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ABBREVIATIONS

BoE	Bank of England
CBC	Central Bank of Cyprus
CHF	Swiss Franc
COLA	Cost of Living Allowance
CPI	Consumer Price Index
CRD	Capital Requirements Directive
CSE	Cyprus Stock Exchange
CTO	Cyprus Tourism Organisation
CYSTAT	Statistical Service of the Republic of Cyprus
ECB	European Central Bank
EER	Effective Exchange Rate
EMTN	Euro Medium Term Note
EMU	Economic and Monetary Union
EONIA	Euro Overnight Index Average
ESA 95	European System of Accounts 1995
ESI	Economic Sentiment Indicator
EU	European Union
EUR	Euro
EURIBOR	Euro Interbank Offered Rate
EUROSTAT	Statistical Office of the European Community
HICP	Harmonised Index of Consumer Prices
FED	US Federal Reserve
FSAP	Financial Sector Assessment Program
GBP	Great Britain Pound
GDP	Gross Domestic Product
GRDS	Government Registered Development Stock
IMF	International Monetary Fund
JPY	Japanese Yen
LFS	Labour Force Survey
MFIs	Monetary and Financial Institutions
NACE	Nomenclature statistique des Activités économiques dans la Communauté Européenne (Statistical classification of the economic activities in the European Community)
NEER	Nominal Effective Exchange Rate
NFCs	Non-Financial Corporations
OIS	Overnight Index Swaps
REER	Real Effective Exchange Rate
ROA	Return on Assets
ROE	Return on Equity
SDW	Statistical Data Warehouse
SPV	Special Purpose Vehicle
UK	United Kingdom
US	United States
USD	United States Dollar

Introduction

International developments

The current edition of the *Economic Bulletin* coincides with a period of serious and fundamental developments in the world economy, as a result of the international financial turmoil which began in the summer of 2007. This turmoil, which developed into an economic crisis during the period September-October 2008, was mainly the outcome of subprime lending in the US and the underestimation of risks resulting from, *inter alia*, the inadequate supervision of banks and other financial institutions. It eventually became evident that large and internationally prestigious financial institutions were under immense pressure, with concomitant risks for the viability of the international financial system. The banking system in Europe was also affected and, by September 2008, the situation deteriorated to such an extent that intense fears regarding the financial system and the real economy became widespread. These negative developments led governments, central banks and international organisations, such as the International Monetary Fund (IMF), to adopt with unprecedented coordination, emergency measures for the prevention of further negative consequences on the real economy. These measures included internationally coordinated reductions in interest rates and specific measures for the economies of individual countries and their financial systems.

The impact of the crisis on the world economy was already evident in the third quarter of 2008, where a decrease was recorded in the quarterly growth of GDP in most developed economies. Further indications also pointed to the fact that a number of countries were already in, or entering, recession. The year 2009 will now be characterised as a year of recession in the major developed economies. The negative path followed by the international economy caused a reduction in the demand for goods, including oil, leading to a reduction in its price. Inflation forecasts and expectations were contained, thus making it substantially easier for the major central banks to proceed with reductions in interest rates. More specifically, during the period October-November, the Federal Reserve and the European Central Bank (ECB) responded with successive interest rate reductions, totalling 100 basis points each. The Bank of England reduced its interest rate by a total of 200 basis points. At the same time, the major central banks continued with liquidity injections. Moreover, in an effort to deal with the crisis, the ECB adopted new measures relating to its monetary policy implementation framework. In particular, it widened the collateral base in the main refinancing operations, conducted more and longer-term refinancing operations, increased the number of acceptable counterparties in fine-tuning operations and, finally, in cooperation with the Federal Reserve and the Swiss National Bank, injected liquidity in dollars and Swiss francs, respectively. In December the ECB and the Bank of England proceeded with further reductions in their interest rates of 75 and 100 basis points, respectively.

Amidst constant negative results in the international stock markets, and problems in major financial organisations, stock indices recorded large losses. In fact, October was the worst month in the last 75 years for the stock markets. Equity values were partially supported after the announcement of government measures and actions by the monetary authorities internationally, which included, among other things, bank deposit guarantees, support and reinforcement of banking institutions as well as reductions in interest rates. Nevertheless, there still exists great uncertainty in the markets, which is reflected in intense fluctuations in equity values.

Domestic developments

Domestically, sectors like tourism and construction have begun to be negatively affected. Nonetheless, the average growth rate for the first nine months of 2008, although decelerated, was a high 3,8%. This was supported by increased consumption and lending which can be characterised as excessive. In relation to prices, the Harmonised Index of Consumer Prices (HICP) increased by 4,8% in the first ten months of 2008 compared with 1,9% in the same period last year. The acceleration in inflation during the current year resulted mainly from the increase in oil prices until July. However, it also reflected excessive demand. It is anticipated, though, that the reduction in oil prices, the expected deceleration in the world economy, and the foreseeable deceleration in domestic demand, will have a dampening effect on domestic inflation.

With respect to lending, the increase in credit to the private sector in September 2008 was still at a high level, reaching 22,8%. Since deposits were the main sources of funding for new loans, competition to attract new deposits led to higher deposit rates. The increased cost of money was, in turn, transferred to lending rates. More specifically, the annual growth of consumer loans was further increased, mainly at the end of the third quarter of 2008 while the rate of growth of housing loans exhibited a continuing deceleration in the last few months consistent with the other indicators of construction activity.

Regarding real GDP, according to the latest available data from the Cyprus Statistical Service (Cystat), the rate of growth of the Cyprus economy exhibited a small deceleration during the first nine months of 2008, reaching a growth rate of 3,8%. For the whole of 2008, a bigger deceleration is expected, as a result of the consequences of the economic crisis in the fourth quarter. Indicatively, the confidence indicators for the services, industry, retail trade, consumption and construction sectors worsened substantially in the last few months.

As for the current account balance, this deteriorated continuously during the first six months of 2008, mainly as a result of the large increase in the imports of goods. These imports were largely affected by the increase in the price

of oil products and excess demand, which led to increases in the imports of consumer and intermediate goods. In tourism, a small decrease in revenue was experienced in the first nine months of 2008 compared with the respective period last year. This development is partly the result of the world economic crisis and, in particular, the unfavourable consequences for the UK economy.

In the labour market, employment levels continued to accelerate, reaching 3,1% during the first six months of 2008, reflecting the strong economic activity during the aforementioned months. During the same period, there was a decrease of 0,2% in unemployment, which reached 3,9%, according to data from the Labour Force Survey.

As regards public finances, according to preliminary data from Cystat covering the first nine months of 2008, there was a budget surplus of 2,9% of GDP compared with a surplus of 3,1% for the corresponding period of the previous year. There was also a significant reduction in the rate of increase of direct tax revenue in 2008, which is a consequence of the decrease in revenue from capital gains tax, resulting from the deceleration of the real estate market.

Public debt as a percentage of GDP decreased to 59,4% of GDP in 2007 compared with 64,6% in 2006, mainly due to the high primary surplus. In 2008 the public debt is anticipated to experience a larger decrease, mainly as a result of the running down of sinking funds. The government budget for 2009 foresees an increase in total expenditure, with the exception of loan repayments, of 10,9% compared with 2008. According to government projections, in 2009 there will be a budget surplus of 0,7% of GDP. This forecast, however, was made several months ago and is based on the assumption that the economy will expand by 3,7% at constant prices. The latest international developments with respect to the persistence of the financial crisis make the aforementioned forecast an ambitious one. This is because, despite the fact that Cyprus was not affected directly from these developments, the anticipated deceleration in the economies of Cyprus's trading partners will have a negative impact on the domestic economy as well. It is estimated that for every 1% lower growth in the economy, the fiscal balance deteriorates by 0,4% mainly because of lower receipts. Consequently, if the growth rate of the economy in 2009 is significantly lower than the initial forecasts of the Ministry of Finance, then it is possible to have a budget deficit rather than a surplus.

With regards to the forecasts of the Central Bank of Cyprus (CBC) for the main indicators of the Cyprus economy, according to the main scenario, the rate of GDP growth is expected to reach 2% and 2,5% in 2009 and 2010 respectively, mainly because of the anticipated reduction in domestic demand following the unfavourable international developments. These forecasts are lower than the forecasts made in June 2008, mainly due to the dramatic international developments, which

peaked in September-October 2008, and the consequent impact on the Cyprus economy.

The HICP is expected to slow down to around 2,4% in 2009 and 2,9% in 2010. On the other hand, HICP excluding energy is expected to reach 3,1% mainly as a result of the relatively high wages and COLA which were observed during the current year. In 2010 HICP excluding energy is expected to slow down to 2,6%, due to relatively lower earnings.

Financial stability conditions

Overall, potential risks to financial stability originating from conditions in the household sector remain contained. However, the acceleration of credit to households in the first nine months of 2008, which has contributed to the growing indebtedness of the sector, coupled with the rise in bank lending interest rates, may adversely affect households' debt-servicing capacity in the near term. On the positive side, the generally stable outlook for the labour market and household disposable income should contribute to a moderation of risks.

As regards the potential risks facing the non-financial corporate sector, the expected slowdown in domestic economic activity, coupled with the deteriorating external macroeconomic environment, will probably weigh on firms' revenues. Enterprises in the construction and tourism sectors may be particularly vulnerable if risks to the macroeconomic outlook were to materialise. Higher borrowing costs and reduced availability of credit, mainly as a result of tighter bank lending standards, are expected to exert a downward pressure on corporate profitability. At the same time, non-financial corporations' leverage has remained at a high level, making them less resilient to potential adverse shocks.

A deceleration in real estate sector activity, as shown by a number of key market indicators, was recorded in the first ten months of 2008. In parallel, a slowdown in the annual increase in residential real estate prices, as indicated by trends in the CBC's residential property price index, is expected in 2008. However, despite the expected negative impact of the weakening of activity in the construction industry on the domestic economy, the slowdown in house price growth may eventually prove to be a healthy development to avert any possible overheating in the residential property sector. At the same time, MFI loans to the domestic broad real estate sector rose significantly year-on-year in September 2008. However, as mentioned above, the rate of growth of housing loans exhibited a continuing decelaration in the last few months.

In the first half of 2008, banks in Cyprus operated in an external environment characterised by the ongoing global financial turmoil, which has thus far had a marginal impact on the domestic banking sector. Banks have remained profitable despite a deceleration in profitability growth, which was mainly due to a significant fall in net non-interest income. At the same time, higher funding costs have put pressure on net interest

margins. Stock liquidity indicators show a gradual depletion of excess liquidity in the banking system. Nevertheless, the banks' liquidity position remains at a satisfactory level. In addition, banks are adequately capitalised, with the banking sector's overall solvency ratio remaining well above the minimum regulatory requirements of 8% applied to individual banks. Moreover, banks' asset quality has improved in the first six months of 2008.

However, banks are faced with a number of potential risks in the near term. Firstly, the expected deceleration in the domestic economic activity, coupled with the weak external macroeconomic environment, could lead to a further tightening of credit standards and a slowdown in the growth of lending to households and non-financial corporations. These forces are expected to adversely affect banks' earnings and, therefore, their profitability. Credit risks from lending to households and non-financial corporations have also increased, while any potential reduction in their debt-servicing capacity may lead to future asset quality problems and thus have a negative impact on banks' financial results. Moreover, counterparty risks are on the upside. Given the continuing financial market tensions, further mark-to-market valuation losses or impairments on financial assets are also possible for those banks which have opted not to adopt the recent changes in international accounting standards. Furthermore, funding liquidity risks have grown due to rising funding costs emanating mainly from higher deposit rates on retail deposits and also from money market rates, which, although decreasing, remain elevated. A potential slowdown in the growth of deposits may also contribute to keeping banks' funding costs at a higher level. Country risks stemming from the international expansion of the three major domestic banking groups have also escalated due to worsening macroeconomic conditions in the countries in which these banks operate.

Conclusions

It is difficult to predict exactly what the consequences of the international economic crisis will be on the Cyprus economy. Nevertheless, the possible negative consequences will be much less severe compared with the situation which would have prevailed in a small, open economy like Cyprus had the euro not been adopted. Nevertheless, an economy whose rate of growth essentially depends on external demand cannot remain completely sheltered from a substantial reduction in international economic activity.

It is particularly worrying that during the past year the difference between Cyprus's domestic harmonised inflation and that for the euro area has increased while at the same time, the current account deficit has also increased substantially. It should be stressed, once more, that since our accession to the euro area, the CBC's monetary policy has been the same as that of the

Eurosystem, whose target is to maintain an average euro area inflation of close to, but below, 2%. Consequently, almost all the burden of avoiding deviations in domestic inflation from the equivalent mean in the euro area rests with the government's fiscal policy. The same applies to the maintenance of domestic demand and the curtailment of pressures on the current account balance. Moreover, it is emphasised that the Social Security Fund, and hence the future path of public finances, face many challenges as a result of Cyprus's ageing population. Therefore it is crucial to maintain budget surpluses so as to cover the government's debt on the general system of social insurance and the pension system of civil servants.

Nevertheless, in the case of a significant reduction in GDP beyond what is predicted in the main scenario of projections due to the international recession, it is desirable to follow targeted measures so as to limit the consequences of the crisis and to accelerate recovery. Such measures, though, need to be carefully planned. Dealing with the consequences of the crisis in an inappropriate manner will deteriorate the economy's prospects and will exacerbate the macroeconomic imbalances (excess borrowing, excess consumption, high inflation and a widening in the current account balance) which were created in the last two years. With well planned actions, and within the general framework of the European Union, Cyprus can prudently manage the consequences of the international recession, so as to lead the economy to a recovery as fast as possible.

As regards banks in Cyprus, these remain healthy and sound and are in a generally solid starting position to weather any potentially difficult times ahead. However, the banking sector is facing significant risks and challenges that might affect its capacity to sustain current profitability levels in the short term.

SECTION A

Macroeconomic Developments and Projections

1. International Environment

1.1 International developments

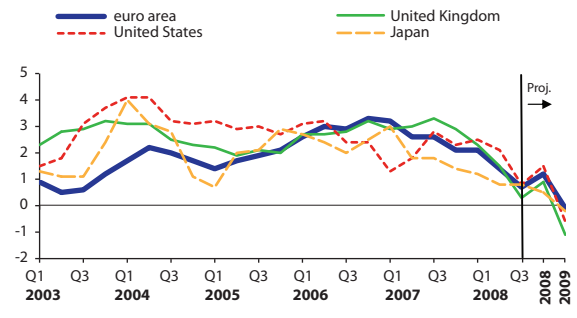
GDP growth[1]

During the third quarter of 2008 there was a decrease in the quarter-on-quarter growth rate of GDP in most developed economies, with more indicators showing a number of countries either entering or already in recession. The initial repercussions of the financial crisis, which began in the summer of 2007, were mainly on the US and then later the European banking sectors. Until September / October 2008 the situation was heightened by serious concerns regarding the significant consequences for the world financial system and, in effect, the world economy. These developments led governments, central banks and international organisations like the IMF, to react in unprecedented ways with extraordinary measures in order to alleviate further negative consequences on the real economy. These measures consisted of coordinated interest rate reductions and support to countries and their financial systems (for a more detailed analysis see Box 1).

The negative developments led to continued downward revisions of economic projections by analysts (**Chart A.1**). It has become obvious that 2009 will be a year of recession for the major economies.

The downturn in the world economy has resulted in a drop in demand for oil and a concomitant fall in its price. At the same time,

CHART A.1 **Gross Domestic Product**
(annual change, %)



Source: Eurostat.
Note: The projections are for the year and are calculated as averages of the most recent projections from the European Commission, The Economist poll and the IMF.

1. GDP projections are estimated as the average of the most recent projections from The Economist Poll (6 November 2008), the European Commission (Economic Forecasts, autumn 2008) and the IMF (World Economic Outlook, October 2008 – update).

other commodity prices have decreased, as in the case of food, while world inflation expectations have receded.

According to preliminary data from Eurostat, the annual growth of GDP in the euro area was 0,7% in the third quarter compared with 1,4% in the second quarter. On a quarter-on-quarter basis, in the second quarter there was a decrease of 0,2% compared with the previous quarter and a further 0,2% fall was registered in the third quarter. Consequently, the euro area is technically in recession which is mainly the result of the drop in external demand and exports. Projections for 2008 point towards an annual growth rate of 1,2% and a contraction of 0,1% in 2009.

In the UK, GDP growth decreased by 0,3% in the third quarter compared with an increase of 1,5% in the second quarter. On a quarter-on-quarter basis, there was a reduction of 0,5% in GDP in the third quarter following zero growth in the previous quarter. Analysts expect the UK economy to grow by 0,9% in 2008 while in 2009 there will be a drop of 1,1% in GDP.

Due to the continuing uncertainty and the flow of negative data, recent revisions for the euro area and UK economies have been more pessimistic.

In the US, GDP grew year-on-year by 0,8% in the third quarter compared with 2,1% in the previous quarter. On a quarter-on-quarter basis, GDP decreased by 0,5% in the third quarter mainly due to the negative developments in the real estate sector where prices have been continuously

Box A.1 The international financial turmoil: brief history and lessons learnt

Brief history

In the US, excess bank liquidity was created during 2001 – 2004 as a result of the loose monetary policy followed by the Federal Reserve. Banking institutions, in turn, followed aggressive lending policies in order to channel these extra funds to the real economy and in particular to the housing sector. At the same time real estate prices were registering continuous increases while there was an underpricing of risks by banking institutions as well as the development of esoteric financial products.

In light of the above, risky loans, known as subprime loans, were channelled to individuals that were not particularly creditworthy, based on the rationale that property prices would continue to rise and banks would be covered as regards the risk of non-repayments. In addition, the subprime loans were sold to other financial organisations as part of a package of financial instruments so that the lending chain was growing without the final holders of these products being in a position to value the quality of their loan portfolios. The rating of the companies which owned these complex financial instruments was based on rating agencies' models which did not take into account the true credit risk of the subprime loans. In the meantime, in the autumn of 2005 property prices began to fall in the US with dire consequences for the value of the mortgages on which the loans were taken.

Starting in 2006 and gaining momentum in 2007, a number of companies which financed subprime loans started filing for bankruptcies in the US due to the non-repayments of loans and the low values in mortgages that did not cover the values of the loans. In August 2007 the problems in the US financial sector started spreading to other countries because of the globalised financial environment. Since the beginning of September 2008, the Fed has been injecting liquidity and since October the ECB has been following suit. The Bank of England has followed the same policy as well, especially after the significant withdrawal of deposits from Northern Rock in the UK in September 2007.

The year 2008 began with large falls in equity values across the globe. Within the year, there were a few buyouts of banking institutions and continuous flow of negative data. The intensification of the market turmoil reached new levels following the collapse of Lehman Brothers while October saw the biggest losses in equity indices in the last 75 years. Following these developments, the US government announced a rescue plan amounting to $700 billion.

In parallel, at high level international meet-

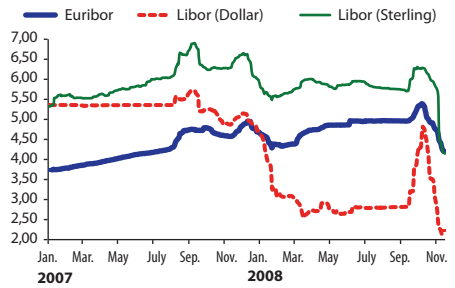
ings (G7, European Union) national measures to support the banking sector, including deposit guarantees, were announced. At the same time the monetary authorities followed coordinated measures, decreasing their interest rates and injecting large amounts of liquidity in the markets.

Reaction policies

The lack of trust arising from the continuous flow of bankruptcy information and financial losses affected interbank rates (i.e. interest rates on loans between banks), which registered new highs (see Chart). The increased cost in the interbank market reached extremely high levels during the period September – October. Following the measures taken by national authorities, interbank rates were smoothed out.

In addition, the IMF announced new measures to support the emerging economies via short–term loans, while countries like Pakistan, Ukraine, Hungary, Iceland and others requested financial assistance from the IMF.

CHART: **EURIBOR and LIBOR (3 month duration)**
(% per annum, daily data)



Source: Reuters Wealth Manager, British Bankers Association.

At the European level, the European Commission in cooperation with the ECB and the national governments, has adopted various measures in order to tackle the crisis and protect depositors. In October 2008 EU member states decided at the highest level on a package of measures for the banks, thus setting a harmonised framework of support at the European level. In addition, national governments announced measures related to deposit guarantees and support of the banking sector.

Furthermore, the ECB decided to allow its monetary policy implementation framework to become more flexible and at the same time widened the collateral base for its main refinancing operations. In addition it carried out more longer – term refinancing operations, accepted a larger number of counterparties in its fine – tuning operations and, finally, it injected liquidity in dollars and Swiss francs in cooperation with the Federal Reserve and the Swiss National Bank, respectively.

The EU has emphasised that government measures should be consistent with the principle of a "level playing field", so that protectionism is avoided and the development of competition in the markets is not stalled. On 26 November the European Commission announced a package of measures amounting €200 billion (approximately 1,5% of EU GDP) which may be used with the common

contribution of the Commission and member state governments, within the framework of the Stability and Growth Pact.

In Cyprus, the government announced that it will guarantee deposits amounting to €100.000. In addition, financial assistance for the tourism and the construction sectors amounting to €52 million have been announced.

Lessons learnt

The crisis which originated in the property market and spread to the banking sector in the US, was rapidly transmitted internationally, thus emphasising the importance that should be given to financial stability in the present globalised environment. Financial turmoil is very easily transmitted to the other sectors of the real economy, resulting in economic slowdown or even recession. Therefore, sound fundamentals in the banking sector are of the utmost importance.

In addition, it is important to note that during international crises a coordinated response by the countries affected is required. In a globalised environment, whereby financial transactions are not limited by national boundaries, it is necessary to have harmonised rules for supervision. The international community is moving towards this direction (G20, EU) in order to enhance the roles of the IMF and the Financial Stability Forum.

Another issue which has emerged from the crisis is the extremely high bonuses of senior management in corporations which led to excessive risk taking (market, liquidity, credit risks). Thus, the need for more prudent controls and supervision in this area has become evident.

Related to the above is the fact that both banking institutions and monetary authorities should focus their attention on safeguarding normal conditions in the interbank markets and in the management of risk, especially liquidity and credit risk. The procedures for risk management, even though extensively covered in the Basel II framework, need to improve.

Another weakness which has become apparent following the financial turmoil is the corporate ratings carried out by rating agencies. The European Commission has already made public suggestions on setting up a formal framework of supervising these agencies, aiming at complete transparency in the way these ratings are carried out.

The US experience following the demise of the two government financed institutions (Fannie Mae and Freddie Mac) which expanded their portfolios based on government guarantees could have been avoided. More specifically, if the Federal Reserve had been supervising these organisations, the latter could have been protected from the political pressures to support the property market. It is therefore evident that the existence of supervisory bodies which are independent of political pressures is vital.

decreasing since the beginning of the year. Analyst projections point towards an annual growth of 1,5% in 2008 and a contraction of 0,6% in 2009.

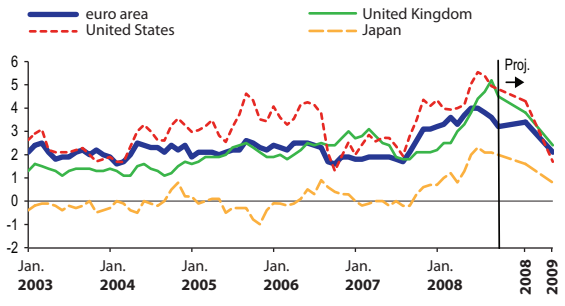
In Japan there was a deterioration in GDP growth during the third quarter. More specifically, there was a further reduction of 0,1% compared with a decrease of 0,7% in the second quarter. It is noted that at the time of writing there were no data available for the year-on-year GDP growth in the third quarter. The main factors which influenced activity in Japan were the decrease in domestic demand and the slowdown in exports. Economic analysts expect that GDP growth will rise by 0,5% in 2008 and drop by 0,2% in 2009.

Inflation[2]

World prices registered a decrease mainly due to the fall in the price of oil emanating from reduced demand, as a result of the economic uncertainty and the concerns about world recession **(Chart A.2)**.

In particular, in the euro area the HICP was 3,2% in October compared with 3,6% in September. While inflationary pressures are receding and long-term market expectations seem to be in line with the medium-term target of the ECB regarding price stability, the danger of inflation has not been completely eradicated. Similarly, in the UK inflation was 4,5% in October compared with 5,2% in September. The Bank of England anticipates that inflation will register a large fall due to recession in the country while analysts expect that inflation will

CHART A.2 **Inflation in selected countries**
(annual change,%)



Sources: Eurostat, SDW.
Note: The projections are for the year and are calculated as averages of the most recent projections from the European Commission, The Economist poll and the IMF.

2. Inflation projections are estimated as the average of the most recent projections from The Economist Poll (6 November 2008), the European Commission (Economic Forecasts, autumn 2008) and the IMF (World Economic Outlook, October 2008).

reach 3,8% in 2008 and 2,4% in 2009.

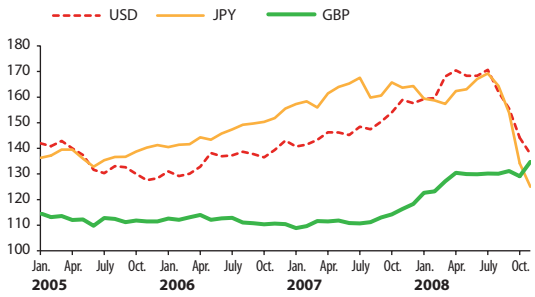
In the US, inflation reached 5% in September compared with 5,4% in August. Analysts expect that inflation will reach 4,3% in 2008 and 1,7% in 2009.

In Japan inflation remained unchanged at 2,1% in September. The decrease in the prices of energy goods is expected to influence the prices in Japan as well with analysts giving projections in the order of 1,6% for 2008 and 0,8% in 2009.

Exchange rates

The euro depreciated against the other two main currencies during the third quarter of 2008 mainly due to the continuous flow of negative economic data in the euro area **(Chart A.3)**. More specifically, the euro depreciated by 3,7% against the dollar in the third quarter compared with the previous one while it had appreciated by 4,2% in the second quarter. Similarly, the euro depreciated against the yen due to the reversal of carry trades (i.e. borrowing in low interest currency and investing in high yield currencies). In particular the euro depreciated by 1% against the yen in the third quarter compared with the previous quarter. The European currency did not exhibit any strong fluctuations against the pound since economic data in the UK were on the negative side as well during the period October – November 2008. Since the beginning of the year and until 17 November 2008 the euro appreciated by 14,4% against the pound and depreciated

CHART A.3 **Selected exchange rates against the euro**
(index of monthly average rates, 2000=100)



Source: SDW.
Note: A higher (lower) index level represents a nominal appreciation (depreciation) of the currency against the euro.

against the dollar and the yen by 25,6% and 13,8%, respectively.

Oil and gold

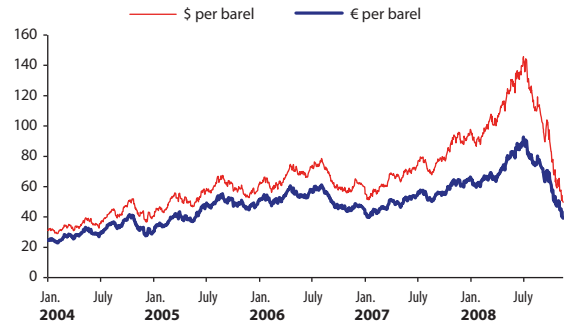
Following the historical highs reached last July, the price of oil has been on a downward trend in view of the negative statistical data for the world economy and the consequent recession which led to a decrease in demand for oil **(Chart A.4)**. More specifically, the average price of Brent crude reached $72,8 (€54,7) per barrel compared with $99,1 (€69) per barrel in September. Since the beginning of the year and until 17 November the dollar price of oil fell by 49%.

Regarding gold, the average dollar price decreased in October to $805 (€605,4) per ounce compared with $828,7 (€577,1) per ounce in the previous month. Between 1 January and 17 November the price of gold decreased by 11,5% **(Chart A.5)**. Nevertheless, the demand for gold, a commodity which is regarded as the safest in times of crises, remains strong.

Selected international stock market indices

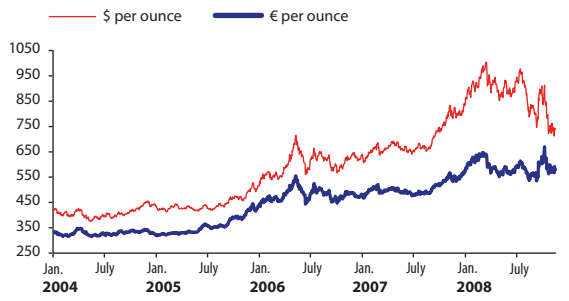
Amidst the continuous flow of negative corporate results and bankruptcies of large financial corporations in the US, equity values recorded immense losses, especially during October which was the worst month for stock exchanges in the last 75 years **(Chart A.6)**. More specifically, during the

CHART A.4 **Closing prices of oil (Brent)**
(daily data)



Source: Bloomberg.

CHART A.5 **Closing prices of gold**
(daily data)



Source: Bloomberg.

CHART A.6 **Selected international stock market indices**
(daily data, 02/01/2007 = 100)

Source: Bloomberg.

period September – October, the DJ Eurostoxx index declined by 23%, the S&P500 fell by 24% while the Nikkei 225 decreased by 33%.

Equity values found some support following the announcement of government measures across the globe, which have included deposit guarantee schemes, government ownership in banking institutions, etc. Despite the above, there continues to exist strong uncertainty in the markets, which is reflected in large daily fluctuations in equity values. This uncertainty emanates from increased counterparty risk on the one hand and the economic recession on the other, while at the same time new announcements of negative statistical data worldwide point to a deeper crisis than had originally been perceived.

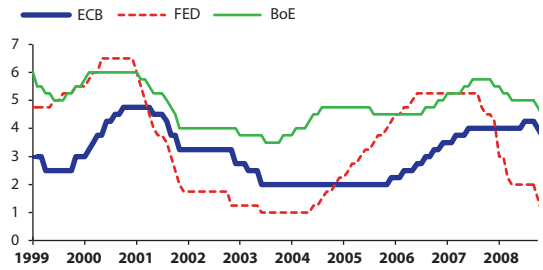
International official interest rates

The lack of liquidity in international markets, which led to a rise in interbank rates to higher levels than official central bank rates as well as the negative data which continue to point towards economic recession, in conjunction with the receding inflationary pressures and expectations, led to the largest central banks adopting loose monetary policies. In particular, the Federal Reserve, the ECB and the Bank of England decreased their interest rates substantially. On 8 October these central banks, in cooperation with the Bank of Canada, the Swiss National Bank and the Sveriges Riksbank, agreed to proceed with an historic decrease of 50 basis points, which was followed by further individual decreases

in their official interest rates. During the period October – November the Fed and the ECB lowered their policy rates by a total of 100 basis points while the Bank of England lowered its rate by a total of 200 basis points **(Chart A.7)**.

In public statements following the announcements of interest rate decreases, central bank governors urged the commercial banks to adopt the decreases for consumer and corporate loans, in order to facilitate the proper functioning of the monetary transmission mechanism. Preliminary data show that the decreases in official interest rates have not yet begun to be reflected in lending rates.

CHART A.7 **Official interest rates**
(% per annum)



Sources : ECB, FED, BoE.

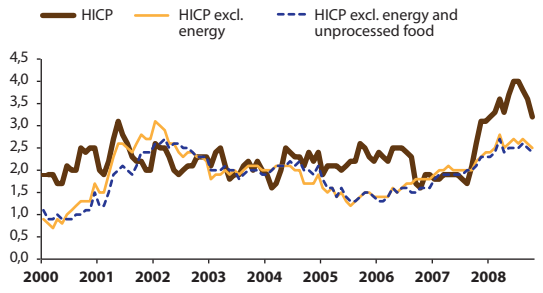
1.2 Monetary developments in the euro area

Inflation

In the euro area inflation reached 3,2% in October compared with 3,6% in September and 2,6% in October 2007 **(Chart A.8)**. The price of oil was the main factor which affected the HICP. Nevertheless the ECB still considers that broad-based second round effects have not yet been totally eliminated. However, it appears that inflationary expectations remain anchored to the medium-term target of the ECB, i.e. inflation close to but below 2%, something which confirms the credibility of the ECB in the markets.

Concerning the HICP excluding energy, it reached 2,5% in October compared with 2,6% in the previous month while the HICP excluding energy and unprocessed food was 2,4% compared with 2,5% in September **(Chart A.8)**.

CHART A.8 **Inflation in the euro area**
(annual change, %)



Source : Eurostat.

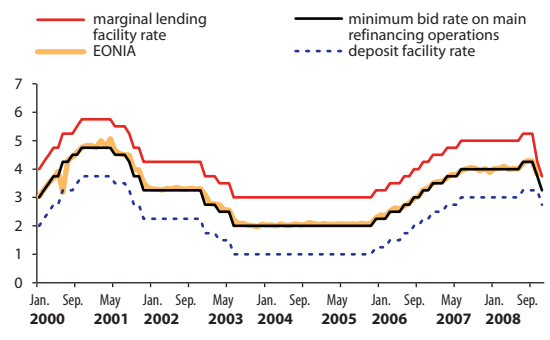
Reference rates and ECB interventions

As already mentioned, on 8 October in an extraordinary teleconference the ECB, in cooperation with other central banks, lowered its policy rate by 50 basis points. At the same time, the ECB announced the decrease in the corridor between the marginal lending facility rate and the main refinancing rate from 100 basis points to 50 basis points. An equivalent decrease between the main refinancing rate and the deposit facility rate was also decided. In view of the intense uncertainty in the money market, the ECB announced that it would satisfy all bids from counterparties that took part in its regular weekly refinancing operations at a fixed rate of 3,75%. This facility will be available to banks in the euro area until the end of the current year.

On 6 November the Governing Council of the ECB decided to further lower the reference rates by an additional 50 basis points. This decision was mainly based on the fact that inflationary pressures in the euro area started to recede, with signs of a more protracted economic slowdown or even recession than had originally been perceived. As a result, with effect from 12 November 2008 the deposit facility rate was decreased to 2,75%, the main refinancing rate was decreased to 3,25% and the marginal lending facility rate was lowered to 3,75% **(Chart A.9)**.

At the same time, the ECB continued to intervene with liquidity injections in the money

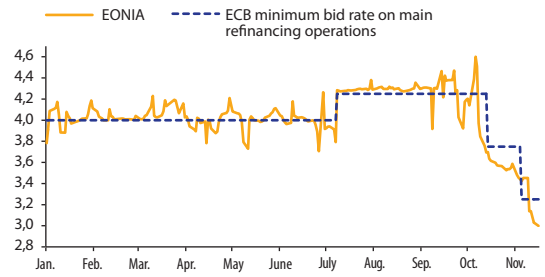
CHART A.9 **ECB reference rates & EONIA**
(% per annum, daily data)



Sources: ECB,www.euribor.org.

markets. During the period September – November the ECB provided an average of €245 billion to the market via its regular main refinancing operations. In addition the ECB continued to carry out liquidity provisions in dollars against acceptable collateral as well as liquidity in dollars and Swiss francs through foreign currency swaps, in cooperation with the Federal Reserve and the Swiss National Bank, respectively. Additional measures from the ECB have been, as already mentioned, the widening of the collateral base in the main refinancing operations, the conduct of longer-term refinancing operations with bigger maturities and the widening of the acceptable counterparties in fine-tuning operations. The continuous interventions and both interest rate reductions in the ECB policy rates led to a decrease in EONIA rates **(Chart A.10)**.

CHART A.10 **EONIA vs ECB minimum bid rate on main refinancing operations,2008**
(% per annum,daily data)



Sources: ECB,www.euribor.org.

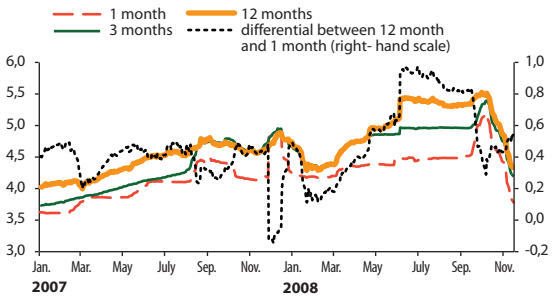
Interbank market and interest rate differentials

In the interbank market during the period September – October which was the peak of the international crisis, there were intense fluctuations in market interest rates. The uncertainty and the lack of confidence among market players regarding liquidity conditions caused interest rates to reach extremely high levels and therefore large spreads between market rates and the ECB main refinancing rate. More specifically, the 3-month Euribor reached an average of 5,019% in September and 5,113% in October. In the latter month it reached

an historical high of 5,393%. Following the ECB's interest rate reductions in October and November, the 3-month Euribor decreased gradually and on 17 November it closed at 4,191% with a continuing downward trend. After the second reduction in ECB rates, the spread between EONIA and the main refinancing rate was at around 20 basis points compared with 47 basis points at the end of October. Signs from the interbank market point towards at least a partial smoothing out in liquidity conditions in the euro area. A similar course was followed by 1-month and 12-month Euribor **(Chart A.11)**. The average spread between Euribor 1-month and Euribor 12-month was at 0,724% in September, falling sharply to 0,417% in October. The large decrease in the spread reflects market expectations about further reductions in European interest rates.

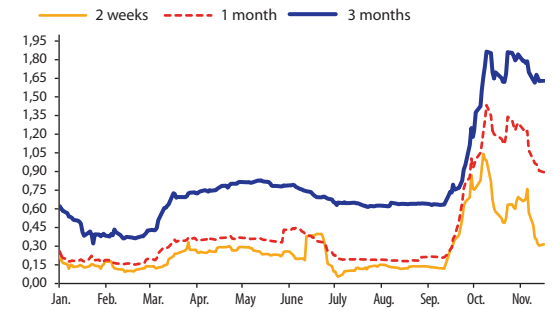
In addition, as depicted in **Chart A.12**, the differential between Euribor and OIS[3] reached extremely high levels due to the large uncertainty in the markets during the period under review. Following the two interest rate reductions by the ECB, the differential between Euribor and OIS was lowered for the three maturities shown in the chart, remaining however at higher levels than those at the beginning of the year. Indicatively, the differential between the 3-month Euribor and OIS was at 62 basis points at the beginning of the year, reaching up to 186 basis points towards the end of October and falling slightly to 163 basis points in mid-November.

CHART A.11 **EURIBOR (selected durations)**
(% per annum, daily data)



Source: www.euribor.org.

CHART A.12 **EURIBOR vs OIS, 2008**
(% per annum, daily data)



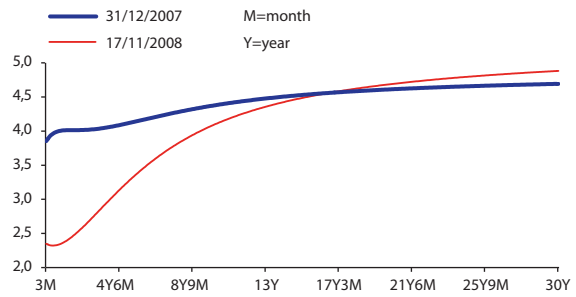
Source: www.euribor.org.

3. OIS are derivative products where EONIA is swapped with a fixed interest rate of selected duration. OIS are used for hedging or speculative moves in the interbank overnight rate or the reference rates of central banks.

Euro area yield curve

Chart A.13 presents the spot yield curve for AAA government bonds for maturities up to 30 years. Compared with the end of 2007, the yield curve has acquired the usual upward shape, meaning that bonds of longer maturities face more uncertainty and therefore risk so they offer higher return. The reduction in the ECB interest rates is reflected in the downward shift of the curve at the short end.

CHART A.13 **Euro area spot yield curve**
(%)



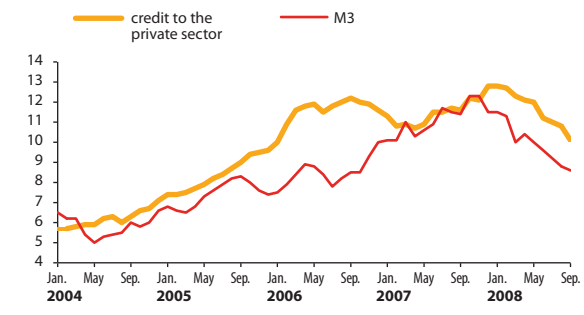
Source: ECB.
Note: Yields on AAA government bonds with maturity up to 30 years, spot prices.

M3 and credit expansion

M3 grew by 8,6% year-on-year in September compared with 8,8% in August while during the period July–September it expanded by 8,9% on average. The slowdown in M3 growth has continued since the beginning of the year and is in conjunction with the slowdown of credit growth in the euro area **(Chart A.14)**.

More specifically, credit to the private sector grew by 10,1% year-on-year in September compared with 10,8% year-on-year in August and 12,8% year-on-year in December 2007 and January 2008, an historical high. The overall slowdown of credit to the private sector was mainly driven by the deceleration in loans to NFCs which grew by 12,1% year-on-year in September from 12,6% in August, while the growth of household credit reached 3,8% year-on-year in September compared with 3,9% year-on-year in August. More specifically, housing loans grew by 4% in Septem-

CHART A.14 **M3 and credit to the private sector: euro area**
(annual change %, seasonally adjusted data)



Source: SDW.

ber compared with 4,1% in the previous month.

Regarding total credit expansion, the latest data for the third quarter point towards a decelerating path despite the fact that it is at high levels compared to historical data. The slowdown is expected to continue given the negative economic prospects in the euro area. At the same time, the ECB's interventions in the money market are intended to further smooth out the transmission of monetary policy and avoid a possible credit crisis.

2. Domestic Prices, Monetary Aggregates and Labour Costs

The international inflationary pressures have started to fade, whilst signs of a more prolonged period of global economic slowdown than initially assumed are becoming more evident. Despite this, the macroeconomic components concerning the Cyprus economy, such as consumption and borrowing, continue registering growth rates that could be considered as excessive.

Prices

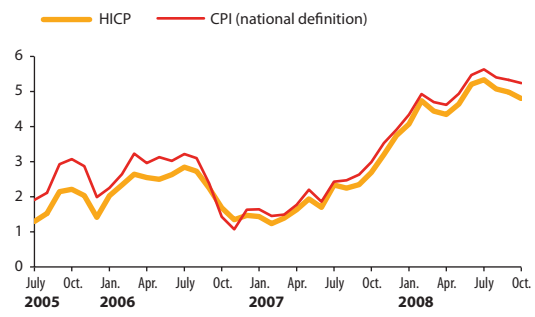
In light of the above, the national Consumer Price Index (CPI) for October registered an increase of 5,2%, compared with 5,3% in September 2008. For the first ten months of 2008, the CPI, on average, registered an increase of 5,1%, whilst in the corresponding period of 2007 the increase in the CPI was just 2,1%. In addition, the Harmonised Index of Consumer Prices (HICP) accelerated by

4,8% in October compared with 5% in the previous month. The increase in HICP for the first ten months of 2008, was on average 4,8%, compared with 1,9% during the corresponding period of 2007 (**Chart A.15**).

The rapid increase in inflation during the current year is, largely, related to the increase in international oil prices. It should be noted that the highest inflation rate in the last 5 years was recorded in July 2008 reaching 5,3%, mainly due to the historical increase in oil prices with the price of Brent crude oil reaching $144 per barrel in mid-July. Furthermore, the increase in food prices, due to the increase in the demand for wheat and maze, has also contributed to the high inflation rate of 2008. The small deceleration of inflation, which has been evident since August is mainly due to the significant reduction in oil prices driven by the uncertainty regarding demand, resulting from the expected global economic slowdown. What is more, the high inflation in Cyprus is also fuelled by the soaring growth of domestic consumption and borrowing, which could be characterised as excessive.

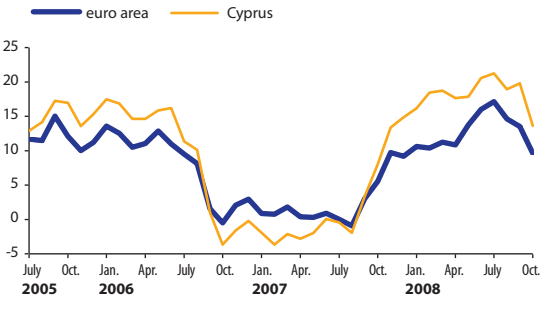
Chart A.16 shows the effect of the recently high international oil prices in the HICP energy component, which registered an increase of 20,6% and 21,2% during June and July 2008, respectively. According to the latest statistical data, the increase in energy prices for September and October 2008 was constrained at 19,8% and 13,6%, respectively. Nevertheless, it should be noted that the recent reductions in international oil prices have not yet

CHART A.15 **Consumer Price Index**
(annual change,%)



Source: Cystat.

CHART A.16 **Harmonised Index of Consumer Prices: energy**
(annual change, %)



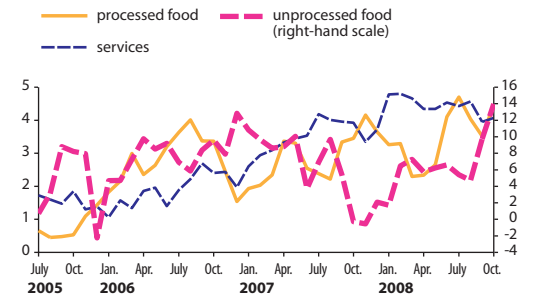
Source: Eurostat, Cystat.

been fully passed through to domestic consumers, since changes in oil prices are transmitted gradually and with some lag to retail prices. The depreciation of the euro relative to the dollar, which is evident in the past two months, has also contributed to a lower reduction in euro denominated oil prices than would have been the case had the dollar remained cheaper.

The HICP food and services components are illustrated in **Chart A.17**. The processed food prices continued registering increases of 4,5% in October 2008. At the same time, unprocessed food prices also increased to 14% during October 2008, mostly due to the increase in the price of fruit and vegetables resulting from the continuing drought. According to the latest data, vegetable prices accelerated to 38% during October. Given also that during the corresponding month of 2007 the unprocessed food prices recorded a decrease of 0,3%, the significant increase recorded in October 2008 could also be characterised, to some extent, as a base effect.

As far as the HICP services component is concerned, significant increases in the prices of hairdressers, restaurants and medical services have been observed during the period January to October 2008. As a result, the whole category has registered a year-on-year increase of 4,1% during the same period. Nevertheless, in September it appears that the base effect of last year's increases in several categories of services, partly due to the rounding up effect from the euro adoption, has been eradicated.

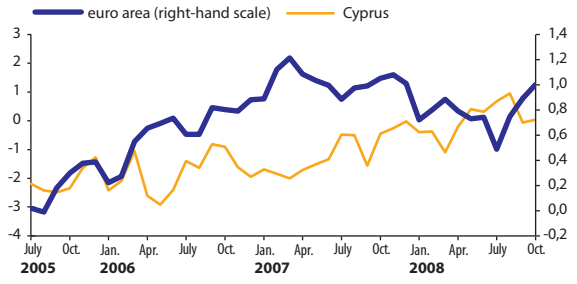
CHART A.17 **Harmonised Index of Consumer Prices: by category**
(annual change, %)



Source: Cystat.

The non-energy industrial goods prices (**Chart A.18**), have been decreasing for the past years, except during the period May to August 2008, whereby they recorded an increase of 0,6%. As a result, prices of non-energy industrial goods have helped contain the overall HICP inflation, due to the low pricing of imported goods, particularly clothing, footwear and motor cars. In September 2008, the prices in the overall category registered a decrease of 0,1%, relative to a 1,6% decrease in the corresponding month of 2007, whereas in October non-energy industrial goods prices recorded zero growth.

CHART A.18 **Harmonised Index of Consumer Prices: non-energy industrial goods**
(annual change, %)



Source: Eurostat, Cystat.

Comparing domestic inflation with the average of the euro area, it is important to note that the gap between the two inflation rates increased during 2008. In particular HICP inflation in Cyprus increased to 4,8% in October 2008, whilst in the euro area it reached 3,2%. This means that the gap between the two rates has been significantly widened to 1,6 percentage points compared with 0,6 percentage points in December 2007. Consequently, if this gap remains at such high levels, the competitiveness of the domestic economy could be adversely affected.

Nevertheless, and despite the fact that inflation in Cyprus remains at higher levels compared with the overall euro area, both exogenous and endogenous components are expected to significantly reduce HICP inflation and contain inflationary pressures in the domestic economy. In particular, it is expected that the reduction in the

price of oil in conjunction with the expected economic slowdown in the global economy and a decrease in domestic demand, will further contain domestic inflationary pressures.

Monetary aggregates[4]

At the outset it should be noted that the "Definition of the Term 'resident of Cyprus' for Statistical Purposes Directive of 2008", came into force on 1 July 2008. As a result, all Monetary and Financial Institutions (MFIs) proceeded with the reclassification of a large number of customer organisations or enterprises with no physical presence in Cyprus, known as "Brass Plates", from the "non-resident" sector to the "resident" sector. The effect of this reclassification has been excluded from the monetary and financial statistics of Section A of this publication in order to achieve comparability of data and at the same time to help draw conclusions. Specifically, references to domestic data or domestic residents exclude organisations or enterprises without a physical presence in Cyprus[5].

In the monetary sector, the international financial crisis does not seem to have, to date, affected domestic credit growth. The excessive domestic demand recorded in the last two years was greatly fuelled by the maintenance of high credit growth rates.

The annual growth of credit to the private sector at the end of the third quarter of 2008 continues to be fairly high at 22,8%, with the over-

4. All the monetary aggregates for Cyprus, including interest rates, are for data excluding the CBC and/or the Eurosystem.
5. For purposes of uniformity, monetary time series data have been amended by the Economic Research Department.

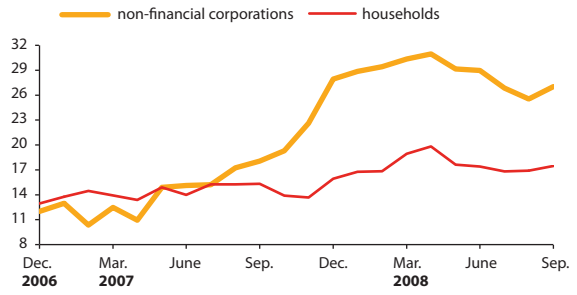
all trend of the last five months indicating a slowdown, partly related to a base effect. Deposits remain the main source of funding for new loans resulting in higher interest rates on deposits due to competition and the transfer of the increased cost to lending rates.

The annual rate of growth of loans to domestic non-financial corporations (**Chart A.19**), after the sharp acceleration recorded last year and up until April 2008, shows a slowdown in the last few months, partly due to the high base of comparison. Nevertheless, at the end of the third quarter of 2008 it remains robust at 27%. Turning to loans to domestic households, after the acceleration in the rate of expansion at the beginning of the year, a slowdown was recorded from May 2008, reaching 17,5% at the end of the third quarter of 2008.

Of the loans granted by MFIs in Cyprus to domestic households at the end of the third quarter of 2008 (**Table A.1**), a share of 22,3% was granted for consumer spending, 44,4% for housing purposes and 33,3% was other lending.

The annual growth rate of consumer credit is still at high levels, continuing the trend since the beginning of the year and reaching 26,3% at the end of the third quarter of 2008. Regarding the growth in housing loans, there was a general slowdown from the beginning of the second quarter of 2008, reaching 25,1% at the end of the third quarter of 2008. Similarly, other lending recorded an overall slowdown in growth, since the beginning of the year, reaching 4,1% at the end of the third

CHART A.19 **Loans to domestic households and non-financial corporations: Cyprus**
(annual change,%)



Source: CBC.

TABLE A.1 **Loans to domestic households**[1],[2]

	Outstanding balance as % of total[3]	Annual percentage change 2007 June	2007 Sep.	2007 Dec.	2008 Mar.	2008 June	2008 Sep.
Domestic households	100,0	14,0	15,3	15,9	19,0	17,4	17,5
1. Consumer credit[4]	22,3	5,1	3,9	9,7	25,8	22,9	26,3
2. Lending for house purchase	44,4	29,3	29,2	27,9	28,3	25,2	25,1
3. Other lending	33,3	5,4	9,0	7,4	5,4	5,8	4,1

Source: CBC.
(1) Sectoral classification is based on ESA 95.
(2) Including non-profit institutions serving households.
(3) As at the end of the last month available. Figures may not add up due to rounding.
(4) The increase recorded at the end of the first quarter of 2008, was mainly due to the merger of an MFI, with its financing subsidiary.

quarter compared with 7,4% at the end of 2007.

Turning to loans to domestic residents by economic activity (**Table A.2**), loans to the broad real estate sector show a continued slowdown in recent months following the rapid acceleration in the annual rate of growth registered last year. This trend is consistent with other indicators of construction activity. Regarding lending to the wholesale and retail trade sector, an acceleration was recorded in the growth rate from the beginning of the year, reaching 27,7% at the end of the third quarter of 2008. By contrast, lending to hotels and restaurants recorded a slowdown from the beginning of 2008, with an annual increase of 8% at the end of the third quarter of 2008.

As regards deposits of domestic non-financial corporations (**Chart A.20**), they remain high. Nevertheless, a deceleration in growth has been recorded since May 2008. Specifically, the annual growth rate of deposits by domestic non-financial corporations reached 22,1% at the end of the third quarter 2008.

Similarly, the growth rate of domestic households' deposits (**Chart A.20** and **Table A.3**) also recorded a slowdown from the beginning of the year, reaching 8,2% at the end of the third quarter of 2008. Since the beginning of the year, there has been a shift from shorter term deposits of domestic households to deposits with an agreed maturity of up to 2 years, reflecting the intense competition among MFIs for raising liquidity through deposits with attractive interest rates. It is

TABLE A.2 **Loans to domestic residents classified according to the NACE Rev. 1.1 of the EU**

	Outstanding balance as % of total[1]	Annual percentage change 2007 Dec.	2008 Mar.	2008 June	2008 Sep.
Manufacturing	3,9	4,7	5,4	5,3	14,8
Construction	11,2	58,8	66,9	71,2	62,0
Wholesale and retail trade	9,5	14,4	19,9	25,2	27,7
Hotels and restaurants	4,8	20,0	10,7	5,6	8,0
Financial intermediation [2]	3,2	-12,5	-30,1	-27,2	-21,6
Real estate, renting and business activities	14,0	49,4	52,0	41,1	45,6
Private individuals	43,0	16,4	19,6	17,6	12,7
Other sectors	10,5	37,3	15,3	19,0	30,0

Source: CBC.
(1) As at the end of the last month available. Figures may not add up due to rounding.
(2) Excluding category 65.1 (monetary intermediation).

CHART A.20 **Deposits of domestic households and non-financial corporations: Cyprus**
(annual change,%)

Source: CBC.

TABLE A.3 **Deposits of domestic households** [1],[2]

	Outstanding balance as % of total[3]	Annual percentage change 2007 June	2007 Sep.	2007 Dec.	2008 Mar.	2008 June	2008 Sep.
Domestic households	**100,0**	**14,2**	**14,4**	**14,8**	**12,6**	**10,0**	**8,2**
Overnight	16,0	20,2	21,6	19,6	13,5	4,7	-3,6
With agreed maturity	**70,9**	**11,2**	**15,1**	**18,7**	**20,7**	**23,6**	**22,7**
up to 2 years	65,9	13,3	17,2	21,1	22,8	26,7	25,9
over 2 years	4,9	-4,5	-1,8	-0,9	1,6	-5,2	-8,8
Redeemable at notice	**13,2**	**18,0**	**6,5**	**-0,5**	**-10,9**	**-24,0**	**-27,1**
up to 3 months	10,0	11,1	5,1	-3,0	-13,7	-21,6	-29,8
over 3 months	3,2	45,5	12,3	9,9	1,0	-31,1	-16,7

Source: CBC.
(1) Sectoral classification is based on ESA 95.
(2) Including non-profit institutions serving households.
(3) As at the end of the last month available. Figures may not add up due to rounding.

worth noting that deposits with an agreed maturity of up to 1 year amount to 60% of all domestic household deposits.

Interest rates

Since the beginning of the year the average lending and deposit MFI rates in Cyprus have followed an upward path.

The upward trend in Cyprus MFI average interest rates on new euro-denominated loans at a floating rate and with an initial rate fixation of up to 1 year to euro area households, (**Table A.4**), and to euro area non-financial corporations (**Table A.5**), is due to the increased cost of raising liquidity from the interbank market as well as through deposits. It should be noted that the Cyprus MFI average interest rate on new euro-denominated loans to non-financial corporations, in particular in other loans over €1 million at a floating rate and with an initial rate fixation of up to 1 year (**Table A.5**), registered a decrease in September. In particular, the aforementioned average rate reached 5,32% in September compared with 7,13% in August 2008. This was due to a particular loan given by a specific MFI in Cyprus at a rather low rate and therefore does not reflect the general trend.

The corresponding rates for loans from MFIs in the euro area (**Chart A.21**) also followed an upward trend. The average interest rate on new loans to households for consumption purposes

TABLE A.4 **Cyprus MFI interest rates on euro-denominated loans (new business) to euro area households[1]**
(% per annum, period average)

		Bank overdrafts [2]	Floating rate and up to 1 year initial rate fixation		
			Consumer credit	Lending for house purchase	Other lending
2008	Jan.	6,61	6,42	5,50	6,15
	Feb.	6,60	6,58	5,48	6,19
	Mar.	6,65	6,48	5,47	6,46
	Apr.	6,83	6,68	5,53	6,53
	May	6,84	6,71	5,55	6,44
	June	7,05	7,01	5,84	6,90
	July	7,33	7,58	6,21	7,22
	Aug.	7,37	7,78	6,37	7,30
	Sep.	7,43	7,75	6,40	7,18

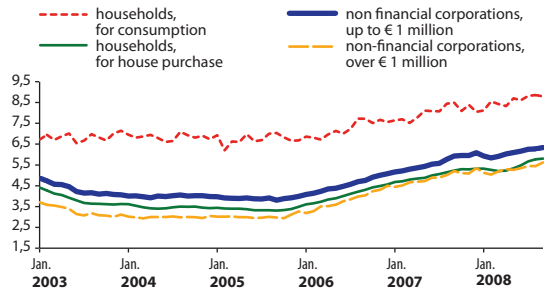
Source: CBC.
(1) Including non-profit institutions serving households.
(2) For this instrument category, new business refers to end-of-period.

TABLE A.5 **Cyprus MFI interest rates on euro-denominated loans (new business) to euro area non-financial corporations**
(% per annum, period average)

		Bank overdrafts [1]	Floating rate and up to 1 year initial rate fixation	
			Other loans up to € 1 million	Other loans over € 1 million
2008	Jan.	6,38	6,31	5,71
	Feb.	6,38	6,56	5,50
	Mar.	6,51	6,63	5,87
	Apr.	6,83	6,90	6,56
	May	6,80	6,96	6,57
	June	7,12	7,05	6,35
	July	7,42	7,22	6,93
	Aug.	7,34	7,33	7,13
	Sep.	7,45	7,43	5,32

Source: CBC.
(1) For this instrument category, new business refers to end-of-period.

CHART A.21 **Euro area MFI interest rates on euro-denominated loans (new business) to euro area residents[1]**
(% per annum, period averages)



Source: SDW.
(1) At floating rate and up to 1 year initial rate fixation.

reached 8,79%, i.e. 104 basis points higher than the average rate applied by MFIs in Cyprus in September 2008, compared with 8,86% in August and 8,61% in June 2008. The average rate for new housing loans to households rose to 5,80% in September 2008, 60 basis points lower than in Cyprus, compared with 5,77% in August and 5,48% in June 2008. Turning to the corresponding average rate applied by euro area MFIs on loans to non-financial corporations, for other loans up to €1 million it was 109 basis points lower than the average rate applied by MFIs in Cyprus and reached 6,34% in September, compared with 6,27% in August and 6,16% in June 2008. The average rate for new loans over €1 million rose to 5,62% in September, compared with 5,45% in August 2008 and 5,35% in June 2008.

Since the beginning of 2008 there was an increase in the deposit interest rates offered in Cyprus (**Table A.6**). Specifically, the average interest rate of new euro-denominated deposits with an agreed maturity of up to one year to MFIs in Cyprus by euro area households reached 5,60% in September, compared with 5,47% in August and 5,11% in June 2008. The corresponding average rate of new deposits with an agreed maturity of over one and up to two years, rose to 5,53% in September compared with 5,45% in August and 5,13% in June 2008. The average rate on new deposits with an agreed maturity of up to one year of non-financial corporations reached 4,97% in September, compared with 4,73% in August and

TABLE A.6 **Cyprus MFI interest rates on euro-denominated deposits (new business) by euro area residents**
(% per annum, period average)

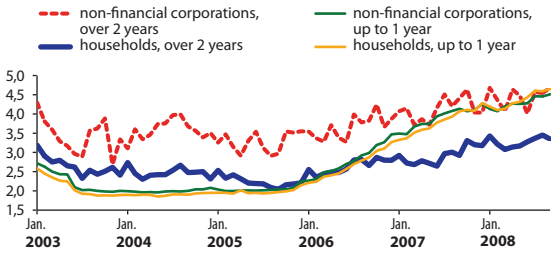
		Households[1]			Non-financial corporations	
			With agreed maturity			
		Overnight[2]	Up to 1 year	Over 1 and up to 2 years	Overnight[2]	With agreed maturity up to 1 year
2008	Jan.	1,59	4,13	4,26	1,28	3,99
	Feb.	1,57	4,17	4,27	1,15	3,85
	Mar.	1,65	4,32	4,28	1,32	4,31
	Apr.	1,55	4,56	4,61	1,11	4,56
	May	1,59	4,73	4,71	1,11	4,82
	June	1,57	5,11	5,13	1,08	4,78
	July	1,60	5,36	5,31	0,94	5,02
	Aug.	1,63	5,47	5,45	0,95	4,73
	Sep.	1,66	5,60	5,53	1,01	4,97

Source: CBC.
(1) Including non-profit institutions serving households.
(2) For this instrument category, new business refers to end-of-period.

4,78% in June 2008. As already mentioned above, the increases in interest rates on time deposits in recent months is mainly due to the ongoing competition among banks to attract new deposits.

In the euro area, the average interest rate on new euro-denominated deposits from households with an agreed maturity of over two years (**Chart A.22**) reached 3,35% in September compared with 3,45% in August and 3,28% in June 2008, while the average rate for new deposits from households with an agreed maturity of up to one year rose to 4,65% in September, from 4,59% in August and 4,43% in June 2008. Moreover, the corresponding rate for deposits of non-financial corporations with an agreed maturity of over two years reached 4,67% in September from 4,55% in August and 4,01% in June 2008, while the average interest rate on non-financial corporations' deposits with an agreed maturity of up to one year rose to 4,51% in September from 4,46% in August and 4,28% in June 2008. This year's rise in interest rates on new deposits reflects the efforts of MFIs in the euro area to raise liquidity through deposits, which are the main source of funding for bank loans, because of the uncertainty and lack of trust between the banks and the high cost in the interbank market.

CHART A.22 **Euro area MFI interest rates on euro-denominated deposits (new business) by euro area residents**[1]
(% per annum, period averages)



Source: SDW.
(1) New deposits with agreed maturity.

Labour costs[6]

Reflecting the aforementioned monetary developments and inflation pressures recorded during the first months of 2008, labour costs, as shown by

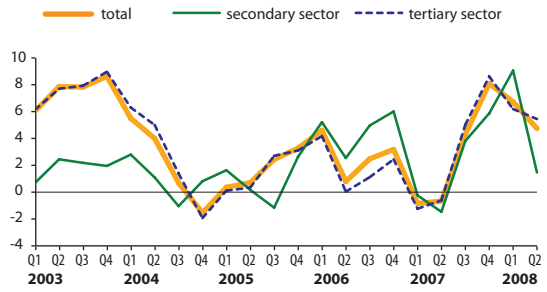
6. The quarterly data that refer to the compensation per employee are under review. Therefore, the analysis in this section is based on annual data (annual data for 2007 have already been revised and, based on this, a revision of the quarterly figures will follow) while the analysis for the first half of 2008 is based on projections.

the nominal compensation per employee[7], are expected, according to preliminary indicators, to accelerate during the first half of 2008 **(Chart A.23)**. Specifically, the average monthly earnings of employees in the first half of 2008 increased by 1,6 percentage points compared with the first half of 2007. This was due to, among other things, the cost of living allowance (COLA) which recorded an annual increase of approximately 4% for 2008, the highest increase over the past 12 years.

Real compensation per employee in the first half of 2008 is expected to marginally increase compared with 2007, since the expected increase in nominal compensation per employee will be mitigated by the growth of the private consumption deflator. This reverses the 2007 picture, when real compensation per employee decreased possibly due to the increased inflow of low-wage foreign workers. In parallel, the increased inflow of unskilled foreign workers was reflected in the productivity slowdown in the first half of 2008 and 2007 **(Chart A.24)**.

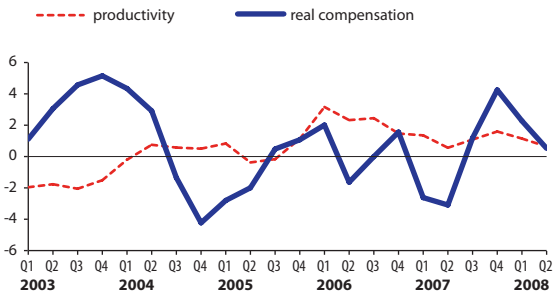
Unit labour costs in the first half of 2008 are expected to increase due to the expected growth in nominal compensation per employee and the marginal slowdown in productivity. In 2007 unit labour costs recorded a marginal increase due to the slowdown in productivity which overcame the slowdown in nominal compensation per employee. Nevertheless, they remained below the euro area rates for 2006 and 2007, thus reversing the picture of the previous years **(Chart A.25)**.

CHART A.23 **Nominal compensation per employee by sector**
(annual change, %)



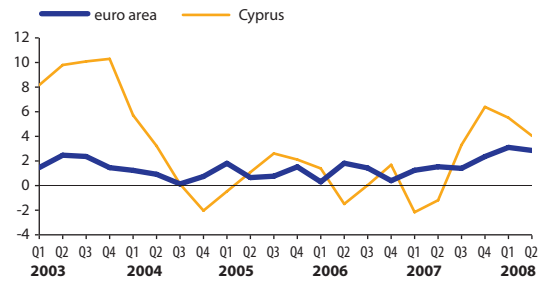
Source: SDW.

CHART A.24 **Productivity and real compensation per employee**
(annual change, %)



Source: SDW.

CHART A.25 **Unit labour costs: Cyprus and the euro area**
(annual change, %)



Source: SDW.

7. The number of employees refers to physical persons and not full-time equivalent persons which is used by Cystat because this is not available on a quarterly basis.

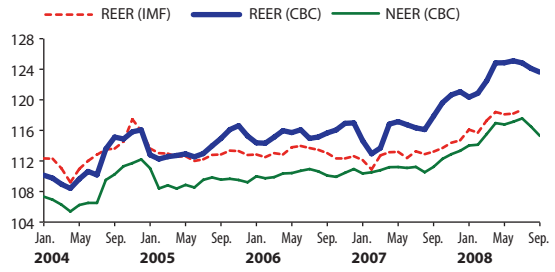
3. Domestic Competitiveness and Balance of Payments

As a result of the excessive domestic demand, the current account deficit increased significantly in both 2007 and the first months of 2008. Even though the deficit financing, has not, so far, created any immediate problems, however, it is still an issue on which special attention should be paid. Beyond showing excessive consumption, it probably reveals some competitiveness problems in the domestic economy, given the problems recorded in the exports of goods and tourism services.

Effective exchange rate

Chart A.26 shows the effective exchange rate (EER) of the Cyprus currency (Cyprus pound until 2007 and euro from 2008 onwards), namely the index of real EER, as calculated by the International Monetary Fund (IMF) and the real and nominal EER index as calculated by the CBC[8]. The chart shows an increasing trend of the real exchange rate (appreciation) in 2007 and the first months of 2008, which is due to higher inflation recorded in Cyprus compared with the corresponding inflation recorded by our trading partners, as well as to the weakening of the dollar and sterling against the euro. This trend was reversed (depreciation) during the second half of 2008 and it is primarily caused by the weakening of the euro against the dollar and the yen. The depreciation of the real EER is less pronounced compared with the

CHART A.26 **Real and nominal effective exchange rates of the Cyprus currency (IMF weights)**
(Base year 2000=100)



Sources: CBC, IMF.

8. The effective exchange rate in real terms "REER IMF" is calculated by the IMF and takes into account competition with other countries (19 countries). The deflator used is the CPI. Because of the time lag in publishing this index, the CBC calculates a simplified index using eight countries instead of 19 (REER CBC). The same index is also calculated in nominal terms (NEER CBC).

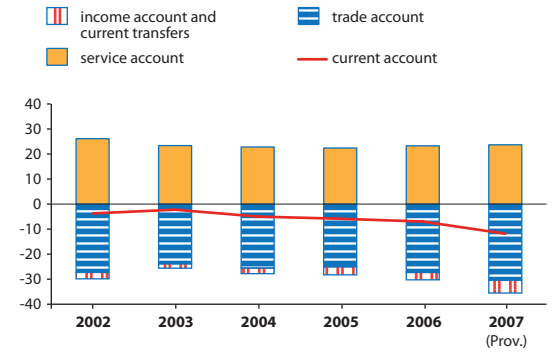
nominal EER because of the higher inflation recorded in Cyprus compared with the inflation in trading partner countries.

The real EER and the unit labour costs are two important indicators which reflect the degree of competitiveness of the Cypriot economy. Specifically, the rise in unit labour costs and the preservation of the appreciation of the real EER compared with previous years negatively affect the current account, making domestic exports less competitive and imported products cheaper.

Balance of payments

According to preliminary data for 2007, the current account recorded a deficit of 11,7% of GDP compared with a deficit of 7% in 2006 **(Chart A.27)**. The increase in the deficit was mainly due to the deterioration of the trade account deficit which recorded a three percentage point increase, reaching 30,2% of GDP, while the increase recorded in the services account surplus was not sufficient to reverse the picture. Finally, a deterioration was recorded in the income account and current transfers which was due, in part, to the increased profitability of Cypriot financial institutions with increased capital participation by foreign investors. The profits are distributed to the investors according to their participation in the company's capital. Even if the share of profits that belongs to foreign investors is not repatriated but

CHART A.27 **Current account**
(% GDP)



Source: CBC.

remains as reinvested earnings in Cyprus, in accounting terms both an outflow from the current account and an inflow of foreign direct investment in the financial account is recorded. In other words, the profits of non-resident investors in Cyprus which are not repatriated are simultaneously recorded as a deterioration in the current account and an increase in its financing. Given both the increased profitability and increased participation of non-residents in Cypriot companies in 2007-2008, the profits of non-residents during this period have increased, being mirrored as a deterioration in the current account.

The latest data for the first half of 2008 reveal a further deterioration in the current account. Specifically, the deficit in the first half of 2008 reached 18,3% of GDP compared with 8,2% in the first half of 2007. The deterioration was mainly due to the strong growth in the imports of goods which are largely influenced by the price of oil and excess domestic demand, which lead to increases in the imports of consumer and intermediate goods. In addition, recent data regarding the trade balance for the third quarter of 2008 does not change the picture. Specifically, **Table A.7** shows that the growth rate of the total imports of goods is higher than the one of exports of goods, and, coupled with the fact that the level of imports is much higher, this has led to a further deterioration in the trade balance. Regarding the services sector, preliminary data for the first two quarters showed a reduction in the surplus, therefore

TABLE A.7 **Trade account**
(€ million)

	Imports	Exports	Trade deficit
2006	5.513,5	1.111,8	4.401,7
2007	6.353,4	1.082,7	5.270,8
annual % change	15,2	-2,6	19,7
2007 Jan. - Sept.	4.648,4	818,7	3.827,7
2008 Jan. - Sept.	5.560,1	850,0	4.710,1
annual % change	19,6	3,8	23,1

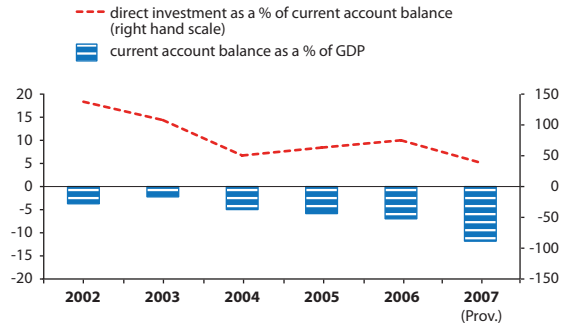
Source: Cystat.

increasing the current account deficit.

Cyprus's financing needs which result from the current account deficit in recent years are mainly met through foreign direct investment **(Chart A.28)**. The percentage of financing for 2007 fell to almost 40% from 75% in 2006, and even though this share is still considered high compared with other countries, for Cyprus it is the lowest percentage in recent years. Financing from direct investments as a percentage of GDP, averaged around 5% over the past eight years, while in 2007 it reached 4,6%. Because of the increased deficit in the current account in 2007, the financing share from portfolio investments and other investments increased to around 60%.

It should be noted that the total foreign debt of Cyprus reached approximately 125% of GDP in 2007, up from around 50% in 2003, although a part of the increase was due to companies based in Cyprus but which do not have commercial transactions with domestic residents. Finally, the international investment position in 2007 shows that Cyprus is a net creditor, i.e. assets exceeded liabilities.

CHART A.28 **Current account financing by foreign direct investment**



Source: CBC.

Tourism

Revenues from tourism in the first nine months of 2008 deteriorated compared with the corresponding period of 2007 **(Table A.8)**. Specifically, total revenue for this period decreased by 4,1%. At the same time, arrivals decreased by 0,3% for the first nine months of the year. The recent developments

TABLE A.8 **Tourism**

	Tourist arrivals (thous.)	Tourist receipts (€ million)	Expenditure per person (€)
2006	2.400,9	1.755,3	731,1
2007	2.416,1	1.858,1	769,1
annual % change	0,6	5,9	5,2
2007 Jan. - Sept.	1.972,5	1.532,7	777,0
2008 Jan. - Sept.	1.965,9	1.470,2	747,9
annual % change	-0,3	-4,1	-3,8

Source: Cystat.

in tourism are due, in part, to the adverse effects of the global financial crisis and particularly the effects of the crisis on the UK economy which accounts for approximately 50% of the tourist arrivals in Cyprus.

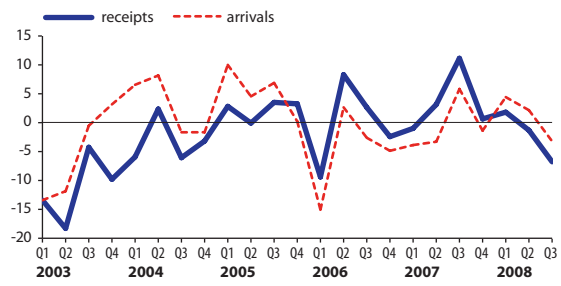
As shown in **Chart A.29** the rate of revenue growth during the first nine months of 2008 is lower than the growth rate of arrivals, which means that per capita spending fell during this period. The same trend was recorded in the period 2003 - 2005, while in the period 2006-2007, the trend was in the opposite direction.

4. Domestic Demand, Production and the Labour Market

Quarterly national accounts

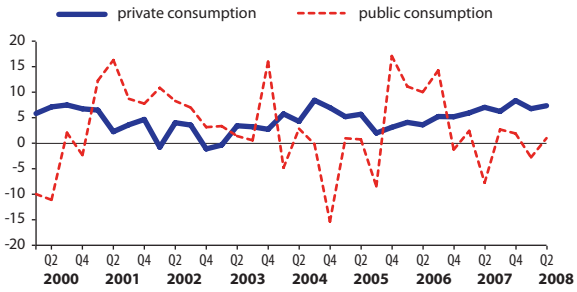
Based on the most recent data published by the Statistical Service of Cyprus (Cystat), GDP growth recorded a marginal deceleration in the first half of 2008 compared with the corresponding period of 2007. However, it remained at relatively high levels. More specifically, real GDP growth fluctuated around 4% in the first half of the year compared with 4,3% in the corresponding period of 2007 **(Charts A.30(a) and A.30(b)).** Cystat recently announced the flash estimate for the third quarter real GDP growth rate which reached 3,5%. Therefore, for the first nine months of 2008 real GDP increased by 3,8%. It should, however, be noted that the categorisation of Cystat GDP breakdown

CHART A.29 **Tourist arrivals and receipts**
(annual change, %)



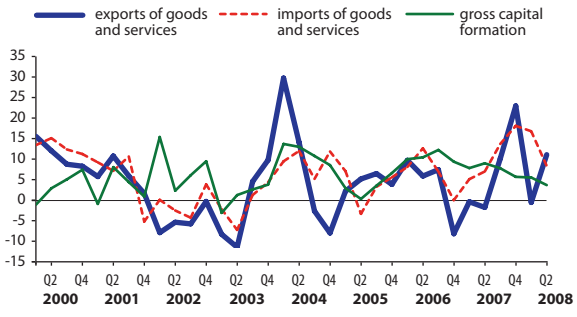
Source: Cystat.

CHART A.30(a) **Quarterly GDP growth (expenditure categories)**
(annual change, %)



Source: Cystat.

CHART A.30(b) **Quarterly GDP growth (expenditure categories)**
(annual change, %)



Source: Cystat.

by expenditure category may be revised with the next GDP figures revision.

In the fourth quarter of 2008 a much bigger deceleration is expected compared with the one registered in the first nine months of 2008, as a result of the worldwide financial crisis which was more pronounced in the last quarter. According to the Confidence Indicators published in October **(Table A.9)**, the deceleration recorded in real GDP is expected to continue in the fourth quarter of 2008. In particular, the sub-categories of services, manufacturing, retail sales, consumption and construction have shown significant deterioration in the last few months.

According to the latest available data by Cystat, real GDP growth decelerated in the first half of 2008, mainly due to the reduction in public consumption by 0,9%. On the other hand, private final consumption, which contributed significantly to GDP growth in 2007, recorded a further acceleration, reaching 7% in the first half of 2008 compared with 6,5% in the corresponding period of 2007. Gross capital formation, on the other hand, decelerated to 4,6%, following the significant increase in 2007. Total imports increased by 12,4% compared with 6,1% in the corresponding period of 2007, mainly driven affected by the notable increase in the imports of goods. At the same time, total exports increased by 6% compared with a reduction of 1,2% recorded in the corresponding period of 2007, primarily due to the significant increase in

TABLE A.9 **Business and consumer surveys: confidence indicators**
(for sub-indices: difference between percentages of positive answers and percentages of negative answers)

	2008 June	2008 July	2008 Aug.	2008 Sept.	2008 Oct.
ESI	112,2	109,6	109,0	112,8	93,6
Industry	11	12	9	10	3
Services	28	17	20	22	7
Consumer	-34	-31	-26	-25	-31
Retail trade	7	6	1	5	0
Construction	-3	-4	-9	-3	-15

Source: European Commission.
(1) Seasonally adjusted data.

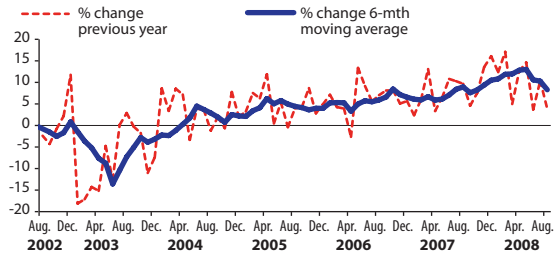
the exports of services, specifically in the category of financial services.

Private consumption

According to the analytical national accounts data for the first six months of 2008, private final consumption recorded significant increases. Nevertheless, more recent data on the retail sales index, excluding the sales of motor vehicles, recorded a deceleration, increasing by 8,3% in August 2008 compared with approximately 12% increase in the first half of the year **(Chart A.31)**, therefore showing a possible reversal of the trend recorded in private final consumption. As far as the registration of motor vehicles is concerned, a deceleration was recorded, increasing by 6,4% in the first ten months of the year compared with a 38% increase in the corresponding period of 2007, which was the year when excise taxes were reduced and, therefore, sales of motor vehicles increased significantly **(Chart A.32)**.

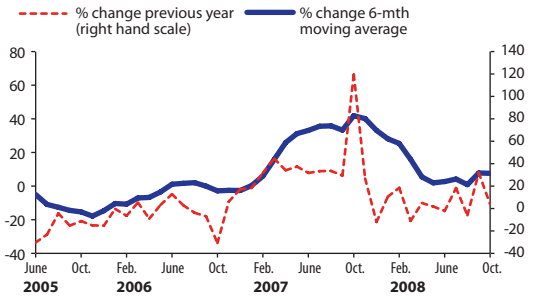
Credit card spending by domestic card holders in Cyprus, which is an additional indicator of consumption **(Chart A.33),** increased by 8,3% in October, thus registering a significant deceleration compared with the 30,2% increase recorded in October 2007. For the whole period, a deceleration was also recorded, with credit card spending registering a 19,2% increase compared with a 25% increase in the corresponding period of 2007. The same trend is expected to continue in subsequent

CHART A.31 **Retail sales**



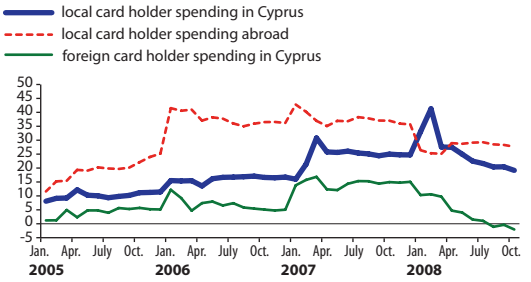
Source: Cystat.

CHART A.32 **Registration of motor vehicles**



Source: Cystat.

CHART A.33 **Credit card spending**
(cumulative annual % change from January)



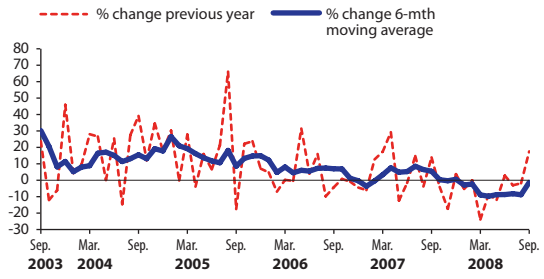
Source: JCC Payment Systems Ltd.

months. During the period January – October 2008, credit card spending by foreign card holders in Cyprus registered a 2,1% increase compared with a 15% increase in the corresponding period of 2007, thus mirroring the reduction in the receipts from tourism.

Secondary sector: construction / manufacturing production

As far as the secondary sector is concerned, the construction industry has started showing signs of sluggishness as a result of the recent international crisis. In particular, the number of building permits has fallen by 10%, from 7.166 to 6.447 between January and September 2008 compared with the corresponding period of 2007 (**Chart A.34**). In addition, the total area and total value of the permits as well as the number of dwelling units have also been reduced by 4,8%, 2,7% and 9,1% respectively, during the aforementioned period. It should be noted that for the first nine months of 2008, a significant fall of 12% in building permits was registered in the category of residential buildings. At the same time, comparing each district and area, Ammochostos registered the biggest fall in building permits of 32,4% for the first nine months of 2008, whilst the second largest fall of 14,5% was registered in Larnaca. Nevertheless, Larnaca and Paphos continue registering an increase in the total area and total value of the permits. Nicosia, on the

CHART A.34 **Building permits authorised**



Source: Cystat.

other hand, registered a fall in both the total area and total value of the permits, despite the fact that a smaller reduction in the number of building permits was recorded. As a consequence, the trend of building permits, which constitutes a leading indicator of future activity in the construction industry, supports the overall market view of a significant reduction in construction activity, especially in tourist areas.

The latest available data show that in September 2008 building permits recorded an increase of 13,8%, compared with the corresponding month of the previous year. Nonetheless, the latest data must not be interpreted as a change in the trend since, as previously mentioned, building permits registered a significant fall during the first ten months of 2008, and this fluctuation appears to be within the month to month fluctuations due to unforeseen factors. One possible explanation for the increase in building permits in September could be the reduction in the cost of production, caused by the recent global economic recession, inducing an increase in demand. However, this is not expected to change the overall trend of the index.

Another indication of a deceleration in the construction industry is the significant reduction in the government's tax receipts from real estate, registered in the first nine months of 2008. In particular, during the period January to September 2008, the collections of the Inland Revenue Department from immovable property tax and

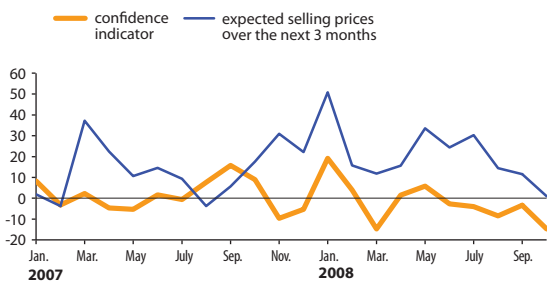
capital gains tax registered a decrease of 6% and 22% respectively, compared with the corresponding period of 2007, whilst stamp duty registered a small decrease of 2%.

Furthermore, as has been mentioned in the previous section on the quarterly national accounts, the confidence indicator for the construction industry (**Table A.9,** p.48) points towards a significant reduction in activity. At the same time, and as shown in **Chart 35**, the expectations for real estate prices, which are incorporated into the confidence indicator for the construction industry, are falling thus reflecting the negative path which the construction industry is expected to follow.

Focusing on the sales of cement, the sales volume has increased by 10,8% during the first ten months of 2008, registering a growth rate virtually unchanged from the corresponding period of 2007. Nevertheless, according to the latest available data, the growth rate of the sales volume for October 2008 has decelerated to 1,2% compared with 17,8% in the corresponding month of 2007 (**Chart A.36**).

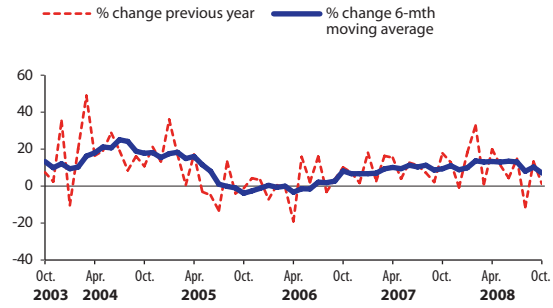
As with the construction sector, manufacturing production is showing signs of weariness. In total, the index of manufacturing production (**Chart A.37**) has registered an increase of 3,9% in the period January to August 2008, compared with 2,8% in the corresponding period of 2007. Despite this, however, according to the latest available data in August 2008, the index recorded an annual reduction of 3,2%.

CHART A.35 **Construction confidence indicator**



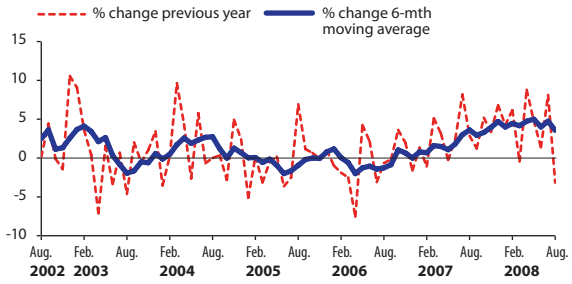
Source: European Commission.
Note: Seasonally adjusted data

CHART A.36 **Sales of cement**



Source: Cystat.

CHART A.37 **Manufacturing production**



Source: Cystat.

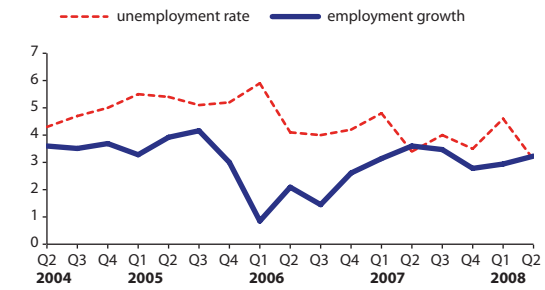
Labour market

Following strong economic activity in the first half of 2008, employment[9] continues its strong growth, reaching 3,1%. This increase resulted mainly from the increase in foreign labour. In parallel, during the same period, the unemployment rate decreased by 0,2%, thus reaching 3,9%, according to the Labour Force Survey (LFS) **(Chart A.38)**.

The most recent available data for unemployment is that for the registered unemployed, which shows a similar trend recorded by the LFS data in the past two years. The registered unemployment rate showed a downward trend up to the first half of 2008, while showing signs of stabilisation since then. This development is associated with the projected slowdown of the Cyprus economy in the second half of 2008 **(Chart A.39)**. This trend is more evident in the seasonally adjusted data. It is worth noting that the numbers of registered unemployed and therefore the rate of registered unemployment are lower than those of the LFS because of differences in the methodologies of the two unemployment measures.

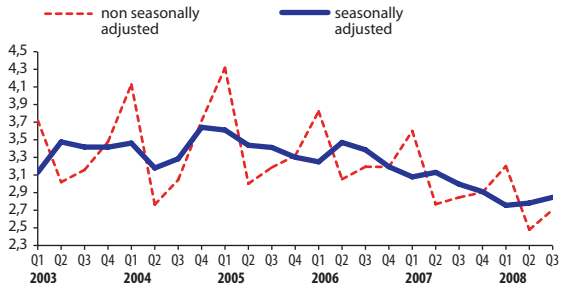
The increase in employment in the first half of 2008 is mainly driven by the "other services" sector (financial institutions, real estate, public administration, education, health) **(Chart A.40)**, while the contribution of the trade, repairs, hotels, restaurants, transport and communications sectors was also important. Construction also contributed positively to employment, as did manufacturing,

CHART A.38 **Employment growth and unemployment rate**



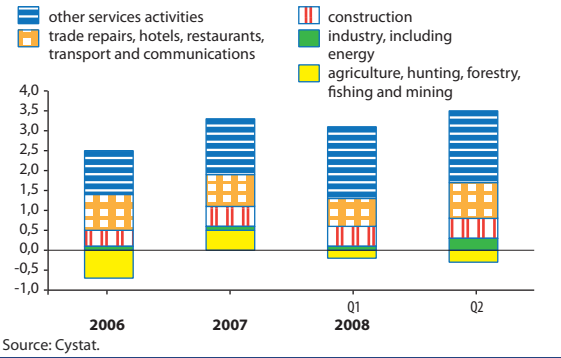
Source: Cystat.

CHART A.39 **Registered unemployment rate**



Source: Cystat.

CHART A.40 **Contribution to employment growth by sector**
(%)



Source: Cystat.

9. See footnote 7.

although to a lesser extent. Finally, employment in the agriculture sector, despite its positive contribution in 2007, recorded a decrease in the first half of 2008, possibly due to the drought.

5. Domestic Public Finance Developments

According to the preliminary general government figures published by Cystat, a budget surplus of 2,9% of GDP was recorded during the first nine months of 2008, compared with a surplus of 3,1% during the corresponding period in 2007 **(Table A.10)**. During the same period, the primary surplus was reduced from 5,6% of GDP to 5,2% **(Chart A.41)**. Total expenditure of general government rose by 8,3% during the first nine months of 2008 compared with the corresponding period of 2007, while total revenues rose by 7,6%.

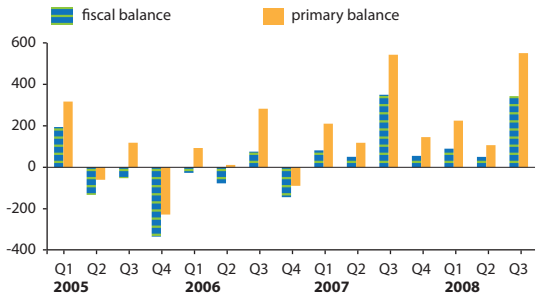
Analytically, on the revenue front, comparing the first nine months of 2008 with the corresponding period of 2007, an increase of only 4,5% was recorded in the revenues in the category "Current taxes on income, wealth etc." This category contains the revenues from capital gains tax, which are affected by the level of activity in the construction and property sector. It should be noted that the increase in revenues in this category had been 35% during the first nine months of 2007 compared with the corresponding period of 2006, due to the boom in the construction and property sector. The significant reduction in the rate of growth of revenues in 2008 is due to the decelera-

TABLE A.10 **Accounts of general government**
(€ million)

	Jan.-Sept. 2007	Jan.-Sept. 2008	Change
EXPENDITURE			
Intermediate consumption	506,0	555,8	49,8
Capital formation	273,2	285,7	12,5
Compensation of employees	1.597,2	1.707,5	110,3
Other taxes on production	0,2	0,4	0,2
Subsidies	1,3	1,4	0,1
Interest paid	389,3	398,9	9,6
Social transfers	1.337,1	1.511,2	174,1
Other current transfers	500,3	567,2	66,9
Capital transfers	51,8	15,0	-36,8
Total expenditure	**4.656,4**	**5.043,1**	**386,7**
REVENUE			
Market output & output for own final use	348,8	346,6	-2,2
Taxes on production and imports	2.226,2	2.404,7	178,5
of which VAT	1.254,2	1.443,3	189,1
Property income	84,8	112,8	28,0
Current taxes on income, wealth, etc	1.486,6	1.554,8	68,2
Social contributions	905,3	1.024,7	119,4
Other current transfers	77,2	80,0	2,8
Capital transfers	9,7	3,0	-6,7
Total revenue	**5.138,6**	**5.526,6**	**388,0**
Surplus (+) / Deficit (-)	**482,2**	**483,5**	
Surplus (+) / Deficit (-) % of GDP	3,1	2,9	

Source: Cystat.

CHART A.41 **Fiscal and primary balances of the general government**
(€ million)



Source: Cystat.

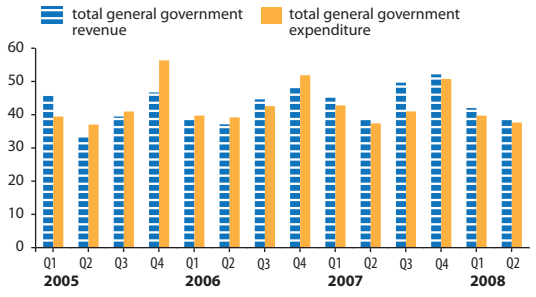
tion in transactions in the property market. This is also confirmed by Inland Revenue Department figures which show a 22% reduction in receipts from capital gains tax during the first nine months of 2008 compared with the corresponding period in 2007.

In general, it is considered advisable that temporary and unexpected increases in revenues, such as those observed in 2007, are utilised to further consolidate fiscal balances instead of increasing expenditures, since the latter tend to be of a permanent nature and thus cannot easily be reversed.

Additionally, the restraint in public expenditure is vital so as to ensure the long-term sustainability of public finances. This is especially important in view of the European Commission's calculations indicating that the ageing population will place severe pressure on Cyprus's public finances. Moreover, measures which aim at ensuring the viability of the Social Security Fund need to be adopted the soonest. A package of such measures, which mainly involves the gradual increase in the social contribution rates, is currently under discussion by the government.

Public debt as a percentage of GDP was reduced from 64,6% in 2006 to 59,4% in 2007, due to the high primary surplus and the running down of sinking funds **(Chart A.43)**. During 2008, an even larger reduction in public debt as a percentage of GDP is expected, with government projections pointing to a debt level of 47,9% of GDP. This reduction is mainly due to the running down of

CHART A.42 **Total revenue and expenditure of the general government as a percentage of GDP**



Source: Cystat.

CHART A.43 **Net total debt as a percentage of GDP**

Source: Ministry of Finance.

BOX A.2. Analysis of the reduction in public debt as a percentage of GDP in 2008

According to the figures and estimates of the Ministry of Finance as well as the 2009 budget, public debt as a percentage of GDP is expected to be reduced from 59,4% in 2007 to 47,4% in 2008. This expected drop of 12% is despite the projected small primary balance in 2008. The aim of this box is to explain the reasons for this large decrease.

The budget deficits of the government add to the public debt, whereas budgetary surpluses have the effect of reducing debt. Interest on the debt has a debt increasing impact, whereas any interest repayments have a debt decreasing impact. A significant factor affecting the change in the level of debt is the primary balance, which is defined as the budget balance excluding the government's expenditure on interest repayments. Another factor is the magnitude of the denominator, that is the level of GDP, since in the case of economic growth, *ceteris paribus*, the increase in the size of the denominator leads to a reduction in the value of the debt ratio.

In the case of Cyprus, reductions in the debt ratio are also due to the running down of the sinking funds. These are interest bearing accounts which were created in the past and kept at the Central Bank of Cyprus with the aim of repaying specific government loans. Every year and up to the date of repayment of the particular loan, the government deposits predetermined amounts in these accounts. Previously, the amounts deposited in the sinking funds were deducted from public debt, despite the fact that the actual repayment of the particular loans would occur in the future. In the light of the then upcoming accession of Cyprus to the EU, it was no longer possible for methodological reasons imposed by Eurostat to classify the deposits in the sinking funds as debt repayments. Consequently, these amounts are presented as part of the public debt until the date of maturity of the sinking funds, that is the date when the repayments of these particular loans are actually made.

During 2008 there was a significant running down of the sinking funds since a large amount of the debt, the repayment of which was made through sinking funds, reached maturity and was thus repaid.

The foregoing analysis can be represented by the equation[1] below. The change in the debt to GDP ratio is attributed to four factors: the real growth rate of the economy, which affects the size of the

1 L.Spaventa "The growth of public debt: sustainability, fiscal rules and monetary rules" IMF staff papers, June 1987.

denominator; the real interest rate; the size of the primary balance; and the running down of the sinking funds.

$$\Delta\beta_t = \beta_{t-1}(i_t - \pi_t - y_t) - PB_t - SF_t + \varepsilon_t$$

Where,

Δ = change

β = public debt as a percentage of GDP

i = nominal interest rate

π = inflation rate

y = real growth rate of the economy

PB = primary balance as a percentage of GDP

SF= sinking funds which are reaching maturity during year t, as a percentage of GDP

ε= other factors

t = time

The table below presents the contribution of the above factors to the projected reduction in the public debt as a percentage of GDP for 2008. From the 12 percentage point (pp) reduction in the debt ratio, 5,2 pp is attributed to the running down of the sinking funds, 3,9 pp is attributed to the primary balance, 2,3 pp is attributed to the real GDP growth rate and 0,6 pp is attributed to other smaller factors.

Analysis of the reduction in public debt as a percentage of GDP in 2008
(percentage points)

Change in the public debt to GDP ratio	**-12,0**
Part of the change that is attributed to real GDP growth	-2,3
Part of the change attributed to the real interest rate	0,0
Part of the change that is attributed to the primary balance	-3,9
Part of the change that is attributed to the running down of the sinking funds	-5,2
Part of the change attributed to other factors	-0,6

most of the sinking funds. However, the fact that the debt level is projected to be considerably lower than the 60% of GDP threshold of the Stability and Growth Pact should not lead to complacency.

It should be stressed that if the measures aimed at securing the viability of the Social Security Fund are not adopted, the surpluses that are currently recorded in the balances of the Fund will turn into deficits, thus placing significant pressure on both the budget balances and the public debt. Such a development would seriously limit the ability of the government to use fiscal policy as an economic tool.

Euro area entry has significantly increased the importance of fiscal policy, which should be used in a manner which enables the economy to meet the various challenges that it faces, such as the ongoing financial crisis. Fiscal policy needs to be consistent with the maintenance of macroeconomic stability. The revised Stability and Growth Pact calls for increased fiscal consolidation efforts during periods of economic growth so as to create room for budgetary manoeuvre in times of economic crisis, without violating the conditions of the Pact.

Any increase in public expenditure for social or investment purposes, something which may be desirable due to current developments, should be targeted and within the confines of the state's fiscal abilities.

The government needs to pay particular attention to the timing of the implementation of fiscal policy so as to ensure that the various measures adopted

dampen rather than exacerbate the economic cycle. The practical commitment by the government to the Stability and Growth Pact will not only ensure healthy public finances but it will also enable it to achieve long-term macroeconomic stability.

2009 Budget

In September 2008, the Council of Ministers adopted the draft 2009 budget, which proposes an increase in total expenditure, excluding loan repayments of 10,9%. A large part of this increase is due to the proposed 16,4% increase in transfer payments due to measures such as the Easter bonus to pensioners, the strengthening of housing policy, the purchase of medical services from the private sector, and the increase in various social payments.

The 2009 budget estimates that a surplus of 0,7% of GDP will be recorded for the year. This projection, however, is based on the assumption of a 3,7% real GDP growth rate, which appears to be optimistic given the latest international economic developments. The expected recession in the economies of our trading partners will also have a negative impact on the Cyprus economy. Central Bank of Cyprus calculations indicate that for every 1% reduction in the growth rate of the economy, the fiscal balance deteriorates by 0,4%, mainly due to lower receipts. During highly uncertain times, this has to be taken into account since a slowdown or even reduction in public expenditure, may be difficult to achieve.

6. Macroeconomic Projections for the Cyprus Economy

Working assumptions

The projections for the Cyprus economy are based on the assumptions for the world economy as defined and adopted by the eurosystem. These projections are then aggregated to yield euro area numbers and used for the evaluation of international developments and risks by the ECB's Governing Council, which is responsible for setting monetary policy. The common working assumptions mainly cover variables such as interest rates, exchange rates, the price of oil and international trade. The cut off date for the working assumptions and the data used for the calculation of the projections was 14 November.

According to the aforementioned assumptions, the dollar is expected to fluctuate at around $1,27 in 2008-2010. The price of oil is expected to approximately reach $100 per barrel in 2008, while in 2009 it is expected to fluctuate at around $77 per barrel. However, recent developments in the international oil market point to a very different picture to the one presented by the assumptions, as the price of oil has fallen significantly. As far as public finances are concerned, implicitly only the measures announced and passed by the parliament by the cut-off point are taken into account.

Eurosystem projections for the euro area

Based on the above technical assumptions, the

HICP for the euro area is expected to remain at high levels and to fluctuate between 3,2% and 3,4% for 2008 (**Table A.11**). In 2009 average HICP inflation is expected to be between 1,1% and 1,7%, while in 2010 it is projected to range between 1,5% and 2,1%, thus recording a small acceleration. The "U" shape trend of the HICP inflation rate mostly reflects the previous increases in 2008 in the prices of several goods. GDP is expected to fluctuate between 0,8% and 1,2% in 2008, and between -1,0% and 0,0% in 2009, reflecting mostly the global economic slowdown as well as the recent adverse financial market conditions. In 2010, a small recovery is expected with real GDP growth varying between 0,5% and 1,5%.

TABLE A.11 **Eurosystem projections for the euro area**
(annual change,%)

	2008f	2009f	2010f
GDP			
December Projections 2008	0,8 - 1,2	-1,0 - 0,0	0,5 - 1,5
June Projections 2008	1,5 - 2,1	1,0 - 2,0	-
Inflation			
December Projections 2008	3,2 - 3,4	1,1 - 1,7	1,5 - 2,1
June Projections 2008	3,2 - 3,6	1,8 - 3,0	-

Source: ECB.

Projections for the Cyprus economy

Prices: harmonised index of consumer prices

Focusing on the domestic economy, and based on the technical assumptions of the eurosystem, HICP inflation in 2008 is expected to reach 4,6% compared with 2,2% in 2007 **(Table A.12)**, mainly due to the historical high price of oil recorded up to the third quarter of 2008, as well as the increase in the prices of food commodities such as wheat, maze and milk. In addition to these exogenous factors, the increase in inflationary pressures during the first nine months of 2008 were also related to the abnormal growth in domestic consumption and loans. In 2008 HICP inflation,

TABLE A.12 **HICP projections**
(annual change,%)

	2007	2008f	2009f	2010f
HICP				
December Projections 2008	2,2	4,6	2,4	2,9
June Projections 2008	2,2	4,2	2,4	-
HICP excluding energy				
December Projections 2008	2,2	3,2	3,1	2,6
June Projections 2008	2,2	2,8	2,7	-

Sources: Cystat, CBC.

excluding energy, is expected to increase to 3,2% compared to 2,2% in 2007.

In 2009 HICP inflation is expected to decelerate to 2,4%, mostly due to the recent developments in international oil prices. In contrast, HICP inflation, excluding energy, is expected to hover around the same levels as in 2008, mostly due to expected second round effects from the relatively high salary increases and high COLA observed in 2008. These second round effects are expected to somewhat offset the downward inflationary pressures caused by the global economic slowdown. As far as 2010 is concerned, HICP inflation is expected to accelerate to 2,9%, mostly due to a base effect caused by the relatively low oil prices assumed in 2009. HICP inflation, excluding energy, on the other hand, is expected to decelerate to 2,6%, mostly due to lower salary increases in 2009.

Compensation, productivity and the labour market

Unit labour costs **(Table A.13)** are expected to increase by 3,9% in 2008 due to the significant increase in the compensation per employee, which is directly linked to the increase in COLA. In 2009, unit labour cost growth is expected to marginally decelerate at 3,8%, which will reflect the expected deceleration in the compensation per employee and the marginal deceleration in productivity. In 2010 an even stronger decelera-

TABLE A.13 **Labour market projections**
(annual change,%, unless otherwise indicated)

	2007	2008f	2009f	2010f
Compensation per employee				
December Projections 2008	2,2	5,0	4,8	3,7
June Projections 2008	3,1	4,5	4,3	-
Unit labour cost				
December Projections 2008	0,9	3,9	3,8	2,8
June Projections 2008	1,8	2,7	2,4	-
Productivity				
December Projections 2008	1,3	1,1	0,9	0,9
June Projections 2008	1,3	1,7	1,8	-
Total employement				
December Projections 2008	3,1	2,5	1,1	1,6
June Projections 2008	3,0	1,9	1,8	-
Unemployment rate (% of labour force)				
December Projections 2008	3,9	3,9	4,3	4,1
June Projections 2008	3,9	3,7	3,7	-

Sources: Cystat, CBC.

tion is expected with growth reaching 2,8%, mainly driven by the significant deceleration in the compensation per employee.

Employment growth is expected to decelerate in 2008 at 2,5%, while a further deceleration is expected in 2009 at 1,1% due to the expected decline in the inflow of foreign workers to Cyprus. The unemployment rate in 2008 is expected to be at the 2007 levels, while it is projected to increase to 4,3% in 2009, due to the worsening of the economic climate, before marginally decelerating in 2010.

National accounts

As far as the national accounts are concerned, real GDP growth rate is expected to reach 3,6%, 2% and 2,5% in 2008, 2009 and 2010, respectively. These developments, in 2009 and 2010, are the result of the expected reduction in domestic demand, following the international economic developments **(Table A.14)**. The projections presented for the aforementioned period are lower than the projections prepared in June 2008, mainly due to the sudden worsening of the international environment in September and October, which point towards a much stronger deceleration in the construction, tourism and financial services industries in 2009.

More analytically, in 2009 a marginal deceleration is expected in public consumption growth, whereas private consumption is expected to register a significant deceleration, increasing by 3,7%. The latter is expected to mirror the negative inter-

TABLE A.14 **National accounts projections in real terms**
(annual change,%)

	2007	2008f	2009f	2010f
GDP				
December Projections 2008	4,4	3,6	2,0	2,5
June Projections 2008	4,4	3,6	3,7	-
Private consumption				
December Projections 2008	8,2	10,7	3,7	3,7
June Projections 2008	6,2	6,4	5,4	-
Public consumption				
December Projections 2008	0,1	3,7	3,8	2,9
June Projections 2008	-0,1	3,3	2,4	-
Gross fixed capital formation				
December Projections 2008	7,6	6,0	3,7	2,1
June Projections 2008	6,3	5,8	4,8	-
Exports of goods and services				
December Projections 2008	7,2	0,7	-1,6	3,0
June Projections 2008	4,3	4,4	5,3	-
Imports of goods and services				
December Projections 2008	12,5	10,8	0,9	3,4
June Projections 2008	6,9	8,2	7,2	-

Sources: Cystat, CBC.

national developments, lower consumer confidence and the restraint of spending following two years of extraordinarily high consumption. It is noted that the deceleration would be even higher if the social benefits included in the 2009 budget are not taken into account. Gross capital formation is expected to slowdown in 2008-2010, mainly driven by the expected deceleration in the construction industry. The latter is based on the recent data on building permits and the expected reduction of foreign demand for premises in Cyprus.

As far as exports of goods and services are concerned, a significant deceleration is expected in 2009. International developments are expected to negatively affect the tourism and financial services sectors. Furthermore, a similar trend is expected for imports of goods and services. In 2010 a partial rebound of the world economy is projected, with a positive impact on exports and imports of goods and services.

Fan charts for the macroeconomic projections

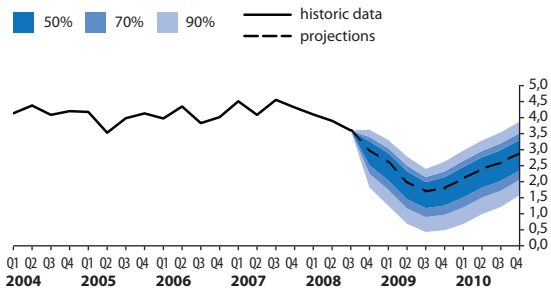
The projections for HICP inflation (**Table A.12**, p.61) as well as those for GDP growth (**Table A.14**, p.63), are the modal forecasts and are considered to be the most probable to take place given the technical assumptions of the eurosystem. Nevertheless, the projections carry with them certain risks and are thus subject to uncertainty. This results both from the uncertainty in the assumptions used as well as from errors ensuing from the model used

in preparing the projections. As a result, the modal forecasts are often published together with their potential risks, highlighting the possible alternative deviations from the projections.

The probability of both the GDP and HICP forecasts lying around their respective modal projections is depicted in **Charts A.44** and **A.45**, respectively. The fan charts represent an extension of the modal forecast by an assessment of the forecast error, which is interpreted by the width of the interval. The three intervals show the bands within which the GDP and HICP are expected to fall with a probability of 50%, 70% and 90%. The form of the distribution, which is based both on purely statistical methodology and on expert judgement, is two-piece normal with a degree of asymmetry in the form of a variable skew. In particular, the skewed distribution is separated into two unequal parts, above and below the modal forecast[10]. In addition, the gradual spreading of the fan charts represents the growth in the degree of uncertainty (forecast error) over time.

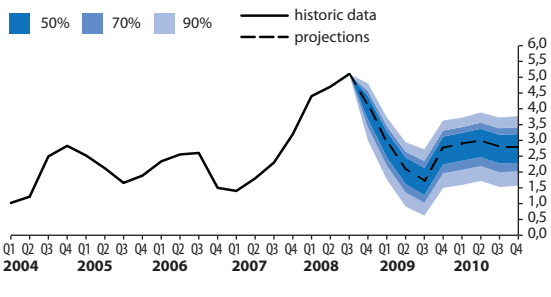
As far as the modal forecasts are concerned, there are risks related to the price of oil and the worldwide economic crisis, which are expected to affect domestic demand. Given that this implication may be more marked than was originally assumed, the risks surrounding the output and inflation growth are on the down side. This means that downward deviations from the growth path of the central scenarios are considered more likely than upward ones.

CHART A.44 **Real GDP fan chart**
(annual change, %)



Sources: Cystat, CBC.

CHART A.45 **HICP fan chart**
(annual change, %)



Sources: Cystat, CBC.

10. The estimation of the intervals of the skewed distribution was based on the methodology developed by the Bank of England and the Sveriges Riksbank.

In particular, a further reduction in foreign demand due to the expected global economic slowdown, and the possibility of a failure in the coordinated attempt by central banks to obtain ample liquidity in the global credit market, is expected to adversely affect both the tourist and construction industry in Cyprus, mainly due to a fall in the demand for holiday residences as well as for other services related to the tourist industry, such as restaurants and hotels. Under this scenario, the provision of financial services is also expected to be adversely affected, making it harder to obtain loans, thus leading to a significant reduction in domestic demand. In 2010 the technical assumptions assume a small recovery for the Cyprus economy, but there is still great uncertainty as to whether the global economy, and hence the domestic economy, will manage to recover.

As a result, the risks for GDP growth are on the downside, with the probability of recording lower growth rates than those projected, being greater than the probability of recording higher ones.

Focusing on HICP inflation, the continuing fall in the price of oil at levels much lower than initially assumed, as well as the possibility of further reductions in the price of wheat and maze due to a fall in global demand, may eliminate inflationary pressures and lead to a fall in the overall HICP inflation at levels much higher than the ones projected. What is more, an increase in unemployment related to the slow-

down in GDP growth may help contain wage and COLA increases, thus putting a downward pressure on HICP inflation. In light of this, the risks to HICP inflation are considered to be on the downside, as in the case of GDP growth. Nonetheless, the downside risks to inflation are of a lower degree than the ones to GDP growth due to the possibility of some inflationary expectations being present.

A comparison of the projections for the Cyprus economy by other international organisations

The 2008 spring and autumn projections for Cyprus GDP and HICP inflation published by other international organisations for the year 2008 are along the same lines as with the CBC projections. In 2009 and 2010, the projections differ from those of the CBC due to the different assumptions used at the time the projections were completed (**Table A.15**). In particular, the CBC expects a greater deceleration in GDP for 2009, due to the recent worsening developments in the international environment and a small recovery in 2010. In addition, the CBC anticipates a significant decrease in HICP inflation for 2009 and a small increase in 2010, in line with the European Commission's projections but in contrast to the IMF, which foresees a further decrease in 2010.

TABLE A.15 **Cyprus economy comparison projections by international organisations**
(annual change,%)

		GDP			HICP		
		2008f	2009f	2010f	2008f	2009f	2010f
European Commission	Autumn 2008	3,7	2,9	3,2	4,5	2,9	3,2
	Spring 2008	3,7	3,7	-	3,8	2,5	-
IMF	Autumn 2008	3,4	2,8	3,5	4,6	3,5	2,6
	Spring 2008	3,4	3,5	-	4,0	2,9	-
CBC	December 2008	3,6	2,0	2,5	4,6	2,4	2,9
	June 2008	3,6	3,7	-	4,2	2,4	-

Sources:European Commission,IMF, CBC.

SECTION B

Financial Stability Conditions

Introduction

"Financial stability" can be defined as a condition in which the financial system – comprising of financial intermediaries[1], financial markets[2] and financial infrastructures[3] – is capable of withstanding shocks and the unravelling of financial imbalances, thereby, mitigating the likelihood of disruptions in the financial intermediation process which are severe enough to significantly impair the allocation of savings to profitable investment opportunities[4].

This section of the *Bulletin* provides an analysis of the sources of risk and vulnerability for the stability of the financial system emanating from the macro-financial environment, by focusing on the household, non-financial corporate and real estate sectors. As regards the domestic financial system, the key developments in the financial markets as well as the main structural developments in the banking sector are briefly described. Finally, this section provides an assessment of banks' financial condition as well as an analysis of the most significant risks facing the banking sector, which constitutes by far the largest component of Cyprus's broad financial system.

1. MFIs (credit institutions, money market funds, central banks and other institutions) and other financial intermediaries (insurance corporations, pension/provident funds, financial auxiliaries, mutual funds, securities and derivatives dealers and financial corporations engaged in lending).
2. Money and capital markets.
3. Payment, clearing and settlement systems.
4. Financial Stability Review, ECB, June 2008.

BOX B.1 Main recent developments in the international financial system

In September 2008, the global financial market turmoil worsened and entered a new phase. First, the two main mortgage finance institutions in the US, Freddie Mac and Fannie Mae, which accounted for around half of domestic mortgage lending, had to be supported financially and bailed out by the Treasury. Then, the bankruptcy of Lehman Brothers, the biggest recorded in US history, proved to be a turning point, prompting the three largest remaining US investment banks (Merrill Lynch, Goldman Sachs and Morgan Stanley) to sell themselves to, or become, commercial banks. In particular, Merrill Lynch was acquired by Bank of America, while Goldman Sachs and Morgan Stanley converted to commercial banks. In parallel, the financial strains in the insurance industry, which had already been under considerable pressure on account of the highly risky financial products to which it was severely exposed, intensified. The American International Group (AIG), one of the world's largest insurance corporations and the biggest in the US, was rescued and effectively acquired by the Federal Reserve.

The collapse of Lehman Brothers led to a loss of confidence and a freeze in numerous markets, including some that had until then been functioning reasonably well and which are fundamental to providing finance in the US. The deterioration in the commercial paper market was particularly serious. Following the bankruptcy of Lehman Brothers, some money market funds with exposure to its debt recorded losses, inducing investors to redeem their holdings. These funds were then forced to sell large amounts of securities to pay investors, leading to serious damage to the commercial paper market of non-financial firms. More recently, in November 2008 the US government contributed to the rescue of Citigroup, entering into an agreement to inject capital in the form of newly-issued preference shares, to restore confidence in the bank.

In Europe, investors were concerned about the liquidity position of entities reliant on very short-term financing, subjecting them to fierce selling pressure in the equities markets. In parallel, in response to the serious problems which arose in the banking sector, the authorities in a number of European countries had to intervene to provide assistance. For example, in the UK, what started as a problem for HBOS, the largest mortgage lender which had to be bailed out by Lloyds TSB bank, spread to the

whole banking system, prompting the UK government to launch an unprecedented intervention plan in which, initially, eight of the largest banks in the country expressed their willingness to participate. In addition, the Belgian, Dutch and Luxembourg authorities intervened in response to the problems at Fortis, a bank whose share price had collapsed, while the Belgian, Luxembourg and French authorities had to take action to deal with the problems at Dexia. In Iceland, the government nationalised its three largest banks and in Germany, the problems besetting the Hypo Real Estate Bank led the government to design a rescue plan, while support was also provided to Bayern LB. Finally, in the Netherlands, the problems at ING required a large injection of capital from the state, while the French government had to recapitalise France's five main banks as well.

In recent weeks the crisis has spread to many emerging countries around the world, against a background of heightened risk aversion and the liquidation by investors of market positions subject to even minimal risk. The countries that have suffered most are those with significant current account deficits and financial systems strongly dependent on external financing. These include, *inter alia*, the Baltic States, Bulgaria, Hungary, Pakistan, Romania, Russia, Turkey and Ukraine.

In the near term, wide ranging public policy measures across the globe, are expected to contribute to a gradual improvement in market perception of systemic risk in the financial system and, over time, are also likely to better enable banks to withstand the increasingly challenging macroeconomic environment. However, given the ongoing problems in credit and funding markets, the time needed for government measures announced around the world to take effect remains uncertain.

In Cyprus, because of the healthy state and soundness of the banking sector, which has no exposures to toxic assets, as well as the banks' adequate capital buffers and satisfactory liquidity position, recapitalisation and/or asset purchase measures by the government have not been deemed necessary. It must be noted that banks in Cyprus are predominantly funded by retail deposits with limited reliance on market-based financing. The only government measure in support of the banking sector which has been announced so far concerns the intention of the government to guarantee all bank deposits up to €100.000 per customer (depositor) and per bank.

However, following the full abolition of

exchange controls and the entry of Cyprus into the EU and the euro area, the domestic economy is not isolated nor fully protected from events in the global economy. As analysed in the sections that follow, Cyprus's broad financial sector will not remain unaffected. With the aim of minimising any potential effects emanating from the expected deceleration of domestic economic activity, the government has announced measures worth €52 million in support of the tourism and construction industries.

1. The Domestic Macro-Financial Environment

This section includes an analysis of the leverage and financial condition of households and non-financial corporations as well as an assessment of the potential risks facing these two sectors. Moreover, the key developments regarding real estate sector activity are described, while information on the financing of real estate by banks is also provided.

1.1 Household sector

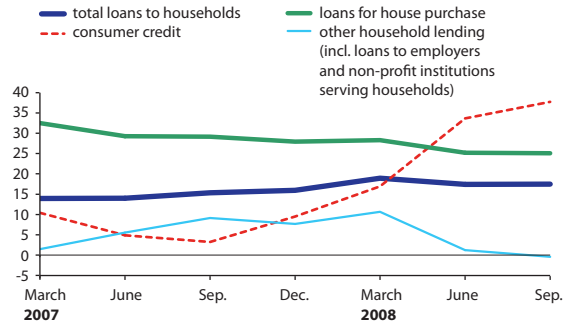
1.1.1 Leverage

MFI loans to domestic households

MFI loans to domestic households[5] increased by 17,5% year-on-year in September 2008. As regards the three components of household lending, loans for house purchase and consumer credit grew by 25,1% and 37,8%[6], respectively, while other household lending[7] fell by 0,5% year-on-year in September 2008 **(Chart B.1).**

At the end of September 2008, loans to the domestic household sector as a percentage of total outstanding loans to resident non-MFIs declined

CHART B.1 **Bank loans to households**
(annual change, %)



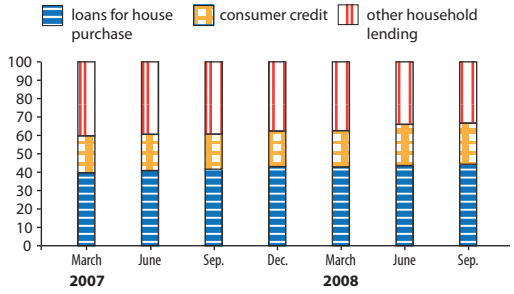
Source: CBC.

5. Based on MFI monthly balance sheet data, which cover the aggregated non-consolidated data of all credit institutions operating in Cyprus, including the co-operative credit institutions.
6. As part of the continuing effort to improve the quality of the data submitted by MFIs to the CBC, a reclassification of the order of €500 million from "other household lending" to "consumer credit" was effected as from the reference month of June 2008, which resulted in a sharp increase in the annual growth of "consumer credit" and a steep drop in the annual growth of "other household lending". The annual growth rates, however, are not representative as the above reclassification applies to all previous months as well.
7. Includes, *inter alia*, MFI loans granted to individuals, other than those included in "loans for house purchase" and "consumer credit", such as loans for medical treatment, education and debt consolidation, as well as loans to employers (including own-account workers) and non-profit institutions serving households.

to 43,4%, compared with 47,1% at end-March 2008 and 48,3% at the end of September 2007. Loans for house purchase, consumer credit and other household lending stood at 44,4%, 22,3% and 33,3% of total loans to the household sector, respectively, at end-September 2008, compared with 43%, 19,6% and 37,4% at the end of March 2008 and 41,7%, 19% and 39,3% at end-September 2007, respectively **(Chart B.2).** In this regard, housing loans continue to constitute the largest exposure of the household sector.

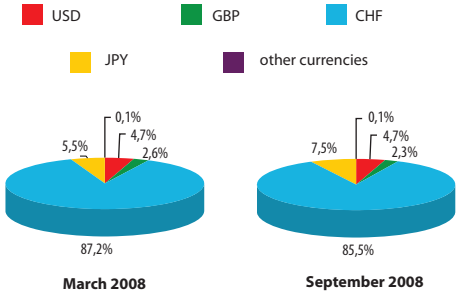
Loans to households in foreign currency as a percentage of total outstanding loans to the household sector increased to 4% at the end of September 2008, compared with 3,8% at end-March 2008. At end-September 2008, 85,5% of foreign currency loans to households was accounted for by Swiss francs, 4,7% by US dollars and 7,5% by Japanese yen, compared with 87,2%, 4,7%, and 5,5% respectively at the end of March 2008 **(Chart B.3).**

CHART B.2 **Distribution of bank loans to households**
(end of quarter, %)



Source: CBC.

CHART B.3 **Distribution of bank loans to households by foreign currency**
(end of quarter, %)

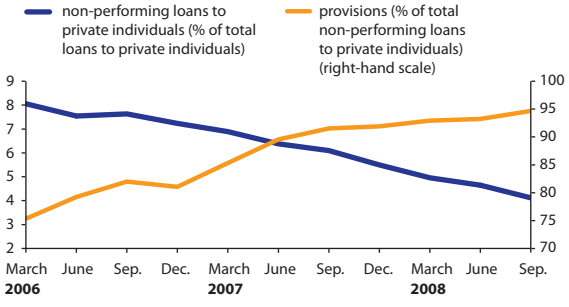


Source: CBC.

Non-performing loans

Non-performing loans[8] to private individuals[9] as a percentage of total outstanding loans to private individuals amounted to 4,1% at end-September 2008, compared with 4,9% at the end of March 2008 and 6,1% at end-September 2007 **(Chart B.4).** Provisions as a percentage of total non-performing loans to private individuals stood at 94,7% at the end of September 2008, compared with 92,9% at end-March 2008 and 91,5% at the end of September 2007.

CHART B.4 **Non-performing loans to private individuals and provisions**
(end of quarter, %)



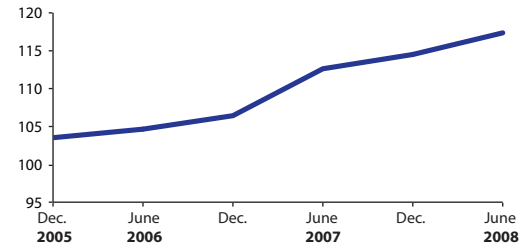
Source: CBC.

8. As defined in the relevant CBC Directive, non-performing loans include credit facilities which are in excess of their approved limit or whose repayment in regard to principal or interest or other income, is in arrears for more than three months. Funded credit facilities and credit substitutes extended to customers, which are fully secured, are not classified as non-performing.
9. Loans to households excluding loans to employers and non-profit institutions serving households.

Household debt

Household debt[10] as a percentage of GDP increased to 117,2% at the end of June 2008 (up from 114,5% at end-December 2007 and 112,6% at the end of June 2007). **Chart B.5** exhibits the household debt-to-GDP ratio for the years 2005-2008.

CHART B.5 **Household debt as % of GDP**
(end of quarter, %)

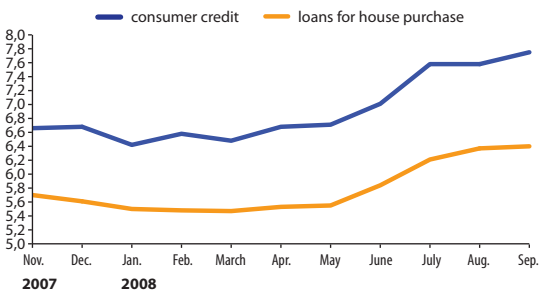


Source: CBC.

Financing conditions

Cyprus MFI interest rates[11] on euro-denominated loans for house purchase and consumer loans (new business) to euro area households have risen from 5,47% and 6,48% in March 2008 to 6,40% and 7,75% in September 2008, respectively **(Chart B.6).**

CHART B.6 **Cyprus MFI interest rates on euro-denominated loans (new business) to euro area households**
(% per annum, period average)



Source: CBC.

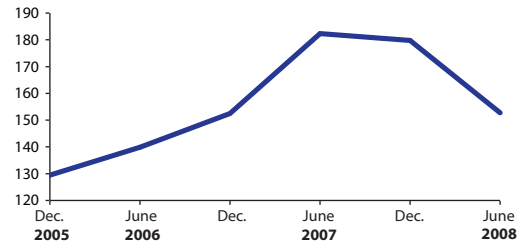
1.1.2 Financial condition[12]

Net financial assets

The household sector's net financial assets as a percentage of GDP dropped to 152,5% at end of June 2008 (down from 179,8% at end-December 2007 and 182,4% at the end of June 2007). **Chart B.7** indicates the household sector's net financial assets as a percentage of GDP for the years 2005 to 2008.

The household sector's financial liabilities have expanded by 13,7% year-on-year in June 2008 mainly due to a notable increase in the value of loans granted, which accounted for 94,7% of the household sector's financial liabilities at end of

CHART B.7 **Household sector's net financial assets as % of GDP**
(end of quarter, %)



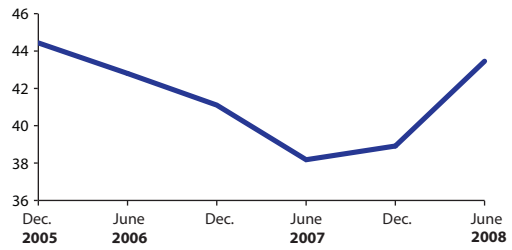
Source: CBC.

10. Based on quarterly financial accounts data (provisional). Includes loans and other financial liabilities of households and non-profit institutions serving households.
11. Floating rate and up to 1 year initial rate of fixation.
12. Based on quarterly financial accounts data (provisional).

June 2008. Consequently, as indicated in **Chart B.8**, the ratio of financial liabilities to financial assets rose to 43,5% at the end of June 2008 (up from 38,2% at end-June 2007).

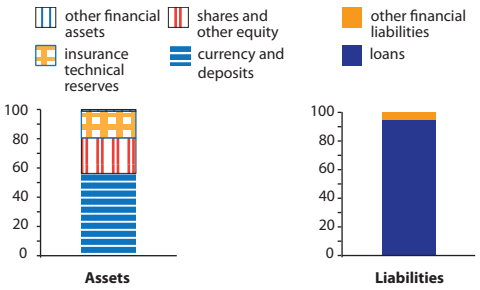
At the end of June 2008, cash and bank deposits and bank loans represented the largest parts of the household sector's financial assets and liabilities, respectively. **Chart B.9** exhibits the breakdown of the household sector's financial assets and liabilities at end-June 2008.

CHART B.8 **Household sector's financial liabilities**
(end of quarter, % of financial assets)



Source: CBC.

CHART B.9 **Distribution of household sector's financial assets and liabilities**
(end of June 2008, %)

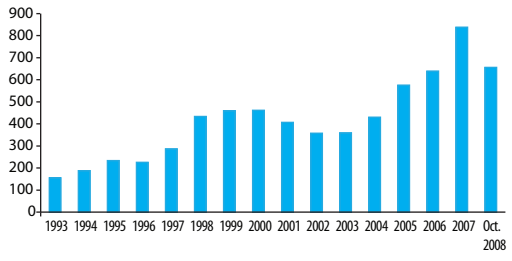


Source: CBC.

Bankruptcies of natural persons

The number of bankruptcies of natural persons has exhibited a continuous upward trend since 2003, which may indicate that the financial condition of households is deteriorating. In the first ten months of 2008, 656 bankruptcies of natural persons were recorded, which shows that the total for the year could eventually be approximately the same as in 2007 during which 839 receiving orders were issued by the appropriate courts of justice. **Chart B.10** shows the number of bankruptcies of natural persons for the years 1993 to 2008.

CHART B.10 **Bankruptcies of natural persons**
(annual data)



Source: Department of Registrar of Companies and Official Receiver.

Confidence and economic sentiment indicators

Aggregate confidence and economic sentiment indicators for Cyprus compiled by the European Commission on a monthly basis, based on the results of relevant surveys conducted in each EU

member state, show that the Economic Sentiment Indicator (ESI)[13] followed an overall downward trend since March 2008 but improved slightly in September 2008 **(Chart B.11).** As regards households' expectations, the consumer confidence indicator, while showing signs of increasing weakness from February to June 2008, improved in the period July to September 2008.

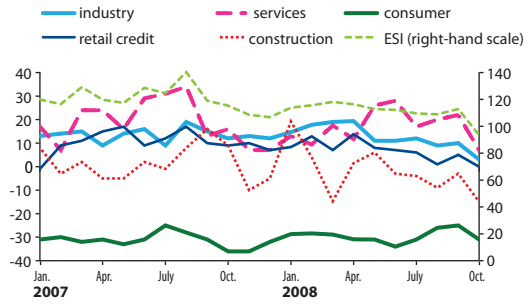
In addition, survey evidence collected by the European Commission shows a deterioration in households' expectations about their financial situation and their perception of future employment prospects in October 2008 **(Chart B.12).**

1.1.3 Risks facing the household sector

Developments in interest rates and income are the two main sources of risk that can affect households' debt-servicing capacity. A potential overvaluation in the housing market could also represent, to a lesser extent, a source of risk for the household sector balance sheets.

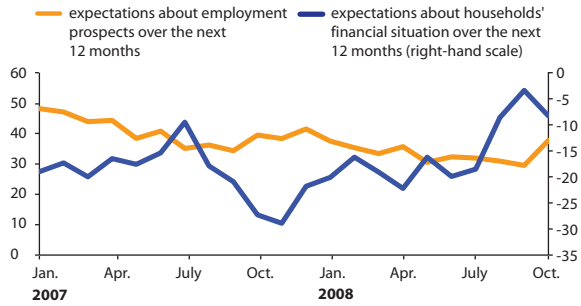
Overall, risks to financial stability originating from conditions in the household sector remain contained. However, the acceleration of credit to households in the first nine months of 2008, which has contributed to the growing indebtedness of the sector, coupled with the rise in bank lending interest rates, may, to some extent, adversely affect households' debt-servicing capacity in the near term. On the positive side, the generally stable outlook for the labour market and household

CHART B.11 **Confidence and economic sentiment indicators**[(1)]



Source: European Commission.
(1) Seasonally adjusted data.

CHART B.12 **Households' financial situation and unemployment expectations**[(1)]



Source: European Commission.
(1) Seasonally adjusted data.

13. The Economic Sentiment Indicator (ESI) is composed of the industry confidence indicator (40%), the services confidence indicator (30%), the consumer confidence indicator (20%), the construction confidence indicator (5%) and the retail trade confidence indicator (5%).

disposable income should contribute to a moderation of risks.

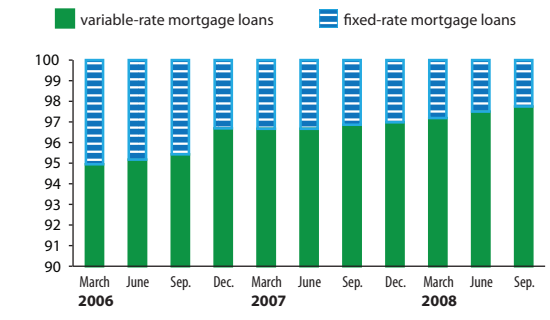
Interest rate risks of households

Following the publication of the June 2008 *Economic Bulletin*, the ECB increased key interest rates by 25 basis points in July 2008. This decision was followed by a decrease of 50 basis points in euro area basic interest rates in early October 2008, as part of a coordinated move involving various central banks and addressing the need to ease global monetary conditions. A further fall of 50 basis points in the ECB's key interest rates was effected in November 2008.

As regards mortgage housing loans[14], the impact of rising interest rates on debt servicing costs depends on the terms and conditions of individual households' mortgage contracts. In the case where a mortgage contract provides for a variable rate of interest, households are exposed to an interest rate risk. The share of adjustable-rate mortgage housing loans to total outstanding mortgage housing loans stood at 97,8% at the end of September 2008, compared with 97,2% at end-March 2008 and 96,9% at the end of September 2007 **(Chart B.13)**. Hence, the predominance of mortgage housing loans which carry a variable rate of interest indicates that households remain vulnerable to interest rate shocks.

The recent global financial crisis has led to a rise in short-term money market rates. Although

CHART B.13 **Distribution of fixed- and variable-rate mortgage housing loans**
(end of quarter, %)



Source: CBC.

14. Loans which are fully and completely secured by mortgage on residential property which is or will be occupied by the borrower or which the borrower will let for residential purposes as well as lending to households in the form of top-up mortgages or equity release mortgages whereby a mortgage is increased to allow funds to be used for house improvement or renovation.

Euribor rates have been declining recently, banks' funding costs remain elevated. More importantly, strong competition in the domestic banking sector for retail deposits has led banks to offer higher deposit rates. As a result, banks have been induced to pass on the higher funding costs to borrowers, thereby increasing households' overall debt-servicing burden.

With the gradual easing of tensions in the international money markets, Euribor rates are expected to decline in the medium term. At the same time, the current weakness of economic activity in the euro area may prompt the ECB to further lower its key interest rates, provided the outlook for euro area inflation remains favourable.

However, it must be borne in mind that not all households hold debt and borrower characteristics play a role in determining debt sustainability. In particular, the risks affecting the most financially vulnerable segments of the population cannot be properly addressed by looking at aggregate data. In that sense, indebted low income households tend to face higher risks.

Risks to household income

The evolution of household income, which is linked to developments in the labour market, is one of the most important indicators of households' ability to meet their debt-servicing obligations.

Domestic economic activity has decelerated during the second half of 2008 and is expected to weaken further in 2009. However, potentially less dynamic immigration inflows could keep the unemployment rate at a relatively low level, despite the softening growth outlook. Although the cost of living has escalated in the past two years mainly due to higher oil, food and commodity prices, the level of inflation is expected to decrease in the short term. In view of the above, income-related risks for households are not expected to rise significantly in the near future.

Risks emanating from residential property prices

In the first nine months of 2008, a cooling-off of demand and related construction activity in the residential real estate sector has been evident. Nevertheless, although any rapid deceleration in house price inflation, which could reduce household sector net worth, may increase financial stability risks, the probability of a sharp downturn in house prices in the short term remains low.

In addition, while any potential overvaluation in the housing market could represent a source of risk for household sector balance sheets, since it leads to a corresponding overvaluation of financial assets, income growth continues to remain the more decisive factor in assessing the risks to household finances.

1.2 Non-financial corporate sector

1.2.1 Leverage

MFI loans to domestic non-financial corporations

MFI loans to domestic non-financial corporations[15] increased by 40%[16] year-on-year in September 2008 **(Chart B.14).**

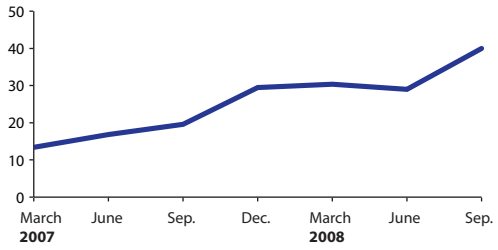
At the end of September 2008, loans to non-financial corporations as a percentage of total outstanding loans to non-MFIs increased to 47,7% from 46,1% at end-March 2008 and 44,5% at the end of September 2007.

Loans to non-financial corporations in foreign currency to total outstanding loans to non-financial corporations increased to 21,3% at end-September 2008, up from 16,7% at the end of March 2008. At end-September 2008, 34,5% of foreign currency loans to non-financial corporations were accounted for by Swiss francs, 54,5% by US dollars and 10,5% by Japanese yen, compared with 50,8%, 38,2%, and 5,1%, respectively at the end of March 2008 **(Chart B.15).**

Non-performing loans

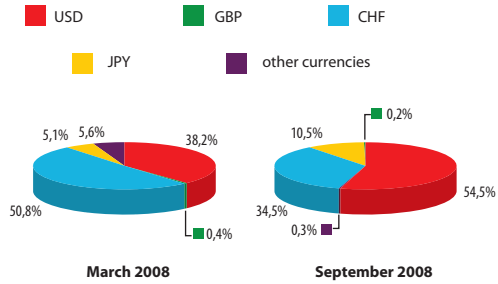
Non-performing loans to non-financial corporations as a percentage of total loans to non-financial corporations amounted to 6,5% at the end of September 2008, compared with 8,1% at end-March 2008 and 10,2% at the end of September 2007

CHART B.14 **Bank loans to non-financial corporations**
(annual change, %)



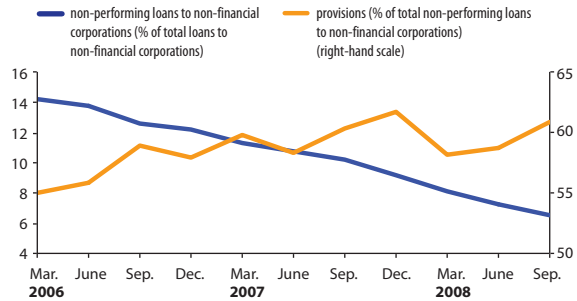
Source: CBC.

CHART B.15 **Distribution of bank loans to non-financial corporations by foreign currency**
(end of quarter, %)



Source: CBC.

CHART B.16 **Non-performing loans to non-financial corporations and provisions**
(end of quarter, %)



Source: CBC.

15. Based on MFI monthly balance sheet data. Includes, *inter alia,* enterprises MFI loans to organisations or companies without a physical presence in Cyprus (i.e. "brass plates").
16. As a result of the change in the definition of the term "resident of Cyprus" for statistical purposes as from July 2008, MFI monthly balance sheet data have been affected due to the reclassification of organisations or enterprises with no physical presence in Cyprus (i.e. "brass plates") from the "non-resident" sector to the "resident" sector.

(Chart B.16). Provisions as a percentage of total non-performing loans to non-financial corporations stood at 60,9% at the end of September 2008, compared with 58,1% at end-March 2008 and 60,3% at the end of September 2007.

Non-financial corporate debt[17]

Non-financial corporate debt as a percentage of GDP declined to 141,6% at the end of June 2008 (down from 144,7% at end- December 2007 and up from 133,3% at the end of June 2007). **Chart B.17** exhibits the non-financial corporate debt-to-GDP ratio for the years 2005-2008.

Financing conditions

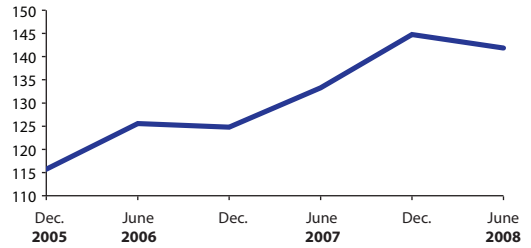
Cyprus MFI interest rates[18] on euro-denominated loans (new business)[19] up to €1 million to euro area non-financial corporations rose from 6,63% in March 2008 to 7,43% in September 2008 **(Chart B.18).**

1.2.2 Financial condition[20]

Net financial assets

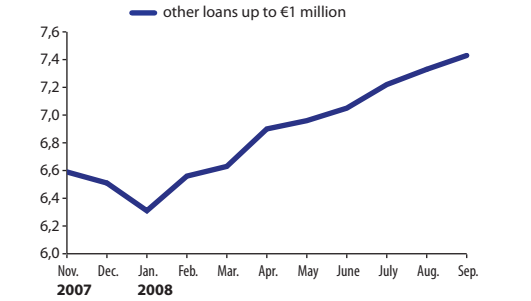
As shown in **Chart B.19,** the non-financial corporate sector's net financial assets as a percentage of GDP decreased to -194,5% at the end of June 2008 (down from -195,2% of GDP at end-December 2007 and -189,6% of GDP at the end of June 2007).

CHART B.17 **Non-financial corporate debt as % of GDP**
(end of quarter, %)



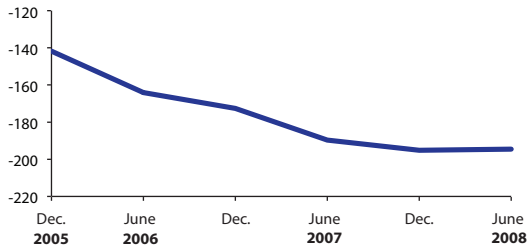
Source: CBC.

CHART B.18 **Cyprus MFI interest rates on euro-denominated loans (new business) to euro area non-financial corporations**
(% per annum, period average)



Source: CBC.

CHART B.19 **Non-financial corporate sector's net financial assets as % of GDP**
(end of quarter, %)



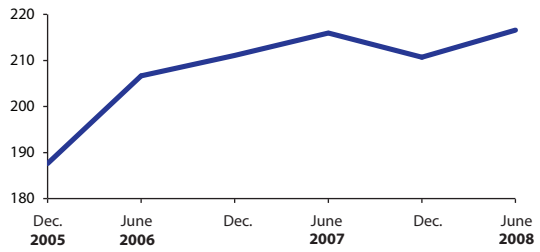
Source: CBC.

17. Based on quarterly financial accounts data (provisional). Includes loans, debt securities, trade credit and other financial liabilities of non-financial corporations.
18. Floating rate and up to 1 year initial rate of fixation.
19. Loans other than bank overdrafts of up to €1 million.
20. Based on quarterly financial accounts data (provisional).

The ratio of financial liabilities to financial assets increased to 216,6% at the end of June 2008 from 210,7% at end-December 2007 and 216,0% at the end of June 2007, mainly due to a significant rise in financial liabilities **(Chart B.20).**

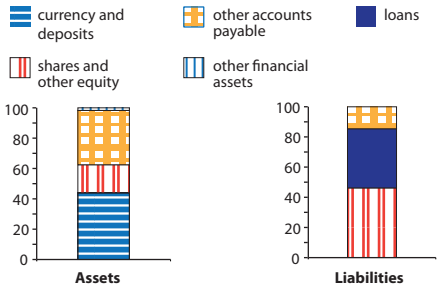
At the end of June 2008, cash and deposits represented the largest part of the non-financial corporate sector's financial assets while shares and other equity constituted the largest part of the sector's financial liabilities. **Chart B.21** exhibits the breakdown of the non-financial corporate sector's financial assets and liabilities as at the end of June 2008.

CHART B.20 **Non-financial corporate sector's financial liabilities**
(end of quarter, % of financial assets)



Source: CBC.

CHART B.21 **Distribution of non-financial corporate sector's financial assets and liabilities**
(end of June 2008, %)



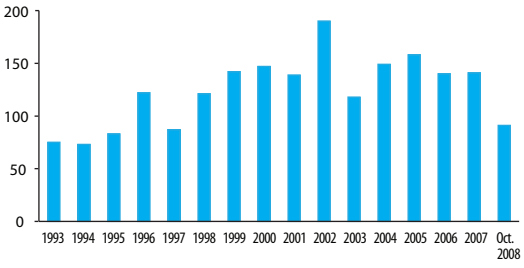
Source: CBC.

Company liquidations

The number of company liquidations reached 141 in 2007, compared with 140 in 2006 and 158 in 2005 **(Chart B.22).** In the first ten months of 2008, 91 winding-up orders were issued by the appropriate courts of justice.

The number of new company registrations reached 29.016 in 2007, compared with 20.280 in 2006 and 14.494 in 2005 **(Chart B.23,** p.85). In the period from January to October 2008, 20.969 new companies were registered.

CHART B.22 **Company liquidations**
(annual data)



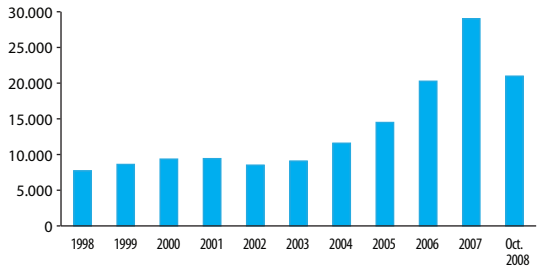
Source: Department of Registrar of Companies and Official Receiver.

Confidence and economic sentiment indicators

As exhibited in **Chart B.11** (p.78), the industry confidence indicator deteriorated significantly in May and has remained at comparatively low levels ever since, while the construction confidence indicator

was negative in the period June to September 2008. Moreover, a major improvement in the services confidence indicator took place in May 2008 but the aforementioned indicator weakened in July 2008 with marginal improvement in the following two months to September 2008. Furthermore, the retail trade confidence indicator deteriorated in the period from May to August 2008 but showed signs of improvement in September 2008.

CHART B.23 **New company registrations**
(annual data)



Source: Department of Registrar of Companies and Official Receiver.

1.2.3 Risks facing the non-financial corporate sector

Overall, a less favourable macroeconomic environment ahead will probably weigh on non-financial corporations' revenues. Higher borrowing costs and reduced availability of credit, mainly as a result of tighter bank lending standards, are expected to adversely affect corporate earnings and profitability. At the same time, firms' indebtedness has remained at a high level, making them less resilient to potential adverse shocks.

Earnings and profitability risks

The expected slowdown in domestic economic activity, coupled with the deteriorating external macroeconomic environment, is expected to exert a downward pressure on the earnings and profitability of the corporate sector. Enterprises in the construction and tourism sectors may be

particularly vulnerable if risks to the macroeconomic outlook were to materialise. The nine-monthly financial results of companies listed on the Cyprus Stock Exchange as well as the profit warnings issued by a number of quoted firms over the past six months, confirm that risks to corporate profitability are on the upside.

Risks facing leveraged companies

Firms' leverage plays a crucial role for financial stability as high indebtedness can aggravate economic business cycles. Historical evidence internationally has shown that leveraged firms' balance sheets tend to be more vulnerable to macroeconomic stress than those of less indebted corporations.

The growth of credit to non-financial corporations accelerated in the first three quarters of 2008. As a result, firms' leverage has remained at a high level in the period under review, making non-financial corporations more vulnerable to potential adverse shocks.

Bank financing conditions for non-financial corporations have gradually worsened over the past six months. In response to the less favourable operating environment, there has been a net tightening of bank credit standards for new loans to enterprises. Higher bank lending rates are also likely to contribute to a more difficult funding situation for the non-financial corporate sector in 2009.

1.3 Real estate sector

1.3.1 Key developments in the real estate sector

Real estate sector activity

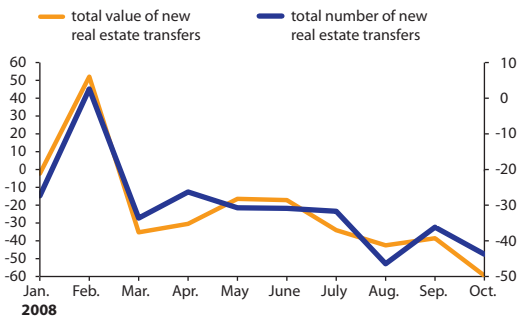
A deceleration in real estate sector activity, as shown by a number of key market indicators, was recorded in the first ten months of 2008. In particular, the volume index of authorised building permits registered a decrease of 10,0% during the period from January to September 2008, compared with the corresponding period of 2007 **(Chart A.34**, p. 50). In the first nine months of 2008, the total value of building permits dropped by 2,7% and the total area of building units by 4,8%, while the number of dwelling units declined by 9,1%, compared with the same period of 2007.

In addition, cement sales in the domestic market increased by 10,8% in the period from January to October 2008, compared with the corresponding period of 2007. **Chart A.36** (p. 52) exhibits the cement sales in the domestic market.

Furthermore, in the first ten months of 2008, the volume of new real estate transfers (sales) effected dropped by 43,8%, compared with the same period of 2007. Similarly, the value of new real estate transfers (sales) declined by 59,5% in the period from January to October 2008, compared with the corresponding period of 2007 **(Chart B.24).**

Moreover, the volume of new real estate sales

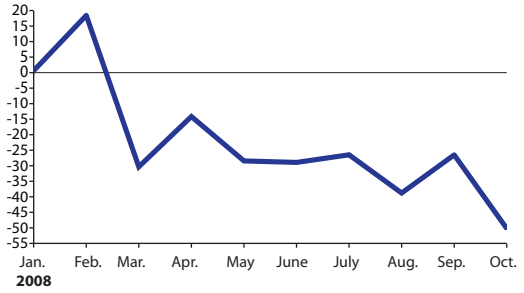
CHART B.24 **New real estate transfers (sales)**
(annual change, %)



Source: Department of Lands and Surveys.

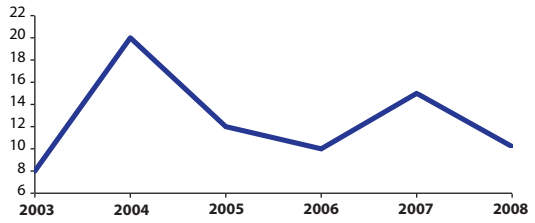
contracts registered dropped by 50,2% in the first ten months of 2008, compared with the same period of 2007 **(Chart B.25).**

CHART B.25 **New real estate sales contracts registered**
(annual change, %)



Source: Department of Lands and Surveys.

CHART B.26 **Residential property price index**
(annual change, %)



Source: CBC.

Real estate prices

In parallel to the slowdown in real estate activity registered in the first ten months of 2008, the annual rate of growth of residential property prices, as indicated by trends in the Residential Property Price Index[21], is expected to decline to 10% in 2008, following a rise of 15% in 2007 **(Chart B.26).** However, despite the expected negative impact of the weakening of activity in the construction industry on the domestic economy, the slowdown in house price growth may eventually prove to be a healthy development to avert any possible overheating in the residential property sector.

1.3.2 Real estate financing by banks

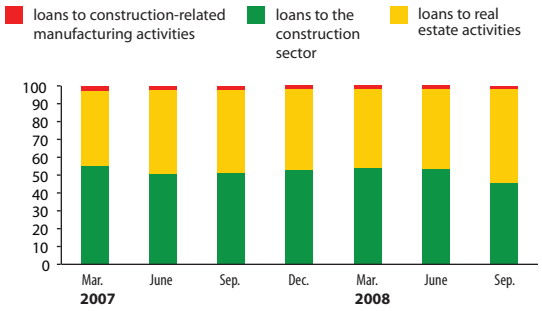
MFI loans to the broad real estate sector

MFI loans to the domestic broad real estate sector[22] rose significantly by 80,7%[23] year-on-year in September 2008 and represented 22,4% of the total outstanding loans to non-MFIs, up from 18,4% at the end of March 2008 and 16,1% at end-September 2007.

21. The index, which is compiled by the CBC, is based on valuations of residential property (new and existing houses and flats) used as collateral for loans granted by banks.
22. Based on MFI monthly balance sheet data. Excludes loans to households for house purchase.
23. As a result of the change in the definition of the term "resident of Cyprus" for statistical purposes as from July 2008, MFI monthly balance sheet data have been affected due to the reclassification of organisations or enterprises with no physical presence in Cyprus (so-called "brass plates") from the "non-resident" sector to the "resident" sector.

As regards the three components of this sector, loans to the construction sector rose notably by 62,4% year-on-year in September 2008 and represented 10,2% of the total outstanding loans to non-MFIs, compared with 10% at the end of March 2008 and 8,2% at end-September 2007. At the same time, loans to real estate activities exhibited a significant increase of 102,3% year-on-year in September 2008, and represented 11,8% of the total outstanding loans to non-MFIs, compared with 8% at end-March 2008 and 7,6% at the end of September 2007. Also, loans to construction-related manufacturing activities rose by 37,2% year-on-year in September 2008 and represented 0,3% of the total outstanding loans to non-MFIs as at the end of September 2008, retaining the same share at end-March 2008 and at the end of March 2007. The distribution of MFI loans to the broad real estate sector is shown in **Chart B.27.**

CHART B.27 **Distribution of bank loans to the broad real estate sector**
(end of quarter, %)

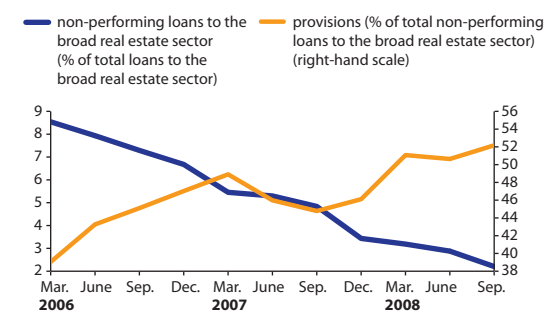


Source: CBC.

Non-performing loans

Non-performing loans to the broad real estate sector as a percentage of total loans to the broad real estate sector amounted to 2,2% at the end of September 2008 (down from 3,2% at end-March 2008 and 4,8% at the end of September 2007) **(Chart B.28)**. Provisions as a percentage of total non-performing loans to the broad real estate sector stood at 52,2% at the end of September 2008, compared with 51,1% at end-March 2008 and 44,8% at the end of September 2007.

CHART B.28 **Non-performing loans to the broad real estate sector and provisions**
(end of quarter, %)



Source: CBC.

2. The Domestic Financial System

This section provides a description of the key developments in the domestic financial markets as well as a brief overview of the main structural developments in the banking sector. An assessment of banks' financial condition as well as an analysis of the main risks facing the banking sector are also covered. Finally, reference is made to the results of two stress testing exercises, which were conducted by the CBC in the third quarter of 2008.

2.1 Financial markets

2.1.1 Key developments in the money market

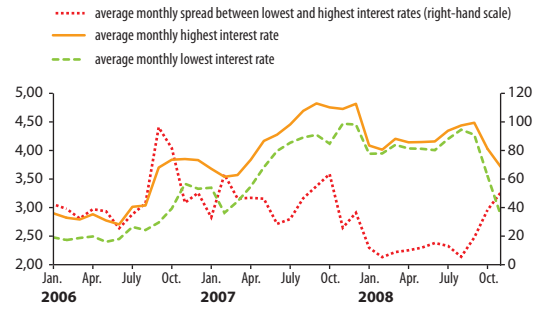
The ongoing global financial crisis has had a profound impact on the relative pricing conditions applied in the euro area money market. The tensions emanating from the financial market turmoil culminated in a serious impairment of the functioning of the interbank market in late September 2008. Although strains in the unsecured segment of the money market have since begun to ease, the three-month Euribor remains elevated relative to the respective overnight index swap (OIS) rate **(Chart A.12**, p. 30). However, it must be noted that the largest part of transactions in the unsecured interbank market is contracted for a much shorter duration than three months and, consequently, these rates are not necessarily representative of rates

that banks actually have to pay for liquidity. In particular, about two thirds of the transactions in the unsecured money market are overnight, while most of the remaining portion of transactions has a maximum maturity of one month[24]. At the same time, EONIA swap rates decreased markedly in the course of October 2008, in line with the downward revision of market expectations regarding future key ECB interest rates.

Since the publication of the June 2008 edition of this *Bulletin*, the average monthly highest and lowest interbank rates[25] peaked in September 2008 and August 2008, respectively, with the average monthly spread between the highest and the lowest interbank rates reaching its highest point in October 2008 **(Chart B.29).**

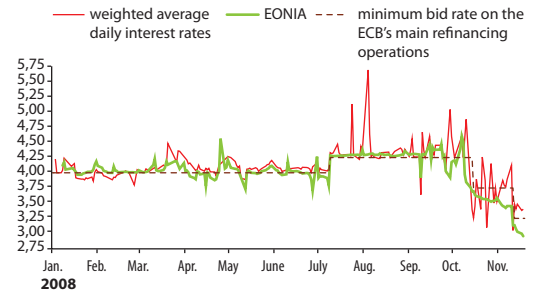
Chart B.30 exhibits the fluctuations of the weighted average daily interbank rates[26] around the EONIA swap rate and the minimum bid rate for the ECB main refinancing operations since January 2008.

CHART B.29 **Average monthly interest rates in the interbank market**
(%)



Source: CBC.

CHART B.30 **Weighted average daily interest rates in the interbank market (with maturity of up to 7 days), 2008**
(%)



Source: CBC, ECB.

2.1.2 Key developments in the capital markets

Government bond market

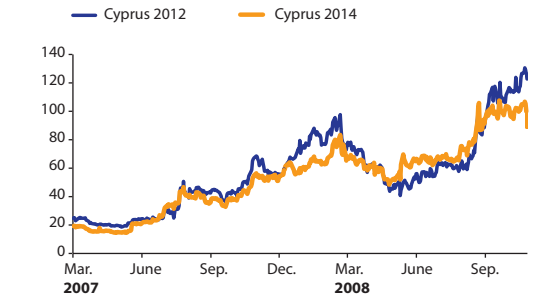
In the first ten months of 2008, only one primary market auction for the sale of government bonds was held, which involved the sale of 4,5% five-year GRDS. The above auction took place in June 2008 but no bids were accepted, reflecting the reduced government financing needs through the issue of

24. Euro Money Market Survey, ECB, September 2008.
25. Cost of short-term funding in euro (with a maturity of up to 7 days) of banks in Cyprus when borrowing from other domestic or foreign banks.
26. With a maturity of up to 7 days.

government securities at the time as well as the significant lack of interest on the part of local institutional investors, mainly credit institutions, in participating in the said auctions. It must be noted that liquidity in the secondary market of government securities (i.e. the Cyprus Stock Exchange) remains extremely low.

As shown in **Chart B.31**, following the strong upsurge observed in the Spring of 2008, the yield spreads of the two Cyprus sovereign bonds[27], which are traded in the international markets, over German Bunds reached new highs in October 2008 but tightened thereafter. This widening of sovereign bond yield spreads can be attributed to the general flight-to-quality behaviour on the part of investors exhibited during the course of the ongoing financial crisis. In addition, since the beginning of the turmoil in August 2007, liquidity in the secondary euro area government bond market has been concentrated mostly in the German government bond futures market (in the Eurex exchange). The intensified risk aversion, however, underlies the heavy demand for German Bunds over other euro area sovereign debt throughout the current financial market turmoil.

CHART B.31 **Sovereign bond yield spreads over German Bunds**
(basis points)



Source: Bloomberg.

Equity market

Share prices of companies listed on the Cyprus Stock Exchange have declined significantly since June 2008, with the banking sector again capturing most of the investors' interest.

27. Euro-denominated bonds issued by the Cyprus government under the Euro Medium Term Note (EMTN) Programme established in 1997.

Specifically, the CSE General Price Index (main and parallel market) dropped by 80,2% year-on-year in October 2008, reaching 1.545,20 points, down from 5.518,50 points at the end of October 2007 **(Chart B.32)**. In parallel, the FTSE/CySE 20 Index decreased by 72% year-on-year in October 2008, climbing to 528,9 points (down from 1.891,48 points at end-October 2007).

The market capitalisation of shares[28] declined by 16,9% year-on-year in October 2008 reaching €7,51 billion, compared with €22,98 billion in October 2007. In total, the three largest domestic banks listed on the CSE represented 65,1% of market capitalisation as at end-October 2008, compared with 76,9% at the end of October 2007. Market capitalisation of shares to GDP fell from 150,4% at the end of September 2007 to 44,9% at end-September 2008.

The further sharp fall in share prices since June 2008 can be attributed to the heightened uncertainty prevailing in global financial markets, including the Athens Stock Exchange on which the shares of the two largest domestic banks have a parallel listing. Ongoing concerns about the health of the banking sector and the stability of the global financial system as well as the potential fallout of the current financial crisis on the real economy, continued to weigh heavily on investors' sentiment and valuations in international stock markets. Against this background, global stock market uncertainty, as measured by implied volatility, increased in

CHART B.32 **Cyprus Stock Exchange general price index (main and parallel market)**
(daily data, 3 September 2004=100)

Source: CSE.

28. Excluding the investment companies market.

October 2008 to levels not observed since the 1987 stock market crash.

2.2 Banking sector

Banks in Cyprus play by far the most significant role in financial intermediation, representing 74,8% of total financial system assets[29] at end-June 2008. Moreover, the total consolidated assets of the banking sector reached 682,9% of GDP at the end of June 2008. In the light of the above, the analysis of the stability of the banking sector is crucial when assessing the overall financial stability.

2.2.1 Key structural developments in the banking sector

This section provides a brief overview of the main structural developments in the Cyprus banking sector which took place in 2008. **Tables C.21** (p.139) and **B.1** exhibit a number of structural indicators (for the years 2005 to 2007) and capacity indicators relative to the population (for the year 2007) for the Cyprus banking sector[30].

Domestic market structure

As shown in **Table B.2**, there are currently 41 banks operating in Cyprus, comprising of 8 domestically-controlled banks and 33 foreign-controlled banks (of which 9 are subsidiaries and 24 are branches of

TABLE B.1 **Banking sector capacity indicators relative to population**[(1)]
(end of 2007, non-consolidated data)

	CY	EMU13	EU27
Number of credit institutions	215	6.128	8.348
Population per credit institution	3.663	52.098	59.401
Population per local unit (branch)	855	1.735	2.123
Population per ATM [(2)]	1.474	1.203	1.362
Population per employee	70	140	153
Population density	85	126	114
Assets per employee	8.076	12.437	12.676

Sources: CBC, ECB.
(1) Includes the co-operative credit institutions.
(2) 2006 data.

TABLE B.2 **Banking sector structure**[(1)]
(end of October 2008)

	Number of banks
Domestically-controlled banks	8
Foreign-controlled banks	33
EU subsidiaries	9
EU branches	8
Non-EU subsidiaries	1
Non-EU branches	15
Total	41

Source: CBC.
(1) Excludes the co-operative credit institutions.

29. Based on quarterly financial accounts data (provisional). Includes MFIs, other financial intermediaries, financial auxiliaries, insurance corporations and pension funds.
30. EU Banking Structures, ECB, October 2008.

foreign banks). The banking landscape continues to be dominated by domestic banks, which represent 70,5% of total consolidated banking system assets at end-June 2008.

In 2008 three new players entered the domestic banking market. In particular, following the exercise of the right of EFG Eurobank Ergasias S.A. of Greece for free establishment and the opening of a branch in Cyprus in April 2007, the CBC granted a banking licence to Eurobank EFG Cyprus Ltd in February 2008 to operate on the island in the form of a subsidiary. In May 2008, the CBC granted a banking licence to Atlasmont Banka A.D. of Montenegro to establish a representative office in Cyprus. The Joint Stock Company Akciju Komercbanka "Baltikums" of Latvia exercised its right for free establishment by establishing a branch in Cyprus in September 2008.

As regards mergers and acquisitions in the domestic banking market, in January 2008 the sale of the branch network of Arab Bank Plc to Piraeus Bank (Cyprus) Ltd was completed. In October 2008, Piraeus Bank (Cyprus) Ltd also completed the takeover of Euroinvestment & Finance Public Ltd, which had been licensed to conduct limited banking operations. Finally, in the same month of 2008, the full acquisition of Pancyprian Finance Public Company Ltd, which had been granted a licence to conduct limited banking operations, by Hellenic Bank Public Company Limited was completed.

Consolidation in the co-operative credit sector

continued in 2008 with the number of co-operative credit institutions falling to 124 at end-October 2008, compared with 170 at the end of December 2007 and 233 at end-September 2007. It is expected that further consolidation in the above sector will take place in 2009.

Internationalisation of domestic banks

Domestic banks continued their geographical diversification in 2008 through their expansion overseas into targeted markets. In February 2008, Marfin Popular Bank Public Co. Ltd completed the acquisition of approximately 43% of the share capital of Lombard Bank Malta PLC of Malta. In May 2008 Bank of Cyprus Public Company Ltd completed the acquisition of 97,2% of the share capital of AvtoZAZBank of Ukraine. In addition, in September 2008 Marfin Popular Bank Public Co. Ltd obtained the approvals of the CBC and the Central Bank of the Russian Federation in relation to the agreement to acquire 50,04% of the share capital of the Russian CJSC RPB Holding, parent company of OOO Rossisysky Promishlenny Bank (Rosprombank) of Russia. Finally, in October 2008 Bank of Cyprus Public Company Ltd completed the acquisition of 80% of the share capital of Uniastrum Bank of Russia.

Banking regulatory developments

As regards the main developments in the banking

regulatory framework, the CBC issued a number of directives and guidelines to banks during 2008 in accordance with the recommendations of the Basel Committee on Banking Supervision and the relevant EU Directives on banking sector issues. In chronological order, in January 2008 guidelines to banks on the management of market risk were issued by the CBC, which provide the basic principles that should govern the banks' management practices and processes for the identification, measurement, monitoring and control of market risk.

Guidelines on the management of operational risk were also issued in March 2008, which set out the basic principles that should govern the banks' operational risk management framework.

In April 2008 a directive to banks was issued in accordance with article 59(4) of the *Prevention and Suppression of Money Laundering Activities Law, 2007* with the aim of laying down the specific policy, procedures and internal controls that all banks should implement for the effective prevention of money laundering and terrorist financing so as to achieve full compliance with the requirements of the law.

The constraints imposed by the CBC for acquiring or building a second residence were lifted in May 2008. Specifically, the loan-to-value ratio for a second mortgage reverted to 70% from 60%.

In July 2008, guidelines to banks on the management of credit risk were issued, which provide the core principles for the banks' credit

risk management framework, including provisions on the establishment and maintenance of the credit risk management function. In the same month of 2008, the revised Computation of Prudential Liquidity in Euro Directive was issued to banks, which provides for the methodology for computing the banks' prudential liquidity in euro as well as the basic principles that should govern the banks' liquidity risk management framework.

Finally, in September 2008 the revised the Computation of Prudential Liquidity in Foreign Currency Directive was issued to banks, which provides for the methodology for computing the banks' prudential liquidity in foreign currency.

2.2.2 Banks' financial condition

The analysis of banks' financial condition in the first half of 2008 that follows is based, unless otherwise noted, on aggregate cross-border and cross-sector consolidated data (excluding insurance companies), which cover the entire banking system[31]. **Table C.22** (p. 140) exhibits a number of key aggregate indicators of the Cyprus banking sector.

Since this section provides a comparison of banks' financial results in the first six months of 2008 with those recorded in the corresponding period of 2007, it must be borne in mind that a significant portion of banking system profits in

31. Includes all domestically controlled and foreign controlled banks operating in Cyprus but excludes the co-operative credit institutions.

the first half of the previous year was due to exceptional gains emanating from the disposal of three substantial long-term investments by Marfin Popular Bank Public Co. Ltd. These gains can be considered as non-recurring. Furthermore, the aforementioned bank's own funds and total assets registered a substantial increase in the first six months of 2007 due to the bank's change of ownership structure and subsequent major reorganisation as from December 2006.

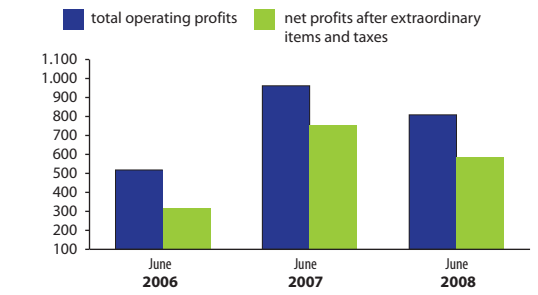
Earnings and profitability

Banks remain profitable. However, after several years of improvement, banks' profitability declined in the first half of 2008, compared with the corresponding period of 2007. In particular, in the first six months of 2008, banks' total operating profits and net profits after tax and extraordinary items decreased by 15,9% and 22,3%, respectively, compared with the same period of 2007 **(Chart B.33).** This can be attributed mainly to the fall in net non-interest income, which resulted in a reduction in total operating income, against a rise in operating expenses.

As depicted in **Chart B.34**, in the first six months of 2008, annualised return on equity (ROE) (after tax) fell to 20,3% (down from 27,6% in the same period of 2007), while annualised return on assets (ROA) (after tax) decreased to 1% (down from 1,5% in the corresponding period of 2007).

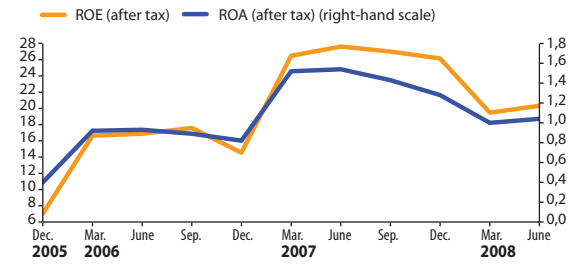
In the first half of 2008, total operating

CHART B.33 **Total operating profits and net profits after extraordinary items and taxes**
(€ million)



Source: CBC.

CHART B.34 **Return on equity (ROE) and return on assets (ROA)**
(%)

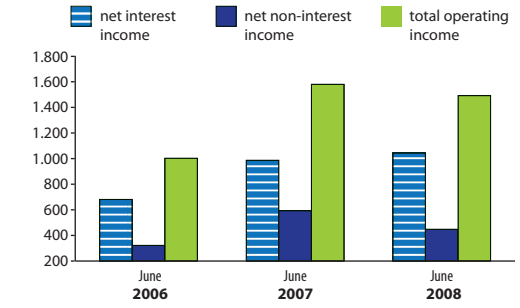


Source: CBC.

income fell by 5,6%, compared with the period from January to June 2007 **(Chart B.35).** Banks continue to obtain the largest part of their earnings from net interest income, which has traditionally been a comparatively more stable source of income than net fees and commissions or capital gains on financial instruments. The latter are more sensitive to unfavourable price or volume developments in international financial markets. Net interest income rose by 5,8% in the first six months of 2008, accounting for 70% of total operating income, compared with 62,5% in the same period of 2007. In contrast, net non-interest income registered a decrease of 24,5% in the first half of 2008 mainly due to the fall in trading revenues, representing 30% of total operating income, compared with 37,5% in the corresponding period of 2007. As regards the two main components of non-interest income, trading and foreign exchange results fell by 69,8% in the period from January to June 2008, accounting for 5,3% of total operating income (down from 16,7% in the same period of 2007), while net income from fees and commissions grew by 15,2%, with its contribution to total operating income rising to 21,8% (up from 17,9% in the corresponding period of 2007).

The more intense competition in the domestic banking market and banks' higher funding costs, which can be mainly attributed to higher interest rates being offered on deposits, account for the decline in net interest margin, which fell to 2,06%

CHART B.35 **Total operating income, net interest income and net non-interest income**
(€ million)



Source: CBC.

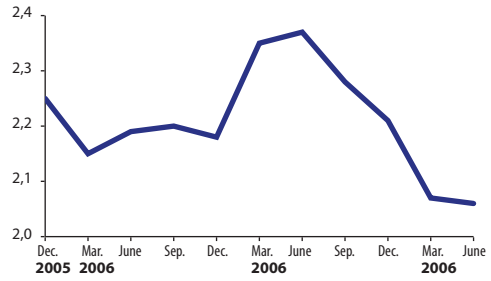
in the first half of 2008 from 2,37% in the period from January to June 2007, the latter being the highest level recorded in the past three years **(Chart B.36).**

Total operating expenses rose by 10,4% in the first half of 2008, compared with the same period of 2007 **(Chart B.37).** Staff costs recorded an increase of 10,5% in the first six months of 2008, accounting for 61,7% of total operating expenses, the same as in the corresponding period of 2007. The growth in operating costs, coupled with the decline in revenues, has led to a deterioration in the cost-to-income ratio from 39,2% in the period from January to June 2007 to 45,8% in the first half of 2008 **(Chart B.38),** indicating a worsening in operating efficiency in the period under review.

Banks' impairment charges on financial assets represented 0,09% of total assets in the first half of 2008 (down from 0,11% in the first six months of 2007).

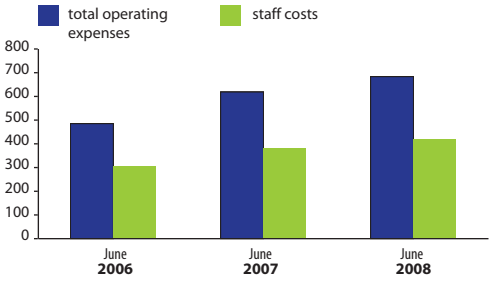
It must be noted that the recently amended International Accounting Standard (IAS) 39 allows, under certain circumstances, the reclassification of non-derivative financial assets from the held-for-trading category to other categories as well as the reclassification of financial assets from available-for-sale investments to loans and receivables. In parallel, the recently amended International Financial Reporting Standard (IFRS) 7 requires additional disclosures in the financial statements of entities, which adopt the above amendments IAS 39.

CHART B.36 **Net interest margin**
(year-to-date,%)



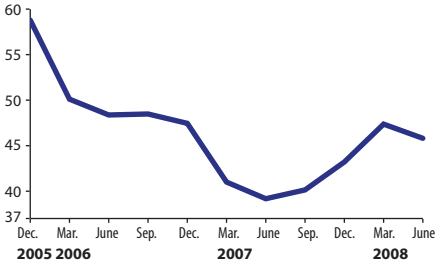
Source: CBC.

CHART B.37 **Total operating expenses and staff costs**
(€ million)



Source: CBC.

CHART B.38 **Cost-to-income ratio**
(%)

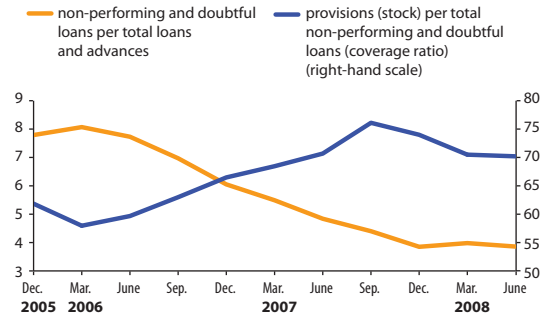


Source: CBC.

Asset quality

As regards asset quality indicators, non-performing and doubtful loans per total loans and advances fell to 3,9% at end-June 2008, compared with 4,8% at the end of June 2007 **(Chart B.39),** reflecting the improved quality of banks' loan portfolios in the period under review. However, it should be noted that non-performing loan ratios are typically pro-cyclical and may actually decrease in periods of strong credit growth, while they can be lagging indicators of banks' credit risk. Provisions (stock) per total non-performing and doubtful loans (coverage ratio) remain satisfactory, standing at 70,2% at the end of June 2008, compared with 70,7% at end-June 2008.

CHART B.39 **Non-performing and doubtful loans and provisions**
(end of quarter, %)

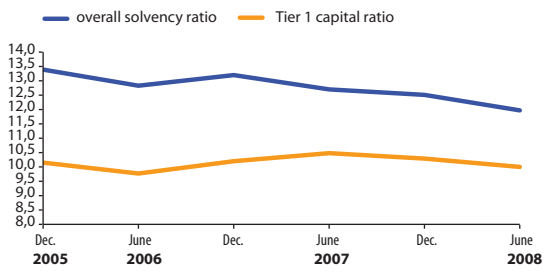


Source: CBC.

Capital adequacy

In the first half 2008, the capital buffer available in the Cyprus banking system to cope with unexpected losses decreased, mainly due to reduced profits as well as a rise in risk-weighted assets in the banking book. In particular, the banks' overall solvency ratio fell to 12% at end-June 2008 from 12,7% at the end of June 2007, mainly due to reduced retained earnings **(Chart B.40).** However, the capital position of the banking system remains adequate, with banks' overall solvency ratio standing at well above the minimum regulatory requirements of 8% applied to individual banks. Similarly, banks' Tier 1 capital ratio decreased to

CHART B.40 **Overall solvency and Tier 1 capital ratios**
(end of quarter, %)



Source: CBC.

10% at the end of June 2008, compared with 10,5% at end-June 2007.

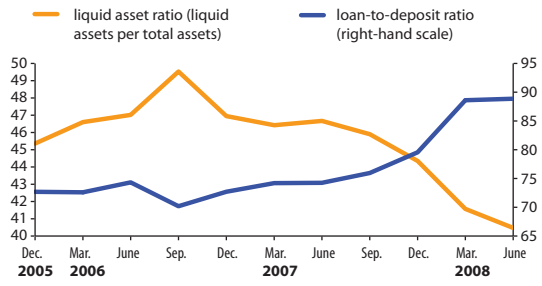
It must be noted that, in the period under review, banks had to calculate their capital requirements for the first time according to the provisions of the Capital Requirements Directive (CRD).

Liquidity

The liquid asset ratio (liquid assets[32] per total assets) stood at 40,5% as at end-June 2008, compared with 46,7% as at the end of June 2007 **(Chart B.41),** which indicates a gradual depletion of excess liquidity in the banking system. However, banks' liquidity position remains satisfactory. It should be borne in mind that the above indicator has significant limitations, since it does not include off-balance sheet commitments and does not account for the time dimension of liquidity, which restrict its informational value, especially in times of distress.

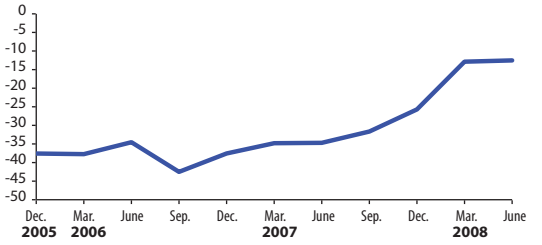
Moreover, total loans and advances to customers per amounts owed to customers (loan to deposit ratio) increased to 88,9% at end-June 2008 (up from 74,3% at the end of June 2007). Finally, as shown in **Chart B.42**, the banking sector's customer funding gap, which represents the proportion of customer loans that is not covered by customer deposits, reached -12,5%[33] at end-June 2008, compared

CHART B.41 **Liquid asset and loan-to-deposit ratios**
(end of quarter, %)



Source: CBC.

CHART B.42 **Customer funding gap**
(end of quarter, % of total loans to customers)



Source: CBC.

32. Includes cash, balances with the central bank, balances with other credit institutions and debt securities, including fixed-income securities.
33. A negative customer funding gap indicates a deposit surplus.

with -34,7% at the end of June 2007. This reflects the strong lending growth which outpaced the increase in deposits.

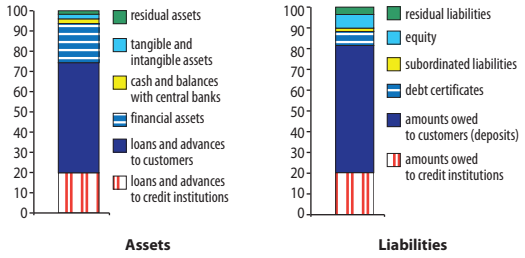
Liquidity stress tests can better simulate sudden and abrupt changes in the drivers of bank liquidity (Section 2.2.4, page 118).

Balance sheet structure

On the consolidated balance sheet asset side, loans and advances to customers accounted for 54,4% of total assets at the end of June 2008, compared with 47% at end-June 2007 **(Chart B.43).** At the end of June 2008, financial assets[34] comprised 19,4% of total assets, compared with 22,6% at end-June 2007, which can be attributed to the fall in fair market value of financial instruments. On the consolidated balance sheet liability side, amounts owed to customers (deposits) represented the lion's share of total liabilities with 61,3% at end-June 2008, compared with 63,4% at the end of June 2007.

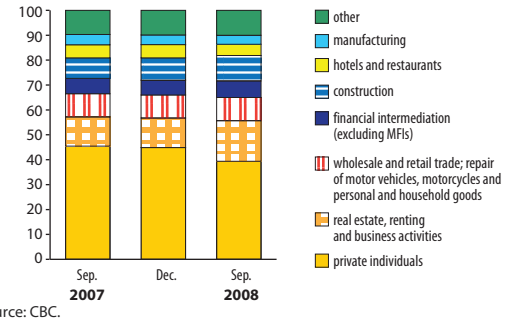
The analysis of bank loans to Cyprus residents by economic activity on a non-consolidated basis[35] (**Chart B.44** and **Table C.23**, p. 141) shows that lending to most sectors has increased. As noted in section 1.3.2, loans to the broad real estate sector rose by 80,7%[36] year-on-year in September 2008 and represented 22,4% of total outstanding loans to non-

CHART B.43 **Balance sheet structure**
(end of June 2008, % of total assets)



Source: CBC.

CHART B.44 **Distribution of bank loans to Cyprus residents by economic activity**
(end of quarter, %)



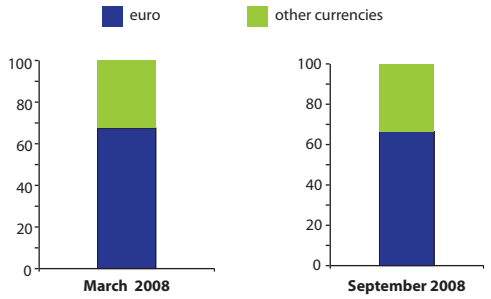
Source: CBC.

34. Includes financial assets at fair value through profit and loss, held-to-maturity investments, available-for-sale assets and investments in associates and subsidiaries.
35. Based on MFI monthly balance sheet data.
36. As a result of the change in the definition of the term "resident of Cyprus" for statistical purposes as from July 2008, MFI monthly balance sheet data have been affected due to the reclassification of organisations or enterprises with no physical presence in Cyprus (i.e. "brass plates") from the "non-resident" sector to the "resident" sector.

MFIs, compared with 18,4% at end-March 2008 and 16,1% at end-September 2007. Loans to the wholesale and retail trade sector rose by 30,2% year-on-year in September 2008 and represented 9,4% of total outstanding loans to non-MFIs, compared with 9,6% at the end of March 2008 and 9,4% at end-September 2007, while loans to hotel and restaurants increased by 9,8% year-on-year in September 2008 and represented 4,5% of total outstanding loans to non-MFIs, compared with 5,2% at end-March 2008 and 5,3% at end-September 2007. Loans to the non-bank financial intermediation sector increased by 40% year-on-year in September 2008 and represented 6,6% of total outstanding loans to non-MFIs, compared with 5% at end-March 2008 and 6,2% at end-September 2007.

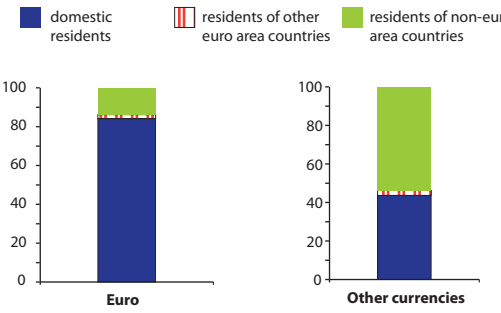
On a non-consolidated basis[37], at end-September 2008, 66,5% of deposits were denominated in euros and 33,5% in foreign currencies, compared with 67,6% and 32,4% respectively at end-Match 2008 **(Chart B.45)**. As regards the distribution of bank deposits by geographical origin, at end-September 2008, 84,2%[38] of euro-denominated deposits emanated from domestic residents, 2% from residents from other euro area countries and 13,8% from residents of third countries, compared with 82,2%, 2,5% and 15,3% at end-March 2008, respectively **(Chart B.46)**. At end-September 2008, 72,8% of foreign currency deposits was accounted for by US dollars, 0,4% by Swiss francs, 0,4% by Japanese yen and 17,6%

CHART B.45 **Distribution of bank deposits by currency**
(end of quarter, %)



Source: CBC.

CHART B.46 **Distribution of bank deposits by geographical origin**
(end of September 2008, %)



Source: CBC.

37. Based on MFI monthly balance sheet data. Includes deposits from both Cyprus residents and non-residents.
38. As a result of the change in the definition of the term "resident of Cyprus" for statistical purposes as from July 2008, MFI monthly balance sheet data have been affected due to the reclassification of organisations or enterprises with no physical presence in Cyprus (so-called "brass plates") from the "non-resident" sector to the "resident" sector.

by sterling, compared with 53,9%, 0,5%, 3,0% and 37,7%, respectively, at the end of March 2008 **(Chart B.47)**.

Off-balance sheet items

As shown in **Chart B.48,** total off-balance sheet items (contingent liabilities and commitments) represented 10% of aggregate banking assets at the end of June 2008, compared with 17,5% at end-June 2007. This indicates that banks' off-balance sheet exposures are not sizeable.

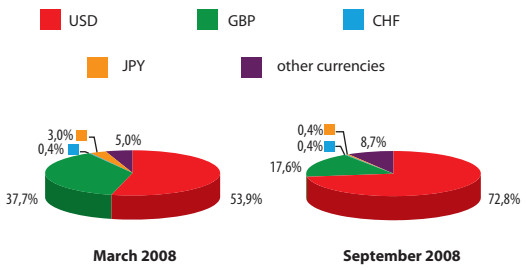
2.2.3 Risks facing the banking sector

This section discusses the main potential sources of risk facing banks. It should be noted that the key sources of risk identified are not necessarily the most probable outcome, but rather should be seen as plausible downside risks for banks.

So far, the impact of ongoing global financial crisis on the Cyprus banking sector has been limited and mainly indirect, since banks are not exposed to any US subprime-related products or other toxic financial assets.

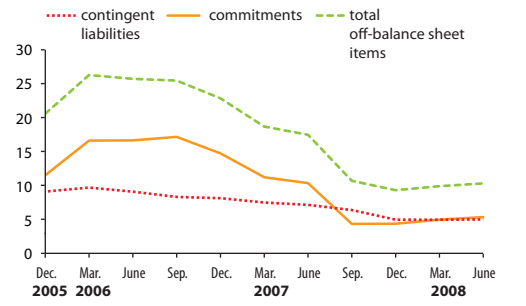
Nevertheless, banks must face the difficulties associated with a less favourable operating environment. Against the backdrop of a major economic slowdown in the US and concerns over economic growth in other regions in the world, it is expected that the international financial system will now have to cope with a period of adverse

CHART B.47 **Distribution of bank deposits by foreign currency**
(end of quarter, %)



Source: CBC.

CHART B.48 **Off-balance sheet items**
(end of quarter, % of total assets)



Source: CBC.

market conditions for revenue growth and a downturn in the credit cycle.

Earnings and profitability risks

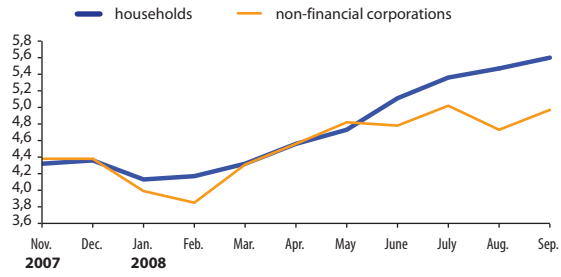
The sound profitability of banks during the past few years has generated substantial buffers against potential losses, thus strengthening banking sector resilience. However, the current unfavourable external environment as well as the expected slowdown in domestic economic activity will likely imply lower revenue and challenges for banks' future earnings prospects from core banking activities. The net tightening of banks' credit standards already evident in response to the less favourable operating environment, coupled with a potential decline in demand for loans to both households and non-financial corporations in the short run, may lead to lower lending volumes, which can also depress revenues. The near-term outlook for earnings on the non-interest income side could also be rather negative, given declining trading revenues and the possibility of further mark-to-market losses on holdings of financial assets.

Furthermore, the possibility of persistently high funding costs in the short term provides an additional drag on banks' profits and will probably exert downward pressure on the future growth of balance sheets. Although interest rates in international money markets have been declining recently, funding pressures remain intense.

Moreover, competition for retail deposits in the domestic banking market has intensified, inducing banks to raise the interest rates offered on new deposits. In particular, Cyprus MFI interest rates[39] on euro-denominated deposits (new business) by euro area households and non-financial corporations rose from 4,32% and 4,31% in March 2008 to 5,60% and 4,97% in September 2008, respectively **(Chart B.49)**. As already indicated in section 2.2.2, the increased funding costs have put pressure on banks' net interest margins in the first half of 2008. Nevertheless, to compensate for the reduced income, banks have gradually started to pass the higher funding costs on to new and existing borrowers.

It must be noted that the negative outlook for banks' near-term revenue growth should be seen against the background of the strong earnings growth that most of these banks had recorded in the past few years. Nevertheless, given the less favourable environment in which banks are currently operating, lower profits and a slower organic growth of banks' capital bases should likely be expected in the near term.

CHART B.49 **Cyprus MFI interest rates on euro-denominated deposits (new business) by euro area residents**
(% per annum, period average)



Source: CBC.

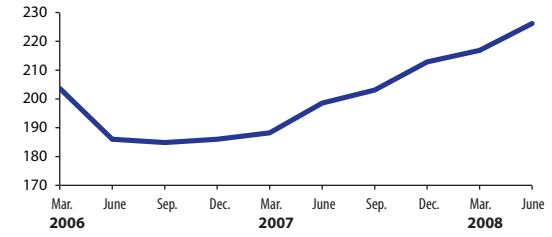
Credit risk

Credit risk remains the most significant risk to which banks are exposed. Bank credit to the private sector[40] rose by 31,5% year-on-year in September 2008. Moreover, bank credit to the

39. With agreed maturity of up to 1 year.
40. Based on MFI monthly balance sheet data. Includes MFI loans to Cyprus residents and MFI holdings of securities issued by Cyprus residents.

private sector to GDP reached 226,2% at the end of June 2008, compared with 212,9% at end-December 2007 and 198,5% at the end of June 2007 **(Chart B.50)**. As reported in section 2.2.2, the robust credit growth exhibited in the first nine months of 2008 was mainly supported by buoyant lending to households for house purchase and non-financial corporations with activities in the broad real estate sector. The intense efforts of domestic banks, due to strong competition, to increase profitability and market share as well as the growth in demand for real estate financing in general, have contributed significantly to the strong lending growth. It must be noted that the robust credit expansion can be also attributed to the increase in banking system liquidity, which was effected as from 1 January 2008 due to Cyprus's entry into the euro area and the amendment of the CBC regulations on the prudential liquidity of banks (since the euro had no longer been considered as a foreign currency and, consequently, the quantitative limits on the funding of deposits in euro had similarly ceased to hold) as well as the amendment of the directive on banks' minimum reserve requirements with the CBC. An additional factor that may have contributed to the strong demand for loans was the gradual reduction of basic interest rates set by the CBC before the entry of Cyprus into the euro area in order to converge and, as from 1 January 2008 to mirror, the ECB minimum rate for main

CHART B.50 **Bank credit to the private sector as % of GDP**
(end of quarter, %)



Source: CBC.

refinancing operations. As a result, the level of indebtedness of both households and non-financial corporations remains high.

As regards household sector credit risk, the outlook is influenced adversely by slower economic growth, tighter credit conditions and an increased cost of living. Non-financial corporate sector credit risks focus on vulnerabilities in the current environment to adverse shocks to cash flows or debt servicing costs as well as potential disruptions in the refinancing of existing loans due to the growing indebtedness of the sector. Any potential substantial reduction in the debt-servicing capacity of households or corporations may lead to future asset quality problems and, consequently, have a negative impact on banks' financial results.

Moreover, although a potential sharp downturn in property prices in the near term is not expected, any real estate price correction will have a negative impact on household and corporate net worth and, if combined with unfavourable income and labour market developments, it could also weaken households' and corporates' debt-servicing capacity, leading to future asset quality problems. Furthermore, a fall in real estate prices will have an adverse effect on the value of collateral, thus diminishing the ability of households and corporations to obtain financing from banks, and, given the importance of real estate as loan collateral, will also increase banks' collateral risk.

Nevertheless, the moderation of house price inflation in 2008 may eventually prove to be a healthy development to avert any possible overheating in the residential real estate sector.

Counterparty risk

Since the onset of the global financial crisis, counterparty credit risk has become one of the main reasons for banks' reluctance to lend to each other and has hoarded liquidity due to the uncertainty with regard to the exposure of counterparties and their inability to value their respective assets. Counterparty credit risk has also become important for banks in Cyprus given their exposures to other credit institutions in the form of money market placements and bond investments. At end-September 2008, banks' total holdings in other euro area banks and in banks from the rest of the world (non-euro area EU banks and non-EU banks) stood at €12 billion and €9,8 billion, respectively. However, government and central bank measures announced in support of the banking sector in various countries are expected to gradually help ease market tensions and alleviate concerns associated with counterparty risk.

Market risk

The financial market turmoil has had a major adverse impact on the earnings which a number

of banks in the euro area and the rest of the world generate from their trading book assets. In this regard, mark-to-market losses exerted a negative drag on these banks' profits. In contrast, market-related risks do not play such an important role in the overall risk profiles of banks in Cyprus. The fact that banks are not exposed to structured products, i.e. products with structured flows which are associated with other debt securities, price indicators (e.g. equity, bond and commodity price indices) or derivatives, has contributed in limiting market risks, despite the negative developments in the international financial system. In this regard, in the first half of 2008, the capital allocated for interest rate risks related to debt instruments, equity investment-related risks and risks related to foreign exchange exposure was, on average, limited.

Banks are subject to interest rate risk, which is related mainly to developments in the shape of the yield curve. This has implications for income derived from the banking books and from fixed-income assets held in the trading books. At end-September 2008, banks' holdings of fixed-income securities issued by general government and MFIs on a non-consolidated basis[41] comprised 4,9% and 7,3% of total banking sector assets, respectively, compared with 6,2% and 9,5% at the end of September 2007. The share of corporate bonds, excluding bonds issued by other banks, in total banking sector assets stood at 6,3% at the end of September 2008 against

41. Based on MFI monthly balance sheet data.

3,7% at end-September 2007. Moreover, banks tend to hedge their fixed-income portfolio holdings by using interest rate derivatives. Hence, banks' exposure to traded debt instruments remains contained.

As regards equity price risks, the share of banks' equity investments (excluding shares in group undertakings and participating interests) on a non-consolidated basis[42] declined to 0,5% of total banking sector assets at end-June 2008 from 1% at the end of June 2007. Therefore, equity-investment related risks are also limited.

Banks direct exposures to foreign exchange risk are limited and extensively hedged. In this regard, the ratio of banks' overall net open position in foreign exchange to capital remains at a low level.

Funding liquidity risk

Customer deposits remain the most important source of funding for banks. Banks in Cyprus have limited reliance on the international wholesale markets and have not adopted the "originate and distribute" banking model, whereby banks originate loans, repackage the cash-flows generated by these loans into asset-backed securities, often via so-called Special Purpose Vehicles or Entities, and sell-on the securities to investors. Such funding structures carry greater funding liquidity risks than traditional ones that rely heavily on customer

42. Based on MFI monthly balance sheet data.

deposits. This is because of the relative ease with which wholesale funding can be withdrawn as opposed to customer deposits.

However, the costs for virtually all types of funding have risen significantly. Liquidity conditions in the money market have led to increased interbank interest rates. However, it must be noted that banks' recourse to market-based funding remains limited. In parallel, the high deposit rates being offered in the domestic banking market due to the intensified competition for attracting retail deposits, especially fixed-term deposits, have contributed to the increase in banks' funding costs.

Another source of risk relates to the fact that some banks have issued short-term floating-rate fixed income securities in recent years, which need to be rolled over at regular intervals. Although banks should have no problems in rolling over such debt in normal circumstances, the costs of such action in the current environment of high risk aversion remain elevated.

In addition, the issuance of long-term debt securities has become more difficult given the prevailing financial market tensions. Reflecting tightened financing conditions in the wholesale funding markets, any new debt issuance is also likely to take place at higher spreads and shorter maturities, thereby contributing further to the rise in banks' funding costs and implying increased roll-over risks. Conditions have also tightened notably

in some other segments of the funding markets, such as that for issues of innovative capital instruments (e.g. preference shares/subordinated debt and hybrid Tier 1).

Furthermore, given the high market volatility and sharp declines in banks' stock prices, the access to funds of those banks that might need to tap the equity market for additional funds to strengthen their capital base against possible future losses may remain very difficult in the period ahead.

Country risk

During the past few years, intensified competition and saturation in the domestic banking market have triggered significant international expansion by the three largest domestic banking groups (Bank of Cyprus Public Company Ltd, Marfin Popular Bank Public Co. Ltd and Hellenic Bank Public Company Limited) in the form of mergers and acquisitions and/or organic growth. As outlined in section 2.2.1, this trend continued in 2008. Banks have been expanding their branch network in Greece and, more recently, banks have been increasingly focusing on the Eastern European countries, primarily Russia, Romania, Bulgaria, Serbia and Ukraine, to tap the ample growth opportunities in these new markets and to further extend the business relationships with their existing clients, currently serviced by

banks' international business departments.

At end-September 2008, the overseas operations of Bank of Cyprus, Marfin Popular Bank and Hellenic Bank represented around 50%, 58% and 16% of their total consolidated group assets, respectively.

The increasing exposure of banks emanating from their growing expansion in overseas markets, while entailing significant benefits such as the diversification of risks and the reduction in the sensitivity to domestic shocks, carries country risks. In this regard, particular caution is warranted with respect to the emerging Eastern European economies for which macroeconomic conditions have become more challenging. The extended credit cycle in these countries has seen rapid bank lending, which risks exacerbating macro-economic imbalances and raises financial sector concerns about excessive over-borrowing and a potential loosening of credit standards that could lead to future asset quality problems. In countries with foreign exchange risk, the volatility in foreign exchange rates should be monitored, especially in the case of countries with high current account deficits, which are more vulnerable to abrupt foreign exchange movements. In addition, the growing dependence of the three main domestic banking groups on the Greek market makes them vulnerable in the event of an economic slowdown in Greece.

2.2.4 Shock-absorption capacity of the banking sector on the basis of stress testing results

In the third quarter of 2008, a single-factor sensitivity analysis based on a "top-down" approach was conducted by the CBC in order to assess the resilience of the banking system to a range of hypothetical adverse shocks. A number of shocks concerning individual risk factors, namely credit risk, market risk (interest rate risk, foreign exchange risk and equity risk) and liquidity risk were considered. The aggregate results of this stress testing exercise suggest that the banking sector's shock-absorption capacity remains strong.

In addition, a more comprehensive "bottom-up" stress testing exercise was carried out in the period from July to September 2008, as part of the assessment of Cyprus's broad financial sector by the IMF under its Financial Sector Assessment Program (FSAP), in which four major banks participated. The assumed shocks or scenarios took into account the actual past experience of Cyprus, the experiences of other countries that faced systemic banking crises as well as the stress testing practices in other central banks and in previous IMF/World Bank FSAP missions. In this exercise, a number of shocks concerning individual risk factors, namely interest rate risk, foreign exchange rate risk, asset price risks

(equity price risk and real estate price risk), credit risk and net interest margin risk were considered. For liquidity risk, a number of multi-factor scenarios were included. In addition, a number of multi-factor macroeconomic scenarios, which included various extreme, but plausible, combinations of individual shocks, were considered. Overall, the results show that the banks which participated in the exercise remain resilient to adverse shocks.

2.2.5 Overall assessment and outlook

In the first half of 2008, banks in Cyprus operated in an external environment characterised by the ongoing global financial turmoil. Banks have remained profitable despite a deceleration in profitability growth, which was mainly due to a significant fall in net non-interest income. At the same time, higher funding costs have put pressure on net interest margins. Stock liquidity indicators show a gradual depletion of excess liquidity in the banking system. Nevertheless, the banks' liquidity position remains at a satisfactory level. In addition, banks are adequately capitalised, with the banking sector's overall solvency ratio remaining well above the minimum regulatory requirements of 8% applied to individual banks. Moreover, banks' asset quality improved in the first six months of 2008.

However, banks are faced with a number of

potential risks in the near term. Firstly, the deceleration in domestic economic activity, coupled with the weak external macroeconomic environment, could lead to a further tightening of credit standards and a slowdown in the growth of lending to households and non-financial corporations. These forces are expected to adversely affect banks' earnings and, therefore, their profitability. Credit risks from lending to households and non-financial corporations have also increased, while any potential reduction in their debt-servicing capacity may lead to future asset quality problems and have a negative impact on banks' financial results. Moreover, counterparty risks are on the upside. Given the continuing financial market tensions, further mark-to-market valuation losses or impairments on financial assets are also possible for those banks which have opted not to adopt the recent changes in international accounting standards. Furthermore, funding liquidity risks have grown due to rising funding costs emanating mainly from higher deposit rates on retail deposits and also from money market rates, which, although decreasing, remain elevated. A potential slowdown in the growth of deposits may also contribute to keeping banks' funding costs at a higher level. Risks from the international expansion of the three major domestic banking groups have also escalated due to worsening macroeconomic conditions in the countries in which these banks operate.

In conclusion, banks in Cyprus remain healthy and sound and are in a generally solid starting position to weather any potentially difficult times ahead. However, the banking sector is facing significant risks and challenges that might affect its capacity to sustain current profitability levels in the near term.

Finally, the implementation of the Capital Requirements Directive (CRD) will help align regulatory capital requirements more closely to the underlying risks which banks face and also enhance banks' risk management practices. Nevertheless, differences in the risk profiles of individual banks may imply that some of them, based on the findings of the supervisory review process to be carried out by the CBC, could need the strengthening of their capital buffers against possible future unexpected losses.

Section C

Statistical Annex

TABLE C.1 **Exchange rates of selected currencies against the euro**

	GBP/EUR	JPY/EUR	USD/EUR
Average for January	0,7473	158,68	1,4718
Average for February	0,7509	157,97	1,4748
Average for March	0,7749	156,59	1,5527
Average for April	0,7949	161,56	1,5751
Average for May	0,7921	162,31	1,5557
Average for June	0,7915	166,26	1,5553
Average for July	0,7931	168,45	1,5770
Average for August	0,7928	163,63	1,4975
Average for Septemer	0,7992	153,20	1,4369
Average for October	0,7867	133,52	1,3322
Average for November (until 17 Nov.)	0,8210	124,47	1,2733
Average for Jan-November (until 17 Nov.)	0,7859	155,15	1,4820
Closing rate on 02/01/2008	0,7413	163,83	1,4688
Closing rate on 17/11/2008	0,8483	121,93	1,2660
Highest exchange rate vs the euro	0,8598 (14 Nov.)	169,75 (23 Jul.)	1,5990 (15 Jul.)
Lowest exchange rate vs the euro	0,7413 (2 Jan.)	115,75 (27 Oct.)	1,2460 (27 Oct.)
% appreciation (+)/depreciation (-) of the currency vs the euro from closing rate on 02/01/2008 to closing rate on 17/11/2008	-14,4	25,6	13,8

Source: SDW.

TABLE C.2 **Percentage change in CPI by economic category**

		2005	2006	2007	Oct. 2007/06	Sep. 2008/07	Oct. 2008/07	Jan.-Oct. 2007/06	Jan.-Sep. 2008/07	Jan.-Oct. 2008/07	Weights 1998=100 (for 2005)	Weights 2005=100 (for 2006)	Weights 2005=100 (for 2007 & 2008)[1]
	GENERAL INDEX	2,56	2,49	2,38	2,99	5,33	5,24	2,09	5,05	5,06	100,00	100,00	100,00
A	**DOMESTIC PRODUCTS**	**1,79**	**4,35**	**3,94**	**3,03**	**9,06**	**10,65**	**4,06**	**6,94**	**7,32**	**32,36**	**28,60**	**28,98**
A.1	Agricultural	1,34	6,51	7,83	0,41	13,60	20,30	9,34	9,51	10,57	7,93	6,92	6,93
A.2	Industrial	1,13	2,47	3,02	3,69	3,53	3,77	3,00	3,43	3,46	22,91	19,24	19,29
A.3	Eelctricity	11,51	13,10	-0,33	4,51	32,05	31,29	-2,59	23,70	24,51	1,52	2,44	2,76
B	**PETROLEUM PRODUCTS**	**14,82**	**8,09**	**2,81**	**9,31**	**15,35**	**7,36**	**0,49**	**16,97**	**15,98**	**4,33**	**6,44**	**6,63**
C	**IMPORTED PRODUCTS**	**-2,47**	**-1,14**	**-1,92**	**-0,75**	**-0,40**	**-0,44**	**-2,36**	**-0,42**	**-0,42**	**22,20**	**25,31**	**24,62**
C1	Motor vehicles	-2,42	-1,38	-8,50	-8,98	-1,25	-1,20	-9,90	-1,30	-1,29	9,43	6,15	5,41
C2	Other imported products	-2,49	-1,07	-0,08	1,49	-0,17	-0,25	-0,13	-0,19	-0,19	12,77	19,16	19,21
D	**SERVICES**	**3,34**	**2,57**	**3,58**	**4,04**	**3,95**	**4,08**	**3,49**	**4,64**	**4,58**	**41,11**	**39,65**	**39,77**
	HICP	**2,1**	**2,2**	**2,2**	**2,7**	**5,0**	**4,8**	**1,9**	**4,8**	**4,8**			

Source: Cystat.
(1) The weights for 2007 were updated as a result of the change in the taxes on motor vehicles.

TABLE C.3 **Weighted contribution to the total percentage change in CPI by economic category**

(%)

		2005	2006	2007	Oct. 2007/06	Sep. 2008/07	Oct. 2008/07	Jan-Oct. 2007/06	Jan.-Sep. 2008/07	Jan.-Oct. 2008/07	Weights 1998=100 (for 2005)	Weights 2005=100 (for 2006)	Weights 2005=100 (for 2007 & 2008)[1]
	GENERAL INDEX	2,56	2,49	2,38	2,99	5,33	5,24	2,09	5,05	5,06	100,00	100,00	100,00
A	**DOMESTIC PRODUCTS**	**0,61**	**1,25**	**1,16**	**0,91**	**2,74**	**3,19**	**1,19**	**2,08**	**2,19**	**32,36**	**28,60**	**28,98**
A.1	Agricultural	0,11	0,45	0,56	0,03	1,08	1,48	0,67	0,73	0,81	7,93	6,92	6,93
A.2	Industrial	0,27	0,47	0,58	0,72	0,68	0,74	0,58	0,66	0,67	22,91	19,24	19,29
A.3	Eelctricity	0,23	0,32	-0,01	0,14	0,99	0,97	-0,08	0,69	0,72	1,52	2,44	2,76
B	**PETROLEUM PRODUCTS**	**0,97**	**0,52**	**0,20**	**0,62**	**1,08**	**0,52**	**0,03**	**1,18**	**1,11**	**4,33**	**6,44**	**6,63**
C	**IMPORTED PRODUCTS**	**-0,43**	**-0,29**	**-0,46**	**-0,18**	**-0,09**	**-0,10**	**-0,56**	**-0,09**	**-0,10**	**22,20**	**25,31**	**24,62**
C1	Motor vehicles	-0,15	-0,08	-0,44	-0,46	-0,06	-0,05	-0,52	-0,06	-0,06	9,43	6,15	5,41
C2	Other imported products	-0,28	-0,20	-0,01	0,28	-0,03	-0,05	-0,02	-0,03	-0,04	12,77	19,16	19,21
D	**SERVICES**	**1,41**	**1,02**	**1,43**	**1,60**	**1,60**	**1,64**	**1,39**	**1,88**	**1,85**	**41,11**	**39,65**	**39,77**

Source: Cystat.

(1) The weights for 2007 were updated as a result of the change in the taxes on motor vehicles.

TABLE C.4 **Percentage change in the CPI by category of goods and services**

	2005	2006	2007	Oct. 2007/06	Sep. 2008/07	Oct. 2008/07	Jan.-Oct. 2007/06	Jan.-Sep. 2008/07	Jan.-Oct. 2008/07
GENERAL INDEX	**2,56**	**2,49**	**2,38**	**2,99**	**5,33**	**5,24**	**2,09**	**5,05**	**5,06**
Food & non-alcoholic beverages	1,59	4,80	5,56	2,99	9,08	12,09	6,04	6,79	7,32
Alcoholic beverages & tobacco	0,23	0,49	1,34	0,71	-0,15	0,65	1,33	0,04	0,11
Clothing & footwear	-2,24	-0,32	0,29	3,28	-2,11	-3,12	0,40	-0,87	-1,13
Housing, water, electricity & gas	5,41	4,90	2,07	3,32	9,47	9,34	1,56	7,36	7,55
Furnishings, household equipment & supplies	0,58	0,13	0,27	1,02	1,73	2,25	0,20	1,96	2,00
Health	0,36	1,31	6,22	6,68	4,05	3,72	6,09	5,41	5,23
Transport	3,79	2,87	-0,48	1,36	6,09	2,52	-1,86	7,00	6,54
Communications	-10,34	-1,83	1,30	1,24	0,22	0,22	1,24	0,21	0,20
Recreation & culture	1,06	-0,33	0,59	1,34	3,25	3,31	0,38	3,77	3,72
Education	5,21	4,68	4,88	5,06	3,86	5,20	4,85	4,99	5,02
Restaurants & hotels	3,30	2,18	4,20	6,16	7,01	7,11	3,80	7,83	7,76
Miscellaneous goods & services	3,83	2,23	2,48	3,25	1,58	1,92	2,45	2,61	2,54

Source: Cystat.

TABLE C.5 **Weighted contribution to the total change in the CPI by category of goods and services**
(%)

	2005	2006	2007	Oct. 2007/06	Sep. 2008/07	Oct. 2008/07	Jan.-Oct. 2007/06	Jan.-Sep. 2008/07	Jan.-Oct. 2008/07
GENERAL INDEX	**2,56**	**2,49**	**2,38**	**2,99**	**5,33**	**5,24**	**2,09**	**5,05**	**5,06**
Food & non-alcoholic beverages	0,31	0,82	0,98	0,54	1,71	2,20	1,06	1,24	1,33
Alcoholic beverages & tobacco	0,01	0,01	0,03	0,02	0,00	0,01	0,03	0,00	0,00
Clothing & footwear	-0,14	-0,03	0,03	0,30	-0,17	-0,28	0,03	-0,07	-0,09
Housing, water, electricity & gas	1,22	0,76	0,34	0,55	1,58	1,55	0,26	1,20	1,22
Furnishings, household equipment & supplies	0,04	0,01	0,02	0,07	0,11	0,14	0,01	0,13	0,13
Health	0,02	0,06	0,31	0,33	0,21	0,19	0,30	0,28	0,26
Transport	0,59	0,45	-0,07	0,21	0,91	0,38	-0,29	1,03	0,96
Communications	-0,11	-0,07	0,05	0,05	0,01	0,01	0,05	0,01	0,01
Recreation & culture	0,06	-0,02	0,04	0,08	0,20	0,20	0,02	0,23	0,22
Education	0,13	0,13	0,14	0,15	0,12	0,16	0,14	0,15	0,15
Restaurants & hotels	0,23	0,16	0,31	0,46	0,55	0,55	0,28	0,59	0,58
Miscellaneous goods & services	0,21	0,15	0,17	0,23	0,11	0,13	0,17	0,18	0,17

Source: Cystat.

TABLE C.6 **Percentage change in prices of services**

	Oct. 2007/06	Sep. 2008/07	Oct. 2008/07	Jan.-Oct. 2007/06	Jan.-Sep. 2008/07	Jan.-Oct. 2008/07
GENERAL INDEX	**2,99**	**5,33**	**5,24**	**2,09**	**5,05**	**5,06**
Rents	2,42	3,00	2,84	2,52	2,55	2,58
Maintenance of houses	0,78	2,66	3,33	1,09	2,73	2,79
Transport	1,97	2,21	2,09	5,56	2,03	2,04
Communications	1,46	0,31	0,31	1,48	0,30	0,35
Insurance	1,48	-0,85	-0,85	2,43	-0,12	-0,20
Public services	3,31	0,93	2,05	2,45	1,61	1,66
Education	5,06	3,86	5,20	4,84	5,00	5,02
Medical care	9,28	5,57	5,15	8,05	7,50	7,21
Restaurants	6,17	6,94	6,99	3,88	7,97	7,87
Personal and household services	4,33	5,39	5,48	2,82	6,93	6,79
Total services	**4,04**	**3,95**	**4,08**	**3,49**	**4,64**	**4,58**

Source: Cystat.

TABLE C.7 **Weighted contribution to the percentage change in prices of services**
(%)

	Oct. 2007/06	Sep. 2008/07	Oct. 2008/07	Jan.-Oct. 2007/06	Jan.-Sep. 2008/07	Jan.-Oct. 2008/07
GENERAL INDEX	**2,99**	**5,33**	**5,24**	**2,09**	**5,05**	**5,06**
Rents	0,17	0,21	0,19	0,17	0,18	0,18
Maintenance of houses	0,02	0,06	0,07	0,02	0,06	0,06
Transport	0,05	0,06	0,05	0,14	0,05	0,05
Communications	0,05	0,01	0,01	0,05	0,01	0,01
Insurance	0,03	-0,02	-0,01	0,04	0,00	0,00
Public services	0,04	0,01	0,03	0,03	0,02	0,02
Education	0,15	0,12	0,16	0,14	0,15	0,10
Medical care	0,33	0,21	0,19	0,28	0,28	0,27
Restaurants	0,44	0,52	0,52	0,28	0,58	0,58
Personal and household services	0,34	0,43	0,43	0,22	0,54	0,53
Total services	**1,61**	**1,60**	**1,64**	**1,39**	**1,88**	**1,85**

Source: Cystat.

TABLE C.8 **Balance of payments**
(€ million)

	2006			2007 (prov.)		
	CREDIT	DEBIT	NET	CREDIT	DEBIT	NET
CURRENT ACCOUNT	**9.149,3**	**10.154,6**	**-1.005,3**	**10.500,5**	**12.332,0**	**-1.831,4**
GOODS, SERVICES AND INCOME	**8.493,0**	**9.663,7**	**-1.170,7**	**9.899,2**	**11.723,7**	**-1.824,5**
GOODS AND SERVICES	**6.799,2**	**7.380,7**	**-581,5**	**7.486,2**	**8.526,9**	**-1.040,7**
GOODS	**1.111,7**	**5.043,8**	**-3.932,1**	**1.083,2**	**5.793,8**	**-4.710,6**
SERVICES	**5.687,5**	**2.336,9**	**3.350,6**	**6.402,9**	**2.733,0**	**3.669,9**
Transport	1.322,6	858,3	464,3	1.543,4	881,8	661,5
Travel	1.882,0	768,0	1.113,9	1.955,2	1.070,6	884,5
Communications services	73,3	100,1	-26,8	85,9	103,3	-17,4
Construction services	158,0	18,5	139,5	148,1	21,0	127,1
Insurance services	90,9	60,4	30,5	84,4	61,2	23,2
Financial services	249,1	104,0	145,2	527,9	116,1	411,8
Computer and information services	161,2	27,1	134,1	198,8	27,9	170,9
Royalties and licence fees	12,8	47,4	-34,6	15,5	39,3	-23,8
Other business services	1.386,8	230,8	1.156,0	1.424,8	258,9	1.165,9
Personal, cultural and recreational services	42,1	51,6	-9,5	56,3	59,7	-3,3
Government services, n.i.e.	308,6	70,6	238,0	362,6	93,2	269,4
Services not allocated	0,0	0,0	0,0	0,0	0,0	0,0
INCOME	**1.693,8**	**2.283,0**	**-589,2**	**2.413,1**	**3.196,8**	**-783,8**
Compensation of employees	27,5	147,0	-119,4	31,6	162,9	-131,3
Investment income	1.666,3	2.136,0	-469,7	2.381,5	3.033,9	-652,4
Direct investment income	476,5	1.283,8	-807,2	601,8	1.653,6	-1.051,8
Portfolio investment income	387,0	307,1	79,9	627,5	633,5	-5,9
Other investment income	802,8	545,2	257,6	1.152,2	746,8	405,3
CURRENT TRANSFERS	**656,3**	**490,9**	**165,4**	**601,3**	**608,2**	**-7,0**
General government	245,9	163,0	82,8	176,0	199,7	-23,6
Other sectors	410,5	327,9	82,6	425,2	408,6	16,6
CAPITAL AND FINANCIAL ACCOUNT			**1.013,0**			**2.029,1**
Capital account	77,6	51,8	25,8	63,5	57,8	5,7
Financial account			987,2			2.023,4
Direct investment			754,7			710,3
Abroad			-707,2			-877,7
In Cyprus			1.461,9			1.588,0
Portfolio investment			-131,6			-322,7
Assets			-2.528,3			284,3
Liabilities			2.396,7			-607,0
Financial derivatives			-129,7			101,4
Other investment			1.280,6			1.314,2
Assets			-2.790,8			-9.992,1
Liabilities			4.071,4			11.306,3
Official reserve assets			-786,8			220,2
Net errors and omissions			**-7,7**			**-197,7**

Source: CBC.

TABLE C.9 **Trade account**
(€ million)

	2006	2007	% change	2007 Jan.-Aug.	2008 Jan.-Aug.	% change
Imports	**5.513,5**	**6.353,4**	**15,2**	**4.101,9**	**4.920,1**	**19,9**
Consumer goods	1.683,0	1.834,5	9,0	1.179,3	1.294,8	9,8
Intermediate inputs	1.525,9	1.848,9	21,2	1.198,1	1.424,7	18,9
Capital goods	505,7	571,5	13,0	371,6	440,2	18,5
Transport equipment	727,0	1.013,7	39,5	678,4	712,1	5,0
Fuels and lubricants	999,9	1.071,2	7,1	663,5	1.038,7	56,5
Exports	**1.111,8**	**1.082,7**	**-2,6**	**736,251**	**775,826**	**5,4**
Trade deficit	**4.401,7**	**5.270,8**	**19,7**	**-3.365,7**	**-4.144,3**	**23,1**

Source: Cystat.

TABLE C.10 **Direct investment by non-residents in Cyprus**
(€ million)

		Net capital flows										
NACE CODE	**Economic activity**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
595	AGRICULTURE AND FISHING	-0,3	0,3	*	0,2	0,2	0,0	0,0	0,0	0,0	-0,1	-0,1
1495	MINING AND QUARRYING	0,1	4,1	8,9	2,8	2,1	2,1	4,7	50,3	19,9	0,4	0,5
3995	MANUFACTURING	7,5	-5,2	6,0	14,3	5,6	37,8	-9,2	53,2	30,4	79,6	15,4
4195	ELECTRICITY, GAS AND WATER	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
4500	CONSTRUCTION	3,2	3,7	*	6,6	-6,3	13,6	29,8	58,9	68,3	47,9	48,2
5295	TRADE AND REPAIRS	125,1	130,2	132,4	210,7	256,1	217,8	101,1	277,3	177,2	262,5	395,8
5500	HOTELS AND RESTAURANTS	1,3	-0,6	0,4	2,3	21,3	8,3	1,9	*	*	5,7	10,6
6495	TRANSPORT AND COMMUNICATION	0,7	2,4	7,2	9,6	-0,2	44,6	119,1	*	*	-21,6	53,5
6895	FINANCIAL INTERMEDIATION	184,5	42,0	394,5	431,8	444,3	173,6	140,0	122,1	0,8	279,8	235,6
7395	REAL ESTATE AND BUSINESS ACTIVITIES	140,0	108,6	172,6	218,3	278,9	523,3	338,1	205,8	356,0	485,2	755,6
9995	OTHER SERVICES	17,9	20,1	30,9	12,6	35,8	67,8	40,0	75,8	269,6	322,4	72,8
9996	NOT ALLOCATED	0,0	0,0	0,0	0,0	0,0	14,7	24,4	15,3	0,0	0,0	0,0
9999	**TOTAL**	**479,9**	**305,6**	**754,3**	**909,1**	**1.037,8**	**1.103,6**	**789,8**	**873,0**	**940,5**	**1.461,9**	**1.588,0**

		Net capital flows										
Geographical / economic zone		**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
E1	EUROPEAN COUNTRIES	397,2	252,5	637,0	771,4	873,3	955,1	667,5	764,5	909,4	861,0	1.514,6
D2	EU-15	195,4	*	209,1	392,9	414,0	418,1	511,7	477,4	501,3	443,1	942,3
D3	EU-25	231,6	223,2	219,1	458,4	455,2	444,1	588,4	604,3	534,0	492,2	969,4
E4	AFRICA	15,3	19,0	19,1	16,2	20,8	25,3	25,9	*	*	*	*
E7	AMERICA	33,1	*	75,2	82,6	82,3	*	30,3	*	-9,4	192,4	*
F2	ASIA	34,7	31,1	24,7	39,7	63,0	86,6	*	14,8	34,2	413,3	*
F7	OCEANIA	-0,4	*	-1,7	-0,8	-1,7	*	*	-1,2	*	*	*
Z8	Extra EU-15 not allocated	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	-0,1	0,0
A1	**WORLD (ALL ENTITIES)**	**479,9**	**305,6**	**754,3**	**909,1**	**1.037,8**	**1.103,6**	**789,8**	**873,0**	**940,5**	**1.461,9**	**1.588,0**

Source: CBC.
*In order that the confidentiality of the data is ensured, amounts which relate to a small number of transactions are not presented on their own but are included at a higher level of aggregation.
For the conversion of Cyprus pounds into euro, the irrevocable exchange rate of €1 = £0,585274 was used.

TABLE C.11 **Direct investment abroad**
(€ million)

		Net capital flows										
NACE CODE	**Economic activity**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
595	AGRICULTURE AND FISHING	0,0	*	*	-2,6	*	-0,3	0,0	0,0	0,0	0,0	0,0
1495	MINING AND QUARRYING	0,0	0,0	0,0	0,0	-0,9	0,0	0,0	0,0	0,1	0,0	0,0
3995	MANUFACTURING	0,6	-2,6	-3,8	-7,1	-7,1	-4,6	-15,5	-58,9	-39,5	41,3	-1,9
4195	ELECTRICITY, GAS AND WATER	*	0,0	0,0	*	*	-1,4	0,0	-0,1	0,0	0,0	0,0
4500	CONSTRUCTION	-1,0	-1,2	-1,2	-4,2	*	-69,5	-75,0	*	-196,8	*	-49,4
5295	TRADE AND REPAIRS	-1,8	-0,6	-2,7	-9,1	-7,9	-5,3	-32,6	-37,3	176,9	-30,2	-23,4
5500	HOTELS AND RESTAURANTS	*	*	-2,3	-18,2	-62,9	-16,3	-88,1	*	*	*	-22,4
6495	TRANSPORT AND COMMUNICATION	0,0	-8,7	-39,6	-22,2	-13,5	-21,3	-18,4	-12,0	3,8	-10,0	-50,6
6895	FINANCIAL INTERMEDIATION	-18,8	-47,5	-116,2	-98,4	-160,9	-112,1	-94,6	-122,4	42,5	-430,9	-349,2
7395	REAL ESTATE AND BUSINESS ACTIVITIES	-4,3	-1,5	-2,5	-18,1	-12,7	-299,6	-132,4	-137,4	-415,8	-180,3	-380,8
9995	OTHER SERVICES	*	*	*	*	-3,9	-0,8	-10,7	-0,7	*	114,2	-0,1
9996	NOT ALLOCATED	0,0	0,0	0,0	0,0	0,0	-9,3	-39,5	-8,9	0,0	0,0	0,0
9999	**TOTAL**	**-24,5**	**-62,6**	**-169,4**	**-183,0**	**-274,3**	**-540,6**	**-506,8**	**-555,4**	**-442,4**	**-707,2**	**-877,7**

		Net capital flows										
Geographical / economic zone		**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
E1	EUROPEAN COUNTRIES	-20,6	-44,6	-115,0	-139,2	-234,8	-441,4	-412,0	-475,6	-301,9	-375,8	-812,7
D2	EU-15	-19,8	-36,2	-104,4	-114,4	-221,9	-188,0	-319,4	-319,7	-127,1	-68,8	-490,1
D3	EU-25	-20,0	-36,0	-104,6	-116,1	-223,6	-429,0	-339,0	-359,2	-138,7	-34,7	-498,9
E4	AFRICA	*	-0,6	-30,0	-7,6	*	-26,4	-35,4	*	*	-213,4	-0,6
E7	AMERICA	-1,1	*	*	-2,4	*	*	-16,9	-6,5	*	*	-5,3
F2	ASIA	-1,2	-16,0	-21,4	-0,6	-3,9	*	-41,1	*	*	*	-52,9
F7	OCEANIA	*	*	*	-33,2	-32,9	-3,4	-1,4	-11,2	-4,8	-8,6	-5,8
Z8	Extra EU-15 not allocated	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	-0,4
A1	**WORLD (ALL ENTITIES)**	**-24,5**	**-62,6**	**-169,4**	**-183,0**	**-274,3**	**-540,6**	**-506,8**	**-555,4**	**-442,4**	**-707,2**	**-877,7**

Source: CBC.
* In order to ensure confidentiality of the data, amounts which relate to a small number of transactions are not presented on their own but are included at a higher level of aggregation.
For the conversion of Cyprus pounds into euro, the irrevocable exchange rate of €1 = £0,585274 was used.

TABLE C.12 **Annual international investment position: 2007 (provisional)**
(€ million)

	ASSETS	LIABILITIES	BALANCE
FINANCIAL ACCOUNT			1.964,8
Direct Investment			-5.964,7
Abroad			6.066,7
Equity capital and reinvested earnings			5.303,5
MFIs (excluding central banks)			1.371,1
Other sectors			3.932,4
Other capital			763,2
MFIs (excluding central banks)			65,0
Other sectors			698,2
In the reporting country			12.031,4
Equity capital and reinvested earnings			9.429,9
MFIs (excluding central banks)			3.527,8
Other sectors			5.902,1
Other capital			2.601,4
MFIs (excluding central banks)			273,2
Other sectors			2.328,2
Portfolio Investment	19.062,7	9.768,8	9.293,9
Equity securities	3.404,8	682,0	
Monetary authorities			
General government			
MFIs (excluding central banks)	33,5	564,3	
Other sectors	3.371,3	117,7	
Debt securities	15.657,9	9.086,8	
Bonds and notes	15.248,2	5.923,5	
Monetary authorities	1.378,4		
General government		1.400,0	
MFIs (excluding central banks)	13.129,8	4.523,5	
Other sectors	740,0		
Money market instruments	409,7	3.163,3	
Monetary authorities			
General government			
MFIs (excluding central banks)	171,7	3.163,3	
Other sectors	238,0		
Financial Derivatives	225,5	327,1	-101,6
Monetary authorities			
General government			
MFIs (excluding central banks)	216,0	322,1	-106,1
Other sectors	9,5	5,0	4,5
Other Investment	35.863,7	38.387,5	-2.523,8
Monetary authorities	1.784,1	27,0	
Loans/currency and deposits	1.784,1	27,0	
Other assets/liabilities			
General government	60,0	732,0	
Trade credits	51,1		
Loans/currency and deposits		732,0	
Other assets/liabilities	8,9		
MFIs (excluding central banks)	**29.060,9**	**36.027,1**	
Loans/currency and deposits	29.060,9	36.027,1	
Other assets/liabilities			
Other sectors	**4.958,7**	**1.601,5**	
Trade credits	94,5	613,6	
Loans/currency and deposits	4.864,2	987,9	
Other assets/liabilities			
Reserve assets			1.261,0

Source: CBC.
MFIs= Monetary Financial Institutions
For the conversion of Cyprus pounds into euro, the irrevocable exchange rate of €1 = £0,585274 was used.

TABLE C.13 **Tourist arrivals and receipts from tourism**

		Tourist arrivals			Receipts from tourism		
		Number of	% change			% change	
Year	Month	tourists	Previous year	Cumulative period	€ million	Previous year	Cumulative period
2005	January	58.894	4,2	4,2	35,4	-5,0	-5,0
	February	72.600	-4,1	-0,5	40,1	-7,6	-6,4
	March	137.075	22,4	10,0	81,3	13,2	2,8
	April	183.561	-4,0	3,8	105,9	-14,0	-4,7
	May	284.132	8,6	5,6	180,1	5,9	-0,7
	June	282.652	6,7	5,9	193,6	3,7	0,6
	July	338.972	10,8	7,1	239,4	3,7	1,4
	August	336.587	10,0	7,7	275,6	8,9	3,1
	September	302.833	-0,2	6,4	235,6	-2,3	2,2
	October	292.273	4,8	6,2	205,8	3,9	2,4
	November	104.822	-8,1	5,5	73,7	0,0	2,3
	December	75.656	-3,9	5,2	51,8	5,3	2,4
2006	January	54.875	-6,8	-6,8	36,2	2,4	2,4
	February	66.151	-8,9	-8,0	39,4	-1,7	0,2
	March	107.071	-21,9	-15,1	66,5	-18,3	-9,4
	April	206.548	12,5	-3,9	127,2	20,2	2,5
	May	283.513	-0,2	-2,5	191,1	6,1	4,0
	June	280.164	-0,9	-2,0	201,1	3,8	3,9
	July	341.443	0,7	-1,3	264,9	10,6	5,8
	August	314.872	-6,5	-2,4	264,8	-3,9	3,5
	September	296.532	-2,1	-2,3	240,8	2,2	3,2
	October	283.046	-3,2	-2,4	209,9	2,0	3,1
	November	95.682	-8,7	-2,7	64,3	-12,7	2,4
	December	71.022	-6,1	-2,8	49,1	-5,2	2,2
2007	January	51.848	-5,5	-5,5	33,6	-7,1	-7,1
	February	63.098	-4,6	-5,0	38,5	-2,2	-4,6
	March	104.316	-2,6	-3,9	68,5	3,1	-1,0
	April	189.310	-8,3	-6,0	123,7	-2,8	-1,8
	May	273.058	-3,7	-5,1	204,6	7,1	1,9
	June	282.465	0,8	-3,4	207,4	3,2	2,3
	July	352.423	3,2	-1,7	287,3	8,5	4,0
	August	340.534	8,1	0,1	306,0	15,5	6,6
	September	315.437	6,4	1,1	263,0	9,3	7,0
	October	275.103	-2,8	0,6	206,3	-1,7	5,9
	November	94.741	-1,0	0,5	67,8	5,5	5,9
	December	73.742	3,8	0,6	51,4	4,5	5,9
2008	January	50.658	-2,3	-2,3	35,3	4,9	4,9
	February	70.140	11,2	5,1	40,6	5,5	5,2
	March	108.164	3,7	4,4	67,3	-1,7	1,8
	April	182.091	-3,8	0,6	107,8	-12,8	-5,0
	May	271.599	-0,5	0,1	191,3	-6,5	-5,7
	June	307.237	8,8	2,7	229,6	10,7	-0,7
	July	342.554	-2,8	1,2	272,9	-5,0	-2,0
	August	328.100	-3,7	0,2	278,0	-9,1	-3,7
	September	305.348	-3,2	-0,3	247,4	-5,9	-4,1
	October	267.866	-2,6	-0,6	n/a	n/a	n/a

Source: Cystat.

TABLE C.14 **Gross Domestic Product by category of expenditure at constant 2000 prices, chain linking method**
(€ million)

Year /Q		Gross domestic product	General government consumption	Private consumption	Gross capital formation	Exports of goods and services	Imports of goods and services
1995	Q1	1.913,0	235,8	1.448,4	500,0	706,4	977,7
	Q2	2.153,9	260,3	1.217,7	640,2	1.097,8	1.062,2
	Q3	2.094,1	269,4	1.160,5	413,2	1.299,7	1.048,7
	Q4	2.034,2	414,3	1.381,0	205,7	1.080,4	1.047,2
1996	Q1	1.981,2	254,7	1.436,1	570,2	794,5	1.074,3
	Q2	2.171,7	297,8	1.281,4	597,5	1.136,2	1.141,2
	Q3	2.121,7	325,3	1.225,3	361,0	1.303,7	1.093,6
	Q4	2.072,4	477,0	1.447,2	215,1	1.096,5	1.163,3
1997	Q1	2.017,5	305,1	1.472,6	453,5	805,9	1.019,6
	Q2	2.158,6	338,6	1.323,5	550,0	1.143,5	1.197,1
	Q3	2.216,7	352,9	1.218,9	396,3	1.430,5	1.181,9
	Q4	2.150,3	478,3	1.490,9	193,4	1.103,4	1.115,7
1998	Q1	2.090,9	359,7	1.600,9	373,5	853,1	1.096,3
	Q2	2.300,8	341,3	1.371,4	537,2	1.185,2	1.134,2
	Q3	2.331,8	369,4	1.269,6	460,1	1.425,0	1.192,3
	Q4	2.250,5	463,7	1.589,4	306,0	1.091,5	1.200,1
1999	Q1	2.182,2	376,3	1.662,2	335,9	850,5	1.042,7
	Q2	2.414,0	385,0	1.411,0	574,8	1.265,0	1.221,8
	Q3	2.437,3	385,4	1.295,2	360,2	1.606,3	1.209,8
	Q4	2.374,9	521,1	1.632,5	292,1	1.223,1	1.293,9
2000	Q1	2.305,9	338,8	1.759,1	407,7	982,8	1.182,5
	Q2	2.550,8	342,3	1.511,4	686,4	1.417,2	1.406,4
	Q3	2.552,0	393,3	1.392,2	379,0	1.746,8	1.359,3
	Q4	2.474,7	508,9	1.742,6	338,3	1.324,3	1.439,4
2001	Q1	2.383,5	380,4	1.873,1	382,1	1.039,3	1.291,4
	Q2	2.656,6	398,0	1.545,6	650,1	1.569,7	1.506,8
	Q3	2.676,6	427,5	1.442,6	460,6	1.849,9	1.503,9
	Q4	2.560,5	548,4	1.823,8	207,0	1.346,0	1.364,6
2002	Q1	2.442,9	421,7	1.858,3	498,2	957,1	1.292,4
	Q2	2.697,3	431,0	1.607,6	642,3	1.485,3	1.468,9
	Q3	2.712,7	457,4	1.493,9	458,0	1.743,1	1.439,7
	Q4	2.640,6	565,7	1.803,4	346,7	1.341,8	1.417,0
2003	Q1	2.487,8	435,8	1.851,7	586,9	877,6	1.264,1
	Q2	2.747,7	437,0	1.662,6	695,5	1.315,1	1.362,5
	Q3	2.756,8	460,0	1.542,0	390,5	1.822,1	1.457,7
	Q4	2.700,7	656,1	1.852,6	197,9	1.472,9	1.478,8
2004	Q1	2.590,1	414,9	1.958,0	462,4	1.138,5	1.383,7
	Q2	2.867,9	449,4	1.733,6	710,3	1.500,4	1.525,8
	Q3	2.870,0	459,1	1.671,8	498,8	1.773,6	1.533,3
	Q4	2.814,2	555,4	1.981,6	576,2	1.355,2	1.654,1
2005	Q1	2.697,1	418,9	2.059,8	536,6	1.163,3	1.481,5
	Q2	2.969,1	452,8	1.831,9	581,5	1.577,9	1.475,0
	Q3	2.984,5	420,3	1.705,1	553,9	1.888,3	1.583,1
	Q4	2.931,5	650,3	2.043,3	576,8	1.407,3	1.746,1
2006	Q1	2.806,2	465,4	2.143,9	522,0	1.276,3	1.601,5
	Q2	3.101,7	498,1	1.897,9	696,4	1.670,6	1.661,3
	Q3	3.102,0	480,3	1.794,2	492,6	2.028,6	1.693,8
	Q4	3.052,3	641,9	2.149,2	715,5	1.292,1	1.746,4
2007	Q1	2.933,3	476,7	2.271,3	597,5	1.271,3	1.683,4
	Q2	3.231,2	459,5	2.031,3	876,6	1.641,2	1.777,4
	Q3	3.244,7	493,2	1.906,0	537,2	2.234,1	1.925,8
	Q4	3.187,2	654,2	2.328,7	678,1	1.588,7	2.062,5
2008	Q1	3.054,1	463,4	2.424,9	867,4	1.264,3	1.966,0
	Q2	3.356,8	464,1	2.180,5	814,7	1.823,0	1.925,5

Source: Cystat.

TABLE C.15 **Gross Domestic Product by category of expenditure at current prices**
(€ million)

Year	Q	Gross domestic product	General government consumption	Private consumption	Gross capital formation	Exports of goods and services	Imports of goods and services
1995	Q1	1.627,8	188,4	1.235,0	443,3	601,6	840,6
	Q2	1.889,1	212,0	1.098,5	562,4	935,0	918,9
	Q3	1.828,3	218,0	1.052,7	358,0	1.107,7	908,1
	Q4	1.805,0	347,4	1.236,7	203,2	931,8	914,2
1996	Q1	1.723,3	209,5	1.263,5	509,6	688,6	947,9
	Q2	1.945,3	250,0	1.184,9	537,1	988,6	1.015,2
	Q3	1.902,9	272,9	1.137,6	331,3	1.140,5	979,5
	Q4	1.877,6	411,3	1.326,6	231,0	964,3	1.055,6
1997	Q1	1.792,6	263,3	1.326,4	422,9	716,9	936,8
	Q2	1.978,6	300,4	1.243,5	514,5	1.027,2	1.107,0
	Q3	2.036,3	314,0	1.152,9	370,4	1.298,9	1.099,9
	Q4	2.002,8	437,7	1.395,1	204,8	1.005,2	1.040,1
1998	Q1	1.911,5	318,3	1.469,4	355,7	782,1	1.014,0
	Q2	2.170,5	310,1	1.308,1	518,8	1.090,3	1.056,8
	Q3	2.214,0	340,0	1.217,8	438,8	1.321,0	1.103,6
	Q4	2.149,0	430,9	1.510,4	306,8	1.011,6	1.110,8
1999	Q1	2.055,3	344,6	1.556,2	335,1	791,0	971,6
	Q2	2.326,0	359,7	1.365,7	560,9	1.193,7	1.153,9
	Q3	2.359,1	363,1	1.264,7	357,5	1.529,6	1.155,7
	Q4	2.322,1	507,1	1.600,1	289,9	1.175,6	1.250,6
2000	Q1	2.244,7	330,1	1.712,3	396,4	959,1	1.153,1
	Q2	2.543,9	340,0	1.522,1	648,4	1.412,0	1.378,5
	Q3	2.563,8	391,3	1.409,0	382,8	1.754,8	1.374,1
	Q4	2.530,9	521,8	1.761,8	383,9	1.345,3	1.482,0
2001	Q1	2.408,4	384,3	1.868,2	391,3	1.062,7	1.298,1
	Q2	2.770,6	413,5	1.593,2	676,7	1.614,8	1.527,6
	Q3	2.777,1	439,6	1.489,2	476,1	1.898,4	1.526,2
	Q4	2.672,1	581,4	1.892,2	202,4	1.374,2	1.378,2
2002	Q1	2.505,1	434,5	1.892,8	512,5	972,6	1.307,3
	Q2	2.796,9	452,6	1.686,6	662,7	1.501,6	1.506,5
	Q3	2.845,2	486,3	1.593,2	487,0	1.757,7	1.479,0
	Q4	2.832,5	623,5	1.921,5	397,9	1.340,6	1.450,9
2003	Q1	2.683,1	493,8	1.978,2	638,2	871,7	1.298,8
	Q2	3.028,4	511,6	1.825,6	764,7	1.309,9	1.383,3
	Q3	3.039,4	533,9	1.695,6	451,8	1.840,7	1.482,7
	Q4	3.010,4	783,2	2.039,0	191,6	1.501,4	1.504,9
2004	Q1	2.890,4	483,4	2.114,7	534,6	1.168,6	1.410,9
	Q2	3.230,6	535,5	1.923,3	790,4	1.562,8	1.581,4
	Q3	3.274,1	549,5	1.876,4	577,1	1.878,2	1.607,1
	Q4	3.258,5	686,9	2.242,0	650,6	1.436,6	1.757,6
2005	Q1	3.097,5	507,1	2.296,8	632,2	1.241,4	1.580,1
	Q2	3.422,3	559,7	2.088,2	679,7	1.699,4	1.604,8
	Q3	3.471,8	522,2	1.951,3	690,1	2.042,5	1.734,3
	Q4	3.470,7	838,1	2.362,5	680,0	1.521,6	1.931,4
2006	Q1	3.315,4	585,9	2.451,3	663,5	1.393,5	1.778,8
	Q2	3.693,4	640,9	2.217,2	846,6	1.841,9	1.853,3
	Q3	3.722,6	618,5	2.104,5	635,4	2.251,7	1.887,5
	Q4	3.703,6	837,2	2.524,5	854,8	1.438,8	1.951,7
2007	Q1	3.555,7	607,8	2.644,6	782,7	1.418,6	1.897,9
	Q2	3.959,7	602,0	2.433,2	1.103,0	1.844,9	2.023,3
	Q3	4.037,3	652,2	2.307,3	738,0	2.535,2	2.195,4
	Q4	4.013,1	889,7	2.836,2	847,9	1.806,6	2.367,4
2008	Q1	3.916,2	628,4	2.946,5	1.149,4	1.451,5	2.259,7
	Q2	4.338,4	650,7	2.721,1	1.087,9	2.108,4	2.229,6

Source: Cystat.

TABLE C.16 **Turnover volume index of retail trade**

Year /	Month	Volume	6-mth moving average	% Change previous year	% Change 6-mth moving average
2005	August	120,8	119,2	4,0	4,4
	September	120,8	121,1	4,3	4,1
	October	121,5	120,4	8,7	3,6
	November	119,9	122,0	2,8	4,0
	December	155,4	128,2	4,9	4,0
2006	January	112,9	125,2	7,1	5,2
	February	102,7	122,2	4,3	5,3
	March	113,8	121,0	3,9	5,3
	April	122,0	121,1	-2,6	3,3
	May	125,4	122,0	13,4	5,0
	June	128,7	117,6	9,2	5,7
	July	138,2	121,8	5,6	5,5
	August	129,3	126,2	7,0	5,9
	September	130,6	129,0	8,1	6,6
	October	131,4	130,6	8,1	8,5
	November	126,0	130,7	5,1	7,2
	December	164,2	136,6	5,7	6,6
2007	January	115,6	132,9	2,4	6,1
	February	108,9	129,5	6,0	5,9
	March	128,7	129,1	13,1	6,7
	April	126,1	128,3	3,4	5,9
	May	133,5	129,5	6,5	6,1
	June	142,6	125,9	10,8	7,1
	July	152,4	132,0	10,3	8,4
	August	141,8	137,5	9,7	8,9
	September	136,6	138,8	4,6	7,6
	October	141,3	141,4	7,5	8,2
	November	143,1	143,0	13,6	9,4
	December	191,0	151,1	16,3	10,6
2008	January	129,9	147,2	12,4	10,8
	February	127,5	144,8	17,1	11,9
	March	135,1	144,6	5,0	12,0
	April	142,0	144,7	12,6	12,8
	May	153,0	146,4	14,6	13,0
	June	147,9	139,2	3,7	10,6
	July *	168,2	145,6	10,4	10,3
	August**	147,3	148,9	3,9	8,3

Percentage change by category	August* 2007/2006	August* 2008/2007	Jan.-Aug.* 2007/2006	Jan.-Aug.* 2008/2007
General index	**9,7**	**3,9**	**7,9**	**9,7**
Retail sale in non-specialised stores with food, beverages or tobacco predominating	6,4	9,7	5,7	8,2
Other retail sale in non-specialised stores	2,6	17,3	4,8	17,6
Retail sale of food, beverages and tobacco in specialised stores	-6,5	11,5	-5,2	9,2
Retail sale of pharmaceutical and medical goods, cosmetics and toilet articles	26,7	11,8	16,5	18,8
Retail sale of textiles, clothing, footwear and leather goods	8,1	-0,1	9,1	7,0
Retail sale of furniture, lighting, equipment and household articles, electrical household appliances and radio and television goods hardware, paints and glasses	12,0	-9,9	10,5	8,9
Retail sale of books, newspapers and stationery and other retail sale in specialised stores	18,6	-1,3	12,7	8,0
Retail sale of second-hand goods in stores	-10,9	-9,8	-35,4	5,9
Retail sale not in stores	12,4	4,5	24,8	3,8

Source: Cystat.
* Revised data.
** Provisional data.

TABLE C.17 **Construction indicators**

		Sales of cement (volume)			Building permits authorised (volume)		
			% change			% change	
Year /	Month	Total (m.ton)	Previous year	6-mth moving average	Area (sq.m)	Previous year	6-mth moving average
2005	January	120.970	35,96	17,53	268.015	30,19	26,50
	February	126.572	17,15	18,29	285.715	-0,17	20,94
	March	150.703	0,56	14,89	330.823	27,80	19,24
	April	146.911	17,17	16,03	252.028	-3,92	16,21
	May	133.692	-3,10	11,55	289.171	15,95	13,67
	June	143.765	-4,91	8,04	297.040	6,58	11,77
	July	135.562	-13,32	1,01	255.329	21,34	10,62
	August	76.062	13,28	-0,16	221.276	66,09	18,14
	September	140.080	-3,95	-1,00	264.510	-17,56	8,55
	October	136.293	-1,18	-3,89	329.040	22,14	13,30
	November	146.225	4,26	-2,60	336.708	23,74	14,76
	December	131.832	3,23	-1,18	287.328	7,08	14,91
2006	January	112.257	-7,20	0,40	280.754	4,75	12,25
	February	127.234	0,52	-0,67	265.808	-6,97	4,73
	March	149.825	-0,58	-0,06	331.444	0,19	8,07
	April	118.938	-19,04	-3,30	251.063	-0,38	4,54
	May	154.815	15,80	-1,44	380.135	31,46	6,05
	June	146.826	2,13	-1,55	309.252	4,11	5,55
	July	157.298	16,03	2,12	296.102	15,97	7,23
	August	73.669	-3,15	1,87	199.623	-9,79	7,41
	September	145.224	3,67	2,67	253.311	-4,23	6,97
	October	150.045	10,09	8,16	331.638	0,79	6,86
	November	156.958	7,34	6,69	333.853	-0,85	1,17
	December	134.066	1,69	6,68	274.504	-4,46	-0,30
2007	January	132.561	18,09	6,70	263.912	-6,00	-3,65
	February	130.638	2,68	7,00	299.455	12,66	-0,42
	March	174.292	16,33	9,32	388.979	17,36	3,35
	April	137.205	15,36	10,10	324.503	29,25	7,54
	May	160.929	3,95	9,41	333.002	-12,40	4,89
	June	165.444	12,68	11,26	304.133	-1,66	5,25
	July	174.989	11,25	10,36	339.730	14,73	8,51
	August	78.961	7,18	11,29	192.004	-3,82	6,49
	September	148.393	2,18	8,68	288.517	13,90	5,47
	October	176.722	17,78	9,37	318.083	-4,09	0,31
	November	177.170	12,88	11,04	275.785	-17,39	-0,32
	December	133.152	-0,68	8,83	284.703	3,72	0,58
2008	January	156.587	18,12	9,90	249.822	-5,34	-2,89
	February	173.499	32,81	13,66	299.159	-0,10	-2,31
	March	175.963	0,96	13,04	295.942	-23,92	-8,92
	April	164.519	19,91	13,30	296.211	-8,72	-9,74
	May	179.007	11,23	13,00	293.231	-11,94	-8,77
	June	172.650	4,36	13,45	312.757	2,84	-8,72
	July	200.922	14,82	13,04	329.337	-3,06	-8,20
	August	69.945	-11,42	7,98	188.451	-1,85	-8,84
	September	168.055	13,25	10,30	n/a	n/a	n/a
	October	178.855	1,21	7,07	n/a	n/a	n/a

Source: Cystat.

TABLE C.18 **Volume index of manufacturing production**

		Index		% change		
Year /	Month	Monthly	Cumulative	Previous year	6-mth moving average	Cumulative period
2005	August	77,20	101,85	6,93	-0,95	-1,30
	September	112,50	103,03	1,17	-0,19	-1,00
	October	107,70	103,50	0,65	0,00	-0,83
	November	110,50	104,14	-0,09	-0,05	-0,76
	December	111,90	104,78	0,99	0,79	-0,61
2006	January	90,50	90,00	-0,98	1,18	-0,98
	February	93,50	93,00	-1,89	0,05	-1,45
	March	105,20	104,60	-2,50	-0,59	-1,83
	April	99,30	99,00	-7,54	-2,01	-3,36
	May	112,70	112,40	4,26	-1,26	-1,74
	June	113,70	113,30	2,16	-1,05	-1,05
	July	112,60	114,30	-3,10	-1,42	-1,37
	August	76,70	76,40	-0,65	-1,26	-1,30
	September	112,30	113,10	-0,18	-0,85	-1,16
	October	111,60	112,50	3,62	1,04	-0,67
	November	112,70	111,90	1,99	0,66	-0,41
	December	110,10	113,20	-1,61	0,00	-0,52
2007	January	91,70	91,70	1,33	0,79	1,10
	February	93,50	92,10	-1,07	0,69	0,11
	March	110,70	98,27	5,13	1,60	1,94
	April	102,30	99,30	3,12	1,49	2,24
	May	112,40	101,92	-0,27	1,08	1,68
	June	116,50	104,35	2,46	1,82	1,82
	July	121,80	106,84	8,17	3,01	2,80
	August	78,90	103,35	2,87	3,61	2,81
	September	113,70	104,50	1,25	2,93	2,62
	October	117,40	105,79	5,20	3,30	2,90
	November	116,50	106,76	3,37	3,94	2,95
	December	117,60	107,67	6,81	4,70	3,29
2008	January	95,60	95,60	4,25	4,00	4,25
	February	98,20	96,90	6,16	4,45	5,21
	March	110,10	101,30	-0,45	4,16	3,09
	April	111,40	103,83	8,79	4,74	4,56
	May	117,80	106,62	4,80	5,00	4,61
	June	118,10	108,53	1,37	4,01	4,01
	July	131,70	111,84	8,13	4,74	4,68
	August	76,40	107,41	-3,17	3,56	3,93

Percentage change by category	August 2007/2006	August 2008/2007	Jan.-Aug. 2007/2006	Jan.-Aug. 2008/2007
General index	**3,3**	**-3,2**	**3,0**	**3,9**
Food products, beverages & tobacco	1,8	-2,4	1,8	3,8
Textiles & textile products	-9,8	-16,6	5,1	-9,1
Leather & leather products	-23,6	50,9	-5,4	-7,1
Wood & wood products	3,0	1,2	-5,5	1,2
Paper products, publishing & printing	-1,3	3,3	0,0	3,4
Refined petroleum products, chemical products & man-made fibres	9,9	-5,5	10,2	8,2
Rubber & plastic products	0,3	1,9	5,7	14,4
Other non-metallic mineral products	7,3	-10,2	6,6	4,7
Basic metals & equipment n.e.c.	4,7	-1,1	1,8	1,9
Machinery & equipment	4,9	-7,3	2,3	-1,3
Electrical & optical equipment	25,8	16,4	11,0	22,0
Transport equipment	3,0	-13,9	4,3	-1,6
Manufacturing n.e.c.	3,6	-4,8	2,5	1,3

Source: Cystat.

TABLE C.19 **Labour market indicators based on the Labour Force Survey (LFS)**

	2007				2008	
	Q1	Q2	Q3	Q4	Q1	Q2
Labour force	388.115	391.089	395.400	398.903	397.937	396.476
Employed	369.308	377.856	379.777	384.852	379.790	384.028
By type of employment:						
Full time	341.654	351.519	352.990	355.813	350.076	354.295
Part time	27.654	26.337	26.787	29.039	29.714	29.733
By sector of employment:						
Primary sector	14.766	16.209	17.259	18.057	15.871	16.081
Secondary sector	82.774	85.947	84.832	86.895	86.206	86.933
Tertiary sector	271.768	275.700	277.686	279.900	277.714	281.014
Employees	293.071	301.789	301.131	308.228	304.067	307.878
Unemployed	18.808	13.233	15.622	14.051	18.146	12.448
By unemployment duration:						
Less than 12 months	15.893	10.555	12.783	11.007	15.514	10.975
12 months and above	2.913	2.678	2.838	3.044	2.632	1.473
Employment rate (%)	60,9	61,9	62,1	62,4	61,4	62,1
Male	69,9	71,1	71,8	71,6	70,2	71,0
Female	52,5	53,4	53,2	53,8	53,2	53,8
Unemployment rate (%)	4,8	3,4	4,0	3,5	4,6	3,1
Male	4,2	3,2	3,2	3,0	4,2	2,6
Female	5,7	3,6	4,9	4,1	5,0	3,9
Activity rate (%)	64,0	64,1	64,7	64,7	64,3	64,2
Male	73,0	73,4	74,1	73,9	73,3	72,8
Female	55,7	55,4	55,9	56,2	56,0	56,0

Source: Cystat.

TABLE C.20 **Public debt**
(€ million)

	2005	2006				2007				2008	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
A. Domestic debt	12.210,54	12.328,92	12.780,94	12.816,82	12.876,08	13.153,97	13.032,27	12.993,33	12.945,12	12.905,66	12.508,01
Long-term debt	6.378,93	6.217,05	6.757,48	6.751,52	6.757,38	6.951,27	7.075,94	6.997,94	6.928,11	6.723,41	6.280,79
Short-term debt	5.831,61	6.111,87	6.023,45	6.065,30	6.028,70	6.202,69	5.956,34	5.995,40	6.017,01	6.182,25	6.227,21
B. Foreign debt	2.295,11	2.294,45	2.006,80	2.003,83	2.049,18	2.040,57	2.043,35	2.040,59	2.132,33	2.131,90	2.117,67
Short-term liabilities of the Central Bank to the IMF	8,15	8,15	8,15	8,15	8,15	0,00	0,00	0,00	0,00	0,00	0,00
Long-term loans	639,36	638,66	625,62	622,65	656,75	656,30	659,07	656,32	732,33	731,90	717,67
Medium-term loans (EMTN)	1.647,60	1.647,64	1.373,03	1.373,03	1.384,27	1.384,27	1.384,27	1.384,27	1.400,00	1.400,00	1.400,00
Short-term loans (ECP)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
C. Total public debt	14.505,65	14.623,37	14.787,74	14.820,65	14.835,26	15.194,54	15.075,62	15.033,92	15.077,45	15.037,56	14.625,68
D. Net total debt (excl. intragovermental & short-term liabilities of the Central Bank to the IMF)	9.299,80	9.358,38	9.482,54	9.436,11	9.330,93	9.634,41	9.443,47	9.239,15	9.261,52	8.855,34	8.388,49

Source: Ministry of Finance.

TABLE C.21 **Structural indicators of the banking sector** [1]
(end of year, non-consolidated data)

	2003			2004			2005			2006			2007		
	CY	EMU13	EU27	CY	EMU13	EU27	CY	EMU13	EU27	CY	EMU13	EU27	CY	EMU13	EU27
Number of credit institutions	408	6.623	9.054	405	6.427	8.908	391	6.271	8.689	336	6.157	8.514	215	6.128	8.348
Number of local units (branches)	983	168.730	206.956	977	168.476	211.442	951	169.644	214.925	941	181.499	228.601	921	183.981	233.581
Number of employees of credit institutions	10.480	2.220.876	3.130.447	10.617	2.197.112	3.129.775	10.799	2.204.486	3.124.757	10.845	2.250.316	3.181.304	11.286	2.276.562	2.787.038
Total assets of credit institutions (€ million)	41.890	18.909.627	26.605.149	46.450	20.454.115	29.159.989	60.753	22.670.806	33.158.743	74.709	24.962.298	37.101.055	91.141	28.312.864	41.072.276
Herfindahl index for credit institutions	946	579	545	940	599	567	1.029	642	600	1.056	630	588	1.082	654	628
Share of the 5 largest credit institutions in total assets	57,2	4,5	39,7	57,3	41,6	40,9	59,8	42,6	42,1	63,9	42,8	42,1	64,8	44,1	44,4
Loans of credit institutions to non-financial corporations	n.a. [2]	3.041.170	3.721.201	n.a.	3.160.910	3.892.768	10.876	3.419.578	4.311.806	12.348	3.857.454	4.902.157	16.047	4.388.718	5.581.945
Loans of credit institutions for house purchase	n.a.	2.361.010	3.721.201	n.a.	2.592.293	3.892.768	4.140	2.916.666	4.311.806	5.450	3.214.028	4.902.157	6.989	3.436.867	5.581.945
Consumer credit	n.a.	484.489	697.012	n.a.	517.280	759.744	2.578	556.045	824.872	2.848	588.802	877.380	3.118	617.856	913.542
Other household lending	n.a.	675.630	808.648	n.a.	702.264	847.689	5.644	722.557	864.635	5.676	739.568	906.475	6.111	753.384	936.479
Total loans of credit institutions to non-credit institutions	21.804	8.501.690	12.673.025	24.769	9.012.853	13.678.797	28.062	9.889.222	15.446.679	31.417	10.853.959	17.143.568	41.020	12.069.220	19.298.850
Total deposits of credit institutions by non-credit institutions	28.155	7.140.650	10.971.394	30.062	7.530.151	11.841.328	38.073	8.249.646	13.468.942	43.099	8.978.515	14.854.027	52.514	9.969.039	16.679.738
Total assets under management by investment funds	463	3.420.806	3.921.044	422	3.831.961	4.435.255	692	4.790.731	5.580.087	1.005	5.549.891	6.487.906	1.190	5.778.955	6.779.576
Number of branches of credit institutions from EU countries	5	417	557	4	431	579	4	459	624	4	473	649	9	501	693
Number of branches of credit institutions from third countries	19	104	230	19	98	218	18	95	211	17	88	205	16	95	215
Total assets of branches of credit institutions from EU countries	929	595.062	2.010.932	476	718.681	2.350.438	1.044	854.421	2.782.159	733	963.127	3.127.403	5.089	1.248.250	3.810.592
Total assets of branches of credit institutions from third countries	2.602	70.738	1.199.802	2.798	65.764	1.231.576	3.275	85.558	1.547.483	3.284	99.251	1.734.366	5.632	126.152	2.025.848
Number of subsidiaries of credit institutions from EU countries	9	364	525	9	344	526	9	351	536	8	351	537	7	346	528
Number of subsidiaries of credit institutions from third countries	2	180	288	1	168	271	1	159	262	1	159	260	1	169	275
Total assets of subsidiaries of credit institutions from EU countries	5.346	1.721.114	2.089.800	8.272	1.999.236	2.650.035	12.338	2.660.961	3.406.338	18.533	3.026.041	3.918.054	18.562	3.675.067	4.623.807
Total assets of subsidiaries of credit institutions from third countries	[2]	180.414	747.335	[2]	155.880	761.859	[2]	207.998	983.329	[2]	258.292	1.149.404	[2]	468.508	1.335.844
Population (thousand, end of period)	723	312.002	487.601	740	313.986	489.769	758	315.827	491.930	773	317.473	493.921	788	319.259	495.879
Gross domestic product at market price (€ million)	11.761	7.497.503	10.076.044	12.654	7.801.633	10.577.049	13.462	8.086.317	11.029.876	14.394	8.473.617	11.635.302	15.490	8.889.919	12.293.830

Sources: CBC, ECB.
(1) Includes the co-operative credit institutions.
(2) n.a. = not available.
(3)Where the number of subsidiaries is less than three, the underlying data is not disclosed for confidentiality reasons.

TABLE C.22 **Key aggregate indicators of the banking sector**[1]
(aggregated cross-border and cross-sector consolidated data)

			Dec. 05	June 06	Dec. 06	June 07	Dec. 07	June 08
1.	Efficiency (%)	1.1 Cost-to-income ratio	58,79	48,37	47,45	39,17	43,21	45,81
2.	Expenditure structure (% of total assets)	2.1 Administrative costs per total assets	0,46	0,22	0,37	0,20	0,41	0,19
		2.2 Total operating expenses per total assets	1,57	0,71	1,20	0,64	1,29	0,61
		2.3 Staff costs per total assets	0,97	0,45	0,75	0,39	0,78	0,38
3.	Expenditure structure (% of total costs)	3.1 Administrative costs per total costs	29,12	30,17	30,80	30,72	31,97	31,54
		3.2 Staff costs per total costs	61,91	62,52	62,31	61,62	61,02	61,65
4.	Income (% of total assets)	4.1 Fees and commissions (net) per total assets	0,57	0,29	0,49	0,29	0,63	0,29
		4.2 Net interest income per total assets	1,93	1,00	1,77	1,01	1,88	0,94
		4.3 Net non-interest income per total assets	0,75	0,47	0,77	0,61	1,09	0,40
		4.4 Total operating income per total assets	2,67	1,48	2,54	1,62	2,98	1,34
		4.5 Other operating income per total assets	0,05	0,02	0,05	0,05	0,09	0,04
		4.6 Trading and foreign exchange results per total assets	0,13	0,16	0,23	0,27	0,37	0,07
5.	Income structure (% of total income)	5.1 Fees and commissions (net) per total total operating income	21,28	19,93	19,48	17,88	21,21	21,83
		5.2 Net interest income per total operating income	72,03	67,88	69,67	62,46	63,32	69,97
		5.3 Net non-interest income per total operating income	27,97	32,12	30,33	37,54	36,68	30,03
		5.4 Other operating income per total operating income	1,95	1,54	1,82	2,93	2,94	2,86
		5.5 Trading and foreign exchange results per total operating income	4,75	10,66	9,03	16,73	12,53	5,35
6.	Liabilities (% of total liabilities)	6.1 Amounts owed to customers (deposits) per total liabilities	70,76	66,55	65,55	63,35	63,61	61,26
		6.2 Amounts owed to credit institutions per total liabilities	10,89	12,78	11,67	13,93	17,09	20,26
		6.3 Debts evidenced by certificates per total liabilities	7,18	9,03	9,78	10,02	7,50	6,74
		6.4 Subordinated liabilities per total liabilities	2,87	3,10	2,20	2,21	1,59	1,60
		6.5 Equity per total liabilities	5,06	5,07	6,63	6,38	5,41	6,17
7.	Off-balance sheet items (% of total assets)	7.1 Contingent liabilities per total assets	11,49	16,63	14,72	10,33	4,34	5,32
		7.2 Guarantees and other commitments per total assets	9,08	9,07	8,11	7,12	4,94	4,97
8.	Profitability (% of total assets)	8.1 Impairment losses (net) on financial assets per total assets	0,54	0,20	0,31	0,11	0,19	0,09
		8.2 Operating profits per total assets	1,10	0,76	1,33	0,99	1,69	0,72
		8.3 Profits after provisions, before tax and extraordinary items per total assets	0,51	0,54	0,97	0,88	1,49	0,61
		8.4 Profits after provisions, tax and extraordinary items per own funds (% Tier 1 capital) (ROE)	7,04	16,88	14,55	27,62	26,16	20,32
		8.5 Profits after provisions, tax and extraordinary items per total assets (ROA)	0,40	0,93	0,82	1,54	1,28	1,04
		8.6 Net interest margin [2]	2,25	2,19	2,18	2,37	2,21	2,06
9.	Solvency (%)	9.1 Overall solvency ratio	13,39	12,83	13,20	12,70	12,51	11,97
		9.2 Tier 1 capital ratio	10,15	9,77	10,20	10,48	10,29	10,00
10.	Asset quality (%)	10.1 Total non-performing and doubtful loans per total loans and advances	7,79	7,73	6,05	4,84	3,85	3,86
		10.2 Provisions (stock) per total non-performing and doubtful loans	61,85	59,67	66,48	70,68	74,00	70,20
		10.3 Provisions (stock) per total loans and advances	4,82	4,61	4,02	3,42	2,85	2,71
11.	Assets (% of total assets)	11.1 Financial assets per total assets	20,23	21,04	22,19	22,56	18,68	19,37
		11.2 Other assets per total assets	1,29	1,52	1,58	1,79	1,47	1,72
		11.3 Shares and participating interests per total assets	0,81	0,92	1,28	2,10	1,22	0,98
		11.4 Tangible assets and intangibles per total assets	1,08	1,04	2,48	2,36	2,30	2,28
12.	Liquidity (%)	12.1 Loans and advances to customers per total assets	51,44	49,46	47,66	47,40	50,60	54,44
		12.2 Liquid asset ratio (liquid assets per total assets)	45,36	47,02	46,95	46,67	44,35	40,47
		12.3 Loans and advances to customers per amounts owed to customers (deposits)	72,69	74,33	72,70	74,25	79,55	88,87
		12.4 Customer funding gap	-37,57	-34,54	-37,56	-34,69	-25,71	-12,53

Source: CBC.
(1) Includes all domestically controlled and foreign controlled banks but excludes the co-operative credit institutions.
(2) The 2005 indicator has been compiled using the simple average approach. Thereafter, the indicator has been compiled using the quarterly average approach.

TABLE C.23 **Distribution of bank loans to Cyprus residents by economic activity based on the NACE Rev. 1.1 classification of the EU**
(monthly data, %)

		Outstanding Amount as a % of total				% change
		Sept. 2007	Dec. 2007	Mar. 2008	Sept. 2008	Sept. 2007 – Sept. 2008
A	Agriculture, hunting and forestry	0,83	0,84	0,86	0,77	20,50
B	Fishing	0,04	0,04	0,04	0,04	17,32
C	Mining and quarrying	0,37	0,36	0,44	0,33	18,60
D	Manufacturing	4,09	3,88	3,74	3,63	15,65
	of which: construction-related activities (20.1 to 20.3 and 26.3 to 26.7)	0,32	0,29	0,33	0,33	37,23
E	Electricity, gas and water supply	0,17	0,18	0,07	0,09	-27,69
F	Construction	8,21	9,00	10,01	10,24	62,37
G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	9,35	9,24	9,58	9,35	30,24
H	Hotels and restaurants	5,30	5,34	5,22	4,46	9,82
I	Transport, storage and communication	1,44	1,37	1,68	1,94	75,89
J	Financial intermediation (excluding other MFIs)	6,16	5,93	4,99	6,63	40,04
K	Real estate, renting and business activities	11,71	11,83	12,17	16,31	81,56
	of which: real estate activities (70)	7,60	7,60	8,01	11,79	102,32
L	Public administration and defence; compulsory social security	3,22	3,23	2,98	2,54	3,03
M	Education	0,32	0,34	0,34	0,38	52,37
N	Health and social work	0,46	0,47	0,48	0,56	56,72
O	Other community, social and personal service activity	2,86	3,03	2,67	3,35	53,27
P	Private individuals	45,47	44,91	44,74	39,36	12,74
Q	Extra-territorial organisations and bodies	0,00	0,00	0,00	0,00	-100,00
Total		**100**	**100**	**100**	**100**	**30,26**

Source: CBC.

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