

Financial Stability Report 2009



BANK ĊENTRALI TA' MALTA
EUROSISTEMA
CENTRAL BANK OF MALTA



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FINANCIAL STABILITY REPORT

2009

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Financial stability is a condition where the financial system – comprising institutions, markets and infrastructures – is able to: allocate savings to investment opportunities efficiently; ensure the rapid settlement of payments; effectively manage potential risks that may harm its performance; and absorb shocks without impairing its operations. In this manner financial stability is conducive to a well functioning economy and leads to sustainable growth.

The Financial Stability Report surveys the financial system in Malta so as to identify possible sources of risks and vulnerabilities that could impact on the stability of the system while assessing its resilience to shocks. The Report is also intended to foster a better understanding of the financial system in Malta and relevant financial stability issues. The Report has been adopted by the Bank's Financial Stability Committee.

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*as at 31 December 2009

The financial stability analysis focuses on those institutions that the Central Bank of Malta considers important for the domestic financial system. Unless otherwise stated, these will be referred to as 'credit institutions' or 'banks' (used interchangeably), 'insurance companies' and 'investment funds'. References to the banking sector, the insurance sector and the securities sector refer to the aggregate of these banks, insurance companies and investment funds, respectively, which together are referred to as the 'domestic financial system'.

Selected credit institutions for the financial stability analysis:

APS Bank Ltd
Banif Bank (Malta) plc
Bank of Valletta plc
Bawag Malta Bank Ltd
HSBC Bank Malta plc
Lombard Bank Malta plc
Volksbank Malta Ltd

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ABBREVIATIONS

BCBS	Basel Committee on Banking Supervision
BIS	Bank for international Settlements
BLS	Bank Lending Survey
CAR	Capital Adequacy Ratio
CBM	Central Bank of Malta
CCAR	Core Capital Adequacy Ratio
CDS	Credit Default Swaps
CIS	Collective Investment Scheme
CRD	Capital Requirements Directive
EC	European Commission
ECB	European Central Bank
EONIA	Euro OverNight Index Average
ESCB	European System of Central Banks
ESRB	European Systemic Risk Board
ETC	Employment and Training Corporation
EU	European Union
FSB	Financial Stability Board
FSI	Financial Soundness Indicators
FSR	Financial Stability Report
FTSE	Financial Times Stock Exchange Index
GDP	Gross Domestic Product
HHI	Herfindahl-Hirschman Index
HICP	Harmonised Index of Consumer Prices
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IMF	International Monetary Fund
LLPs	Loan Loss Provisions
LtV	Loan-to-Value ratio
MEPA	Malta Environment and Planning Authority
MFEI	Ministry of Finance, the Economy and Investment
MFSA	Malta Financial Services Authority
MGS	Malta Government Securities
MSE	Malta Stock Exchange
NSO	National Statistics Office
NPISH	Non-Profit Institutions Serving Households
NPLs	Non-Performing Loans
P/E ratio	Price-to-earnings ratio
ROA	Return on Assets
ROE	Return on Equity
RRR	Risk Retention Ratio
RWA	Risk Weighted Assets
S&P	Standard and Poor's
SMEs	Small and Medium sized Enterprises
UCITS	Undertakings for Collective Investment in Transferable Securities
UK	United Kingdom
US	United States
WAI	Weighted average interest rate

GOVERNOR'S STATEMENT

The publication of this second edition of the Central Bank of Malta's *Financial Stability Report* coincides with a dramatic widening of government bond and sovereign credit default swap spreads of many euro area issuers with large fiscal imbalances. Risk aversion has once again taken hold and contagion has spread from the bond market to the stock, commodity and money markets. Central banks and governments have intervened in an attempt to stabilize the financial system and to mitigate the consequences of the adverse feedback loop between the financial markets and public finances. The measures adopted by the European Central Bank and the creation of the European Financial Stabilisation Mechanism are important steps in this direction, but they should not be allowed to divert attention from the underlying fiscal and structural causes of the latest bout of market turbulence.



Against this background of heightened instability and risk, the proposals currently under study to strengthen regulatory regimes, and in particular those of the Basel Committee designed to increase the resilience of banks through the adoption of stricter capital and liquidity regulations, assume particular relevance. Their early implementation is now becoming a matter of urgency.

Although it does not fully take into account the recent deterioration in global financial market conditions, this *Financial Stability Report* indicates that during 2009 and the early part of 2010 Malta's financial sector exhibited a high degree of resilience. As expected, the contraction in economic activity put some pressure on the debt-servicing capacity of households and corporates alike, which was reflected in somewhat higher levels of non-performing loans and an increased incidence of loan rescheduling. On the other hand, capital adequacy and liquidity ratios remained robust and well above the regulatory minima, while stress test results confirmed that the banks are able to withstand extreme but plausible shocks.

While the risk outlook for financial stability in Malta does not, therefore, give rise to concern at this time, its future evolution remains uncertain in a global scenario characterised by the prospect of weak growth, fiscal retrenchment and market volatility. These factors are reflected in the Bank's latest forecasts for the Maltese economy, which point to relatively modest growth up to 2011. This suggests that the upward trend in non-performing loans evident in 2009 is likely to persist, a development which would, in turn, call for an increase in loan loss provisioning. Combined with the probable introduction of more stringent capital and liquidity requirements in the period ahead and the likely pressure on profitability deriving from an unfavourable economic conjuncture, the expected increase in credit risk suggests that the banks may need to reassess their dividend policies in order to be able to support a commensurate amount of capital.

A handwritten signature in black ink, appearing to read 'Michael C. Bonello'. The signature is stylized and fluid, with a long horizontal line extending from the end of the name.

Michael C Bonello

OVERVIEW

The Financial Stability Report 2009 confirms that the Maltese financial sector remains resilient, although it is likely to face further challenges in the short to medium term. The severity of these challenges will largely depend on the strength of the forecast economic recovery and its sustainability, both of which remain uncertain.

Macroeconomic environment

Throughout 2009 the major industrial countries continued to suffer from the economic shocks triggered by the global financial crisis. The negative impact was somewhat less severe than had originally been anticipated, as strong fiscal and monetary stimuli were promptly implemented worldwide. The latter also contributed to some improvement in global financial market conditions. Going forward, the major economies are expected to register positive, albeit weak growth, conditioned by gradual fiscal retrenchment and the expected implementation of exit strategies by central banks.

Against this background, the Maltese economy exhibited considerable resilience, as the decline in economic activity and the resultant increase in unemployment were less pronounced than in other countries. The adverse shock was in the main absorbed by the corporate sector, which recorded a decline in profitability. Still, the debt-servicing capacity of households and corporates alike came under pressure. Indeed, non-performing loans in both categories increased, and are likely to rise further in the near term, despite the projected recovery. Another sign of stress was the higher incidence of rescheduled loans. The latter were, to a large extent, influenced by the ongoing downward price correction in the property market, amidst low turnover. On the other hand, higher household net financial wealth, driven by the turnaround in financial markets and supported by lower average lending rates as a result of the cuts in ECB official interest rates, mitigated the adverse impact on debt servicing. Going forward, more borrower weaknesses may yet be exposed when interest rates eventually start to rise from the current low levels.

The financial system

The observed system-wide deterioration in the quality of bank assets, reflected in the significant rise in both household and corporate non-performing loan ratios and the number of rescheduled loans, was however not matched by a similar increase in loan loss provisioning by banks. This factor may exacerbate the negative impact on banks should credit risks materialise, particularly in view of the high concentration in property-related loans.

A deceleration in both household and corporate credit growth resulted in a slower aggregate bank balance sheet expansion. This reflected both demand and supply factors: the uncertain economic prospects and an increased resort to alternative sources of funding by the corporate sector on the one hand, and tighter credit conditions imposed by the banks on the other. Indeed, throughout the year bond issues were heavily oversubscribed, indicating a strong search for yield among households amidst an environment of low deposit interest rates.

During 2009 the banks did not depart significantly from their traditional business model, continuing to rely strongly on retail deposits to finance their lending activities while diverting excess liquidity into high quality securities. An increase in corporate sector deposits more than offset a marginal decline in household deposits. Moreover, the share of longer-dated time deposits increased as banks launched a series of special deposit products to benefit from the relatively flat yield curve.

The aggregate profitability of the banking sector improved during the year, driven largely by the reversal of valuation losses incurred during 2008. This more than compensated for the decline in interest income, which nevertheless remained the banks' main source of revenue. The drop reflected, to a large extent, the lagged re-pricing of deposits when compared to loans and the generally lower interest rates earned on securities

and holdings of required reserves. Profitability was further boosted by lower charges for specific and general provisions and bad debts written off, despite the recession.

Banks remained well capitalised, with regulatory ratios above the minima. Indeed, capital adequacy ratios improved, albeit through a reduction in risk-weighted assets. The latter reflected a rebalancing towards lower risk assets, as well as subdued lending growth. Despite the adoption of tighter lending standards, however, there is no evidence to suggest that banks undertook, or intended to undertake, any significant de-leveraging.

At the same time, stress test results confirmed the banks' ability to withstand extreme yet plausible shocks. Indeed, the indications are that the banks should be able to withstand all the hypothetical strong adverse shocks which were modelled - namely, a deterioration in asset quality, a strong economic downturn, a generalised adverse house price correction and a severe deposit run. Nevertheless, banks should continue to strengthen their capital buffers to be able to withstand possible further challenges as identified in this Report.

The insurance sector continued to expand during 2009, with its operational revenue recovering from the decline recorded in the immediate aftermath of the global financial crisis. Nevertheless, the non-life insurance segment suffered from the strong losses incurred by a foreign subsidiary of one domestic insurance company. Meanwhile risks to financial stability from the investment funds sector remained negligible, given its relatively small size.

Policy responses and implications

Going forward, the current review of regulatory regimes which international standard setting bodies are undertaking is likely to impact the banks' business strategies. The proposed changes are designed to improve the quality of bank capital through a narrower definition of what constitutes core capital, as well as to impose stricter liquidity requirements.

1. THE MACRO-FINANCIAL ENVIRONMENT

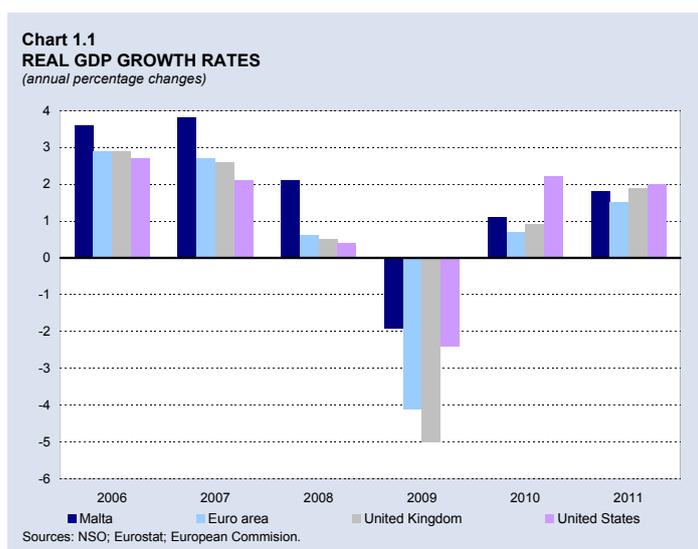
The intensification of the international financial crisis in the third quarter of 2008 had a severe and wide ranging impact on the world's major economies. As a result, global economic prospects for 2009 became increasingly pessimistic. In response, governments and central banks implemented strong expansionary policy measures to mitigate the impact on output and employment. Hence, although the latter was clearly felt, it was less severe than originally anticipated. In spite of this concerted countercyclical impulse, however, the overall financial position of the non-financial sector worldwide deteriorated considerably, leading to a sharp rise in NPLs, a situation that is likely to persist in the near term. Although an economic recovery is projected for 2010, this is likely to be fragile and may prove to be insufficient to mitigate credit risk. At the same time, the measures taken to strengthen the capital bases of a number of banks and to facilitate their access to funding led to a sharp increase in government borrowing and an accumulation of government debt, giving rise to concerns about sovereign risks.

1.1 The external macroeconomic and financial environment

The heightened uncertainty and restricted availability of credit triggered by the global financial crisis impacted negatively on economic activity and, in particular, on world trade. Estimates suggest that major economies, such as the euro area, the UK and the US, contracted by 4.1%, 5% and 2.4%, respectively, in 2009 (Chart 1.1).¹ As a result world trade shrank by around 14.4%.² Resulting job losses pushed unemployment rates in the euro area and the US up to about 10% and in the UK to just under 8%, in all instances significantly above the 2008 levels.³ Still, these adverse conditions attenuated somewhat towards the end of the year, with a number of economies emerging from recession. Meanwhile, in a number of euro area countries house prices continued to decline, but in the US signs of a modest improvement emerged.

Authorities responded to the shocks from the global financial crisis with a number of policy measures. Monetary easing by central banks continued, taking interest rates to historically low levels. Central banks also injected vast amounts of liquidity into money markets. In tandem, governments implemented large fiscal stimulus packages, which resulted in ballooning deficits and public debt. The beneficial effects of these interventions started to be felt in the latter part of 2009.

Conditions in financial markets improved somewhat in the course of the year, with funding pressures easing and markets beginning to function more efficiently. This was largely due to a return of confidence as authorities took the necessary measures to halt the downward spiral that had gripped the financial system after the fall of Lehman Brothers. Massive capital injections and debt guarantees provided by authorities, as well as the perceived likelihood that systemically important financial institutions would not be allowed to fail, resulted in a significant decrease in risk aversion. The functioning of the money markets gradually improved and short-term interbank interest



¹ Eurostat based on European Commission.

² World Bank Global Economic Prospects Report 2010 – Crisis, Finance and Growth. According to the WTO, world trade shrank by around 12%.

³ Eurostat.

rates started to decline. In the euro area, use of the ECB deposit facility decreased, and interbank market turnover rebounded. This reflected both the easing of short-term liquidity pressures and a reduction in counterparty risks. Nevertheless, conditions have still not fully reverted to normal. Indeed, there are growing tensions in financial markets associated with the increase in sovereign risk. The easing of financial conditions is reflected in the Global Index of Financial Turbulence (GIFT) published by the ECB, which shows that market stress, though still at historically high levels, has receded somewhat.⁴ The Global Financial Stability Map (GFSM) compiled by the IMF similarly shows lower macroeconomic, market and liquidity risks.⁵

In 2010 the major economies are expected to register positive, albeit weak, growth. Indeed the euro area and the UK are only expected to grow by 0.7% and 0.9%, respectively, during the year, while the US is forecast to grow by 2.2%, with world trade recovering by around 4%.⁶ Further economic recovery is projected for 2011, but growth rates are still expected to be below pre-crisis levels. Meanwhile, unemployment rates worldwide are expected to remain high, as firms may prefer to wait for a sustainable increase in demand before adding to their workforce. This effect may be further exacerbated should firms opt for capital deepening strategies rather than adding to employment levels.

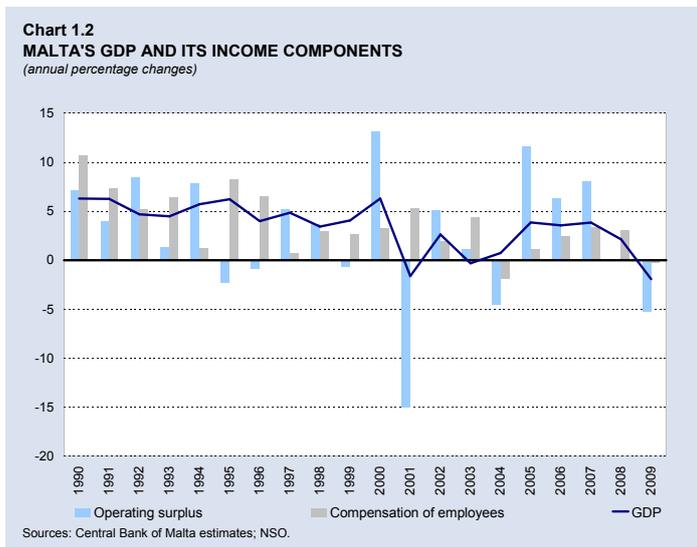
Even though macroeconomic and financial conditions appear to have stabilised, they remain fragile and growth rates are expected to remain low for some time. Financial conditions remain vulnerable to shocks triggered by specific episodes, such as the inability to refinance maturing bonds.

1.2 The domestic economy

1.2.1 Macroeconomic environment

The recession in its main trading partners had an adverse impact on the Maltese economy, which contracted in 2009. The decline, however, was less steep than in many other countries, with real GDP falling by 1.9%, year-on-year. This was the third negative annual growth rate registered since 1990, as well as the largest (Chart 1.2). As in previous occasions, the slide was mainly reflected in a drop in operating surplus, which is estimated to have fallen by 5%. By contrast, employee compensation proved to be rather resilient, falling by a mere 0.2%.⁷

From an expenditure perspective, the decline in GDP was mainly driven by a slump in gross fixed capital formation, which experienced a double-digit dip for the second consecutive year, reflecting a drop in both public and private sector investment. In turn, this contributed to a narrowing of the merchandise trade gap as a result of a sharp reduction in imports. ETC data indicate that the number of the registered unemployed rose by just over 20%, raising unemployment by 1.3 percentage points to 7.2% by end-2009, though this was still signif-



⁴ ECB, Financial Stability Review (December 2009). The improvement in the Index, which incorporates a number of indicators thought to drive financial uncertainty, was mainly the result of a rebound in stock prices, normalisation of money market conditions, narrowing spreads and decreasing volatility in exchange markets.

⁵ IMF, Global Financial Stability Report (October 2009).

⁶ Eurostat (with respect to GDP forecasts) and World Bank, Global Economic Prospects Report 2010 – Crisis, Finance and Growth (with respect to trade).

⁷ Operating surplus was deflated using the GDP deflator. Compensation of employees was deflated using the consumption deflator.

icantly below the levels seen in the euro area and the US.⁸ Nevertheless, domestic consumption remained relatively stable at the 2008 level. A significant deceleration in inflation, from 5% in 2008 to -0.4% in 2009, as well as lower interest rates, probably contributed to this resilience.

As for the macroeconomic outlook for the next two years, the risks are broadly balanced. Conditional on a recovery in Malta's main trading partners, and helped by the anticipated strong impulse from EU-funded public projects, the domestic economy is projected to grow by 1.2% in 2010 and by 1.8% in 2011.⁹ Downside risks however remain, particularly if the global negative feedback loop between the real economy and the financial system is prolonged.

1.2.2 The household sector

Bank indebtedness

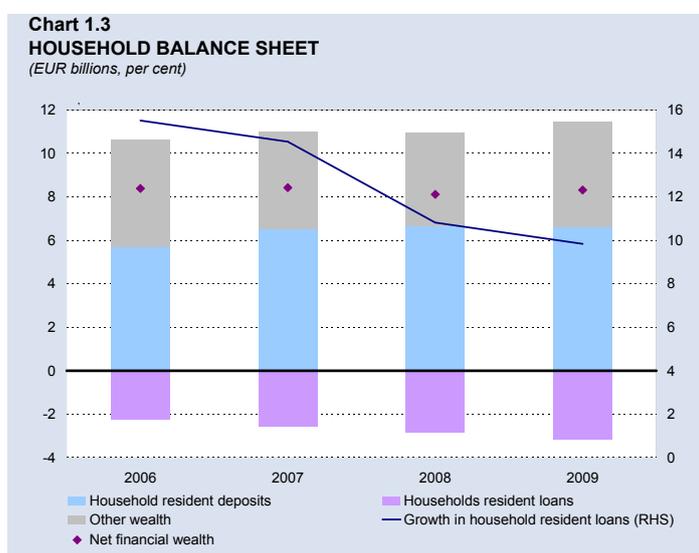
At 41.6%, loans to households account for the largest share of bank lending (excluding loans to government and interbank loans). The greater part of this, 32.6% of total lending, represents mortgages, most of which are at variable interest rates.

Household credit growth, at 9.8%, remained significant in 2009, albeit slightly slower than the 10.8% growth registered in 2008. The increase reflected a 10.7% rise in mortgage credit and an almost 7% rise in other consumer loans. While tighter bank lending standards might have contributed to the deceleration, the current low interest rates probably helped stimulate credit demand.¹⁰ Household loans expressed as a percent of GDP increased by 4.8 percentage points to 55%, more than doubling over the last decade, to converge with the EU average.¹¹

Financial and non-financial wealth

In an environment of low interest rates on bank deposits, holdings of securities traded on the MSE rose. Households reduced their holdings of deposits slightly, but added to their holdings of higher-yielding securities. As a result, household financial wealth is estimated to have increased by 4.4% during 2009, following the marginal drop recorded in 2008.¹² At the same time the ratio of household loans to financial assets increased by 1.4 percentage points to (a still relatively low) 27.4%. Consequently, the build-up in net financial wealth was limited to 2.5%.

Household non-financial wealth is estimated to have diminished due to declining house prices (Chart 1.3). The latter fell by 5% year-on-year during 2009 as against a decline of 2.7% in the previous year, with the worst hit category being flats, the prices of which fell by 8%.¹³ In con-



⁸ Eurostat.

⁹ CBM projections.

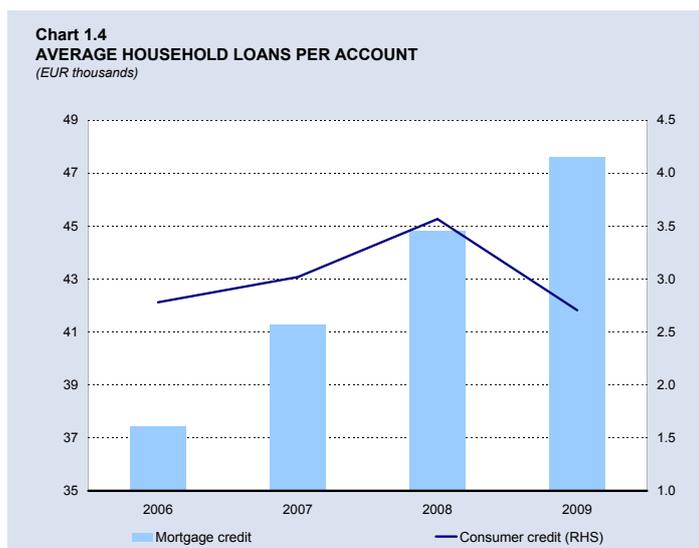
¹⁰ See Box 2, The Bank Lending Survey.

¹¹ ECB, Eurostat.

¹² The proxy for financial wealth includes the following components in order of importance: bank deposits, value of securities traded on the MSE which are owned by households, insurance technical reserves, holdings of SICAVs, estimated currency in circulation and Treasury bills. From this, net financial wealth excludes the value of loans.

¹³ Source: CBM. The Bank's residential property price index tracks movements in advertised residential property prices compiled on the basis of newspaper advertisements sampled each month.

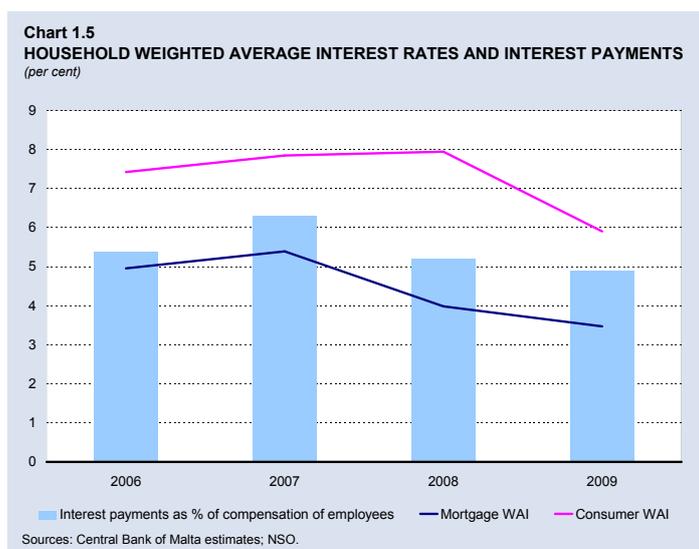
trast, the prices of terraced houses rose by 3.2%. Despite the decline in house prices, the size of the average house loan, at close to €48,000, continued to increase, albeit at a decelerating pace. The average house loan was equivalent to around 3.4 times the average yearly income (as reported by the Labour Force Survey) and 6.2 times the stipulated minimum wage. Both these ratios maintained a moderate upward trend (the comparable figures in 2006 were 2.9 and 5.4, respectively), reflecting the still buoyant demand for mortgage borrowing. This could be the result of the low interest rate environment and, hence, households' increased borrowing capacity. But it also raises the debt repayment burden. On the other hand, the already low average debit balance on other consumer credit accounts declined further, to around €2,700 (Chart 1.4).



Debt servicing capacity

As official ECB rates were cut, households benefited from a lower weighted average interest rate on mortgage loans, which during 2009 eased from 4% to 3.5% (Chart 1.5). The weighted average rate on other consumer loans fell even more sharply, from 7.2% to 5.9%. As a result, overall interest payments by households declined by 5% in absolute terms compared to a year earlier. Interest payments thus absorbed around 4.9% of employee compensation in 2009, as against 5.3% in 2008.

Overall figures may however hide pockets of vulnerability as debt and wealth are unevenly distributed across households. For a number of years, favourable credit conditions, such as longer loan maturities and higher LtV ratios, combined with low (but variable) interest rates, made it possible to service higher debt for a given income. This makes lower-income households more vulnerable to risks arising from potentially higher expenditure. Indeed, the average figures may give an overly optimistic picture of resilience, as the impact of the recession was not evenly distributed across sectors. Economy-wide wages increased by around €6 million in 2009, mainly due to higher wages in the *wholesale & retail*, *financial intermediation* and *real estate* sectors. Still, NSO statistics indicate that in 2008 15% of the population were at risk of poverty, slightly more than a year earlier.

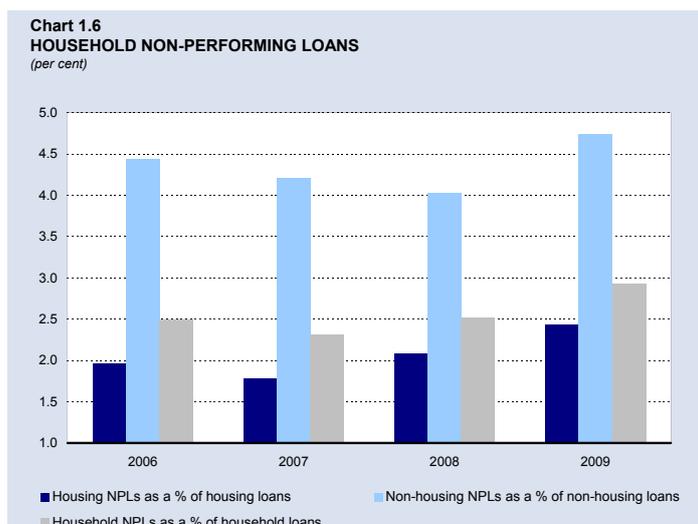


Household NPLs rose by 27.6% in 2009, with the ratio of such loans to total household loans increasing

by 0.4 percentage points to 2.9%, despite the increased borrowing (Chart 1.6). This rise was observed both with respect to mortgage loans (with NPLs rising from 2.1% to 2.4% of the total) and to other household credit (with NPLs increasing from 4.0% to 4.7%).

The ability of households to service their mortgages is dependent on both employment and income gearing. So far, the low interest rate scenario has more than offset the wider spreads on loans to households, impacting positively on the sector's repayment capacity. However, rising unemployment will probably have amplified the financial vulnerability of households.

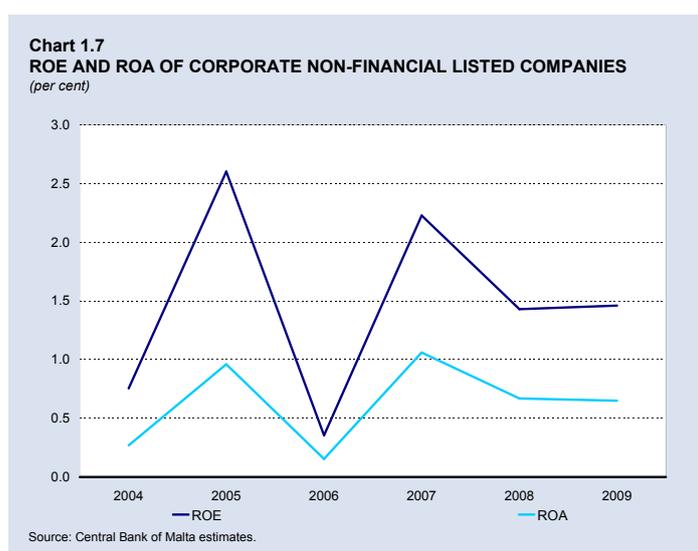
And since unemployment is not likely to diminish significantly in the near term, there remains a clear risk of more frequent defaults on loan repayments, particularly if interest rates begin to rise.



1.2.3 The corporate sector

Profitability

Due to the adverse impact of the recession, the financial strength of the non-financial corporate sector deteriorated somewhat during 2009. Indeed, the operating surplus of the sector, a proxy for profitability, declined by 3.1% in nominal terms during the year, indicating a possible intensification of vulnerabilities. However, there were wide variations across the sector. The *hotels & restaurants*, the *manufacturing*, and the *wholesale & retail* sectors registered the largest contraction in operating surplus, down by 95.9%, 35.5%, and 21.7% respectively. On the other hand, the profitability of the *real estate, renting & business activities* sector remained stable, probably also due to the addition of new and more diverse activities in the sector. The overall picture is also corroborated by the financial results of companies listed on the MSE.¹⁴ The aggregate profits of the listed companies fell from over €65 million in 2008 to an estimated €17.7 million in 2009.¹⁵ As a result, the ROE and the ROA of these companies fell to very low levels, of 1.46% and 0.65%, respectively, even if at these levels they were still higher than the floor recorded in 2006 (ROE: 0.36%; ROA: 0.15%) (Chart 1.7).¹⁶ On a sectoral level, four sectors main-



¹⁴ The sample consists of the 29 listed companies, split into the following sectors: construction, real estate & business activities, hotels & restaurants, manufacturing, wholesale & retail, transport & communication and computer & related services.

¹⁵ The latest available data relate to the interim mid-year accounts. The annual profit turnout was annualised by assuming that the performance in the second half of the year would be identical to that in the first.

¹⁶ In 2006, profits were depressed mainly on account of significant drops in profitability recorded in the transport & communication and the hotels & restaurants sectors.

tained positive ROE and ROA ratios, namely, the *manufacturing*, the *real estate*, the *wholesale & retail* and the *transport, storage & communication* sectors. On the other hand, the construction sector continued to record negative returns, while the ROA and ROE of listed companies in the tourism sector also swung into negative territory. The latter, in fact, registered an aggregate loss of over €2 million in 2009, as against a profit of around €31 million in the previous year.

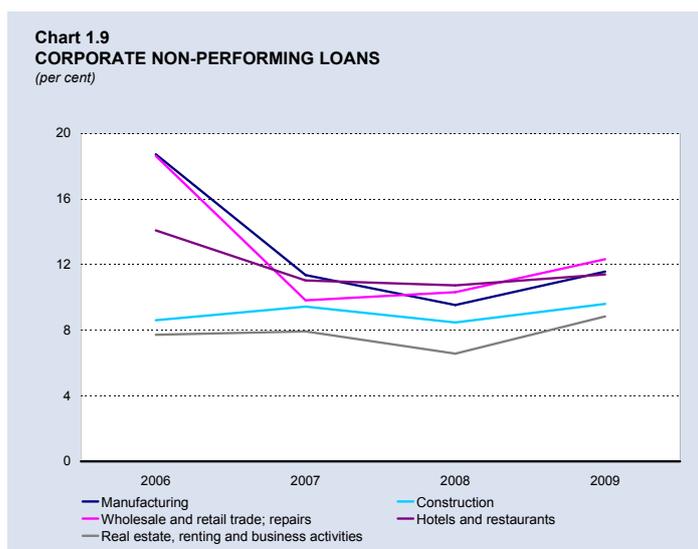
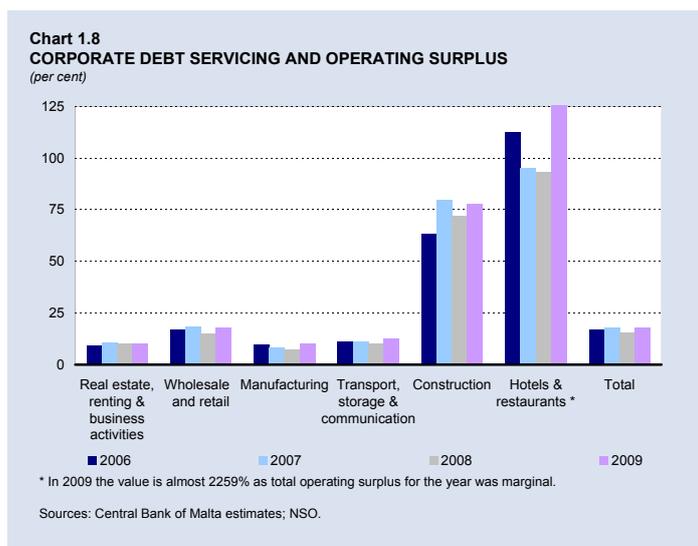
Corporate indebtedness

Corporate credit growth decelerated to 5.7% in 2009, reflecting both tighter credit supply and weaker demand.

The overall level of indebtedness of listed companies increased by 2%, but its composition changed in favour of market-based financing.

Nevertheless, bank-related indebtedness of the corporate sector extended its trend rise, reaching 78.6% of GDP in 2009 from 74.5% in the previous year. Existing balance sheet vulnerabilities may thus intensify. Indeed, bank debt-related interest payments due by the corporate sector, expressed as a proportion of the sector's operating surplus, rose to 18.1%, from 15.5% in 2008 (Chart 1.8). This resulted from a fall in the sector's operating surplus that was only partly offset by a small decrease in debt-servicing payments. The higher indebtedness of the corporate sector in Malta as compared with the euro area as a whole (around 52% of GDP in 2009) reflects, to some extent, the fact that most Maltese companies are SMEs, which rely more on bank borrowing for their financing needs.¹⁷ Although the interest burden of companies operating in the *manufacturing*, the *wholesale & retail*, the *transport, storage & communication* and the *construction* sectors dropped marginally in absolute terms, it still represented a higher proportion of these sectors' operating surplus, which fell significantly in 2009.¹⁸ This effect was particularly pronounced in the case of the *hotels & restaurants* sector, which suffered a sharp fall in its operating surplus during the year.

During 2009 the economic downturn resulted in a 20.7% rise in the non-performing loans of the corporate sector, with the increase being spread across all sectors (Chart 1.9). Rising NPL ratios have not yet been directly translated into insolvencies which, at 11 cases, remained low.¹⁹ Compared to 2008, the NPL ratio of the *wholesale & retail* sector rose from 10.3% to 12.3%, while that of the *manufacturing* sector rose from 9.5% to 11.6%. In turn, the NPL ratio



¹⁷ ECB, Eurostat.

¹⁸ Operating surplus is only a crude measure of debt servicing ability as it measures only a subset of corporates' income earning activities.

¹⁹ This includes both voluntary and non-voluntary dissolutions.

of the *real estate* sector increased by 2.2 percentage points to 8.8%, while other sectors reported increases of around one percentage point.

Monetary policy easing to some extent alleviated the burden on the corporate sector, reducing its financing costs. However, the leverage of the corporate sector makes it particularly vulnerable to the downside risks from global economic developments. Hence, the challenges facing the sector are not expected to diminish in the short term. Indebtedness is rising, and the ability of firms to generate internal funding remains weak.

1.2.4 The real estate market

The residential property market

The decline in house prices - driven largely by excess supply, rising nominal incomes and lower interest rates - has made housing in Malta generally more affordable (Chart 1.10). According to a bi-annual survey conducted by the Bank, a number of real estate agents envisage a possible continuation of the decline in house prices, as the lull in activity and the drop in prices across all house categories, especially flats/apartments targeted mainly at first-time buyers, persists. According to the survey, houses are still perceived to be overvalued, and to a larger extent than in 2008 (Chart 1.11). In addition, according to MEPA, there was a double-digit dip in both housing-related construction and in the number of permits issued.

The commercial property market

Conditions in the commercial property market, which tends to be even more vulnerable to downturns in business cycles, also deteriorated during 2009. Although no official data on prices in this sector are available, replies by real estate agents to the Bank's survey indicate worsening market conditions translating into subdued sales volumes and lower prices. However, the extent of the correction that has already taken place appears to have brought prices in this market segment closer to realistic levels. Indeed the vast majority of respondents believed that, at current levels, commercial properties, particularly office space, were correctly priced. At the same time, respondents reported higher rental rates.

Chart 1.10
HOUSING AFFORDABILITY INDEX

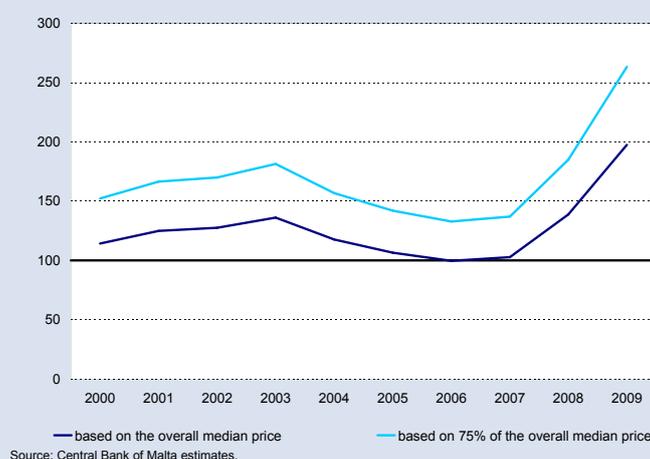
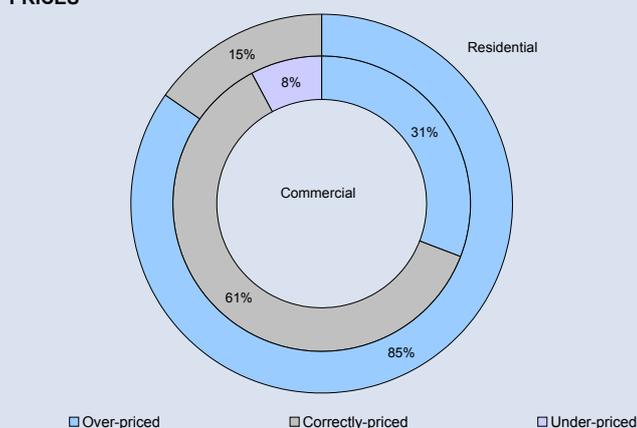


Chart 1.11
PERCEPTIONS OF RESIDENTIAL AND COMMERCIAL PROPERTY PRICES



2. THE FINANCIAL SYSTEM

2.1 Market infrastructure

2.1.1 Financial system structure

The domestic financial system's share of the economy expanded further over the course of 2009, up by 6 percentage points to just over 300% of GDP (Table 2.1).¹ At the same time, the banking sector's share grew by 1.9 percentage points to 253% of GDP, due both to more modest growth of the sector and to the contraction of the economy.

Credit institutions continued to dominate the Maltese financial sector, accounting for around 84% of the sector's assets at the end of the year.² The insurance sector came next, with 10%, followed by the investment funds sector, with around 5%. Employment in the financial sector as a whole remained relatively stable, at just under 4700, representing around 3.2% of the gainfully occupied.³ In contrast to many other countries, the extent of Government ownership in banks did not increase in 2009, remaining limited to 25% of the equity of one domestically-controlled credit institution.

The MFSA received two notifications for the direct provision of banking services under the passporting regime during 2009, bringing the total at the end of the year to 212. Of these, only one institution is established through a branch in Malta. At the same time, the number of insurance undertakings from other EU Member States benefiting from the freedom to provide services in Malta increased by 20 to 346. By contrast, the number of UCITS fell by 38 to 513.

At the same time, the number of banking institutions providing services from Malta in other EU Member States rose to 8, from 6 in 2008, while the number of representative offices of Maltese banks abroad was unchanged at 7. On the other hand, the only representative office in Malta as at end-2008 ceased operations during the year.

Concentration in the banking sector remained very high, with an HHI of 3,205, slightly up from the previous year and substantially higher than the EU average of 1,120 (2008 data). The margin has tended to widen since 2006.⁴

Table 2.1
STRUCTURAL DATA

	2006	2007	2008	2009
Total assets of the financial system (€000s)	16,090,012	16,506,369	16,773,330	17,164,627
GDP at current prices (€000s)	5,110,561	5,458,671	5,696,800	5,711,553
Total assets of the financial system (as a % of GDP)	315	302	294	301
Ratio of growth in total assets to GDP growth	1.3	0.4	0.4	9.0
Total assets as % of GDP				
Credit institutions	260.9	252.8	251.1	253.0
Insurance companies	25.9	28.1	27.6	31.1
Collective investment schemes	26.6	18.1	13.6	14.1
Hedge funds	1.2	3.2	2.0	2.0
Financial institutions	0.3	0.3	0.2	0.3

¹ Box 1 analyses briefly the operations of internationally-oriented banks.

² Credit institutions comprise three domestically-controlled institutions and four subsidiaries of cross-border banks.

³ Source: Regulatory returns of financial institutions, and the ETC.

⁴ Source: ECB 'Structural Indicators for the EU Banking Sector 2010'.

BOX 1: INTERNATIONALLY-ORIENTED BANKS

There are currently twenty-five credit institutions licensed by the MFSA to operate in and from Malta under the Banking Act (*Cap 371*)¹. For the purposes of the FSR, the CBM periodically assesses the business model of the licensed institutions to determine the extent of their systemic importance to the financial system. But the Bank's main focus is on the seven institutions whose business model is domestically-oriented. Since the other seventeen have no significant linkages to the domestic financial system or the Maltese economy, they are considered to pose limited risks to the system.

The latter group of banks consists of four institutions whose home regulator is the MFSA; eight that are subsidiaries of cross-border international institutions established in the EU; three that are subsidiaries of non-EU banks; and three branches, one of which is established in Malta under passporting rights, while the other two are branches of non-EU banks.

The total assets of these internationally-oriented banks amounted to €26.8 billion at the end of 2009, almost twice the size of the domestically-oriented banks. The two largest institutions hold approximately three-fifths of these assets. Nine institutions have a balance sheet size of between €359 million and €2.7 billion. But five institutions carry out limited activities and have a balance sheet size of less than €100 million. During 2009, the internationally-oriented institutions reported aggregate profits of more than €440 million (2008: €303 million).

Most of these banks are funded by deposits from foreign banks (usually parents / affiliates) and non-resident deposits, some of which are channelled through the parent banking groups. As at the end of 2009, non-resident household and corporate deposits with these banks totalled €248million and €6.3 billion, respectively. Deposits from residents, mainly from the corporate sector, amounted to only €191million, or 1.6% of the total. Of these, resident households held €73 million.

The assets side of the internationally-oriented banks' balance sheet is primarily in the form of non-resident non-interbank loans (amounting to €13.1 billion) to the *manufacturing*, the *financial intermediation* and the *transport, storage & communication sectors*. Loans to residents are very limited, amounting to around €25 million at the end of December. In the case of subsidiaries, licence conditions require that non-performing loans are transferred back to the foreign parent institution, thus limiting risks for the local subsidiary. Deposits held with foreign banking institutions (in many cases related affiliates) account for 16% of these banks' aggregate balance sheet. Around 28% of their assets consist of foreign securities, 56% of which are sovereign bonds. Aggregate country exposures at end-December were mainly to Turkey and the United Kingdom. The currency exposures of these banks were mainly in euro, US dollars and Turkish Lira.

Although the direct impact of the internationally-oriented banks on the domestic economy is considered to be limited, yet resident and non-resident household deposits with these banks at the end of 2009 amounted to €321million, and of these, €56million are eligible deposits covered by the domestic Depositor Compensation Scheme.

¹ Includes credit institutions licensed up to 11th March 2010, as well as a credit institution that operates under the EU Passporting Rights.

The two largest credit institutions continued to dominate the market, with a share of almost 80% of total assets. Indeed, concentration in respect of deposits and lending to the corporate and household sectors is even higher than indicated by the overall HHI. Concentration was similarly high in the insurance sector, with HHI levels climbing to 3,918. The share of the two largest companies in the domestic insurance market, one of which is a subsidiary of a domestic bank, also edged higher, to 82.6%. This implies that, although there are no restrictions on market entry, the small size of the market may be reducing the incentive for entry by other large institutions.

2.1.2 Market structure

Market performance

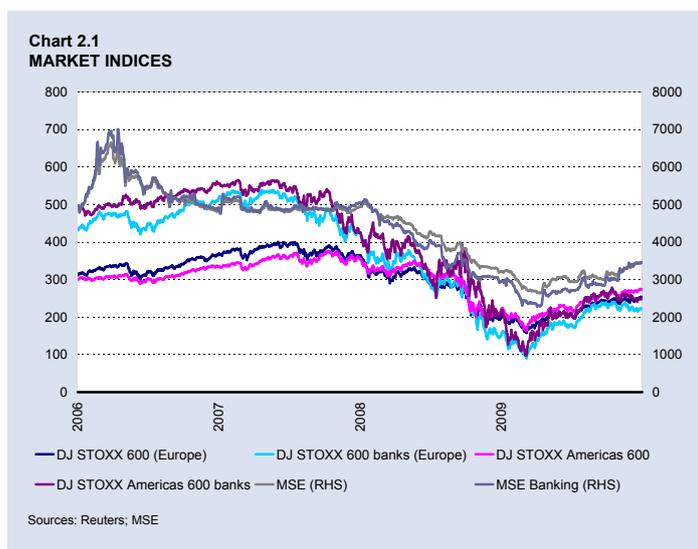
As Chart 2.1 shows, the performance of the MSE during 2009 mirrored that of stock exchanges abroad, such as the DJ STOXX 600 and DJ STOXX Americas 600. Indeed, the correlation between the performance of the MSE and that of the other indices increased during 2009.⁵

The early months of 2009 extended the pattern noted throughout 2008, with indices continuing to drop as markets priced in the negative feedback loop between the difficulties in the financial sector and deteriorating economic conditions. The European and US markets fell to their lowest levels on 9 March 2009. From the second quarter of 2009, however, indices embarked on a generally upward trend. The DJ STOXX 600 and the Americas 600 staged a strong recovery, rising by 28.6% and 26%, respectively, from end-2008 levels. From the trough, the DJ STOXX 600 rose by 60.3%, while the DJ STOXX Americas 600 improved by 65.6%.

In the case of the MSE, the index recovered more slowly, rising by 8% by the end of the year. Thus the recovery from the trough was more modest but still a substantial 31.3%. Similar to the other two international indices, the overall MSE index largely trailed developments in banking shares, reflecting the weight that these carry in each. Also, during 2010, the MSE index continued to perform well, similar to the other two indices.

During 2008, the P/E ratios for banks in both the US and the euro area fell well below the levels prevailing before the failure of Lehman Brothers. This trend was reversed during the course of 2009, with the momentum continuing into 2010. The P/E ratio for the banks quoted on the MSE climbed to 17 by the cut-off date, up from 13.7 at end-2008, and that for the banks quoted on the FTSE reached 27.8, from 7 as at end-2008.⁶ This reversal probably reflects growing market optimism of higher profit expectations.

Apart from an upward trend in indices, international stock exchanges exhibited significant volatility throughout 2009. In the case of the MSE, volatility rose slightly, albeit still remaining significantly below that recorded in the other two international indices.



⁵ The correlations of the MSE Index in 2009 were 0.75 with respect to DJ STOXX 600 and 0.74 with respect to DJ STOXX Americas 600. The correlation for the bank indices was 0.71, both with the EU and with the US index. In previous years, such correlations were often negative.

⁶ Source: Financial Times 20 February 2010.

Market capitalisation

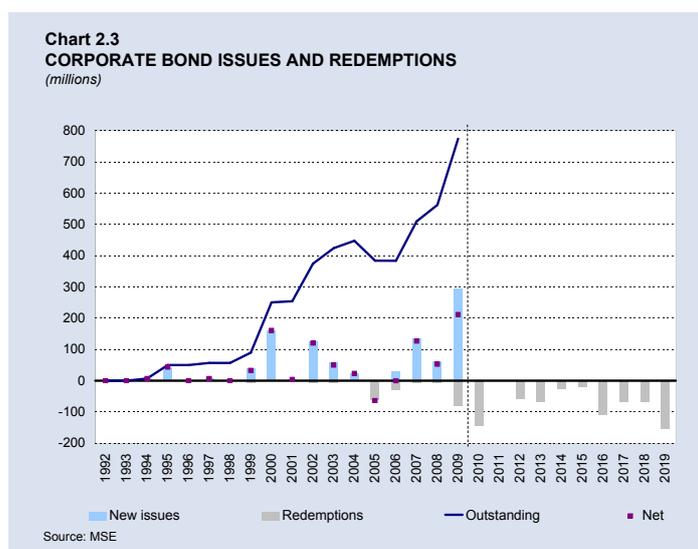
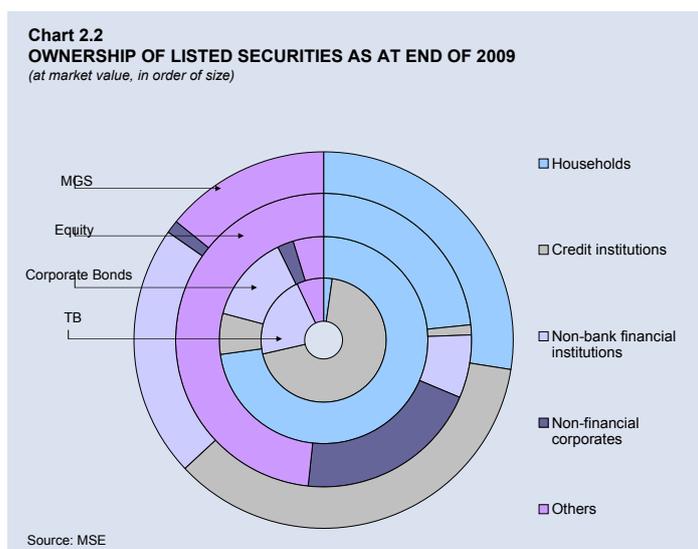
Market capitalisation on the MSE grew by €850 million to €7.6 billion during 2009, equivalent to 132.2% of GDP. This growth was largely driven by the increased issuance of bonds as well as by the recovery in equity prices. Apart from the record high increase in corporate bond issuance, which is expected to maintain its momentum even in 2010, the Government issued a net €261.7 million in MGSs.

Nearly all bond issues were heavily oversubscribed, suggesting a continued search for higher yielding products, which are generally held to maturity. In the absence of credit ratings, coupon rates may not necessarily reflect risks. Nevertheless coupon rates seem to override other important considerations, such as maturity structure and the type of issuer. In addition, the fact that securities are usually held to maturity is one possible reason for the limited turnover in the domestic capital market.

During 2009 the Treasury launched a new product through the issue of a floating rate MGS linked to the six-month Euribor but within a specific floor and ceiling. In 2010, the net issuance of MGSs is expected to increase, and will probably again include floating rate arrangements. Credit institutions continue to hold the largest share of MGSs and, even more, of Treasury bills, while their holdings of equity and corporate bonds remained very limited (Chart 2.2).

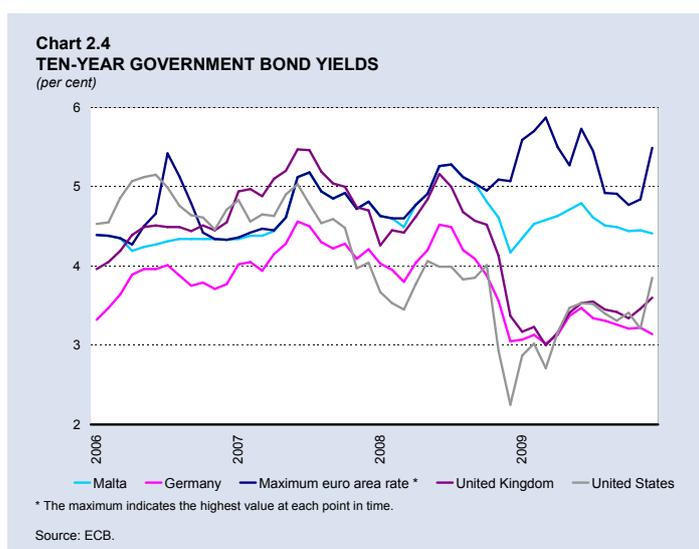
In 2009 the corporate sector in Malta, like corporates elsewhere, turned mainly to the bond market for funding. New corporate bonds listed on the MSE amounted to €294 million (Chart 2.3). This was almost double the issuance in 2000, the previous record year. In net terms, however, the increase was smaller, as €82.3 million were redeemed during the year. The main reasons behind the increased recourse to the bond market included the attractiveness of locking into the current low interest rates; the earlier rollover of existing bonds at lower rates; the repayment of bank loans, particularly on account of tighter bank credit conditions; and the back-loading of bond issues from earlier years as a result of delayed investments.

The vast majority of the newly issued corporate bonds, around four-fifths of the total, were taken up by households, while non-bank financial institutions took up around 10%. The take-up by credit institutions was limited to approximately 5%. Ownership



of corporate bonds has thus become increasingly skewed, with households owning some 75% of the total by the end of the year.

Although high bond issuance is positive, as it deepens the domestic financial market while ensuring increased competition in the supply of credit, risks may have been shifted towards areas where the degree of financial awareness is more limited and where resilience to shocks may be lower, as portfolios are less diversified. Given the small size of the market, swings in sentiment may create strong negative adverse ripples.



Spreads

As a result of the global financial crisis, a flight-to-quality benefited the German Bund. For most of 2008, following the adoption of the euro, yields on Maltese 10-year Government bonds were the highest in the euro area. But in 2009 yields on MGS were exceeded by those on a number of other countries' debt, as these were perceived to be more risky (Chart 2.4).

In fact, concern regarding international sovereign risk intensified in the latter part of 2009 and into the first months of 2010. Nevertheless, the 5-year CDS for Malta remained stable at 116 basis points (only 19 basis points wider than at end-2008 against the German CDS). Meanwhile, the CDS spread for the peripheral countries of the EU widened significantly, with that of Greece reaching 270 basis points by 11 March 2010.^{7,8} This clearly demonstrates that unsustainable expansion in public debt can result in higher sovereign risk premia.

As at end-2009, the spread of domestic private non-bank bonds maturing within the next one to three years against the equivalent MGSs was 433 basis points. The gap narrows to around 300 basis points and 186 basis points, respectively, on residual maturities of between 5-7 years and more. These spreads remained relatively unchanged in the first two months of 2010, but by 11 March they had widened slightly. On average, corporate bond spreads in the euro area against the German Bund narrowed to slightly less than 200 basis points during 2009. Historically, domestic corporate bond yields have been rather stable due to limited turnover and are largely driven by developments in the MGS yield curve. It is thus not possible to determine conclusively whether these spreads reflect the actual credit risk differential.

Market liquidity

Market depth and resilience remained weak during 2010.⁹ Liquidity in the MSE secondary equity market decreased further and remained limited. Indeed, between 2008 and 2009 the number of shares transacted fell from 22 million to 13.6 million, while the value of transactions halved to just over €25 million. The equity market turnover ratio, which is the ratio of the weekly volume of shares traded to the existing volume of shares, declined from 0.03% in 2008 to 0.02% in 2009. On the other hand, a higher turnover was recorded in the corporate bond market, with transactions increasing by 30.4% to €35 million. Still, Maltaclear data indi-

⁷ Source: Reuters.

⁸ CDSs allow a buyer to insure against the default on a reference entity against payment of a periodic premium to the seller and thus enable a transfer of credit risk.

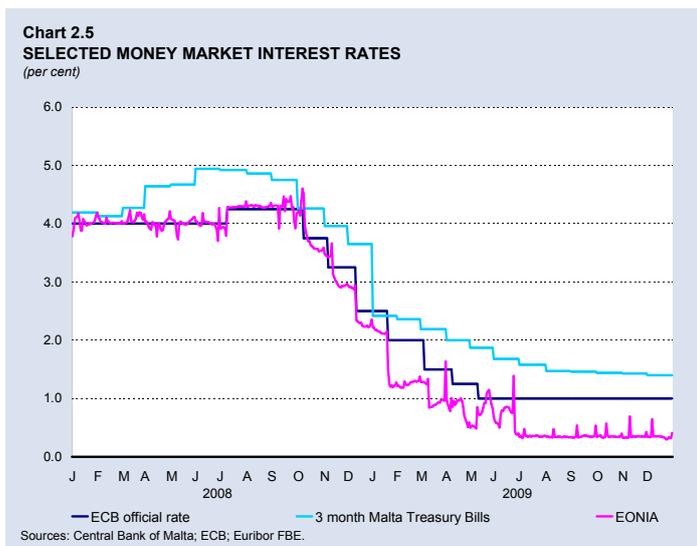
⁹ Market depth relates to the ability of a market to absorb large trade volumes without a significant impact on prices. Resilience is the speed with which price fluctuations arising from trades are dissipated.

cate that the average monthly value of settled transactions relating to equities and government / corporate bonds decreased from €43.3 million to €34 million over the year.¹⁰

Money markets

The ECB cut its official rates by a further 150 basis points to 1% during 2009, bringing the total easing since the beginning of the financial crisis to 325 basis points (Chart 2.5). Domestically, the three-month Treasury bill rate moved in line with ECB official rates.

These cuts, which were effected in the first half of the year in conjunction with other non-conventional measures, including the unlimited provision of liquidity against eligible collateral, brought the EONIA down to around 0.3% during the second half of the year.¹¹ The domestic banks, similar to other euro area banks, regularly participate in the overnight interbank market.



2.2 The banking sector

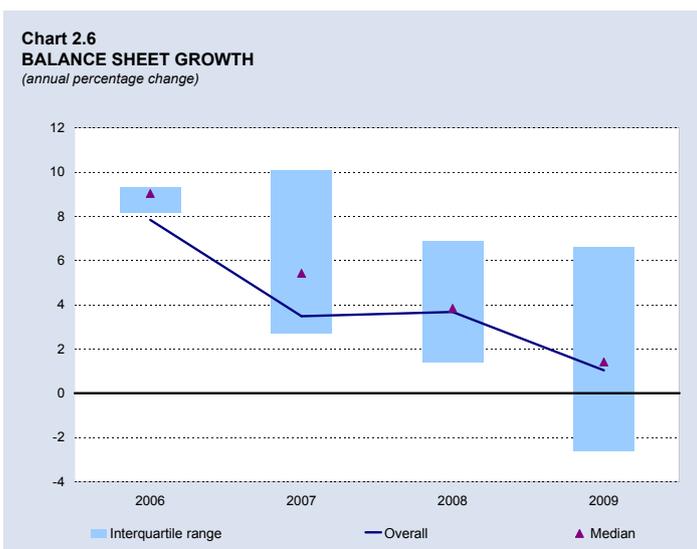
The domestic banks generally remained in a solid financial position in 2009, successfully raising capital both through the retention of earnings and from the markets. Most banks reverted to profitability during the year. Nonetheless, downside risks remain as loan losses are expected to increase.

2.2.1 Balance sheet

The balance sheet of the banking sector grew by 1% to €14.5 billion in 2009. This was a slower growth rate than that recorded in 2008 (Chart 2.6).

Although the median growth rate decelerated, there was a wide divergence between the growth rates of different banks. The moderation in the overall growth rate reflected a slower growth in lending as well as a further reduction in interbank activity (Chart 2.7).

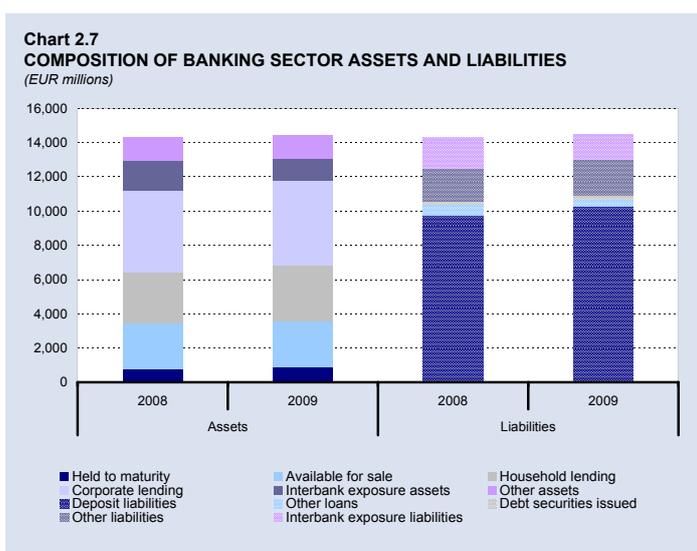
Loans to the non-bank sector accounted for the largest proportion of assets at the end of the year,



¹⁰ Maltaclear is the system responsible for the settlement of securities in Malta. The average value of settlements for 2008 is based on the April - December period.

¹¹ The EONIA is an effective overnight rate computed as a weighted average of all overnight unsecured lending transactions in the interbank market initiated within the euro area by the contributing panel banks.

equivalent to approximately 57% of the balance sheet total, in spite of the fact that credit growth slowed from 13.2% in 2008 to 5.6% in 2009 as credit standards were tightened and demand weakened.¹² At the same time the securities portfolio accounted for 25% of the banks' balance sheet, while other assets (including interbank loans, financial derivatives and tangible fixed assets) made up the remaining 18%. In particular, interbank lending, largely in the form of intra-group funding, contracted considerably, falling from 9.6% to 7.3% of balance sheet size by the end of December, while the share of lending to other credit institutions remained below 2.0%.



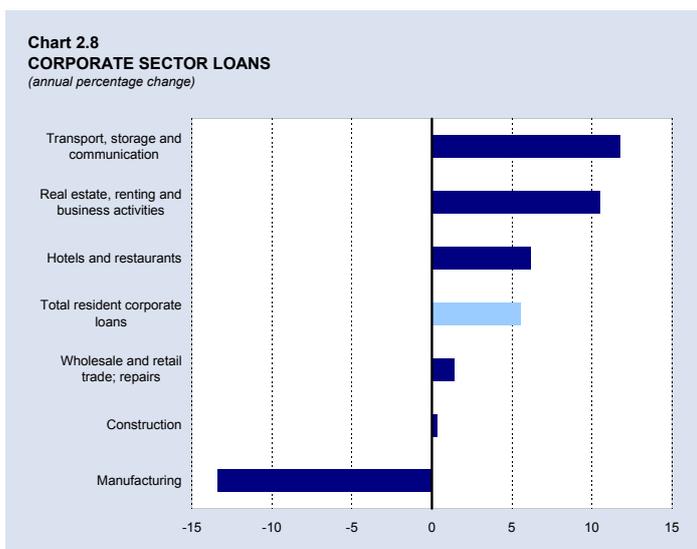
On the liabilities side, the importance of customers' deposits increased further in 2009, with these accounting for 71.2% of total liabilities by the end of the year. This was 2.8 percentage points more than at the end of 2008. Household deposits contracted by 0.7%, but corporate deposits put on 14%. At the same time banks reduced their interbank exposure, which, declined to 10.1% of total liabilities from 12.5% in 2008, mainly as a result of lower intra-group exposures, including both loans and deposits. The share of other loans (arising from participation in the ECB financing operations) in the banks' total balance sheet value declined from 4.2% in 2008 to 2.8%. On the other hand, banks made greater use of sale/repurchase agreements, which accounted for nearly 2.1% of their balance sheet total at the end of 2009.

The asset portfolio

In their replies to the BLS, banks said there was no undue restriction on the provision of credit due to shortage of capital or liquidity constraints. But lending to practically all the major economic sectors decelerated markedly, mainly reflecting a drop in loans to the manufacturing sector (Chart 2.8).

While credit growth generally mirrors economic performance, excessive credit growth can result in an accumulation of vulnerabilities. Chapter 3 describes the policy measures currently in force that are designed to reduce this risk. Despite the deceleration in credit growth during 2009, the ratio of private and public non-financial companies' indebtedness to nominal GDP increased further in the course of the year, reaching 132% (Chart 2.9).

As noted in past years, lending to households, mostly by way of mortgages, remained the main driving force behind the expansion in the banks' loan portfolio, constituting



¹² Box 2 reviews the results of the BLS.

BOX 2: BANK LENDING SURVEY RESULTS

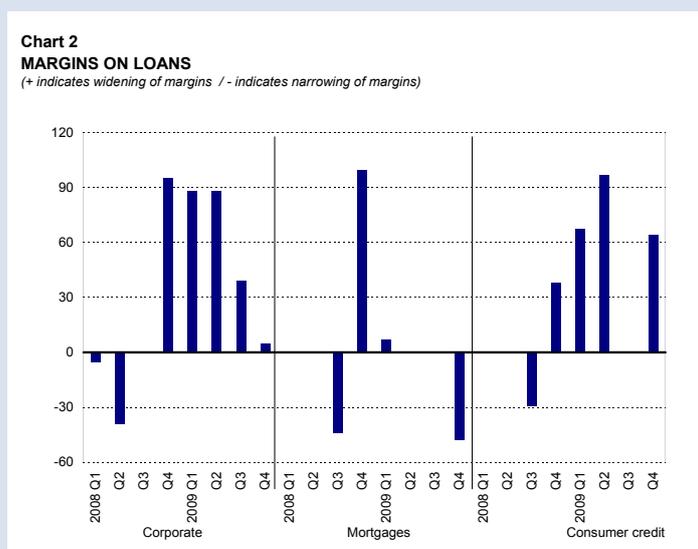
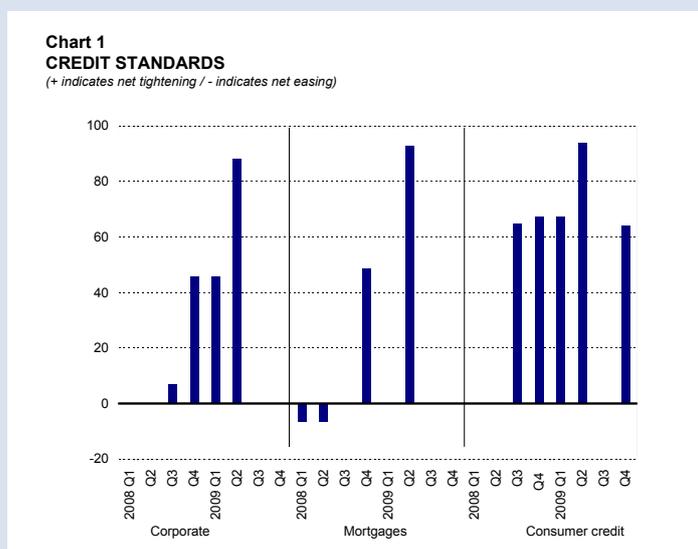
The BLS explores trends in the credit standards applied by banks and in the demand for loans by the corporate sector and by the household sector for mortgages and consumer credit during 2009. It also assesses expectations for the first quarter of 2010. It was carried out on a quarterly basis in conjunction with other euro area Member States as part of an ECB survey.¹

The banks surveyed were the four largest in terms of lending to residents, accounting in aggregate for 92% of the total. The results were weighted in accordance with the relative importance of each of the four banks in the respective loan category.

Following the international financial crisis, and in line with other banks in the euro area, the United Kingdom and the United States, the participating banks tightened their credit standards progressively (Chart 1). In many cases even conditions relating to existing corporate loans were tightened, with banks showing less willingness to extend further credit, particularly in areas where their exposure was already high. Conditions attached to household loans were also tightened, particularly in the case of consumption-related credit, which entails higher risk. A negative economic outlook, both overall and in relation to specific industries and the housing market, was the main reason given for the tightening. Additional reasons included increased costs related to the banks' capital and liquidity positions, as well as higher perceived risk in relation to collateral.

Banks mainly opted to implement the tightening via wider interest margins. This was clearly visible in the case of loans to corporates and consumption-related lending (Chart 2). In fact, in order to attain the twin objective of better pricing of risk and cushioning the fall in net interest income, the banks did not pass on to borrowers all the interest rate cuts implemented by the ECB.

A supplementary survey relating to a sample of loans granted during December 2009 indicated that the majority of loans did not exceed 60% of the value of the asset to be purchased. In the case of mortgages, however, the average LTV ratio

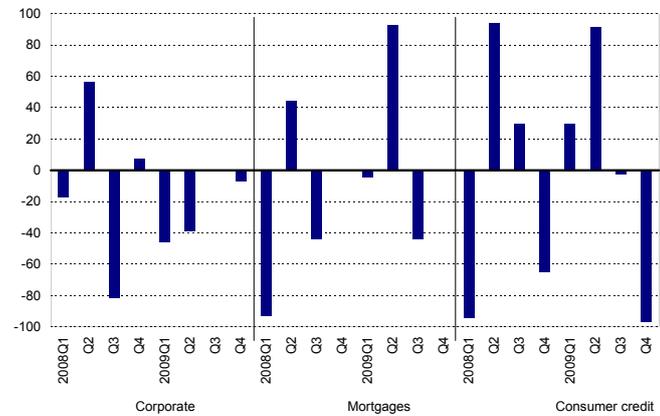


¹ Latest information about developments in the euro area is available on http://www.ecb.europa.eu/stats/pdf/blssurvey_201001.pdf.

remained unchanged at just over 73%. Slightly more than two-fifths of mortgage loans fell into the LtV category of up to 60%, with 18% of them in the over 90% category.

Credit demand was generally subdued throughout the year, particularly in the case of corporates (Chart 3). Weak demand by the latter mainly stemmed from low planned investment outlays, since companies preferred to wait for a more positive outlook before embarking on new projects. Even demand for credit by households, despite some volatility, was in general below average, in line with the slowdown in property-related transactions and cautious behaviour in view of an uncertain future.²

Chart 3
CREDIT DEMAND
(+ indicates increase / - indicates decrease)



² Given that the Survey is conducted on a quarterly basis, results exhibit some volatility. This is in part also attributable to the small size of the sample. Thus the replies of one bank, which can be driven by specific situations such as temporary initiatives, may drive the overall result.

37.1% of total loans by end-2009. The slowdown observed in the course of the year stemmed largely from a weak demand for loans to finance consumption, probably on account of the unfavourable economic conditions.

The slowdown in corporate borrowing was attributable to a number of factors. The largest corporates were able to access the financial market and raise funds from the public, locking in low interest rates for a longer-term horizon. Furthermore, the need to borrow to finance new investments decreased as the economy slowed down, while lending standards were tightened. Nevertheless, all the major economic sectors, apart

from *manufacturing*, increased their borrowing during the year. And the contraction in loans to the manufacturing sector was entirely due to a specific large loan repayment, which offset other borrowing by this sector. Otherwise, overall credit to the sector would have remained stable. Meanwhile, despite the uncertain economic conditions, lending to the *real estate renting & business activities sector* expanded by 10.5% during 2009, although lending to the *construction sector* remained broadly stable. The latter reflected increased cautiousness by the banks in expanding their already high exposure to this sector in the context of oversupply conditions.

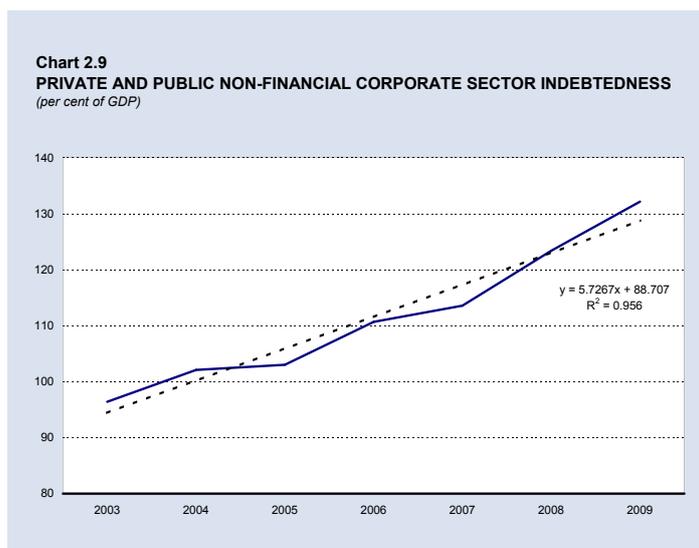
The banks' securities portfolio amounted to €3.6 billion at the end of 2009, up by 4% from end-2008. The portfolio remained highly concentrated in domestic government paper, both MGSs and Treasury bills, which together accounted for just over two-fifths of the securities' portfolio at the end of the year. Private foreign securities accounted for almost half of the banks' portfolio, though these were spread across a number of sectors. In the course of the year there was a clear shift towards higher quality assets, with banks reducing their holdings of private securities and adding holdings of government paper, both domestic and foreign. This rebalancing of the securities portfolio reflected a flight-to-quality in the light of the turbulence in the financial markets. Such securities are normally easier to value and are more liquid than private sector paper. Thus, over three-fourths of foreign securities held by banks at the end of the year had an S&P rating of at least A-

Asset quality

The recent crisis highlighted the financial institutions' exposure to adverse conditions in the international financial system. Although banks in Malta were relatively well shielded from the direct effect of the financial crisis, they remain exposed to the feedback loop hitting economies worldwide.

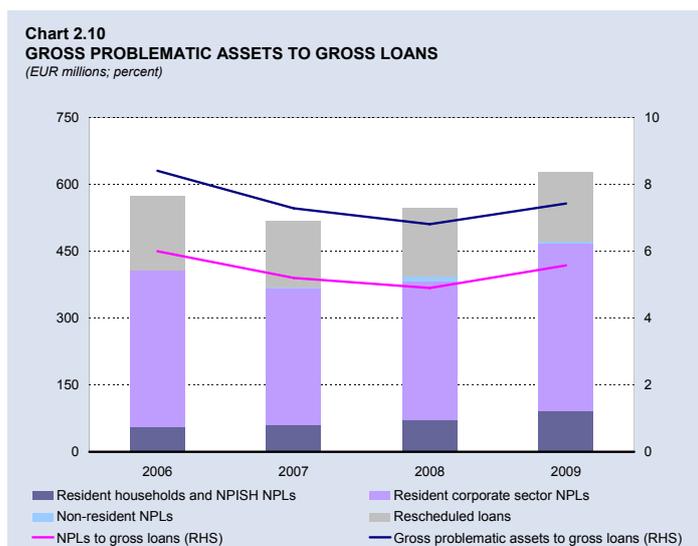
Against this backdrop, credit risk monitoring assumed greater importance. The financial turmoil also revealed the potential risk from exposure to foreign currency-denominated loans and exchange rate fluctuations. But lending in foreign currency by banks in Malta constitutes a negligible amount of their loan portfolio, and hence the extent of such risk is minimal. This confirms that the removal, upon Malta's adoption of the euro, of prudential measures designed to limit such exposures has not had negative consequences.

The credit risks inherent in the banks' loan portfolio noted in the 2008 FSR started to materialise during 2009, with the banks reporting a deterioration in the quality of some of their exposures and an expected further deterioration likely in 2010. Total NPLs increased by €78 million to €471.2million in 2009, and constituted 5.6% of total loans at the end of the year (Chart 2.10).



The deteriorating economic conditions in 2009 reversed the overall decline in the NPL ratio observed in previous years. This deterioration was reported by all banks. Furthermore, the value of rescheduled advances, that is those advances whose conditions were modified in view of worsening financial conditions on the part of the borrower, expanded by around 2.3%. Over 40% of rescheduled loans related to the *real estate* and the *construction* sector, while around one-fifth were attributable to the *hotels & restaurants* sector. In turn, the *wholesale & retail* and the *manufacturing* sectors accounted for around 14% and 12% of total rescheduled loans, respectively. The ratio of gross problematic

assets, which include both non-performing loans and rescheduled facilities, thus rose to 7.4% of total loans at the end of the year, up from 6.8% a year earlier.



As expected, the increase in NPLs was mainly driven by the corporate sector, as the latter is more vulnerable to the downturn in the business cycle. Indeed, banks abroad have witnessed similar developments.¹³ Resident corporate NPLs expanded by €64.2 million, or 20.6%, to €375 million in 2009, and the corporate NPL ratio rose by one percentage point to 8.3%, reflecting weaker financial conditions. Nearly half of the new NPLs were loans to the *real estate, renting & business activities* sector, as the slump in housing-related activity, characterised by falling prices and negative prospects, exerted pressure on these borrowers. Similarly, the *construction* sector experienced an increase in NPLs. As at end-2009, the NPL ratio of these two sectors reached 8.8% and 9.6%, respectively. Export-oriented and service industries, such as the *manufacturing* and the *hotels & restaurants* sectors, were also negatively affected, and their NPL ratios climbed to 11.6% and 11.4%, respectively.

Continuing the trend reversal reported in the 2008 FSR, household NPLs jumped by 28%, year-on-year, lifting households' NPL ratio from 2.5% to 2.9%. The largest increase, both in absolute and in percentage terms, was in non-performing mortgage loans. Increased defaults reflected the higher levels of unemployment, although low interest rates helped alleviate some of the debt repayment burden.

Loan loss provisioning

The cyclical nature of the accounting and regulatory frameworks has attracted close attention by policymakers as this contributes to pro-cyclical behaviour. Several proposals aimed at dampening pro-cyclicality are being discussed in the various international fora, including a revision of the method of loan loss provisioning.¹⁴

The credit risk outlook for the Maltese banks remains negative for 2010, particularly as loan defaults are a lagged indicator of economic activity. The proportion of problematic loans is expected to increase further in the near term, although the quality and speed of the economic recovery will determine the extent to which credit risk will intensify.

Under domestic regulatory rules, banks are required to make provisions only to the extent that NPLs are not covered by collateral. Thus, the build-up of credit risk during 2009 does not appear to have been mirrored to

¹³ Refer to Box 3 for financial stability information available internationally.

¹⁴ Refer to Chapter 3.

BOX 3: DYNAMIC PROVISIONS

The 2008 FSR had noted that the concept of dynamic provisioning was gradually gaining international support. This should enhance the soundness of the financial system as it encourages risk-adjusted pricing by banks, reduces the pro-cyclicality of bank lending, and makes the banking system more resilient during an economic downturn.¹

Credit risk is generally counter-cyclical. During economic booms, the risks of default are perceived to be low, but as economies start experiencing a slowdown, perceived credit risks tend to rise. An efficient credit market implies that banks are able to accurately assess and foresee risks over the business cycle. This should enable them to price in risks within their margins and to make adequate loan loss provisions to cover both expected and unexpected future losses. Due to asymmetrical information, disaster myopia, competition, herd behaviour and perverse incentives, however, markets may not function perfectly, with resultant pro-cyclical behaviour. In turn, provisioning levels generally follow the same swings, with the added risk that in boom years provisioning may not be commensurate with the 'long term' risk of lending. To a certain extent, current accounting rules also contribute to this result, since they prohibit banks from building up reserves against future losses unless there is evidence of actual incurred losses.

Dynamic provisioning looks through the cycle and requires banks to build up a buffer against future losses.² There are various methodologies by which dynamic provisioning can be implemented. A simple operational way would be to link provisions more directly to credit growth. That is, when credit growth is above the long-term average (normally in boom years), additional provisioning by a factor dependent on an average credit loss is automatically triggered.³ Subsequently, as the economy slows down and credit growth falls below average, a bank can release funds from the previously built-up stock of provisions. This simple rule, however, tends to penalise banks with a less risky lending portfolio. Thus, it is important that the provisioning is calibrated according to the different risks within a bank's portfolio (low, medium or high risk, collateralisation, loan categorisation etc). Although calibrated on the basis of historical experience, the purpose is to anticipate the next economic cycle rather than to reflect past ones.

Dynamic provisions are intended to mitigate the impact of an adverse turn in the economic cycle and to smooth out bank profitability levels. Furthermore, such provisions are designed to pre-empt the possible drying up of credit in an economic downturn and on account of binding capital constraints, which in turn could exacerbate the cyclical downswing.

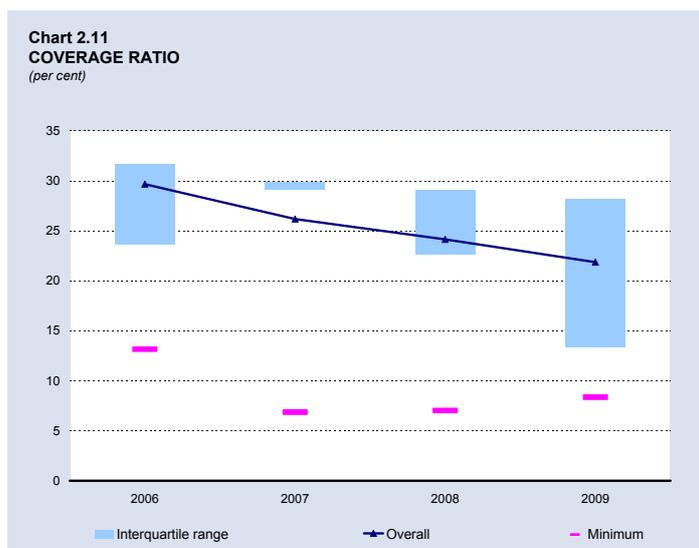
¹ Professor Charles Goodhart and Avinash Persaud have suggested an alternative to dynamic provisions, proposing instead that capital adequacy requirements are linked by a ratio to the growth of the value of bank assets. Financial Times 4 June 2009, A party pooper's guide to financial stability.

² J Saurina and G Jimenez. Credit Cycles, Credit Risk, and Prudential Regulation, March 2006.

³ This concept can be expressed as :LLP total = Special provisions + general provisions + $\alpha(\Delta C - \gamma C_{t-1})$, where α denotes expected loss (average NPLs to total loans); γ average loan growth rate, C total outstanding loans.

any significant extent in the level of LLPs. Indeed, the latter were raised by only €8 million, or 8.5%, significantly less than the 20% increase in NPLs.

As a result, the overall coverage ratio extended its trend decline, falling to just below 22% as at end-2009, around 2 percentage points lower than in 2008 (Chart 2.11). While the dispersion across banks widened, the minimum coverage ratio remained low. The current low level of LLPs largely stems from the pro-cyclical features embedded in accounting requirements. From a financial stability perspective, low provisioning increases idiosyncratic risk.¹⁵ In line with heightened credit risk banks should increase their LLPs during 2010.



Concentration risk

Concentration risk is an important area under Pillar II of the CRD. From a financial stability perspective, diversification reduces the exposure to co-movements of related risks. The 2008 FSR had highlighted the risk arising from concentrated exposure to particular types of assets, such as property. But the already very high concentration across the banks' lending portfolio intensified further in 2009, with the HHI reaching 1,961. This characteristic remained evident across all banks, with the disparity in concentration between institutions narrowing. In addition, the increase in property-related loans raised concentration even further, as such loans now account for over half of the banks' loan portfolio. This increases the banks' vulnerability to deteriorating property market prospects, particularly since over 80% of the collateral backing such loans is also in the form of property.

Single name concentration risk, reflecting the value of the ten largest single-name exposures, remained broadly stable during the year. At the end of the year, the aggregate value of the ten largest exposures amounted to some 88% of the capital earmarked to back such exposures. In turn, around one third of the unsecured large exposures related to the *real estate* and the *construction industry*, while the *transport, storage & communication* sector accounted for around another two-fifths. Other large exposures related to the *hotels & restaurants* sector, the *wholesale & retail trade* and the *manufacturing* sector.

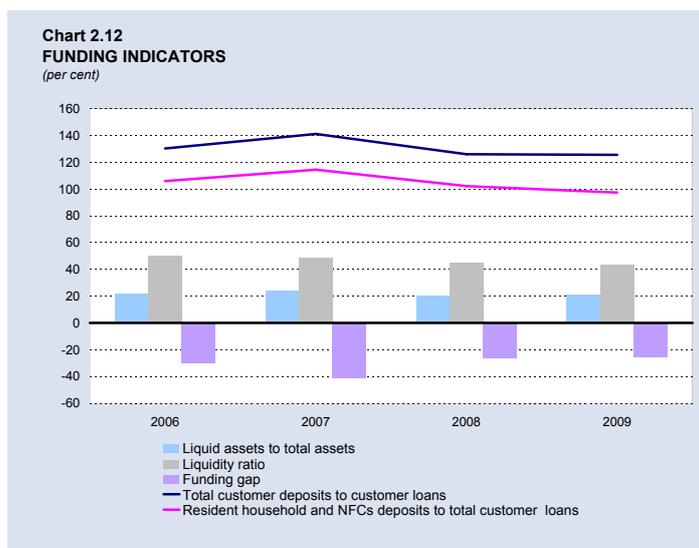
Funding and liquidity risk

During 2009 the banking sector did not depart significantly from the previous funding sources. Recourse to ECB monetary operations, both for short- and for long-term funding, diminished compared to 2008. Banks continued to rely, to a large extent, on customer deposits to fund their loans in spite of the fact that deposit margins were under pressure due to stiff competition. This was in line with the traditional intermediation role of the banks. Thus, customers' deposits represented 71% of the banks' total liabilities at the end of the year. Thus, the customer deposit-to-loan ratio remained high, enabling the banking sector to finance credit from this primary source of funding with only limited reliance on other sources. The customer deposit-to-loan ratio remained stable at 126%, the same as in 2008 (Chart 2.12). Even taking into account only the more sticky funding (defined for this purpose as deposits belonging to resident households and non-financial corporates), the ratio is still relatively high, at 97.4%. At these levels, however, these ratios are lower than they were before the financial crisis, as the growth rate of loans continued to outpace that of deposits, a scenario which is likely to persist in the near term.

¹⁵ Refer to Box 4.

Despite the current low opportunity cost of holding cash, as well as the economic recession and the wider choice of higher-yielding financial instruments, overall customer deposit growth accelerated from 1.1% in 2008 to 5.2% in 2009, fuelled mainly by deposits from non-financial corporates, possibly as a result of delayed investment spending.

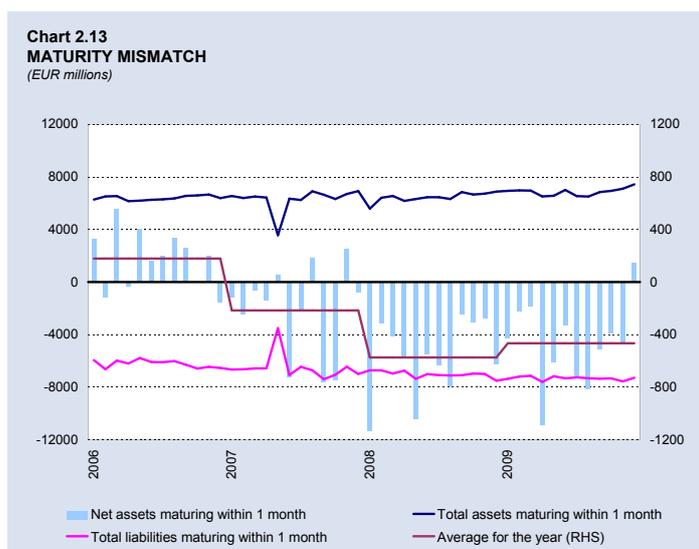
Bank liquidity remained at elevated levels in 2009, with banks maintaining a stock of liquid assets in terms of prudential requirements equivalent to 43.7% of their short-term liabilities (i.e. liabilities maturing within three months) – the regulatory minimum being 30%. Nonetheless, the dispersion across banks was rather wide, partly reflecting the strategic choices of individual banks and partly the stage of their operations. Liquid assets accounted for almost 21% of total bank assets at the end of 2009.



The maturity structure of deposits remained broadly stable, with around 46% placed in current and savings deposits. Although the latter have an embedded option, in that they can be withdrawn instantly or at very short notice, in effect the general experience to date has been that they are rather sticky. The share of time deposits with a residual maturity of less than three months decreased by 4.1 percentage points compared to end-2008, to 21.5%. On the other hand, the share of deposits with a residual maturity of over 1 year rose from 5.8% to over 9.1%. Indeed, in the course of the year, banks launched a number of higher yielding longer-term special deposit products with the intention of tapping funds for a longer period in an environment of a relatively flat yield curve. This strategy enabled the banks to attract deposits without resorting to an across-the-board increase in deposit rates, albeit reducing transparency in the pricing of deposits in the process.

The maturity structure of loans is generally longer than that of deposits, having a weighted average maturity of 10.2 years (2008: 9.9 years) and with a quarter of the banks' loan portfolio having a maturity of over 20 years. Although on average banks ran a negative mismatch gap during the year, this turned positive at the end of the year (Chart 2.13).

The financial crisis also highlighted the extreme importance of prudent liquidity management. As described in Chapter 3 of this FSR, there are currently several policy recommendations being discussed at a global level to strengthen bank liquidity management.



Market and counterparty risk

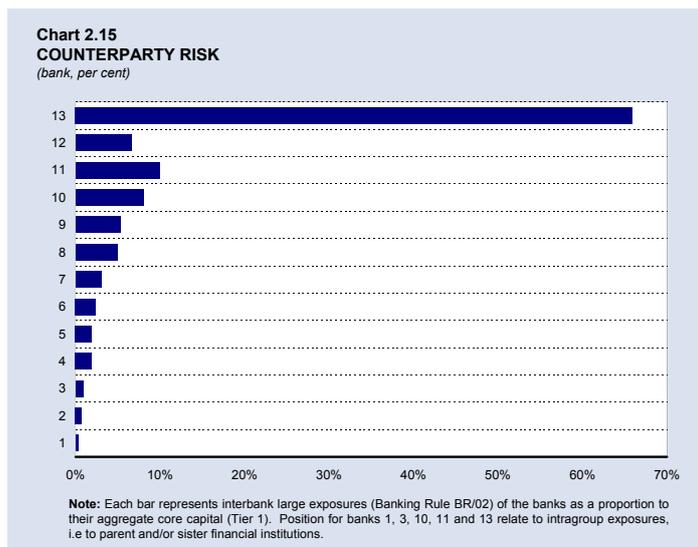
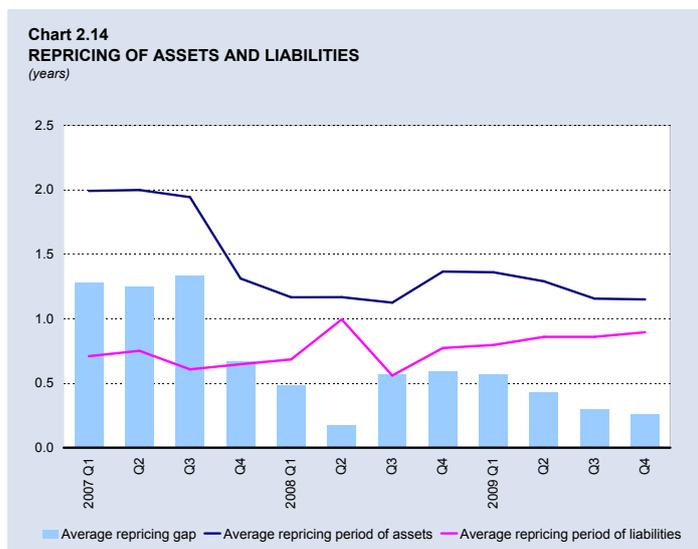
Interest rate risk diminished during 2009, as the re-pricing gap narrowed to 0.3 years from 0.6 years a year earlier (Chart 2.14). This was attributable to a small increase in the re-pricing period of liabilities coupled with a shortening in the re-pricing period of assets.¹⁶ Given the current re-pricing periods, a 200 basis point upward shift in interest rates (upward parallel shift in the yield curve) is estimated to generate a favourable impact, with an increase in economic value equivalent to 0.8% of total own funds.¹⁷

Foreign currency risks remained low in 2009, with an overall net short position equivalent to 0.1% of the banks' total own funds. Meanwhile, as a result of valuation changes, the banks' net open position of equity to total own funds stood at 41.2% at the end of the year, 20.3 percentage points higher than at the end of 2008.

The interbank market gives rise to a complex network of exposures and uncertainty about the extent of counterparty risk. The failure of an individual bank can have significant spill-over effects on the international financial system, as became very evident during the crisis. As Chart 2.15 shows, there is a significant financial stability risk arising from the extent of counterparty exposure to individual banks, well above the level of Tier 1 capital. This is largely in respect of exposures to parent and related banks. In fact, large exposures to intra-group positions (between parent banks and sister subsidiaries) are still significant, at 85% of Tier 1, albeit down from 116.4% in 2008. At the same time, exposures to other non-resident credit institutions increased to 27% of Tier 1 funds in 2009.

2.2.2 Profitability

In 2008 the banks faced major challenges in order to maintain their profitability in the face of the financial crisis, with valuation losses having a major impact. This was reversed during 2009, with most banks

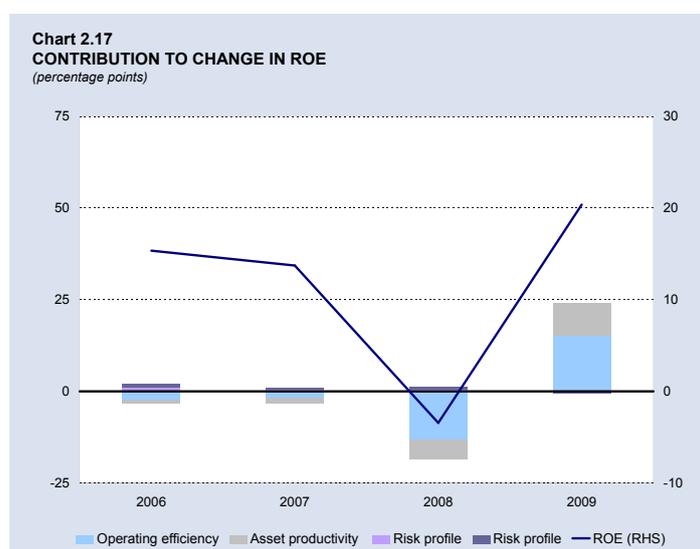
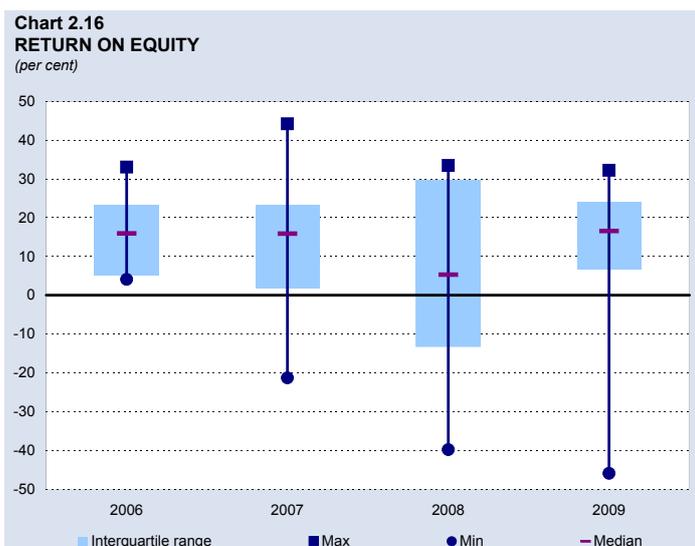


¹⁶ As at the end of 2009, the average re-pricing period of assets was 1.2 years while that of liabilities was 0.9 years. The re-pricing period is estimated as follows: assets and liabilities are sub-divided into four buckets according to their repricing period. The mid-point of each respective bucket is then multiplied by the share of each bucket in the total assets or liabilities.

¹⁷ The estimate used the weighting factors suggested by the BIS in the 'Principles for the management and supervision of interest rate risk', July 2004.

showing solid results driven largely by a partial reversal of the valuation losses incurred in 2008. Profits for 2009 amounted to just under €300 million, resulting in an improvement in both the weighted average and the median ROE, to 20.4% and 16.5%, respectively (Chart 2.16). At the same time, the inter-quartile range narrowed. Meanwhile, the median ROE rose from 5.3% in 2008 to 16.5% in 2009, comparable to the pre-crisis level. In line with the ROE, the ROA turned positive during the year, rising from -0.3% in 2008 to 2.1% by end-2009. This increase was driven by the improvement in profits, although average assets expanded only marginally in 2009, by 1.6%.

The ROE can be decomposed into four multiplicative subcomponents: operating efficiency, asset productivity, risk profile and balance sheet leverage. This permits an analysis of the main drivers of profit so as to determine the extent of the risks undertaken by the banks to generate such profits. As Chart 2.17 shows, the main drivers of the increased profitability in 2009 were higher operating efficiency (mainly due to the positive revaluation effect) and a significant improvement in risk-adjusted income (asset productivity).¹⁸ On the other hand, the contribution from leverage and the risk profile decreased marginally, indicating that banks were less willing to take risks.



Net interest and non-interest income

Net interest income remained the major source of income during 2009, generating just over a half of gross income, similar to the pre-crisis level. While net interest income was still relatively high, it was down by 8.3%, reflecting to some extent the lagged re-pricing of a proportion of bank deposits when compared to loans and the generally lower interest returns on securities and required reserves. In effect, asset interest rates were down by 1.7 percentage points and liability interest rates by 1.4 percentage points, to 3.7% and 1.9%, respectively. In other words, the banks passed the cut in official interest rates onto deposit rates to a larger extent than onto lending rates (Chart 2.18). In addition, lending growth marginally exceeded deposit growth, while the yield curve became steeper compared to a year earlier (Chart 2.19).¹⁹

¹⁸ Specifically, $ROE = [(P/NII) \times (NII/GI) \times (GI/RWA) \times (RWA/A) \times (A/E)]$ where P = Profit before tax; NII = Net interest income; GI = Gross Income; RWA = Risk Weighted Assets; A = Average assets; E = Total average shareholders' funds.

¹⁹ A steeper yield curve should in theory impact positively on bank profitability, as banks borrow short and lend long. However, the vast majority of bank loans in Malta carry a variable rate, and hence the impact of the yield curve is likely to be small.

As a result of the reversal of the sharp decline in income during 2008 caused by the securities valuation effect, the banking system's profits from non-interest income increased significantly in 2009, accounting for nearly 49% of their gross income. Banks have also continued to reduce costs, boosting further their net non-interest income. This they did mainly through lower staff expenses and a more intensive use of internet services. As a result, the non-interest expense-to-gross income ratio of the banking system decreased to 37.8%, lower than the pre-crisis level.

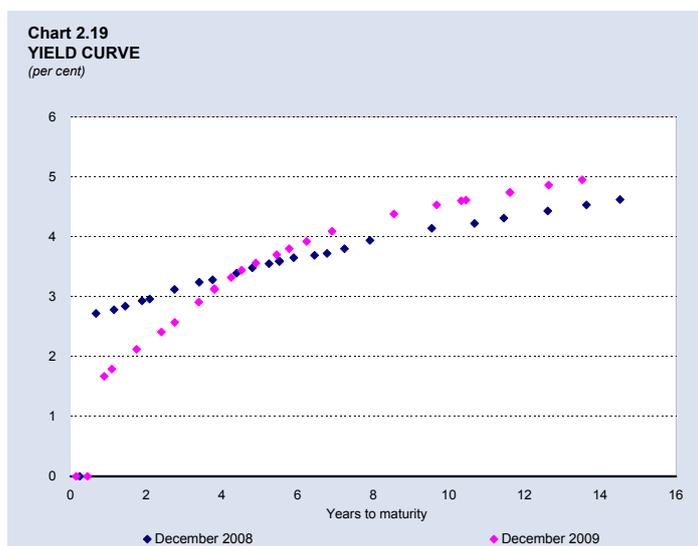
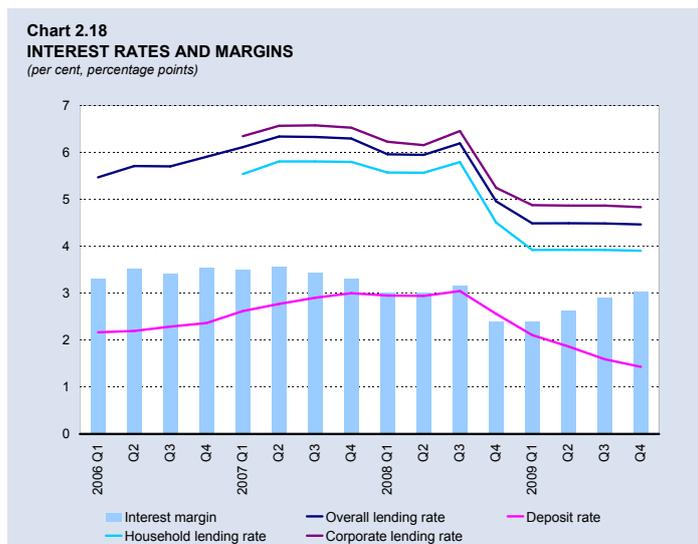
Allocation of loan loss provisions and write-offs

Despite the recession, charges for specific and general provisions decreased from €29.4 million in 2008 to €17 million in 2009. At the same time, bad debts written-off dropped from €10.7 million to €3.6 million. However, write-backs and recoveries fell significantly, from around €32 million to just over €11 million. The overall negative impact on profitability was thus limited to around €1.6 million, since in 2008 provision charges stood at €5.8 million whereas in 2009 they amounted to €7.4 million. This is in sharp contrast to the experience of banks in other countries, which in 2009 increased their loan loss provisions to reflect heightened credit risk. Banks with relatively weak credit risk buffers should make additional provisions as their asset quality deteriorates further.

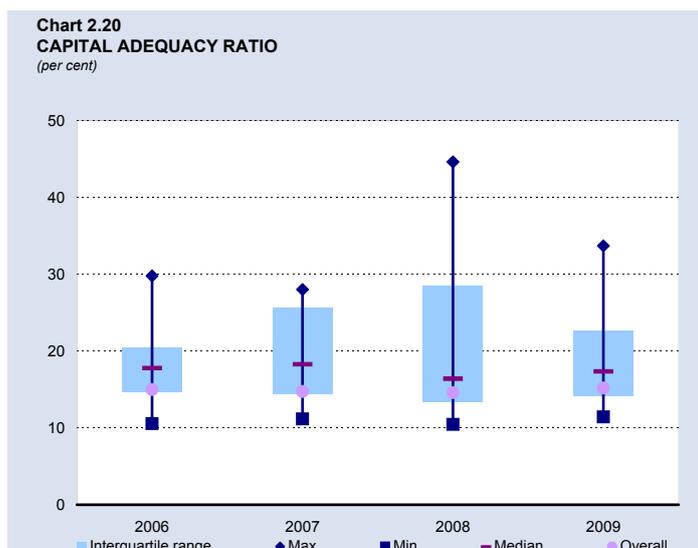
2.2.3 Capital adequacy

During the financial crisis banks in Malta did not need public support to strengthen their Tier 1 capital, as was the case in a number of other countries. Nevertheless, the 2008 FSR had stressed the importance of higher capital buffers. While the amount of regulatory capital held by the banks declined during 2009, the respective capital ratios increased. The crisis showed, however, that while meeting the required regulatory capital ratios is a prerequisite, the quality of capital held and the degree of leverage are of utmost importance for banks to be able to cover risks adequately.

The banks' CAR rose from 14.6% in 2008 to 15.2% as at end-2009, while their CCAR remained broadly unchanged at 12.7% (Chart 2.20). The dispersion of the CAR across banks narrowed during the year, while the median CAR increased by one percentage point to 17.3%. The high level of the CCAR relative to the CAR indicates a better loss-absorbing capacity.



The banks' total own funds decreased by 1% in 2009, entirely due to the regulatory requirement to deduct the value of any equity holdings in excess of the large exposure limit. However, there were two important factors that, to a certain extent, counterbalanced this effect: banks generated a significant improvement in profits, part of which were used for internal capital accumulation, while some successfully raised capital in the market. The improvement in the CAR was therefore entirely the result of a contraction in risk-weighted assets, which dropped by 5% during the year (Table 2.2). This reflected a rebalancing towards lower risk-weighted assets, as well as subdued lending growth.



In turn, the leverage ratio, defined as the ratio of total assets to capital and reserves, dropped by 1.1 percentage point to 9.4% by end-2009, reflecting a faster accumulation of capital and reserves. This suggests lower risk and a better shock-absorption capacity. However, no evident signs of deleveraging have been noted.

Although the CAR and CCAR are above the current regulatory limits, the level of capital to cover both Pillar 1 and Pillar II risks may need to be raised further. Measured in accordance with the EU Capital Requirements Directive (CRD), banks hold sufficient own funds to cover credit, operational and market risks (Pillar I risks).²⁰ The breakdown of capital requirements by type of risk indicates that the capital allocated for credit risk represents around 48% of the banks' own funds under Pillar I, whereas market risk accounts for only 0.2%. The capital requirements for operational risk accounted for around 5%. However, banks also require capital to cover risks under Pillar II, including concentration and interest rate risk. Based on past experience, it appears that the banks are able to raise sufficient additional capital either by retaining more profits or through the markets.

The financial markets and rating agencies now consider that, in many cases, banks require a higher level of capital than indicated by the current regulatory requirements. At the same time, there are international ongoing discussions to review the quality and quantity of capital to ensure that banks remain resilient even under stressed conditions.

Table 2.2
COMPOSITION OF CAPITAL

	2006	2007	2008	2009
Regulatory ratios (per cent):				
CAR	14.99	14.74	14.60	15.18
CCAR	13.49	12.70	12.55	12.71
Risk weighted assets (€ millions)	7,214.97	7,986.92	8,739.47	8,295.17
RWA to total assets (per cent)	54.11	57.88	61.09	57.40

²⁰ Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions, OJ L 177 30.06.2006, pp 1-200.

The resilience of the banking sector

As the recent crisis has shown, strong regulatory capital and liquidity ratios may still mask underlying weaknesses in the ability of a banking system to deal with extreme adverse conditions. The objective of stress testing is thus to design extreme yet plausible shocks and assess whether the current resources available within the banking system, in terms of solvency and liquidity, are able to withstand such shocks.

In this respect, the CBM regularly undertakes a number of stress tests to determine the resilience of Maltese banks. The shocks that are considered most likely to test the robustness of the banks remained those relating to a deterioration in the credit rating of the banks' assets, an economic downturn, a strong downward house price correction and the availability of adequate liquidity. To this effect the Bank ran four different univariate tests on the relevant hypothetical scenarios. As shocks are univariate in nature, they do not take into account endogenous reactions and feedback effects.^{21,22}

The probability that the aforementioned scenarios materialise in the near term is judged to be low for an economic recession, slight for credit quality deterioration and a house price correction (Chart 2.21). The probability of a liquidity crisis on account of a bank run is deemed to be remote.

It is assumed that in the event of an abrupt deterioration in asset quality, the banks' loans and securities portfolios would experience a heightened probability of default ranging from 10% to 20%.²³ In this test, these portfolios are mapped into the rating classes of an external rating agency and assigned the corresponding probability of default. The test assumes that the expected losses actually materialise and consequently these are deducted in full from the regulatory level of capital. At the same time, risk-weighted assets also decline, albeit to a lesser extent.²⁴ In the eventuality that the current probability of default embedded in the banks' assets materialises, and this deteriorates further following the stress test, the CAR and CCAR of the banking system on aggregate would fall to 10.8% and 8.2% respectively, well above the statutory ceilings, with the median bank's results being slightly higher in the case of the CCAR (Chart 2.22).²⁵

Chart 2.21

THE LIKELIHOOD AND IMPACT OF STRESS TEST SCENARIOS

	Probability	Impact
Vulnerability		
Economic recession	Low	Low
Credit quality deterioration	Slight	Significant
House price correction	Remote	High

Legend:

Probability		Impact	
Low	Low	Low	Low
Slight	Significant	Significant	Significant
Remote	High	High	High

²¹ Box 4 gives a brief overview of the current work being undertaken in respect of a more complex model which can be used to assess credit risk.

²² The advantage of top-down univariate stress tests is that they are easier to implement and benefit from better tractability. The CBM is however continuously upgrading its analytical work relating to stress testing. To this effect, the CBM, jointly with the MFSA, has embarked on a review of a series of bottom-up stress tests conducted by the banks themselves.

²³ The weighted average probability of default of the banks' loans and securities portfolio was estimated at 3.2% before the stress testing exercise.

²⁴ It is estimated that the assets which turn into default have a risk weight average equivalent to 57%.

²⁵ The minimum regulatory requirements for the CAR and CCAR are 8% and 4%, respectively.

BOX 4: MEASURING CREDIT RISK

Credit risk is the most important risk in the banking book. Banks are required to hold an amount of capital sufficient to enable them to withstand possible future asset deterioration. Focusing on actual defaults may miss out the potential occurrence of rare events and underestimates the possibility of a synchronisation of problems across many borrowers. A default-mode Merton-type credit risk model can however circumvent such lacunae, particularly as this model does not only rely on past events but also considers many alternative hypothetical scenarios.¹ An added advantage stems from the possibility of factoring in issues related to the size of loans and their sectoral concentration.

In the spirit of Merton's seminal model, a borrower defaults on his debt obligations if the returns on his assets fall below his default threshold. In turn, the threshold default barrier can be inferred from the probability of default where the standard normal inverse default rate can be used as a proxy. Moreover, sectoral borrower defaults can be simulated by means of a Monte Carlo engine, a technique designed to generate random loss realisations which follow a theoretical set-up that accounts for systemic risk, and hence sectoral correlation, and firm-specific risk (also referred to as idiosyncratic risk).^{2,3}

Total losses are obtained by summing up the outstanding value of borrowings that end up in default. The process is repeated several times, each time generating a different loss scenario.⁴ The losses in the different simulated scenarios can then be displayed in a histogram and a measure of extreme losses, and hence economic capital, can be estimated by investigating the tail of the loss distribution.^{5,6} If the loan portfolio is characterised by a large number of low value loans and a small number of large exposures, the resulting distribution will exhibit two modes, indicating the multi-faceted nature of this portfolio. In the first case the required level of capital would have to be larger than that required for a lower variance portfolio, while in the second case the required level of capital has to be determined on the basis of a more case-specific outlook.

¹ Merton R C (1974) 'On the Pricing of Corporate Debt: The Risk Structure of Interest Rates', Journal of Finance 29(2).

² Dullman, K. and Masschelein, N. (2006) Sector Concentration in Loan Portfolios and Economic Capital. *Deutsche Bundesbank. Discussion Paper Series 2: Banking and Financial Studies No. 09/2006*.

³ A mathematical representation of the Monte Carlo engine is $X_{s,j} = r_s Y_s + \varepsilon_{s,j} \sqrt{1-r_s^2}$ where:

$X_{s,j}$ is the log assets return of borrower j in sector s .

r_s is the intra-sectoral correlation factor weight for sector s and takes values between 0 and 1.

Y_s is the matrix of correlated systemic risk factors.

$\varepsilon_{s,j}$ is a matrix of standard normal random numbers, representing borrower specific (idiosyncratic) risk factor.

⁴ A single simulation may be way off the mark. The simulation exercise is therefore repeated many times. Theoretically the average of the generated losses would lie close to the true value of losses to be incurred. Mathematically this is referred to as ergodicity.

⁵ Artzner P, Delbaen F, Ebner J, and D Heath (1999) 'Coherent Measures of Risk', Mathematical Finance 9; and Dullman K, and N Masschelein (2006)

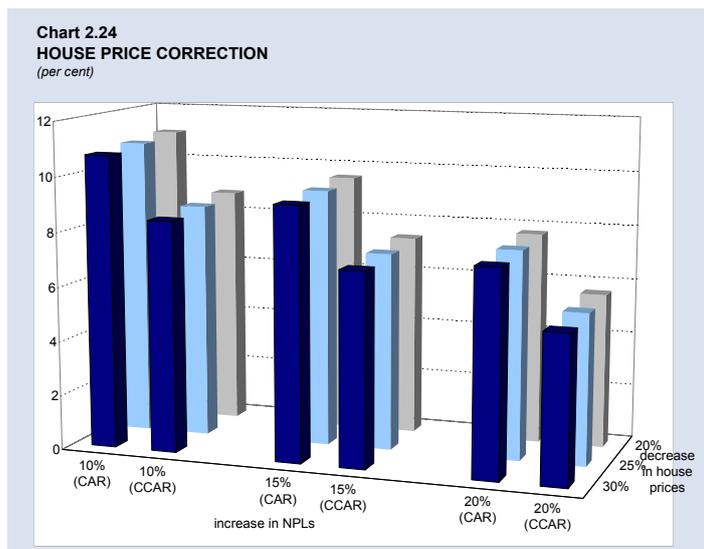
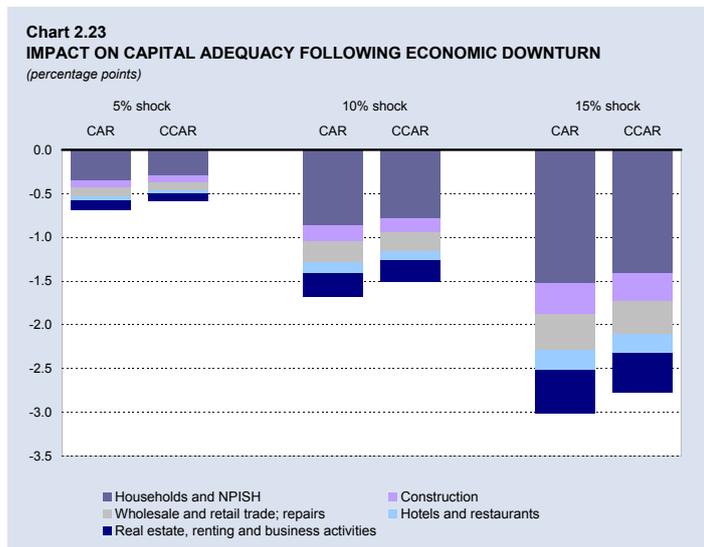
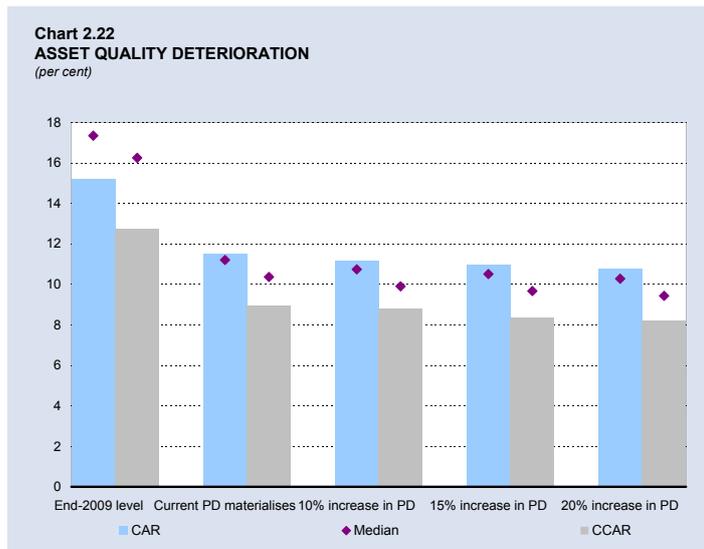
⁶ Economic capital is the amount of capital that ensures an institution's balance sheet remains solvent over a specified time horizon, with a prescribed probability following events that are unexpected, yet not so unlikely that they might never occur in practice.

In the case of an economic downturn, it is assumed that key economic sectors, representing around 75% of the total loan portfolio, suffer losses in demand with a consequent decline in their revenue and their ability to service debts. As non-performing loans entail higher risk weights, the overall risk-weighted assets increase. In contrast, capital falls by an amount equivalent to the increase in specific provisioning. The combined impact of lower capital and increased risk-weighted assets results in a decrease in capital adequacy ratios. The assumed increase in non-performing loans ranges from 5% to 15%. Even in this scenario, all banks would remain adequately capitalised. In the worst case scenario, the CAR would fall to 12.2% and the CCAR to 10% (Chart 2.23).

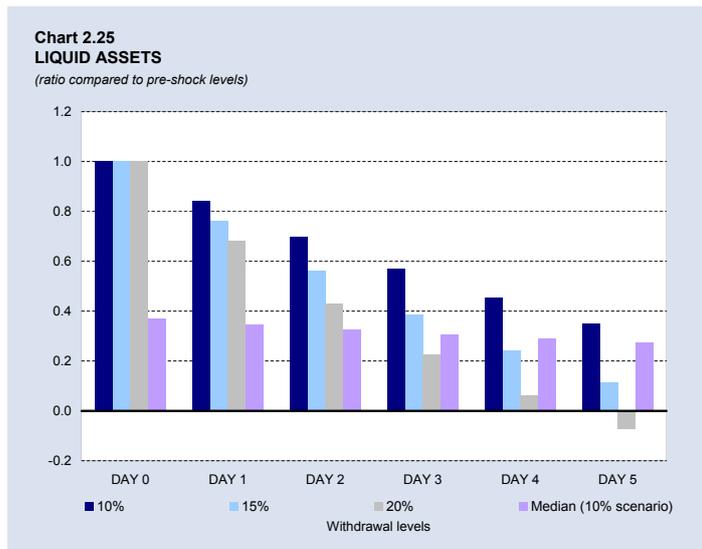
In the case of an adverse house price shock, it is assumed that house prices decline by 20% to 30%.²⁶ The lower property prices affect the solvency of the banks through two transmission channels. It is assumed that the negative wealth effect triggers an increase in non-performing loans ranging between 10% and 20%, necessitating an increase in specific loan loss provisioning and in risk-weighted assets. Moreover, the market value of collateral falls and, as a result, an equivalent additional amount of specific loan loss provisioning would be required against doubtful loans. Under the most extreme scenario, the CCAR of two banks would fall under 4%, but the ratio would still remain positive (Chart 2.24).

The last scenario tests the banks' capacity to survive a severe run for a five-day period under a number of strict funding assumptions. The deposit withdrawal stress test specifies a daily withdrawal in the order of 10%, 15% or 20% of funds available for withdrawal (consisting mainly in

²⁶ House prices fell by 9% from their peak in 2006.



current and savings deposits and an estimate of maturing time deposits). This scenario is assumed to take place for five consecutive days. The counterbalancing capacity is restricted to the sale of securities at market prices outstanding as at the end of 2009 without recourse to other funding options, such as access to ECB liquidity and reserve requirement accounts, as well as from interbank credit lines. The banking sector survived the 10% and 15% daily withdrawals tests, but in some instances the available stock of liquid assets was not commensurate with the more extreme 20% deposit withdrawal on the fifth day (Chart 2.25).



2.3 The non-bank financial sector

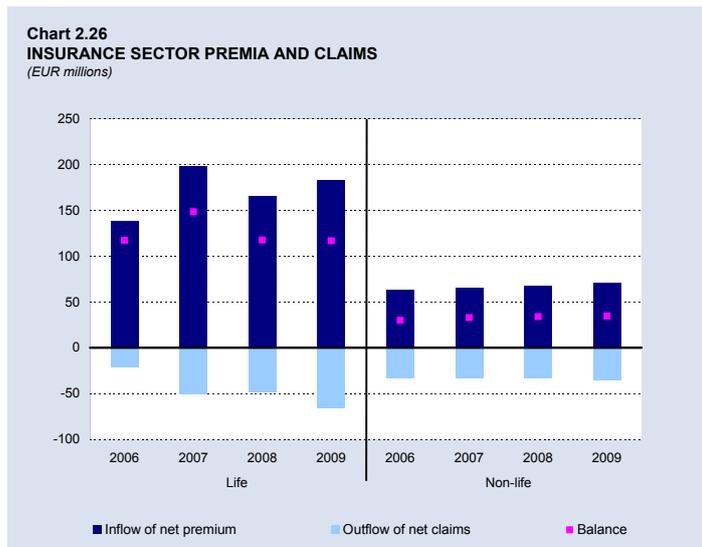
2.3.1 The insurance sector

The operational revenue of the insurance sector improved during 2009, recovering from the declines recorded in the aftermath of the financial crisis. The local insurance market remained very concentrated, with the market share of the largest insurance company in terms of written net premia accounting for 47.5% of the total.

The insurance sector expanded by 13% during 2009, to €1.8 billion in total assets, around 86% of which related to life insurance business. The weak underwriting business reported in 2008 improved somewhat in 2009. Indeed, written net premia expanded by almost 9% to €253.2 million, as both the life and the non-life insurance segments recovered (Chart 2.26).²⁷ In particular life premia rose by 10%. In turn, non-life premia expanded by 4.7% to €70.4 million, partly driven by a higher number of licensed motor vehicles.²⁸ The overall favourable results derived from the underwriting business was partly offset by a 24% rise in net claims, largely reported by the life sector and, in turn, primarily attributable to maturing life policies.

Financial conditions

The capital base of the insurance sector remained broadly stable at €256.8 million. That of the life sector expanded by around €27 million, but this was almost completely offset by a contraction in the non-life sector. In response to the increase in net premia, net techni-



²⁷ Net premia, measured as gross premia less reinsurance ceded, increased marginally, to 5% of GDP.

²⁸ The stock of licensed motor vehicles increased by 5,689 compared to 2008. To an extent, however, this reflects the postponement of the purchase of vehicles to 2009, which took place as a result of the anticipated changes in tax regulations related to car licensing.

cal reserves increased by 16.5% and accounted for over 80% of the sector's total balance sheet.

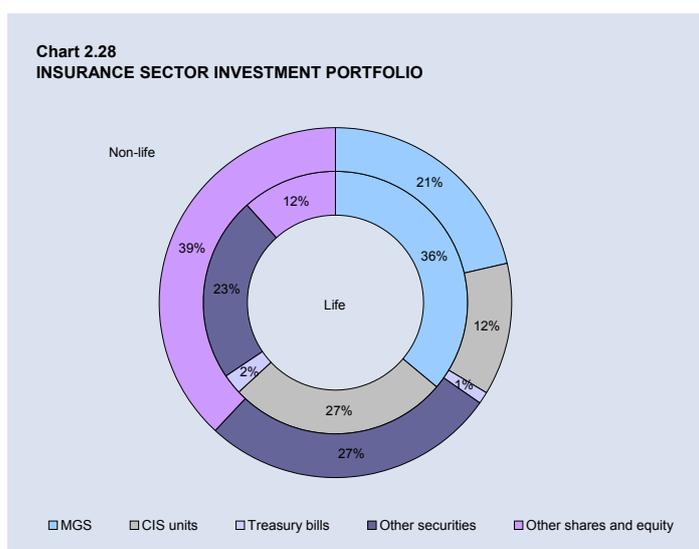
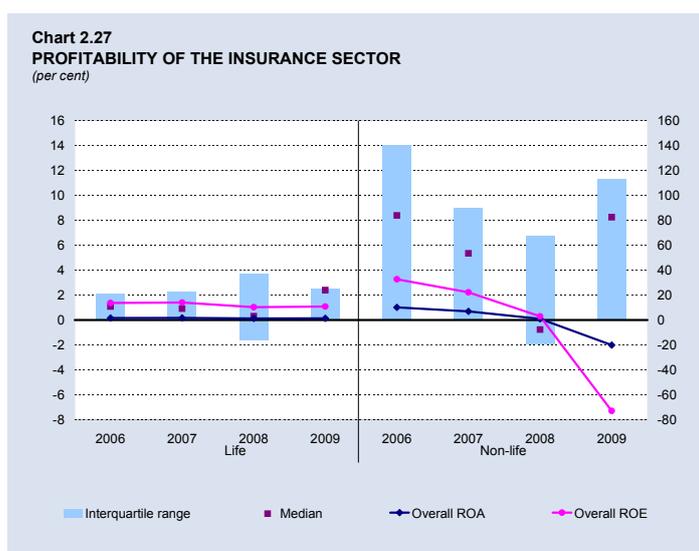
In spite of higher income generation domestically, substantial losses incurred by a foreign subsidiary resulted in an overall loss of around €30 million in 2009. This deterioration was reflected entirely in the non-life segment, whose return swung from a €2.4 million profit in 2008 to a loss of €50.2 million in 2009. On the other hand, the profits registered by the life sector improved by 17.7% to €19.8 million by the end of the year, driven by a considerable increase in investment income and, to a lesser extent, in underwriting business. The general stabilisation of the international financial markets and the adjustment of the insurers' investment portfolio to lower risk investments have improved the investment income of the insurance sector, particularly that of the life segment. Indeed, the decline in investment income registered during the height of the financial market turmoil was reversed during 2009, as it swung from a loss of around €69 million to a profit of just over €34 million.

As a result, the ROA of the life insurance sector improved slightly in 2009, from 1.3% in 2008 to 1.4%, while that of the non-life sector deteriorated, from 0.9% to -20.1%, reflecting the loss mentioned above (Chart 2.27). These trends are also mirrored in the ROE, which increased from 10.4% to 10.8% for the life sector and dropped from 3% to -73% for the non-life sector. The solvency of the non-life sector, measured as capital in relation to total assets, thus declined from 32.2% in 2008 to 24.5% in 2009, while that of the life insurance sector remained stable at around 13%.

The insurance sector remains vulnerable to inherent risks, particularly relating to the pro-cyclicality of revenue generation and dependence on long-term asset returns.

Risks in the insurance industry

In order to shed some of the risk of adverse developments in the stock markets, the insurance industry reduced its equity holdings in 2009 – in line with similar trends observed in the euro area. Indeed, during the year, the sector's holdings of shares and other equity dipped by 28% to 14.1 % of its investment portfolio by the end of the year. The observed shift of investment assets from shares and equity to MGSs indicates a flight-to-quality on account of the uncertain international economic and financial outlook (Chart 2.28).



Concentration in the insurance market remained high, particularly in respect of long-term business. This is mirrored in the HHI, both in terms of total assets and of premia, respectively calculated at 3,918 and 2,894. The life sector consists of only three life insurance companies, with the largest company holding approximately two-thirds of total assets, whereas the non-life sector consists of five companies, with one institution controlling almost half of the market. Concentration risk emerges from the fact that the transferred risk from policy holders rests in the books of a few insurance companies. Such risks need to be adequately reinsured in order to limit the effect of potential catastrophic events. The insurance industry retains a significant degree of risk on its balance sheet, as reflected in the RRR. By end-2009, the RRR of the life business stood at 97%, whereas that of the non-life business stood at 70%, both at practically the same levels as in 2008. Although high risk retention by insurers limits potential spill-over effects from adverse developments in the reinsurance sector, a high RRR also indicates idiosyncratic default risks.

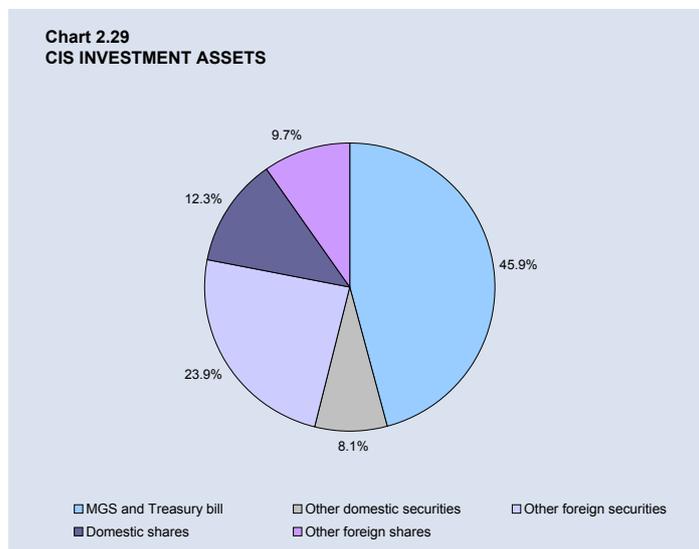
As a result of the inter-linkages between the banking and the insurance sectors, there is also potentially some risk relating to contagion and reputation. This risk increased slightly in 2009, following the higher participation of some banks in particular insurance companies. This risk is, however, mitigated to some extent by the fact that banking regulations require such cross holdings to be deducted from the respective bank's own funds.

Longevity risk is an inherent risk in the life insurance industry. This risk emanates from the fact that average life expectancy is on the rise, and a very small change in life expectancies can create solvency issues for insurance companies.

2.3.2 The investments sector²⁹

The investment funds sector, consisting of CIS and hedge funds, accounts for a relatively small share of the Maltese financial sector, equivalent to 5% and 1%, respectively, in terms of total assets.³⁰

In 2009 the number of licensed CIS rose from 11 to 12, with total assets expanding by 4%, or €32 million, to €804.5 million. The increase was mainly driven by higher prices of shares and other equity, which rose by 14% to €170.3 million as at end-2009, while the value of securities other than shares remained broadly stable at around €600 million. The composition of the sector's investment portfolio remained broadly unchanged, with MGSs accounting for nearly half of the securities held; 32% consisting of long term securities other than MGS; and the remaining 22% directed to other shares and equity (Chart 2.29). This composition reflects a conservative credit risk



²⁹ This section is based on institutions having the majority of shareholder units owned by residents of Malta.

³⁰ The Investment Services Act (1994) specifies that CIS are organisations with the aim of collectively investing 'capital acquired by means of an offer of units for subscription, sale or exchange'. Hedge funds are a special class of CIS, attracting persons or companies with a relatively higher initial level of capital. As their nature is non-retail, they are subject to limited regulation and oversight. There are three types of hedge funds, namely, Experienced Investor Funds, Qualifying Investor Funds and Extraordinary Investor Funds. These differ on the basis of the minimum entry capital levels that investors are expected to invest. Investors are expected to have the expertise, experience and knowledge to be in a position to make their own investment decisions and understand the risks involved. Moreover, special license conditions may apply to specialist schemes such as venture capital or development funds, money market funds, property funds and futures and options funds. Although property funds are slowly gaining more importance, these specialist schemes are not yet very common in Malta. The term 'hedge funds' has replaced the term 'Professional Investor Funds' used in earlier publications.

policy, but is subject to concentration risk. Nevertheless, the limited exposure to foreign securities limits the effect from international market distress.

Households remained the major contributors to CIS, accounting for 92.5% of total domestic investment fund units at the end of the year. The remaining units are mainly held by insurance companies and credit institutions.

The number of licensed hedge funds increased from 5 to 7 during 2009. The drop in total assets that occurred at the height of the global financial crisis was partly reversed during 2009, when aggregate assets increased by 3.6% to €115.7 million. As with CIS, the major stakeholders in hedge funds are households, whose share increased from 34.6% to 44.6% of total domestic shareholder units. On the other hand, credit institutions reduced their holdings by 16 percentage points to only 1.9% of the total. The shift from credit institutions to households was mainly driven by a particular hedge fund. Non-financial companies held 43.5% of shareholder units, while insurance companies and other financial institutions held the remainder.

The small size of the investment funds sector, and the relatively low exposure of households to this sector, which is equivalent to 6% of household financial wealth, somewhat limits the potential threat to the soundness of the financial system. Moreover, the business model adopted by most investment funds is generally conservative, with the largest portfolio component being MGS, while exposures to structured products are negligible. The positive endurance of investment funds in Malta during the recent financial turmoil, which drove some large financial institutions and hedge funds in highly developed markets to closure, reflects their prudent approach to risks. The major concern of the investment funds sector rests in the inter-linkages with other major market players and the potential spill-over effects. This is due to the fact that two major banks manage the two largest CIS through their fund managers, thus amplifying reputation risk within the domestic financial system.

3. POLICY RESPONSES AND IMPLICATIONS

The 2008 FSR broadly described some of the initiatives that were being discussed at the time in various international fora to restore and strengthen the resilience of the financial system in the wake of the financial crisis.¹ Most of these initiatives are reflected in two important consultative documents issued in December 2009 by the BCBS: *Strengthening the Resilience of the Banking Sector* and *International Framework for Liquidity Risk Measurement, Standards and Monitoring*. These initiatives are now being considered by the European Commission for potential incorporation into the EU legislative framework following public consultation.

In the meantime the MFSA continued with its review of domestic legislation and regulations, having issued various consultation documents. Some of these documents were eventually issued as new Rules to the industry, having taken into account the consultation process.²

3.1 Proposals to strengthen banks' own funds and liquidity framework

A strong and resilient banking system is essential for sustainable economic growth. In the years preceding the crisis, however, the composition of bank capital had deteriorated, with a shift towards lower-quality capital instruments that proved incapable of absorbing losses on a going concern basis once the crisis erupted. Hence, the BCBS is now proposing a reform of what should constitute 'own funds' for banks. In particular it is reviewing the quality, consistency and transparency of the capital base by strengthening the components of Tier 1 capital. The predominant component of such capital, it is being proposed, should be common shares and retained earnings. The components of Tier 2 capital will also be harmonised, while Tier 3 capital (available only to cover market risks) is to be eliminated altogether. The calibration of the minimum requirements for the overall level of the banks' own funds, Tier 1 capital and the predominant form of Tier 1 capital, will be carried out as part of an impact assessment.

Another key issue highlighted by the financial crisis was procyclicality. The high leverage strategies adopted by some banks accentuated the procyclicality effect. As a reaction to the evolving crisis, banks naturally reduced their leverage. This action by a significant part of the banking sector exacerbated the feedback loop between losses, declines in bank capital and the drying up of credit flows. To this end, the BCBS is proposing a *leverage ratio*, which should act as a back-stop to risk-taking by banks, complementing risk-weighted capital requirements. In addition to leverage, procyclicality was also amplified through other channels, such as embedded loan loss provisions within certain regulatory, supervisory and accounting frameworks. The BCBS is therefore recommending stronger loan loss provisioning practices and the build-up of adequate buffers over and above the minimum regulatory requirements. These buffers can then be drawn down in periods of stress, acting as a contracyclical capital requirement. In this respect, the BCBS is proposing that one of the measures to build (and conserve) these buffers above the minimum required capital is through reductions in the discretionary distribution of earnings. Raising fresh capital from the private sector might not be an option under conditions of stress. Banks should therefore retain a higher share of their earnings to rebuild their capital buffers, the more so the nearer their actual capital levels are to the minimum required. The proposal therefore envisages that dividend payouts should be regulated when capital levels fall within a buffer range established above the regulatory minimum. These constraints would vary according to how far a bank's actual capital level is from the minimum required.

During the financial crisis the banking sector also suffered from acute liquidity shortages, as certain assets previously considered liquid proved not to be so while the liquidity business models used by a number of banks proved to be defective. In September 2008, the BCBS issued the document *Principles for Sound Liquidity Risk Management and Supervision* as guidance for banks to improve their liquidity risk management and to help them control their liquidity risk exposures. This is now being supplemented with proposals

¹ Box 5 presents an overview of monitoring activities undertaken by international bodies and related publications.

² Refer to MFSA Annual Report 2009 – Legal and Regulatory Developments.

BOX 5: FINANCIAL STABILITY MONITORING

The international financial crisis has clearly demonstrated the importance of financial stability as well as the need to strengthen the mechanisms to address vulnerabilities and to develop and implement strong policies in the interest of financial stability. The IMF carries out regular country surveillance, including those under the Financial Sector Assessment Programmes (FSAP), to assess countries' financial stability strengths and weaknesses. The IMF has now taken on the role of integrating regulatory and supervisory responses into the macro-prudential policy framework and conducting early warning exercises.¹ In addition, the G20 has mandated the Financial Stability Board (FSB) to, *inter alia*, monitor and advise on market developments, undertake joint strategic reviews of the policy development work of the international standard-setting bodies and manage contingency planning for cross-border crisis management.² Together, these two bodies should provide an international framework designed to strengthen global financial stability. Within the EU, too, a new body charged with monitoring and assessing potential threats and risks to financial stability in the Union, the European Systemic Risk Board, should start functioning in 2011.

The ECB systematically monitors cyclical and structural developments in the euro-area to check the resilience of the system. This is done in collaboration with the EU national central banks and supervisory authorities within the ESCB's Banking Supervision Committee. The main reports of these analyses, which are published regularly, include the *Financial Stability Review*, the *EU Banking Sector Stability Report* and the *EU Banking Structure Report*. The purpose of the *Review* is to promote awareness in the financial industry and among the public at large of issues that are relevant for safeguarding the stability of the euro area financial system. The *EU Banking Sector Stability Report* reviews the main risks and financial conditions facing the EU banking sector and provides data on the profit and loss, balance sheet composition, asset quality and solvency of the banking sector. Finally, the *EU Banking Structure Report* assesses structural developments in the EU banking sector that can shape the sector's evolution as well as other relevant data.³

The CBM participates in many of these fora and regularly transmits relevant data to both the ECB and the IMF. Some of these data are included in the respective institutions' publications and are available on their websites, together with similar statistics compiled by other central banks. With regard to the IMF, the CBM participates in the Fund's project to publish Financial Stability Indicators (FSIs). These indicators are being regularly published on the IMF's website for all participating countries.⁴ Quarterly data for Malta are published both for domestically-oriented banks and for the banking sector as a whole. Quantitative information and qualitative assessments related to financial stability can also be found in the yearly IMF Article IV Consultation Mission Staff Report on Malta.⁵

¹ The IMF issues a Global Financial Stability Report - <http://www.imf.org/external/pubs/ft/gfsr/>

² Publications issued by the FSB are found on <http://www.financialstabilityboard.org/>

³ Publications available on <http://www.ecb.int/pub/pub/prud/html/index.en.html>

⁴ Available on <http://fsi.imf.org/>

⁵ Available on <http://www.imf.org/external/pubs/cat/longres.cfm?sk=23279.0>

to strengthen the liquidity resilience of banks through the introduction of two regulatory standards. The first, the *liquidity coverage ratio*, is intended to ensure that under an acute liquidity stress scenario banks have a sufficient amount of unencumbered high quality liquid assets that can be converted into cash to cover cumulative net cash outflows over a 30-day time horizon. As became evident during the crisis, a number of banks were relying on an unsustainable liquidity funding model. The other proposal is that banks should be required to hold a minimum amount of funding that is expected to be stable over a one-year time horizon based on liquidity risk factors assigned to assets and off-balance sheet liquidity exposures. This *net stable funding ratio* is intended to promote longer-term structural funding of bank balance sheets and off-balance sheet exposures.

From a macro-prudential perspective, the Bank is in favour of proposals aimed at strengthening the functional capacity of the financial system as a whole. The Bank is therefore supportive of the broad thrust of these proposals as, in its view, they should contribute to a reduction in systemic risk originating from the banking sector. The proposals are intended to enhance the macro-prudential goal of ensuring, as far as possible, that there is a sufficient quantity and adequate quality of both capital and liquidity built up by banks during periods of growth to be used in more stressful conditions. This should avoid negative feedback loops that can harm the economy during a downturn. The proposals of the BCBS, however, need to be considered together, and to be introduced gradually, so as to ensure that their introduction does not have unintended consequences, such as choking any incipient economic recovery.

As outlined in this FSR, the domestic banks have a high Tier 1 ratio relative to the CAR, and their leverage ratio is somewhat lower than that of a number of international banks. Thus, the domestic banks are well placed to make the adjustments necessary to meet the requirements of the proposed review of Tier 1 capital and of the leverage ratio. However, as also outlined in this FSR, the domestic banks' capital buffer needs to be strengthened. For while the banks' liquidity structure is quite strong, the proposed new regime may require a careful rebalancing of the redefined liquid assets so as to avoid an undue concentration of holdings of the same assets.

3.2 Crisis management framework and systemically important institutions

The EC has started a consultation process to review the crisis management framework within Member States and its ability to deal with the failure of a bank, whatever its size, while ensuring the continuity of essential banking services and minimising the impact on the financial system generally. The consultation will evaluate the early intervention procedures needed to restore the stability and financial soundness of an institution when problems arise; the resolution measures for managing an ailing bank in order to contain the impact on financial stability and to facilitate its orderly winding up; and the efficiency of the insolvency regime.

Within this context, the Bank, together with the MFSA and the MFEI, is also studying ways to strengthen the domestic resolution and insolvency regime so as to ensure the minimum cost and disruption in the event of the failure of an institution.

This review is being conducted in conjunction with parallel work in a number of international fora, including the IMF, the BIS and the FSB, to formulate guidelines on how national authorities can assess the systemic importance of financial institutions, markets or instruments. Proposals include the evaluation of the costs and benefits of introducing a capital and liquidity surcharge for systemically important banks. Other relevant work relates to the formulation of *living wills* for systemically important institutions, which could have implications for domestic subsidiaries of international cross-border banks. While living wills would help delineate how subsidiaries and other liabilities on the balance sheet of the parent institution are to be handled in case of failure, due consideration also needs to be given in such circumstances to the implications for the host country of systemically important banks that are subsidiaries of large international banks.

3.3 Accounting issues

Following a request by the EC, the IASB is currently revising the provisions of IAS 39. This is likely to result in significant changes in the way that financial institutions classify and measure financial instruments. Other on-going work by the IASB requested by the Commission relates to the allocation of provisions to reflect the need for early recognition of loan losses and to ensure that the provisioning framework is genuinely robust. These revisions are intended to ensure that accounting reforms address broader concerns on procyclicality and systemic risk.

3.4 The macro-prudential perspective

The above measures aim to address concerns at both the macro- and the micro-prudential levels. As the financial crisis has highlighted, a micro-prudential perspective is not sufficient to ensure the resilience of the financial system. A macro-prudential approach is also necessary in order to limit the costs to the economy of financial distress induced by the rational adoption of common approaches, or of behaviour by financial institutions that may result in unintended negative consequences at the macro level. Institutions do not normally internalise the cost of the build-up of risk across the system as a whole (systemic risks). The micro-prudential objective is the reduction of idiosyncratic risk so as to limit the likelihood of failure by individual institutions.

The recent crisis highlighted the fact that a macro-prudential framework was notably absent from the financial supervisory architecture. Hence, following the recommendations of the de Larosiere Report, a European Systemic Risk Board is being established within the EU. It is intended to become fully operative by 2011. The ESRB will conduct macro-prudential supervision, monitoring and assessing risks to the stability of the financial system as a whole and making recommendations to mitigate any resultant systemic concerns. The ESRB will not have direct tools to address identified risks, but it will issue warnings or recommendations to “the Community as a whole or to one or more Member States, or to one or more of the European Supervisory Authorities, or to one or more national supervisory authorities”. Recipients of such warnings will be required to explain the “actions undertaken in response to the recommendations” or explain why the recommendations have not been acted upon.³

The Bank, like most other central banks, is already charged by law to ensure the stability of the financial system. The new European architecture for financial stability puts at its centre the importance of a close central bank involvement in macro-prudential supervision, partly because central banks may be called upon to provide emergency liquidity in times of stress. As a result, a number of national central banks are restructuring their financial stability function through more active involvement in macro-prudential supervision so as to address systemic risks and to meet the eventual demands of the new European architecture.

³ Source: European Commission, Proposal for a Regulation of the European Parliament and of the Council on a Community macro prudential oversight of the financial system and establishing a European Systemic Risk Board.

4. RISK OUTLOOK

As in other jurisdictions, the risk outlook for financial stability in Malta has improved somewhat since the December 2008 FSR, but it still remains to a large extent uncertain due to weak and uneven economic growth prospects. In addition, any further erosion of competitiveness may inhibit the domestic economy from benefiting from the recovery in the major economies. Thus, there appear to be downside risks to household income prospects and corporate profitability, possibly exacerbating pockets of vulnerability and impairing debt servicing capacities. Though the impact is not expected to be widespread, thinned buffers and over-indebtedness are expected to affect the financial system, and the upward trend in non-performing loans evident through 2009 is expected to persist, particularly as these tend to react with a lag. The vulnerability of borrowers may be further exposed when interest rates eventually start to rise, though such a scenario is not expected to materialise suddenly. Indeed, central banks are expected to be cautious in implementing exit strategies.

This increase in credit risk in turn raises concerns about the adequacy of loan loss provisioning by banks. LLPs do not appear to be commensurate with the observed and possible further deterioration in the quality of banks' loan books. This weakness is in turn compounded by high concentration risks on account of the dominance of property-related loans, and this at a time when the outlook for the property market remains clouded by the prospect of a further period of subdued sales and soft prices.

Against this background, banks are expected to continue to reassess their risk appetite, to adhere to strict credit risk guidelines and to moderate expansion in their loan books. To date, however, no significant de-leveraging has been observed and none is anticipated. Indeed, the possibility of a credit crunch remains remote, particularly as credit demand has decelerated. Furthermore, the impact of the banks' caution is being mitigated by the fact that large corporates are increasingly diversifying their funding sources, primarily through issues of bonds. This transfer of risk from the banks (as lenders to the corporate sector) to households (as the major acquirers of new bond issues) looks set to continue. This, however, does not completely shield the credit institutions from risk, which, though reduced, is being transformed from a direct to an indirect risk via the impact of possible losses on household wealth.

The banks' ability to maintain high capital ratios may, therefore, come under pressure. Indeed, future profitability is unlikely to match pre-crisis levels. The turnaround in profitability recorded in 2009 was, to a large extent, attributable to the one-off effect of the reversal of the valuation losses registered in 2008. Bank net interest income declined, and for the foreseeable future it is likely to remain below pre-crisis levels against a background of slower growth in loan portfolios and intensified competition, particularly for deposits.

Thus, in the period ahead the banks may need to reassess their dividend policies in order to support an amount of capital commensurate with the risk embedded in their business model. This is necessary to strengthen the institutions' shock-absorbing capacity, since, as has been shown by the financial crisis, capital needs in a period of distress, both in terms of value and of quality, tend to be higher than indicated by minimum regulatory ratios. Indeed, the ongoing initiatives are likely to translate into stricter capital requirements. Similarly, the banks' liquidity strategies may need to be re-assessed too. Although the domestic banks' current liquidity ratios comfortably exceed regulatory requirements, the latter may become more stringent once the options being considered by international standard setters are implemented.

No major risks to financial stability are expected to arise from the insurance and investments sectors, particularly as these remain relatively small. However, contagion risk cannot be ignored, particularly on account of the close interconnectedness between these sectors and the credit institutions.

Overall, the Maltese financial sector, shielded as it was by its conservative retail funding model, showed resilience to the global financial crisis. In the near term, business practices are likely to remain unchanged, although falling profitability may induce firms to take greater risks. However, the likelihood that a prolonged period of low interest rates may encourage excessive risk taking by corporates and financial institutions alike

is not perceived to be very high at this stage. Indeed, if credit to sectors where bank exposures are already high slows down, financial stability conditions may even improve.

While the direct impact from the financial crisis diminished during the year under review, this was counterbalanced by adverse economic developments. As a result, the resilience of financial institutions is likely to be tested further. At the present juncture, however, no major system-wide shocks are expected to crystallise. Indeed, stress test results broadly confirm the banks' resilience. Still, upgrading institutions' shock absorption capacity remains imperative, and is likely to be the near-term focus of regulatory changes. Furthermore, a pro-active approach would soften the possible impact of the international regulatory overhaul when this is finally implemented.

On balance, therefore, the outlook points to further challenges ahead. These may be more or less severe, depending on the strength of the economic recovery and its sustainability, both of which remain uncertain.

**APPENDIX
AND
GLOSSARY**

Appendix: Financial Soundness Indicators

Core FSIs	COMPARATIVE INDICATORS 2003 - 2009 - (ALL FIGURES IN %)													
	Domestic Banks						Total Banks							
	2003	2004	2005	2006	2007	2008	2009	2003	2004	2005	2006	2007	2008	2009
Regulatory capital to risk weighted assets	17.38	19.04	17.08	14.99	14.74	14.60	15.18	19.61	21.45	20.36	22.01	20.30	17.75	23.91
Regulatory Tier 1 capital to risk-weighted assets	15.20	15.41	15.56	13.49	12.70	12.55	12.71	17.66	18.31	18.99	20.80	18.96	15.66	21.30
Non-performing loans net of provisions to capital	54.53	41.61	33.62	29.85	26.29	26.53	32.52	38.61	29.87	20.10	12.48	10.58	10.80	12.25
Non-performing loans to total gross loans	12.72	10.32	7.38	5.98	5.19	4.90	5.58	8.06	6.45	3.92	2.80	1.82	1.70	2.43
Sectoral distribution of loans to total loans														
Agriculture	0.31	0.32	0.28	0.29	0.28	0.25	0.30	0.20	0.20	0.15	0.13	0.09	0.08	0.11
Fishing	0.08	0.07	0.03	0.05	0.04	0.07	0.14	0.05	0.04	0.02	0.02	0.01	0.02	0.05
Mining and Quarrying	0.25	0.18	0.18	0.16	0.17	0.16	0.08	0.16	0.11	0.10	0.07	0.06	0.05	0.03
Manufacturing	7.87	6.00	4.88	3.91	4.22	4.23	3.47	4.99	3.69	2.52	1.77	1.42	1.31	1.32
Electricity, gas and water supply	3.57	3.60	2.27	2.77	2.77	4.15	5.11	2.26	2.29	1.17	1.25	0.93	1.28	1.92
Construction	8.57	8.48	8.02	8.49	9.54	9.11	8.67	5.43	5.21	4.14	3.89	3.20	2.81	3.26
Wholesale and retail trade; repairs	12.27	11.24	10.97	10.39	10.23	9.37	9.02	7.77	6.97	5.69	4.75	3.46	2.91	3.42
Hotels and restaurants	8.81	8.03	7.58	7.22	6.68	5.70	5.75	5.58	4.93	3.91	3.27	2.24	1.76	2.16
Transport, Storage and communication	5.77	4.96	4.58	4.99	4.54	5.35	5.68	3.66	3.05	2.37	2.26	1.52	1.65	2.14
Financial Intermediation	3.19	2.46	2.32	0.73	0.62	0.45	0.38	2.37	2.00	1.71	0.64	0.35	0.21	0.17
Real estate, Renting and business	5.05	5.39	7.09	8.97	10.20	11.58	12.14	3.20	3.31	3.66	4.07	3.42	3.58	4.60
Public Administration	0.16	0.20	0.86	1.46	1.32	0.88	1.31	0.16	0.12	0.44	0.66	0.44	0.27	0.49
Education	0.25	0.30	0.53	0.58	0.70	0.78	0.26	0.16	0.19	0.27	0.26	0.23	0.24	0.10
Health and Social Work	0.66	0.58	0.52	0.46	0.50	0.48	0.44	0.42	0.36	0.27	0.21	0.17	0.15	0.17
Community, recreational and personal service	1.27	1.16	1.10	1.16	0.97	0.84	0.75	0.80	0.72	0.57	0.53	0.33	0.26	0.28
Households and non-profit institutions	25.98	28.07	31.11	32.98	36.30	35.64	37.13	16.45	15.06	14.57	14.94	12.17	10.98	13.97
Extra-territorial organisations and bodies	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-resident	15.94	18.96	17.68	15.38	10.93	10.95	9.37	46.41	51.74	58.43	61.26	69.95	72.44	65.80
Return on assets	0.89	1.52	2.01	1.77	1.48	-0.34	2.07	1.03	1.39	1.61	1.20	0.98	0.62	1.78
Return on equity	8.30	12.01	16.30	15.34	13.72	-3.45	20.37	10.24	11.82	15.61	12.19	11.81	4.65	12.00
Interest margin to gross income	74.06	67.18	66.04	64.57	67.46	154.00	51.33	71.24	45.35	48.63	56.41	56.27	59.49	49.92
Non-interest expenses to gross income	56.73	46.31	46.01	44.07	43.57	106.11	37.75	57.29	47.22	41.37	44.39	53.78	60.41	26.60
Non-interest income to gross income	25.94	32.82	33.96	35.43	32.54	-54.00	48.67	28.76	54.85	51.37	43.59	43.73	40.51	50.08
Liquid assets to total assets	20.67	20.91	23.07	21.76	24.31	20.34	20.86	24.63	24.25	21.74	19.73	21.87	17.56	16.47
Liquid assets to short-term liabilities	46.90	46.68	53.03	50.32	49.03	45.09	43.67	54.99	53.43	55.72	52.54	52.67	49.49	47.53
Other FSIs														
Coverage ratio	22.24	24.69	27.10	29.67	26.18	24.15	21.86	23.31	25.88	28.83	31.82	28.86	30.19	35.43
Domestic Investment Securities to Total Assets	13.18	13.01	12.26	9.12	9.36	9.31	10.89	8.04	7.38	5.57	4.05	3.42	3.15	3.96
Foreign Investment Securities to Total Assets	15.42	18.42	19.18	17.93	16.17	14.83	13.94	24.77	29.16	31.62	32.18	23.83	18.24	23.16
Unsecured Loans to Total Lending	35.27	35.81	32.32	30.87	26.27	25.93	25.28	37.92	39.38	39.46	40.68	36.72	36.51	35.20
Assets to Total Capital and Reserves (*)	8.04	7.89	8.37	9.15	9.52	10.47	9.37	7.30	7.31	7.77	7.04	7.29	7.95	6.55
Large exposure to capital	136.77	92.08	153.17	157.81	159.03	159.13	160.69	115.28	88.06	134.17	130.55	134.78	109.64	88.62
Gross asset position in financial derivatives to capital	0.67	1.20	2.40	2.98	3.63	15.04	1.12	0.54	0.87	1.43	1.24	1.75	5.88	0.53
Gross liability position in financial derivatives to capital	3.36	3.70	2.99	3.33	2.36	8.30	4.00	2.39	2.66	1.87	1.41	1.13	5.07	1.64
Personnel expenses to non-interest expenses	56.81	59.17	54.03	53.85	55.86	56.79	56.19	34.78	38.85	40.85	36.80	25.65	26.37	39.78
Customer deposits to customer loans	136.64	137.19	135.79	130.36	141.18	126.07	125.58	102.22	102.45	101.93	78.43	69.32	61.60	79.70
Net open position in equities to capital	51.65	44.85	47.10	48.43	41.25	20.89	41.18	42.22	38.23	34.53	24.94	20.65	11.64	17.88

(*) expressed as a ratio.

GLOSSARY

Capital Adequacy Ratio (CAR): A measure of the amount of a bank's regulatory capital expressed as a percentage of its risk weighted assets.

Compensation of employees: Total remuneration in cash or in kind payable by an employer to an employee in return for work done by the latter.

Core Capital Adequacy Ratio (CCAR): Original own funds capital expressed as a percentage of risk-weighted assets.

Corporate sector – deposit to loan ratio: Deposits of public and private non-financial companies resident of Malta to their borrowing.

Coverage ratio: Specific and general provisions expressed as a proportion to non-performing loans.

Credit Default Swap: A swap designed to transfer the credit exposure of fixed income products between parties. The buyer of a credit swap receives credit protection, whereas the seller of the swap guarantees the creditworthiness of the product. Thus, the risk of default is transferred from the holder of the fixed-income security to the seller of the swap.

Customer deposit-to-loan ratio: The proportion of customer deposits to customer loans. The ratio includes all-currency deposits and loans of: (i) money market funds (ii) central government (iii) other general government and (iv) other remaining economic sectors, excluding the financial intermediation sector.

Funding gap: The difference between the amount of customer loans and the amount of customer deposits expressed as a percentage of the outstanding loans. A positive ratio indicates reliance on wholesale/inter-bank funding.

General provisions: Provision charges on the lending portfolio which may carry potential losses but have not yet been unidentified as such.

Gross Problematic Assets: Defined as the sum of non-performing loans and rescheduled facilities

Housing affordability: The ratio of median household income to the income needed to qualify for a mortgage on a median-priced home.

Interest payment burden: The interest payments related to a debt but excluding principal repayment.

Interquartile range: This reflects the difference between the upper and the lower quarter.

Leverage ratio (assets to capital and reserves/shareholders' funds): Assets are equivalent to total assets. Capital and reserves/shareholders' funds include ordinary shares, share premium, perpetual preference shares and reserves and capital contributions. This indicates the extent to which assets are funded by other than capital and reserves. A high ratio indicates a high degree of reliance on external debt financing.

Liquid assets-to-short-term liabilities: In terms of Banking Rule BR/05/2007 issued by the MFSA, credit institutions are required to hold a minimum liquid-asset proportion of 30% of the total deposit liabilities net of deductions (specified in the Rule). For the purposes of this ratio, liquid assets held are deemed to be the total assets as specified in the Rule and include cash and balances held with the Central Bank of Malta, treasury bills and similar securities, other eligible bills, deposits held with other credit institutions, debt securities, gold and other bullion and investments in Collective Investment Schemes. Short-term liabilities are also specified in the Rule and include the amounts owed to banks and customers which

amounts are withdrawable on demand or short notice; which have a remaining time to maturity of less than three months or less; which can be withdrawn at any time against a penalty; and any other borrowing which is repayable either on demand or with a remaining term to maturity of seven days or less but excluding intra-group borrowings.

Liquid assets-to-total assets ratio: Liquid assets as specified in Banking Rule BR/05 issued by the MFSA as a proportion to total assets.

Living wills: This is a tool for crisis management, as they stipulate recovery and resolution plans which the bank is required to have in place should it fall under extreme stress. The recovery plan is about financial continuity, the measures the bank would take to maintain adequate capital and liquidity levels in times of financial stress.

Loan-to-Deposit ratio: The value of loans expressed as a proportion of the amount of deposits.

Loan-to-Value ratio: The amount lent for the purchase of a property as a proportion of the value of the property purchased.

Net open position of equities to capital: The sum of on-balance-sheet holdings of equities excluding shares issued by a subsidiary or parent Monetary Financial Institution. Capital is equivalent to regulatory capital.

Non-performing loans: Credit facilities with payments of interest and/or capital overdue by 90 days or more as well as those facilities which a credit institution has reasons to doubt the eventual recoverability of funds.

Non-performing loans ratio: Non-performing loans expressed as a percentage of total loans outstanding.

One month maturity mismatch: The difference between the value of loans and deposits maturing within one month.

Operating surplus: Income obtained from production activities as measured in the national accounts.

Other remaining economic sectors: These include: (i) insurance companies and pension funds; (ii) other financial intermediaries and financial auxiliaries; (iii) non-financial companies (public and private); and (iv) households and non-profit institutions serving households.

Price Discovery: The determination of the price for a specific security through basic supply and demand factors related to the market.

Procyclicality: Mechanisms through which financial sector activities can amplify natural fluctuations in the economic cycle, and which may be particularly disruptive during an economic downturn or when the financial system is under strain.

Re-pricing gap: Useful indicator to measure the sensitivity to interest rate risk. The larger the gap between the re-pricing of assets and liabilities the greater the interest rate risk.

Return on Assets (ROA): Annual net income before tax divided by a twelve month average value of total assets.

Return on Equity (ROE): Annual net income before tax divided by a twelve month average value of shareholders' funds.

Risk-weighted assets: These are computed in accordance with the Capital Requirements Directive (CRD) which specifies weighting according to the degree of risk attached to the particular asset.

Specific provisions: Provisions set aside for doubtful/loss facilities. Specific provisions should at least be equal to the loss not covered by collateral in the event of default.

TARGET2: The real-time gross settlement system (RTGS) system for the euro, offered by the Eurosystem. It is used for the settlement of central bank operations, large-value euro interbank transfers as well as other euro payments. It provides real-time processing, settlement in central bank money and immediate finality.

Tier 1 Capital: The bank's core capital mainly composed of equity capital and disclosed reserves.

Tier 2 Capital: It includes, *inter alia*, undisclosed reserves, revaluation reserves, general provisions and subordinated term debt.

Tier 3 Capital: Capital held by banks at the discretion of the national supervisor for the sole purpose of meeting a proportion of the capital requirements for market risks. It is generally considered of lower quality compared to Tier 1 and Tier 2 capital.

UCITS: Undertakings for Collective Investment in Transferable Securities

Weighted average interest rate: The interest rate charged to each economic sector multiplied by the latter's share in total outstanding loans.