

Financial Stability Report 2008



BANK ĊENTRALI TA' MALTA
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CENTRAL BANK OF MALTA

FINANCIAL STABILITY REPORT

2008

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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.

Financial Stability Committee

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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

CONTENTS

GOVERNOR'S STATEMENT	9
OVERVIEW.....	11
1. MACROECONOMIC ENVIRONMENT	13
1.1 External macroeconomic and financial conditions	13
1.2 Domestic macroeconomic conditions	15
1.2.1 Macroeconomic environment	15
1.2.2 The household sector	15
1.2.3 The corporate sector	16
1.2.4 The real estate market	18
2. THE FINANCIAL SYSTEM	19
2.1 Market infrastructure.....	19
2.1.1 Financial system structure	19
2.1.2 Markets structure	20
2.2 The banking sector	23
2.2.1 Balance sheet	23
2.2.2 Profitability	34
2.2.3 Capital adequacy	37
2.3 Non-bank financial sector	42
2.3.1 Insurance sector	42
2.3.2 Investments sector.....	44
3. POLICY RESPONSES AND IMPLICATIONS.....	45
3.1 Liquidity	45
3.2 Asset valuation	45
3.3 Dynamic provisioning.....	46
3.4 Bank insolvency.....	47
4. RISK OUTLOOK	48
GLOSSARY	53
Box 1: International responses to the global financial crisis.....	14
Box 2: Direct and indirect participation in TARGET2	24
Box 3: Bank Lending Survey.....	29
Box 4: Stress test analyses.....	39

APPENDICES

Appendix 1: Financial Soundness Indicators	51
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CHARTS & TABLES

Chart 1: Contribution to GDP	15
Chart 2: Household assets, liabilities and net financial wealth	16
Chart 3: Performance by sector in terms of operating surplus	17
Chart 4: Housing affordability index and house price index	18
Chart 5: Share of securities and equities by type of holders	20
Chart 6: Indices of selected stock exchanges	21
Chart 7: 10 year yields of selected government papers	22
Chart 8: Evolution of selected rates	23
Chart 9: Balance sheet asset structure	23
Chart 10: Private sector and public non financial companies to GDP	25
Chart 11: Year-on-year lending growth to selected non-financial sectors	26
Chart 12: Property related loans	26
Chart 13: NPLs of banks	28
Chart 14: NPLs ratio – selected economic sectors	28
Chart 15: Private sector and public non financial companies deposit and credit to GDP	31
Chart 16: Customer loans to customer deposits ratio and funding gap.....	32
Chart 17: One-month maturity mismatch	32
Chart 18: Average repricing gap	33
Chart 19: Possible channels of financial contagion.....	34
Chart 20: ROE and ROA.....	35
Chart 21: Interquartile ROE.....	35
Chart 22: Interest rate margin	36
Chart 23: Capital adequacy ratio.....	37
Chart 24: The likelihood and impact of stress test scenarios	38
Chart 25: Asset quality deterioration	40
Chart 26: Liquidity withdrawal	42
Chart 27: Life and non-life assurance investment assets.....	43
Table 1: Interbank exposures.....	34
Table 2: Components of return on equity	36
Table 3: Economic downturn.....	40
Table 4: House price correction	41
Chart B2.1: Considerations for choosing indirect participation in TARGET2.	24
Chart B3.1: Selected factors contributing to changes in credit standards – Loans to enterprises.....	29
Chart B3.2: Selected factors contributing to changes in credit standards – Loans for house purchase.....	30
Chart B3.3: Selected factors contributing to changes in credit standards – Loans for consumer spending..	30
Chart B4.1: Distribution of losses on a hypothetical loan portfolio	39

ABBREVIATIONS

BCBS	Basel Committee on Banking Supervision
BLS	Bank Lending Survey
bps	Basis points
CAR	Capital Adequacy Ratio
CCAR	Core Capital Adequacy Ratio
CEBS	Committee of European Banking Supervisors
CEIOPS	Committee of European Insurance and Occupational Pensions Supervisors
CESR	Committee of Securities Regulators
CIS	Collective Investment Scheme
CR2	The percentage share of the two largest credit institutions, ranked according to assets, in the sum of the assets of the credit institutions included in the financial stability analysis.
CR5	The percentage share of the five largest credit institutions, ranked according to assets, in the sum of the assets of all the credit institutions in a Member State
CRD	Capital Requirements Directive
ECB	European Central Bank
ECOFIN	The Economic and Financial Affairs Council
EONIA	Euro OverNight Index Average
EU	European Union
FSF	Financial Stability Forum
FTSE	Financial Times Stock Exchange Index
GAAP	General Accounting and Auditing Principles
GDP	Gross Domestic Product
HAI	Housing Affordability Index
HHI	Herfindahl-Hirschman Index
HHR	Hui-Heubel Ratio
HICP	Harmonised Index of Consumer Prices
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
LLPs	Loan Loss Provisions
MFSA	Malta Financial Services Authority
MGS	Malta Government Securities
MSE	Malta Stock Exchange
NPISH	Non-Profit Institutions Serving Households
NPLs	Non-Performing Loans
P/E ratio	Price earning ratio
PIFC	Professional Investor Funds Companies
PSC	Private Sector Credit
PSD	Payment Services Directive
ROA	Return on Assets
ROE	Return on Equity
RRR	Risk Retention Ratio
RWA	Risk Weighted Assets
T/B	Treasury Bills
UCITS	Undertakings for Collective Investment in Transferable Securities

GOVERNOR'S STATEMENT

The Central Bank of Malta is charged by law to ensure the stability of the financial system in Malta. In fulfillment of this statutory responsibility, the Bank monitors the various components of the financial system on an ongoing basis with a view to identifying potential risks to which they may be exposed, and advocates measures and policies designed to safeguard the system against such risks.

Since 2004 the findings of the Bank's financial stability analyses have been contained in internal reports, which have been shared with the MFSA and other relevant authorities who also have an interest in the stability of the system. In addition, the Bank has regularly published a synopsis of these findings in its Quarterly Review and Annual Report.



Financial market developments in recent years, particularly the enhanced intermediation role of credit institutions, have tended to accentuate the natural interest of central banks in safeguarding financial stability. This concern has been reflected in a strengthening of the Bank's capacity to analyse and interpret relevant developments. The current topical interest in financial stability issues and the wealth of pertinent information available now call for a wider dissemination of the Bank's work in this field. Starting this year, therefore, the Bank will be publishing a Financial Stability Report on an annual basis.

The publication of this first edition of the Report covering 2008, in an electronic version for the time being, coincides with a crisis of unprecedented proportions in the global financial system. For reasons that have been explained in the Bank's Annual Report 2008, the domestic banking sector has not been directly affected by the crisis. The resilience of the sector is confirmed by the results of stress tests carried out in connection with this Report, which show that the banks generally have adequate capital buffers and sufficient liquidity to withstand extreme, but plausible shocks. The liquidity profile of the banks remains strong, largely supported by their focus on funding their liquidity needs through retail deposits. Most banks, however, registered lower profits in 2008, in large part a reflection of valuation losses experienced as a result of the generalised decline in asset prices. The fall in the share prices of quoted banks, in turn, appears to have been more a reaction to lower profitability and diminished dividend expectations than to a loss of confidence in the banks.

As with banks elsewhere, credit institutions in Malta are increasingly vulnerable to the negative feedback from the sharp slowdown in the real economy. Going forward, non-performing loans of the non-financial sector are likely to increase as debt-servicing capabilities deteriorate during 2009. This expectation is linked in particular to the significant concentration risk to which banks in Malta are exposed, stemming from both a direct, and an indirect exposure through collateral, to the property sector. As the repricing of risk is likely to continue in the near term, moreover, there will also be further downside risks to earnings growth.

As the domestic financial system is still vulnerable to secondary shocks, largely stemming from valuation effects, dysfunctional international market conditions and diminished debt repayment capacities of corporations and households in the context of a decelerating domestic economy, the banks would do well to strengthen capital buffers further beyond statutory ratios. This should help the banking system become less vulnerable to risks originating from these sources.

Michael C Bonello

OVERVIEW

Macroeconomic environment

The international financial crisis worsened considerably during the last quarter of 2008, requiring extensive measures to stabilize the financial system. Although, to an extent, these measures have had a calming effect, the magnitude of the losses incurred and the extent of deleveraging by many institutions resulted in a slowdown of the global economy, exacerbating systemic risks and vulnerabilities. As a result, the prospects for the Maltese economy have also deteriorated. Owing to its openness, it is likely that the latter will grow at a significantly slower pace in the coming months.

Although leverage has increased, the household sector's net financial wealth buffer remains strong, giving it sufficient leeway to withstand adverse shocks, while the interest rate cuts announced since the latter part of 2008 will reduce household's interest payment burden. However, as the outlook for the labour market deteriorates, the risks to the household sector will intensify, and its ability to service debt will decrease.

National accounts data suggest that, in aggregate, the corporate sector performed reasonably well in 2008, but the *manufacturing* and the *hotels & restaurants* sectors registered lower operating surpluses. Although improved profitability may have had a favourable impact on companies' debt servicing capabilities, lower interest rates had an even greater impact. As global economic conditions deteriorated later in the year, the prospects for the corporate sector became less optimistic and order books fell. Hence, the corporate sector's liquidity and debt servicing capacity is likely to deteriorate. Due to their exposure to international developments, the manufacturing sector and the tourism sector, in particular, will probably face higher risk.

The financial system

The Maltese financial system is dominated by credit institutions. Furthermore, asset concentration is high in both the banking sector and the insurance industry. Mirroring developments elsewhere, the domestic capital market performed badly in 2008, primarily because bank equity lost value. At the same time, trading activity and liquidity in the market remained low, indicating lack of depth.

In spite of the international crisis, however, the banks in Malta remained sufficiently liquid and well capitalised to continue to extend credit, with lending to the corporate sector, apparently for operational purposes, outpacing lending to households. Although deposit inflows decelerated, the traditional dependence on retail deposits became more pronounced as market-related activities slumped. The extent of such indebtedness and the expectations of a slowing economy raise financial stability concerns as the repayment capability of the non-financial sector might be impaired. This would put pressure on the banks' profitability and capital through higher default rates. Meanwhile, concentration within the loan portfolio remains high. Therefore, credit creation is expected to slow down in the coming months, in line with weakening economic activity.

Although non-performing loans decreased in relation to the banks' total loan portfolio, this was largely due to the statistical effect of a larger loan portfolio. Indeed, the non-performing loans of the non-financial sector increased in absolute terms. As the economy slows down, credit risk could become more pronounced, resulting in higher default rates in the medium term. This could be exacerbated by the size of the property-related collateral portfolio and low provisioning underpinning some banks' exposure to such risk. Hence, given the unfavourable international economic outlook and the ongoing correction in the domestic property market, which remains characterised by oversupply, provisioning levels may need to be increased.

The banks' traditional reliance on retail deposits as their main source of funding meant they did not suffer from the liquidity crunch reported by a number of banks elsewhere. Indeed, although lending outstripped deposit growth during 2008, the banks were sufficiently liquid to continue to extend credit without resorting to rationing.

However, the extent of mismatch implies a degree of refinancing risk going forward. In line with international developments in respect of liquidity risk management, the domestic banking sector is expected to continue to strengthen its management capabilities in this area through robust internal governance, monitoring, stress testing and adequate contingency funding plans. Market risks remained generally low.

Profitability dropped significantly as a result of valuation losses as well as lower foreign exchange earnings following the adoption of the euro in January 2008. But there was substantial dispersion in the profitability recorded. Banks' reliance on net interest income increased during the year. Although the reduction in deposit interest rates was smaller than that in lending rates, the increase in the ratio of net interest income to gross income was largely due to the statistical effect arising from the drop in gross income. Banks also reported higher non-interest expenses, while non-interest income turned negative on account of valuation losses.

Capital adequacy ratios, though lower than in December 2007, remained high. This was partly due to a larger increase in risk-weighted assets than in total own funds and partly to lower generation and retention of profits. As the requirements for the allocation of capital will be completed when the Capital Requirements Directive is fully implemented, the banks will need to strengthen their capital buffer to cover concentration and other Pillar 2 risks.¹ As explained in this Report, the Bank has carried out univariate stress tests in respect of a house price correction, a mild recession and a credit quality deterioration in order to test the banks' capital robustness. The Bank also undertook a liquidity stress test on the banks to assess the effect of an extended deposit withdrawal. Under a number of assumptions, these tests showed a generally healthy capital and liquidity situation with regard to the aforementioned extreme but plausible events.

As a result of the global financial turmoil, the challenges faced by the insurance sector in Malta intensified in 2008, largely on account of increased market risk, while the outlook for 2009 is more challenging. Nevertheless, the sector continued to grow, with life assurance remaining the main driver behind this growth. Meanwhile, risks to financial stability from the investment funds sector remained limited, given its relatively small size.

Policy responses and implications

The Bank continues to assess the implications of the various best practice guidance and recommendations issued by international standard setting bodies in respect of a number of key issues which have come to the fore in the wake of the on-going financial turmoil. These include enhanced liquidity management and financial transparency, together with proposals to lessen the procyclical effect from uneven loan loss provisioning and to strengthen crisis resolution.²

¹ The Capital Requirements Directive is the European Union Directive that establishes methodologies for the measurement of capital in relation to an institution's exposure to credit, market, operational and other risks. Pillar 2 of the Capital Requirements Directive establishes the measurement of capital required to cover certain types of risks, such as concentration risks and interest rate risks in the banking book.

² Procyclicality can be defined as a tendency to amplify swings in the performance of the economy and/or the financial system.

1. MACROECONOMIC ENVIRONMENT

1.1 External macroeconomic and financial conditions

The last decade witnessed aggressive lending, low global interest rates, a profusion of innovative financial products offering higher returns (but entailing increased risk and lack of transparency), high leverage, underestimation of risks and imprudent risk management policies by some institutions. These were the ingredients that gave rise, in the course of 2007, to what was initially a non-systemic problem in the subprime market in the United States. The turmoil spread globally, affecting a number of institutions and markets. Several large institutions faced solvency and liquidity problems and were either rescued by the authorities or taken over by competitors. This turmoil became a systemic crisis in September 2008, following the failure of Lehman Brothers, as the crisis continued to spread across countries and markets failed. Highly volatile markets displayed considerable stress as money markets became the transmission channel for loss of confidence. But markets did not function properly: the interbank market seized up, prices were no longer discoverable and money markets ground to a standstill. As a result, risks and vulnerabilities increased, fuelling an all-pervasive negative sentiment. This resulted in the biggest shake-up in the financial industry for many years. Against this background, spreads increased dramatically and interbank rates rose sharply as access to liquidity became even more difficult in spite of continued liquidity injections by central banks through various types of refinancing operations. Similarly, credit default swap spreads widened throughout most of the period.

In the latter part of the year, global economic conditions worsened abruptly as the financial turmoil reached crisis proportions and the global financial industry started to deleverage sharply. The competent authorities all over the world took a number of measures to reinforce the financial system and boost their economies (Box 1). In this respect, the reinforcing feedback between the economic outlook and financial markets remains the most important risk to financial stability. The economic environment is clearly being affected by the financial crisis, with banks tightening their lending standards and households reducing consumption. At the same time, house prices are declining, not only in the United States but also in a number of European countries – especially the United Kingdom, Ireland and Spain. Meanwhile, a number of industries, including manufacturing, the airline and the automotive industries, found themselves in severe difficulties, partly due to the economic downturn and partly on account of higher costs and exchange rate pressures. Economic conditions are generally expected to deteriorate further during 2009.

The euro area economic growth rate for 2008 was 0.8%, while the United Kingdom and the United States grew by 0.7% and 1.1%, respectively.³ Yet even these low levels of growth are expected to evaporate through 2009, with the euro zone GDP expected to contract by 2.2% to 3.3% whilst the United Kingdom and the United States are forecast to contract by 3% and 2.8%, respectively.⁴ Moreover, in most developed countries, the unemployment rate is expected to rise as the recession deepens.

The main central banks started to implement accommodative monetary policies, particularly in the second half of the year, as inflationary pressures and consumption declined on a global level whilst recessionary pressures increased and commodity prices fell. The monetary policy responses were unprecedented, not only in the rapidity with which interest rates were cut, but also with regards to the extent of the cuts. Indeed, by end-2008, the ECB minimum bid rate/fixed rate had been brought down by 175 bps to 2.5%, whilst the Bank of England had reduced its Bank Rate by 350 bps to 2%. The measures taken by the US Federal Reserve were even more dramatic, with interest rates being slashed by 400 bps through 2008, to end December at 0%-0.25%, the lowest level ever recorded in the United States. These measures should ease the burden on mortgage and corporate loan repayments and assist the economic recovery. During January and February 2009, the ECB's intervention rate and that of the Bank of England were lowered by a further 50bps and 100bps, respectively, with a further cut of 50bps being made in March. These cuts brought the respective intervention rates down to 1.5% and 0.5%, and the ECB cut a further 25 bps in the following month.

³ Source: Eurostat.

⁴ Source: Euro area forecasts as published in the ECB Monthly Bulletin March 2009. Other forecasts are based on the Consensus Forecasts (March 2009).

Box 1 : International responses to the global financial crisis

In response to the intensification of the crisis, governments and central banks throughout the world adopted policies aimed at rescuing their financial systems from collapse, whilst governments also undertook a number of fiscal measures to stimulate their economies. The ECB and the EU also took measures to stabilise the financial system.

The measures and policies adopted included:

- i. The extension in the scale and of the maturities of loans provided to banks by central banks and the extension of such loans to new counterparties.
- ii. The widening of the collateral framework by central banks.
- iii. The provision of swap lines and other enhancements for longer-term refinancing, including the provision of United States dollars, to improve the provision of liquidity to the market. Some central banks have also provided facilities to exchange securitised loans for government paper.
- iv. The coordinated easing of monetary conditions.
- v. The provision of support to systemically important institutions, including additional capital to prevent their failure, and the part-nationalisation of banks and other institutions.
- vi. The strengthening of depositor compensation schemes.
- vii. The prohibition of *naked* short selling of financial instruments.⁵
- viii. The enhancement of transparency by obliging banks to disclose the true state of their losses.
- ix. Changes to accounting standards.
- x. Insuring interbank lending.
- xi. Creating protection funds for the removal of troubled assets from banks' balance sheets and/or providing insurance against further losses.
- xii. The possible creation of asset removal schemes through direct government purchases or the setting up of *bad banks* to warehouse toxic assets held on the balance sheets of major financial institutions.

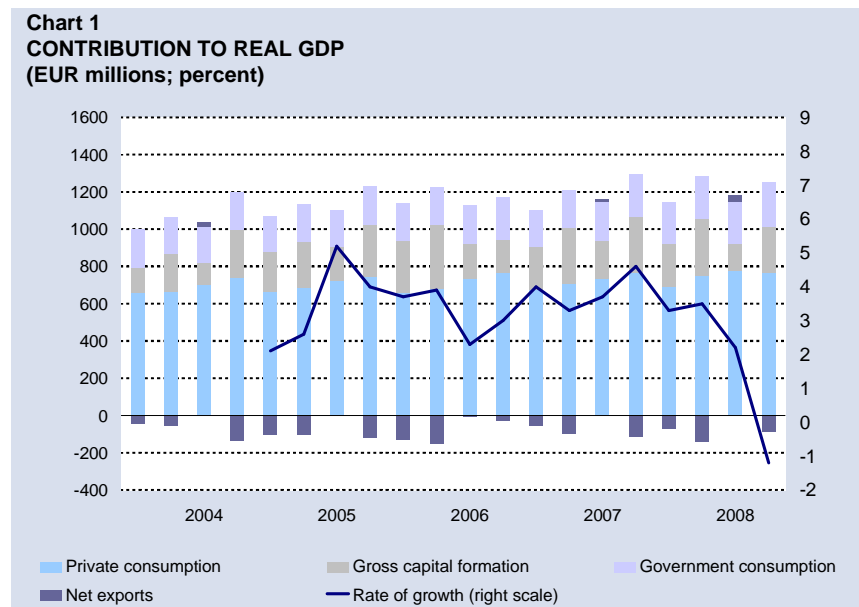
The European Commission adopted a three-pronged approach to deal with the crisis: redesigning the EU's financial market architecture; dealing with the fall-out from the financial crisis on the real economy; and putting the EU at the forefront of the global response to the financial crisis. Thus, the European financial sector's regulatory and supervisory model is to be reviewed. Indeed international consensus is building up to revisit the global regulatory framework. In October 2008 the European Commission established the High Level Experts Group on financial supervision in the EU under the chairmanship of Jacques de Larosiere, with a mandate to make proposals to strengthen European supervisory arrangements covering all financial sectors with the objective of establishing a more efficient, integrated and sustainable European system of supervision. The Group presented its report in February 2009. The European Commission has also made proposals to modify the Capital Requirements Directive. Other policy responses focused on the regulation of credit rating agencies and changes to accounting standards whereby European banks were allowed to reclassify their held-for-trading assets into the held-to-maturity category, thereby avoiding distortions in their financial statements as a result of the failure of price discovery. The European Council also endorsed a comprehensive recovery plan based on a higher co-ordinated fiscal stimulus to restore consumer and business confidence, to restart lending and stimulate investment, to create jobs and to help the unemployed.

⁵ Naked short selling generally refers to the shorting of a stock for sale without first borrowing it.

1.2 Domestic macroeconomic conditions

1.2.1 Macroeconomic environment⁶

After growing steadily since 2005, Malta's GDP slowed down to a growth rate of 1.6% in 2008 from 3.6% in 2007, reflecting the deteriorating global economic conditions. A further slowdown is expected in 2009, with growth forecast between 0.5% and 1.1%. However, there are significant downside risks to these projections on account of the ongoing recession and the openness of the economy.



Domestic demand remained strong, with private consumption increasing during 2008 (Chart 1). Owing to a more pronounced drop in exports than in imports, however, the visible trade gap widened, and the current account deficit is estimated to have widened accordingly. The global recession and concurrent weakness of the dollar and sterling is leading to a fall in demand for Malta's exports and an erosion in price competitiveness. In some cases this has resulted in reduced working days per week and in lay-offs. The labour market is also expected to face further strains, with the unemployment rate forecast to rise to between 6.2 and 6.6% in 2009. Similarly, the recession and the weakness of sterling are expected to negatively affect the tourism sector in 2009.

The annual HICP inflation rate ended 2008 at 5%, (January 2009: 3.1%) somewhat higher than the average for the euro area, reflecting higher energy and food prices in Malta. The higher level of inflation reduces competitiveness and places an additional burden on the debt servicing capacity of the non-financial sector, though these pressures may be mitigated by the significantly lower interest rates. Furthermore, as HICP inflation is expected to decline in the short to medium term, these pressures are expected to ease in the short run.

1.2.2 The household sector

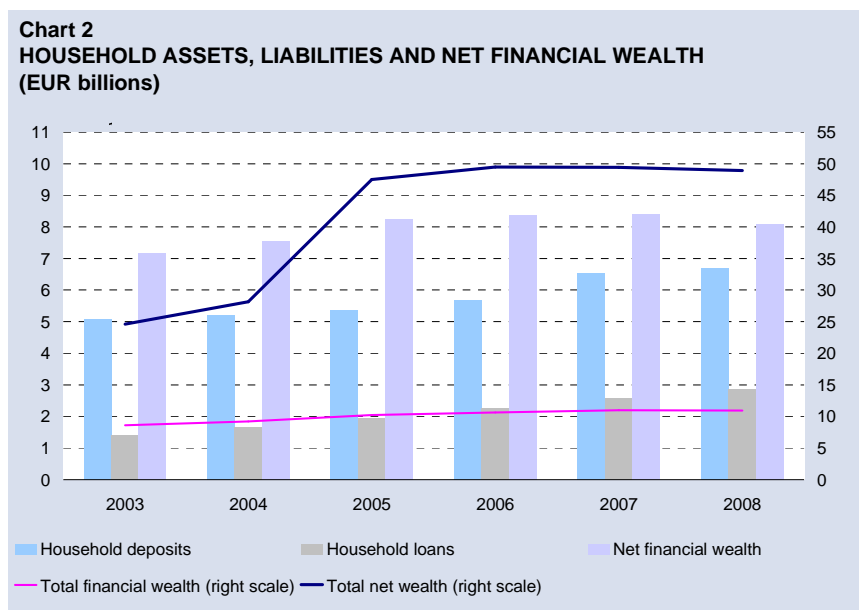
As the global turmoil intensified, and macroeconomic conditions became more uncertain, consumer confidence diminished. Indeed, confidence fell to low levels in December 2008 and is expected to deteriorate further in 2009.⁷ Although the overall financial condition of the household sector remained relatively strong, the risks to the more vulnerable households have increased.

⁶ A more detailed analysis of domestic macroeconomic conditions is found in the Annual Report 2008 issued by the Central Bank of Malta.

⁷ Source: European Commission, Directorate-General for Economic and Financial Affairs, Business and Consumer Survey Results, December 2008.

Balance sheet conditions

During recent years, as house prices rose, households were able to accumulate a higher wealth buffer and to strengthen their balance sheet (Chart 2). This robustness was dented in 2008 as the value of housing equity declined and household debt continued to increase. Household debt represented 26.1% of households' financial assets in 2008, up from 23.4% in 2007, but relative to GDP it remained relatively stable, at 50.4%⁸. The increased debt was mainly channelled to the purchase of real estate, though some was used to finance consumption. Although the house price index dropped by 2.7% during the year, the average value of a mortgage loan increased by 8.6% to almost €45,000, implying a higher burden per mortgage loan account. The average value of a non-mortgage personal loan increased by 18% but was still relatively low, at about €3,600. Deposits increased by 2% during the year, but the investment portfolio of the household sector contracted, partly due to the valuation effects on some of the assets held on account of the financial crisis. As a result, the net financial wealth of the household sector dropped by 4.1%.⁹ At the same time, leverage deteriorated, with household borrowing going up to 5.8% of households' net total wealth and 35.4% of net financial wealth, from 5.2% and 30.6%, respectively, in December 2007.



Debt servicing

As the proportion of variable-rate loans is large, the higher interest rates in the first part of 2008 resulted in a higher interest payment burden. Following the rate cuts announced by the ECB in the last months of the year, however, the burden eased. As a result, households' interest payments as a proportion of the compensation of employees declined to 5.3% as at December 2008 (2007: 6.3%). However, the more challenging financial conditions during 2008 were reflected in a slight rise in the ratio of household non-performing loans to total household loans, which went up from 2.3% in December 2007 to 2.6% at end-2008. Going forward, the risks to the household sector have increased, as the more uncertain macroeconomic environment has resulted in a bleaker outlook for the labour market and, consequently, for the ability of the household sector to service its debt.

1.2.3 The corporate sector

Contrary to the experience of a number of countries, borrowing by the Maltese corporate sector accelerated in 2008. Nonetheless, the global recession has resulted in increased uncertainty, with a number of firms

⁸ The household loans to GDP ratio for the euro area as a whole stood at 53.1%. Source: ECB Monthly Bulletin (March 2009).
⁹ Source: Central Bank of Malta estimates.

being forced to downsize or close in the latter part of the year.¹⁰ This uncertainty was reflected in the confidence index, which plunged in terms of both export order books and production expectations.¹¹ In addition, the weakness of sterling is likely to exacerbate the negative impact on the tourism sector.

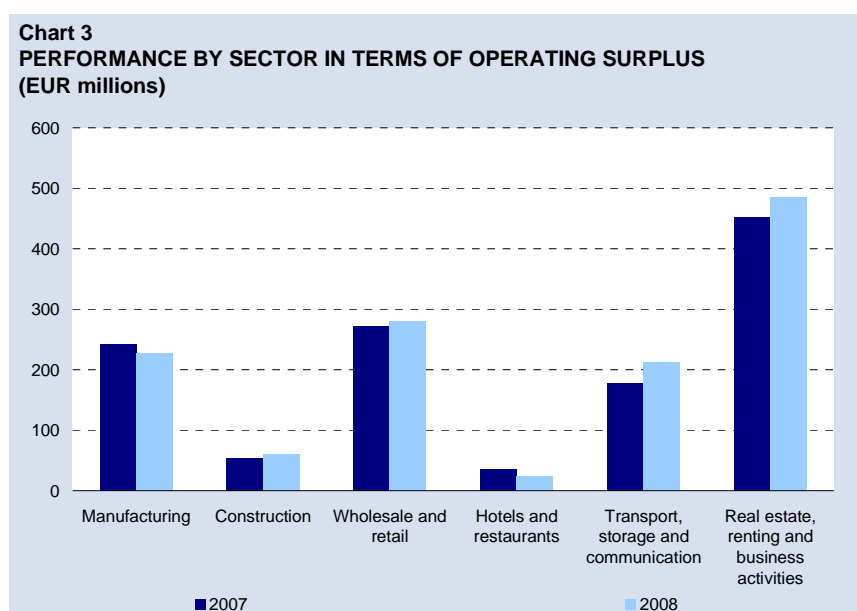
During 2008 corporate borrowing (excluding financial intermediation) grew by 14.7%, up from 6.6% in 2007. The ratio of domestic corporate borrowing (including capital market debt) to GDP rose from 73% in December 2007 to 81% at end-2008. As gross fixed capital formation decreased during the year, the additional borrowing seems to have been intended for operating purposes. At the same time, the loans-to-deposits ratio rose from 2.4 in 2007 to 3.0 in 2008, as corporate loans kept on rising while deposits dropped. At this level, however, the loans-to-deposits ratio was still below the euro area average of 3.2.

Profitability

A sectoral analysis of national accounts data suggests that the performance of the corporate sector was somewhat mixed during 2008. The *construction, wholesale & retail, transport & communication* and *real estate & renting* sectors registered higher operating surpluses than in 2007, whereas the *manufacturing* and the *hotels & restaurants* sectors recorded lower surpluses. However, the surpluses of the *construction* and the *hotels & restaurants* sectors remained very low (Chart 3). The impetus to economic growth weakened in the latter part of 2008, and is likely to weaken further in 2009.

Debt servicing

Bank borrowing was the main source of external funding for the corporate sector in 2008, with only two firms resorting to the capital market. The ratio of domestic corporate bank borrowing to GDP rose from 68% in December 2007 to 75% at end-2008, well above the euro area average ratio of 52.3% as at December 2008.¹²



As a result of a considerable decline in the weighted average interest rate for corporate borrowers, from 6.5% in 2007 to 5.3% in 2008, the interest payment burden eased for many firms, in spite of the increased borrowing. In fact, the interest rate burden decreased to 28.3% of short-term deposits, from 29.6% in the previous year. This indicates adequate coverage and a lower interest burden relative to short term deposits. Indeed, the ratio of total corporate non-performing loans to total corporate loans, although still high, declined

¹⁰ Nine corporate insolvencies were in fact reported in 2008, up from two in 2007. The insolvent companies were mainly in manufacturing, in the wholesale & retail, and in the real estate sectors.

¹¹ Source: European Commission, Directorate-General for Economic and Financial Affairs, Business and Consumer Survey Results, December 2008.

¹² Source: Central Bank of Malta estimates and ECB Monthly Bulletin, March 2009.

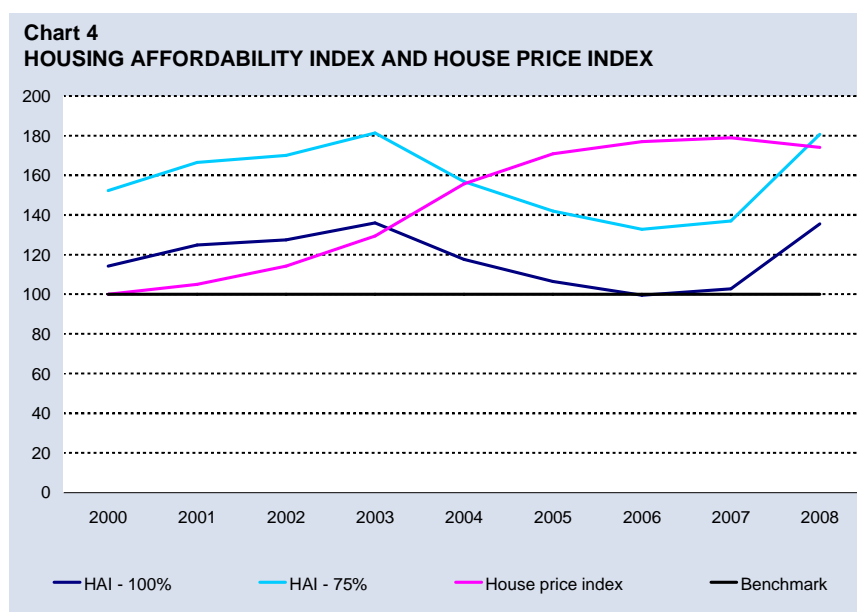
from 7.8% in December 2007 to 7% in December 2008. This improvement was spread across all the major sectors except *wholesale & retail*, which accounted for 16.8% of total corporate loans.

In general, the financial conditions of the corporate sector improved in 2008. However, the rapid deterioration in economic conditions in the latter part of the year and into 2009 is likely to weigh on the ability of the sector to service its debts. In fact, the liquidity and debt servicing capacity of the corporate sector is likely to deteriorate. Due to their exposure to international conditions, the *manufacturing* and the *tourism* sectors are likely to be most at risk.

1.2.4 The real estate market

The residential real estate market

Demand for housing appeared to have stabilised during the first half of 2008 before declining steadily thereafter. This was possibly due to a drop in the demand for property for resale, though negative price expectations probably induced households to delay their buying decisions too. Indeed, the demand for flats and maisonettes decreased in 2008, and the annual rate of mortgage lending decelerated to 10%. The correction in house prices is reversing the brisk growth recorded between 2004 and 2006, which contributed to a mismatch between house prices and their estimated fundamental value.¹³ The price correction has also triggered a slight slowdown in supply. Thus the number of new permits issued by the Malta Environment and Planning Authority fell to around 6,836 in 2008 from the peak of 11,343 in 2007. At the same time, real estate agents reported a drop in entry level house prices.¹⁴ This has helped to improve housing affordability (Chart 4).¹⁵



The commercial property market

Office space prices continued to rise during the first half of 2008, but in line with the broader economic scenario this was less evident during the latter part of the year. Nevertheless, real estate agents reported a slight drop in their unsold office space stock, indicating an apparent shortage. Real estate agents also reported higher rental rates during the year. But the number of permits for the building of warehouses, retail outlets and offices issued by the Malta Environment and Planning Authority dropped significantly in 2008, falling to the lowest level since 2003.

¹³ Source: Central Bank of Malta estimates, Property Price Index based on advertised prices.

¹⁴ Source: Central Bank of Malta, Real Estate Market Survey.

¹⁵ The Housing Affordability Index has a value of 100 when the median-income household has sufficient income to purchase a median-priced (typical) home. When the ratio is above 100 the typical household has more income than necessary to purchase a typical house. When the ratio falls below 100 the typical household has less income than necessary to finance a typical house.

2. THE FINANCIAL SYSTEM

2.1 Market infrastructure

2.1.1 Financial system structure

In the ten years since the start of the monetary union, the European financial and capital markets have become broader, deeper and more integrated. Competitive pressures have increased. The Maltese financial system followed a similar trend, although with less intensity. In 2008, the system's financial assets were equivalent to 295.7% of GDP. Intermediation remained at a high level during the year. Direct access of the non-bank financial sector to the capital market through the issuance of debt securities remained low.

The domestic financial system continues to be dominated by credit institutions, which accounted for 85.5% of the financial sector as at end-December 2008, while the insurance, the securities, and the other non-bank financial institutions sectors accounted for 9.4%, 5.0% and 0.1%, respectively. During 2008, the MFSA received 43 notifications for the direct provision of banking services in Malta under the passporting regime, bringing the total as at end-December to 210, with one institution offering its services through a branch.¹⁶ The number of banking institutions providing services from Malta in other EU Member States rose to six, from four in 2007. The number of insurance undertakings and UCITS from other EU Member States that benefit from the freedom to provide services in Malta increased by 53 and 43, to 326 and 551, respectively. Meanwhile, the number of representative offices of Maltese banks abroad and those of European banks in Malta remained unchanged, at 7 and 1, respectively.

Efficiency of the financial system

Sound and efficient financial systems contribute to sustained economic growth by reducing asymmetric information as well as by encouraging innovation. Hence, low concentration levels, along with strong competition amongst banks and other financial intermediaries, generally give rise to an efficient channelling of savings into more productive investment. The entry of new competition lessens concentration and enhances efficiency. Market concentration, as measured by the HHI, increased during 2008, reaching 3,185 by the end of December. This reflects the dominance of the two largest banks within the domestic market.¹⁷ The concentration within the insurance sector remained relatively unchanged, at 3,683 as at end-December 2008. The high level of concentration in the market is also borne out by the fact that the weighted average share of the two largest credit institutions and insurance companies in the respective domestic markets (CR2) stood at 77.9% and 80.3%, respectively.¹⁸

Transparency also leads to increased market efficiency. Asymmetry in information flows hinders the even distribution of information between financial institutions and investors. As recent international developments have underlined, confidence can easily be undermined when transparency is low, as losses and off-balance sheet commitments are unknown. Hence, if confidence is to be maintained, increased transparency is essential and disclosure should be enhanced in line with the best international practices.¹⁹

¹⁶ The European Passporting Rights for credit institutions, the insurance business and investment firms are governed by Legal Notice 88 of 2004 as amended by Legal Notice 66 of 2005 and Legal Notices 57 and 352 of 2008; Legal Notice 89 of 2004 as amended by Legal Notice 284 of 2004; Legal Notices 289 and 421 of 2007; and Legal Notice 325 of 2007 as amended by Legal Notice 251 of 2008.

¹⁷ The HHI is a commonly accepted measure of market concentration. It is calculated by squaring the market share of each firm competing in a market and then summing the resulting numbers. A market with an HHI of less than 1000 is considered to be competitive; one with an HHI between 1000-1800 is considered moderately concentrated; whereas one with an HHI of 1800 or more is considered highly concentrated.

¹⁸ The CR 5 of the EU banks stood at 44% as at December 2007.

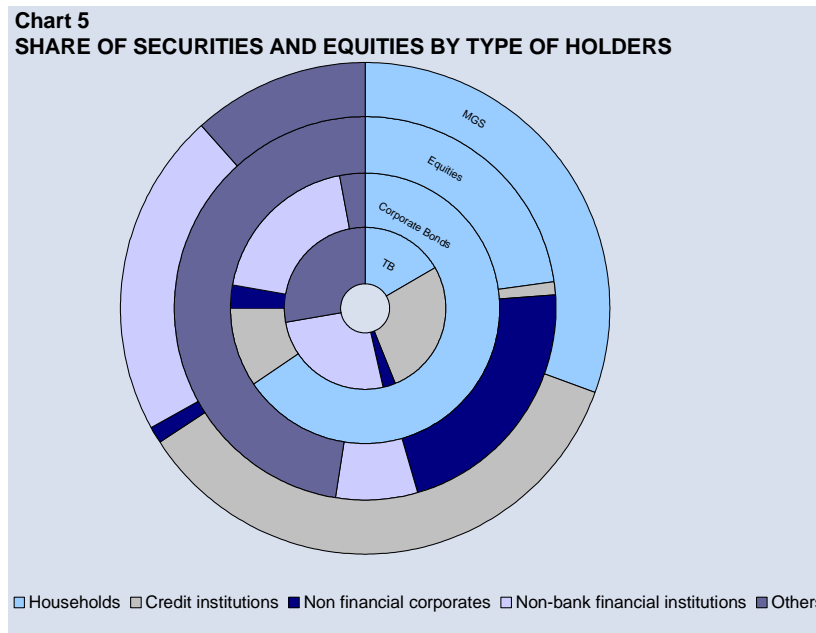
¹⁹ Refer to the Joint Statement from CESR, CEBS and CEIOPS regarding the latest developments in accounting issued in October 2008 and the statement issued by the IASB on 5 March 2009 on financial instruments disclosures.

2.1.2 Markets structure

Market capitalisation, concentration and ownership

Market capitalisation contracted to €6.7 billion, or 118% of GDP in 2008. The loss in value was largely attributable to equities, whose share of market capitalisation dropped from 50.6% in 2007 to 38.3% in 2008. This was mainly due to the drop in the value of bank equity.

Three equity issues, totalling €57 million, were placed during 2008. This, coupled with the decline in the share of bank equity in the market, raised the Gini Coefficient Index by 1.1 percentage points to 67.4%, indicating a lower degree of concentration.²⁰ During 2008 two corporates and a bank issued fixed income securities amounting to €62 million. At the same time, the Government issued a net €201.1 million in MGSs, so that the share of MGSs in the total fixed income market rose to 78.7%.



Credit institutions hold the largest share of MGSs and a negligible share of equity investments. Excluding strategic holders, the non-financial sector, which includes the household and the corporate sector, has the largest share in equity holdings, whilst the household sector holds the majority of corporate bonds (Chart 5).

MSE performance

In line with most international stock exchanges, the MSE Index lost 35% of its value during 2008, ending at 3,208, the lowest level since 2005.²¹ The overall decline was largely due to the weight of the banks' shares in the MSE index. Although most of the banks in Malta did not suffer directly from the international crisis, some banks did suffer losses from valuation adjustments. As a result, particularly following the announcement of a fall in profits as a result of these losses, bank share prices declined by about 48% during the year.²² In contrast, the drop in the rest of the market was more contained, at 28%. During the year, the banks' P/E ratio dropped from 15.8 to 13. This is still much higher than the P/E ratio of 7 for the banks quoted in the FTSE, but it implies that the market has priced in lower earnings expectations for the foreseeable future.²³

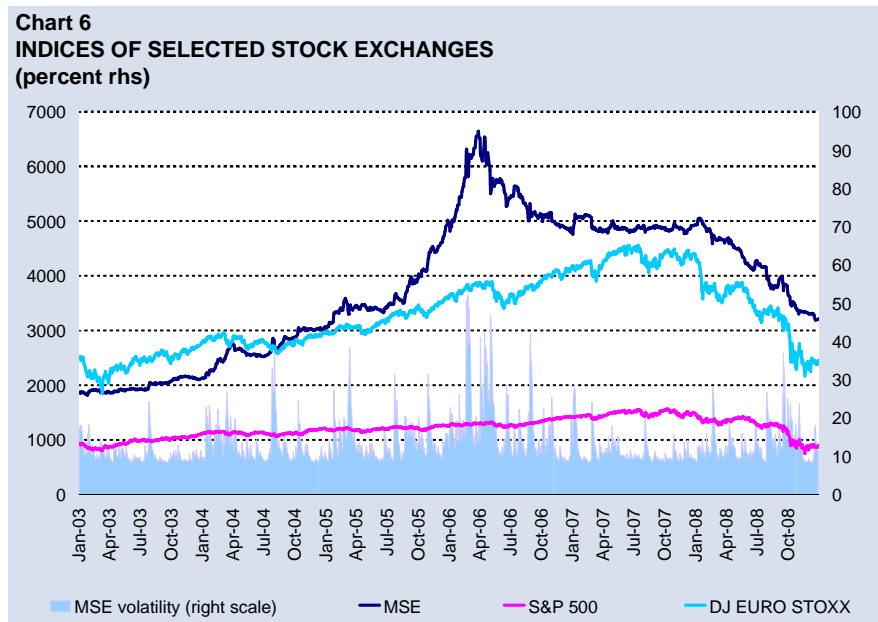
²⁰ The Gini Coefficient is a measure of statistical dispersion commonly used as a measure of concentration.

²¹ To place this in the context of international bourses, the S&P 500 and Dow Jones EUR STOXX indices declined by 38% and 44%, respectively.

²² These calculations are based on the average weighted price, which is estimated utilising data on equity prices at close of trading and weighted by equity market capitalisation.

²³ FTSE Sector Indices, Category: Financials and sub-category Banks, Financial Times, 3 January 2009.

As share prices declined, volatility increased throughout 2008.²⁴ This was particularly evident in the case of bank equity, reflecting a higher risk perception and greater uncertainty in the market. Nonetheless, the MSE Index is still less volatile than other indices, such as the S&P 500 and the DJ EUR STOXX (Chart 6).



Government bond yields declined during 2008, but they too displayed significant volatility (Chart 7).²⁵ In the early months of the year, concerns about inflation and related rising interest rates resulted in higher yields. As the financial crisis intensified, however, flight-to-safety, as well as expectations of lower interest rates, led to a reversal of this trend. In line with developments in the euro area as a whole, yield spreads for MGSs widened by 52 bps relative to German Bund yields in the course of the year. But this was less than the widening exhibited by the bonds of a number of other euro-area countries, such as Spain and Italy. Also in line with international developments, sovereign credit default 5-year swap premia for Malta widened by 74 basis points during the last four months of 2008, and they continued to widen in 2009, though less than in many other euro area countries.

Market liquidity

Secondary market activity remained limited, with trading volume down by about 7% during 2008. The drop was most pronounced in equity trading. Although still accounting for 63.5% of transactions, this was lower than the 69.4% share recorded in 2007. The turnover ratio remained low, confirming the lack of liquidity in the market.²⁶ Concurrently, the average weekly HHR for the two most liquid equities quoted on the MSE deteriorated slightly when compared to 2007, reflecting continued lack of depth and resilience in the market.^{27,28}

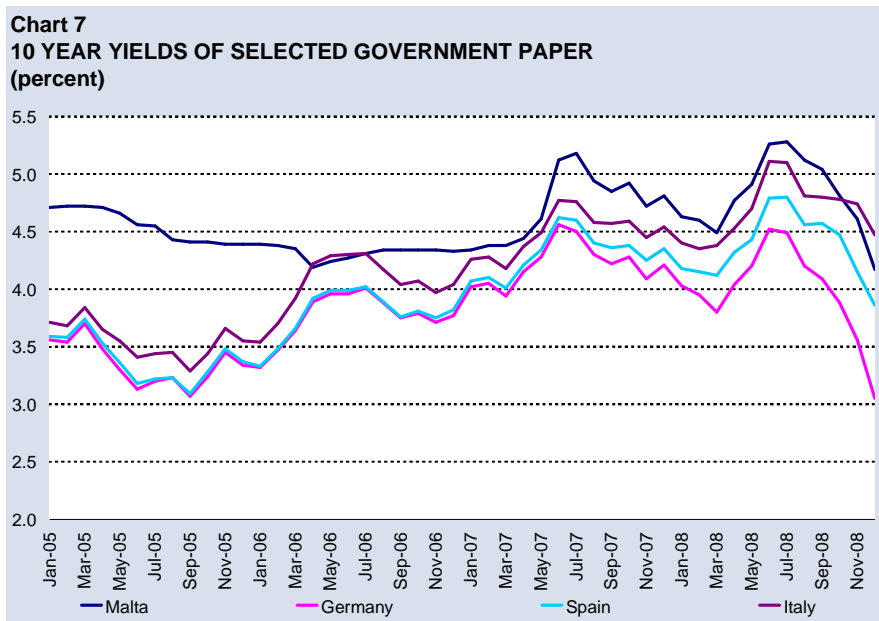
²⁴ Volatility is measured as the annualised standard deviation of daily percentage changes in the MSE price index estimated on the basis of a GARCH (1,1) model.

²⁵ The Bond Index calculation is based on the bond's price data as at close of trading, while its weighting is based on the bond's market capitalisation. The bond index is based on an initial value of 100.

²⁶ The turnover ratio is a measure of liquidity and is calculated as the ratio of the volume traded against the number of outstanding equities.

²⁷ The HHR is a measure used to capture the depth and resilience of the market. Specifically, the HHR relates the impact on prices that arises from the volumes traded by utilising intraday changes in prices as a ratio of the value, outstanding balance and closing price.

²⁸ Resilience is the speed with which price fluctuations arising from trades are dissipated.



Payment and settlement systems²⁹

The MaltaClear system operated by the MSE is designated as a systemically important securities settlement system by the Bank in terms of Directive No 2: Payment and Securities Settlement Systems. To ensure finality of settlement, and to enable participants to utilize their liquidity flows more efficiently, trades are executed on a delivery-versus-payment basis. In order to limit the danger that settlement failures may result in a gridlock, payments that are not passed through TARGET2 require a guarantee. This has enabled the settlement system to function without any major problems. The average monthly value of securities transactions settled through MaltaClear between April and December 2008 amounted to €43.3 million, 91% of which were transactions settled by the major brokers.³⁰

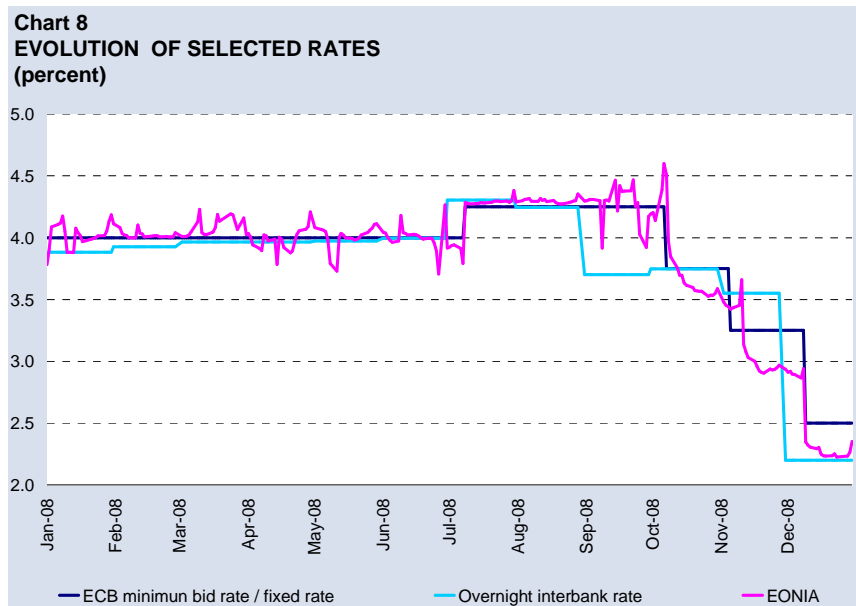
TARGET2 is the euro-area centralised system for large-value payments. It allows the optimization of liquidity and reduces counterparty risks. Currently banks in Malta are indirect participants in TARGET2, with the Bank and the MSE being the two direct participants. Hence, payments are generally channelled through foreign counterparties who are themselves direct participants in TARGET2 (Box 2).

Money markets

Liquidity in the euro area money market deteriorated in 2008, as market participants hoarded liquidity in view of perceived counterparty risk. However, the EONIA rate largely followed the policy rate set by the ECB (Chart 8). For the most part, the overnight inter-bank rate for money market trades by banks in Malta followed the same pattern, except in the last four months of the year, when the rate dropped in anticipation of an ECB rate cut. This resulted in a wider spread of about 55 basis points. The average monthly money market trades by banks in Malta amounted to €479 million in 2008, of which 70% were conducted with foreign banks.

²⁹ Data to analyse the settlement transactions passing through the MSE are not available.

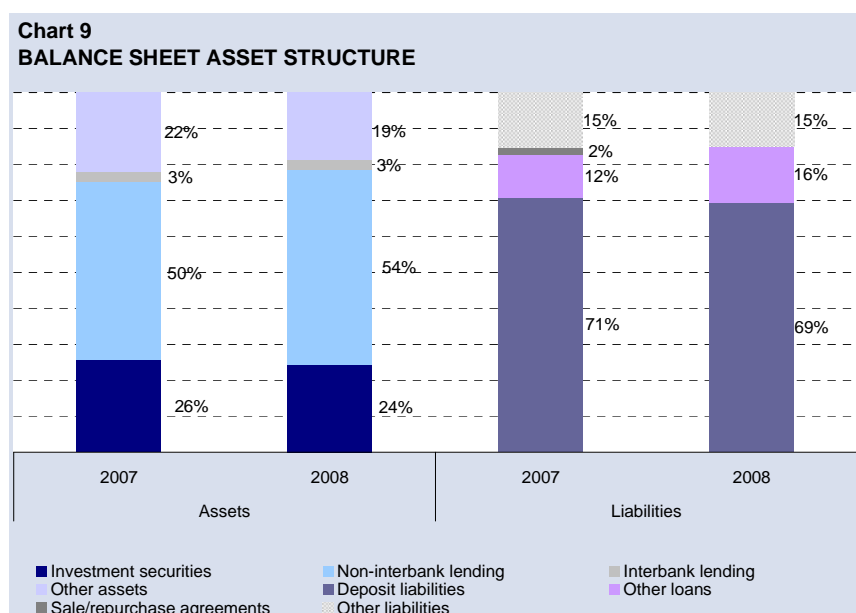
³⁰ Data are only available as from April 2008.



2.2 The banking sector

2.2.1 Balance sheet

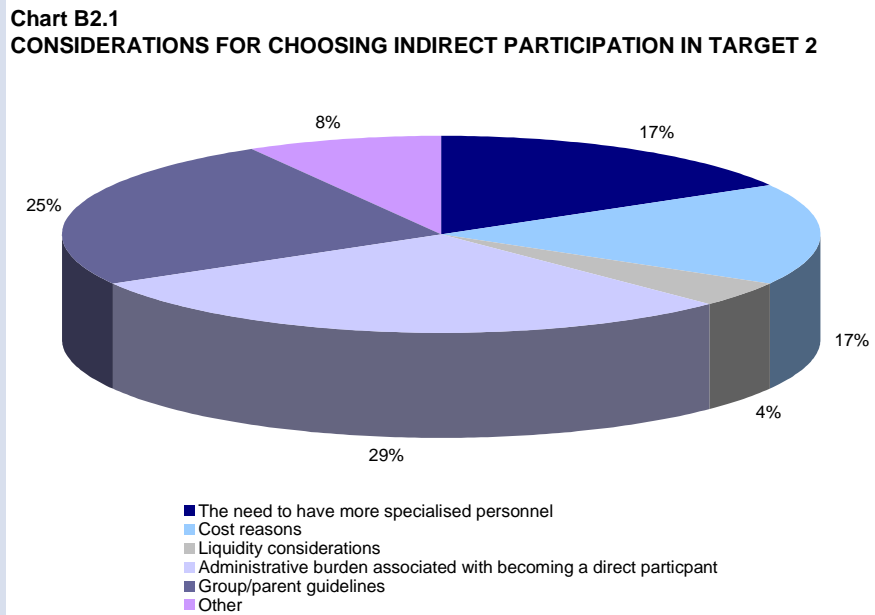
Although the direct consequences of the financial crisis for most of the banks were relatively small, the indirect effects were felt even in Malta. The aggregated balance sheet of the banking sector grew by 3.8% to €14.3 billion during the year, but as a share of GDP it remained practically unchanged at around 253%. Credit institutions increased their traditional intermediation business, as market-related activities slumped (Chart 9). Indeed, non-interbank lending accelerated to 13.2%, from 7.3% in 2007, and accounted for 54.2% of total assets at the end of the year. When Malta joined the euro zone, the minimum reserve requirement ratio was aligned with that of the ECB, and this resulted in a release of funds to the banks. This was the main factor behind a 12.3% reduction in funds held by banks with the Central Bank of Malta. But the banks' securities portfolio contracted, mainly due to valuation adjustments as a result of the financial crisis.



Box 2: Direct and indirect participation in TARGET2

TARGET, short for Trans-European Automated Real-time Gross settlement Express Transfer system, is the real-time gross settlement system for the euro and the preferred system for large-value payments in euro. It provides intraday finality, i.e. settlement will be final once the funds have been credited. Operations commenced in 1999. To enable the Eurosystem to meet new demands from its users, TARGET was upgraded to TARGET2 in 2007. Malta was amongst the first countries to migrate to TARGET2, in November 2007. As at end-2006, TARGET had 1,072 direct and 9,322 indirect participants.³¹

The efficient and safe transfer of payment instructions are critical for banks, as payment failures can result in liquidity problems and higher costs. Hence, banks need to ensure that their payments are processed efficiently and securely. Direct participation in TARGET2 provides this service level and continuity. Indirect participation implies that payment orders are sent to/received from the system via a direct participant, with payments being settled in the direct participant's account on the single shared platform. So far, all banks in Malta are indirect participants in TARGET2. The main reasons for the banks' choice to participate as indirect participants are depicted in Chart B2.1.



Banks therefore rely exclusively on their foreign counterparties to settle their payments in euro. This could entail risks resulting from external dependency. In order to analyse financial stability risks stemming from indirect participation, the Central Bank of Malta has carried out a survey on participation in TARGET2.³² The survey results indicated that all institutions have agreements in place setting out the terms and conditions relating to their indirect participation. Some banks, however, reported that occasionally they had encountered operational problems, including gridlocks and time-related issues, which resulted in additional costs. Payment failure could also result in reputation risk, even if the counterparty is responsible. In this respect it is crucial that even indirect participants have in place a contingency plan to cater for operational failure by their counterparties.

The current international financial crisis, and the problems faced by a number of high-profile institutions, highlights the possibility of counterparty credit risk. In this respect, a number of banks have reported considering becoming direct participants in TARGET2.

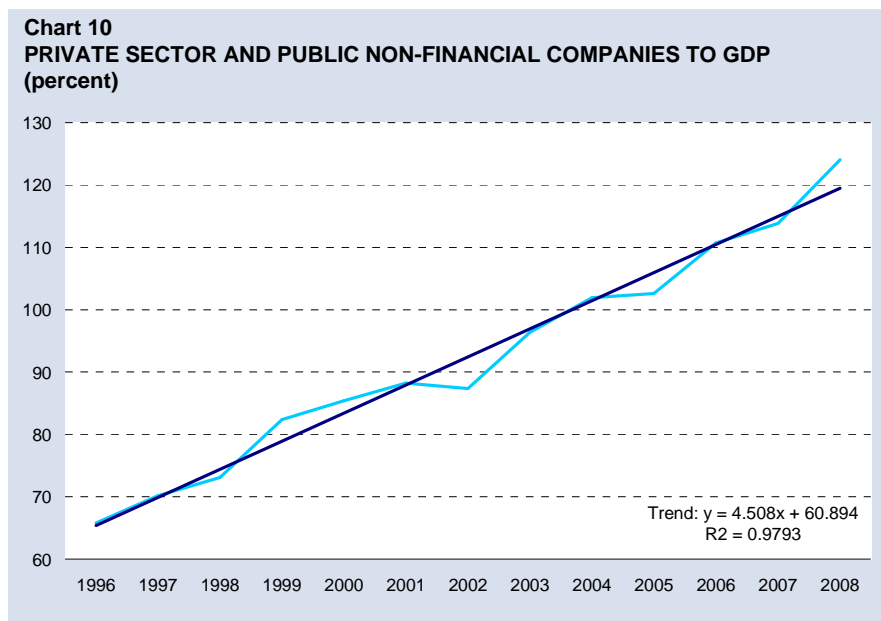
³¹ ECB, TARGET Annual Report 2007. As at June 2008, direct participants in TARGET2 numbered 784 (ECB Monthly bulletin, November 2008).

³² The survey was carried out amongst all credit institutions licensed in Malta. The response rate was 91%.

On the liabilities side, the de-hoarding effect connected with the euro changeover abated as the rate of growth in deposits slowed down, falling to 1.5% from 16% in 2007. Consequently, the share of deposits in the banks' aggregate balance sheet fell to 69.3%, although deposits remained the main source of funding. But the banking sector also tapped other sources of finance, including ECB loan facilities, share issues and subordinated debt to compensate for the slowdown in deposit growth.

The asset portfolio

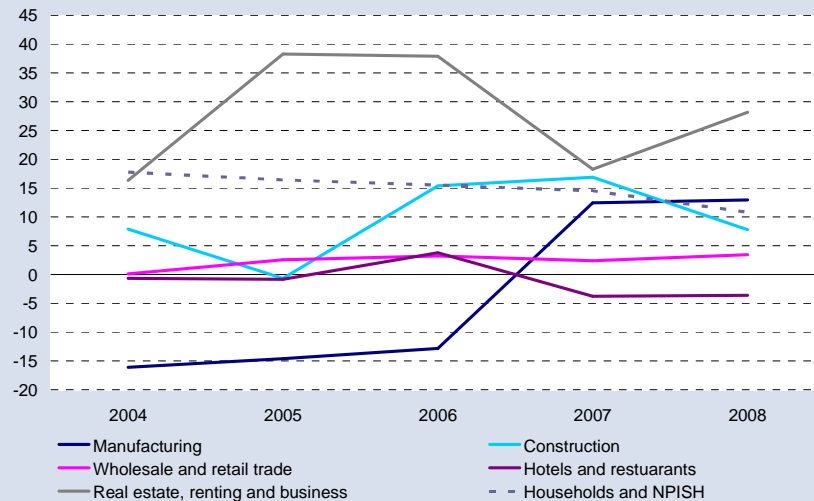
In spite of the international crisis, the banks remained sufficiently liquid and adequately capitalised to continue to extend credit. Indeed, during 2008 their loan portfolio grew by 12.9% (€915.2 million), compared to 4.1% in 2007. Thus, in spite of tighter lending conditions, the supply of credit to the domestic economy accelerated, with lending to residents growing by €813.4 million, or 12.9%. While supply restrictions can result in a credit crunch, an excessive growth in indebtedness that is out of line with economic fundamentals can lead to higher defaults in the future. Internationally, the credit boom of recent years is generally considered to be one of the main causes of the current global crisis. Hence, the continued rapid growth in credit may lead to a further build-up in vulnerabilities, as credit is extended to an already highly indebted private sector. The latter's indebtedness stood at 124.1% of GDP as at December 2008, up by 10.2 percentage points from December 2007 (Chart 10).



Together with the expectations of a slowing economy, this raises some concerns for financial stability. If deteriorating macroeconomic conditions lead to higher unemployment and/or falling demand, the repayment capabilities of both households and corporates may be impaired, leading to higher default rates and pressure on the bank profitability and capital.

During recent years, lending to the household sector, particularly for mortgage purposes, has been the driving force behind the expansion in the banks' loan portfolio (Chart 11). Indeed, such loans accounted for over a third of the portfolio at the end of December 2008. But demand for loans by households decelerated to 10.8% during 2008 from 14.5% a year earlier, largely on account of a decrease in the demand for mortgage loans as expectations of a continuation of the house market boom receded (see Box 3). Thus, lending to the corporate sector (including financial intermediation) outpaced lending to households in 2008, growing by 14.3% (2007: 6.4%).

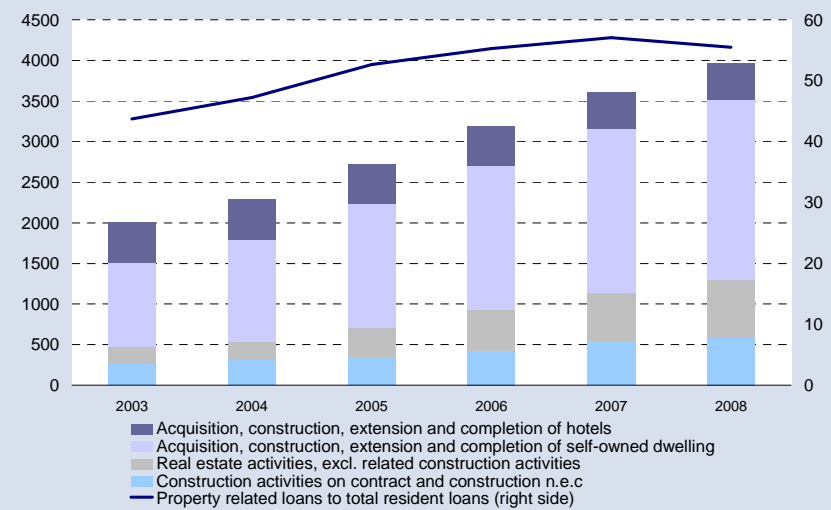
Chart 11
YEAR-ON-YEAR LENDING GROWTH TO SELECTED NON-FINANCIAL SECTORS
(percent)



Although the more benign economic conditions in the earlier part of 2008 may have contributed to this growth, borrowing for operating purposes (particularly by public non-financial companies) seems to be the main reason for the increased borrowing by the corporate sector. All the major economic sectors registered an increase in credit demand, except *Hotels and Restaurants*. This may have been due to the fact that the tourism industry had already begun to feel the impact of the deepening recession in Malta's main markets, particularly the UK, where the weakness of sterling also contributed. Demand for credit by the *manufacturing* sector increased by 13%, possibly due to cash-flow difficulties as exports of manufactured goods fell.

At 55.5%, property-related loans – including mortgages – constituted the major proportion of the total loan portfolio at the end of the year. Despite the banks' increased cautiousness vis-à-vis the *property market*, lending to the *construction* and *real estate* sectors - which carry the highest risks for banks - still increased by 9.8% during 2008 (Chart 12). As the economy slows down, however, it is expected that the demand for property-related credit will ease accordingly.

Chart 12
PROPERTY RELATED LOANS
(EUR millions; percent)



The banks' securities portfolio contracted by €51 million to €3.5 billion as at December 2008, when it accounted for 24.3% of their aggregate balance sheet. The contraction was partly due to valuation adjustments in accordance with IAS 39, but disposal of securities also contributed. The effect of valuation adjustments on holdings of non-government securities, mainly foreign, appears to be the prime reason for the drop in the share of foreign securities in the value of the banks' investment portfolio, from 63.3% in 2007 to 61.7% as at end-December 2008. The percentage of foreign securities rated as 'AA-'grade or better fell from 50.6% in 2007 to 38.9% at end-December 2008, and as the financial crisis continues to unfold, further write-downs cannot be ruled out.

Loan portfolio concentration

While dispersion reduces the risk from potential losses arising from default, concentration remains a financial stability concern. On an aggregate loan portfolio basis, concentration remains high, with the HHI at 2111, but there is substantial dispersion between banks (with a high of 5303 and a low of 1959). Furthermore, single name concentration may have a substantial effect on the capital buffer of certain credit institutions if any large exposure borrowers default. During 2008, the aggregated nominal value, on a net basis, of the ten largest single name exposures increased by 10.9%. Of these, 39.2% were in the *wholesale & retail trade* sector, whose aggregated asset quality deteriorated during the year. Another 32.3% were in the *real estate, renting & business activities* sector, which has been identified by banks as posing higher risks for asset quality. The remaining large exposures were in the *hotels & restaurant* sector, which is expected to face challenges in the coming months, and the *transport & communications* sector. The risk posed by such concentration is high, particularly as these sectors are likely to be the hardest hit by the global recession.

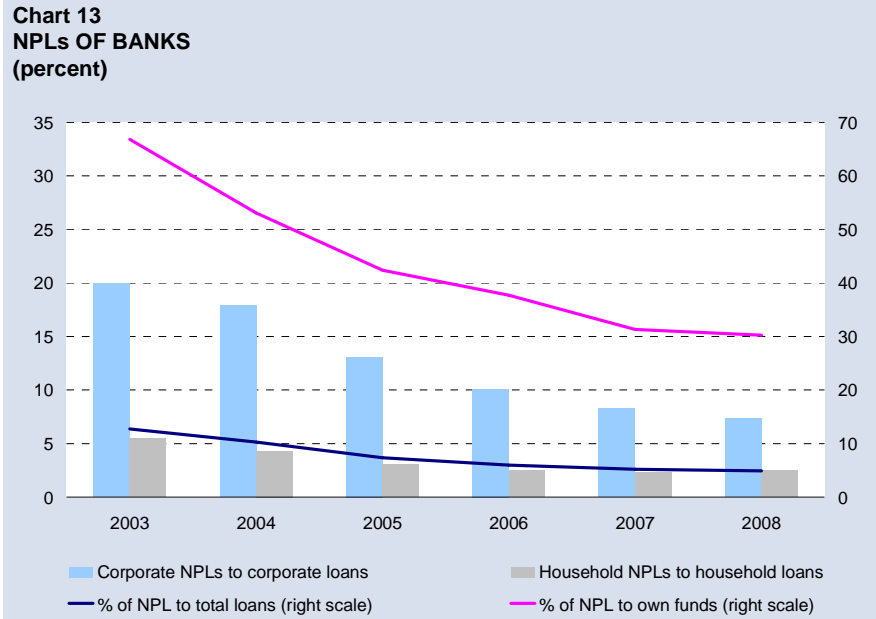
Asset quality and credit risk

The financial accelerator theory suggests that credit growth tends to be pro-cyclical, possibly inflated in good times by over-optimism about future economic activity. As a result, when economic conditions are favourable, market participants tend to underestimate risk and undertake excessive credit.³³ These risks are likely to become manifest in a subsequent economic downturn, as delinquent loans increase exponentially and borrowers' capacity to service debt deteriorates. The recent sustained period of economic growth was one of the main factors behind the decreasing trend in the NPL ratio. Credit institutions reported further improvements in the credit quality of their loan portfolio during 2008, with the NPL ratio decreasing by 0.3 percentage points to 4.9% as at end-December, though even at this level the ratio is still considered high (Chart 13).³⁴ Indeed, NPLs increased by €24.5 million during the year, implying that the decline in the NPL ratio was due to the statistical effect. However, the likelihood that an improving trend will continue has diminished as the expected economic slowdown is likely to result in higher default rates.

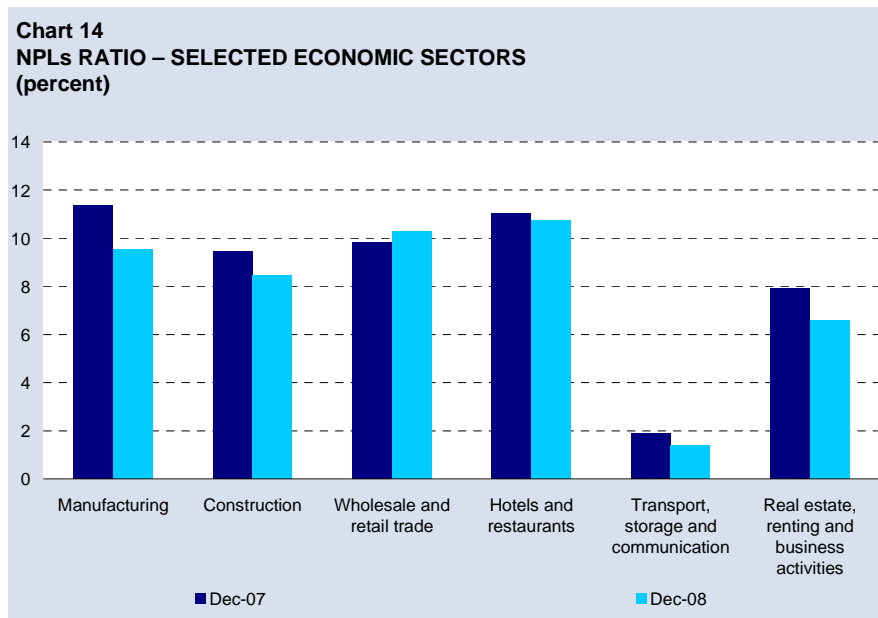
Historically, the banking sector has considered mortgage loans to be low risk exposures, as the probability of default by the *household* sector was considered small. But during 2008 the NPL ratio for mortgage loans rose to 2.1%, from 1.8% in 2007, even though, over the same period, the NPL ratio for consumer loans decreased to 4% from 4.2%. Looking forward, it seems likely that the risks from the household sector will increase as the economy slows down and unemployment increases.

³³ The financial accelerator theory refers to endogenous developments in credit markets which amplify and propagate shocks to the macroeconomy.

³⁴ The corresponding figure for all domestic non-IFRS reporting banks in the EU as at 2006 was 1.69%.



Meanwhile, the NPL ratio for the corporate sector fell by 1 percentage point to 7.3% as at December 2008, though this was mainly due to the statistical effect of a larger loan portfolio. The improvement took place mainly in the first six months of 2008, as non-performing loans increased in the latter part of the year. This may have been due to the deteriorating global economic situation, which by then had started to have some impact on the corporate sector as uncertainty increased and external demand fell. On a sectoral basis, the *hotel & restaurant* sector, the *wholesale & retail trade*, the *manufacturing* and the *construction* sectors exhibited a high level of non-performing loans (Chart 14). As with the *household* sector, the impact from the deteriorating global economy is likely to result in higher credit risks from these sectors too as corporate liquidity is dented.

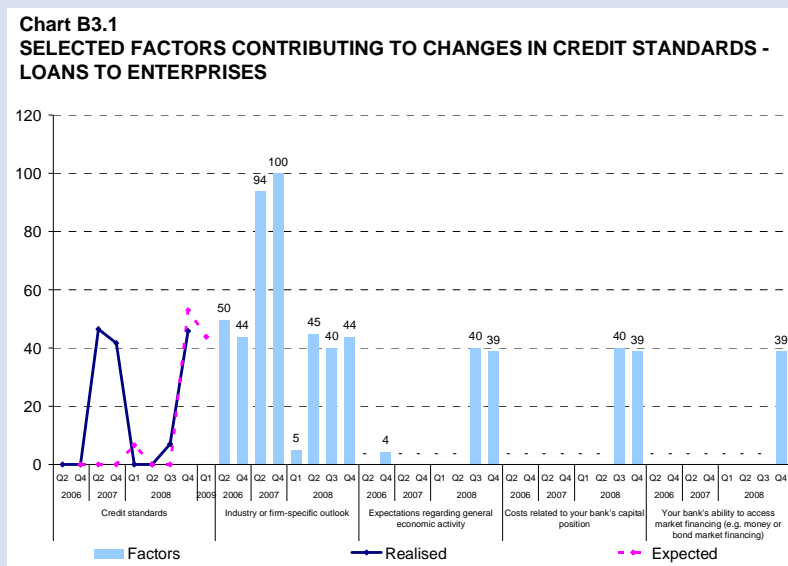


Box 3: Bank Lending Survey

The Bank Lending Survey explores trends in the credit standards applied by banks and in the demand for loans by enterprises, mortgages, and consumer credit during the fourth quarter of the year. Expectations for the first quarter of 2009 are also assessed. Results are based on the replies of respondent banks.^{35,36}

Similar to the euro area generally, respondent banks tightened credit standards for corporate loans during the last quarter of 2008. The main factors behind this decision were deteriorating industry-specific perceptions as well as expectations regarding the general economy and, to a lesser extent, increased costs related to the banks' capital position and access to market funding. Respondent banks also felt pressure from funding and a heightened perception of risk on collateral (Chart B3.1). As in the euro area, these factors were mainly translated into higher margins on "average" and "riskier" loans. But respondent banks also imposed higher non-interest charges, stricter collateral requirements, and loan covenants with shorter maturity periods. Expectations point towards further tightening.

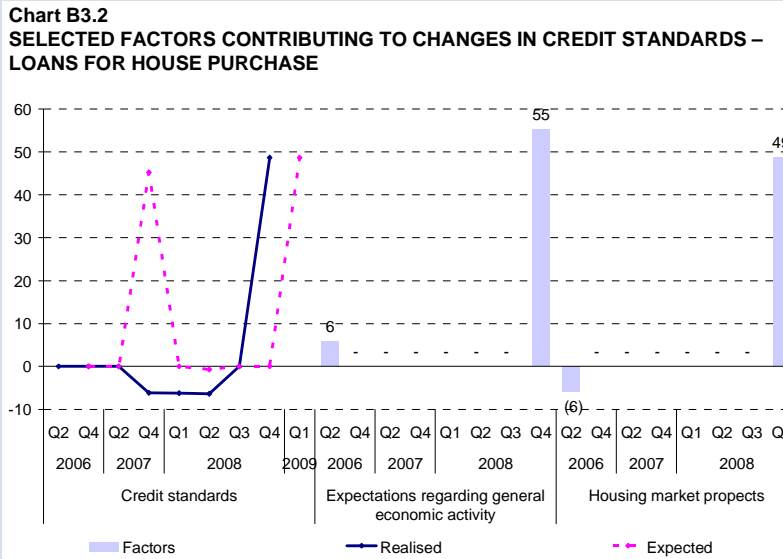
Demand for corporate loans increased slightly during the quarter and is expected to remain stable during the first quarter of 2009. The increase was due to higher spending on inventories and working capital, which was partly counterbalanced by lower fixed investment. On the other hand, euro area banks experienced a drop in demand for corporate loans, reflecting lower fixed investment and subdued merger/acquisition activity. Euro area banks expect a fall in the demand for loans by the corporate sector during the first quarter of 2009.



Credit standards applied to house loans were also tightened, both domestically and by euro area banks, mainly due to deteriorating expectations regarding both the general economy and the housing sector (Chart B3.2). As in the euro area, these were reflected in higher margins on both "average" and "riskier" loans. Respondent banks also applied lower loan-to-value ratios. Credit standards applied to house loans were expected to be tightened further during the first quarter of 2009, both domestically and in the euro area.

The demand for house loans remained stable in the last quarter of 2008. This was due to a perceived balance between less reliance on savings and increased competition from other banks. By contrast, other euro area banks reported a drop in the demand for house loans in the last quarter of 2008, reflecting worse housing market prospects and lower consumer confidence. Demand for house loans in Malta is expected to decline in the first three months of 2009.

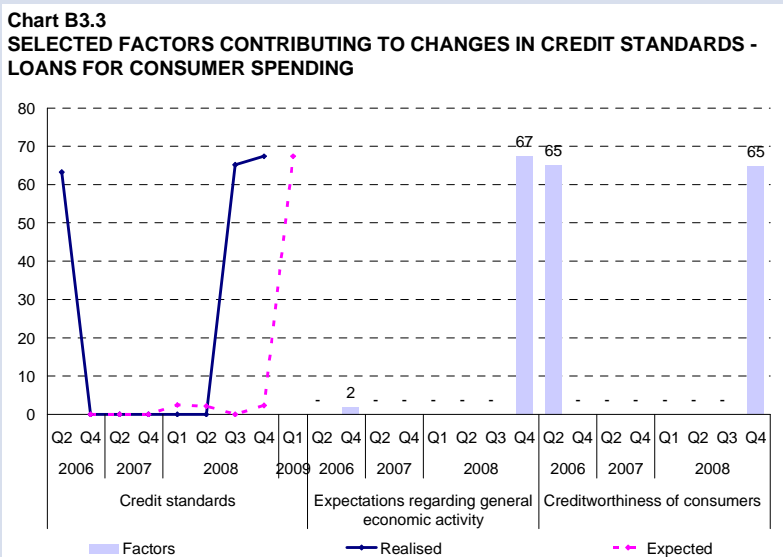
³⁵ The BLS survey is carried out on a quarterly basis within euro area Member States. Domestically replies are weighted by the reporting banks' respective proportion of loans to the total loans of all participant banks. A different weight is computed for each of the three loan categories.
³⁶ The results for the euro area are available on <http://www.ecb.int/stats/money/lend/html/index.en.html>.



Credit standards were tightened during the last quarter of 2008, as expectations regarding the general economy and perceived consumer creditworthiness worsened. As in the euro area generally, this was again reflected in higher margins on “riskier” and “average” loans (Chart B3.3). Credit standards are expected to be tightened further during the first quarter of 2009.

Demand for consumer credit declined in the last quarter of 2008 and is expected to drop further in 2009Q1. The lower demand was due to weaker consumer confidence and reduced spending on durable goods.

The tightening bias adopted by respondent banks is a natural consequence of the downside risks to growth, which have made the vulnerabilities inherent in the business of banking more evident. Some tightening in credit standards may also reflect a more prudent risk assessment by banks, necessary to avoid deterioration in their loan portfolio and reduce the probability of a higher level of defaulting loans in the future. The tightening will affect corporates and households alike. This appears justified, given the genuine concerns about a possible deterioration of customers’ creditworthiness. But the BLS results give no indication as to whether access to credit by worthy customers will also be affected. The tightening currently underway is mainly taking place through higher interest rate margins on “average” and “riskier” loans.



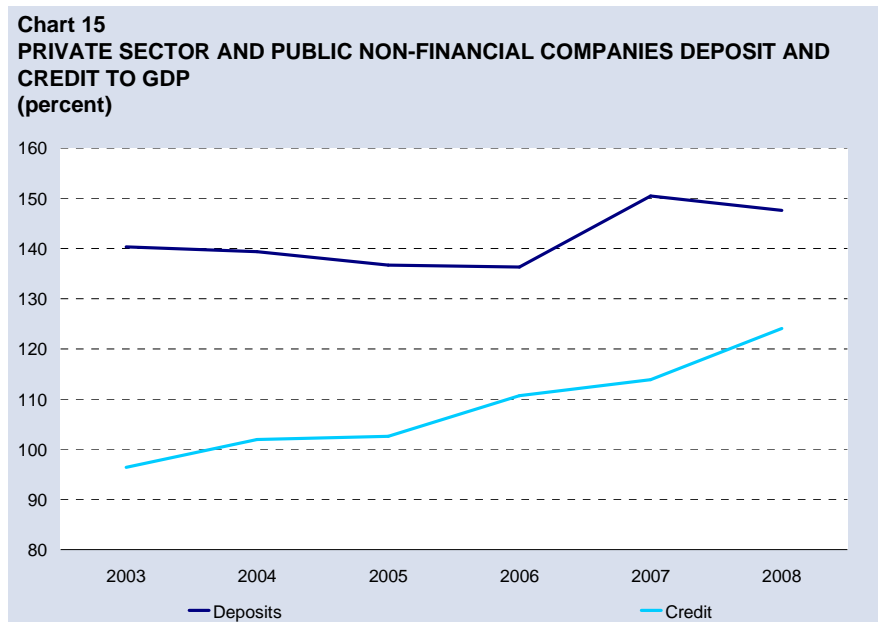
Loan loss provisions

Credit institutions have increased their general provisions in line with the higher level of outstanding loans. On the other hand, despite an increase in NPLs, banks have reduced specific LLPs against unsecured NPLs. This reduction in LLPs resulted in the coverage ratio falling by 2 percentage points to 24.1%, indicating a higher exposure to credit risk. Besides, uncovered NPLs increased, reaching the equivalent of 3.6% of total own funds in December 2008, up from 3.2% at end-2007.

The banks' highly concentrated collateral portfolio, with immovable property accounting for 85% of the total collateral value, together with the low level of LLPs, reflect the exposure of the banking sector to credit risk. Given the unfavourable international economic outlook, and the current sluggishness of the domestic property market, LLPs may need to be increased.

Liquidity risk

Assessments of liquidity risk seek to gauge the ability of a bank to fund increases in assets and to meet obligations as they fall due without incurring unacceptable losses. The fundamental role of banks in the maturity transformation of short-term deposits into long-term loans makes them inherently vulnerable to liquidity risk, both individually and collectively. Virtually every financial transaction or commitment has implications for a bank's liquidity.³⁷

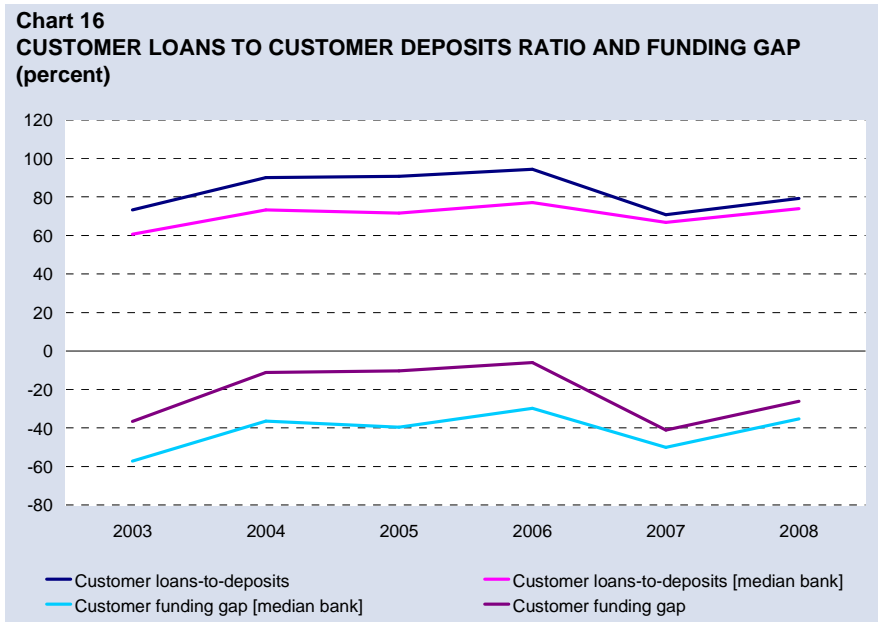


The banks remained substantially liquid throughout 2008. The liquidity crunch triggered by the financial crisis in most countries has been due to both the high dependence on wholesale funding and to market illiquidity. But banks in Malta have traditionally relied on retail deposits as their main source of funding, and this has spared them from dependence on the interbank market to finance their normal intermediation operations. Thus, during the year banks generally obtained short-term funding from the ECB to supplement their investment strategies rather than for liquidity purposes.

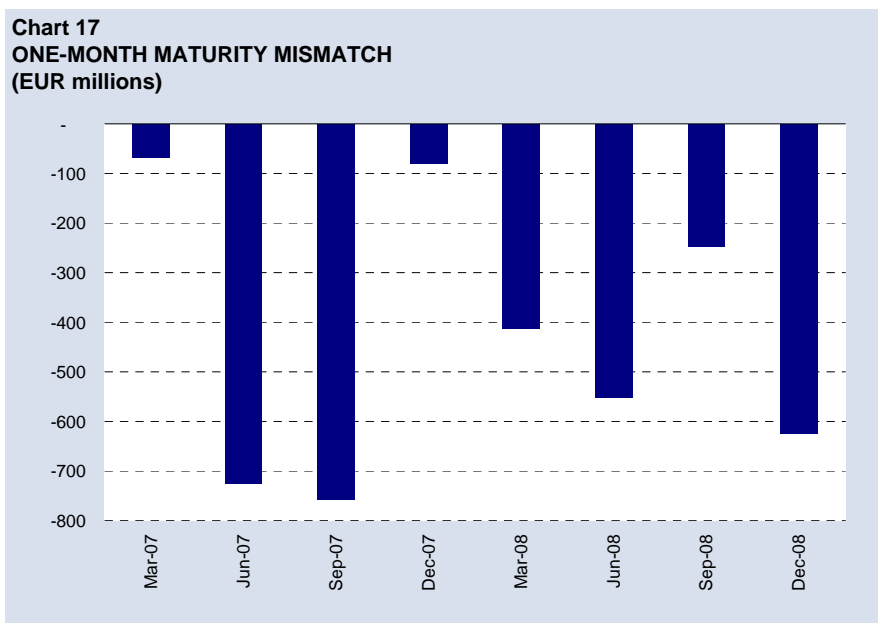
Although the relevant indicators show that the banks have a strong liquidity position, this deteriorated somewhat in 2008, as lending outstripped deposit growth (Chart 15). The ECB has, however, announced that it would extend fixed-rate tender procedures with full allotment for all main refinancing operations as long as needed and in any case beyond the end of 2009.

³⁷ Principles for Sound Liquidity Risk Management and Supervision, BCBS, September 2008.

The customer-loan-to-deposit ratio and the funding gap, at 79.3% and -26.1% respectively at end-2008, allow for further credit creation before credit institutions would need to resort to wholesale funding (Chart 16). Although the liquid-assets-to-short-term-liabilities and the liquid-assets-to-total assets ratios declined by 4 percentage points each during the year, they remained high, at 45.1% and 20.3%, respectively.³⁸



The maturity structure of the banks' short-term (i.e. under one year) deposit and loan portfolio remained broadly unchanged during the year, with short-term deposits accounting for around 94.2% of total deposits and short-term loans accounting for 26.6% of total loans. To an extent, this implies a degree of refinancing risk - as is clear also from the one-month maturity mismatch, representing the difference between assets and liabilities maturing within one month (Chart 17).



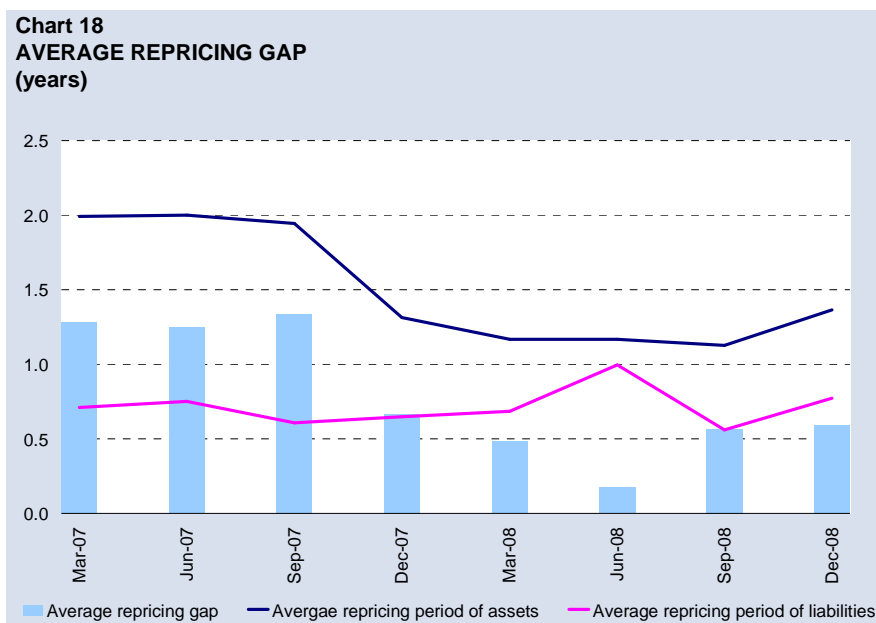
³⁸ The liquid asset ratio is defined as the proportion of liquid assets to short-term liabilities. A regulatory limit of 30% is set on this ratio.

Another gauge of liquidity risk is the ability of banks to liquidate their portfolio in times of stress without suffering significant losses. As the global financial crisis has shown, it is important that, despite strong liquidity positions, banks continuously monitor the liquidity features of their assets.³⁹ In times of stress, markets may stop functioning and certain assets may not retain their previous liquidity features. Hence, there is still a need to strengthen or adopt liquidity risk management through robust internal governance, monitoring, stress testing and adequate contingency funding plans.

Market risk

Market risk, which comprises interest rate, equity price and exchange rate risks, has remained generally low in Malta. The average interest re-pricing period of banks' assets and liabilities remained unchanged, at around 1.4 years and 0.8 years respectively, compared to December 2007 (Chart 18). In a low interest rate environment, banks remain exposed to the risk of a sudden rise in interest rates. Possibly as a reaction to a decreasing interest rate scenario, the duration of the banks' loan portfolio increased during the year, to 2.1 years. A 200 basis point shock in interest rates generates a change in the economic value equivalent to 2.8% of total own funds.⁴⁰

During the year, the net open position of equity to capital decreased by 20.8 percentage points to 20.4%. This largely stemmed from the valuation losses consequent to the fall in equity prices mentioned previously. On the other hand, risks from foreign exchange exposure decreased considerably following Malta's adoption of the euro, with the banks' overall net position as at end-2008 narrowing to -0.8% (short position) of total own funds, from -13.4% at end-2007.



Contagion risk

The lack of confidence in the international financial markets has led to a curtailment of interbank exposures.⁴¹ While, as a result, exposures to non-related credit institutions decreased significantly during the year, exposures to related financial institutions increased considerably (Table 1).

³⁹ Principles for Sound Liquidity Risk Management and Supervision, BCBS, September 2008.

⁴⁰ The 200 bps shock and the duration is in line with the methodology proposed by the BCBS, "Principles for the Management and Supervision of Interest Rate Risk", July 2004.

⁴¹ Interbank exposures include loans and deposits on the assets side of the banks' balance sheet.

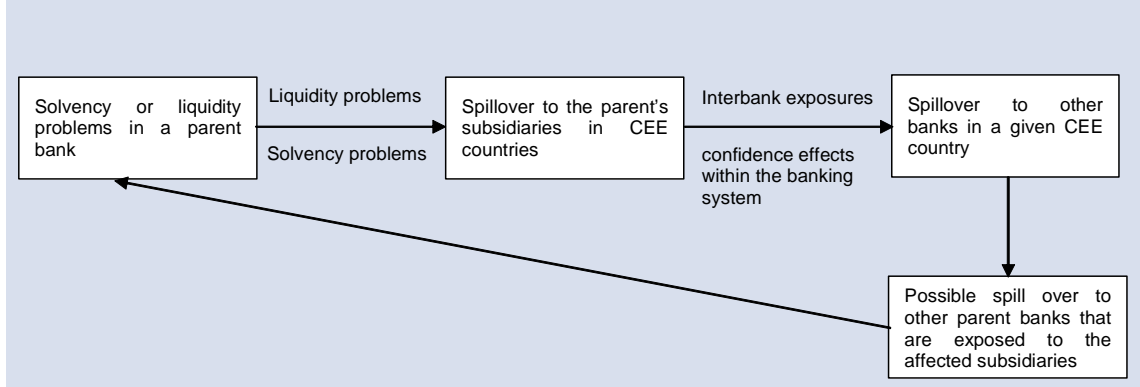
Table 1
INTERBANK EXPOSURES

Percentage of total

	Interbank exposures		Own funds	
	Dec-07	Dec-08	Dec-07	Dec-08
Resident credit institutions	4.0	2.0	4.3	2.4
Non-resident parent, subsidiaries related credit institutions	63.9	89.1	69.6	106.2
Non-resident credit institutions	32.1	8.9	34.9	10.7
Total	100.0	100.0	108.9	119.3

Liquidity or solvency problems within a parent bank can spread to its subsidiaries through the contagion effect (Chart 19).⁴² Risks arising from the outflow of liquidity from subsidiaries to their home country parents are however difficult to quantify as these depend on the solvency of the parent bank. But they warrant continuous monitoring.

Chart 19
POSSIBLE CHANNELS OF FINANCIAL CONTAGION

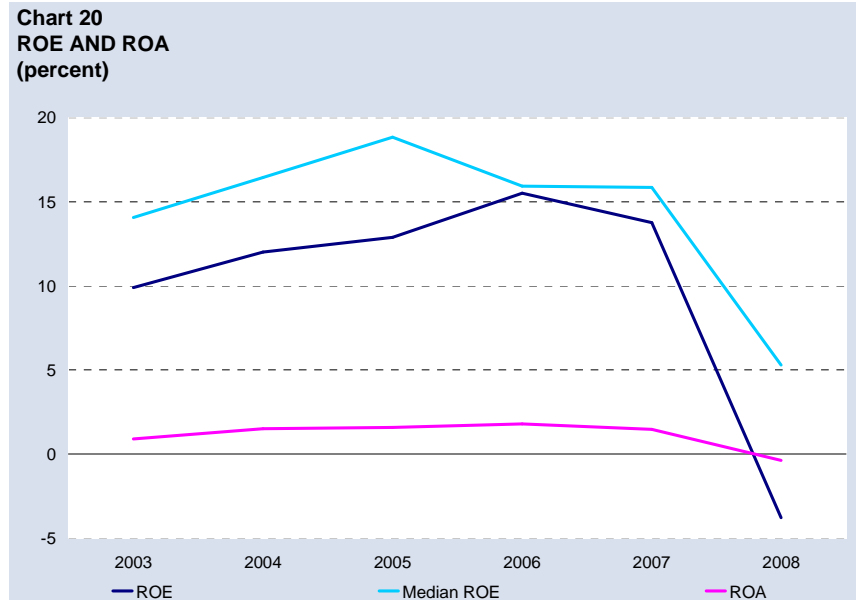


2.2.2 Profitability

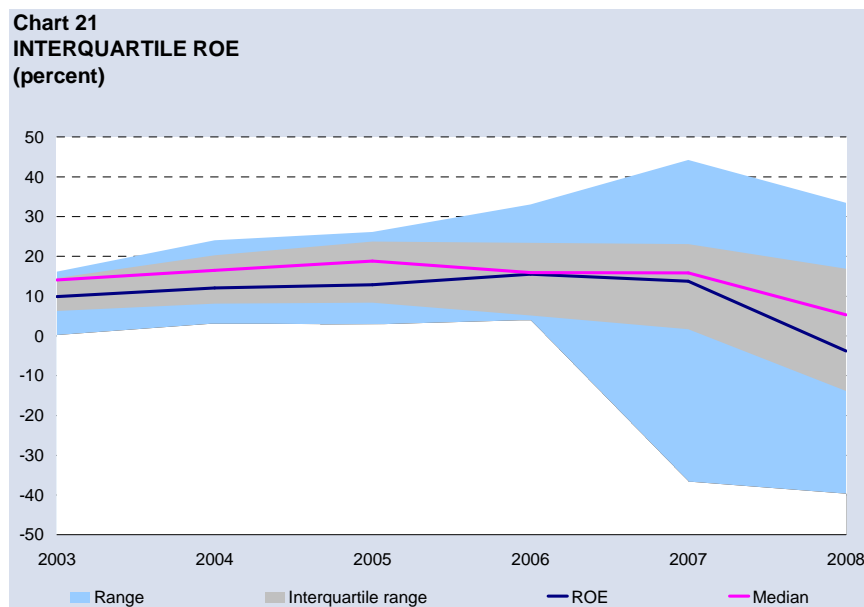
The international financial crisis has undermined confidence in the valuation of financial instruments. Price discovery became extremely difficult under these conditions, giving rise to valuation losses. Impairment charges also rose significantly. As a result, many large and complex banking groups either incurred losses or recorded lower profits during 2008. Although generally the banks in Malta were not overly-exposed to the structured products that resulted in a number of international banks reporting huge write-offs, the turmoil did affect the banks through the valuation effect on their securities portfolio. Indeed, some banks registered valuation losses while others allocated the loss in value of their available-for-sale holdings directly to reserves.

IAS 39 allows an institution to choose at inception whether any fair value adjustment to securities is transferred to the profit and loss account or directly to reserves. In both cases, the capital base of the institution is affected. There was, however, substantial dispersion in the recording of profitability. While all the larger banks recorded profits, albeit less than in previous years, others recorded significant valuation losses. Comparisons with the previous year are also influenced by the sharply reduced profits from foreign exchange market activity consequent to Malta's adoption of the euro as the domestic currency. Hence, both the banks' ROE and their ROA ratios turned negative, falling to -3.8% and -0.4%, respectively, as at end-December 2008 (Chart 20).

⁴² Source: IMF W/P/09/6 Regional Financial Interlinkages and Financial Contagion within Europe.



The median ROE, however, remained positive at 5.3%, though this was well below the 15.9% level registered at end-2007. The impact of the reported valuation losses is reflected in the wider ROE inter-quartile range (Chart 21).



The ROE can be decomposed into its four multiplicative subcomponents, namely, operating efficiency, asset productivity, risk profile and balance sheet leverage.⁴³ An increase in operating efficiency and asset productivity boosts financial resilience, while an increase in risk profile and balance sheet leverage increases vulnerability. A deterioration in resilience resulted from all four components of the banks' aggregate ROE during 2008, as the contribution of operating efficiency and asset productivity to the ROE declined, while that of risk and leverage increased (see Table 2).⁴⁴ This means that banks took on higher risks as they increased their risk profile and leveraging.

⁴³ $ROE = [(P/NII) \times (NII/GI) \times (GI/RWA) \times (RWA/A) \times (A/E)]$ where P = Profit before tax; NII= Net interest income; GI=Gross Income; RWA=Risk Weighted Assets; A=Assets; E=Total average shareholders funds.

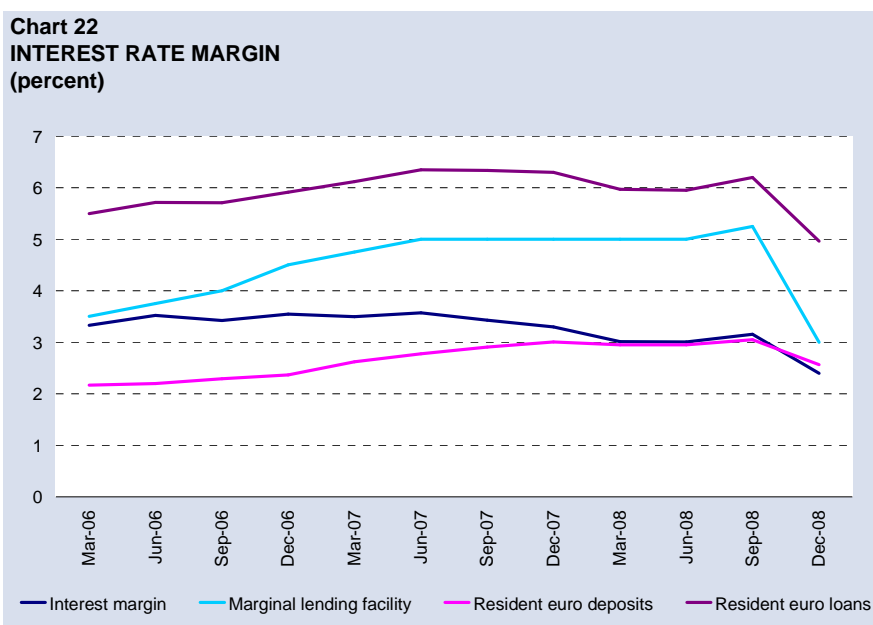
⁴⁴ The table illustrate the contribution of each component to the change in ROE compared to the previous year.

Table 2
COMPONENTS OF RETURN ON EQUITY

	Contribution to change in percentage points		Potential effect on financial stability	Potential effect on profitability
	Dec-07	Dec-08		
Operating efficiency	-1.7	-14.0	-ve	↓
Asset productivity	-0.4	-5.5	-ve	↓
Risk profile	0.0	1.1	-ve	↑
Balance sheet leverage	0.4	0.9	-ve	↑

Developments in net interest margins

The reliance of banks on interest income increased during 2008. Net interest income rose by 0.6%, as growth in income outpaced that in expenses. The proportion of net interest income to gross income surged to 152.8% in 2008 from 67.5% a year earlier. But this increase was largely attributable to the statistical effect of the drop in gross income as a result of the reported valuation losses. The loan-to-deposit margin, measured as the weighted average interest rate on loans less the weighted average interest rate on deposits, narrowed from 3.3% in December 2007 to 2.4% at end 2008. This means that the reduction in interest rates on deposits was smaller than that in lending rates (Chart 22). This is also reflected in the spread against the refinancing rates, possibly reflecting competitive pressures on the banks' funding on the liabilities side, as well as a reappraisal of credit risk on the assets side.



Developments in non-interest income and expense

Lower profits, and the losses on investment portfolios reported by the banks, were largely due to the valuation effects resulting from the global financial turmoil, but lower dividends and lower income from foreign exchange transactions also contributed.⁴⁵ As a result, during 2008, the ratio of non-interest income to gross income dipped to -52.8%, from 32.5% in 2007. As a proportion of gross income, non-interest expenses increased by 65.2 percentage points to 108.8%, partly as a result of higher operating expenses but mainly on account of the statistical effect of lower gross income. In fact, non-interest expenses increased by 10.9% as a result of a higher wage bill and other operating expenses.

⁴⁵ Non-interest income includes trading profits/losses and valuation profits/losses.

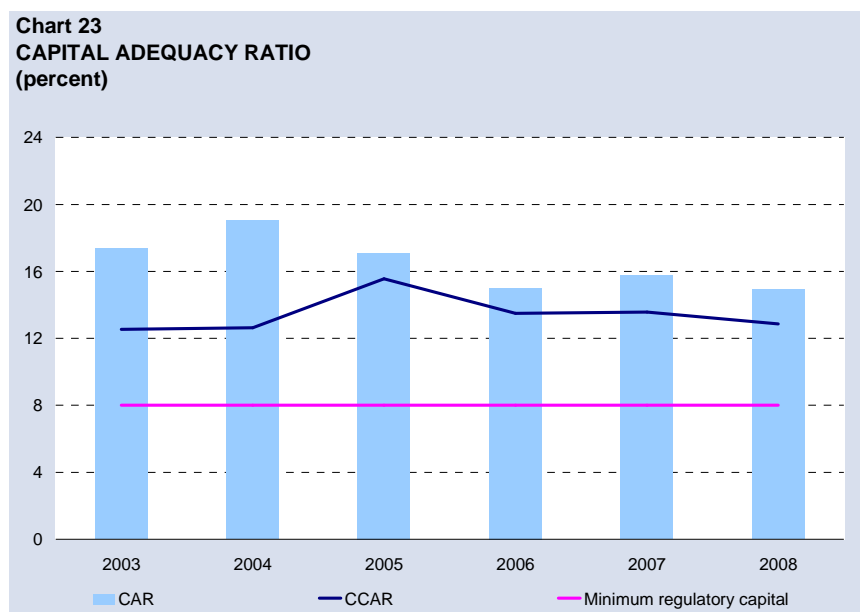
Allocation of loan loss provisions and write offs

During 2008, the banks wrote off a smaller amount of bad debts than in 2007. However, the net write-back of LLPs was also lower than in 2007. The net effect of these changes was a charge of €5.3 million to profits for LLPs, up from €2.9 million as at end-2007. The increasing credit risk posed by the less favourable internal and external economic conditions could further dent bank profitability through the allocation of additional LLPs and/or write-offs in the future.

2.2.3 Capital adequacy

Capital ratios give an indication of a bank's ability to withstand shocks that erode capital levels and impair its ability to continue their normal business operations. The adoption of the CRD during 2008 introduced more risk-sensitive capital requirements, which, however, are by nature also prone to pro-cyclicality.⁴⁶ This feature of capital requirements can lead to further pressure on a bank's capital as default rates increase. From a financial stability perspective, capital levels should increase when economic conditions are benign, enabling banks to strengthen their capital buffer (i.e. capital held on top of the required regulatory minimum), so that the latter can then be drawn down during an economic downturn.

The banks' CAR declined during 2008, from 15.8% to 14.9%, with the CCAR falling from 13.6% to 12.9% (Chart 23).⁴⁷ These declines may in part have reflected the impact of the implementation of the CRD, but a larger increase in RWA (due to increased lending) than in total own funds also contributed.



Measured in accordance with the CRD, the banks surveyed have sufficient own funds to cover credit, operational and market risks under Pillar 1. But Pillar 2 of the CRD requires banks to hold additional own funds to cover other risks, including concentration risk and interest rate risk in the banking book commensurate with their risk profile. Although there are wide dispersions, preliminary estimates by the Bank indicate that some banks may need to increase their capital to meet Pillar 2 requirements.

⁴⁶ The CRD has three pillars. Pillar 1 requires minimum capital requirements against credit, market and operational risk. Pillar 2 requires a supervisory review process to assess banks' risk management with respect to other risks not covered by Pillar 1, including the treatment of interest rate risk and concentration risks. The aim is not only to ensure that banks have adequate capital to support all the risks in their business, but also to encourage them to develop and use better risk management techniques in monitoring and managing risks. Pillar 3 relates to disclosure requirements for banks.

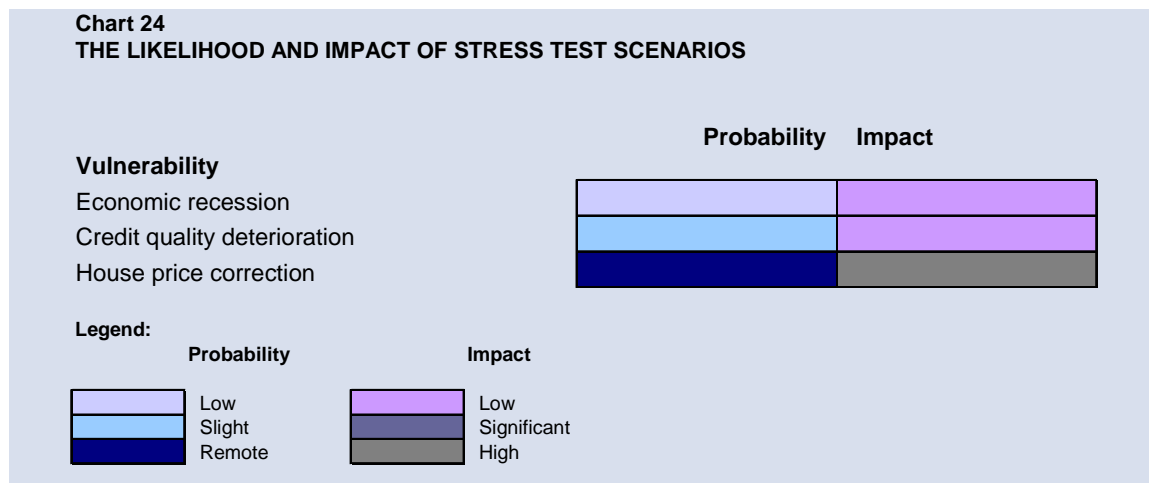
⁴⁷ The regulatory minimum requirement for the CAR is set at 8% with the CCAR benchmarked at 4%. The reported own funds, the CAR and the CCAR may be subject to adjustment as banks continue to revise their position in the light of the CRD requirements.

Consequent to the financial crisis, the market has also started to give increasing attention to other measures of capital strength, including the leverage ratio. The leverage ratio for the banking sector rose from 9.5 as at end-2007 to 10.3 as at end-2008. Looking forward, the CAR is likely to be affected by lower profits on account of further valuation losses and higher specific LLPs. Meanwhile, a significant decrease in RWA is not the most likely scenario. This implies that capital buffers may need to be increased and strengthened further.

The resilience of the banking system

The Bank regularly assesses the resilience of banks against a number of univariate shocks (Box 4). The scenarios are chosen on the basis of identified financial stability risks, which, in line with the underlying rationale for stress testing, are deemed to be extreme but plausible. Hence, in accordance with the prevailing risks and vulnerabilities, the latest scenarios chosen were a deterioration in credit quality, a sharp house price correction, a mild economic recession and a run on deposits.

The scenarios were evaluated in terms of their likelihood of occurrence as well as their impact on the capital adequacy of credit institutions. The probability of occurrence is subjective and ranges from low to remote, while the resulting impact on the banks' performance ranges from low to high (Chart 24).



The likelihood of occurrence and the impact of the calibrated shocks on capital adequacy positions differ across the institutions reviewed. It is worth mentioning that the resulting figures are somewhat understated since not all Pillar 1 risks were taken into account.

The probability of a mild economic recession materializing was found to have increased. The likelihood of occurrence of a house price crash was still considered remote, while the probability of a deterioration in credit quality was deemed likely to have increased.

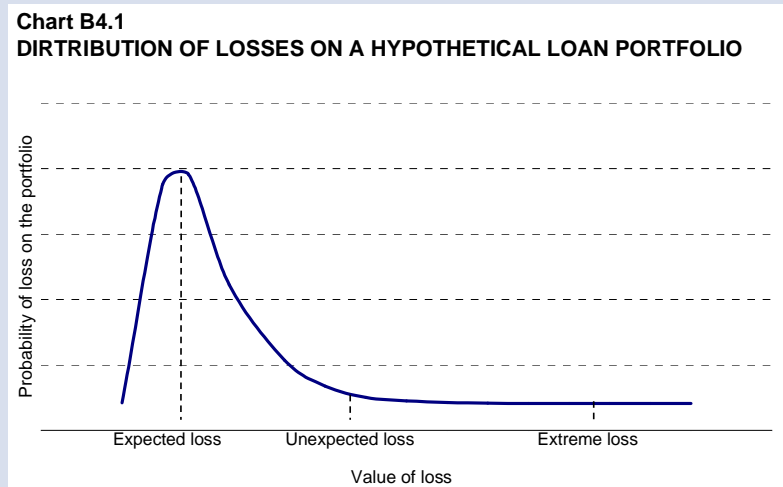
Box 4: Stress test analyses

Stress testing is a framework used to assess the resilience or vulnerability of the banking system to extreme yet plausible hypothetical shocks. It is an essential part of the toolkit for financial risk assessment and a valuable aid in assessing the resilience of individual banks, as well as the banking sector as a whole, to extreme stress events.⁴⁸ Stress tests undertaken by central banks *complement stress tests conducted by individual institutions, and act as a cross-check for other types of analysis.*⁴⁹

With the aid of stress testing, credit institutions can make an in-depth bottom-up assessment of the potential implications of critical developments and thereby be in a position to take appropriate and timely measures. Central banks, on their part, utilise uniform top-down univariate and/or multivariate stress tests so as to have a more uniform assessment of potential risk developments within the financial system.

Stress testing enhances macro prudential analysis by revealing whether the overall pool of risks in the system is increasing or decreasing over time and by highlighting potential negative developments at an early stage, thus enhancing the early warning framework to help identify weak banks or a weak banking system. Stress testing analyses the impact of adverse developments in macroeconomic conditions on the risks of either an individual financial institution or a group of institutions. This is also important with regard to the procyclicality debate and the analysis of the macroeconomic determinants of banks' credit risks.

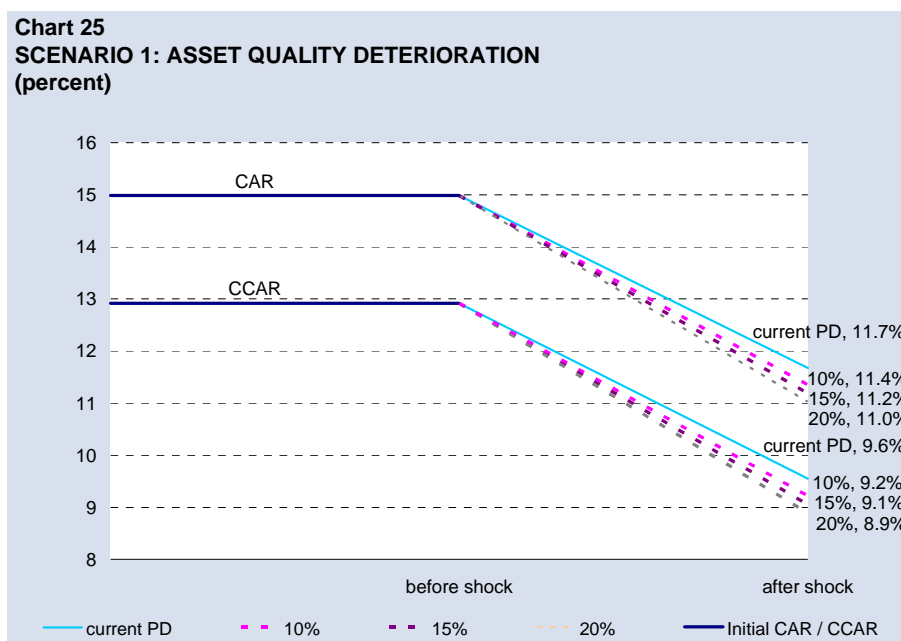
The current international financial crisis has highlighted a number of issues relating to stress testing. Stress tests are not a forecasting tool. They take into account extreme tail events over a long period (Chart B4.1). They should also take into account the second round effects of a stress event. The results should then be tailored into the risk response mechanism.



⁴⁸ Blaschke Winfrid, Jones Matthew, Majnoni Giovanni & Martinez Peria (2001), 'Stress Testing of Financial Systems: An Overview of Issues, Methodologies and FSAP Experiences', *IMF June 2001*.

⁴⁹ Matthew T. Jones, Paul Hilbers, and Graham Slack, 'Stress Testing Financial Systems: What to Do When the Governor Calls', IMF Working Paper 04/127.

The first scenario entails a test of the impact on the banks' capital adequacy and core capital ratios following an abrupt deterioration in the asset quality of their loans and of their securities portfolio (based on an assumed mapping of the current loan categories into Moody's rating classifications).



The test evaluated the impact of a hypothetical increase in the respective probability of default from 10% to 20% following a possible downgrade in asset ratings. The results of this simulation showed that even in the most extreme case, the banks would remain resilient (Chart 25).

Table 3
SCENARIO 2: ECONOMIC DOWNTURN

% increase in sectoral NPLs	5%	10%	15%
Current CAR	15.0		
	<i>Decrease in CAR in percentage points</i>		
<u>Sectors</u>			
Households and NPISH	0.06	0.13	0.20
Real estate, renting and business activities	0.02	0.04	0.06
Construction	0.02	0.03	0.05
Wholesale and retail trade	0.00	0.01	0.01
Hotels and restaurants	0.01	0.02	0.03
Resulting CAR	14.87	14.76	14.65
Current CCAR	12.9		
	<i>Decrease in CCAR in percentage points</i>		
<u>Sectors</u>			
Households and NPISH	0.09	0.18	0.27
Real estate, renting and business activities	0.03	0.05	0.08
Construction	0.02	0.04	0.06
Wholesale and retail trade	0.01	0.02	0.03
Hotels and restaurants	0.01	0.03	0.04
Resulting CCAR	12.76	12.59	12.43

In the second scenario it was assumed that an economic downturn would result in a minimum increase of 5% and a maximum of 15% in NPLs within each key economic sector (Table 3).⁵⁰ The results indicate that the financial system would remain adequately capitalised, even in the event that all the five identified sectors simultaneously experienced a 15% shock.

The third scenario assesses the impact of a sharp correction to house prices, which would translate into a reduction in the value of banks' collateral in the form of property. Concurrently, in line with current provisioning requirements, an equivalent additional amount of specific LLPs would be required against doubtful loans. A drop in property prices is also likely to produce a reduction in economic activity as a result of negative business and consumer sentiment and adverse wealth effects. This could in turn raise the banks' NPLs, thereby forcing them to increase specific LLPs further. The scenarios considered were a 20%, a 25% and a 30% correction in house prices, while the increase in NPLs ranged from 10% to 20%.⁵¹ In the most extreme scenario, both the CAR and the CCAR would remain above the regulatory minima of 8% and 4%, respectively (Table 4).

Table 4
SCENARIO 3: HOUSE PRICE CORRECTION

Current CAR:15%			
percentage decline in house prices	A percentage increase in NPL's		
	10	15	20
20	12.68	11.67	10.22
25	12.53	11.52	10.07
30	12.38	11.36	9.92
Current CCAR:12.9%			
	10	15	20
	10.60	9.57	8.10
	10.45	9.42	7.95
	10.30	9.27	7.79

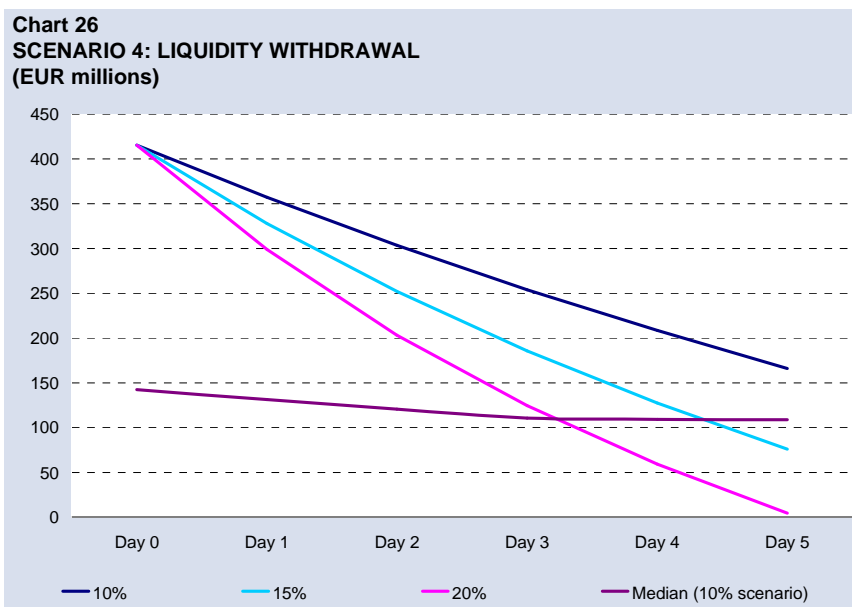
The robustness of the banks' liquidity position was tested by means of a simulated deposit run with the aim of assessing the banks' ability to withstand a survival period of five days (Chart 26). In this fourth scenario, deposit withdrawals of 10%, 15% and 20% were assumed. It was also assumed that banks would only utilize their securities portfolio to meet the cash withdrawal, and that there would be no recourse to minimum reserve balances, borrowing against credit claims or emergency borrowing.⁵² The results showed that even in the event of a 20% daily withdrawal of deposits, the banks would, on average, remain liquid for the five-day survival period.

In conclusion, if the assumed extreme scenarios were to materialise, the banking sector would still remain adequately capitalised. Feedback and second round effects, and capital requirements against other types of risks, such as Pillar 2 risks, were not, however, taken into consideration.

⁵⁰ It is also assumed that the banks would provide additional provisions for the difference between the average collateral coverage of about 85% and the increased NPLs.

⁵¹ For the purpose of putting the correction of house prices in perspective, the UK FSA suggests that an average reduction of 40% in property prices is an appropriate basis for stress testing.

⁵² Deposits with a remaining time to maturity of less than 3 months are assumed to mature uniformly on a daily basis and to be transferred to demand deposits.



2.3 Non-bank financial sector

2.3.1 Insurance sector

The global market turmoil has not spared the insurance industry. This was due both to losses on exposures to credit default swaps and to deteriorating financial performance. Indeed, several insurance companies worldwide were forced to cease operations or to resort to government intervention. Comparatively, insurance companies in Malta were not so extensively affected by the turbulence. However, they too are exposed to the international turmoil. Consequently, some registered lower profits in 2008 while others even registered losses due to downward fair value movements in their investment portfolio.

Insurance companies account for 9.4% of the domestic financial system, and maintained a relatively stable share throughout the year. As at end-2008, the total assets of the insurance sector remained relatively stable at €1.6 billion, with the life assurance sector accounting for the largest share of the business, with assets worth €1.3 billion. The industry is highly concentrated, both in terms of total assets and in terms of net premia, with an HHI of 3,683 and 2,760, respectively. This means a few insurers have a high degree of market power.

Financial conditions

The underwriting business deteriorated during 2008, with written premia falling by 12% to €232 million. This was entirely attributable to the life insurance sector, whose premia dropped by 17% to €165 million, as non-life premia increased marginally. The proportion of gross premia to GDP at market prices declined by 0.8 percentage points to 5% over the year.

Given a positive correlation between the demand for insurance policies and that for new mortgage loans, the slowdown in the property market has resulted in both a decrease in property sales and related house loans and a decline in the demand for life policies. These developments reflect those in the euro area generally, where, as a result of the crisis, a decrease in sales of life policies has also been noted.⁵³ On the other hand, while the life assurance industry reported a 6% drop in net claims, non-life net claims were only slightly less than a year earlier.

⁵³ Source: CEIOPS Financial Stability Committee, December 2008 Financial conditions and financial stability in the European Insurance and Occupational pension fund sectors 2007-2008 Risk Update.

As a result, during the period under review, the industry registered a further decline in profitability, with profits after tax falling by nearly 70%. This contraction mainly stemmed from the non-life sector, which registered a 98% drop in profits, whereas the life sector registered a 30% drop. This was due both to the decline in underwriting business and to valuation effects on the investment portfolio.

The overall weaker financial performance was counterbalanced by an increase in capital by some insurance companies. As a result, the solvency position of both the life and the non-life sectors, as calculated by the ratio of capital to total assets, remained relatively stable, at 12.8% and 32.2%, respectively.

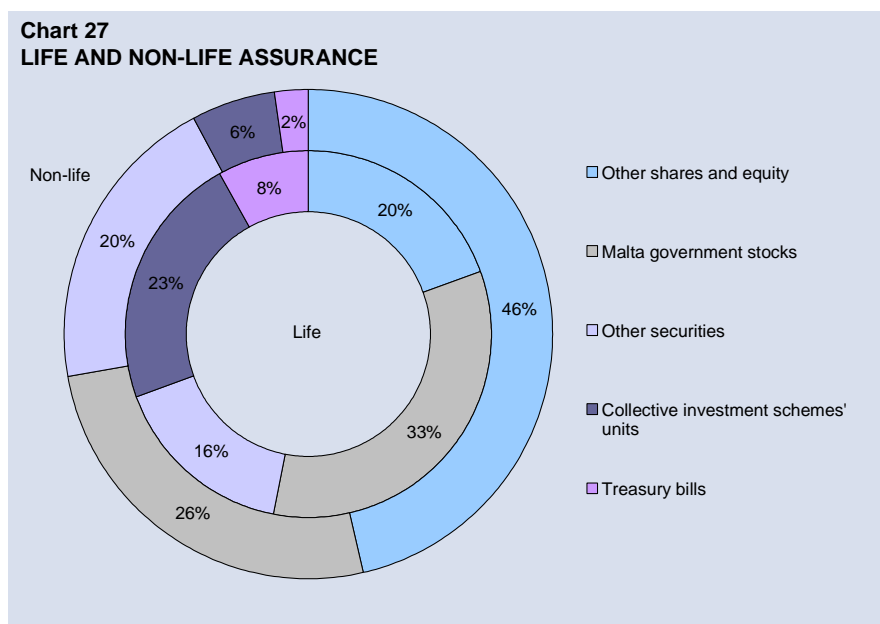
Risks to the insurance sector

The main risks to the insurance industry generally arise from the underpricing of risk and from market, contagion and reinsurance risks.

Currently, there is no evidence of underpricing of risks within the domestic insurance sector. However, market risk stemming from the sector's investment portfolio is a major risk faced by the insurance industry. This is mainly due to fluctuations in the prices of assets, which have resulted in valuation losses.

Furthermore, the mismatch between the sector's holdings of long-term liabilities (e.g. life contracts) and medium-term assets (e.g. bonds) also gives rise to interest rate risk. The investment portfolio of insurers in Malta has remained relatively stable, with a significant part consisting of MGSs. But as the domestic capital market does not offer long-term assets to match the insurers' liabilities, interest rate risks remain (Chart 27).

While this structure has to some extent insulated local insurers from the risks triggered by the international turbulence, it also reveals - to some extent - a degree of liquidity risk arising from the lack of depth of the Maltese capital market. However, as from 2008, with the introduction of the euro, insurers may find it easier to resort to the euro area market to finance their operations. Nevertheless, the insurance companies retain a high degree of risk in their balance sheet, as reflected in the RRR of 96% for life and 69% for non-life insurers as at end-2008.⁵⁴ While a high RRR may limit possible spillover effects from instability in the reinsurance sector, it also heightens idiosyncratic default risks.⁵⁵



⁵⁴ The RRR, expressed as a percentage of net premiums on gross premiums, conveys the extent to which risk is retained by insurance principals or directed to reinsurers.

⁵⁵ The insurance companies are required to effect their reinsurance arrangements with reinsurers having a rating of not less than A-.

Monoline insurance activities and exposures to credit default swaps have been in the limelight in the global insurance sector due to their implications in the current climate of financial market instability.⁵⁶ Unlike other euro area institutions, however, domestic insurance companies do not have significant exposures to such activities, and consequently no direct impact is anticipated from these sources. On the other hand, longevity risk and asset-liability mismatch persist amongst insurers across countries, including domestic insurers.⁵⁷ Contagion and reputation risks, emanating from interlinkages between the banking sector and the insurance industry, remained broadly unchanged and limited for the domestic industry.

Going forward, the deteriorating macroeconomic and financial environment is likely to lead to higher risks for the insurance industry. These are likely to arise from a lower propensity to insure by both households and the corporate sector, leading to less business for the industry, though this may be partly offset by clients' increased risk awareness. Added risks stem from insurance covering loan defaults, particularly as a result of the deteriorating economic situation, and a continuation of the current uncertainty surrounding the valuation of the sector's investment portfolio.

2.3.2 Investments sector⁵⁸

With a relatively minor share of 5.1% of the domestic financial system, the investment funds sector poses limited risks to financial stability, although there could be reputation risks arising from failures.

The household sector remains the major investor in CISs, holding 90.3% of total shareholders' funds. Despite a 25% decline in assets held in CISs, down to €738.9 million as at end-2008, the risk of a significant worsening in CISs' performance is low. This is mainly due to the fact that the largest component of investments, at 57.3%, is MGSs, while exposure to structured products is limited. In fact, the majority of CISs are bond funds, signaling a low risk investment profile.

The PIFC sector contracted by 35.5% during 2008, to €111.7 million. This decline appears to have been largely due to a heightened aversion to risk by shareholders – mainly households and privately-owned non-financial companies. Indeed, the distress of several large international hedge funds, as well as the collapse of foreign property markets, are considered important factors, especially as the greater part of the underlying assets of the PIFC sector consist of foreign real estate.

⁵⁶ Monoline insurance refers to those entities which insure against the risk of default of a bond or other security, usually through an unrestricted and binding guarantee of payment of the principal and interest of the bond underwritten.

⁵⁷ Longevity risk is the risk stemming from an ageing population, which could subsequently lead to higher accumulated claims resulting from larger- than- expected mortality rates further down the line.

⁵⁸ The investments sector consists of CISs and PIFCs. CISs are organisations that collectively invest "capital acquired by means of an offer of units for subscription, sale or exchange" (Investment Services Act, 1994). PIFCs are a special class of investment funds, attracting persons or companies with a relatively higher initial capital level. There are three types of PIFC, namely, Experienced Investor Funds, Qualifying Investor Funds and Extraordinary Investor Funds, differing on the basis of the minimum entry capital levels. For further details, refer to 'Investment Services Act', 1994 and 'Introduction to the Investment Services Rules for Recognised Persons and Retail Collective Investment Schemes', 2007.

3. POLICY RESPONSES AND IMPLICATIONS

The immediate priority of the authorities in the current financial crisis is to restore calm to the markets. But in the medium term various policy responses need to be developed and specific legislation reviewed to resolve systemic stress. Most international fora, including the IMF, the FSF and ECOFIN, have already put forward a number of recommendations to restore the resilience of the financial system. Some of these recommendations include measures to dampen or mitigate the cyclical swings in credit conditions and measures to strengthen liquidity, enhance transparency and valuation, reduce procyclicality and improve the bank resolution framework.

3.1 Liquidity

Liquidity plays a crucial role in the proper functioning of the financial system. Policies aimed at strengthening banks' liquidity management enhance both market stability and systemic resilience. From a financial stability perspective, proper liquidity management, accompanied by an efficient contingency funding strategy, safeguards the banks' funding capabilities and heightens their resilience against idiosyncratic or systemic market risks. Banks and other financial institutions need to actively manage their liquidity risks so as to reduce possible liquidity demands and to hold truly liquid assets to enable them to meet such demands.⁵⁹

Existent EU legislation on liquidity risk is highly fragmented, reflecting various national approaches towards liquidity management. Although a one-size-fits-all regulatory regime may not be easily achievable due to the heterogeneity of both type and size of EU banking institutions, adherence to a set of principles, such as those provided by the BCBS, should prove fruitful. These principles highlight the importance for banks of having sound liquidity risk management frameworks accompanied by formal contingency funding plans (including risk tolerance levels) which crystallize the strategies for addressing times of liquidity strains. Banks should also embrace sound communication plans that are able to deliver accurate and timely information to both internal and external parties, including central banks. Additionally, banks should regularly conduct stress tests, taking into account both institution-specific liquidity crisis and general market liquidity crisis, such as large depositor withdrawals or the revocation of inter-bank facilities. These tests should assist credit institutions to identify exposures to possible liquidity stresses, thus enabling them to implement mitigating measures to strengthen their resilience to such strains. Consequently, each institution's contingency plan should take into account the results of such tests.

Banks should also maintain strong relationships with current and potential sources of funding, including central banks. This would enable them to gain insight into the providers' behaviour in times of bank-specific or market-wide shocks and to mitigate a liquidity problem should this arise. It would also enhance central banks' monitoring of the banks' liquidity risk, enabling them to promptly identify signs of a deterioration. This has to be supported by cooperation between central banks and supervisory authorities through effective communication channels in order to prevent liquidity disruptions from spreading across the financial system.

In recognising the importance of strong liquidity risk management, the Bank, together with the MFSA, has been working with a number of banks on their contingency funding plans and stress testing capacity. The strengthening of these capacities, together with the existing robust regulatory quantitative and qualitative requirements, should ensure that banks maintain sufficient liquidity and provide early warning signals to the authorities.

3.2 Asset valuation

Accounting standards are a fundamental aspect of the financial infrastructure and are key to market discipline. The adoption of fair value accounting has raised a number of important considerations. In this respect, the de Larosiere Report recommends that accounting standards should not bias business models,

⁵⁹ RiSk Minds Conference, December 2008, Dr Thomas F Huertas Financial Services Authority (UK).

promote pro-cyclical behaviour or discourage long-term investment. In fact, from a macro-prudential perspective, there are concerns about the procyclical nature of fair value accounting, while from a micro-prudential perspective, there are concerns about the underlying depth of the markets on which such fair valuation accounting is based, particularly in times of stress.

According to the fair valuation principle, financial instruments in the ‘trading book’ are valued at fair value through the profit and loss account, while those in the ‘available-for-sale’ portfolio are valued through reserves. On the other hand, assets ‘held-to-maturity’ are amortised. Thus, for supervisory purposes, the fair-value principle raises issues regarding the allocation of assets to the proper portfolio, hence giving rise to risk management concerns. The fair valuation framework is based on the presumption that a market value for financial instruments exists. But in a crisis, this may not necessarily be the case. The application of fair valuation implies that liquidity problems can be directly transmitted to the profitability of an institution, and hence to its capital base. As became evident in the current financial crisis, the liquidity crisis was quickly transmitted to the capital base through the valuation effect.

Several accounting standard-setting bodies have emphasized the need for greater management judgment in estimating fair values when markets are inactive. Specifically, in October 2008, the IASB, in response to a request by ECOFIN, allowed the reclassification of financial assets under certain circumstances, made proposals to enhance disclosures of financial instruments and published guidance for the application of fair value in illiquid markets. During the same month, the EU Commission adopted the amendments to the accounting standards with the intention of mitigating the consequences of the recent turbulence in the financial markets.

The guidance issued by the IASB emphasises that the objective of a fair value measurement is to establish the price at which an orderly transaction would take place between market participants on the measurement date, not the price that would be achieved in a forced liquidation or distress sale.⁶⁰ The guidance also reaffirmed that such transactions should not be considered as fair value measurement. The IASB also agreed to align IAS 39 with the US GAAP by permitting non-derivative financial assets to be reclassified out of the “held-for-trading” category to the “held-to-maturity” one.⁶¹

From a financial stability perspective, the reclassification of assets in unusual circumstances would help financial institutions to mitigate the problems arising from the inability to discover prices. Reclassification in such circumstances would be appropriate, but future considerations regarding fair value accounting should address the other broader implications for financial stability purposes.

3.3 Dynamic provisioning

In line with IFRS requirements, LLPs are allocated only against those assets believed to be impaired at the balance sheet date. Following the financial crisis, this ex-post approach to LLPs came under scrutiny. As provisions for losses normally increase sharply during cyclical downturns, the procyclical effect is amplified.

Maintaining an adequate capital buffer against expected losses during an economic downturn reduces the procyclical nature of LLPs. This means that LLPs should be measured against the expected losses over the life of a loan, rather than against the actual losses incurred to date. Such *dynamic provisioning* should diminish the sharp swings that result when provisions are built up during economic upswings and used during downswings.

The concept of *dynamic provisioning* is gradually gathering more support internationally, as such a system, by lessening the procyclical effects of the current provisioning regime, should help to further strengthen the soundness of the financial system. In fact, the de Larosiere Report encourages dynamic provisioning or capital buffers to reduce pro-cyclicality.

⁶⁰ IASB, Measuring and disclosing the fair value of financial instruments in markets that are no longer active, October 2008.

⁶¹ IASB, Reclassification of Financial Assets, October 2008.

3.4 Bank insolvency

Banks are seen as a 'special' and different type of entity from other companies. The failure of a bank can have far more serious repercussions than the failure of another company of a similar size. The failure of Northern Rock in the United Kingdom demonstrated the need for a sound legal framework to efficiently and equitably handle failing banks. The United Kingdom is consequently reviewing the bank insolvency procedures to facilitate, in case of need, the resolution of a problem bank.⁶² Sound legislative provisions prevent confusion and delays, and ensure resolution efficiency. During various banking crisis it has been observed that the absence of adequate mechanisms to deal with failing banks eventually raised the cost to public finances.

One of the disadvantages of applying the same solvency regime to banks as to other commercial enterprises is that the winding up process can be initiated by the creditors and/or the shareholders. This might disrupt or jeopardize a resolution by the authorities and result in a non-optimum resolution, to the detriment of retail depositors and/or the tax-payer.

The solvency regime for banks in Malta is similar to that applied to private and public non-financial companies. The regime is mainly governed by the Companies Act (*Cap 386*), supplemented by the Controlled Companies (Procedures for Liquidation) Act (*Cap 383*). But some provisions specific to the banking sector are to be found in the Banking Act (*Cap 371*) and the Credit Institutions (Reorganisation and Winding up) Regulations 2004. It may therefore be prudent to study and review the insolvency and bank resolution procedures with a view to consolidating the relevant legal provisions and setting up a more efficient regime.

⁶² Proposals for strengthening the framework for financial stability and protecting depositors were published on 1 July 2008 by HM Treasury, the Financial Services Authority and the Bank of England, July 2008.

4. RISK OUTLOOK

The international financial crisis has had a profound effect on the financial industry. Following the insolvency of Lehman Brothers in September 2008, the uncertainty prevailing in the global financial system worsened considerably, with a corresponding increase in the risks to financial stability. Risks to the domestic financial system have increased accordingly, albeit not to the same extent as in a number of other countries.

Banks in Malta remain for the most part adequately capitalized, in spite of their having registered lower profits due to valuation losses. However, as the fuller implementation of the CRD progresses, additional capital may be required to meet risks other than those catered for under Pillar 1. This is crucial if the existing resilience of banks to extreme but plausible shocks is to be maintained. Although the share prices of the listed banks have fallen, this appears to have been more a reaction to lower profitability (and hence lower dividend expectations) than to loss of confidence in the banks.

Going forward, banks in Malta, like their counterparts elsewhere, have become increasingly vulnerable to macroeconomic developments. Credit growth during 2008 was in line with nominal GDP growth, but the continued rapid accumulation of debt by an already highly indebted private sector may lead to a further build-up in vulnerabilities. The current economic slowdown is likely to result in a further increase in non-performing loans in both the household and the corporate sectors as debt-servicing capabilities deteriorate. The outlook for the banks' earnings in 2009 is therefore highly uncertain. This view is reinforced by the still on-going repricing of risks. In addition, the banks are highly exposed to the property market, which, after years of continuous growth, is now likely to converge to its fundamental value. Although a severe correction in property prices is only a tail event, and the banks currently appear to have sufficient capital to withstand such a shock, their resilience would certainly be tested should it materialise.

The liquidity profile of the banks remains generally strong, supported as it is by their focus on funding through retail deposits. However, the deposit inflow has decelerated in recent months, and the cost of such funding is likely to rise as the domestic banks face increased competition for deposits from other institutions.

Market risks, particularly counterparty credit risks, have increased as a result of the financial crisis. As confidence in counterparties deteriorated and the interbank market dried up, market rates became increasingly volatile. The ECB and various other authorities have taken extensive measures to calm the market and restore confidence. But despite these measures, the instability may last long. Hence, banks are still exposed to various risks, including those arising from second round effects. In this respect, they need to control counterparty limits rigorously, including high direct exposures to related institutions, in line with their risk tolerance level.

Stress tests undertaken by the Bank confirm that, on average, the banks have sufficient capital buffers to withstand extreme yet plausible shocks, even if, as a result of lower profits, these buffers contracted in 2008. In addition, the tests showed that the banks were sufficiently liquid to withstand a persistent withdrawal of funds should such an event materialise.

The non-bank financial sector has also suffered as a result of the crisis. Business activity has slowed down, although, at the same time, the insurance sector has seen a drop in claims. Here too, however, the largest effect resulted from the valuation of the sector's investment portfolio. The securities market has similarly suffered, with investors withdrawing as the crisis deepened. If the lack of confidence persists, losses will accumulate and hedge funds will fold up or curtail redemption. Therefore, the risks for the securities market are likely to intensify.

The Maltese economy is likely to slow down as the recession spills over onto a number of industries and spreads across countries. Hence, the domestic banks are likely to face a rise in non-performing loans and a fall in profitability. Nevertheless, the banks have so far remained resilient to a number of stressful events.

In short, as a result of the global financial crisis and the deepening recession, the domestic financial system has become more vulnerable and overall financial stability conditions in Malta have become more uncertain.

**APPENDIX
AND
GLOSSARY**

Appendix 1: Financial Soundness Indicators

Comparative Indicators 2003 - 2008 - (All figures in %)

Core FSIs	Domestic Banks						Total Banks					
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008
Regulatory capital to risk weighted assets	17.38	19.04	17.08	14.99	15.76	14.93	20.65	21.35	20.36	22.01	21.04	17.92
Regulatory Tier 1 capital to risk-weighted assets	12.54	12.63	15.56	13.49	13.57	12.87	16.39	15.97	18.99	20.80	19.66	15.82
Non-performing loans net of provisions to capital	54.53	41.61	33.62	29.85	26.28	26.07	38.42	30.01	20.10	12.48	10.58	10.72
Non-performing loans to total gross loans	12.72	10.32	7.38	5.98	5.19	4.90	8.06	6.45	3.92	2.80	1.82	1.62
Sectoral distribution of loans to total loans												
Agriculture	0.31	0.32	0.28	0.29	0.28	0.25	0.20	0.20	0.15	0.13	0.09	0.08
Fishing	0.08	0.07	0.03	0.05	0.04	0.07	0.05	0.04	0.02	0.02	0.01	0.02
Mining and Quarrying	0.25	0.18	0.18	0.16	0.17	0.16	0.16	0.11	0.10	0.07	0.06	0.05
Manufacturing	7.87	6.00	4.88	3.91	4.22	4.23	4.99	3.69	2.52	1.77	1.42	1.31
Electricity, gas and water supply	3.57	3.60	2.27	2.77	2.77	4.15	2.26	2.29	1.17	1.25	0.93	1.28
Construction	8.57	8.48	8.02	8.49	9.54	9.11	5.43	5.21	4.14	3.89	3.20	2.81
Wholesale and retail trade; repairs	12.27	11.24	10.97	10.39	10.23	9.37	7.77	6.97	5.69	4.75	3.46	2.91
Hotels and restaurants	8.81	8.03	7.58	7.22	6.68	5.70	5.58	4.93	3.91	3.27	2.24	1.76
Transport, Storage and communication	5.77	4.96	4.58	4.99	4.54	5.35	3.66	3.05	2.37	2.26	1.52	1.65
Financial Intermediation	3.19	2.46	2.32	0.73	0.62	0.45	2.37	2.00	1.71	0.64	0.35	0.21
Real estate, Renting and business	5.05	5.39	7.09	8.97	10.20	11.58	3.20	3.31	3.66	4.07	3.42	3.58
Public Administration	0.16	0.20	0.86	1.46	1.32	0.88	0.10	0.12	0.44	0.66	0.44	0.27
Education	0.25	0.30	0.53	0.58	0.70	0.78	0.16	0.19	0.27	0.26	0.23	0.24
Health and Social Work	0.66	0.58	0.52	0.46	0.50	0.48	0.42	0.36	0.27	0.21	0.17	0.15
Community, recreational and personal service	1.27	1.16	1.10	1.16	0.97	0.84	0.80	0.72	0.57	0.53	0.33	0.26
Households and non-profit institutions	25.98	28.07	31.11	32.98	36.30	35.64	16.45	15.06	14.57	14.94	12.17	10.98
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
Non-resident	15.94	18.96	17.68	15.38	10.93	10.95	46.41	51.74	58.43	61.26	69.95	72.44
Return on assets	0.90	1.52	1.59	1.79	1.48	-0.37	1.06	1.41	1.45	1.15	0.98	0.61
Return on equity	9.91	12.01	12.88	15.50	13.75	-3.77	12.44	11.82	13.67	12.27	11.83	4.51
Interest margin to gross income	74.06	67.18	66.04	64.57	67.46	152.77	71.24	45.35	48.63	56.41	56.27	59.32
Non-interest expenses to gross income	56.73	46.31	46.01	44.07	43.57	108.77	57.29	47.22	41.37	44.39	53.78	63.63
Non-interest income to gross income	25.94	32.82	33.96	35.43	32.54	-52.77	28.76	54.65	51.37	43.59	43.73	40.68
Liquid assets to total assets	20.38	20.91	23.07	21.76	24.31	20.32	24.38	24.25	21.74	19.73	21.87	17.55
Liquid assets to short-term liabilities	47.85	46.68	53.03	50.32	49.03	45.09	50.00	49.90	55.72	52.54	52.59	49.49
Other FSIs												
Coverage ratio	22.24	24.69	27.10	29.67	26.18	24.15	23.31	25.88	28.83	31.82	28.86	26.92
Domestic Investment Securities to Total Assets	13.18	13.01	12.26	9.12	9.36	9.30	8.04	7.38	5.57	4.05	3.42	3.15
Foreign Investment Securities to Total Assets	15.42	18.42	19.18	17.93	16.17	14.95	24.77	29.16	31.62	32.18	23.83	18.30
Unsecured Loans to Total Lending	35.27	35.81	32.32	30.87	26.27	25.93	37.92	39.38	39.46	40.68	36.72	36.44
Assets to Total Capital and Reserves (*)	8.04	7.89	8.37	9.15	9.52	10.28	7.30	7.31	7.77	7.04	7.29	7.88
Large exposure to capital	142.71	56.83	153.68	160.26	160.75	156.26	118.23	62.81	134.01	131.43	135.70	108.65
Gross asset position in financial derivatives to capital	0.67	1.20	2.40	2.98	3.53	14.74	0.54	0.87	1.43	1.24	1.75	5.82
Gross liability position in financial derivatives to capi	3.36	3.70	2.99	3.33	2.36	6.93	2.38	2.68	1.87	1.41	1.13	4.54
Personnel expenses to non-interest expenses	56.81	59.17	54.03	53.85	55.86	54.96	34.78	38.85	40.85	36.80	25.65	24.91
Customer deposits to customer loans	136.64	111.12	110.30	106.02	141.18	126.07	102.22	85.33	86.70	66.68	69.32	61.58
Net open position in equities to capital	51.65	44.85	47.10	48.43	41.25	20.45	41.73	38.17	34.53	24.94	20.65	11.53

(*) 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 loan-to- deposit ratio: The proportion of customer deposits to customer loans. Customer loans include all-currency claims on (i) money market funds; (ii) general government; and (iii) other remaining economic sectors. Customer deposits include all-currency deposits and other loans (liabilities) of (i) money market funds; (ii) central government; (iii) other general government; and (iv) other remaining economic sectors.

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/interbank funding.

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

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.

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.

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.

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

