised losses.
cies are similarly considered to be realised from the settlement date. Meanwhile, foreign ex-
change forward purchase and sale transactions shall be recognised in off-balance-sheet ac-
counts at the spot date of the transaction, affecting the foreign currency position as at that
date. The gain or loss on the transaction shall also be considered to be realised on that date.
If a period-end falls between the trade date and the spot settlement date, the transactions
have to be recognised at the trade date.

Purchases are recorded at acquisition cost in euro. Purchases and sales of foreign currencies
against euro are valued at the exchange rate agreed in the transaction. When foreign curren-
cies are bought and sold against other foreign currencies, the euro valuation is at the midmar-
ket exchange rate of the currency sold on the trade date. Transactions in a foreign currency
that do not modify the overall position therein have no effect on the book value of such posi-
tion.

The cost in euro of foreign currency sold is calculated using the daily net average cost method.

Accrued interest denominated in foreign currency is recorded on a daily basis using the mid-
market rate on each day. If the rate on the relevant day is not available, the latest mid-market
rate available shall be applied. Accrued interest receivable or payable denominated in foreign
currency shall form part of the foreign currency position.

Foreign currencies are revalued monthly to market price. This revaluation is performed without
netting unrealised gains against unrealised losses on the various currencies. Unrealised gains
and losses (with the exception of unrealised losses at year-end) are reflected in adjustment
accounts and credited or debited, respectively, to revaluation and expense accounts.

Unrealised losses existing at the end of the year are taken to the profit and loss account for the
year, in which case they affect the average cost of the currency in question. Such losses are
considered irreversible in subsequent revaluations.

The criteria applied are the same as those indicated in the preceding section for foreign cur-
rencies.

SDRs and the net position in the International Monetary Fund (IMF) are valued at the year-end
SDR market exchange rate by the same methods used for other currencies.

The Banco de España holds three separate securities portfolios: a trading portfolio, a held to-
maturity portfolio and a monetary policy portfolio (set up in accordance with the ECB Govern-
ing Council decisions of 7 May 2009 and 4 June 2009).

In all three cases, the securities are recorded initially at acquisition cost, which is determined
by the cash amount paid, less any accrued gross coupon.

The cost of securities sold or redeemed is determined by the average book value of the secu-
ritv in question. The securities in the held-to-maturity portfolio may not be sold except in ex-
ceptional circumstances and with the authorisation of the Operations Committee.

Trading portfolio securities are revalued monthly to market price. This revaluation is carried out
without any netting of unrealised gains and losses on different security codes. Unrealised gains
and losses (with the exception of unrealised losses at year-end) are reflected in adjustment
accounts and credited or debited, respectively, to revaluation and expense accounts. Unreal-
ised losses existing at the end of the year are taken to the profit and loss account. Their amount is credited directly to the securities account, and the average book price – and therefore the internal rate of return – of the security code concerned is modified. These unrealised losses are considered irreversible.

Securities within the held-to-maturity portfolio and the monetary policy portfolio are not subject to any periodic valuation, except for recognition, where applicable, of loss of value due to asset impairment.

Any premiums, discounts and coupons that have accrued but are not due are recorded in accruals accounts, using the internal rate of return of each security code for their calculation within each portfolio. These accruals are recorded daily.

The above references to acquisition cost and market prices shall, in relation to securities denominated in foreign currency, be understood to refer to the currency concerned, these amounts being translated into euro, as stipulated in the “Foreign currencies” section.

Reverse repurchase agreements involving securities are recorded on the assets side of the balance sheet as collateralised outward loans for the amount of the loan. Securities acquired under reverse repurchase agreements are not revalued or included in the securities portfolio.

Repurchase agreements involving securities are recorded on the liabilities side of the balance sheet as an inward deposit collateralised by securities, the balancing entry of which is the cash received. Securities sold under this type of agreement remain on the Bank’s balance sheet and are treated as if they had remained part of the portfolio from which they were sold. Repurchase agreements involving securities denominated in foreign currencies have no effect on the average cost of the currency position.

In direct loans of securities, repurchase and reverse repurchase agreements conducted simultaneously are accounted for separately, each being recorded according to the valuation rules set forth in the preceding two paragraphs.

Automated security loans (contracts empowering a depository of securities to lend them to a third party in overnight transactions, subject to certain contractual limitations) are not recorded in the balance sheet. The only item accounted for is the income, which is recorded in the profit and loss account. Transactions outstanding at year-end are recorded off-balance sheet.

Where there is any reasonable doubt about the recovery of an asset, it is recorded in a separate account and the relevant provision set aside.

These are valued at their nominal amount.

The ECB establishes the conditions applicable to the monetary policy operations conducted by Eurosystem central banks and the need to obtain adequate collateral for them. Also, Article 32.4 of the Statute of the ESCB and of the ECB stipulates that the Governing Council may decide that NCBs shall be indemnified, in exceptional circumstances, for specific losses arising from monetary policy operations undertaken for the ESCB. Indemnification shall be in a form deemed appropriate in the judgment of the Governing Council; these amounts may be offset against the national central banks’ monetary income (see Note 28 on the balance sheet and Note 8 on the profit and loss account).
Loans to the State

In accordance with the Guideline of the European Central Bank of 10 November 2006 on the legal framework for accounting and financial reporting in the European System of Central Banks (ECB/2006/16), they are valued at nominal amount (see Notes 9 and 28 to the balance sheet and Note 5 to the profit and loss account).

Shares and participating interests

Shares and participating interests in national and/or international institutions, including the participating interest in the European Central Bank (ECB), are valued at cost. The participating interest in Bolsas y Mercados Españoles, Sociedad Holding de Mercados y Sistemas Financieros S.A. is valued at its underlying book value.

Tangible and intangible fixed assets

Fixed assets are defined as those non-financial assets owned by the Bank that are intended to be used for a period exceeding 12 months and contribute directly or indirectly to fulfilling its objectives and/or to the probable generation of income in the future and, in addition, their cost can be reliably assessed.

Fixed assets are generally valued initially at cost, defined as the amount of the monetary disbursements made or committed to, including any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the intended manner, such as transport, installation, professional fees for legal services, non-refundable taxes and the fair value of other consideration given.

Trade discounts and those for defects in assets received are recorded as a reduction in the cost of the related assets. Cash discounts and those for late delivery are recorded in the profit and loss account under other income or, where appropriate, as a reduction in expenses, and do not affect the acquisition cost of the asset purchased.

Fixed assets are deemed not to include those assets which, although meeting the conditions to be classed as such, do not generally exceed the amount of €600 (€6,000 in the case of buildings, structures and plant in buildings), although there may be exceptions, normally for control reasons.

Only extensions, replacements, rehabilitations and improvements that exceed €6,000 are capitalised, provided also that the elements replaced can be removed from the balance sheet or that they are fully depreciated.

Computer applications developed specifically for the Banco de España the cost of which does not exceed €300,000 are recorded directly as expenses and are not eligible for subsequent capitalisation.

After initial recognition, fixed assets are valued at acquisition cost less accumulated depreciation or amortisation and any impairment losses.

The acquisition cost of a fixed asset, net of its residual value, is depreciated or amortised systematically during its useful life on a straight-line monthly basis from the month following that in which it was recognised in the accounts. Generally, all depreciable/amortisable fixed assets are estimated to have a residual value of zero unless there is a deep, liquid market for assets similar to the one whose residual value may be received. Land, the art collection and fixed assets under construction are not depreciated.

The depreciation/amortisation rates and estimated useful lives applied to the various fixed assets in 2009 were as follows:
An asset is impaired when its book value exceeds the recoverable value. In this case, and only if the amounts are significant, an impairment loss is recognised by simultaneously reducing the item’s book value and modifying its depreciable/amortisable base.

The ECB and the national central banks (NCBs), which together comprise the Eurosystem, have issued euro banknotes since 1 January 2002. The total value of euro banknotes in circulation is recorded by allocating to each Eurosystem NCB, on the last working day of each month, an amount based on the banknote allocation key.

The ECB has been allocated a share of 8% of the total value of euro banknotes in circulation, whereas the remaining 92% has been allocated to the NCBs and divided amongst them according to their weightings in the capital key of the ECB. The share of banknotes allocated to each NCB is disclosed under the balance sheet liability item “Banknotes in circulation”.

The difference between the value of the euro banknotes allocated to each NCB in accordance with the banknote allocation key and the value of the euro banknotes that it actually puts into circulation also gives rise to remunerated intra-Eurosystem balances. These claims or liabilities, which incur interest, are disclosed under the item “Intra-Eurosystem: Net claims/liabilities related to the allocation of euro banknotes within the Eurosystem” (see “Intra-Eurosystem balances” in this section on accounting policies).

From 2002 until 2007, the intra-Eurosystem balances arising from the allocation of euro banknotes were adjusted in order to avoid significant changes in the relative income positions of the NCBs that initially formed part of the Eurosystem as compared with previous years. The adjustments were effected by taking into account the differences between the average value of banknotes in circulation of each NCB in the specified reference period and the average value of banknotes that would have been allocated to them during that period under the ECB’s capital key. The adjustments were reduced in annual stages until

<table>
<thead>
<tr>
<th>Depreciation /Amortisation Rate (%)</th>
<th>Useful life (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings and structures</td>
<td>2</td>
</tr>
<tr>
<td>Renovation work</td>
<td>4</td>
</tr>
<tr>
<td>Plant in buildings</td>
<td>10</td>
</tr>
<tr>
<td>Security-related plant in buildings</td>
<td>20</td>
</tr>
<tr>
<td>Furniture and fittings</td>
<td>10</td>
</tr>
<tr>
<td>Office machines for the handling of banknotes and coins</td>
<td>10</td>
</tr>
<tr>
<td>Other office machines</td>
<td>20</td>
</tr>
<tr>
<td>Computer equipment</td>
<td>25</td>
</tr>
<tr>
<td>Transport equipment. Cars and motor bikes</td>
<td>25</td>
</tr>
<tr>
<td>Transport equipment. Trucks and buses</td>
<td>10</td>
</tr>
<tr>
<td>Library collection</td>
<td>10</td>
</tr>
<tr>
<td>Other tangible fixed assets</td>
<td>20</td>
</tr>
<tr>
<td>Computer applications</td>
<td>20</td>
</tr>
<tr>
<td>Industrial property</td>
<td>—</td>
</tr>
</tbody>
</table>

the end of 2007. However, this mechanism has also been applied in the case of new Member States adopting the euro so as to calculate the amount of compensation corresponding to each of them under the aforementioned calculation method. This adjustment is gradually reduced over a six-year period, being held unchanged during each financial year.

The interest income and expense on intra-Eurosystem balances relating to banknote allocation is cleared through the accounts of the ECB and is disclosed under “Net interest income” in the profit and loss account.

In accordance with the ECB Decision of 17 November 2005 (ECB/2005/11) on the distribution of the income of the ECB on euro banknotes in circulation to the national central banks (NCBs) of the participating Member States, this income arising from the 8% share of euro banknotes allocated to the ECB belongs to the NCBs and shall be distributed to them annually. This Decision stipulates however that the ECB’s Governing Council may decide before the end of the financial year to transfer part or all of this income to an ECB provision for foreign exchange rate, interest rate, credit risk and gold price risks. The ECB Governing Council may also decide before the end of the financial year not to distribute part or all of this income if it expects that the ECB will incur a loss or that its net profit for that year may be less than the amount of seigniorage income on its euro banknotes in circulation. Finally, the distribution of this income may be reduced in accordance with any decision by the ECB’s Governing Council in respect of expenses incurred by the ECB in connection with the issue and handling of euro banknotes.

Intra-Eurosystem balances arise from the Banco de España’s participating interest in the ECB, claims equivalent to the reserves transferred to the ECB and the net balance resulting from the transfers issued and received by TARGET27 among the NCBs of the ESCB, including the ECB. They also arise from the balances vis-à-vis the ECB resulting from allocation of euro banknotes within the Eurosystem, from the outcome of the contribution and allocation of monetary income and from the positions vis-à-vis the ECB owing to the deferral of sundry receipts and payments.

In the case of TARGET2 operations, the resulting balance is included as an asset or liability, as appropriate, under the item “Other claims/liabilities within the Eurosystem (net)”. Intra-ESCB balances arising from the allocation of euro banknotes within the Eurosystem are included, depending on their net amount, as an asset or liability under “Net claim/liability related to the allocation of euro banknotes within the Eurosystem” (see “Banknotes in circulation” in this section on accounting policies).

Income and expenses are recognised in the period in which they accrue.

Realised gains and realised and unrealised losses are taken to the profit and loss account. To calculate the acquisition cost of items sold, the average cost method is used for securities and the daily net average cost method is used for foreign currencies and gold. In the case of unrealised losses on any item at year-end, its average cost is reduced to the end-of-year market price and/or exchange rate.

Unrealised gains are not recognised as income, but are transferred to a revaluation account.

7. Trans-European Automated Real-time Gross settlement Express Transfer system.
Unrealised losses are taken to the profit and loss account if they exceed previous revaluation gains recorded in the corresponding revaluation account, and are not reversed in subsequent years against new unrealised gains. Unrealised losses in any one security or currency or in gold are not netted against unrealised gains in other securities or currencies.

Premiums or discounts on purchased securities are calculated and shown as reductions of or additions to interest income and accrued over the remaining life of the securities concerned, together with the accrued coupons, according to the internal rate of return method.

The Pension Scheme for Bank employees is of the defined-contribution type. The Pension Fund is external and closed-end. Contributions made by the Banco de España on behalf of the employees who, having joined the Bank after 1 February 1986, are eligible to and do participate in the Scheme, are established at 7.5% of the so-called “regulating salary”, consisting of the salary items determined in the Scheme Rules. The amounts contributed by the Bank are recognised as a current expense in the year to which they relate.

In application of the principle of prudence, the liabilities side of the balance sheet includes provisions approved by the Executive Commission of the Banco de España which are considered necessary to cover adequately, on objective criteria, the risks derived from the financial positions held and other losses of a diverse nature (see Note 28 on the balance sheet).

Foreign exchange forward currency positions, which comprise transactions and forward legs of foreign exchange swaps, are included in the net foreign currency positions in order to calculate foreign exchange gains and losses.

As a general rule, profits and losses arising from off-balance-sheet positions are recognised and treated in a similar manner to those arising from on-balance-sheet assets and liabilities. Specifically, in application of the economic approach, the gains and losses on positions in interest rate futures are considered to be realised at the time when they are settled net each day. Since these futures are denominated in foreign currency, such settlements shall affect the foreign currency position on the day on which they take place.

The Banco de España’s gold holdings amount to €6,938.31 million, consisting of 9.054 million troy ounces\(^9\) of fine gold valued at a market price of €766.35 per ounce. The value of these holdings is €1,311.03 million more than in 2008, as a result of the rise in the market price (at end-2008 the price per ounce was €621.54). This increase is included in the liability revaluation accounts. The cost of the gold holdings is €850.43 million.

---

8. The net position under foreign exchange forward transactions and swaps, and the foreign-exchange gains and losses generated by such position are shown in the balance sheet under items 11.3 on the assets side and 12.1 on the liabilities side, depending on their sign. 9. One troy ounce is equal to 31.1035 grams.
This item has three components:

a) The position in the International Monetary Fund (IMF) in the reserve tranche. This is the euro equivalent of the SDRs relating to the foreign currencies assigned to the IMF due to Spain’s initial quota and successive increases in it and due to the net financing granted to the IMF.

b) Special drawing rights (allocations). These represent the euro equivalent of the successive allocations of this currency by the IMF. The changes in allocations are mainly due to loan agreement transactions with third countries and to interest receipts or payments resulting from positions vis-à-vis the IMF.

c) Other claims on the IMF. These reflect the amount that the Banco de España has provided to the IMF as a contribution to the Poverty Reduction and Growth Facility. This fund is used to finance low-interest loans to the poorest countries. The Banco de España has undertaken to contribute a maximum of SDR 425 million to this fund.

The breakdown in 2008 and 2009 is as follows:

<table>
<thead>
<tr>
<th>Type of asset</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserve tranche position</td>
<td>541.30</td>
<td>466.58</td>
<td>74.72</td>
</tr>
<tr>
<td>Special drawing rights (allocation)</td>
<td>3,221.20</td>
<td>160.10</td>
<td>3,061.10</td>
</tr>
<tr>
<td>Other claims on the IMF</td>
<td>356.66</td>
<td>240.99</td>
<td>115.67</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4,119.17</strong></td>
<td><strong>867.67</strong></td>
<td><strong>3,251.49</strong></td>
</tr>
</tbody>
</table>

The overall amount of claims on the IMF increased by €3,251.49 million with respect to the balance at end-2008.

The increase in the reserve tranche position account (€74.72 million) is basically due to the Banco de España’s net contributions to the IMF for loans to third countries (Turkey, Hungary, Sri Lanka and Romania). Of this increase, €82.78 million related to the net increase in amounts denominated in foreign currencies, reduced by €8.06 million due to the effect of the change in market foreign exchange rates between the two years. Spain’s IMF quota was not changed in 2009, remaining at SDR 3,048.90 million.

The increase of €3,061.10 million in the “Special drawing rights (allocation)” account is mostly explained by the extraordinary SDR allocations agreed in the IMF. These amounted to €2,752.80 million (€2,528.75 million SDRs). The net increase explained by the rise in foreign currencies (€3,109.04 million) was reduced by €47.94 million due to the year-end exchange rate effect.

The increase in the “Other claims on the IMF” account (€115.67 million) is due to the Banco de España’s contributions to the IMF’s PRGF III programme, which resulted in an increase of €120.98 million, less €5.31 million due to the change in exchange rates between the two years.

SDRs are valued at the year-end market rate, calculated by the ECB for all the Eurosystem NCBs, of 1 = SDR 0.918611. The SDR is defined in terms of a basket of currencies. Its value...
is determined as the weighted sum of the exchange rates of four major currencies: the US dollar, the euro, the yen and the pound sterling. The interest rate, which is updated weekly, remained between 0.82% and 0.23% during the year.

This item includes current accounts, deposits, debt security investments in the trading and held-to-maturity portfolios and other claims on non-euro area residents denominated in foreign currency. The held-to-maturity portfolio consists of securities with fixed or determinable payments which the Banco de España intends to hold until maturity.

The total amount as at 31 December 09 was €8,187.65 million, with the following breakdown:

<table>
<thead>
<tr>
<th>EUR m</th>
<th>Type of asset</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deposits</td>
<td>144.65</td>
<td>95.69</td>
<td>48.96</td>
</tr>
<tr>
<td></td>
<td>Security investments</td>
<td>8,042.39</td>
<td>7,413.75</td>
<td>628.65</td>
</tr>
<tr>
<td></td>
<td>Trading portfolio</td>
<td>4,149.24</td>
<td>3,374.09</td>
<td>775.15</td>
</tr>
<tr>
<td></td>
<td>Held-to-maturity portfolio</td>
<td>3,892.15</td>
<td>4,039.65</td>
<td>-146.50</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>0.60</td>
<td>1.62</td>
<td>-1.02</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>8,187.65</td>
<td>7,511.06</td>
<td>676.59</td>
</tr>
</tbody>
</table>

As at 31 December 2009, 99.74% of these assets were denominated in US dollars. The equivalent value in euro of this US dollar amount was transferred to the balance sheet at the year-end market exchange rate (€1 = USD 1.4406).

The increase in the balance of this item (€676.59 million) was due to the net effect of the factors listed in the following table:

<table>
<thead>
<tr>
<th>EUR m</th>
<th>Reason for change</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Net investment</td>
<td>1,052.20</td>
</tr>
<tr>
<td></td>
<td>Changes of market exchange rates as at 31 December</td>
<td>-285.91</td>
</tr>
<tr>
<td></td>
<td>Changes of securities market prices as at 31 December</td>
<td>-107.96</td>
</tr>
<tr>
<td></td>
<td>Accrued interest receivable</td>
<td>18.64</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>-0.38</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>676.59</td>
</tr>
</tbody>
</table>

This balance sheet item may include current accounts, balances with banks and security investments. Its balance of €0.01 million at 31 December 2009 is €8,940.58 million less than that of the previous year. This decrease was because at end-2009 no US dollar denominated deposits at monetary financial institutions were held (the euro equivalent of these deposits at end-2008 was €718.55 million) and because in the closing months of 2009 no reverse operations were carried out with Eurosystem counterparties in connection with the US dollar Term Auction Facility, the balance of which at the previous year-end amounted to €8,222.03 million.

Included here is the balance of current accounts at correspondents and trading and held-to-maturity portfolio securities denominated in euro. The held-to-maturity portfolio consists of securities with fixed or determinable payments which the Banco de España intends to hold until maturity.
The breakdown is as follows:

<table>
<thead>
<tr>
<th>EUR m</th>
<th>Type of asset</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Balances with banks</td>
<td>0.21</td>
<td>0.22</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>Security Investments</td>
<td>1,014.75</td>
<td>2,928.78</td>
<td>-1,914.03</td>
</tr>
<tr>
<td></td>
<td>Trading portfolio</td>
<td>108.94</td>
<td>110.41</td>
<td>-1.48</td>
</tr>
<tr>
<td></td>
<td>Held-to-maturity portfolio</td>
<td>905.81</td>
<td>2,818.37</td>
<td>-1,912.56</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>1,014.96</td>
<td>2,929.01</td>
<td>-1,914.05</td>
</tr>
</tbody>
</table>

Of the total of this heading (€1,014.96 million), most (€905.81 million) relates to fixed-income securities included in the held-to-maturity portfolio, which, however, decreased by €1,912.56 million with respect to the balance as at 31 December 2008 as a result of redemptions during the year. This portfolio consists of euro-denominated securities issued by non-euro area States and by international organisations (the European Investment Bank and the Bank for International Settlements). The balance of €108.94 million of the securities included in the trading portfolio is €1.48 lower than in the previous year and relates in full to securities issued by international agencies (European Investment Bank).

This item includes the amount of the euro-denominated lending to euro area credit institutions through which monetary policy is implemented. The total amount of these loans in the Eurosystem as a whole is €749,890 million, of which €90,087.62 are included in the balance sheet of the Banco de España. Pursuant to Article 32.4 of the ESCB/ECB Statute, any counterparty risks that materialise in monetary policy operations must be shared by all Eurosystem banks in proportion to their share of the subscribed capital of the ECB according to the capital keys in force when this risk materialises (see the provision for counterparty risk in monetary policy operations, in Note 28.- Provisions).

The breakdown by type of transaction is as follows:

<table>
<thead>
<tr>
<th>EUR m</th>
<th>Type of operation</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Main financing operations</td>
<td>657.70</td>
<td>22,168.90</td>
<td>-21,511.20</td>
</tr>
<tr>
<td></td>
<td>Longer-term refinancing operations</td>
<td>89,421.45</td>
<td>70,284.55</td>
<td>19,136.90</td>
</tr>
<tr>
<td></td>
<td>Fine-tuning reverse operations</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Structural reverse operations</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Marginal lending facility</td>
<td>—</td>
<td>63.00</td>
<td>-63.00</td>
</tr>
<tr>
<td></td>
<td>Credits related to margin calls</td>
<td>8.47</td>
<td>60.25</td>
<td>-51.78</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>90,087.62</td>
<td>92,576.70</td>
<td>-2,489.08</td>
</tr>
</tbody>
</table>

Throughout the whole of 2009, against a background of money market tensions in the euro area, the ECB conducted liquidity-providing operations of various maturities to meet the additional liquidity demands of counterparties.

The balance of this item as at 31 December 2009 is 2.69% less than that of 2008. However, the average daily balance of the financing granted during the year increased by 42.13% (€80,937.90 million in 2009, against €56,946.04 million in 2008).
19.21% of the annual average balance of daily financing was extended through “Main refinancing operations” and another 80.75% was granted under “Longer-term refinancing operations”, which represents a very significant increase with respect to the previous year. Only 0.04% of this balance was financed through other instruments.

a. Main refinancing operations

These operations play a pivotal role in achieving the aims of steering interest rate, managing market liquidity and signalling the monetary policy stance. However, in the reporting year they lost ground, being replaced in this function by longer-term refinancing operations. They are executed through liquidity providing reverse transactions with a weekly frequency and a maturity of one week, normally by means of standard tenders. From October 2008, the operations are conducted at fixed rate with allotment of the total amount bid.

The balance of this item as at 31 December 2009 was €657.70 million, which was €21,511.20 million less than at 31 December 2008, this reduction being offset by the increase in financing extended through longer-term operations. The average balance decreased from €20,794.04 million in 2008 to €15,544.88 in 2009.

b. Longer-term refinancing operations

Originally these operations aimed to provide counterparties with additional longer-term refinancing. They were executed through liquidity-providing reverse transactions with a monthly frequency and a maturity of three months, normally by means of standard tenders. However, to improve liquidity provision in the Eurosystem in 2008 and 2009, these regular main longer-term refinancing operations were accompanied by other supplementary longer-term refinancing operations with maturities of three months, six months and one year (the latter only in 2009), as well as by financing operations with special maturities equal to the reserve maintenance. From October 2008 these operations are also being conducted at fixed rate with allocation of the whole amount bid.

As a result, at end-2009 the balance of this item was very high at €89,421.45 million (99.26% of the total), having increased by €19,136.90 million with respect to the previous year. Similarly, its average balance rose from €36,009.21 million in 2008 to €65,354.89 in 2009. This increase was for the reasons explained above.

c. Fine-tuning reverse operations

The purpose of these operations is to smooth the effects on interest rates caused by unexpected market fluctuations. Owing to their nature, their frequency is not standardised.

The end-2009 balance was zero, as it was at the previous year-end. No fine-tuning reverse operations took place during the year.

d. Structural reverse operations

These are reverse open-market transactions through standard tenders to enable the Eurosystem to adjust its structural liquidity position vis-à-vis the financial sector.

The end-2009 balance was zero, as it was at the previous year-end. No structural reverse operations took place during the year.

e. Marginal lending facility

Counterparties may use the marginal lending facility to obtain overnight liquidity from NCBs at a pre-specified interest rate against eligible assets. This interest rate is penalised with respect to the intervention rate set in the weekly tenders or in main refinancing operations.

The balance at the end of 2009 was zero. There were few of these operations during the year and, as a result, the average balance decreased significantly from €67.50 million in 2008 to €9.86 million in 2009.
f. Credits related to margin calls

Under Eurosystem rules for monetary policy management, all operations providing liquidity to the banking system must be backed by adequate underlying assets accepted by the system as eligible for use as collateral. If, after daily valuation, the market value of the assets used as loan collateral has fallen below the lower trigger point set for each security, the counterparty must provide additional assets or cash (see Note 17). If the market value of the underlying assets, following their revaluation, exceeds the amount of the financing obtained from the NCB plus the variation margin, the counterparty may withdraw an amount of underlying assets equal to that excess (or receive this difference as a cash payment in its account).

In the NCBs that make margin calls by debiting or crediting the accounts of credit institutions, as is the case for the Banco de España, these debits or credits are the balancing entries of the asset-side or liability-side accounts reflecting the changes in these margins. These balance sheet accounts are remunerated at the interest rate applied in main refinancing operations.

As at 31 December 2009 this item had a balance of €8.47 million, down €51.78 million with respect to the previous year.

This item includes claims on credit institutions unrelated to monetary policy operations. Its balance of €1,151.64 million as at 31 December 2009 includes the amount of the correspondent accounts in euro with credit institutions (€1.64 million, down €0.51 million on 2008) and liquidity-support loans to credit institutions (€1,150.00 million).

On 7 May 2009 the ECB Governing Council approved the creation of a monetary policy securities portfolio. The securities included in this portfolio should be recorded in the balance sheet separately from the other euro-denominated securities issued by euro-area residents. Consequently, in 2009 this item was broken down into two sub-items: “Securities held for monetary policy purposes” and “Other securities” (previously, the latter constituted the whole item).

This item includes the amount of euro-denominated fixed-income securities issued by euro area residents which were acquired by the Banco de España for monetary policy purposes under the programme of purchases approved by the ECB Governing Council on 7 May 2009. The purchases began in July 2009. The Governing Council decided to classify these securities as held-to-maturity (see “Securities” in Section 3.1 “Accounting policies”. The balance at 31 December 2009 was €3,400.37 million and there was no objective evidence that these assets were impaired at year-end.

This item includes that part of the Bank’s trading and held-to-maturity portfolio which consists of euro-denominated fixed-income securities issued by euro area residents. The held-to-maturity portfolio consists of securities with fixed or determinable payments which the Banco de España intends to hold until maturity. The breakdown of this item is as follows:

<table>
<thead>
<tr>
<th>EUR m</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Security investments</td>
<td>2009</td>
<td>2008</td>
<td>Change</td>
</tr>
<tr>
<td>Trading portfolio</td>
<td>40,279.80</td>
<td>42,293.25</td>
<td>-2,013.44</td>
</tr>
<tr>
<td>Held-to-maturity portfolio</td>
<td>40,660.51</td>
<td>33,610.69</td>
<td>7,049.82</td>
</tr>
<tr>
<td>TOTAL</td>
<td>80,940.31</td>
<td>75,903.94</td>
<td>5,036.37</td>
</tr>
</tbody>
</table>

The balance of this item as at 31 December 2009 was €80,940.31 million, of which 49.76% related to trading portfolio securities and the remainder (50.24%) to held-to-maturity securities.
Overall, these securities increased by €5,036.37 million in 2009. It was, however, held-to-maturity securities which underwent an increase, of €7,049.82 million, whereas trading securities decreased by €2,013.44 million.

Specifically, the changes were for the reasons reflected in the following table:

<table>
<thead>
<tr>
<th>EUR m</th>
<th>Trading portfolio</th>
<th>Held-to maturity portfolio</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net purchase of securities</td>
<td>-1,720.46</td>
<td>7,075.18</td>
<td>5,354.72</td>
</tr>
<tr>
<td>Unrealised gains at year-end (a)</td>
<td>50.59</td>
<td>-</td>
<td>50.59</td>
</tr>
<tr>
<td>Unrealised losses at year-end (a)</td>
<td>-14.11</td>
<td>-</td>
<td>-14.11</td>
</tr>
<tr>
<td>Accrued implicit interest</td>
<td>-329.46</td>
<td>-25.36</td>
<td>-354.83</td>
</tr>
<tr>
<td>TOTAL</td>
<td>-2,013.44</td>
<td>7,049.82</td>
<td>5,036.37</td>
</tr>
</tbody>
</table>

a. As stated in Section 3.1 "Accounting policies", no periodic valuation is performed on the held-to-maturity portfolio.

This portfolio includes securities issued by general government and by financial institutions in the euro area. It should be noted that all purchases of debt issued by general government are in the secondary market, none being direct subscriptions of security issues.

This item includes loans which, by virtue of their respective laws of creation, were granted to the State prior to the entry into force of Law 21/1993 of 29 of December 1993 on the State budget for 1994. Initially they were to be repaid at their nominal amount on a straight-line basis over twenty-five years by means of yearly payments as from 1999, inclusive, in accordance with transitional provision seven of the aforementioned law. However, on 26 March 2007 an agreement was entered into with the central government to bring forward the repayment schedule of these loans, such that they mature in full by 2015 at the latest and the Treasury can request early repayment of all or part of them. Loans repaid early are paid by the Treasury at the cash amount of their market value at the time. A provision has been set up for losses arising from early repayment of these loans (see Note 28 on the balance sheet).

Under that agreement, in 2009 two instalments of the Law 3/1983 loan (that of the reporting year and the last outstanding instalment of the original repayment schedule) and the instalments of the other two loans corresponding to the reporting year were paid.

The outstanding nominal balance as at 31 December 2009 of the loans granted to the State amounted to €4,665.45 million, broken down as follows:

<table>
<thead>
<tr>
<th>EUR m</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treasury. Law 3/1983 special account</td>
<td>1,171.51</td>
<td>1,366.76</td>
<td>-195.25</td>
</tr>
<tr>
<td>Treasury. Credits arising from subscription for</td>
<td>367.35</td>
<td>408.17</td>
<td>-40.82</td>
</tr>
<tr>
<td>participating interests, contributions and quotas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in international agencies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>4,665.45</td>
<td>5,248.92</td>
<td>-583.47</td>
</tr>
</tbody>
</table>
The change was solely due to yearly repayments on the above-mentioned loans, as set out above. The amounts are shown in the above table.

This heading includes the amounts of the following items:

<table>
<thead>
<tr>
<th>EUR m</th>
<th>Type of asset</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participating interest in the ECB</td>
<td>663.30</td>
<td>437.71</td>
<td>225.59</td>
</tr>
<tr>
<td></td>
<td>Claims equivalent to the transfer of foreign reserve assets to the ECB</td>
<td>4,783.65</td>
<td>4,349.18</td>
<td>434.47</td>
</tr>
<tr>
<td></td>
<td>Net claims related to the allocation of euro banknotes within the Eurosystem</td>
<td>7,674.24</td>
<td>—</td>
<td>7,674.24</td>
</tr>
<tr>
<td></td>
<td>Other claims within the Eurosystem (net)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>13,121.19</td>
<td>4,786.88</td>
<td>8,334.31</td>
</tr>
</tbody>
</table>

As at 31 December 2009 this item totalled €663.30 million. This total amount is divided into two components: participating interest in capital and participating interest in equity excluding capital. Regarding the first of these components, the capital subscribed and paid by the Banco de España amounted to €478.36 million, which is equal to a share of 8.3040% in such capital. This percentage is that corresponding to the Banco de España in accordance with the capital key established using European Commission data on the basis of Spain’s population and GDP relative to those of the total ESCB countries. The second component (participating interest in ECB equity excluding capital) amounted at that date to €184.94 million, which is the amount paid for the Banco de España’s participating interest in ECB reserves due to the increase in the Banco de España’s share of the ECB capital key.

Pursuant to Article 28 of the ESCB Statute, the ESCB national central banks are the sole subscribers to the capital of the ECB. Subscriptions depend on the participating interests fixed in accordance with Article 29.3 of the ESCB Statute, which must be adjusted every five years or whenever new Member States join the European Union and their NCBs thus join the ESCB. In this respect the second five-yearly change in the capital keys took place on 1 January 2009. That date also saw the admission of a new Eurosystem member, the Central Bank of Slovakia. Based on the Council Decision of 15 July 2003 on the statistical data to be used for the determination of the key for subscription of the capital of the European Central Bank, the capital keys of the NCBs were adjusted on 1 January 2009, as follows.
On 1 January 2009 the Banco de España’s share in the subscribed capital of the ECB (€5,761 million) increased by 7.5498% to 8.3040% and its participating interest in the capital of the ECB rose from €434.92 million to €478.36 million.

Additionally, as a result of the aforementioned changes in capital keys, the Banco de España had to disburse the amount relating to the increase in its participating interest in ECB equity excluding capital, the paid-up amount of which increased from €2.79 million in 2008 to €184.94 million.

These represent ECB’s debt to the Banco de España arising from the transfer of foreign reserve assets to the ECB. The claims equivalent to the transferred reserves are denominated in euro at a value fixed from the time of their transfer. They are remunerated at the marginal rate for the Eurosystem’s main refinancing operations, reduced by 15% to reflect a zero return on the gold component.

The change in the ECB’s capital key on 1 January 2009 made it necessary to adjust the assets that the ECB credited to the NCBs for their contributions of external reserve assets to it. To reflect the increase in the Banco de España’s share of the ECB capital key, an additional contribution of foreign reserve assets was made to the ECB for the equivalent of €434.47 million, as a result of which the balance rose to €4,783.65 million in 2009.
This account, the balance of which amounted to €7,674.24 million at end-2009, consists of the claims and liabilities of the Banco de España vis-à-vis the Eurosystem in relation to the allocation of euro banknotes within the Eurosystem (see “Banknotes in circulation” and “Intra-Eurosystem balances” in the section on accounting policies).

At 31 December 2008 these accounts had a net credit balance (€7,125.42 million) and were included in item 10.1 on the liabilities side. The change is due both to the increase from 9.9660% to 10.9465% in the share in the Eurosystem banknote allocation key as a result of the changes in the ECB’s capital key derived from the five-yearly adjustment, and to the decrease in banknotes in circulation in Spain during 2009 (-3.06%) as opposed to the increase in the Eurosystem as a whole (5.72%).

In accordance with Eurosystem rules, since the accounts making up this item have a net credit balance, this information is presented on the liabilities side of the balance sheet.

The breakdown of this item into its components, together with their accumulated depreciation, is as follows:

<table>
<thead>
<tr>
<th>EUR m</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TANGIBLE FIXED ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land and unbuilt plots</td>
<td>535.30</td>
<td>535.30</td>
<td>0.00</td>
</tr>
<tr>
<td>Buildings, structures and renovation work</td>
<td>106.41</td>
<td>103.11</td>
<td>3.30</td>
</tr>
<tr>
<td>Plant in buildings</td>
<td>162.67</td>
<td>146.91</td>
<td>15.76</td>
</tr>
<tr>
<td>Furniture and fittings</td>
<td>36.42</td>
<td>34.98</td>
<td>1.43</td>
</tr>
<tr>
<td>Office machines other than computer</td>
<td>47.59</td>
<td>43.54</td>
<td>4.05</td>
</tr>
<tr>
<td>Computer equipment</td>
<td>55.56</td>
<td>54.77</td>
<td>0.79</td>
</tr>
<tr>
<td>Transport equipment</td>
<td>8.67</td>
<td>8.54</td>
<td>0.12</td>
</tr>
<tr>
<td>Library collection</td>
<td>5.01</td>
<td>9.78</td>
<td>-4.77</td>
</tr>
<tr>
<td>Other tangible fixed assets</td>
<td>3.90</td>
<td>3.74</td>
<td>0.16</td>
</tr>
<tr>
<td>Art collection</td>
<td>38.54</td>
<td>38.49</td>
<td>0.05</td>
</tr>
<tr>
<td><strong>INTANGIBLE FIXED ASSETS</strong></td>
<td>53.03</td>
<td>47.51</td>
<td>5.52</td>
</tr>
<tr>
<td>Computer applications</td>
<td>52.97</td>
<td>47.45</td>
<td>5.52</td>
</tr>
<tr>
<td>Industrial property</td>
<td>0.06</td>
<td>0.06</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>FIXED ASSETS IN PROGRESS</strong></td>
<td>30.35</td>
<td>35.19</td>
<td>-4.84</td>
</tr>
<tr>
<td>Buildings, plant in buildings and other</td>
<td>20.28</td>
<td>28.81</td>
<td>-8.52</td>
</tr>
<tr>
<td>structures under construction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer applications under development</td>
<td>9.20</td>
<td>5.50</td>
<td>3.70</td>
</tr>
<tr>
<td>Other fixed assets in progress</td>
<td>0.87</td>
<td>0.89</td>
<td>-0.02</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>553.49</td>
<td>531.91</td>
<td>21.58</td>
</tr>
</tbody>
</table>
The increase in fixed assets in 2009 basically arose from investment in electrical and air conditioning fixtures in Madrid buildings and in several branches, and from the refurbishment of those buildings. Also noteworthy was the increased investment in non IT office equipment, mainly for processing banknotes and coins, and the increased development of certain computer applications. In 2009, as required by the new rules applicable to these fixed assets, the investments in bibliographical resources were removed from the balance sheet as they had been depreciated in full.

This item includes €50.45 million of financial investments relating basically to the Banco de España’s participating interests in the Bank for International Settlements and Bolsas y Mercados Españoles, Sociedad Holding de Mercados y Sistemas Financieros, S.A. The increase of €0.88 million in these financial assets was basically due to the rise in the underlying book value of the shares of the latter company.

This item includes the amount of the net debtor position arising from foreign-exchange forward and swap transactions valued at the exchange rates prevailing at the end of the year. When the position is a creditor one, as in 2009, it is recorded under the same heading in liability item 12.1 (see Note 25 on the balance sheet).

The main components of this item, the balance of which amounts to €2,126.12 million, are as follows:

10. The refurbishment of buildings is accounted for as an addition to fixed assets if it meets the criteria set out in Section 3.1 “Accounting policies” in regard to tangible and intangible fixed assets.
As can be seen from the foregoing table, the most significant accounts are accrued interest arising from securities acquisitions and accrued coupon interest receivable denominated in euro arising from the trading portfolio (€804.56 million) and from the held-to-maturity portfolio (€813.87 million). In total, this interest increased by €39.70 million with respect to 2008. Furthermore, accrued interest receivable on monetary policy operations decreased significantly (by €230.75 million) due to the lower interest rate applied. Additionally, there was a decrease in interest receivable on claims equivalent to the transfer of foreign reserve assets to the ECB, on exceptional liquidity-providing transactions and on deposits and assets denominated in foreign currency. Lastly, in 2009 the interest accrued on intra-Eurosystem banknote adjustment and offsetting accounts became interest receivable (€19.66 million, relating to accruals in the fourth quarter), whereas in 2008 it was payable.

The most significant components of this item, which totals €1,907.47 million, are the transfer to the Treasury on 1 December 2009 of €1,706.67 million, equivalent to 70% of 80% of the Bank’s distributable profits earned to 30 September 2009 (see Note 15 on the profit and loss account), which was €652.85 million higher than in the previous year, and the home loans and repayable advances granted to Bank employees, the balance of which, at €189.40 million, was up by €0.30 million.

The balance of banknotes in circulation (€88,273.78 million) represents the Banco de España’s share in the total euro banknotes in circulation (see “Banknotes in circulation” in Section 3.1 - Accounting policies) according to the Eurosystem euro banknote allocation key (10.9465% of

<table>
<thead>
<tr>
<th>EUR m</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCRUED INTEREST ARISING FROM SECURITIES ACQUISITIONS AND ACCRUED COUPON INTEREST</td>
<td>1,720.19</td>
<td>1,680.49</td>
<td>39.70</td>
</tr>
<tr>
<td>Trading portfolio</td>
<td>813.46</td>
<td>873.40</td>
<td>-59.95</td>
</tr>
<tr>
<td>Denominated in foreign currency</td>
<td>8.89</td>
<td>16.81</td>
<td>-7.92</td>
</tr>
<tr>
<td>Denominated in euro</td>
<td>804.56</td>
<td>856.59</td>
<td>-52.03</td>
</tr>
<tr>
<td>Held-to-maturity portfolio</td>
<td>848.17</td>
<td>807.08</td>
<td>41.09</td>
</tr>
<tr>
<td>Denominated in foreign currency</td>
<td>34.30</td>
<td>35.49</td>
<td>-1.19</td>
</tr>
<tr>
<td>Denominated in euro</td>
<td>813.87</td>
<td>771.59</td>
<td>42.28</td>
</tr>
<tr>
<td>Securities held for monetary policy purposes</td>
<td>58.56</td>
<td>—</td>
<td>58.56</td>
</tr>
<tr>
<td>OTHER ACCRUED INTEREST RECEIVABLE</td>
<td>402.72</td>
<td>742.57</td>
<td>-339.85</td>
</tr>
<tr>
<td>On forward foreign exchange transactions</td>
<td>0.78</td>
<td>—</td>
<td>0.78</td>
</tr>
<tr>
<td>On deposits and other assets denominated in foreign currency</td>
<td>—</td>
<td>12.38</td>
<td>-12.38</td>
</tr>
<tr>
<td>On exceptional liquidity-providing operations</td>
<td>0.01</td>
<td>18.25</td>
<td>-18.24</td>
</tr>
<tr>
<td>On claims equivalent to the transfer of foreign reserves to the ECB</td>
<td>52.72</td>
<td>151.70</td>
<td>-98.98</td>
</tr>
<tr>
<td>On intra-Eurosystem claims arising from banknote adjustments</td>
<td>19.66</td>
<td>—</td>
<td>19.66</td>
</tr>
<tr>
<td>On monetary policy operations</td>
<td>324.73</td>
<td>555.48</td>
<td>-230.75</td>
</tr>
<tr>
<td>On liquidity-providing loans</td>
<td>2.02</td>
<td>—</td>
<td>2.02</td>
</tr>
<tr>
<td>Other</td>
<td>2.80</td>
<td>4.78</td>
<td>-1.98</td>
</tr>
<tr>
<td>ACCRUED COMMISSIONS RECEIVABLE AND PREPAID EXPENSES</td>
<td>3.21</td>
<td>2.81</td>
<td>0.40</td>
</tr>
<tr>
<td>ACCRUED DIVIDENDS RECEIVABLE</td>
<td>—</td>
<td>4.40</td>
<td>-4.40</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,126.12</td>
<td>2,430.26</td>
<td>-304.14</td>
</tr>
</tbody>
</table>
the total issue by all the central banks) after deducting those corresponding to the ECB (8% of the total). This balance was €12,255.62 million higher than in the previous year because of the greater volume of euro banknotes in circulation in the Eurosystem.

The overall balance of the different types of deposit held by credit institutions with the Banco de España amounted to €35,089.02 million at end-2009, €19,225.90 million less than in the previous year. This decline was basically due to the decrease in the deposit facility, minimally offset by the increase in the balances of credit institution current accounts (including minimum reserves).

The breakdown and the amounts in both reporting years are as follows:

<table>
<thead>
<tr>
<th>Type of liability</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current accounts (covering the minimum reserve system)</td>
<td>24,736.02</td>
<td>24,136.03</td>
<td>599.99</td>
</tr>
<tr>
<td>Deposit facility</td>
<td>10,352.00</td>
<td>30,106.40</td>
<td>-19,754.40</td>
</tr>
<tr>
<td>Fixed-term deposits</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Fine-tuning reverse operations</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Deposits related to margin calls</td>
<td>1.00</td>
<td>72.49</td>
<td>-71.49</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>35,089.02</strong></td>
<td><strong>54,314.92</strong></td>
<td><strong>-19,225.90</strong></td>
</tr>
</tbody>
</table>

The first component, which includes the total current and treasury accounts held by credit institutions at the Banco de España, in which they maintain the minimum reserves required for monetary policy implementation purposes, underwent a decrease of €599.99 million. Its average balance also increased during the year, rising from €24,009.94 million in 2008 to €26,052.70 million in 2009.

The item “Deposit facility”, which includes overnight deposits remunerated at a fixed interest rate (appreciably lower than the market rate), increased significantly from €30,106.40 million in 2008 to €10,352.00 million in 2009. However, analysis of the average balance shows a slight increase (€7,535.94 million in 2009, against €6,777.25 in the previous year), since in 2008 was only used, albeit substantially, in the closing months of the year, against a background of marked tension in the funding markets.

With regard to fixed-term deposits, as in 2008, there was no balance as at 31 December 2009.

They are fine-tuning operations (liquidity withdrawals) that take the form of deposits. In 2009 12 operations of this type were conducted in the Eurosystem. They coincided with the last day of the minimum reserve maintenance period and Spanish institutions participated in all of them.

The captions in this item relate to the deposits placed by credit institutions in relation to fine-tuning reverse operations and deposits related to margin calls. As at 31 December 2009, institutions’ balances of deposits related to margin calls amounted to €1.00 million (€72.49 million in 2008).
This item includes the deposits held by general government with the Banco de España. The outstanding balance at year-end was €31,233.05 million, which breaks down as follows:

<table>
<thead>
<tr>
<th>EUR m</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central government (State)</td>
<td>14,429.06</td>
<td>7,086.58</td>
<td>7,342.48</td>
</tr>
<tr>
<td>Treasury current account</td>
<td>365.25</td>
<td>4,501.72</td>
<td></td>
</tr>
<tr>
<td>Other central government agencies and similar bodies</td>
<td>14,123.81</td>
<td>2,584.86</td>
<td></td>
</tr>
<tr>
<td>Territorial government</td>
<td>960.17</td>
<td>1,880.97</td>
<td>-920.79</td>
</tr>
<tr>
<td>Regional (autonomous) governmenes, administrative agencies and similar bodies</td>
<td>954.85</td>
<td>1,875.53</td>
<td></td>
</tr>
<tr>
<td>Local government</td>
<td>5.32</td>
<td>5.44</td>
<td></td>
</tr>
<tr>
<td>Social security funds</td>
<td>15,843.81</td>
<td>9,602.96</td>
<td>6,240.84</td>
</tr>
<tr>
<td>Social Security System</td>
<td>14,773.28</td>
<td>8,939.17</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1,070.54</td>
<td>863.81</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>31,233.05</td>
<td>18,770.52</td>
<td>12,462.52</td>
</tr>
</tbody>
</table>

The increase in this item (€12,462.52 million) was basically due to the rise of €12,005 million in the balances held by the Fund for the Orderly Restructuring of Banks (FROB) under “Other central government agencies and similar bodies” and “Social security funds”, while the year-end balances of the Treasury and of territorial (regional and local) government declined with respect to the previous year.

Included here are the current accounts of financial institutions other than credit institutions, such as the Deposit Guarantee Funds, other financial intermediaries associated with securities markets settlement, other intermediaries in the debt book-entry market, etc., as well as the current accounts of non-administrative public and autonomous agencies of the State, the current accounts of employees and pensioners and other accounts of legal entities classified in “Other resident non-financial sectors”.

The balance at end-2009 was €1,492.52 million, and its decrease of €281.55 million with respect to end-2008 was basically due to the decrease in the balances of the current accounts of State agencies (€265.70 million).

This item includes the foreign-currency balances of non-euro area central banks and collateralised inward deposits recorded in respect of reverse transactions conducted under repurchase agreements. The end-2009 balance of €0.69 million was €71.16 million less than at the end of 2008 as a result of the significant decrease in US$-denominated deposits placed by these institutions.

This item of €3,078.08 million shows the amount of the special drawing rights allocated to Spain by the IMF in proportion to its quota. The total amount of this item increased by €2,747.96 million with respect to the previous year, due basically to the extraordinary SDR allocations.
agreed in the IMF. There was an initial increase in August as a result of the IMF Board of Governors’ approval of a general allocation to provide liquidity to the system, which in the case of the Banco de España amounted to SDR 2,260.18 million. In September there was a second extraordinary allocation of SDR 268.57 million.

23. INTRA-EUROSYSTEM BALANCES

This item, which as at 31 December 2009 had a balance of €41,033.92 million, comprises the following two sub-items:

a. Net liabilities related to the allocation of euro banknotes within the Eurosystem

This account, which had a zero balance at end-2009 (€7,125.42 million in 2008), consists of the claims and liabilities of the Banco de España vis-à-vis the Eurosystem in relation to the allocation of euro banknotes when they have an overall credit balance (see “Banknotes in circulation” and “Intra-Eurosystem balances” in the section on accounting policies).

It has had a debit balance since 1 January 2009, so it is shown in asset item 9.3 (see Note 10.c).

b. Other liabilities within the Eurosystem (net)

The balance of €41,033.92 million as at 31 December 2009 represents the sum of three components: 1) the position of the Banco de España vis-à-vis the ECB in respect of the transfers issued and received through TARGET2 by the ESCB national central banks, including the ECB, plus the balances held with Eurosystem central banks through correspondent accounts; 2) the position vis-à-vis the ECB in respect of the pooling and allocation of monetary income within the Eurosystem pending settlement; and 3) the Banco de España’s position vis-à-vis the ECB in respect of any amounts receivable or refundable, basically in respect of the seigniorage income relating to euro banknotes issued by the ECB.

Regarding the first component, the year-end net transfers via TARGET2 had a credit balance of €41,135.02 million, while the correspondent accounts showed a debit balance of €0.31 million. The remuneration of the Banco de España’s credit position vis-à-vis the ECB is calculated daily at the marginal interest rate on Eurosystem main refinancing operations.

The second component, i.e. the position vis-à-vis the ECB in respect of the annual pooling and allocation of monetary income within the Eurosystem national central banks, had a debit balance of €7.13 million at year-end (see “Net result of pooling of monetary income” in Note 8 on the profit and loss account).

Finally, in regard to the position vis-à-vis the ECB relating to the distribution of income arising from the seigniorage of euro banknotes issued on its behalf by the NCBs, following approval of the Decision of the European Central Bank of 17 November 2005 on the distribution of the income of the European Central Bank on euro banknotes in circulation to the NCBs of the participating Member States (ECB/2005/11), the income on euro banknotes in circulation earned in each financial year is distributed by the ECB on the second working day of the following year, although the ECB Governing Council may decide before the end of the financial year not to distribute part or all of this income (see “Banknotes in circulation” in Section 3.1).

In the reporting year, the ECB Governing Council decided to allocate in full the banknote seigniorage income among the Eurosystem central banks according to their respective keys. The Banco de España being allocated €93.66 million, this component posting a debit balance for this amount.

24 ITEMS IN COURSE OF SETTLEMENT

Included here are various accounts which as at 31 December 2009 were in the course of settlement, such as transfer instructions pending execution and transfers sent to deposit institutions yet to be reimbursed.
Of the total balance of this item (€103.69 million) at end-2009, €56.16 million correspond to transfers sent to credit institutions via the Sistema Nacional de Compensación Electrónica (National Electronic Clearing System) pending payment at year-end and settled on the following business day, and €45.98 million relate to transfers the beneficiary offices of which, on the last day of the year, had a local holiday or for some other reason were unable to process the transfer on the day.

The decrease of €142.95 million in this item with respect to the previous year is mainly due to the decrease in transfers ordered by credit institutions pending payment at year-end (€158.71 million).

This item includes the amount of the net creditor position arising from foreign-exchange forward and swap transactions valued at the exchange rates prevailing at the end of the year. When this position is a debit one, as it was in 2008, it is recorded under the same heading in asset item 11.3. Its balance of €79.67 million as at end-2009 is the net value of the forward and swap transactions outstanding at that date that are listed below:

<table>
<thead>
<tr>
<th>Operation</th>
<th>Position</th>
<th>Currency</th>
<th>Currency amount (million)</th>
<th>Market exchange rate</th>
<th>Equivalent (million €)</th>
<th>Equivalent (million €)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWAP</td>
<td>DEBTOR</td>
<td>EUR</td>
<td>170.00</td>
<td>1.0000</td>
<td>170.00</td>
<td>9,585.89</td>
</tr>
<tr>
<td></td>
<td>CREDITOR</td>
<td>CHF</td>
<td>233.43</td>
<td>1.4836</td>
<td>157.34</td>
<td>671.96</td>
</tr>
<tr>
<td></td>
<td>USD</td>
<td></td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>8,222.03</td>
</tr>
<tr>
<td>FORWARD</td>
<td>DEBTOR</td>
<td>EUR</td>
<td>2,627.54</td>
<td>1.0000</td>
<td>2,627.54</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>CREDITOR</td>
<td>USD</td>
<td>3,900.00</td>
<td>1.4406</td>
<td>2,707.21</td>
<td>--</td>
</tr>
<tr>
<td>NET POSITION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>79.67</td>
<td>-620.86</td>
</tr>
</tbody>
</table>

In 2008 the year-end balance related in full to swaps arranged within the framework of exceptional liquidity-providing transactions in foreign currencies. Under the agreements in place, both the Federal Reserve and the National Bank of Switzerland provided US dollars and Swiss francs to the ECB by means of swaps against euro. The ECB simultaneously carried out swaps with Eurosystem NCBs, which used the resulting funds to meet the liquidity needs of Eurosystem institutions, in the form of swaps and of repos (see Note 4 to the balance sheet).

In 2009, in view of the lower liquidity needs of Eurosystem institutions, the volume of these operations decreased and at year-end there were no outstanding transactions in US dollars, while those in Swiss francs amounted to €170 million.

A post-balance-sheet event worthy of mention was that in January 2010 the ECB Governing Council decided, in accordance with the central banks involved, to discontinue these operations in view of the lower demand and the improved functioning of the financial markets in 2009.

Also, at end-2009 there were forward sales of US dollars pending execution for an amount of €3,900 million.

This item includes interest accrued but not yet paid, expenses accrued but not yet paid and income collected in advance.
As at 31 December 2009, its balance amounted to €69.06 million, the main component being interest accrued but not yet paid (€61.94 million). The decrease in this item in 2009 (€149.91 million) is essentially because the interest incurred on intra-Eurosystem accounts relating to the adjustment of banknotes in circulation did not have a balance as at 31 December 2009 (€67.75 million in 2008), since, as stated in Note 10.c, these accounts became a remunerated asset. Also, interest incurred on minimum reserves, interest incurred on intra-Eurosystem accounts relating to TARGET2 transactions and interest incurred on Social Security accounts decreased with respect to 2008. The decrease in interest payable in foreign currencies (€17.62 million) basically relates to the sharp drop in exceptional liquidity-providing swap transactions in foreign currencies which had not yet matured at year-end. These decreases were partly offset by the interest payable to remunerate the Fund for the Orderly Restructuring of Banks (FROB) accounts created in 2009 (€7.65 million).

27 OTHER LIABILITIES, SUNDRY

This includes other liabilities not classifiable above.

As at 31 December 2009 the balance of this item amounted to €227.19 million (€44.22 million less than in 2008) and its main component was the “Banco de España employee social welfare scheme (Mutualidad de empleados).- Contributions payable” (€119.47 million). The most significant change relates to the decrease of €42.31 million in this debt to the employee social welfare scheme.

28 PROVISIONS

With the exception of country-risk provisions, which are presented in the balance sheet as reductions of the value of the assets concerned, provisions are recorded under this item, with the following breakdown:

<table>
<thead>
<tr>
<th>EUR m</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>For exchange rate and interest rate risks</td>
<td>3,808.71</td>
<td>3,103.92</td>
<td>704.79</td>
</tr>
<tr>
<td>For early repayment of special loans</td>
<td>734.01</td>
<td>967.75</td>
<td>-233.74</td>
</tr>
<tr>
<td>For counterparty risks in Eurosystem</td>
<td>434.49</td>
<td>621.35</td>
<td>-186.86</td>
</tr>
<tr>
<td>monetary policy operations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For credit risk</td>
<td>168.91</td>
<td>—</td>
<td>168.91</td>
</tr>
<tr>
<td>For operational risk</td>
<td>22.86</td>
<td>—</td>
<td>22.86</td>
</tr>
<tr>
<td>For exchange of withdrawn peseta banknotes</td>
<td>17.70</td>
<td>37.13</td>
<td>-19.42</td>
</tr>
<tr>
<td>For early and regular retirement</td>
<td>33.05</td>
<td>39.05</td>
<td>-6.00</td>
</tr>
<tr>
<td>For death and retirement assistance</td>
<td>72.47</td>
<td>70.26</td>
<td>2.22</td>
</tr>
<tr>
<td>For sundry liabilities and charges</td>
<td>19.84</td>
<td>8.21</td>
<td>11.62</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>5,312.04</strong></td>
<td><strong>4,847.66</strong></td>
<td><strong>464.38</strong></td>
</tr>
</tbody>
</table>

Provision for exchange rate and interest rate risks

This is the most important provision. It was created by a resolution of the Executive Commission of 26 January 1999 to cover exchange rate risks affecting the external reserves of the Banco de España. Subsequently, on 14 April 2004 the Executive Commission resolved to extend the purpose of this provision to include the coverage of interest rate risk. The balance of this provision as at 31 December 2009 amounted to €3,808.71 million, which was €704.79 more than in 2008 (see Note 5 on the profit and loss account).

The balance of this provision is revised annually based on the Banco de España’s valuation of its exposure to the aforementioned risks by value-at-risk methodology. This review takes into account, in addition to that valuation, a number of factors, including the estimated profit for the
coming year and the envisaged behaviour of risk assets and any others deemed to be worthy of consideration under the circumstances. In this respect, on 30 December 2009 the Executive Commission adjusted to the new market conditions, inter alia, the calculation basis and the percentages of coverage to be applied for exchange rate and interest rate risks in each portfolio. With regard to exchange rate risk, it decided that the amount of coverage would be the total value at risk of the USD and SDR currencies. For interest rate risk, it decided on total coverage of the value at risk of the trading and monetary policy portfolios, and on coverage of 10% for the held-to-maturity portfolio.

The agreement in 2007 with the Spanish State government whereby the Treasury can ask to repay a portion or all of these loans early, paying a cash amount equal to their market value instead of their nominal amount, led the Banco de España to set up in that year a provision for losses due to early repayment of special loans, so as to cover the possible losses that may arise from early repayment of these loans (recorded in asset item 8; see Note 9). The balance of this provision was set at the difference between the nominal amount and the current market value of the loans. Its balance of €734.01 million as at 31 December 2009 was €233.74 million less than in the previous year.

In accordance with the general accounting principle of prudence, the ECB Governing Council considered it appropriate in 2008 to establish a buffer totalling €5,736 million against counterparty risks in monetary policy operations (see these operations in Note 6 to the balance sheet). In accordance to Article 32.4 of the ESCB/ECB Statute, this buffer will be funded among all the national central banks of participating Member States in proportion to their subscribed capital key shares in the ECB prevailing at the time. As a result, a provision for €621.35 million, equivalent to 10.8324% of the total provision, was created. On 4 February 2010 the ECB Governing Council reviewed the adequacy of the amount of this provision with effect as at 31 December 2009 and decided to reduce it from €5,736 million to €4,011 million. As a result, the Banco de España provision was set at €434.49 million and, accordingly, a portion of it amounting to €186.86 million was released (see Note 8 to the profit and loss account).

In 2009 the Executive Commission approved a methodology for calculating the credit risk on Banco de España investment portfolios, as a basis for setting up a provision for credit risk, as well as the percentage of coverage to be applied to the value of the risk exposure. This methodology was used to set aside a provision in this connection of €168.91 million.

Also, the Executive Commission approved in 2009 a methodology for calculating operational risk, to be reviewed yearly. It will be used to set aside a provision for any losses arising from operational risk. As a result of this analysis, a provision of €22.86 million was set up.

In the reporting year there were decreases in the provision recorded for exchange of peseta banknotes withdrawn from circulation (€19.42 million) and in the provision for payments to early and regular retirees (€6 million), as a result of the use of these provisions for their intended purpose.

This item includes the revaluations arising from unrealised gains on financial assets and liabilities valued at market prices and exchange rates at year-end. It may be broken down as follows:

### Provision for losses arising from early repayment of special loans

In accordance with the general accounting principle of prudence, the ECB Governing Council considered it appropriate in 2008 to establish a buffer totalling €5,736 million against counterparty risks in monetary policy operations (see these operations in Note 6 to the balance sheet). In accordance to Article 32.4 of the ESCB/ECB Statute, this buffer will be funded among all the national central banks of participating Member States in proportion to their subscribed capital key shares in the ECB prevailing at the time. As a result, a provision for €621.35 million, equivalent to 10.8324% of the total provision, was created. On 4 February 2010 the ECB Governing Council reviewed the adequacy of the amount of this provision with effect as at 31 December 2009 and decided to reduce it from €5,736 million to €4,011 million. As a result, the Banco de España provision was set at €434.49 million and, accordingly, a portion of it amounting to €186.86 million was released (see Note 8 to the profit and loss account).

### Provision for counterparty risk in Eurosystem monetary policy operations

In accordance with the general accounting principle of prudence, the ECB Governing Council considered it appropriate in 2008 to establish a buffer totalling €5,736 million against counterparty risks in monetary policy operations (see these operations in Note 6 to the balance sheet). In accordance to Article 32.4 of the ESCB/ECB Statute, this buffer will be funded among all the national central banks of participating Member States in proportion to their subscribed capital key shares in the ECB prevailing at the time. As a result, a provision for €621.35 million, equivalent to 10.8324% of the total provision, was created. On 4 February 2010 the ECB Governing Council reviewed the adequacy of the amount of this provision with effect as at 31 December 2009 and decided to reduce it from €5,736 million to €4,011 million. As a result, the Banco de España provision was set at €434.49 million and, accordingly, a portion of it amounting to €186.86 million was released (see Note 8 to the profit and loss account).

### Provision for credit and operational risks

In 2009 the Executive Commission approved a methodology for calculating the credit risk on Banco de España investment portfolios, as a basis for setting up a provision for credit risk, as well as the percentage of coverage to be applied to the value of the risk exposure. This methodology was used to set aside a provision in this connection of €168.91 million.

Also, the Executive Commission approved in 2009 a methodology for calculating operational risk, to be reviewed yearly. It will be used to set aside a provision for any losses arising from operational risk. As a result of this analysis, a provision of €22.86 million was set up.

### Other provisions

In the reporting year there were decreases in the provision recorded for exchange of peseta banknotes withdrawn from circulation (€19.42 million) and in the provision for payments to early and regular retirees (€6 million), as a result of the use of these provisions for their intended purpose.

### 29 REVALUATION ACCOUNTS

This item includes the revaluations arising from unrealised gains on financial assets and liabilities valued at market prices and exchange rates at year-end. It may be broken down as follows:
The balance of revaluation accounts at end-2009 was €7,020.16, up €1,208.66 on 2008. The main change was in gold, the unrealised gains on which were €1,311.03 million higher as a result of the increase in its market price (up from €621.54 per ounce at 31 December 2008 to €766.35 per ounce at 31 December 2009). The balance as at 31 December 2009 was €6,087.88 million.

With regard to fixed-income securities in the trading portfolio, there was a decrease in unrealised gain on securities issued in foreign currencies by non-euro area residents (€109.18 million), as a result of security price movements driven by interest rates. This decrease was partly offset by the increase in euro-denominated securities issued by euro-area residents (€50.59 million).

As regards the foreign exchange revaluation accounts, the unrealised gains on foreign currencies decreased by €44.69 million, basically due to the depreciation of the US dollar against the euro.

As at 31 December 2009 the reserves of the Banco de España amounted to €1,000 million, with no change in the year. Included in this item is, first, the amount of capital, reserves and profits that arose in 1973 when the now-defunct Spanish Foreign Currency Institute was included in the Banco de España (€3.17 million) and, second, the portion of 2005 and 2006 profit taken to reserves, authorised by the Council of Ministers on 28 July 2006 (€496.83 million) and 29 June 2007 (€500 million), respectively, in application of the legal provisions cited in the previous note.

The net profit for 2009, after deducting the transfer to the Beneficent Social Fund (€27 million), amounted to €2,673.18 million, up 27.9% on 2008. Of this amount, €1,706.67 million was

During the year, the following amounts were also paid to the Treasury out of 2008 profits:

a) On 2 March 2009, €827.35 million, which, together with the payment in December 2008, amounted to 90% of the €2,090.19 million of distributable profit for that year.

b) On 13 August 2009, once the balance sheet and profit and loss account for the year 2008 had been approved by the Council of Ministers, €209.02 million, representing the rest of the distributable profit for that year.

The details of the various components of the profit for 2009 and the reasons for the changes in them with respect to 2008 are given in Section 3.3 below on the profit and loss account.

### 3.3 Notes on the profit and loss account

This item includes income from interest accrued on the main assets of the Banco de España. The breakdown in 2009 and 2008 is as follows:

<table>
<thead>
<tr>
<th>EUR m and %</th>
<th>Interest income</th>
<th>Average investment in 2009</th>
<th>Average yield in 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FOREIGN CURRENCY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Securities</td>
<td>255.82</td>
<td>278.83</td>
<td>-23.00</td>
</tr>
<tr>
<td>Deposits and other assets</td>
<td>18.33</td>
<td>98.68</td>
<td>-80.35</td>
</tr>
<tr>
<td>Exceptional liquidity providing operations</td>
<td>31.48</td>
<td>69.73</td>
<td>-38.26</td>
</tr>
<tr>
<td><strong>EURO</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Securities</td>
<td>2,945.21</td>
<td>3,071.12</td>
<td>-125.91</td>
</tr>
<tr>
<td>Monetary policy operations</td>
<td>1,280.53</td>
<td>2,529.06</td>
<td>-1,248.53</td>
</tr>
<tr>
<td>Intra-Eurosystem accounts</td>
<td>104.18</td>
<td>157.60</td>
<td>-53.42</td>
</tr>
<tr>
<td>Claims equivalent to the transfer of foreign reserves to the ECB</td>
<td>52.72</td>
<td>151.70</td>
<td>-98.98</td>
</tr>
<tr>
<td>Claims related to allocation of euro banknotes within the Eurosystem</td>
<td>51.46</td>
<td>—</td>
<td>51.46</td>
</tr>
<tr>
<td>Other claims within the Eurosystem (net)</td>
<td>—</td>
<td>5.91</td>
<td>-5.90</td>
</tr>
<tr>
<td>Other assets</td>
<td>34.30</td>
<td>2.24</td>
<td>32.07</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>4,669.85</td>
<td>6,207.26</td>
<td>-1,537.41</td>
</tr>
</tbody>
</table>

Interest income decreased by €1,537.41 million in 2009 with respect to 2008. This decrease resulted from the fall in interest earned on euro-denominated investments (€1,395.79 million) and on foreign currency €141.62 million)

Of the €305.63 million of interest on foreign-currency investments, €255.82 million arose from investments in fixed-income securities denominated in US dollars, €31.48 million from special liquidity providing operations which generated expenses for the same amount, and €18.33 million from deposits and other assets. The interest on this dollar-denominated portfolio decreased by €23 million, basically due to the lower average return (down from 4.2% in 2008 to 3.3% in 2009). Also, interest on deposits and other assets was €80.35 million lower than in 2008. Practically half (€41.62 million) of this decrease relates to interest income on swaps, the
2008 balance contrasted with the absence thereof in 2009. Overall, the average return on foreign-currency investments was 3%, compared with 3.1% in 2008.

Euro-denominated interest income (€4,364.23 million) arose basically from the securities portfolios (€2,945.21 million, a decrease of €125.91 million), monetary policy operations (€1,280.53 million, down sharply by €1,248.53 million) and intra-Eurosystem balances (€104.18 million, down €53.42 million on the previous year).

The main reason for the decrease of €1,395.79 million in euro-denominated income with respect to the previous year was the lower average return in the reporting year (down from 4.1% in 2008 to 2.5% in 2009), in line with the trend in the ECB’s key policy rate. Also noteworthy was that the intra-Eurosystem accounts relating to the adjustment of banknotes in circulation, which in 2008 gave rise to interest expenses of €510.19, became an interest-earning asset from 1 January 2009 due to the increase in the Banco de España’s share of the Eurosystem, €51.46 million being recorded in this respect.

Analysis of the average investment made discloses the significant increase in monetary policy operations (€80,937.90 million in 2009 against €56,946.04 million in 2008). This resulted from the higher funding needs of the banking system and from the fact that foreign-sourced funding (via TARGET2) was largely replaced by monetary policy loans, in both cases as a consequence of the financial turmoil in the interbank market.

This item includes interest expenditure on the liabilities listed below, as follows:

<table>
<thead>
<tr>
<th>EUR m and %</th>
<th>Interest expense</th>
<th>Average financing in 2009</th>
<th>Average cost in 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009</td>
<td>2008</td>
<td>Change</td>
</tr>
<tr>
<td>FOREIGN CURRENCY</td>
<td>35.19</td>
<td>81.57</td>
<td>-46.38</td>
</tr>
<tr>
<td>Swap, forward and other transactions</td>
<td>—</td>
<td>1.75</td>
<td>-1.75</td>
</tr>
<tr>
<td>Exceptional liquidity providing operations</td>
<td>31.48</td>
<td>69.73</td>
<td>-38.26</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>3.72</td>
<td>10.08</td>
<td>-6.37</td>
</tr>
<tr>
<td>EURO</td>
<td>970.10</td>
<td>2,792.28</td>
<td>-1,822.19</td>
</tr>
<tr>
<td>Remuneration of minimum reserves</td>
<td>333.08</td>
<td>975.33</td>
<td>-642.25</td>
</tr>
<tr>
<td>Deposit facility</td>
<td>59.06</td>
<td>192.70</td>
<td>-133.64</td>
</tr>
<tr>
<td>Fixed-term deposits</td>
<td>5.32</td>
<td>40.40</td>
<td>-35.08</td>
</tr>
<tr>
<td>General government deposits</td>
<td>147.96</td>
<td>606.46</td>
<td>-458.50</td>
</tr>
<tr>
<td>Intra-Eurosystem liabilities related to allocation of euro banknotes within the Eurosystem</td>
<td>—</td>
<td>510.19</td>
<td>-510.19</td>
</tr>
<tr>
<td>Other liabilities within the Eurosystem (net)</td>
<td>422.02</td>
<td>457.24</td>
<td>-35.22</td>
</tr>
<tr>
<td>Other liabilities denominated in euro</td>
<td>2.65</td>
<td>9.96</td>
<td>-7.31</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,005.29</td>
<td>2,873.86</td>
<td>-1,868.57</td>
</tr>
</tbody>
</table>

Interest expenses decreased by €1,868.57 million in 2009, of which €1,822.19 million relate to euro-denominated liabilities and €46.38 to liabilities denominated in foreign currencies.
Of the euro-denominated interest expenses (€970.10 million), €422.02 million relate to the remuneration of other intra-Eurosystem balances, €333.08 million to remuneration of minimum reserves, €147.96 million to remuneration of general government deposits and the remainder to remuneration of the deposit facility, fixed-term deposits (fine-tuning operations) and other euro-denominated liabilities.

The sharp decrease in euro-denominated expenses (€1,822.19 million) was basically due to the lower average cost at which liabilities were remunerated, which fell from 3.8% in 2008 to 1.1% in 2009, partly offset by the higher average balance to be remunerated, which rose from €71,555.45 million to €87,617.81 in 2009.

As stated in the preceding section, intra-Eurosystem balances related to the allocation of euro banknotes did not give rise to expenses in 2009 (€510.19 million in 2008), but rather to income.

Regarding the net credit balance of other intra-Eurosystem balances (TARGET2), despite the considerable increase in its average balance with respect to 2008 from €11,314.72 million to €33,514.58 million, the aforementioned replacement of this funding by monetary policy operations meant that the accrued expenses decreased by €35.22 due to the decline in average cost mentioned above.

Of the interest expenses denominated in foreign currencies (€35.19 million), €31.48 million relate to special liquidity providing operations (income for the same amount was recorded) and €3.72 million to other liabilities of less significance.

This item includes the profits and losses arising from dealing in financial assets. In 2009 the net gains in this connection amounted to €108.54 million, arising from the following sources:

<table>
<thead>
<tr>
<th>EUR m</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOREIGN CURRENCY</td>
<td>-120.27</td>
<td>73.97</td>
<td>-194.24</td>
</tr>
<tr>
<td>Sale of gold</td>
<td>0.00</td>
<td>0.04</td>
<td>-0.04</td>
</tr>
<tr>
<td>Sale of foreign currency (exchange gains)</td>
<td>-169.57</td>
<td>-0.91</td>
<td>-168.66</td>
</tr>
<tr>
<td>Sale of securities (price losses)</td>
<td>49.53</td>
<td>78.29</td>
<td>-28.76</td>
</tr>
<tr>
<td>Other gains/losses</td>
<td>-0.23</td>
<td>-3.45</td>
<td>3.22</td>
</tr>
<tr>
<td>EURO</td>
<td>228.81</td>
<td>34.65</td>
<td>194.16</td>
</tr>
<tr>
<td>Sale of securities (price losses)</td>
<td>228.81</td>
<td>34.65</td>
<td>194.16</td>
</tr>
<tr>
<td>TOTAL</td>
<td>108.54</td>
<td>108.62</td>
<td>-0.08</td>
</tr>
</tbody>
</table>

Compared with the prior year, the total amount recorded in 2009 decreased by €0.08 million due to the higher losses on the sale of foreign currencies, basically US dollars (€165.84 million) and SDRs (€3.79 million) and to the lower gains on the sale of US dollar-denominated fixed-income securities from the trading portfolio (€28.76 million), off-set almost in full by the higher gains on the sale of euro-denominated securities issued by euro area residents (€194.16 million).

This item includes the loss arising in the currency position derived from the exchange rate depreciation, as well as that arising from depreciation of securities prices, for that portion that cannot be offset by unrealised gains from previous years. The breakdown in 2009 and 2008 is as follows:
Unrealised losses in 2009 amounted to €193.12 million, substantially all (€179.01 million) of which related to foreign-currency investments. Compared with 2008, unrealised foreign-exchange losses increased by €178.76 million, basically due to the higher unrealised exchange rate losses, specifically on US dollars (€162.72 million) and on SDRs (€12.67 million), and to unrealised losses on US dollar-denominated fixed-income securities, up by €3.37 million. For their part, unrealised losses on euro-denominated securities issued by euro-area residents decreased by €1.77 million.

<table>
<thead>
<tr>
<th>Description</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOREIGN CURRENCY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign currency (exchange rate losses)</td>
<td>175.57</td>
<td>0.19</td>
<td>175.38</td>
</tr>
<tr>
<td>Securities (price losses)</td>
<td>3.44</td>
<td>0.06</td>
<td>3.37</td>
</tr>
<tr>
<td>EURO</td>
<td>14.11</td>
<td>15.88</td>
<td>-1.77</td>
</tr>
<tr>
<td>Securities (price losses)</td>
<td>14.11</td>
<td>15.88</td>
<td>-1.77</td>
</tr>
<tr>
<td>TOTAL</td>
<td>193.12</td>
<td>16.13</td>
<td>176.99</td>
</tr>
</tbody>
</table>

This includes, first, the transfer of €193.12 million from the provision for foreign exchange rate and interest rate risks to cover the losses recorded at end-2009 and, second, the transfer of €897.91 million to this provision to cover the estimated foreign exchange rate and price risks associated with the financial positions subject to such risks, in accordance with the Executive Commission resolution of 5 February 2010.

Also, for the first time, it includes in 2009 the transfer to the provision for credit risk in accordance with an Executive Commission resolution, which amounts to €168.91 million.

Finally, regarding the transfer to/from the provision for losses arising from early repayment of special loans, this item showed a negative change of €176.43 million in 2009 with respect to 2008. This was because in 2009 there were recoveries of €185.56 million as a result of the adjustment derived from changes in the market value of these assets, compared with recoveries of €361.98 million in 2008.

This basically includes income and expenses arising from fees and commissions for banking services and the like (TARGET2, transfers, handling of cheques, custody and administration of securities, etc.). It may be broken down as follows:
Net fee and commission income in 2009 (€10.57 million) was €1.72 million less than in 2008. This change basically relates to the Banco de España’s incorporation in mid-2008 in the single shared TARGET2 platform. Its entry into operation entailed a change in the commissions charged to users and in the operating procedures of the system: central banks pool the amounts which previously they received from direct participants and linked systems (which are thus recorded as income and as expenses) and redistribute them quarterly in accordance with their participating interest in the system.

This item includes the participating interest of the Banco de España in the profit of the ECB and the dividends on other shares and participating interests.

In 2009 the ECB Governing Council decided to allocate in full the banknote seigniorage income among the Eurosystem central banks in proportion to their respective keys. The Banco de España was allocated €93.66 million. Also, an amount of €12.63 million relating to the 2008 ordinary dividend from the ECB was received. Also included in this item are €8.86 million of dividends from the investment in Bolsas y Mercados Españoles, Sociedad Holding de Mercados y Sistemas Financieros, S.A. (BME) and €2.79 million from the investment in international organisations (Bank for International Payments). The amount recorded in 2009 was €26.77 million lower than in 2008, basically because less banknote seigniorage income was received from the ECB in 2009 (down €36.95 on 2008), partly offset by the absence of an ordinary dividend distribution by the ECB in 2008.

The amount of each Eurosystem NCB’s monetary income is determined by calculating the annual income generated by the earmarkable assets held against the liability base. The liability base consists of the following items: banknotes in circulation; liabilities to credit institutions related to monetary policy operations denominated in euro; net intra-Eurosystem liabilities resulting from TARGET2 transactions whenever they have a credit balance; and net intra-Eurosystem liabilities related to the allocation of euro banknotes within the Eurosystem whenever they have a credit balance. Any interest paid on liabilities included within the liability base is to be deducted from the monetary income to be pooled. The earmarkable assets include the following items: lending to euro area credit institutions related to monetary policy operations; monetary policy portfolio securities; intra-Eurosystem claims equivalent to the transfer of foreign reserve assets to the ECB; net intra-Eurosystem claims resulting from TARGET2 transactions, whenever they have a debit balance; net intra-Eurosystem claims related to the allocation of euro banknotes in the Eurosystem, whenever they have a debit balance; and a limited amount of each NCB’s gold holdings, in proportion to its capital key. Gold is considered to generate no income. If the value of a NCB’s earmarkable assets exceeds or is less than the value of its liability base, the difference will be offset by applying to it the most recent marginal interest rate on main refinancing operations.
The breakdown of this item in various years is as follows:

<table>
<thead>
<tr>
<th>EUR m</th>
<th>Description</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monetary income pooled</td>
<td>-1,349.81</td>
<td>-3,044.72</td>
<td>1,694.92</td>
</tr>
<tr>
<td></td>
<td>Monetary income allocated</td>
<td>1,356.94</td>
<td>2,981.51</td>
<td>-1,624.57</td>
</tr>
<tr>
<td></td>
<td>Provision for counterparty risk in monetary policy operations and for ECB losses</td>
<td>186.86</td>
<td>-621.35</td>
<td>808.21</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>193.99</td>
<td>-684.56</td>
<td>878.55</td>
</tr>
</tbody>
</table>

The monetary income pooled by the Eurosystem is to be allocated among NCBs according to the ECB subscribed capital key. The difference between the monetary income pooled by the Banco de España in 2009, amounting to €1,349.81 million, and that reallocated to it, amounting to €1,355.43 million, is equivalent to a net allocation of €8.62 million. To this net allocation should be added €1.49 million for the Banco de España’s share of the losses on Eurosystem monetary policy operations relating to expenses for the professional services of independent experts. Compared with 2008, there was a negative net change of €70.35 million in these results.

Also, with regard to the provision for counterparty risk in Eurosystem monetary policy operations, on 4 February 2010 the ECB Governing Council approved the amounts relating to each NCB. Accordingly, the Banco de España released a portion of the provision recorded in the prior year (€186.86 million out of a total of €621.35 million), resulting in a change of €808.21 million with respect to the prior year.

9 OTHER INCOME AND LOSSES

This includes the income and losses that cannot be included in other items, along with other diverse income of an exceptional nature. It may be broken down as follows:

<table>
<thead>
<tr>
<th>EUR m</th>
<th>Description</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Extraordinary profit</td>
<td>2.36</td>
<td>16.76</td>
<td>-14.40</td>
</tr>
<tr>
<td></td>
<td>Employee social welfare scheme</td>
<td>-17.80</td>
<td>-21.99</td>
<td>4.19</td>
</tr>
<tr>
<td></td>
<td>Sundry</td>
<td>2.51</td>
<td>0.88</td>
<td>1.63</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>-12.93</td>
<td>-4.35</td>
<td>-8.58</td>
</tr>
</tbody>
</table>

As can be seen, this item shows a net loss which is €8.58 million larger than in 2008, basically due to the smaller extraordinary gains arising from the adjustment to the allocation of expenses under the IMF Special Contingency Account (SCA)-1 for Liberia (€11.26 million) in 2008.

10 STAFF COSTS

This item includes the headings “Wages and salaries”, “Contributions to pension scheme” and “Social security contributions and employee benefits”.

The breakdown of changes by component is as follows:
This balance increased from €223.63 million in 2008 to €230.96 million in 2009, a rise of €7.33 million (3.3%), as a result of: a) economic improvements included in the Collective Agreement for 2009, estimated at €5.08 million (2.3%); b) the higher expense of temporary hires (€1.67 million), affected by those for Eurosystem projects; and c) a number of factors of varying nature (wage increases for years of service, wage drift due to promotions, increased social security contributions, tax prepayments on account of compensation in kind, medical and pharmaceutical assistance, etc.)

The following table sets out the changes in permanent and temporary staff, in terms of average number of employees:

<table>
<thead>
<tr>
<th>EUR m and %</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross staff costs</td>
<td>233.04</td>
<td>224.32</td>
<td>8.72</td>
<td>3.9</td>
</tr>
<tr>
<td>Wages and salaries</td>
<td>177.84</td>
<td>169.77</td>
<td>8.07</td>
<td>4.8</td>
</tr>
<tr>
<td>Social Security</td>
<td>32.09</td>
<td>31.38</td>
<td>0.71</td>
<td>2.3</td>
</tr>
<tr>
<td>Staff welfare expenses</td>
<td>17.05</td>
<td>17.64</td>
<td>-0.59</td>
<td>-3.3</td>
</tr>
<tr>
<td>Contributions to pension scheme</td>
<td>6.05</td>
<td>5.53</td>
<td>0.52</td>
<td>9.5</td>
</tr>
<tr>
<td>Reversal of staff costs due to capitalisation of computer applications</td>
<td>-2.07</td>
<td>-0.69</td>
<td>-1.39</td>
<td>202.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>230.96</td>
<td>223.63</td>
<td>7.33</td>
<td>3.3</td>
</tr>
</tbody>
</table>

As at 31 December 2009, the Bank’s total staff numbered 2,727 employees, four fewer than at the same date of the previous year, as a result of the smaller number of permanent employees (down from 2,589 at 31 December 2008 to 2,545 at 31 December 2009, partly offset by a significant rise in temporary hires for the aforementioned reasons. Most noteworthy as regards staff composition by gender was the increase of 28 in the number of women, which, together with the decrease of 32 in the number of men, meant that women now account for 38% of the Bank’s total staff.

This item includes expenses arising from the purchase of current assets and of diverse services received during the year, as follows:
The above table shows that in 2009 the most significant administrative expenses were external services (€64.08 million), mainly IT services (€39.18 million) and rental and maintenance (€32.32 million), composed mainly of hardware and software rental and maintenance (€14.37 million) and property rental and maintenance (€13.09 million).

Goods and services expenses decreased in 2009 (€11.29 million) despite the updating of the prices of contracts currently in force. This decrease resulted from the decline in expenses for external services (€9.97 million), basically relating to the lower expense for IT services outsourcing (€11.35 million) and for rental and maintenance (€2.43 million)

“External services” include €137,636.34 (including VAT) relating to the fees of the external auditors Deloitte, S.L. for the audits in 2009 of the Bank’s annual accounts and of certain aspects of the Bank’s management of European Central Bank reserves. In 2009 no services were received from or amounts paid to other firms in the group.

Included here is the expense of the estimated depreciation of the Bank’s fixed assets, which breaks down as follows:

<table>
<thead>
<tr>
<th>EUR m and %</th>
<th>2009</th>
<th>2008</th>
<th>Change</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation of buildings, structures and renovation work</td>
<td>2.27</td>
<td>2.21</td>
<td>0.06</td>
<td>2.8</td>
</tr>
<tr>
<td>Depreciation of plant in buildings</td>
<td>7.25</td>
<td>5.63</td>
<td>1.62</td>
<td>28.8</td>
</tr>
<tr>
<td>Depreciation of furniture and fittings</td>
<td>1.94</td>
<td>1.75</td>
<td>0.20</td>
<td>11.2</td>
</tr>
<tr>
<td>Depreciation of office machines other than computer equipment</td>
<td>1.79</td>
<td>1.44</td>
<td>0.35</td>
<td>24.0</td>
</tr>
<tr>
<td>Depreciation of computer equipment</td>
<td>5.31</td>
<td>6.23</td>
<td>-0.92</td>
<td>-14.8</td>
</tr>
<tr>
<td>Depreciation of transport equipment</td>
<td>0.83</td>
<td>0.92</td>
<td>-0.09</td>
<td>-9.6</td>
</tr>
<tr>
<td>Depreciation of other tangible fixed assets</td>
<td>0.26</td>
<td>0.29</td>
<td>-0.03</td>
<td>-10.7</td>
</tr>
<tr>
<td>Depreciation of library collection</td>
<td>0.51</td>
<td>—</td>
<td>0.51</td>
<td>—</td>
</tr>
<tr>
<td>Amortisation of intangible fixed assets</td>
<td>5.42</td>
<td>4.40</td>
<td>1.02</td>
<td>23.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26.58</td>
<td>23.35</td>
<td>3.23</td>
<td>9.5</td>
</tr>
</tbody>
</table>

This amount (€71.45 million) corresponds to payments made by the Banco de España to purchase banknotes from the National Mint. The increase with respect to the previous year (€6.37 million) was because in 2009, although €5 banknotes were not purchased and the volume of €20 banknote purchases decreased, the number of €50 banknotes purchased from
the National Mint, at a higher unit cost, increased considerably. All this was partly offset by the lower unit cost of the banknotes purchased by the Bank in the reporting year.

The net balance of transfers and applications to other funds and provisions in 2009 amounted to €75.89 million, compared with €36.65 million in 2008. This change (€39.24 million) arose basically from the recording in 2009, by resolution of the Executive Commission, of a provision for operational risk amounting to €22.86 million and from the transfer to the provision for sundry risks and expenses of €17.61 million relating mainly to litigation in progress. Also, the transfer to the Beneficient-Social Fund increased in 2009 (€27.00 million against €21.11 million in 2008). These higher expenses were partly offset by the smaller transfer in 2009 to the provision for death and retirement assistance under Article 190 of the Banco de España Conditions of Employment (€11.79 million).

The Banco de España, because of the nature of its activity, is not an institution with a high environmental risk. Accordingly, in 2009 it was not considered necessary to record any provision for environmental liabilities and charges.

Pursuant to Article 1.1.b) of Royal Decree 2059/2008 of 12 December 2008, the Banco de España must pay into the Treasury, on the first working day of March 2010, 90% of the profits earned and recorded up to 31 December of the previous year, less the amount paid on 1 December of the previous year.

In accordance with said Royal Decree, on 1 December 2009 the Banco de España paid into the Treasury €1,706.67 million, equal to 70% of the profit recorded as at 30 September 2009.

Once the year had ended, and taking into account that the provisional profits amounted to €2,673.18 million and that 90% of the profits was €2,405.86 million, a payment of €699.19 million was made to the Treasury on 1 March 2010.

The payments to the Treasury of 2009 profit are as follows:

<table>
<thead>
<tr>
<th>EUR m</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Total profit for 2009 2,673.18</td>
</tr>
<tr>
<td>2</td>
<td>Payments to the Treasury 2,405.86</td>
</tr>
<tr>
<td>On 1.12.2009. 70% of profit as at 30.09.2009</td>
<td>1,706.67</td>
</tr>
<tr>
<td>On 1.3.2009. Difference between the above amount and 90% of profit as at 31.12.2009</td>
<td>699.19</td>
</tr>
<tr>
<td>3</td>
<td>Profit payable to the Treasury 267.32</td>
</tr>
<tr>
<td>At date of approval of the 2009 accounts</td>
<td>267.32</td>
</tr>
</tbody>
</table>

The following table shows the changes in the reporting year, which, in addition to the accounting profit, include the net gains not recognised as income in the profit and loss account, the change in provisions and the effect on the balance sheet of the appropriation of profit for the year.

3.4 Changes in capital, reserves, provisions and revaluation accounts
The changes reflected in this table have been explained above in the explanatory notes on the balance sheet and profit and loss account that refer to provisions (Note 28 on the balance sheet), revaluation accounts (Note 29 on the balance sheet), capital (Note 30 on the balance sheet), reserves (Note 31 on the balance sheet) and profit for the year (Note 32 on the balance sheet and Note 15 on the profit and loss account).

<table>
<thead>
<tr>
<th>EUR m</th>
<th>Capital</th>
<th>Reserves</th>
<th>Revaluation accounts</th>
<th>Undistributed profit</th>
<th>Provisions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) 2009 OPENING BALANCE</td>
<td>1,000.00</td>
<td>1,000.00</td>
<td>5,811.51</td>
<td>1,036.37</td>
<td>4,847.66</td>
<td>13,695.54</td>
</tr>
<tr>
<td>1 UNRECOGNISED NET GAINS IN PROFIT AND LOSS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In gold</td>
<td>1,311.03</td>
<td></td>
<td></td>
<td></td>
<td>1,311.03</td>
<td></td>
</tr>
<tr>
<td>In foreign currency</td>
<td>-44.69</td>
<td></td>
<td>-44.69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In securities</td>
<td>-58.67</td>
<td></td>
<td>-58.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>0.99</td>
<td></td>
<td>0.99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 2009 PROFIT</td>
<td>2,673.18</td>
<td></td>
<td></td>
<td>2,673.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 CHANGE IN PROVISIONS</td>
<td></td>
<td>464.38</td>
<td></td>
<td>464.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 APPROPRIATION OF PROFIT</td>
<td>-2,743.04</td>
<td></td>
<td></td>
<td>-2,743.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment to the Treasury of 2008 profit</td>
<td>-1,036.37</td>
<td></td>
<td></td>
<td>-1,036.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment to the Treasury of 2009 profit</td>
<td>-1,706.67</td>
<td></td>
<td></td>
<td>-1,706.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B) CHANGES IN THE YEAR</td>
<td></td>
<td></td>
<td>1,208.66</td>
<td>-69.86</td>
<td>464.38</td>
<td>1,603.18</td>
</tr>
<tr>
<td>B = 1 + 2 + 3 + 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C) 2009 CLOSING BALANCES</td>
<td>1,000.00</td>
<td>1,000.00</td>
<td>7,020.16</td>
<td>966.51</td>
<td>5,312.04</td>
<td>15,298.72</td>
</tr>
</tbody>
</table>
4.1 Contributions made by the Bank to the Deposit Guarantee Funds

The contribution of the Banco de España to the Deposit Guarantee Funds is regulated by Article 3 of Royal Decree 18/1982, according to the wording established by additional provision seven of Royal Legislative Decree 12/1995 of 28 December 1995 and Royal Decree 2606/1996 of 20 December 1996, which implemented the legal regime for such funds.

The aforementioned Royal Decree-Law established that the Deposit Guarantee Funds may only exceptionally “be supplemented by contributions from the Banco de España, the amount of which shall be fixed by Law”. In 2009 the Banco de España made no contributions whatsoever to these Funds.

4.2 Loss of profit

The table below shows the loans outstanding in 2009 with interest rates below the reference rates used, in order to estimate the loss of profit for the year pursuant to the provisions of Article 4.2 of Law 13/1994 of 1 June 1994 of Autonomy of the Banco de España.

<table>
<thead>
<tr>
<th>Type of credit/loan</th>
<th>Estimated average balance in 2009</th>
<th>Interest rate received (%)</th>
<th>Reference interest rate (%)</th>
<th>Estimated loss of profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net State debt</td>
<td>1,581.20</td>
<td>—</td>
<td>1.28%</td>
<td>20.24</td>
</tr>
<tr>
<td>Housing loans and repayable advances to employees</td>
<td>71.35</td>
<td>0.55%</td>
<td>1.28%</td>
<td>0.52</td>
</tr>
<tr>
<td>Housing loans</td>
<td>34.85</td>
<td>1.13%</td>
<td>1.28%</td>
<td>0.05</td>
</tr>
<tr>
<td>Repayable advances</td>
<td>36.50</td>
<td>—</td>
<td>1.28%</td>
<td>0.47</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,652.55</td>
<td>0.02%</td>
<td>1.28%</td>
<td>20.76</td>
</tr>
</tbody>
</table>

Included under “Net State debt” is the average balance during the year, on a daily basis, of the special loans granted to the State before 1994 less the deposits held by the Treasury with the Banco de España, when there is a net balance in favour of the latter.

The reference rate used to estimate the loss of profit in all the loans is the daily average of the marginal interest rate on main refinancing operations conducted during the year.

4.3 Other transactions

On 26 March 2007 an agreement was entered into with the State government to bring forward the repayment schedule of the loans granted to the State prior to the entry into force of Law 21/1993 of 29 December 1993 on the State Budget for 1994 (Law 3/1983 loan, Law 4/1990 loan and credits arising from subscription for participating interests, contributions and quotas in international agencies), such that they all reach final maturity by 2015 at the latest and the Treasury can request early repayment of part or all of these facilities, paying on the due date the effective market price instead of the nominal amount. Under this agreement, in 2009 payment was received of two instalments of the first of the aforementioned facilities (that for the reporting year and the last outstanding instalment of the original repayment schedule), along with the reporting year instalments of the other two facilities, the repayment date of all of them being brought forward from 31 December to 30 April. In accordance with the foregoing, on 30 April 2009 the Treasury paid to the Banco de España the amount of €535,284,017.98, the effective market price of the debt repaid on that date.
Translation of a report originally issued in Spanish based on our work performed in accordance with International Standards on Auditing. In the event of a discrepancy, the Spanish-language version prevails.

To the Governor of the Banco de España:

We have audited the financial statements of the Banco de España, which, in accordance with Article 29.1 of its Internal Rules, comprise the balance sheet at 31 December 2009 and the related income statement and notes to the financial statements for the year then ended.

Responsibility for the financial statements

The Executive Commission of the Banco de España is responsible for organise the Bank and appointing its directors general. Under the Internal Rules of the Banco de España, the Directorate General Services is responsible for preparing the financial statements in accordance with the internal accounting rules and principles of the Banco de España, which are indicated in Note 3.1 to the accompanying financial statements and are based on the accounting regulations established for member central banks of the European System of Central Banks.

This responsibility, which is exercised through the Control, Budget and Accounting Department, includes the supervision of operations and, therefore, the design, implementation and maintenance of the relevant internal controls required for the preparation and adequate presentation of financial statements that are free from material misstatement due either to fraud or error; the selection and application of appropriate accounting rules; and the performance of the estimates considered to be reasonable in the circumstances. Pursuant to Article 21.2) of Law 13/1994, of 1 June, on the Autonomy of the Banco de España, these financial statements are prepared by the Governing Council of the Banco de España.

Responsibility of the auditor

Our responsibility is to express an opinion on the financial statements taken as a whole based on our audit work performed in accordance with International Standards on Auditing, which require that we comply with certain ethical requirements and that we plan and perform the audit to obtain reasonable assurance that the financial statements are free from material misstatements or irregularities.

An audit entails the performance of procedures designed to obtain evidence supporting the amounts and disclosures contained in the financial statements. The procedures selected depend on the auditor’s judgment, which includes the assessment of the risks of the occurrence of material misstatement or irregularities in the financial statements due to either fraud or error. In assessing these risks, the auditor considers the internal control system applicable to the preparation and adequate presentation of the financial statements by the entity, in order to design audit procedures that are appropriate in view of the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity’s internal control system. An audit also includes the evaluation of the adequacy of the accounting policies used and of the reasonableness of the accounting estimates made by the entity, as well as an assessment of the overall presentation of the financial statements. We consider that the evidence we have obtained is sufficient and adequate to provide a basis on which to express our audit opinion.

Comparative information

For comparison purposes, the accompanying financial statements present, in addition to the 2009 figures for each item in the balance sheet and income statement, the figures for 2008. Our opinion refers only to the 2009 financial statements. On 25 May 2009, we issued our auditors’ report on the 2008 financial statements in which we expressed an unqualified opinion.
Opinion

In our opinion, the accompanying financial statements for 2009 present fairly, in all material respects, the net worth and financial position of the Banco de España at 31 December 2009 and the results of its operations in the year then ended, and contain the required information, sufficient for their proper interpretation and comprehension, in conformity with the internal accounting rules and principles of the Banco de España, which are indicated in Note 3.1 to the accompanying financial statements and are based on the accounting regulations established for the member central banks of the European System of Central Banks.

DELOITTE, S.L.

Miguel Ángel Balleón
20 May 2010
We, the undersigned, Ángel Luis López Roa, Jesús Leguina Villa and Ana María Sánchez Trujillo, are members of the Governing Council of the Banco de España and of the Audit Committee appointed by the Governing Council. In accordance with Article 29 of the Internal Rules of the Banco de España, we were given the task of reviewing the accounts of the Institution for the year 2009.

As required by the aforementioned precept, the Audit Committee has analysed the operations of the Banco de España. This examination basically involved: 1) studying the annual accounts of the Banco de España for the year 2009, prepared by the Directorate General Services of the Banco de España; 2) studying the audit of the balance sheet and profit and loss account of the Banco de España for 2009, conducted by the Internal Audit Department; 3) studying the documentation requested by the members of this Committee from the independent external auditors; 4) interviewing the persons responsible for the independent external audit, for the Internal Audit Department and for the Control, Budget and Accounting Department; and 5) making proposals for the modification, correction or clarification of various matters, all of which have been satisfactorily incorporated in the annual accounts by the Control, Budget and Accounting Department.

The basic conclusion of our report is that from the analysis carried out of the examination and accounting procedures, of the accounting records and of the internal controls in place, it can be inferred that the annual accounts for the year 2009 give a true and fair view of the net worth and financial position of the Banco de España.

Madrid, 6 May 2010

[Signatures]
INDEXES
Index of Tables

Table 1.1 Main indicators of the Spanish economy 22

Table 2.1 Capital intensity relative to the euro area 41
Table 2.2 Human capital indicators 46
Table 2.3 Indicators of technological capital and results of R+D+i 53

Table 3.1 Main macroeconomic indicators 64

Table 4.1 Euro area: main macroeconomic indicators 92
Table 4.2 Euro area: main structural indicators 108

Table 5.1 Main stimulus measures applied in 2009 116
Table 5.2 Main general government non-financial transactions 117
Table 5.3 Consumption and gross fixed capital formation by institutional sector 122

Table 6.1 Issuance and public offerings of marketable securities 147
Table 6.2 Turnover on secondary and derivatives markets 148
Table 6.3 Credit institutions. Balance sheet and income statement 150
Table 6.4 Financial transactions of the nation 158

Table 7.1 Institutions supervised by the Banco de España 173
Index of Charts

Chart 1.1 GDP, private consumption, employment and gross fixed capital formation 16
Chart 1.2 Net lending (+) / borrowing (–) of the economy 24
Chart 1.3 Spain/euro area inflation differential 25
Chart 1.4 Financing of households and non-financial corporations 29
Chart 1.5 Employment and unemployment 31

Chart 2.1 Sectoral breakdown of the stock of non-residential capital 42
Chart 2.2 Labour force and participation rate 46
Chart 2.3 Distribution of the population aged 25-64 by level of wage earnings 47
Chart 2.4 Breakdown of economic growth in Spain 55
Chart 2.5 Labour productivity and total factor productivity 56

Chart 3.1 Global economic activity 65
Chart 3.2 Industrial production and international trade 66
Chart 3.3 Inflation and commodities prices 67
Chart 3.4 International financial markets 69
Chart 3.5 Economic activity and employment 70
Chart 3.6 Monetary and fiscal policy 71
Chart 3.7 Size of financial support measures 75
Chart 3.8 Exchange rates and capital flows 76
Chart 3.9 Private sector financing 77
Chart 3.10 Growth forecasts for 2010 85

Chart 4.1 Euro area: composition of growth 93
Chart 4.2 Euro area: labour market and price indicators 94
Chart 4.3 Private sector financing 95
Chart 4.4 Euro area monetary policy 96
Chart 4.5 Financial conditions in the euro area 97
Chart 4.6 Euro area fiscal policy 99
Chart 4.7 Slackness of economic conditions 103

Chart 5.1 Characterisation of the current cycle 114
Chart 5.2 Financing of resident non-financial sectors and asset prices 115
Chart 5.3 Main macroeconomic aggregates 121
Chart 5.4 Final consumption of households 123
Chart 5.5 Housing investment and private productive investment 126
Chart 5.6 External demand and main determinants 127
Chart 5.7 Export shares and import penetration 128
Chart 5.8 GVA and employment by branch of activity 130
Chart 5.9 Employment and wages 131
Chart 5.10 Inflation determinants 133
Chart 5.11 Rest of the world account 137
Chart 5.12 Saving, investment and net lending or net borrowing 137

Chart 6.1 Interest rates, loan conditions, credit and doubtful assets ratios 142
Chart 6.2 Financial market prices 149
Chart 6.3  Institutional investors 151
Chart 6.4  Household wealth and house prices 152
Chart 6.5  Financing of non-financial corporations 155
Chart 6.6  Indicators of profitability and financial pressure for non-financial corporations 155
Chart 6.7  General government 156
Chart 6.8  Net financial transactions 157
Index of Boxes

Box 1.1  The outlook for credit to the private sector in the Spanish economy  26
Box 1.2  Fiscal adjustment and public debt dynamics in Spain  33

Box 2.1  Business closures in Spain during the economic crisis  43
Box 2.2  Effects in the long run of long-term unemployment  50

Box 3.1  Action by the US and UK central banks during the crisis  73
Box 3.2  The new coordination framework for global financial regulation, supervision and oversight  82

Box 4.1  Sovereign debt spreads in the euro area  100
Box 4.2  Fiscal consolidation in the euro area countries  106

Box 5.1  The adjustment of the Spanish real estate sector and its macroeconomic impact  124
Box 5.2  The correction of the external deficit in Spain  135

Box 6.1  Measures to support Spanish credit institutions in the context of the international financial crisis  144
Box 6.2  The financial position of the non-financial private sector from a historical perspective  153
COMPOSITION OF THE GOVERNING BODIES OF THE BANCO DE ESPAÑA
Governing Council

GOVERNOR
Miguel Fernández Ordóñez

DEPUTY GOVERNOR
F. Javier Ariztegui

COUNCIL MEMBERS
Jesús Leguina
Ángel Luis López Roa
Guillem López
José María Marín
Vicente Salas
Ana M.ª Sánchez Trujillo

DIRECTOR GENERAL OF THE TREASURY AND FINANCIAL POLICY
Soledad Núñez

VICE-PRESIDENT OF THE NATIONAL SECURITIES MARKET COMMISSION
Fernando Restoy

DIRECTORS GENERAL OF THE BANK
(J Without a right to vote)
José Luis Malo de Molina
José María Roldán
Pilar Trueba
Javier Alonso
Jerónimo Martínez Tello

SECRETARY
(J Without a right to vote)
José Antonio Alepuz

REPRESENTATIVE OF THE BANK’S PERSONNEL
(J Without a right to vote)
M.ª Luisa Teijeiro
### Executive Commission

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOVERNOR</td>
<td>Miguel Fernández Ordóñez</td>
</tr>
<tr>
<td>DEPUTY GOVERNOR</td>
<td>F. Javier Arístegui</td>
</tr>
<tr>
<td>COUNCIL MEMBERS</td>
<td>Ángel Luis López Roa</td>
</tr>
<tr>
<td></td>
<td>Vicente Salas</td>
</tr>
<tr>
<td>DIRECTORS GENERAL</td>
<td>José Luis Malo de Molina</td>
</tr>
<tr>
<td>(Without a right to vote)</td>
<td>José María Roldán</td>
</tr>
<tr>
<td></td>
<td>Pilar Trueba</td>
</tr>
<tr>
<td></td>
<td>Javier Alonso</td>
</tr>
<tr>
<td></td>
<td>Jerónimo Martínez Tello</td>
</tr>
<tr>
<td>SECRETARY</td>
<td>José Antonio Alepuz</td>
</tr>
</tbody>
</table>
BANCO DE ESPAÑA PUBLICATIONS

Studies and reports

REGULAR

Annual Report (in Spanish and English)
Economic Bulletin (quarterly) (the Spanish version is monthly)
Estabilidad Financiera (half-yearly)
Financial Stability Report (in Spanish and English) (half-yearly)
Informe del Servicio de Reclamaciones (quarterly)
Memoria Anual sobre la Vigilancia de Sistemas de Pago (available only in electronic format on the website)
Memoria de la Central de Información de Riesgos (available only in electronic format on the website)
Memoria del Servicio de Reclamaciones (annual)
Mercado de Deuda Pública (annual)
Report on Banking Supervision in Spain (in Spanish and English) (annual)
Research Memorandum (in Spanish and English) (annual)
The Spanish Balance of Payments and International Investment Position (in Spanish and English) (annual)

NON-PERIODICAL

Central Balance Sheet Data Office: commissioned studies
Notas de Estabilidad Financiera

ECONOMIC STUDIES

70 OLYMPIA BOVER AND MARIO IZQUIERDO: Quality-adjusted prices: hedonic methods and implications for National Accounts (2001). (The Spanish original of this publication has the same number.)
71 MARIO IZQUIERDO AND M.ª DE LOS LLANOS MATÉA: An approximation to biases in the measurement of Spanish macroeconomic variables derived from product quality changes (2001). (The Spanish original of this publication has the same number.)
72 MARIO IZQUIERDO, OMAR LICANDRO AND ALBERTO MAYDEU: Car quality improvements and price indices in Spain (2001). (The Spanish original of this publication has the same number.)
73 OLYMPIA BOVER AND PILAR VEILLO: Hedonic house prices without characteristics: the case of new multiunit housing (2001). (The Spanish original of this publication has the same number.)
74 MARIO IZQUIERDO AND M.ª DE LOS LLANOS MATÉA: Hedonic prices for personal computers in Spain during the 90s (2001). (The Spanish original of this publication has the same number.)
76 FRANCISCO DE CASTRO FERNÁNDEZ: Una evaluación macroeconómica de la política fiscal en España (2005).

ECONOMIC HISTORY STUDIES

46 MARGARITA EVA RODRÍGUEZ GARCÍA: Compañías privilegiadas de comercio con América y cambio político (1706-1765) (2005).

Note: The full list of each series is given in the Publications Catalogue.
All publications are available in electronic format, with the exception of miscellaneous publications and texts of the Human Resources Development Division.

WORKING PAPERS

0918 KAI CHRISTOFFEL, JAMES COSTAIN, GREGORY DE WALQUE, KEITH KUESTER, TOBIAS LINZERT, STEPHEN MILLARD AND OLIVIER PIERRARD: Wage, inflation and employment dynamics with labour market matching.
0919 JESÚS VÁZQUEZ, RAMÓN MARÍA-DOLORES AND JUAN-MIGUEL LONDONO: On the informational role of term structure in the US monetary policy rule.
0922 GALO NUÑO: Technology, convergence and business cycles.
0923 FRANCISCO DE CASTRO AND JOSÉ LUIS FERNÁNDEZ: The relationship between public and private saving in Spain: Does Ricardian equivalence hold?
0924 GONZALO FERNÁNDEZ-DE-CÓRDOBA, JAVIER J. PÉREZ AND JOSÉ L. TORRES: Public and private sector wages interactions in a general equilibrium model.
0926 JULIANA ALÉDO, FERNANDO GARCÍA-MARTÍNEZ AND JUAN M. MARÍN DIAZARAGUE: Firm-specific factors influencing the selection of accounting options provided by the IFRS: Empirical evidence from Spanish market.
0927 JAVIER ANDRÉS, SAMUEL HURTADO, EVA ORTEGA AND CARLOS THOMAS: Spain in the euro: a general equilibrium analysis.
0928 MAX GILLMAN AND ANTON NAKOV: Monetary effects on nominal oil prices.
0929 JAVIER MENCÍA AND ENRIQUE SENTANA: Distributional tests in multivariate dynamic models with Normal and Student t innovations.
0932 ANTON NAKOV AND GALO NUÑO: Oligopoly: a general equilibrium model of the oil-macroeconomy nexus.
0933 TERESA LEAL AND JAVIER J. PÉREZ: Análisis de las desviaciones presupuestarias aplicado al caso del presupuesto del Estado.
0934 JAVIER J. PÉREZ AND A. JESÚS SÁNCHEZ: Is there a signalling role for public wages? Evidence for the euro area based on macro data.
0935 JOAN PAREDES, DIEGO J. PEDREGAL AND JAVIER J. PÉREZ: A quarterly fiscal database for the euro area based on intra-annual fiscal information.
1001 JAVIER ANDRÉS, ÓSCAR ARCE AND CARLOS THOMAS: Banking competition, collateral constraints and optimal monetary policy.
1002 CRISTINA BARCELO AND ERNESTO VILLANUEVA: The response of household wealth to the risk of losing the job: evidence from differences in firing costs.
1003 ALEXANDER KARAIVANOV, SONIA RUANO, JESÚS SAURINA AND ROBERT TOWNSEND: No bank, one bank, several banks: Does it matter for investment?
1004 GABRIEL PÉREZ-CUIRÓS AND HUGO RODRÍGUEZ MENDIZÁBAL: Asymmetric standing facilities: an unexploited monetary policy tool.
1005 GABRIEL JIMÉNEZ, JOSÉ A. LÓPEZ AND JESÚS SAURINA: How does competition impact bank risk-taking?
1006 GIUSEPPE BERTOLA, AURELIJUS DABUSINSKAS, MARCO HOBBERSCHTS, MARIO IZQUIERDO, CLAUDIA KWAPIL, JEREMI MONTORNÈS AND DANIEL RADOWSKI: Price, wage and employment response to shocks: evidence from the WDN Survey.
1007 JAVIER MENCIA: Testing non linear dependence in the Hedge Fund Industry.
1008 ALFREDO MARTÍN-OLIVER: From proximity to distant banking: Spanish banks in the EMU.
1009 GALO NUÑO: Optimal research and development expenditure: a general equilibrium approach.
1010 LUIS J. ALVAREZ AND PABLO BURREL: Is a Calvo price setting model consistent with micro price data?
1012 DAVID DE ANTONIO LIECÓ: General Equilibrium Restrictions for Dynamic Factor Models.
1013 JAMES COSTAIN, JUAN F. JIMENO AND CARLOS THOMAS: Employment fluctuations in a dual labor market.
1014 LUIS M. VICIERA AND RICARDO GIMENO: The euro as a reserve currency for global investors.
1015 PALOMA LÓPEZ-GARCÍA AND JOSÉ MANUEL MONTERO: Understanding the Spanish business innovation gap: The role of spillovers and firms’ absorptive capacity.
1016 AITOR LACUESTA AND SERGIO PUENTE: El efecto del ciclo económico en las entradas y salidas de inmigrantes en España.
1017 REBEKA CHRISTOPOULOU, JUAN F. JIMENO AND ANA LAMO: Changes in the wage structure in EU countries.
1018 THOMAS BREIWER, MARTIN JANDAČKA, JAVIER MENCÍA AND MARTIN SUMMER: A systematic approach to multi-period stress testing of portfolio credit risk.
1019 LUIS J. ÁLVAREZ AND PABLO BURRIEL: Micro-based estimates of heterogeneous pricing rules: The United States vs. the euro area.
1021 LUISA LAMBERTINI, CATERINA MENDICINO AND MARIA TERESA PUNZI: Expectations-driven cycles in the housing market.
1022 JULIÁN MESSINA, PHILIPP DU CAUJ, CLÁUDIA FILIPA DUARTE, NIELS LYNGGARD HANSEN AND MARIO IZQUIERDO: The incidence of nominal and real wage rigidity: an individual-based sectoral approach.
1023 ALESSIO MORDO: Development, growth and volatility.
1024 LUIS J. ÁLVAREZ AND ALBERTO CABRERO: Does housing really lead the business cycle? 
1025 JUAN S. MORA-SANGUNIETTI: Is judicial inefficiency increasing the house property market weight in Spain? Evidence at the local level.
1026 MÁXIMO CAMACHO, GABRIEL PÉREZ-QUIRÓS AND PILAR PONCELA: Green shoots in the Euro area. A real time measure.
1027 AITOR ERCE AND JAVIER DÍAZ-CASSOU: Creditor discrimination during sovereign debt restructurings.
1028 RAFAEL REPULLO, JESÚS SAURINA AND CARLOS TRUCHARTE: Mitigating the pro-cyclicality of Basel II.
1029 ISABEL ARGIMÓN AND JENIFER RUIZ: The effects of national discretions on banks.
1030 GABRIEL JIMÉNEZ, STEVEN ONGENA, JOSÉ-LUIS PEYDRÓ AND JESÚS SAURINA: Credit supply: identifying balance-sheet channels with loan applications and granted loans.
1031 ENRIQUE MORAL-BENITO: Determinants of economic growth: A Bayesian panel data approach.

OCCASIONAL PAPERS

0805 JAVIER DÍAZ-CASSOU, AITOR ERCE-DOMÍNGUEZ AND JUAN J. VÁZQUEZ-ZAMORA: The role of the IMF in recent sovereign debt restructurings: Implications for the policy of lending into arrears.
0806 MIGUEL DE LAS CASAS AND XAVIER SERRA: Simplification of IMF lending. Why not just one flexible credit facility?
0807 MIGUEL GARCÍA-POSADA AND JOSEP M.ª VILARRUBIA: Mapa de exposición internacional de la economía española.
0808 SARAI CIRADO AND ADRIAN VAN RIXTEL: Structured finance and the financial turmoil of 2007-2008: An introductory overview. (There is a Spanish version of this edition with the same number.)
0809 FRANCISCO DE CASTRO AND JOSÉ M. GONZÁLEZ-MÍNGUEZ: La composición de las finanzas públicas y el crecimiento a largo plazo: Un enfoque macroeconómico.
0810 OLYMPIA BOXER: The dynamics of household income and wealth: results from the panel of the Spanish survey of household finances (EFF) 2002-2005. (There is a Spanish version of this edition with the same number.)
0901 ÁNGEL ESTRADA, JUAN F. JIMENO AND JOSÉ LUIS MALO DE MOLINA: The Spanish economy in EMU: the first ten years. (There is a Spanish version of this edition with the same number.)
0902 ÁNGEL ESTRADA AND PABLO HERNÁNDEZ DE COS: Oil prices and their effect on potential output. (There is a Spanish version of this edition with the same number.)
0903 PALOMA LÓPEZ-GARCÍA, SERGIO PUENTE AND ÁNGEL LUIS GÓMEZ: Employment generation by small firms in Spain.
0904 LUIS J. ÁLVAREZ, SAMUEL HURTADO, ISABEL SÁNCHEZ AND CARLOS THOMAS: The impact of oil price changes on Spanish and euro area consumer price inflation.
0905 CORAL GARCÍA, ESTHER GORDÓ, JAIME MARTÍNEZ-MARTÍN AND PATROCINIO TELLO: Una actualización de las funciones de exportación e importación de la economía española.
1002 SONsoles GALLEGO, SÁNDOR GÁRDÓ, REINER MARTIN, LUIS MOLINA AND JOSÉ MARÍA SERENA: The impact of the global economic and financial crisis on Central Eastern and SouthEastern Europe (CESEE) and Latin America.
MISCELLANEOUS PUBLICATIONS


JOSÉ LUIS MALO DE MOLINA, JOSÉ VIÑALS AND FERNANDO GUTIÉRREZ (Eds.): Monetary policy and inflation in Spain (1998) (**).


JOSÉ LUIS MALO DE MOLINA, JOSÉ VIÑALS AND FERNANDO GUTIÉRREZ (Eds.): Monetary policy and inflation in Spain (1998) (**).


Statistics

Boletín de Operaciones (daily) (available only in electronic format on the website)

Boletín del Mercado de Deuda Pública (daily) (available only in electronic format on the website)

Boletín Estadístico (monthly, available only in electronic format on the website)

Central de Balances. Resultados anuales de las empresas no financieras (annual monograph)

Financial Accounts of the Spanish Economy (bilingual edition: Spanish and English) (annual and quarterly series)

Financial legislation

and official registers

Circulares a entidades de crédito

Circulares del Banco de España. Recopilación (four-monthly)

Registros de Entidades (annual) (available only in electronic format on the website)

Training

BANCO DE ESPAÑA: Cálculo mercantil (con ejercicios resueltos).

PEDRO PEDRAJA GARCÍA: Contabilidad y análisis de balances en la banca (tomo I) (1999).


UBALDO NIETO DE ALBA: Matemática financiera y cálculo bancario.

LUIS A. HERNANDO ARENAS: Tesorería en moneda extranjera.

EUROPEAN CENTRAL BANK PUBLICATIONS

Spanish editions of:

Annual Report

Monthly Bulletin

Other publications

1. All publications are distributed by the Banco de España, except those indicated with (‘*’), (**), (***) or (****), which are respectively distributed by Alianza Editorial, Editorial Tecnos, Macmillan (London) and Thomson-Aranzadi. Prices include 4 % VAT.

2. Moreover, it is updated daily in the Statistics section.

3. A quarterly update of the tables of this publication is also disseminated on the Internet.

4. Available only on the Banco de España website until it is included in the publication Circulares del Banco de España. Recopilación.