



**BANK ĊENTRALI TA' MALTA**  
**EUROSISTEMA**  
**CENTRAL BANK OF MALTA**

## **NINTH FINANCIAL STABILITY REPORT**

**2016**

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*The cut-off date for information relating to banking, insurance and investment funds is 8 March 2017. The source of data in tables and charts is the Central Bank of Malta unless otherwise indicated.*

ISSN 2312-5918 (print)

ISSN 2074-2231 (online)

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## ABBREVIATIONS

BCI	Business Conditions Index
BLS	Bank Lending Survey
BR	Banking Rule
BRRD	Banking Recovery and Resolution Directive
BSI	Balance Sheet Items
CCyB	Countercyclical Capital Buffer
CET1	Common Equity Tier 1
CDS	credit default swaps
CIS	Collective Investment Scheme
CISS	composite indicator of systemic stress
CRD IV	Capital Requirements Directive IV
CRR	Capital Requirements Regulation
EBA	European Banking Authority
ECB	European Central Bank
EIOPA	European Insurance and Occupational Pensions Authority
EME	emerging market economies
ESI	Economic Sentiment Indicator
EU	European Union
FSB	Financial Stability Board
FOLTF	failing or likely to fail
FRN	floating rate note
FVTPL	fair value through profit and loss
G20	Forum for the governments and central bank governors from 20 major economies.
GDP	gross domestic product
GFCF	gross fixed capital formation
G-SIIs	globally systemically important institutions
GVA	gross value added
HICP	Harmonised Index of Consumer Prices
HTM	held-to-maturity
IMF	International Monetary Fund
IRRBB	Interest rate risk in the Banking Book
LAA	loss absorption amount
LCR	Liquidity Coverage Ratio
LGD	Loss Given Default
LTV	loan-to-value
MFI	monetary financial institution
MCR	Minimum Capital Requirement
MFSA	Malta Financial Services Authority
MGS	Malta Government Stocks
MMF	money market funds
MREL	minimum requirements for own funds and eligible liabilities
MSE	Malta Stock Exchange
MST	Macro Stress Test
NACE	nomenclature statistique des activités économiques dans la Communauté européenne.
NFC	non-financial corporations
NII	net interest income
NPE	non-performing exposure
NPL	non-performing loan
NSFR	Net Stable Funding Ratio
NSO	National Statistics Office
NTNI	Non-Traditional Non-Insurance

O-SIIs	other systemically important institutions
OFI	other financial intermediaries
PCC	Protected Cell Company
PIF	Professional Investor Funds
PSPP	Public Sector Purchase Programme
RCA	recapitalisation amount
REMS	Real Estate Market Survey
ROA	return on assets
ROE	return on equity
RWA	risk-weighted assets
SCR	Solvency Capital Requirement
SDW	Statistical Data Warehouse
SII	Solvency II
SME	small and medium-sized enterprises
SSM	Single Supervisory Mechanism
STREAM	Structural Macro-Econometric Model of the Maltese Economy
TLAC	total loss absorbing capacity
UK	United Kingdom
US	United States
VaR	value at risk

## THE DOMESTIC FINANCIAL SECTOR

### Banks

Core Domestic Banks	Non-Core Domestic Banks	International Banks
APS Bank Limited	FCM Bank Limited	AgriBank plc
Banif Bank (Malta) plc	FIMBank plc	Akbank T.A.S.
Bank of Valletta plc	IIG Bank (Malta) Limited	Credit Europe Bank NV
HSBC Bank Malta plc	Izola Bank plc	CommBank Europe Limited
Lombard Bank Malta plc	Sparkasse Bank Malta plc	Credorax Bank Limited
Mediterranean Bank plc		Deutsche Bank (Malta) Limited <sup>(2)</sup>
Mediterranean Corporate Bank Limited <sup>(1)</sup>		Ferratum Bank Limited
		MFC Merchant Bank Limited
		NBG Bank Malta Limited
		Nemea Bank Limited <sup>(3)</sup>
		Pilatus Bank Limited
		ECCM plc
		Satabank plc
		Turkiye Garanti Bankasi A S
		Novum Bank Limited
		Yapi Kredi Bank Malta Limited

### Investment Funds

Collective Investment Schemes	Professional Investor Funds
APS Funds SICAV plc	Alinum Fund SICAV plc
Calamatta Cuschieri Funds SICAV plc	Amalgamated Investments SICAV plc
Global Funds SICAV plc	EOS SICAV plc
HSBC Malta Funds SICAV plc	HSBC Malta Funds SICAV plc
Merill SICAV plc	Landoverseas Fund SICAV plc
Vilhena Funds SICAV plc	Novium Opportunity Umbrella SICAV plc

### Insurance Companies

Life Insurance Companies	Non-Life Insurance Companies
MSV Life plc	MAPFRE Middlesea plc
HSBC Life Assurance (Malta) Limited	Citadel Insurance plc
GlobalCapital Life Insurance	Elmo Insurance Limited
	Gasamamo Insurance Malta
	Atlas Insurance PCC Malta

<sup>(1)</sup> On 22 June 2017 Mediterranean Corporate Bank Limited was merged with Mediterranean Bank plc.

<sup>(2)</sup> On 5 July 2016 Deutsche Bank (Malta) Limited surrendered its banking licence.

<sup>(3)</sup> On 23 March 2017 the ECB decided to withdraw Nemea Bank's licence.

This edition of the *Financial Stability Report* is based on the above categorisation of banks.



## PREFACE

The financial system plays a pivotal role in a growing economy as it allocates savings to productive investment, thus contributing to the economy's continuous restructuring. In this regard, a well-developed and sound financial system is highly essential for efficient financing decisions, favouring a better allocation of resources and promoting economic growth. Such functions need to be complemented by a comprehensive regulatory framework coupled with a secure infrastructure, facilitating the execution of financial transactions. Financial stability analysis assesses the financial system and attempts to identify the build-up of potential systemic risks, which could in turn require policy measures.

The *Financial Stability Report*, hereinafter referred to as the *Report*, outlines the main risks faced by the domestic financial system and presents policy measures that have already been implemented, or are expected to be implemented in the near future to address risks. The risk outlook is based on the assessment of the international and domestic macro-financial conditions within which the domestic financial system operated in 2016. The *Report* assesses developments in key financial sectors, namely the banking sector, insurance companies and investment funds, and addresses their resilience. The latter assessment is also supported by a set of stress tests to the banking sector.

The *Report* is prepared by the Financial Stability Department of the Central Bank of Malta and reviewed and endorsed by the Financial Stability Committee. The Committee is chaired by the Governor of the Bank, and includes as members the Deputy Governors, Chief Officer – Financial Stability and Statistics, Chief Officer – Financial Control and Risk, Chief Officer – Economics, and Head – Financial Stability.



## 1. MACRO-PRUDENTIAL RISKS AND POLICY

### ***The financial sector in Malta remained sound, sustaining its resilience against challenges stemming from within and outside the financial system.***

The positive economic climate in 2016 continued to support the soundness and the resilience of the domestic financial system, which system was characterised by adequate capital buffers, ample liquidity levels and healthy profitability levels.

The size of the banking sector stood at 466.7% of gross domestic product (GDP) in 2016, narrowing from 509.8% a year earlier. This contraction was largely influenced by the operations of two large branches of foreign banks coupled with the exiting of another bank as part of the global scaling-back of its operations. This bank together with the foreign branches are categorised as international banks and have no links with the domestic economy.

The balance sheets of the core domestic banks, which are highly connected with the domestic economy, expanded further with total assets reaching 219.9% of GDP by end 2016. Such growth was mainly driven by customer deposits. Lending to households, particularly mortgages, and placements with other banks and the Eurosystem continued to grow. Lending to non-financial corporates (NFC) remained weak, on the back of some signs of disintermediation by the corporate sector, which appears to be resorting more to market financing, in a bid to lock-in lower rates on their debt. Credit risk eased further reflecting the strong economic performance, but also owing to positive sector-specific developments. Furthermore, banks embarked on voluntary processes to clean up their loan portfolio, writing off legacy non-performing loans (NPL). These developments led to further drops in the NPL ratio, down to 5.3% from 7.1% a year earlier. This was also possible, as core domestic banks continued to book healthy profits and were able to further strengthen their capital buffers, with capital ratios exceeding the minimum regulatory requirements. These banks continued to operate with ample liquidity levels, evidenced by the high liquidity coverage ratio (LCR) and the low customer loans to deposits ratio. The business model of core domestic banks remained generally focused on traditional banking business and investments in high investment grade securities.<sup>1</sup>

Non-core domestic banks expanded their total assets during the year, maintaining their international business orientation with limited links to the domestic economy. By the end of 2016, their total assets stood at around 25% of GDP, broadly stable compared to a year ago. Customer lending and equity holdings contributed to the expansion in their balance sheet, financed predominantly through non-resident customer deposits. Profitability levels improved further, on account of higher non-interest income. Non-core domestic banks continued to operate with high capital and liquidity levels, which well exceeded the minima stipulated under the regulatory framework. The business model of this group of banks is varied, ranging from niche service providers to more diversified business operations.

The international banks reported a contraction in their asset base driven predominantly by two branches of foreign banks, which are considerably larger than other banks within this category. Interconnections with the domestic economy remained negligible, as operations mainly revolved around interbank operations and investing in foreign assets. The profitability of international banks weakened somewhat on account of lower interest and non-interest income, whereas their capital and liquidity positions remained well-above the required regulatory minima.

By end 2016, the domestic insurance sector held €3.9 billion in total assets, equivalent to 39.2% of GDP. The investment strategies of the life and general insurance business lines remained broadly unchanged and skewed towards high-quality investment assets, predominantly bonds and equities. Profitability weakened somewhat on the back of lower investment income and a rise in net claims, although overall profits remained healthy. Irrespective of interlinkages with key economic sectors, contagion implications are deemed to be

<sup>1</sup> Investment grade securities are those which carry a rating higher than BBB.

low. Systemic risks from the insurance sector remained contained in 2016, and were further mitigated by the introduction of Solvency II, which is a more risk-based solvency framework.

In 2016, the size of the domestic investment funds expanded to reach 16.4% of GDP, largely driven by developments in the Professional Investment Funds sector, as assets of Collective Investment Schemes declined. Despite the strong links between domestic investment funds and the banking sector in Malta, contagion risk is seen to be limited. Furthermore, bank-like activities by these funds are restricted to a few funds and exclusively with non-residents. As a result, financial stability risks for the domestic system are deemed to be low and contained.

***The Maltese economy remained one of the fastest-growing economies in the euro area, notwithstanding the challenging external economic environment, playing an essential role in further buttressing financial stability.***

In 2016 international economic and political developments generated uncertainty, which in turn curbed growth. Against this backdrop, growth in the euro area was still fragile reflecting structural weaknesses. The latter, became more accentuated as uncertainty grew, heightening potential vulnerabilities and possible down-side risk to economic growth.

As a small and highly open economy, Malta would normally be impacted by the developments in the external macroeconomic environment, particularly by those of its main trading partners. Nevertheless, despite the challenging international environment, the Maltese economy maintained its resilience and posted the second highest growth in the euro area. Furthermore, although economic growth is expected to slow down closing gradually the positive output gap, real GDP growth is anticipated to remain robust, based on total factor productivity growth and strong labour fundamentals, with unemployment projected to remain at historically-low levels. In this regard, the domestic economy will continue to contribute positively to the strong foundations for financial stability.

***The level of NPLs declined further, supported by buoyant economic conditions, but also through efforts by banks to reduce legacy NPLs.***

The strong economic growth over the last few years has improved the overall creditworthiness of borrowers in Malta, on the back of record low unemployment and rising incomes. As a result, the growth in the level of NPLs decelerated steadily over past years and turned negative in 2016. Furthermore, a significant amount of legacy NPLs were written off throughout the year. Although credit demand remained sluggish, banks kept their credit standards at tight levels, and continued to adopt prudent lending practices. In the near term, economic growth is expected to continue supporting borrowers' creditworthiness, driving down the NPL ratio. At the same time, the implementation of the amended Malta Financial Services Authority's (MFSA) Banking Rule 09/2016, will give banks further impetus to continue reducing their legacy NPLs, while at the same time provides an incentive to better monitor their loan book.

***Potential risks stemming from rising real estate prices are deemed to have remained moderate, on account of low private sector indebtedness and prudent lending practices by banks.***

Property markets have been recovering across most EU Member States, with Malta registering a faster growth in property prices in 2016 compared to the EU average. Over the past few years, the considerable easing in monetary policy was a factor that supported the recovery in property markets across most euro area Member States. This policy facilitated cheaper financing of purchases of immovable property, which yielded a better return compared to other assets. In Malta, despite decelerating somewhat in the aftermath of the crisis, mortgage lending remained buoyant. Given the predominance of home-ownership in Malta, growth in mortgage lending is in part driven by the flow of first-time buyers, supported also by fiscal incentives apart from low interest rates. Additionally, the job-rich strong economic growth, accompanied by a

strong influx of foreign workers, provided an opportunity of relatively higher returns from renting property, leading to portfolio rebalancing effects and credit channelled for such activity. Such pressures from demand are expected to be mitigated somewhat by supply-side developments in the near term as the number of permits issued by the Planning Authority almost doubled in 2016, but remained below the peak of the pre-crisis boom period.

The developments in the property market also affected banks, both in terms of loans and collateral, particularly the core domestic banks in view of their exposure to real estate. Since 2010 core domestic banks have been lowering drastically their exposure to the construction and real estate sector, down by around five percentage points to 12.1% of their loans by end 2016. Yet, the growth in mortgage lending resulted in a higher concentration of property-related loans, equivalent to around 59% of the core domestic banks' resident loans. However, the shift in exposures from the construction and real estate sector towards mortgages imply lower concentration of risk as lending is increasingly spread among a larger number of smaller borrowers rather than concentrated on a small number of large borrowers. Furthermore, the ability of borrowers to repay mortgages is generally determined by the developments in the labour market, and the economy in general, rather than concentrated on the fortunes of the real estate market.

On the back of the favourable economic climate and the positive sentiment in the real estate market, property prices have returned to be broadly aligned to fundamentals, with no signs of excessive pressures on affordability. The banks' lending practices remained conservative with the residential loan-to-value ratios averaging around 75% and debt service-to-income ratios at loan origination accounting for less than a quarter of households' income.

Moreover, in the event of a reversal in interest rates, households' affordability is unlikely to be compromised given the relatively low average servicing costs in proportion to households' income and their strong financial buffer. In this light, risks from the real estate sector, while rising compared to previous year, are deemed to be moderate, with no undue risk accumulation both from the banking and the borrowers' standpoint.

***Persistent pressures on profitability owing to a prolonged low interest rate environment and anaemic credit growth.***

The euro area's financial system continued to be affected negatively by a prolonged low interest rate environment, as margins continued to narrow.

To date, core domestic banks were able to cut their loan and deposit rates, factoring-in declining interest rates, yet keeping their margins broadly constant. At the current juncture, none of the banks operating in Malta have resorted to negative deposit rates. However, as deposit rates are now close to the zero lower bound, there is little room left for manoeuvring, though the European Central Bank (ECB) has recently signalled that there will be no further lowering of interest rates. The pressure on profitability is augmented by slow credit growth as private NFCs are increasingly resorting to the domestic capital market for funding rather than the banking system. While such a trend is conducive to develop and deepen the domestic capital market, and thus also contributes positively towards financial stability through the spreading of risks, it adds pressure on banks to sustain their market share.

Pressures on profitability were also observed in other euro area banks, some of which have also introduced negative deposit rates, though not for retail customers. This pushed credit institutions to reconsider their business model and seek alternative income sources from non-interest earning activities. To date, although traditional banking remained a prime activity in Malta, particularly among mainstream banks, some institutions have ventured into offering more innovative products and services that render fees and commissions.

Table 1.1 summarises the key potential risks stemming within or outside the domestic financial system. It also portrays the changes in identified risks since the last edition of the *Financial Stability Review 2015* and the expectations for such risks in 2017.

**Table 1.1  
SUMMARY OF RISKS**

Main vulnerabilities and risks for the financial system	Type of risk	Nature of risk	Change in risk level since FSR 2015	Risk position in 2016			Risk outlook for 2017
				Moderate	Medium	Elevated	
<b>Vulnerabilities within the financial system</b>							
The level of non-performing loans	Credit	Cyclical/ Structural	↓		●		↓
Concentration in bank lending	Credit	Structural	↔	●			↔
Subdued credit developments	Profitability	Structural	↑		●		↔
Reliance on short-term funding	Liquidity	Cyclical/ Structural	↑	●			↔
Interlinkages between banks and the non-bank financial sector	Contagion	Structural	↔	●			↔
<b>Vulnerabilities outside the financial system</b>							
Domestic macroeconomic developments	Credit, Profitability	Cyclical	↓	●			↔
Performance of key economic sectors reliant on bank credit	Credit	Cyclical/ Structural	↓	●			↔
Real estate market developments	Credit/Contagion	Cyclical	↑	●			↔
Exposures of the financial sector to domestic sovereign securities	Profitability	Structural	↓	●			↓
Economic conditions in the euro area	Credit, Profitability	Cyclical	↔		●		↔
Euro area sovereign debt crisis	Contagion, Profitability	Cyclical	↔		●		↔
Geopolitical uncertainties	Contagion	Structural	↑		●		↑
Search for yield owing to the low interest rate environment	Profitability	Cyclical	↔	●			↔

## Regulatory update

In view of the above, and in a bid for the authorities to remain vigilant for any potential rising risks, initiatives were taken to safeguard the system, namely addressing credit risk and misaligned incentives:

### Local

#### **BR/09/2016 Measures Addressing Credit Risks Arising from the Assessment of the Quality of Asset Portfolios of Credit Institutions**

Following the public consultation on the review of the MFSA Banking Rule 09 “Measures Addressing Credit Risks Arising from the Assessment of the Quality of Asset Portfolios of Credit Institutions Authorized under the Banking Act 1994” (Rule), an amended version of the Rule was published under the Banking Act 1994 in December 2016.

The amended Rule sets up a framework that incentivises credit institutions to resolve their NPLs and maintain a maximum NPL ratio of 6% or lower. Banks with a two-year average NPL ratio exceeding this threshold, on the date of publication of this Rule, are required to draw up a concrete reduction plan to bring their level of NPLs below this ceiling over a five-year period. If a bank does not manage to meet the set targets,

automatic sanctions kick off, requiring the bank to hold higher capital requirements through profit allocation. Eight banks are currently subject to these measures and were asked to submit their plans by end-April 2017. Apart from collateral, the impact on banks as a result of such measures is mitigated by the extent of coverage through the allocation of specific provisions as per International Accounting Standards (IAS) 39 – Financial Instruments: Recognition and Measurement.

Subject to the discretion of the competent authority, and in line with para 46 of the said Rule, banks can be exempt or suspended from submitting the NPL reduction plan, if it transpires from the most recent data point, that their NPL ratio is below the 6% threshold. Two domestic banks were exempted as per para 46, one in view of registering a downward trend in its NPL ratio whilst the other one is pending a review following a merger.

The amended BR/09 builds on the measures introduced in 2013, namely: the requirement for a bank to hold a credit risk management framework, which includes a provisioning policy commensurate with its operations and risk profile; adequate procedures and internal controls, including appropriate reporting systems; and a valuation policy. The “Reserve for General Banking Risks”, introduced in 2013, is still maintained in the amended BR/09 and remained generally unchanged after being fully implemented by end 2015, contributing to an increase of 2.1 percentage points in the coverage ratio. The judicial review of the insolvency framework is also expected to increase the efficiency of the process for NPL resolution.

This amended policy measure will release capital tied to non-performing assets, which could be directed towards new lending to the real economy, thus enhancing credit availability. Apart from the positive ripple effects on the real economy, as lending is directed towards more productive assets, this is expected to contribute to banks’ profits thus further strengthening capital levels and their resilience to shocks.

#### **Real estate**

The real estate sector plays an important role in the stability of the financial system. Past financial crises demonstrated that the build-up of real estate imbalances may lead to rising vulnerabilities in the financial system with severe direct and indirect repercussions on the economy as a whole.

To better monitor this sector, in 2016, the Central Bank of Malta embarked on a number of surveys addressed to core domestic banks to assess potential risks to the financial system arising from banks’ exposures to residential and commercial real estate. Through such surveys, the Bank gained a better understanding of the residential and commercial lending practices both from a quantitative and qualitative perspective.

#### **Countercyclical capital buffer**

Given the overall subdued credit growth, the domestic countercyclical capital buffer (CCyB) rate has been set at 0%. The relevant credit-to-GDP ratio stood at 84.1% in December 2016, and its deviation from the long-term trend was -26.7 percentage points. All the relevant quantitative and qualitative information used by the Bank in its assessment of any signs of excessive credit growth, indicate that it is appropriate for Malta to set the CCyB rate at zero at the current juncture.

#### **Capital buffer for Other Systemically Important Institutions**

The list of Other Systemically Important Institutions (O-SIIs) identified in 2015, was reconfirmed in 2016, as per Central Bank of Malta and MFSA’s Statement of Decision.<sup>2</sup> Furthermore, based on the score obtained as per methodology featured in the policy document of 2015, no increase in the capital buffer rate was required.<sup>3</sup> These credit institutions are to continue phasing-in their O-SII capital buffer until 1 January 2019, as established in 2015 as per Appendix A.

<sup>2</sup> Central Bank of Malta and MFSA (Dec 16): “Statement of Decision on the methodology for the identification of other systemically important institutions and the related capital buffer calibration”.

<sup>3</sup> Medifin is to maintain an O-SII Capital Buffer of 0.5%, HSBC Group Malta 1.5%, and Bank of Valletta Group 2.0%. Source: <https://www.centralbankmalta.org/systemically-important-institutions>.

## EU level

### International Financial Reporting Standards (IFRS) 9 – Financial Instruments

IFRS 9, which was endorsed by Member States on 27 June 2016, will become effective on 1 January 2018. It is expected to bring improvements in credit loss provisioning as a result of its forward looking approach unlike IAS 39, which is based on the incurred loss approach. This should lead banks to book higher and earlier provisions than is currently the case, with the collateral value affecting the measure of expected credit losses. Even if a bank determines that there has been an increase in the level of credit risk on a loan, due for instance to the borrower becoming unemployed, and therefore less likely to meet his obligation, expected credit losses may result to be relatively low, if the expected proceeds from the sale of the collateral (e.g. mortgaged property) exceed the credit limit.

The move from IAS 39 to IFRS 9 will affect capital requirements as per Capital Requirements Regulation (CRR). This will depend on:

- a) the extent of increase in provisions
- b) the choice of regulatory approach (Standardized or Internal Ratings Based approach) adopted by banks in the calculation of their capital requirement.

With regards to the first point, the European Banking Authority (EBA) estimated an increase in provisions equivalent to an average of 13% compared to the current provisioning levels under IAS 39.<sup>4</sup> With respect to point (b), banks which make use of the standardized approach are expected to be affected the most, based on the European Commission's (EC) Impact Assessment on the review of the CRR.<sup>5</sup> According to the EBA's impact assessment, the CET 1 ratios are expected to decrease on average by up to 45 basis points (and up to 75 basis points for 86% of the respondents). As part of the Risk Reduction Measures package, the EC on 23 November 2016 included Article 473a in the revised CRR providing banks with a transitional regime so that the impact of IFRS 9 on CET 1 capital is phased-in progressively over a five-year period.

The IFRS 9 is expected to improve the coverage ratio of banks and incentivize them to reduce their NPLs. Yet, even if the proposed transitions are expected to mitigate the impact on capital, profits may be impacted negatively in the short term.

### ESRB Recommendation (ESRB/2016/14) on closing real estate data gaps

In the reports on residential and commercial real estate and financial stability in the European Union, the European Systemic Risk Board (ESRB) indicated that data limitations persist in assessing real estate risks.<sup>6</sup> Given the importance of the real estate sector and its interplay with the financial system, the ESRB through Recommendation ESRB/2016/14 intends to establish a more harmonized framework for monitoring developments in the residential and commercial real estate sector to ensure early identification of vulnerabilities that could lead to future financial crises.

To address each of the five sub-recommendations included in the ESRB Recommendation on real estate data gaps, the Central Bank of Malta took the initiative to improve its information gathering on real estate and initiated bilateral discussions with other relevant authorities to work on such data gaps; and where possible, align the domestic real estate monitoring framework with that being recommended by the ESRB. The

<sup>4</sup> EBA (13 July 2017): "Report on results from second EBA impact assessment of IFRS 9".

<sup>5</sup> European Commission (23 Nov 2016): "Proposal amending: - Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms; - Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms; - Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment firms; - Regulation (EU) No 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund", SWD(2016) 377.

<sup>6</sup> ESRB (Jan 2016): Reports on residential and commercial real estate and financial stability in the European Union.



Bank, in collaboration with the National Statistics Office (NSO), is engaged to adopt, where feasible, the said Recommendation by 2020.

### Risk outlook

Looking ahead, the financial system is expected to remain sound, supported by a favourable macroeconomic environment on the back of further job-rich economic growth, sustainable and declining sovereign debt, and historically-low unemployment. Credit risk is declining and overall is at sustainable levels, on account of improved creditworthiness and lower stock of outstanding NPLs. Nevertheless, further improvements are encouraged, through higher provisioning, sale and write-offs. Continued vigilance is essential to refrain from accumulating undue risk during economic upturns, particularly in an environment of rising property prices. In this regard, banks are encouraged to continue adopting prudent lending practices and refrain from taking on additional risks through the easing of credit standards.

Although to date, the domestic financial system has demonstrated its resilience in the face of negative shocks to the external economic environment and various geopolitical events, the ramifications of the latter and future developments, particularly those relating to the negotiations of the United Kingdom to leave the European Union, remain uncertain. However, the potential negative effects of Brexit on the Maltese economy have been assessed to be contained.

Although most of the European regulatory framework is already in place, upcoming regulations and the introduction of IFRS 9 may put additional pressures on profitability. In this regard, the drive among banks and other institutions to pursue more cost efficiencies while tapping alternative income sources needs to be stepped up to ensure sustainable profitability from a longer-term perspective. At the same time, financial institutions need to remain vigilant and invest to mitigate potential cyber risks which, apart from leading to higher costs, can be a threat to financial stability by disrupting the provision of critical functions of the financial system to the real economy. Banks are therefore encouraged to adopt prudent dividend pay-out policies to invest against such threats and to safeguard and strengthen further their capital buffers to maintain their resilience.

**Table 1.2**  
**MEASURES TO ADDRESS KEY RISKS IN THE FINANCIAL SYSTEM**

Risks	Measures required	Time horizon
Credit risk	Improve coverage ratio <sup>(1)</sup>	<i>Short-term</i>
	Ensure prudent lending policies	<i>Short-term</i>
	Enhance valuation methods for real estate collateral	<i>Short to medium-term</i>
	Embark on a process for an orderly reduction of dated non-performing loans <sup>(1)</sup>	<i>Medium-term</i>
Risks to profitability	Look into alternative income sources and/or enhance efficiency with the objective to sustain profitability on a long-term perspective.	<i>Medium to long-term</i>
Capital requirements	Maintain prudent dividend policies	<i>Short-term</i>

<sup>(1)</sup> The authorities took action by launching the revised Banking Rule 09/2016 to enable an orderly reduction in legacy NPLs.

## **BOX 1: MINIMUM REQUIREMENT FOR OWN FUNDS AND ELIGIBLE LIABILITIES**

During the recent financial crisis, large sums of taxpayers' money were channelled to ailing credit institutions in an effort to prevent them from failing and setting off a chain reaction which could have brought devastating effects on the economies and the well-being of their citizens. However, supporting troubled banks by means of public funds has undesirable consequences on public finances and may lead to moral hazard, providing an incentive to banks for excessive risk taking behaviour. This is particularly the case for systemically important banks, which are considered "too big to fail".

In response to the financial crisis, the G20 mandated the Financial Stability Board (FSB) to draft an international standard for resolution regimes. In 2011, the FSB published the Key Attributes of Effective Resolution Regimes for Financial Institutions (Key Attributes), which should form part of resolution regimes in all jurisdictions. These Key Attributes set out a global standard for Global Systemically Important Institutions (G-SIIs) to hold a minimum requirement for total loss-absorbing capacity (TLAC).

In Europe, these developments brought about Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment firms (the Bank Recovery and Resolution Directive, BRRD). The BRRD brought about major changes in the banks' regulatory framework in the ambit of bank recovery and resolution. The Directive provides a common resolution regime in the European Union with the aim of preventing further government bail-outs of failing banks by shifting the cost of bank failures to shareholders and creditors thus internalising such costs. The introduction of the bail-in concept, a tool introduced in the BRRD to seek the orderly resolution of failing banks, revolves around the principle of burden sharing, whereby the private sector shares in the costs arising from a bank failure.<sup>1</sup> Thus, by transferring the risk of bank failure on shareholders and creditors, risks to taxpayers are contained and moral hazard is also minimised. Moreover, such risk transfer also enhances the level playing field between small and large banks, when financing their operations. Banks therefore need to have enough unsecured liabilities on their balance sheet that are credibly, feasibly and quickly bail-inable and can thus be earmarked for recapitalising the ailing bank.

Prior to the BRRD, the supervisory framework included on-going supervision and early intervention measures to deal with bank failure. In case these measures did not suffice, a bank would be placed under normal insolvency proceedings. The nature of the business of banking is, however, deeply intertwined with the real economy as banks perform critical economic functions. Because of such functions, normal insolvency proceedings are not appropriate for banks. Therefore, resolution under the BRRD was introduced to augment the supervisory framework to ensure that banks are able to absorb losses, while at the same time are still able to perform their critical functions. In essence, resolution is not intended to resurrect an ailing bank, but to preserve its critical functions.

Resolution is triggered if (i) the bank is deemed by the Supervisor as failing-or-likely-to-fail (FOLTF); (ii) there is no alternative action by the private sector; and (iii) it is necessary in the public interest. A bank will be FOLTF if (i) it infringes or might infringe minimum capital requirements, (ii) assets are or will likely be less than liabilities, (iii) the bank becomes insolvent or (iv) the bank needs extraordinary public financial support.

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<sup>1</sup> Bank resolution is the process undertaken by authorities to preserve those critical functions of a bank that have a bearing on the real economy and financial stability, making it a credible alternative to normal insolvency proceedings or government bail-out measures.

Once a bank is deemed FOLTF by the Supervisor, resolution action will be carried out by the Resolution Authority.<sup>2</sup> The resolution authority has at hand an array of resolution tools, comprising (i) the sale of business, (ii) bridge bank institution, (iii) asset separation, and (iv) bail-in.

The Resolution Authority is also bound to establish, for every bank, a Minimum Requirement for Own Funds and Eligible Liabilities (MREL), which is required to ensure an orderly resolution. MREL is the EU equivalent of TLAC for those banks which are not G-SIIs and regardless of which resolution tool (e.g. the bail-in or bridge bank tools) is applied, it must be sufficient to absorb losses related to resolution and ensure that banks still meet minimum capital requirements for continued authorisation and command market confidence even after resolution, without exposing covered depositors to losses.<sup>3</sup>

A sufficient level of MREL would facilitate a resolution action and thus providing added benefits through enhanced depositor protection and the confidence in the banking system. This would, in turn, make the banking system more resilient by reducing contagion risk, thus safeguarding financial stability. The concept of MREL relates to a pre-determined minimum amount of equity and unsecured liabilities allocated to ensure that bail-in can be conducted, effectively. While the bail-in tool and MREL are based on the same concept of write-off/down of debt and equity and/or the conversion of debt into equity, bail-in can be exercised on all the liabilities and equity on the balance sheet (with exceptions such as covered deposits), whereas the scope of MREL is more limited. Liabilities which are excluded both from bail-in (Art. 44(2) of BRRD) and from MREL, include:

- (i) covered deposits
- (ii) secured liabilities including covered bonds
- (iii) any liability that arises by virtue of a fiduciary relationship
- (iv) liabilities with a remaining maturity of less than seven days, owed to systems or operators of systems designated according to Directive 98/26/EC
- (v) a liability to any one of the following:
  - a. an employee, in relation to accrued salary, pension benefits or other fixed remuneration
  - b. a commercial or trade creditor arising from the provision to the institution of goods or services that are critical to the daily functioning of its operations, including IT services, utilities and the rental, servicing and upkeep of premises
  - c. tax and social security authorities
  - d. deposit guarantee schemes.

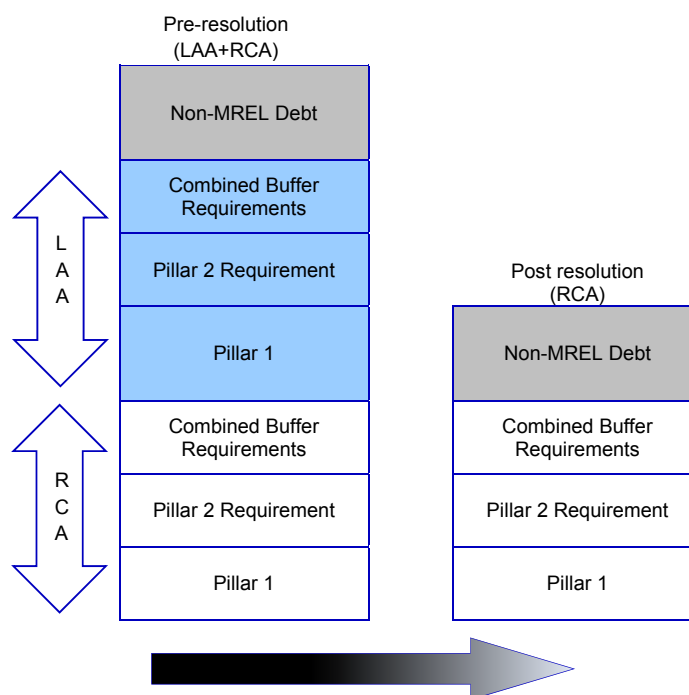
Furthermore, to be eligible for MREL, any liability which is not excluded from bail-in as per above, must satisfy the conditions laid down in Art. 45(4) of BRRD:

- (i) the instrument is issued and fully paid-up
- (ii) the liability is not owed to, secured by or guaranteed by the institution itself
- (iii) the purchase of the instrument was not funded directly or indirectly by the institution
- (iv) the liability has a remaining maturity of at least one year
- (v) the liability does not arise from a derivative
- (vi) the liability does not arise from a deposit which benefits from preference in the national insolvency hierarchy.

<sup>2</sup> Pursuant to Article 7 of Single Resolution Mechanism Regulation, the Single Resolution Board shall be responsible for adopting all decisions relating to resolution of significant institutions supervised by the ECB. For domestic less significant institutions, the Board of Directors of the MFSA shall act as the designated National Resolution Authority in line with Article 7B of the Malta Financial Services Authority Act.

<sup>3</sup> Deposits are covered per depositor per bank, up to a limit of €100,000, which are guaranteed and repayable by the Depositor Compensation Scheme.

**Chart 1  
BANK LIABILITIES BEFORE AND AFTER RESOLUTION ACTION**



**MREL = Loss Absorption Amount + Recapitalisation Amount**

$$= (P1+P2R+CBR) + (P1+P2R+CBR) = 2(P1+P2R+CBR)$$

The ex-ante MREL is composed of a Loss Absorption Amount (LAA), and a Recapitalisation Amount (RCA). Chart 1 provides a visual representation of this concept. The LAA should be sufficient to absorb losses incurred during the resolution process and thus is set equal to the minimum regulatory capital requirements, which aim to cover unexpected losses incurred through on-going business operations.

Since any bank must meet these minimum regulatory capital requirements at all times, to meet the conditions for authorisation, the RCA should ensure that even after resolution, the bank has still enough capital to meet such requirements.

In its public final report on MREL, the European Banking Authority (EBA) has formally interpreted MREL as amounting to 2 x (Pillar 1<sup>4</sup> + Pillar 2 Requirement<sup>5</sup> + Combined Buffer Requirements<sup>6</sup>),

<sup>4</sup> Minimum Capital Requirements under Basel II which must amount to at least 8% to cover market, operational and credit risk.

<sup>5</sup> Institution specific capital add-on according to the supervisory review and evaluation process (SREP), which covers risks over and above Pillar 1.

<sup>6</sup> The total CET 1 capital required to meet the capital conservation, counter cyclical and systemic risk buffers.

based on the Commission's Delegated Regulation.<sup>7</sup> However this can be adjusted both upwards and downwards since the RCA is set at the discretion of the Resolution Authority for each institution to reflect the preferred resolution strategy, the risk over the potential disruption to critical economic functions and the need to apply a proportionate approach.

The EBA has quantified these benefits and presented its findings in a report focussing exclusively on MREL.<sup>8</sup> The EBA estimates that overall, net MREL macroeconomic benefits are positive stemming from a dampened effect of bank failure on the real economy.<sup>9</sup> However, the actual impact of the introduction of MREL depends on the ability of markets to absorb the volumes of debt issuances needed for the build-up of MREL, and the corresponding capacity of banks (especially deposit funded banks) to access markets.

MREL requirements may be difficult to reach due to size and/or the markets' limited capacity to absorb the planned issuances. This could lead to MREL periodic shortages unless sufficient time is allocated for its build-up. The predominance of covered or preferred retail deposits in the funding structure of banks, uncertainties regarding a country's market capacity, and a significant exposure of retail investors to MREL instruments, represent major challenges for the build-up of MREL. In view of this, various policy options are being explored, such as longer transitional periods to phase-in MREL requirements in parallel with policy initiatives to further strengthen the Capital Markets Union to widen banks' access to debt markets.

In the meantime, policy initiatives directed towards a harmonised creditor hierarchy of claims is underway. Indeed, subordination defines the order of wind-down and conversion of debt instruments in resolution and insolvency. Certain senior unsecured debt instruments, which are suitable for bail-in and structurally eligible for MREL, rank *pari-passu* with other debt such as derivatives and corporate deposits; which on their part are more complicated to bail-in due to either their complexity or legal challenges. Such *pari-passu* ranking renders the bail-in of senior unsecured debt more complicated and could give rise to lawsuits, if not respected. The latter arises if the no-creditor-worse-off-principle is not respected.<sup>10</sup>

To this end, several Member States have already taken steps to establish a more effective hierarchy of claims (see Chart 2). Germany implemented a statutory form of subordination, where the senior unsecured class ranks junior to derivatives and corporate deposits on a retroactive basis. Italy has also adopted a statutory form of subordination, whereby a general depositor preference has been introduced, meaning that corporate deposits rank senior to derivatives and other senior debt. In France, a contractual form of subordination has been implemented, where a new debt class of "non-preferred senior debt" has been created, which ranks senior to subordinated debt but junior to senior unsecured. Thus, banks subject to this measure need to issue new debt instruments under this category. All these forms of subordination, whilst increasing the efficiency of the bail-in tool, also address the no-creditor-worse-off principle by increasing legal certainty.

At the EU level, on 23 November 2016, the Commission launched a package of reforms to further strengthen the resilience of EU banks. One of the measures includes amendments to the BRRD to harmonise subordination across the SSM through the creation of a new debt class similar to the one adopted in France (and also Spain). Newly-issued debt in this class is also equivalent to the

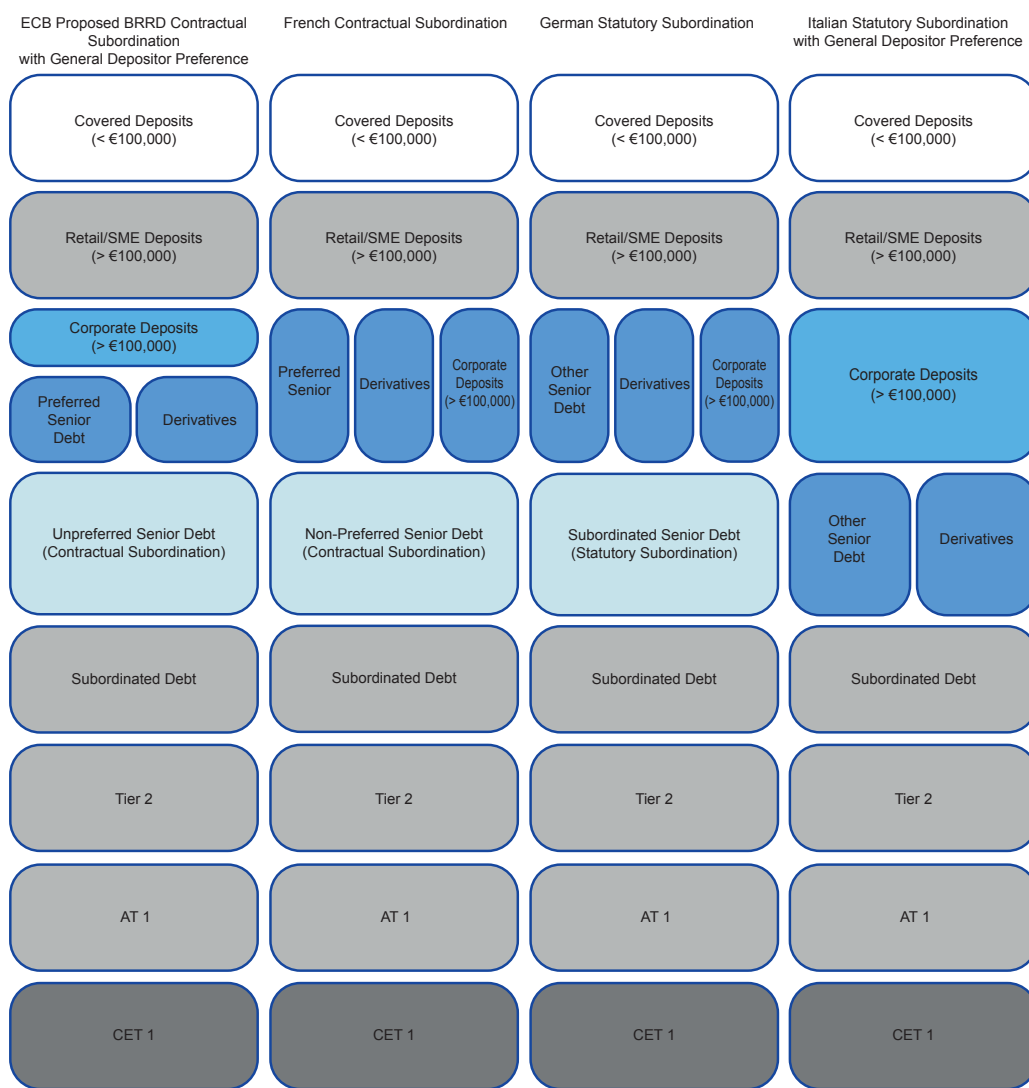
<sup>7</sup> Commission Delegated Regulation (EU) 2016/1450 supplementing Directive 2014/59/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying the criteria relating to the methodology for setting the minimum requirement for own funds and eligible liabilities.

<sup>8</sup> EBA Final Report on MREL (EBA-Op-2016-21).

<sup>9</sup> It is important to highlight that the approach followed provides aggregate results and, to this end, the benefits may vary across Member States.

<sup>10</sup> In resolution creditors should not incur greater losses than if the institution had been wound up under normal insolvency proceedings.

**Chart 2  
DIFFERENT APPROACHES TOWARDS SUBORDINATION ACROSS THE EU**



retroactive German subordinated debt. In its proposal, the ECB has gone a step further by suggesting the addition of a General (Tiered) Depositor Preference, akin to that adopted in Italy, which is to be coupled with the introduction of the new non-preferred senior debt class.<sup>11</sup>

The introduction of MREL is expected to further build the resilience of the banking industry, by facilitating the application of bail-in. This new requirement also brings along new challenges, most notably shortfalls in meeting immediate MREL targets, particularly for deposit-funded institutions, as well as an increase in the bank's cost of funding. Talks and discussions are still on-going to decide on the optimal calibration of MREL which ensures the further strengthening of financial stability, while at the same time, limit or reduce MREL shortfalls and give sufficient time for banks to build MREL. Current

<sup>11</sup> Opinion of the ECB of 8 March 2017 on a proposal for a directive of the European Parliament and of the Council on amending Directive 2014/59/EU as regards the ranking of unsecured debt instruments in insolvency hierarchy (CON/2017/6).

revisions and amendments to the BRRD will help achieve a more effective implementation of both MREL and the bail-in tool.

Resolution authorities will play a key role in planning resolution strategies with banks to ensure that the most efficient MREL requirement is in place. A careful assessment of an appropriate transitional period and further strengthening of the Capital Markets Union to facilitate new issuances of MREL debt are considered important for the successful implementation of MREL. Furthermore, a functioning resolution mechanism is an important step towards shifting the risk and the associated costs of default from sovereigns to the private sector. Ultimately, the resolution regime can be more credible if it is harmonised and applied in a consistent manner across the European Union.

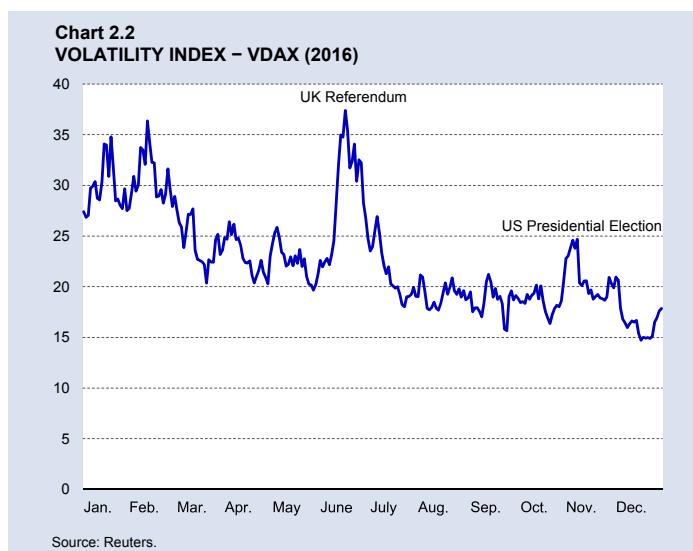
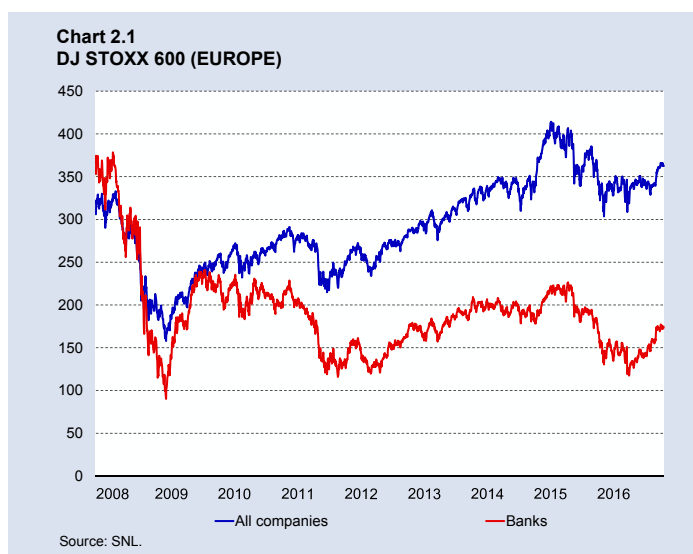
## 2. THE MACRO-FINANCIAL ENVIRONMENT

### 2.1 International

During 2016, the global environment was characterised by economic and financial market uncertainty, triggered by geopolitical events, especially the result of the UK referendum on exiting the European Union, and the outcome of the US presidential election. This uncertainty could linger in 2017 as negotiations on the terms of Britain's exit from the European Union after triggering Article 50 begin, although elections in the Netherlands and France have reduced somewhat the risk of disintegration of Europe. Meanwhile, potential US protectionist policies could also add to uncertainty.

Commodity prices recovered in early 2016, while faster growth in emerging markets and developing economies was also reported.<sup>1</sup> Indicators of economic activity were better than expected in China owing to policy stimulus, while Brazil showed signs of improvement after a deep downturn. Russia benefited from the rebound in oil prices, while economic activity in India remained buoyant. Productivity in most advanced economies stood close to potential, but inflation was still below target. In the second half of the year, advanced economies maintained the pace of their performance, while developing and emerging economies reported a slowdown.

Financial markets were volatile throughout the year, particularly following the result of the United Kingdom's EU referendum in June 2016 and the outcome of the US election in November 2016. Uncertainty instilled by these developments, as well as market concerns about the euro area banks' profitability dampened banks' stock market valuations in Europe (see Chart 2.1). These bouts of volatility were evidenced in the VDAX volatility index, which spiked in the wake of these events, though such shocks were short-lived (see Chart 2.2). Nonetheless risk aversion among investors increased. The pound weakened sharply against major currencies and yields on safe assets rose. In response, the Bank of England eased its monetary policy stance in August 2016 to preempt any possible adverse effects from the Brexit vote. Similarly, the ECB reaffirmed its accommodative



<sup>1</sup> Source: IMF World Economic Outlook Update, July 2016 and January 2017.

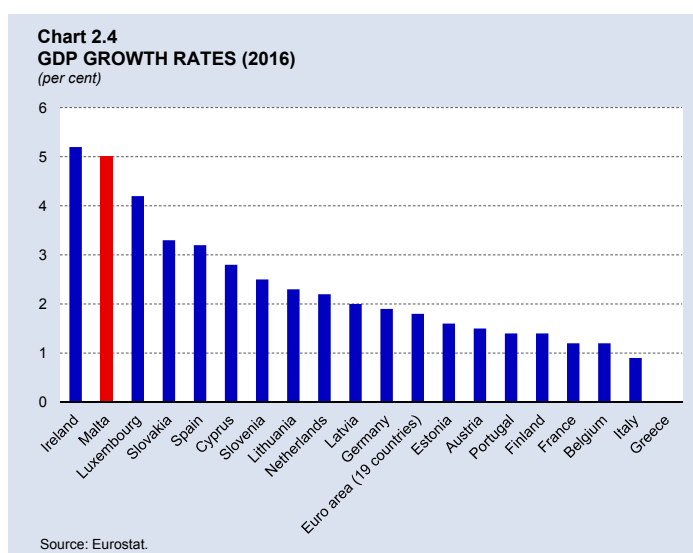
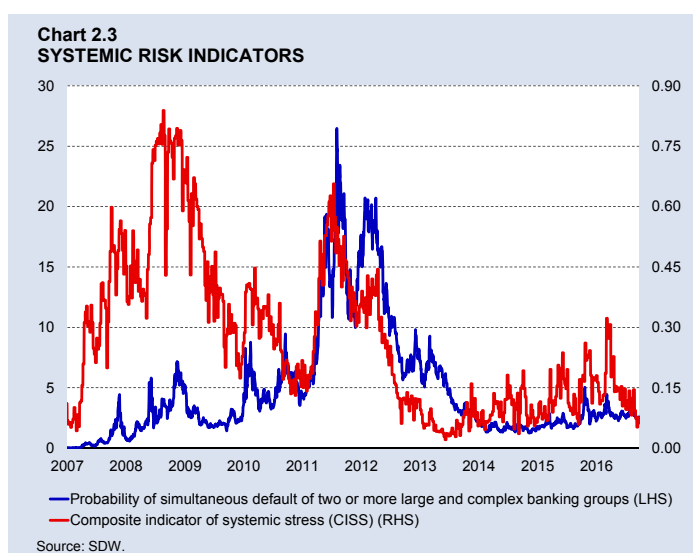


monetary policy stance by extending further its non-standard monetary policy measures while keeping its official interest rates unchanged at very low levels, in a bid to ward off risks of prolonged low inflation.<sup>2</sup> Indeed, in 2016 inflation has moved up though still somewhat short of the 2% target. Other central banks, including the Bank of Japan and the Swiss National Bank, also pushed policy rates into negative territory and are not likely to increase them in the short term. In contrast, the Federal Reserve Bank raised its policy rates again after a year following an increase in nonfarm payrolls and steady declines in the unemployment rate.

The low interest rate environment persisted throughout the year, adding further pressure on banks' profitability. This had the effect of pushing banks into considering adapting their business models to become more cost-efficient and delve more into activities which generate fees and commissions. Such environment has also impacted adversely insurance companies, particularly those offering defined benefits products. Euro area insurance companies are also considering other avenues to bolster their profitability, moving away from products offering guaranteed returns towards unit-linked products, enabling them to share the risk with policyholders.

Banks' profitability was also adversely affected by the high level of legacy non-performing loans (NPL). Indeed, the upward trend in the ECB's Composite Indicator of Systemic Stress (CISS) during the first seven months of 2016 was mostly underpinned by the banking sector's weak profitability and legacy risks, although after summer the index receded to pre-crisis levels and continued to drop in the early months of 2017 (see Chart 2.3). Pressure on bank profitability may continue to impinge upon the banks' ability to strengthen their capital buffers and extend credit. At the euro area level, the ECB has issued guidance for significant banks with a level of NPLs in excess of 7% to implement plans to reduce their non-performing legacy loans. Other supranational institutions such as the European Commission and the European Banking Authority are assessing this matter with a view to introduce measures to address legacy problematic loans, enabling European banks to clean up their balance sheets faster.<sup>3</sup>

Despite the heightened global geopolitical tension, economic activity in the euro area expanded by 1.7% in 2016, lower than the 2.0% recorded in 2015, but still exceeding the post-crisis period growth rates (see Chart 2.4).<sup>4</sup> The increase in the euro



<sup>2</sup> The Governing Council has extended the Asset Purchase Programme, purchasing €80 billion monthly until the end of March 2017. In December 2016, the ECB decided that the monthly purchases were to be reduced to €60 billion as from April 2017 but extended the Programme to at least the end of 2017.

<sup>3</sup> See 'Draft guidance to banks on non-performing loans', ECB, September 2016.

<sup>4</sup> Sources: World Economic Outlook Update, January 2017, IMF; European Economic Forecast, Autumn 2016, European Commission.

area's economic activity was also reflected in the declining unemployment rate which narrowed to 10.0% in 2016. However, the slack in the labour market remained substantial and wide divergences across Member States persisted. The relatively mute gross fixed capital formation in recent years and the corresponding weak economic growth will continue to weigh down on the euro area's potential growth, as investment appetite may be suppressed further.

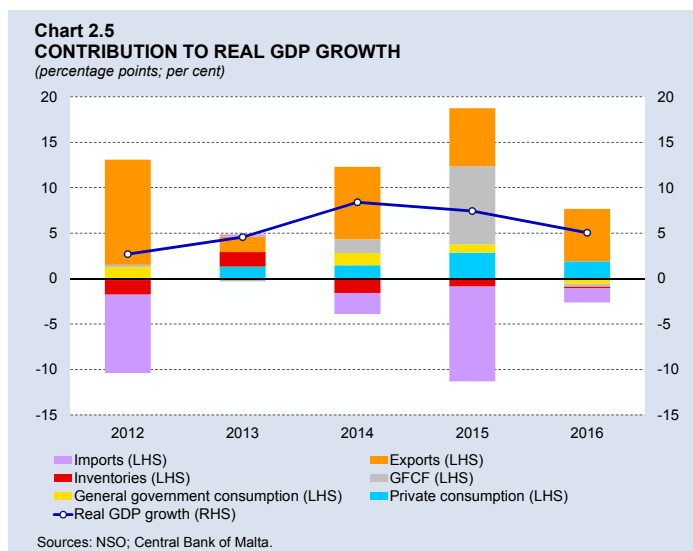
Meanwhile, euro area fiscal balances continued to improve with the government gross debt-to-GDP ratio narrowing to 92.7% in 2016 from 93.5% a year earlier, while the fiscal deficit stood at 1.9% in 2016, down from 2.2% in 2015. Further improvement in government finances is expected, with the euro area public debt-to-GDP anticipated to fall to 91.3% in 2017 and the deficit-to-GDP to 1.6%.<sup>5</sup> However, the widespread uncertainty particularly on the political front and the low growth environment may risk a slowdown or reversal of fiscal and structural reform efforts.

## 2.2. Domestic

The Maltese economy continued to outperform that of most EU Member States, remaining resilient amid uncertainty and international market turbulence, offering a stable operating environment for financial institutions. At 5.1%, real gross domestic product (GDP) growth was primarily driven by external demand although higher domestic demand, particularly private consumption also contributed; as otherwise general government consumption and gross fixed capital formation fell (see Chart 2.5).<sup>6,7</sup> The Business Conditions Index (BCI) compiled by the Central Bank of Malta reflected these developments, signalling positive business conditions in December 2016.<sup>8,9</sup> Furthermore, the Economic Sentiment Indicator (ESI) continued to trend upwards exceeding its long-term average, mainly pulled by improved sentiment in the retail and construction sectors.<sup>10</sup>

Gross value added (GVA) increased by 6.6% to €8.7 billion in 2016 (see Chart 2.6). The main contributor to growth in GVA was the professional and scientific sector, followed by the arts and entertainment sector and public administration sector, which continued to expand on the back of a benign economic environment. Together these sectors contributed to around 3.3 percentage points to the 6.7% nominal GDP growth. During the year, the GVA of the construction sector fell and contributed negatively to nominal GDP growth.

The positive economic sentiment in Malta was also reflected in an



<sup>5</sup> Source: European Economic Forecast, Winter 2016, European Commission.

<sup>6</sup> Sources: NSO News Release 041/2017; Central Bank of Malta calculations.

<sup>7</sup> The drop in the gross fixed capital formation was the result of a base effect in 2015 largely attributed to the end of the 2007-2013 EU Financial Framework.

<sup>8</sup> Source: Economic Update 1/2017, Central Bank of Malta.

<sup>9</sup> The BCI is an indicator composed of the following variables: the term-structure of interest rates; industrial production; an indicator for the services sector; the economic sentiment indicator; tax revenues; unemployment; private sector credit and gross domestic product.

<sup>10</sup> The ESI is a composite indicator made up of five confidence indicators with different weights: the industrial confidence indicator, the services confidence indicator, the consumer confidence indicator, the construction confidence indicator and the retail trade confidence indicator. These confidence indicators reflect answers to a selection of questions closely related to the different sectors (e.g. industrial production for the industrial confidence indicator).

expanding labour force and further declines in the unemployment rate, which reached a record low of 4.4% in December 2016.<sup>11</sup> At the same time, compensation to employees increased by 6.3%.<sup>12</sup> The purchasing power of Maltese households improved further, as the annual Harmonised Index of Consumer Prices (HICP) inflation rate declined to 0.9% in 2016, down from 1.2% in 2015.<sup>13</sup>

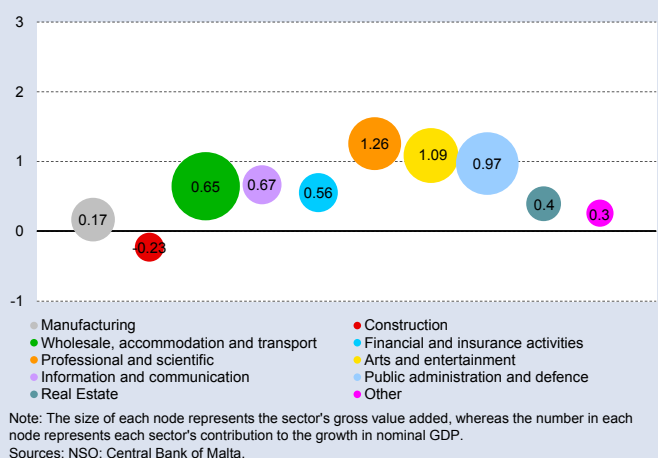
In Malta, the general government debt-to-GDP declined to 58.3% of GDP in 2016 from 60.6% a year earlier, while the Government recorded a fiscal surplus of 1.0% of GDP after more than three decades of fiscal deficits. Projections point towards further fiscal consolidation in 2017, with government deficit expected to narrow further while the level of debt-to-GDP is anticipated to fall further below 60% of GDP in 2017.<sup>14</sup>

Yields on Malta Government Stocks (MGS) were volatile for the second year in a row, triggered by international developments. During the first half of 2016 the yields of both the 10-year US Treasury and the German Bund fell to record lows, leading to a bond market rally in the summer. MGS yields followed suit, and also dropped further following the upgrade of

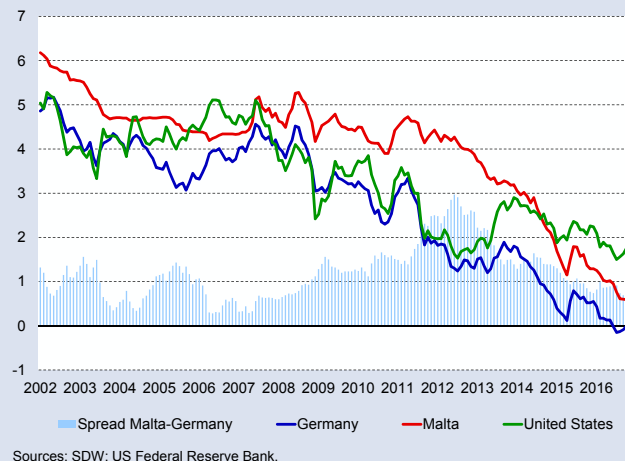
Malta's credit rating by Standard & Poor's to 'A-' from 'BBB+', for the first time in 20 years (see Chart 2.7). However, after the US election, yields in both the United States and the euro zone started increasing again, on expectations of a US fiscal stimulus and its impact on inflation. These increases were mirrored in the benchmark 10-year MGS yield, which lost most of the gains accumulated in previous months. Despite these market movements, all domestic government securities issued during the year continued to be heavily subscribed and largely taken up by the retail sector.<sup>15</sup> In the secondary market, however, trading activity fell to its lowest levels since 2012.

The Malta Stock Exchange (MSE) Equity Index continued to trend upwards, though at a slower pace than in 2015 (see Chart 2.8). Changes in the MSE index reflected predominantly the higher share price for most

**Chart 2.6**  
**GVA BY SECTOR AND CONTRIBUTION TO NOMINAL GDP GROWTH (2016)**  
(percentage points; economic sectors by size)



**Chart 2.7**  
**TEN-YEAR GOVERNMENT BOND YIELDS**  
(per cent)



<sup>11</sup> Source: Eurostat seasonally-adjusted unemployment rate.

<sup>12</sup> Source: NSO News Release 041/2017.

<sup>13</sup> Source: Economic Update 1/2017, Central Bank of Malta.

<sup>14</sup> Source: Central Bank of Malta.

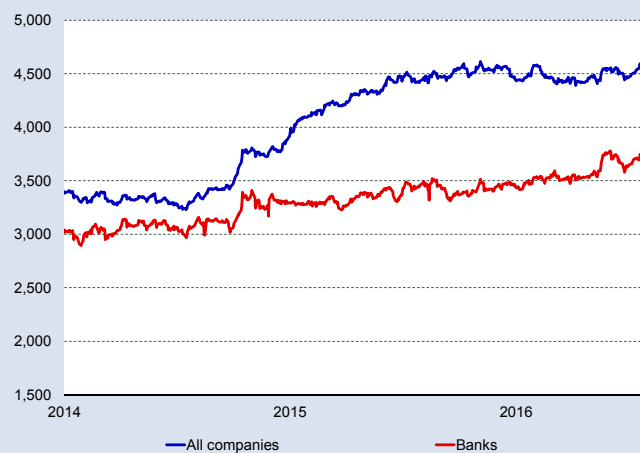
<sup>15</sup> Source: MSE.

of the listed banks. The equity price of a number of non-bank companies also rose, although by a lesser extent than those of banks. This improvement was largely recorded by entities engaged in the real estate sector and in the non-bank financial sector.

No new equities were listed on the MSE in 2016. This contrasts with the record amount of corporate bonds issued during the year, totaling €361.5 million. Nonetheless, bank credit remained the major component in overall corporate debt. Such extensive reliance on bank credit reflects the composition of the corporate sector in Malta which is dominated by small and medium-sized enterprises (SME). Lending to SMEs was supported through the various initiatives which were backed by the European Investment Fund to facilitate access to bank credit for SMEs. Meanwhile, intra-group loans fell by 4.8% over 2015. Resident non-financial corporate (NFC) indebtedness increased, but was outpaced by economic growth so that gross corporate indebtedness fell to 136.1% of GDP, and to 77.7% of GDP on a consolidated basis by December 2016, higher than that reported by euro area NFCs at 133.7% (see Chart 2.9).<sup>16</sup>

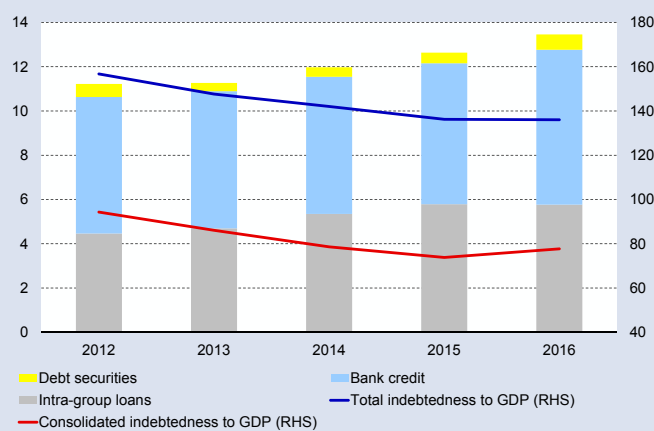
The positive economic sentiment was reflected across a number of sectors including the property market. In 2016 real house prices grew by 4.7% over 2015 and reached the pre-crisis peak (see Chart 2.10).<sup>17</sup> However, a study published by the Central Bank of Malta suggests that property prices in Malta have been undervalued, though further price increases without a corresponding increase in household income could swing

**Chart 2.8**  
**MALTA STOCK EXCHANGE EQUITY INDEX**



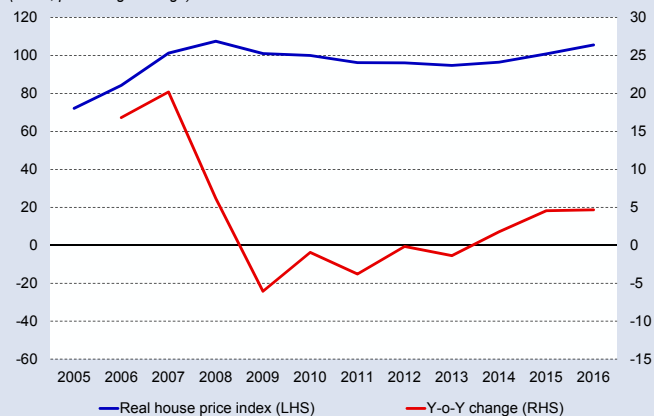
Sources: MSE; Central Bank of Malta calculations.

**Chart 2.9**  
**INDEBTEDNESS OF NON-FINANCIAL CORPORATES**  
(EUR billions; per cent)



Sources: Central Bank of Malta; NSO.

**Chart 2.10**  
**DEVELOPMENTS IN REAL HOUSE PRICES**  
(Index; percentage change)



Note: Nominal house prices are deflated using the HICP, with 2010 as the base year.  
Source: Eurostat.

<sup>16</sup> Source: ECB Statistical Data Warehouse (SDW).

<sup>17</sup> Source: Eurostat.

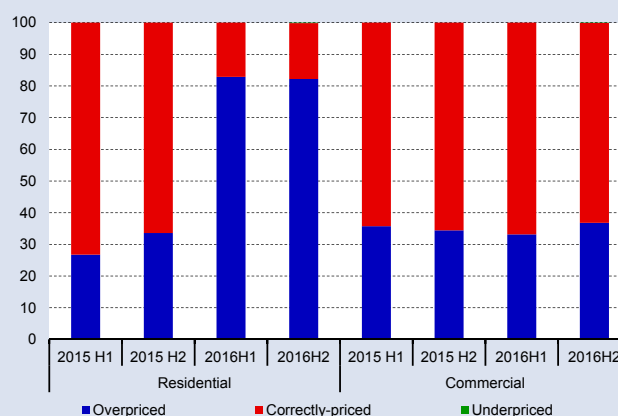
the housing market into over-valuation territory.<sup>18</sup> Nonetheless, there seems to be no significant upward pressure on affordability as the median house price-to-income ratio remained significantly low when compared to the boom period of 2005/2006. Apart from rising incomes, such upward pressure on house prices largely reflected the increase in population from inward migration to take up employment opportunities in Malta. In response to the higher demand, the supply of dwellings is also anticipated to expand in the near term, as evidenced by the increase in the number of permits issued by the Planning Authority which almost doubled in 2016, though still somewhat lower than the pre-crisis peak. Furthermore, initiatives such as the relaxation of height restrictions in highly-urbanised areas, will also aid in expanding housing supply.

Meanwhile, the Bank continued to conduct its Real Estate Market Survey (REMS) among real estate agents, where a larger share of respondents expressed their view that residential properties were overpriced in 2016 (see Chart 2.11). Nevertheless, survey results indicated that sales volume of existing and new residential properties rose. With regards to commercial

property, real estate agents reported higher sales volume, mainly driven by office space. A large majority of respondents continued to perceive commercial real estate property to be correctly-priced. However, the number of respondents expressing the view that such properties are over-priced increased slightly in the second half of the year.

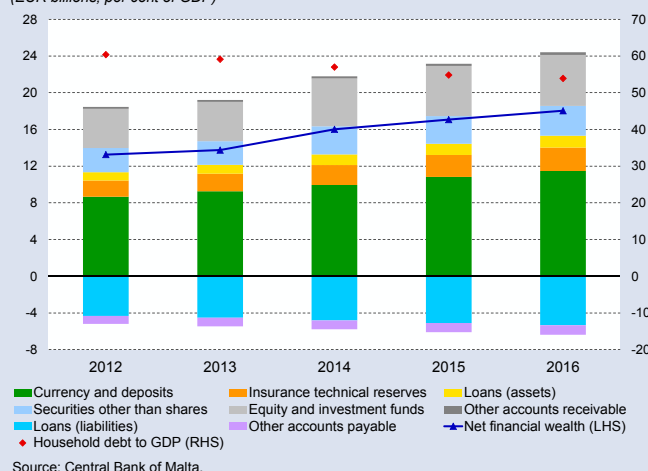
Despite relatively buoyant mortgage growth and recovery in property prices, the ratio of household debt-to-GDP dropped to 53.9% in December 2016, below the euro area average of 58.7%, as growth in GDP outpaced the increase in household debt (see Chart 2.12).<sup>19</sup> Higher household indebtedness was accompanied by faster wealth accumulation with net financial wealth expanding by 5.7% over 2015, rising to almost twice GDP and over three times their gross debt. This increase in financial wealth mainly stemmed from higher holdings of currency and deposits, which remained the largest share of households' financial wealth.

**Chart 2.11**  
**VALUATION PERCEPTIONS OF RESIDENTIAL AND COMMERCIAL PROPERTIES**  
(per cent)



Source: Central Bank of Malta's Real Estate Market Surveys.

**Chart 2.12**  
**NET HOUSEHOLD FINANCIAL WEALTH**  
(EUR billions; per cent of GDP)



Source: Central Bank of Malta.

<sup>18</sup> Refer to 'Residential property price misalignment with fundamentals', *Quarterly Review* 2017:1, Central Bank of Malta.

<sup>19</sup> Source: ECB SDW.

## Outlook

Amidst geopolitical tensions and potential rising protectionism, world output is still anticipated to grow robustly, up by 3.4% in 2017 and 3.6% in 2018, compared to 3.1% in 2016.<sup>20</sup> In the euro area economic growth for 2017 is forecasted to be slower than in the previous year, growing by 1.6% in real terms in 2017 and 2018.<sup>21</sup> In Malta, real GDP growth is forecasted to slow down somewhat, but to remain robust at 3.7% in 2017 and 2018, closing the positive output gap. This is supported by strong labour market fundamentals, as the unemployment rate is projected to remain at a historically low level. Inflation is predicted to pick up to 1.6% in 2017 on the back of higher oil prices and a rise in services inflation. Fiscal consolidation is expected to continue, bringing down further public debt. Such favourable economic conditions are conducive to bolstering further the resilience of the domestic financial system. Although the global economic environment has been characterised by relatively high geopolitical uncertainty, the potential negative effects from Brexit on the United Kingdom are likely to have a relatively small impact on Europe and Malta. Furthermore, following the election outcomes in the Netherlands and especially in France, the risk of EU disintegration has been considerably reduced, while the new US administration appears to be backtracking on some of its initial policy proposals.

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<sup>20</sup> Source: World Economic Outlook Update, January 2017, IMF.

<sup>21</sup> Source: European Economic Forecast, Autumn 2016, European Commission.

### 3. THE BANKING SECTOR

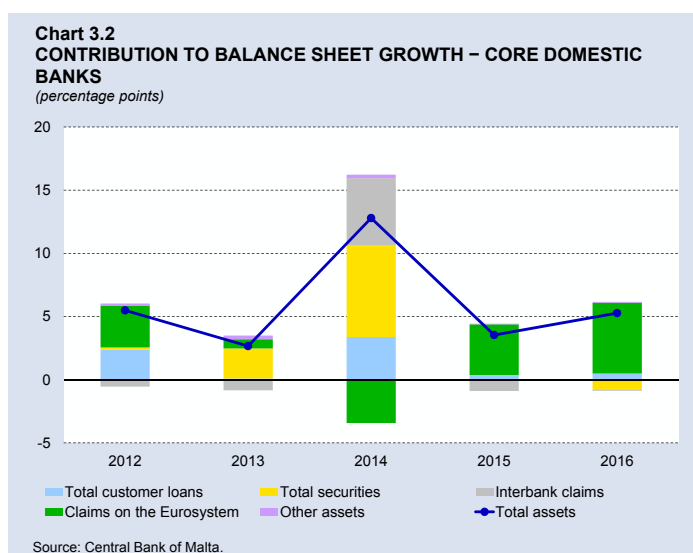
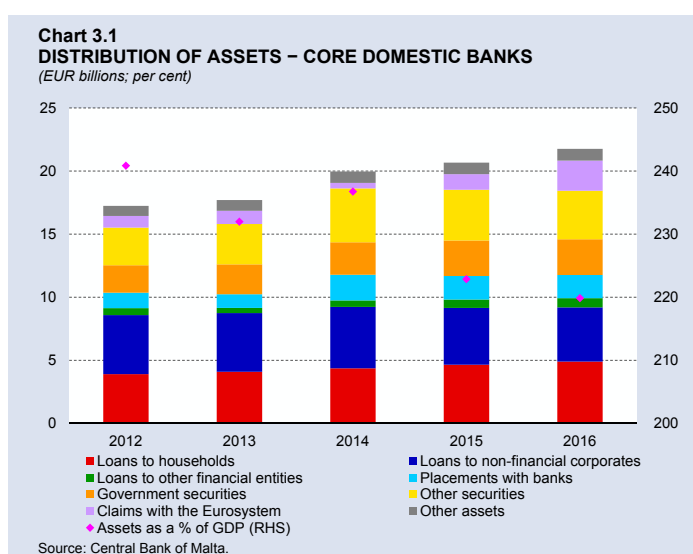
The banking sector in Malta continued to demonstrate sound resilience and remained a contributor to sustainable economic growth. Profitability improved across all banks, with adequate capital levels and healthy liquidity positions. Despite the improved performance, the prolonged low interest rate environment coupled with muted credit growth, continued to weigh on the banks' profitability. The level of credit risk attenuated further, with core domestic banks reporting a noticeable decline in non-performing loans (NPL). This was driven by enhanced creditworthiness supported by robust economic growth and also reflected an increase in write-offs of legacy NPLs. The banking sector's resilience is also confirmed by the results of stress tests conducted by the Central Bank of Malta (see Chapter 4). The outlook for the banking sector remains positive, but challenges persist as a result of the developments in the international environment, particularly geopolitical uncertainty, the persistent low interest rates, and continued developments in the regulatory framework.

#### 3.1 Core domestic banks

In 2016, the assets of the core domestic banks expanded by 5.3%, 1.7 percentage points higher than in the previous year. This growth outpaced that reported by banks in the euro area by 4.5 percentage points.<sup>1</sup> With total assets of €21.8 billion, the size of core domestic banks was equivalent to almost 220% of gross domestic product (GDP) by end 2016 (see Chart 3.1). This is lower than the EU average of about 260%.

Similar to the previous year, growth in total assets was funded through deposits. These were mainly translated into higher placements with the Eurosystem which almost doubled to €2.4 billion (see Chart 3.2). Customer loans also contributed to the expansion in the balance sheet, growing by 1.0%. On the other hand, securities holdings and inter-bank claims contracted by 2.5% and 0.8%, respectively.

Foreign assets amounted to just about a third of the total balance sheet value, with securities representing almost two thirds of foreign assets. The remaining was predominantly composed of interbank placements with foreign banks, and to a lesser extent, non-resident customer loans.



<sup>1</sup> Source: ECB Statistical Data Warehouse (SDW).

In terms of currency exposure, assets were mainly denominated in euro with only 15.2% of total loans, advances and bonds denominated in foreign currency, predominantly in US dollar and the pound sterling.

### 3.1.1 Profitability

In 2016, pre-tax profits of core domestic banks rose by almost 12% (and by 11.5% when accounting for tax), to reach €249.0 million, reinforcing the recovery reported in 2015.

Non-interest income was the main driver behind the growth in pre-tax profits, as it increased by 9.1% and contributed 8.4 percentage points to its growth. This mainly reflected higher dividend income, non-trading profits and fees and commissions, which offset a fall in trading profits (see Chart 3.3).<sup>2</sup> However, this improvement reflected a one-time gain from the disposal of assets representing almost 19% of non-interest income. In its absence, non-interest income would have contracted by 11.5%.

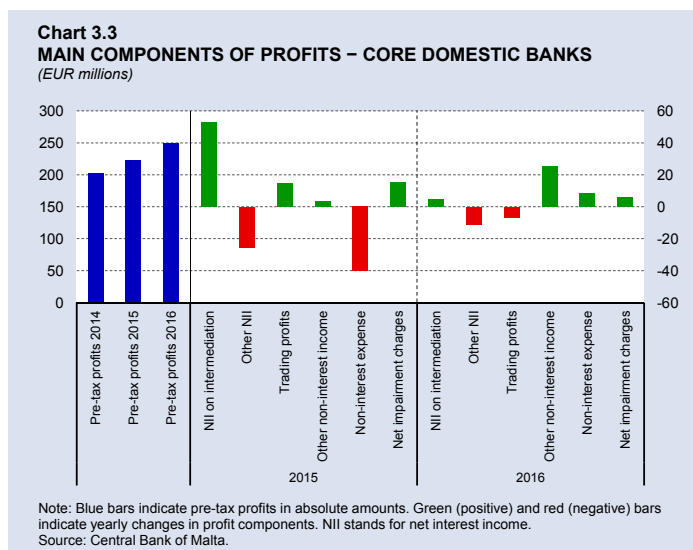
Lower net impairment losses also contributed to the overall growth in profits since these fell by 14.1% in 2016 owing to lower specific allowances, as otherwise write-offs and collective provisioning allowances increased.

Operating expenses fell by 2.6% supporting further the growth in profits. This was exclusively driven by lower staff costs, as other operating expenses rose. The drop in staff outlays was largely impacted by the exceptionally-high staff costs incurred in 2015 due to an early retirement scheme by one bank, which should give rise to permanent cost savings in the medium term. Meanwhile, in 2016 a bank incurred a one-off provision relating to the winding-down of a business operation. In the absence of these exceptional costs, the fall in non-interest expenses would shrink to just 0.5%.

The one-time events over the past two years, namely the retirement scheme in 2015 and the sale of a business line by one bank in 2016, affected the overall profitability of the core domestic banks. Should these exceptional events be excluded, pre-tax profits would have fallen by about 9% in 2016.

Although still representing the largest share of gross income, net interest income (NII) contracted by 1.7% in 2016. This was driven in part by lower NII from non-intermediation activities, which fell by 15.4%, on the back of lower interest rates coupled with the contraction in the portfolio of fixed-investment securities. This decline was also impacted by increased placements by banks with the Eurosystem, which currently carry a negative rate. Meanwhile, NII from financial intermediation activities, which accounted for over half of gross income, advanced by 1.6% in 2016. This occurred as the average interest rate on deposits fell at a faster pace than that on loans, with the banks maintaining a stable interest rate margin. However, the faster growth in deposits relative to loans partly offset such increase.

Accordingly, the operational cost-to-income ratio improved to 49.9%, from 52.4% in 2015, owing to exceptional events which bolstered



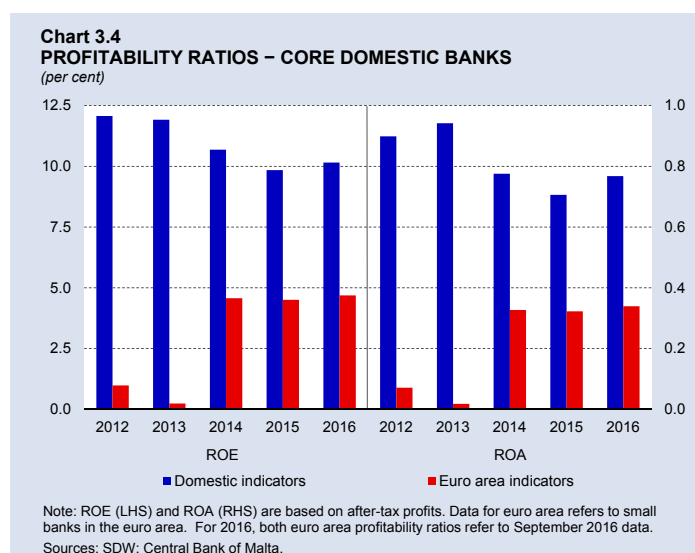
<sup>2</sup> Trading profits consist of fair valuation movements and gains or losses on traded securities.



both income and expenses, but to different degrees.<sup>3</sup> Indeed, after accounting for the exceptional income and expenditure in both years, the cost-to-income ratio would remain relatively unchanged at 50.4%. However, core domestic banks still remained more efficient than other small banks in the euro area, with a cost-to-income ratio well below the euro area average of 67.5% in 2016.<sup>4</sup>

In 2016, the return on equity (ROE) rose by 0.3 percentage point to 10.2%, while the return on assets (ROA) edged up by 0.1 percentage point to 0.8% (see Chart 3.4).<sup>5,6</sup> The core domestic banks continued to

outperform their euro area peers which reported ROE and ROA of 4.7% and 0.3%, respectively in December 2016.



## BOX 2: EVOLUTION IN THE PROFITABILITY OF THE CORE DOMESTIC BANKS OVER THE LAST DECADE

The recent global financial crisis has brought along a number of challenges for most euro area banks. As economies fell into recession, lending became anaemic, while NPLs soared to high levels. In a bid to stimulate growth and eliminate the threat of deflation, the European Central Bank (ECB) loosened its monetary policy stance with the overnight deposit facility rate falling into negative territory since mid-2014, while its policy rate reached the zero-bound in 2016. At the same time, the ECB implemented non-standard monetary policy measures to further support the supply of cheap bank lending. The unfolding of the financial crisis has eroded profits of euro area banks, with post-tax profitability ratios declining significantly. Domestically, the drop in profitability ratios of the core domestic banks was comparatively milder.<sup>1,2</sup> This Box reviews the developments in the core domestic banks' key profitability drivers, highlighting trends over the last decade.

Core domestic banks reported higher profits, albeit profitability abated over the last decade. Since 2005 core domestic banks' pre-tax profits increased in absolute terms, on the back of a doubling of their balance sheet. The latter partly reflected the licensing of two new banks but also through organic growth of existing institutions.<sup>3</sup> Nevertheless when expressed as a share of assets and equity, indi-

<sup>1</sup> See Chart 3.4: Profitability ratios – core domestic banks.

<sup>2</sup> Core domestic banks refer to the most systemically-important banks in Malta as listed in the *Financial Stability Report 2016*, pg. 8.

<sup>3</sup> Mediterranean Bank started operations in 2006, while Banif Bank started operating in 2008.

<sup>3</sup> The cost-to-income ratio is defined as operating expenses (net of amortisation but including intangible assets other than goodwill) to gross income (NII and non-interest income).

<sup>4</sup> Source: ECB SDW. This ratio refers to the average for domestic euro area small banks.

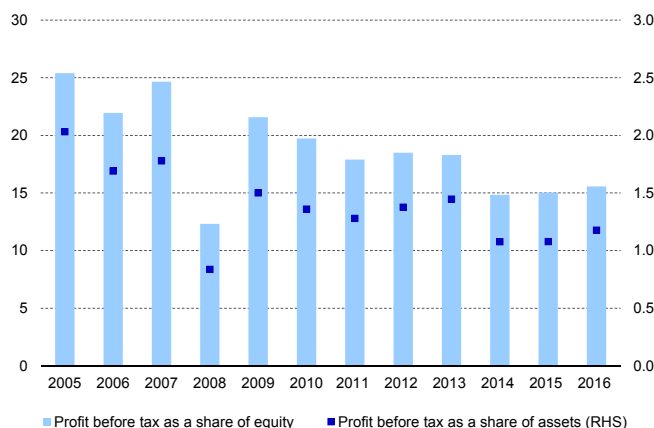
<sup>5</sup> The ROE and ROA are calculated on the basis of after-tax profits and based on a 12-month average of equity and assets.

<sup>6</sup> The ROE and ROA based on pre-tax profits stood at 15.6% and 1.2% respectively in 2016, marginally higher compared to 2015. Should the one-time events in 2015 and 2016 be excluded, the pre-tax ROE would decrease to 13.6% in 2016, down from 16% in 2015, whereas the ROA would decline marginally by 0.1 percentage point to 1% in 2016.

cators signal some weakening in profitability levels (see Chart 1).<sup>4</sup> Notwithstanding, core domestic banks fared comparatively better than their euro area peers on average throughout the crisis (see Table 1).

The decline in profitability levels of the core domestic banks was largely driven by developments in operating income, mainly from lower NII from securities holdings on the back of declining interest rates. Concurrently,

**Chart 1  
PROFITABILITY**  
(per cent)



Source: Central Bank of Malta.

**Table 1  
MAIN PROFITABILITY INDICATORS**

	ROE		Total operating income (% of assets)		Net interest income (% of assets)		Non-interest income (% of assets)	
	Euro area	Core domestic banks	Euro area	Core domestic banks	Euro area	Core domestic banks	Euro area	Core domestic banks
2007	10.0	16.8	2.3	3.3	0.9	2.5	1.3	0.9
2008	-0.8	8.1	1.6	2.4	1.1	2.2	0.5	0.2
2009	1.5	14.1	2.1	3.1	1.3	1.9	0.8	1.1
2010	3.2	13.4	2.1	2.9	1.3	2.1	0.8	0.8
2011	-2.8	11.8	2.1	3.1	1.3	2.2	0.8	0.9
2012	-3.2	12.1	2.0	3.4	1.2	2.1	0.8	1.3
2013	1.3	11.9	2.2	3.1	1.3	2.0	0.9	1.1
2014	3.3	9.8	2.1	2.8	1.3	1.8	0.9	1.0
2015	4.7	9.8	2.3	2.8	1.3	1.8	1.0	1.0
2016	3.8	10.2	2.2	2.8	1.2	1.7	0.9	1.1
	ROA		Total operating expenses (% of assets)		Impairment (% of assets)		Cost-to-income	
	Euro area	Core domestic banks	Euro area	Core domestic banks	Euro area	Core domestic banks	Euro area	Core domestic banks
2007	0.5	1.2	-1.5	-1.5	-0.2	0.0	65.1	44.9
2008	0.0	0.6	-1.2	-1.5	-0.4	-0.1	72.5	62.0
2009	0.1	1.0	-1.3	-1.5	-0.7	-0.1	60.0	48.1
2010	0.2	0.9	-1.3	-1.4	-0.5	-0.1	61.9	47.2
2011	-0.1	0.8	-1.3	-1.6	-0.8	-0.2	63.1	49.5
2012	-0.2	0.9	-1.3	-1.5	-0.8	-0.5	65.5	41.9
2013	0.1	0.9	-1.4	-1.5	-0.6	-0.2	65.1	45.6
2014	0.2	0.7	-1.4	-1.4	-0.5	-0.3	63.4	49.6
2015	0.3	0.7	-1.4	-1.5	-0.4	-0.2	63.3	52.4
2016	0.2	0.8	-1.4	-1.4	-0.4	-0.2	65.5	49.9

<sup>4</sup> Pre-tax profits expressed as a share of assets narrowed from 2.0% in 2005 to 1.2% in 2016. The same trend is observed should pre-tax profits be expressed as a share of equity, narrowing by about 10 percentage points to 15.6% in 2016.

NII from intermediation (i.e. through the granting of loans and accepting deposits) grew, as banks managed to maintain a relatively stable spread in spite of a declining interest rate environment. Deposit rates fell to historically-low levels while lending rates also dropped due to increased competition. This, coupled with a recovering real estate market and continued efforts to reduce risk (and return), led to a further shift towards higher mortgage lending by banks, where risk is spread across a large number of

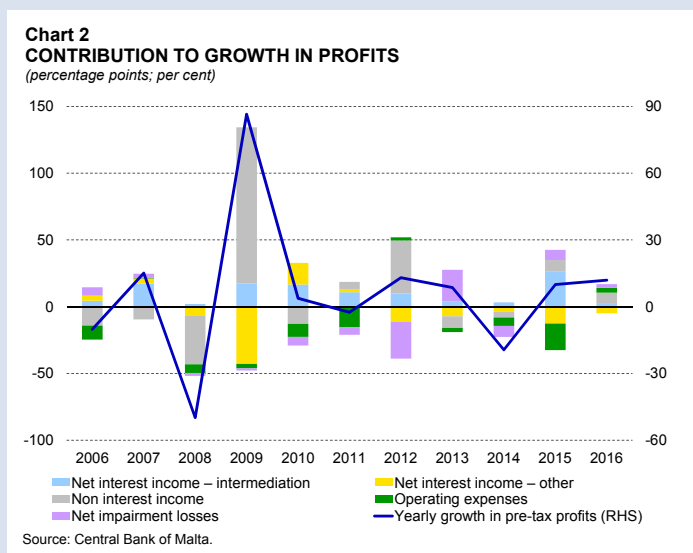
small borrowers, away from a small number of relatively large non-financial corporate borrowers. Meanwhile, the weakening in operating income expressed as a share of assets for euro area banks was much more contained than that for core domestic banks in Malta, contributing only marginally to the drop in profitability. Such decline in euro area banks' profitability was driven from non-interest income, as otherwise NII as a share of total assets, expanded since the onset of the crisis. In turn, operating expenses remained relatively contained when expressed as a share of assets, indicating a relatively neutral impact both for core domestic banks and the euro area banks, on average.

Over the years, the main driver to the increase in the profits was NII from intermediation activities (see Chart 2). Other sources of operating income, such as NII from securities, and more predominantly non-interest income were rather volatile and not a steady source of profit growth for the core domestic banks. Operating expenses generally grew, bar for a few years, pushing down profit growth. As the financial crisis evolved, net impairment losses also impacted negatively banks' profits to varying degrees, particularly in 2012, but these losses were recouped in the following year. Similarly, lower net impairment charges in 2015 and 2016 contributed positively to profits, adding 7.6 and 2.7 percentage points to profit growth, respectively.

### Pressures on operating income<sup>5</sup>

The weakening in profitability mainly reflected dwindling operating income which in relation to total assets shrank by 1 percentage point to stabilise at 2.8% between 2014 and 2016 (see Chart 3). Commensurate with their traditional business model of channelling deposits into lending, NII has consistently been reported as the core domestic banks' main income component, averaging around two-thirds of gross operating income. The remaining share consists of non-interest income.

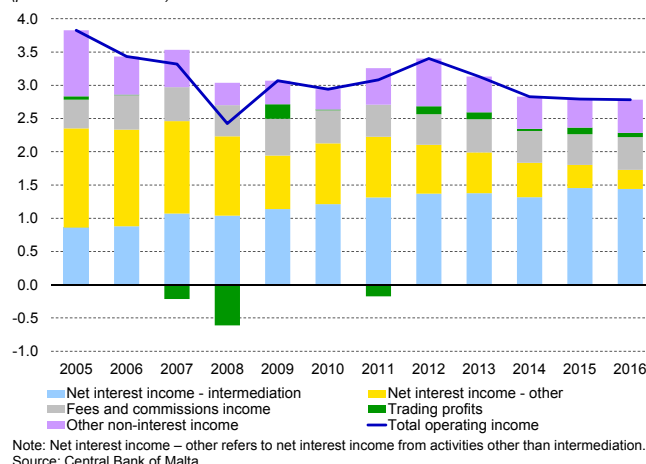
As a proportion of total assets, NII (from intermediation and non-intermediation activities) declined steadily, falling from around 2.4% to about 1.7%, with its two main components registering diverging trends. The weakening in NII mainly stemmed from non-intermediation activities, with such NII falling from 1.5% of total assets to just 0.3% in the period under review. Lower interest earned on investment



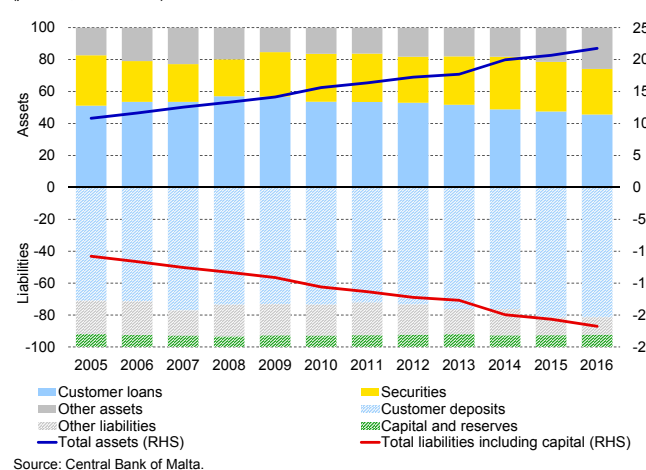
<sup>5</sup> Unless otherwise specified, the assessment on profits is conducted as a share of total assets, to measure developments in profitability. Should the assessment be based on the share of equity, the results would have broadly remained the same given the high correlation between the two denominators.

securities mainly resulted from a price effect on the back of declining yields internationally, as core domestic banks rolled over their investments at lower rates. Concurrently, banks also reduced the share of their securities portfolio on their balance sheet, partly motivated by the implementation of the ECB's Extended Asset Purchase Programme, but also in a bid to reduce their concentration in domestic sovereign exposures (see Chart 4). In addition, the easing of the ECB's monetary policy stance has pushed policy rates into negative territory; with excess funds held under reserve requirement, which has been increasing given the banks' ample liquidity from deposit-taking, attracting a negative remuneration. In addition the overnight deposit facility rate was also pushed into negative territory, affecting profitability since this facility is also frequently resorted to by the domestic core domestic banks. All of these events have contributed to the contraction in income from non-intermediation activities.

**Chart 3**  
**OPERATING INCOME**  
(per cent of total assets)



**Chart 4**  
**BREAKDOWN OF BALANCE SHEET**  
(per cent; EUR billions)



On the other hand, NII from intermediation improved considerably in the period under review, accounting from about 0.9% of total assets in 2005 to almost 1.5% by 2016. Although core domestic banks largely followed the ECB's monetary policy stance by cutting interest rates both for loans and deposits, they managed to maintain a sustainable and stable margin, which in turn, contributed to an improvement in NII from intermediation. While both lending and deposits rates have trended downwards, the fall in deposit rates was faster than that on loans, with the average cost per euro deposited falling significantly more than the average interest income of each euro loaned (see Chart 5). These developments were partly motivated by the elevated level of credit risk reported up to 2014, and also reflective of the corporate landscape in Malta, with small and medium enterprises accounting for the bulk of the banks' lending portfolio. These are generally considered to be less capitalised and thus more risky, with banks charging an additional risk premium. Meanwhile, the share of customer deposits to

total assets grew throughout the years, up by about 10 percentage points exceeding 80% in both 2015 and 2016. Higher deposits mainly reflected a shift in preference by customers towards demand deposits, with the share of deposits of longer maturities contracting given the current low level of interest rates. This has further contributed to the declining costs of deposit funding. Furthermore, on the back of decelerating credit demand, the share of customer loans to total assets fell to about 45% – the lowest level since

2005, when growth in assets exceeded that of credit (see Chart 4). This led to a fall in the loan-to-deposit ratio from a high of 77.6% in 2009 to 56.0% in 2016. Such developments partly offset the gains obtained from the positive price effect on intermediation income.

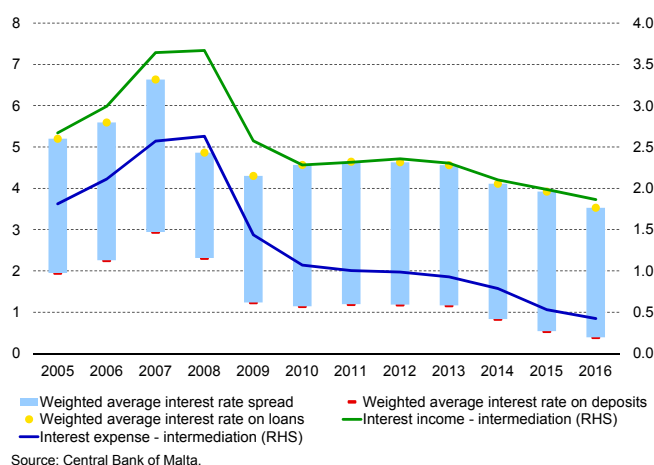
Non-interest income has been more volatile, varying from a high of 1.5% of total assets in 2005 to a record low of 0.2% in 2008, recovering somewhat to 1.1% in 2016. Such volatility is mainly reflective of developments in trading profits owing to fair value movements of assets. Indeed, on the onset of the financial crisis, banks reported trading losses to the tune of 0.2% and 0.6% of assets in 2007 and 2008, respectively. Meanwhile, as the European sovereign debt crisis intensified and markets started to fear contagion across Europe, stock prices fell dramatically with the core domestic banks reporting further trading losses of 0.2% of assets in 2011. Other factors which led to some volatility in non-interest income were foreign exchange trading and non-trading profits, reflected in the ‘other non-interest income’ category (see Chart 3).<sup>6</sup>

Fees and commission income has been the second-most important source of operating income, averaging 0.5% of total assets, and remaining broadly stable throughout the period under review. As the low interest rate environment persists, the banks may become under increasing pressure to seek alternative sources of income, adapting their business model towards growth in fee and commission-based activities.

### Operating expenses largely contained

Through cost containment measures, the core domestic banks have managed to restrain the increase in operating expenses. Thus, given that assets increased faster than operating expenses, core domestic banks brought down their operating expenses to total assets ratio, to 1.4% by end 2016 (see Chart 6). Staff expenses, which make up the largest share of total operating expenses, declined from 0.9% in 2005 to 0.7% by 2016, driven by slower growth in the number of staff employed coupled with a number of early retirement schemes, which were aimed at consolidating future staff expenses. Furthermore, the aggregate number of local branches decreased to the lowest level over the past 12 years, despite the establishment of two new core domestic banks. Other operating expenses as

**Chart 5**  
**NET INTEREST INCOME ON INTERMEDIATION**  
(per cent of total assets)



<sup>6</sup> Dividend income for 2005 was exceptionally high due to higher dividend income from a subsidiary company of one of the core domestic banks.

a share of total assets still increased marginally, partly reflecting the higher regulatory costs following the financial crisis, as well as increased IT-related costs.

Over the years, cost efficiency deteriorated as growth in operating expenses outpaced that of operating income.<sup>7</sup> This pushed up the cost-to-income ratio by about 10 percentage points to 50% (see Chart 7). Nevertheless, the core domestic banks remained still noticeably more efficient, with the cost-to-income ratio standing well below the euro area average of about 65%.<sup>8</sup>

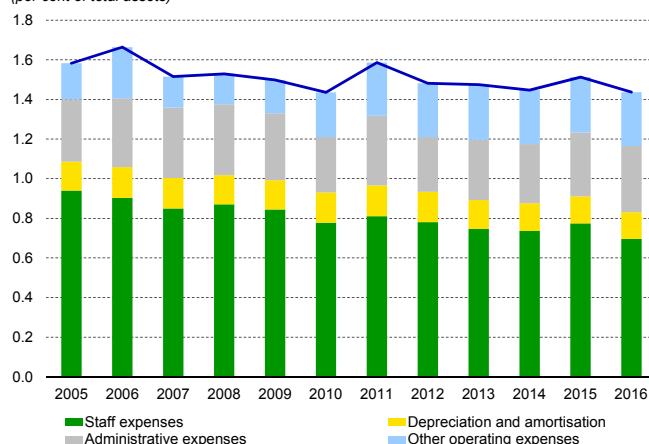
### Net impairment losses impacted banks' profitability

During the financial crisis, credit risk intensified, resulting in higher net impairment losses on customer loans. Indeed, impairment charges on lending rose steadily from almost none in 2007 to 0.3% of assets in 2014, mirroring the rising trend in NPLs. Subsequently, with stronger economic growth, net impairment losses waned in line with the reduction in NPLs (see Chart 8). Write downs on holdings of Greek bonds in 2011, and more predominantly in 2012, led to total net impairment charges to exceed 0.5% in 2012.

In sum, the traditional business model shielded core domestic banks from severe consequences of the international financial crisis, recording healthy profitability levels despite some weakening over the years. Such profitability levels were supported by the enhanced NII from intermediation, as banks were able to maintain a sustainable and stable interest rate spread in spite of the low interest rate environment.

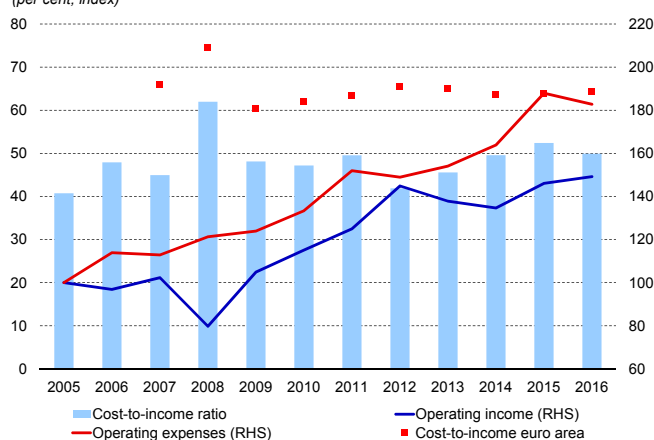
Nevertheless, throughout the years core domestic banks embarked on various measures to enhance their performance, consolidating their non-core business activities in an attempt to de-risk

**Chart 6**  
**OPERATING EXPENSES**  
(per cent of total assets)



Source: Central Bank of Malta.

**Chart 7**  
**COST-TO-INCOME RATIO**  
(per cent; index)



Note: Euro area data refers to domestic banking groups and stand alone banks. 2016 data refers to Q3.  
Source: Central Bank of Malta.

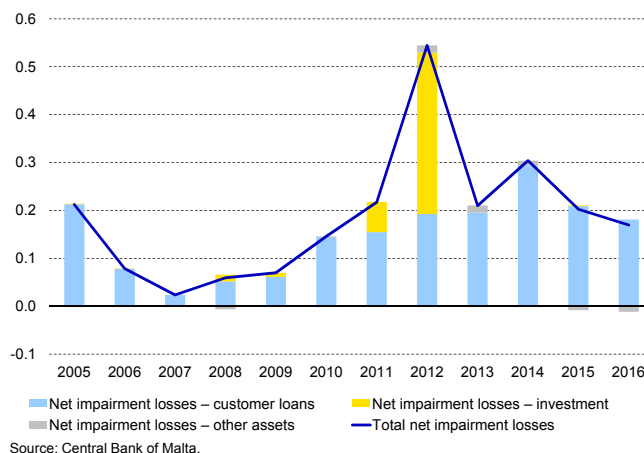
<sup>7</sup> Operating expenses exclude amortisation costs but include intangible assets other than goodwill.

<sup>8</sup> In 2008 the cost-to-income ratio surged to 62.0% due to the exceptional drop in operating income reported that year.

their balance sheets. They have also engaged in cost containing measures including the streamlining of their branch network across Malta coupled with early retirement schemes. At the same time, banks are slowly and gradually adapting their business models, tapping more fee-generating income rather than relying on the traditional credit intermediation.

Looking forward, the prevailing low interest rate environment will continue to set challenges on banks' profitability, both domestically and across the euro area. While interest rates on deposits approached the zero bound, pressures to decrease the cost of credit continue, possibly narrowing margins. This, coupled with subdued credit developments, may exert additional pressure on the profitability of core domestic banks. New regulatory requirements are also expected to continue to impinge on the banks' profitability, both through higher funding and capital costs, as well as through further increases in other operating expenses, particularly investment in technology. The latter could also be another avenue for generating new income through the potential tapping of fintech opportunities through strategic alliances, while at the same time, increasing efficiency. Profitability of the core domestic banks is likely to remain healthy in the short to medium-term, supported by their comparatively low cost structure; improving asset quality and the current robust economic climate.

**Chart 8**  
**NET IMPAIRMENT LOSSES**  
(per cent of total assets)



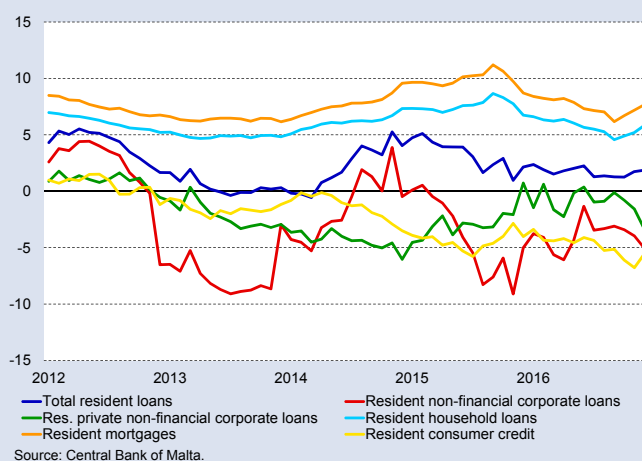
### 3.1.2 Asset quality

#### The loan portfolio

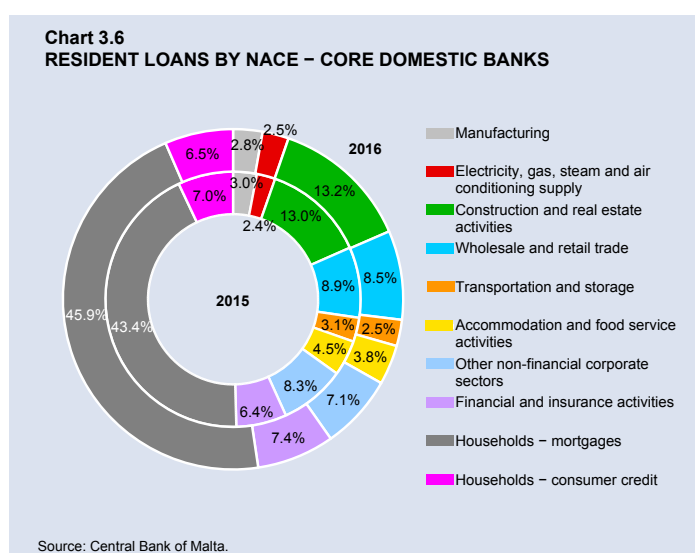
Credit growth remained weak in 2016, growing by just 1.3%. At €9.9 billion by end 2016, the loan portfolio remained the main asset component of the core domestic banks' balance sheet, accounting for 45.7%, almost two percentage points lower than in 2015. Lending to residents grew by 1.9%, accounting for around 92% of total loans, while non-resident lending contracted by 5.2% (see Chart 3.5).

As observed in previous years, growth in resident lending was driven by mortgages, which increased by 7.7% picking up some momentum towards the end of the year.

**Chart 3.5**  
**ANNUAL CREDIT GROWTH RATE – CORE DOMESTIC BANKS**  
(per cent)



The sustained growth in mortgage demand was supported by the robust economic conditions and the low interest rate environment (see Box 3). At almost 46% of total resident loans, financial stability risks stemming from mortgages are contained, as the risk of default is spread over a larger base and dependent on labour market conditions rather than on the performance of one specific economic sector (see Chart 3.6). Furthermore, at the current juncture, the economy is growing strongly with unemployment at an all-time low, which enhances the creditworthiness of borrowers and further mitigates potential risks arising from such loans.



In contrast, resident consumer credit contracted further, declining by 5.5%. This downward trend in part reflected the tendency of households to fund consumption through savings rather than bank credit. It also reflects tendency to fund big-ticket purchases through alternative sources such as hire purchase. In aggregate total resident household lending grew by 5.8% in 2016.

In spite of the lower borrowing costs, lending to resident non-financial corporates (NFC) contracted further by 5.1%.<sup>7</sup> However this decline was not broad-based. While lending to construction and real estate activities recovered, on the back of positive developments in the property market, lending towards accommodation and food service activities; public administration; and the wholesale and retail trade sectors contracted. The drop in NFC lending was particularly affected by lower lending to the public sector. Meanwhile, resident private NFC lending fell by 3.4%. However, the decline in private NFC lending was more than offset by a strong increase in bond issuance, indicating a shift away from bank financing towards market financing, partly driven by high liquidity and search for lower funding costs by NFCs. In 2016 net bond issuance by non-bank corporates on the Malta Stock Exchange increased by 25.0% to about €950 million. Thus, combining bank credit and market financing by private NFCs would show an increase of 1.8% in 2016 over the previous year.

### BOX 3: BANK LENDING SURVEY RESULTS

The Bank Lending Survey (BLS) is a quarterly qualitative survey consisting of a set of standard and ad-hoc questions, conducted among 140 banks in the euro area.<sup>1</sup> In Malta, four core domestic banks participate in the BLS, accounting for more than 90% of the resident credit market. The weighted domestic replies are integrated in the euro area BLS results.<sup>2,3</sup> The survey examines the euro area lending environment, both from a supply and a demand perspective. In particular, the survey gathers information on credit standards adopted by the banks, based on the overall creditworthiness of potential borrowers, terms and conditions applicable on bank loans, and demand

<sup>1</sup> Replies are provided by the senior loan officers of the participant banks.

<sup>2</sup> The weighting scheme is based on the amounts of outstanding loans of the individual participant banks. Furthermore, net percentages are used to analyse trend estimates.

<sup>3</sup> The BLS data for Malta and other euro area banks are published on the ECB's SDW.

<sup>7</sup> In 2016, the average weighted lending rate for NFC loans declined further by 0.2 percentage point to 4.2%.

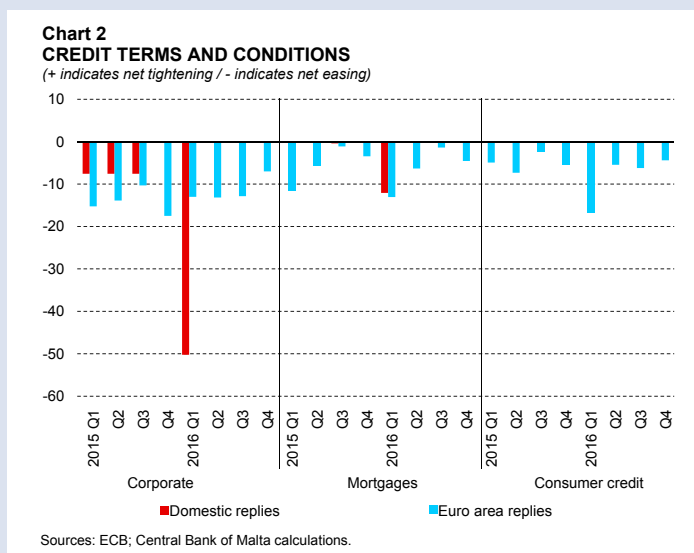
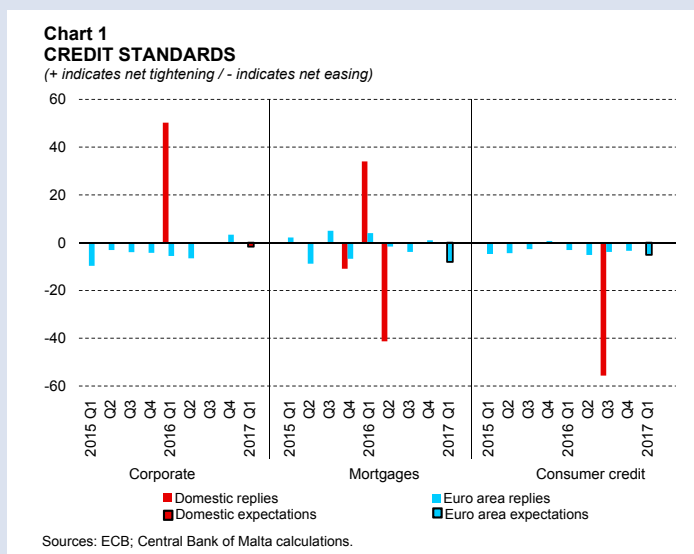


for credit.<sup>4</sup> The BLS differentiates between three loan categories, namely: loans to enterprises; loans to households for house purchases; and loans to households for consumer credit and other lending.

### Credit supply conditions

Following a year where credit standards for enterprises remained unchanged, Maltese respondents tightened these standards in early 2016 (see Chart 1).<sup>5</sup> This tightening stemmed from lower risk-tolerance by these banks with respect to specific industries or firms, on the back of the banks' drive to further improve their capital position. No further tightening was reported in subsequent quarters and credit standards are projected to remain unchanged in the first quarter of 2017. Meanwhile, credit terms and conditions for corporate loans were eased in the first quarter of 2016, reflected in narrower loan interest margins on average loans and less strict collateral requirements. These, however remained unchanged in the following quarters (see Chart 2).

In contrast, over the first half of 2016, euro area BLS banks continued to ease corporate credit standards, mainly on account of stiffer competition. This trend was however reversed in the second half of the year, primarily due to higher costs related to the banks' capital position and higher risks associated with collateral offered as security backing loans. However, euro area participant banks anticipated some loosening in their overall corporate lending standards over the first



<sup>4</sup> Credit standards refer to the internal guidelines on loan approval criteria, established prior to the actual loan negotiation. These specify the borrower characteristics such as income levels, age and employment status which the banks consider in their credit scoring methods. Credit terms and conditions refer to the conditions of a loan. These consist of the interest rate, loan size, fees, collateral requirements, maturity and other conditions.

<sup>5</sup> Credit standards refer to the loan approval criteria of the bank, based on its internal loan policy.

quarter of 2017. Furthermore, corporate terms and conditions for enterprises in the euro area continued to ease further in 2016.

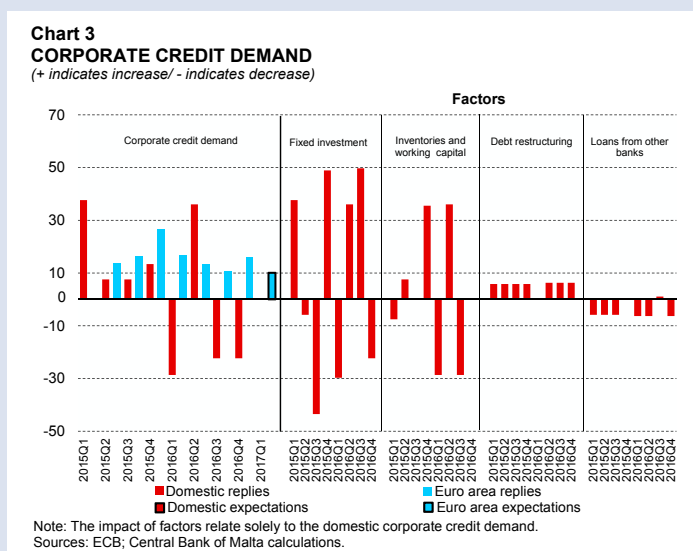
With regards to mortgage credit standards, some tightening was reported by the domestic BLS banks in the first quarter of 2016, largely attributed to one of the banks being less risk tolerant than the others (see Chart 1). In the following quarter, the consolidated position of the respondents showed some easing in the mortgage credit standards, but this was mainly due to higher creditworthiness and to another bank being more risk tolerant to a particular segment of borrowers as the other respondents kept their credit standards unchanged. Mortgage credit standards were subsequently left unchanged for the rest of the year. In addition, in 2016 the overall terms and conditions on mortgages eased further, expressed through narrower margins on riskier loans (see Chart 2). No further changes in mortgage credit standards were anticipated for the first quarter of 2017.

Similarly, euro area banks continued to ease both the credit standards, mainly owing to higher competition and improved housing market prospects; and terms and conditions for mortgages. Such credit standards were expected to ease further in the first quarter of 2017.

Maltese BLS banks relaxed their credit standards on consumer credit and other lending to households owing to higher risk-tolerance and are anticipated to leave credit standards unchanged in the first quarter of 2017 (see Chart 1). Similar trends were reported across the euro area, where banks eased their consumer credit standards throughout 2016 and anticipated further easing in the beginning of 2017. Meanwhile, overall terms and conditions were kept unchanged in Malta while euro area banks reported further easing in the terms and conditions pertaining to consumer credit over 2016 (see Chart 2).

### Credit demand conditions

Following strong demand for corporate loans in 2015, Maltese respondents reported a net decline in the first quarter of 2016, mainly owing to lower credit demand for fixed investment, inventories and working capital needs. Subsequently, corporate loan demand picked up in the second quarter as financing needs for investment increased, only to retract in the second half of the year. For the first quarter of 2017, Maltese BLS banks expected corporate credit demand to remain weak (see Chart 3). In contrast, euro area BLS banks reported a steady rise in corporate loan demand throughout 2016, primarily owing to several corporate restructurings on the back of the low interest rate environment, as well as an increase in inventories and working capital needs. Such a positive trend in corporate loan demand is expected to be maintained even in the first quarter of 2017.

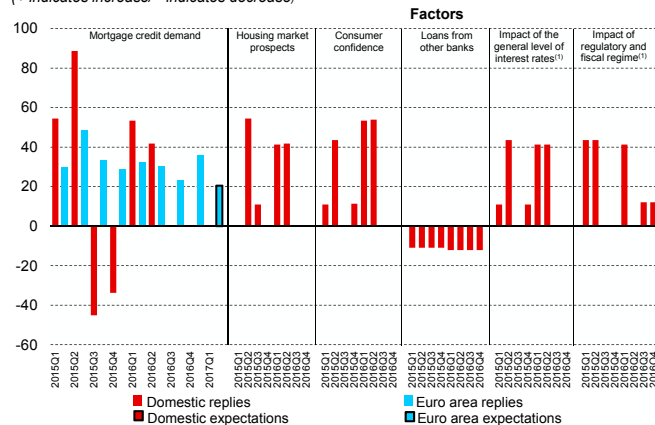


During the first half of 2016, Maltese BLS banks experienced an increase in mortgage demand which remained broadly unchanged till the end of the year (see Chart 4). Stronger consumer confidence and buoyant housing market prospects, coupled with a prolonged low interest rate environment, contributed significantly to this rising trend. These driving forces were also quoted by euro area BLS respondents. For the first three months of 2017, Maltese banks did not expect any changes in mortgage loan demand while euro area BLS banks anticipated further increases.

Maltese BLS banks reported further declines in consumer credit demand, particularly over the first half of 2016 as consumers relied considerably on their own sources of funding (see Chart 5). In the third quarter of 2016, there was a temporary increase in consumer credit demand as consumers used less of their savings while spending more on durable consumer goods. However, demand turned negative again in the last quarter of 2016 and surveyed banks anticipated consumer credit demand to remain weak even in the first quarter of 2017.

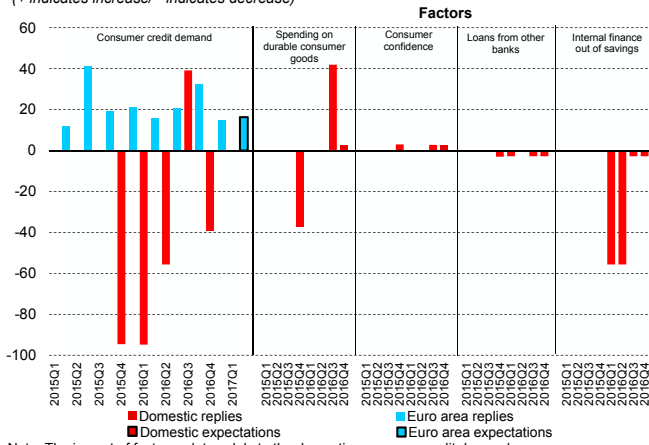
In contrast, euro area banks reported further growth in consumer credit demand throughout 2016 and expected the trend to persist into the first three months of 2017. The prolonged low level of interest rates and the growing demand for durable consumer goods, together with improved consumer confidence, continued to support such developments in consumer credit demand in the euro area.

**Chart 4**  
**MORTGAGE CREDIT DEMAND**  
(+ indicates increase/ - indicates decrease)



<sup>(1)</sup> These two factors were introduced as from the April 2015 BLS round to reflect the prevailing conditions affecting the home loan market.  
Note: The impact of factors relate solely to the domestic mortgage credit demand.  
Sources: ECB; Central Bank of Malta calculations.

**Chart 5**  
**CONSUMER CREDIT DEMAND**  
(+ indicates increase/ - indicates decrease)



Note: The impact of factors relate solely to the domestic consumer credit demand.  
Sources: ECB; Central Bank of Malta calculations.

### Non-performing loans

In 2016 the amount of outstanding NPLs dropped by 18.4%. This drop was spread across all the core domestic banks, although a significant decline was attributable to a write-off exercise conducted during the last quarter of the year.

Resident NPLs fell by 18.8% consisting mainly of NFC loans. The latter contracted by almost a quarter, with the construction and real estate, wholesale and retail trade, and accommodation and food services activities sectors contributing mostly to this fall. Meanwhile, household NPLs declined by 8.2%, reflecting lower non-performing mortgages which offset higher NPLs pertaining to other household credit.<sup>8</sup>

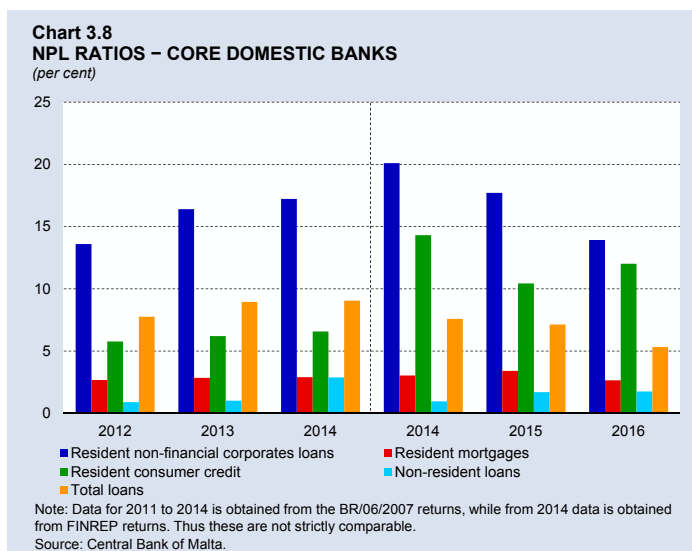
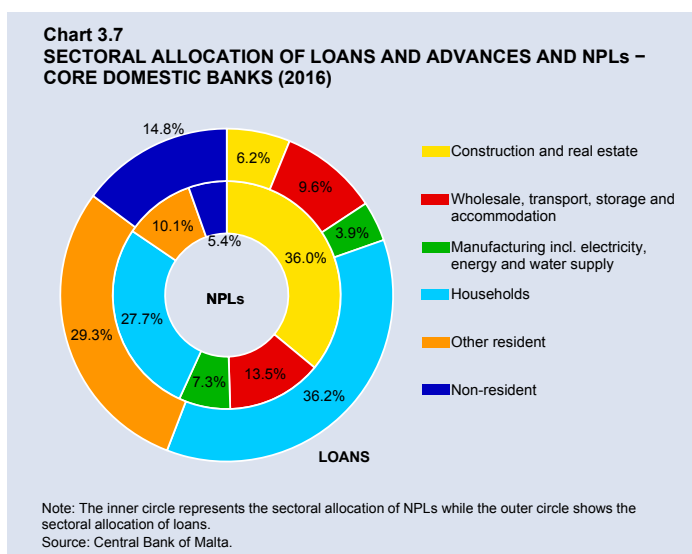
Non-resident NPLs contracted by 12.5%, mainly related to the human health services and social work activities sector; partly offset by higher non-resident mortgage NPLs. As a share of total NPLs, non-resident NPLs increased marginally to 5.4% (see Chart 3.7).

The fall in outstanding NPLs led to a further improvement in the NPL ratio, which dropped by 1.8 percentage points to 5.3% in 2016 (see Chart 3.8). Growth in loans and advances, largely stemming from interbank activity and deposits with the Central Bank of Malta, also contributed to the reduction in the NPL ratio.

The quality of resident loans also improved with the resident NPL ratio dropping to 6.0% from 8.6% a year earlier. This improvement stemmed predominantly from the corporate segment, with the resident NFC NPL ratio dipping by 3.8 percentage points to 13.9% as at end 2016. Similarly, the household NPL ratio improved by 0.6 percentage point to 4.1%, as the performance of mortgage loans was more positive. Indeed, the resident NPL ratio of mortgage loans declined to 2.6%, whereas that of resident consumer credit increased to 12.0%.

### Loan loss provisions

During 2016, core domestic banks continued to strengthen their coverage of NPLs, with the total coverage ratio progressing by a further 2.5 percentage points to 46.0% (see Chart 3.9).<sup>9</sup> This reflected higher collective provisions notably by one bank. The “Reserve for



<sup>8</sup> Consumer credit refers to household loans other than mortgages.

<sup>9</sup> This includes specific and collective provisions, as well as the “Reserve for General Banking Risks” introduced in the Banking Rule 09/2013.

General Banking Risks” remained broadly unchanged after being fully implemented by end 2015, contributing to 2.6 percentage points of the coverage ratio. Meanwhile specific provisions contracted by 18.8%, given that the loans written-off were already significantly provided for. As this decline was in line with the drop in NPLs, the proportion of specific provisions to NPLs remained broadly unchanged at around 40%, still below the EU average of around 45% reported in December 2016.<sup>10</sup>

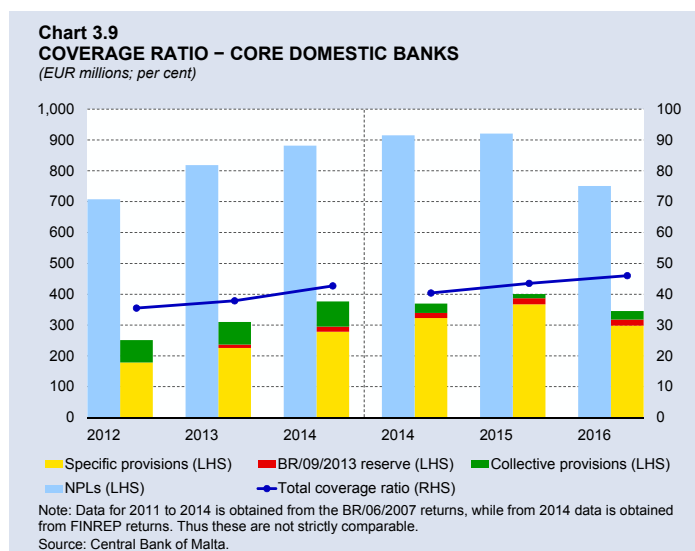
In addition to provisions, credit risk in the loan portfolio is also mitigated through adequate collateral and the conservative valuation policies. Collateral, predominantly in the form of real estate, accounted for more than half of outstanding NPLs. Sound valuation haircuts in the region of 10-30% are applied to the collateral, shielding the banks from any potential loss in the value of collateral, particularly real estate. Historically, in Malta, real estate has recorded significantly smaller declines in value, particularly during the financial crisis. Taking into account the collateral and provisions set aside, NPLs are more than fully covered, minimising potential losses for banks.

Other internal policies buttressing the quality of the banks’ loan portfolio include borrower-based policies such as the conservative loan-to-value (LTV) ratios, which are intended to protect banks from potential reversal in property prices and potential borrower default. Such policies also ensure that debtors do not take on excessive risk. The latter is also supported by the implementation of generally conservative loan-to-income and debt service-to-income ratios by banks. Based on a sample of new loans, the average LTV ratio for residential properties stood at 75.1% in 2016. The LTV ratio for residential first-time buyers is higher than that of non-first time buyers, averaging at 77.4% and 72.9%, respectively in 2016. The higher LTV for first-time buyers reflects the relative lower availability of funds in terms of down payment for the purchase of the dwelling. Risks from higher exposures are largely contained given the buyers’ higher income prospects and the longer maturity term for these types of mortgages reflecting the generally younger cohort age. The buy-to-let residential property market, which has seen a revival over the past few years, has a generally more conservative LTV ratio of 69.3%. Meanwhile, the LTV for commercial real estate loans stood at 67.5%.<sup>11</sup>

Debt servicing ratios for residential real estate lending are also considered to be generally conservative with an average ratio of less than 25% at inception; while the average loan amounts to about 4.3 times the annual income of the debtor. The residential buy-to-let market is even more conservative with an average debt servicing ratio of 22%, while the average loan is generally 2.8 times the debtor’s annual income.

### *The securities portfolio*

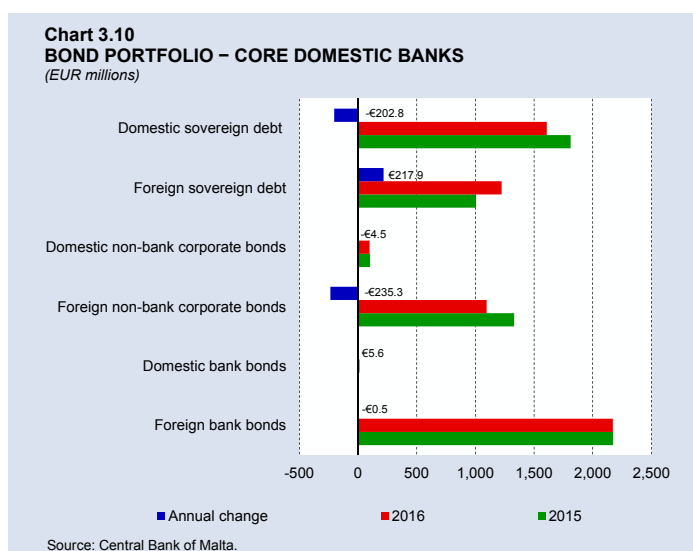
At 30.7% of total assets, securities form the second largest component on the banks’ balance sheet, totalling €6.7 billion by end 2016. Such holdings however contracted by 2.5% reflecting developments in the bond market, as otherwise equity holdings grew by 12.2%. The latter, which accounted for merely 6.9% of total securities (2.1% of total assets), resulted from higher equity holdings issued by credit institutions.



<sup>10</sup> Source: ECB, Financial Stability Review, May 2017.

<sup>11</sup> Commercial real estate loans refer to loans withdrawn for the purchase of properties which are used solely for commercial purposes, such as offices and warehouses, and which are backed by the said real estate.

While banks reduced the size of their bond portfolio by 3.4% to €6.2 billion, its composition changed somewhat. Collectively, core domestic banks reduced their domestic sovereign debt (bonds and Treasury Bills) by 11.2% to reach €1.6 billion, partly reflecting the implementation of the Euro-system's Public Sector Purchase Programme (see Chart 3.10). As a result, the share of domestic sovereign debt to total assets fell by 1.4 percentage points to 7.4%, while their share in total securities dropped by 2.3 percentage points to 25.9%.



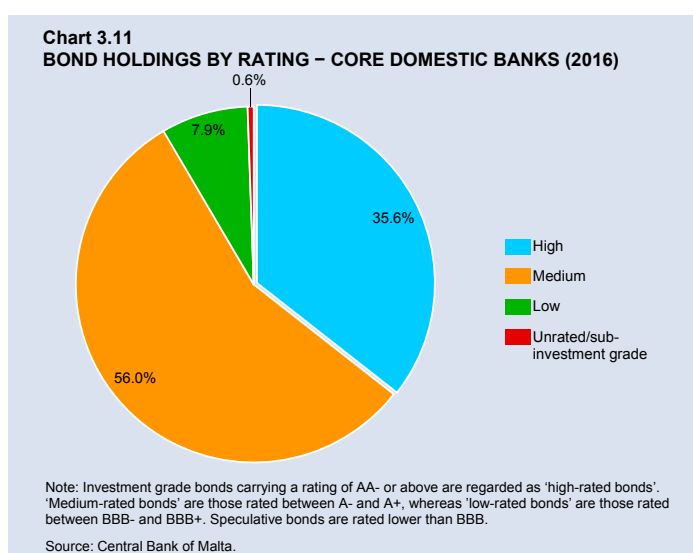
The lower exposure towards domestic sovereign debt was substituted by higher holdings of foreign sovereign debt, up by almost 22% reaching €1.2 billion and accounting for around a fifth of the total securities portfolio. Core domestic banks also shed their foreign corporate bond holdings, down by almost 18% to €1.1 billion. Holdings of bonds issued by banks, predominantly by foreign institutions, remained relatively unchanged during the year.

As the bulk of the bonds sold by the banks were booked as 'available-for-sale' and 'designated through profit and loss', the relative share of bonds booked as 'held-to-maturity' increased by 4.5 percentage points to 57.5% of total bond holdings. This insulates further the core domestic banks from adverse market movements which could otherwise impact their profitability in the short term.

### Securities asset quality

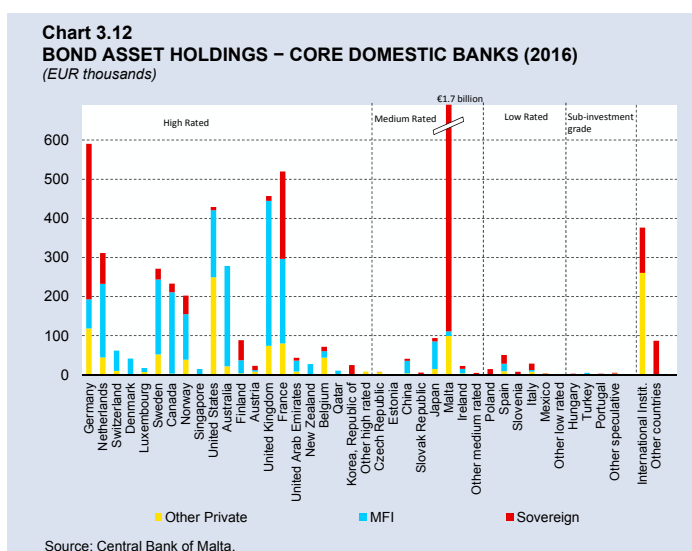
The core domestic banks' investment profile remained prudent as high-rated bonds accounted for more than a third of the bond holdings, largely in line with the risk profile as at end 2015 (see Chart 3.11). Another 56.0% consisted of medium-rated bonds whereas, the low-rated investment grade bonds accounted for less than 8%. Holdings of unrated or speculative bonds remained marginal, at just 0.6% of bond holdings.

Apart for the individual ratings of the bonds held, the sovereign ratings of the country of origin also shed light on the risk profile of the banks' bond portfolio, predominantly from a geopolitical risk point of view. The amount of foreign bond holdings remained broadly stable at €4.5 billion, accounting for around 21% of total assets. More than four fifths of foreign bond holdings originate from high-rated countries, mainly



Germany, France, the United Kingdom and the United States (see Chart 3.12). The share of holdings in medium- and low-rated countries amounted to 3.9% and 2.4%, respectively with only 0.4% being of sub-investment grade. Highly-rated European and international institutions represented another 8.4% of foreign bond holdings.

In 2016, the performance of the securities portfolio remained positive with none of the bonds classified as non-performing. Taking into consideration the total bond and loans portfolios, the non-performing exposure (NPE) ratio for core domestic banks stood at 3.7%, falling by more than 1 percentage point compared to 2015.

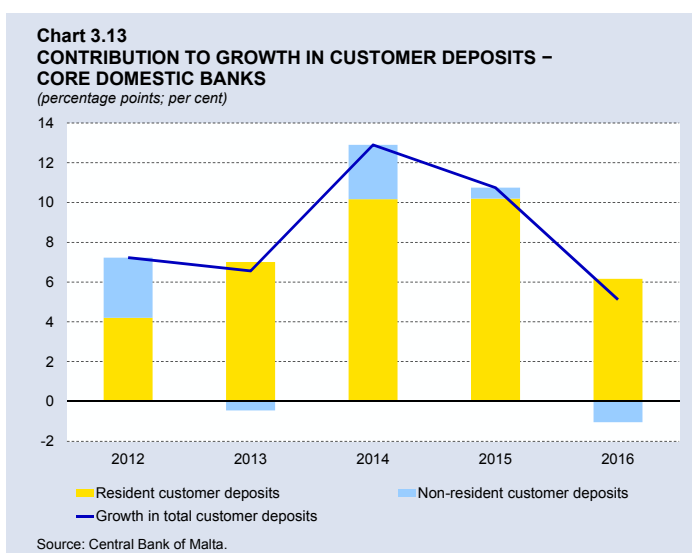


### 3.1.3 Funding and liquidity

#### Customer deposits

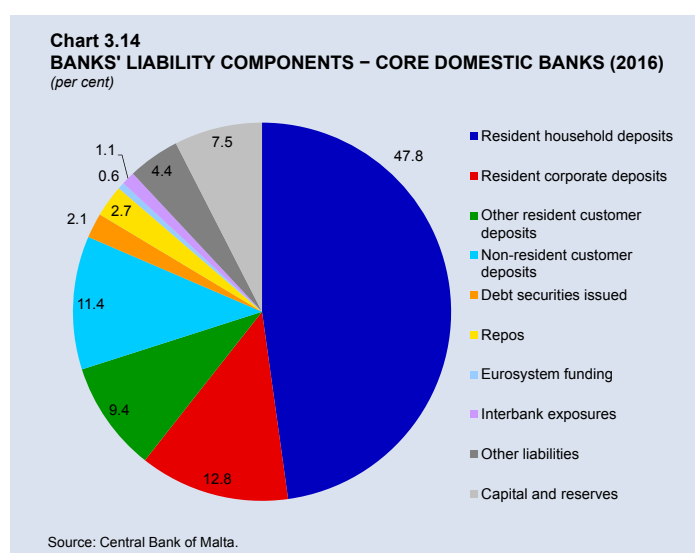
Core domestic banks continued to rely extensively on customer deposits as their main funding source, representing more than four fifths of their total balance sheet value. The rate of growth in customer deposits has slowed down to 5.1% in 2016 owing to a 6.6% fall in non-resident customer deposits, namely of NFCs (see Chart 3.13). This development, however, did not pose any funding concerns for core domestic banks given that such deposits accounted for only 14.0% of total customer deposits and have been rather volatile over the years. Indeed, the liquidity buffer of core domestic banks strengthened further, with the customer loan-to-deposit ratio falling by an additional 2.2 percentage points to 56.0%, remaining well below the euro area average of almost 100%.<sup>12</sup> The continued inflow of deposits occurred despite the further decline in interest rates with the weighted average interest rate paid on deposits easing by an additional 0.15 percentage point to 0.4%. The continued inflow of deposits, particularly of short-term nature, could indicate that depositors are placing their funds in highly-liquid instruments to await better investment opportunities. Moreover, households in Malta traditionally tend to prefer deposits with relatively short-term maturities even when interest rates are high, as evidenced in the pre-crisis period.

Resident customer deposits grew at a much slower pace in 2016, up by 7.3% as against 12.3% a year earlier. Although interest rates on deposits are very low, household



<sup>12</sup> Source: ECB SDW.

deposits continued to flow in, rising by 6.6% over the preceding year. As a result, the share of resident household deposits to total customer deposits rose by 0.8 percentage point to 58.7%, financing almost half of the total assets (see Chart 3.14). Banks also reported a significant increase in deposits from resident financial intermediaries and auxiliaries, up by more than a third in 2016, pushing up the proportion of 'Other' resident deposits by 2.2 percentage points to 11.6% of total customer deposits.<sup>13</sup>



Meanwhile, private resident corporate deposits contracted by 2.8%, partly reversing the significant growth reported in 2015 and suppressing the overall growth in resident customer deposits in 2016. By the end of the year, their share in total resident customer deposits fell from 20.2% to 18.3%.

The outflow in non-resident deposits was predominantly denominated in foreign currency, whereas the increase in resident deposits was euro-denominated. Given the declines in foreign currency deposits, the currency composition of the customer deposit base became more euro-oriented, reaching 87.3% of total customer deposits. The remaining foreign currency deposits were largely denominated in US dollars and the pound sterling.

Although the weighted average deposit rate continued to tighten, customers' preferences towards demand and short-term deposits intensified further, as the share of current and savings deposits to total deposits rose by 4.1 percentage points to 73.8% – the highest share of demand deposits since 2004. Conversely, short-term deposits with a maturity of up to one year declined further to 18.7% of total deposits, down by 2.6 percentage points when compared to 2015. The drop was largely reported in the up-to-3 months' category. The remaining fixed-term deposits with a maturity of more than one year also contracted, with their share of total deposits falling by 1.5 percentage points to 7.5%, mainly driven by deposits with a maturity of one to three years.

### *Eurosystem and wholesale funding*

Core domestic banks reduced further their reliance on euro-denominated Eurosystem funding, which was nevertheless already insignificant, to just 0.1% of total liabilities at the end of 2016. At the same time, one credit institution also tapped the one-week USD operations to the tune of 0.4% of the core domestic banks' total assets. On aggregate core domestic banks utilised only a third of their pledged Eurosystem-eligible collateral.

Interbank funding (excluding repos) increased by 58.0% in 2016, though this accounted for only 1.1% of total balance sheet value, up by 0.4 percentage point over the previous year. Core domestic banks also issued debt securities during the year, growing by 8.4%; although the proportion of such funding to total balance sheet value remained unchanged at 2.1%. This type of funding includes the issuance of subordinated debt securities, which are eligible for fulfilling the minimum requirements for own funds and eligible liabilities (MREL) governed by the Bank Recovery and Resolution Directive (see Box 1). Funding from repos contracted by almost 20%, whereas 'other' liabilities increased by 3.1%. These funding sources financed 2.7% and 4.4% of total assets, respectively as at end 2016.

<sup>13</sup> 'Other' resident customer deposits also include captive financial institutions and money lenders, government deposits, insurance companies and public corporates.



### Liquidity

Throughout 2016 the liquidity position of the core domestic banks remained healthy. At 164.5%, the liquidity coverage ratio (LCR) remained relatively unchanged compared to a year ago, but was more than double the transitional minimum requirement of 70%, and also well-above the fully-phased-in LCR requirement of 100%. While high quality liquid assets grew by almost 20%, this was almost equally matched by net cash outflows.

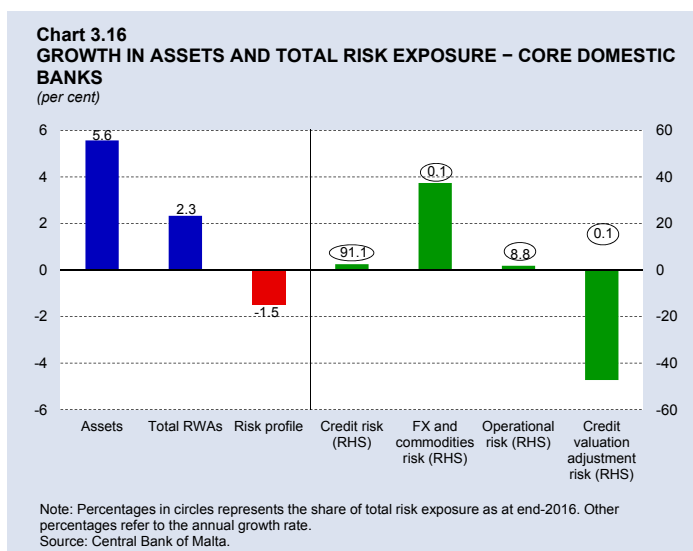
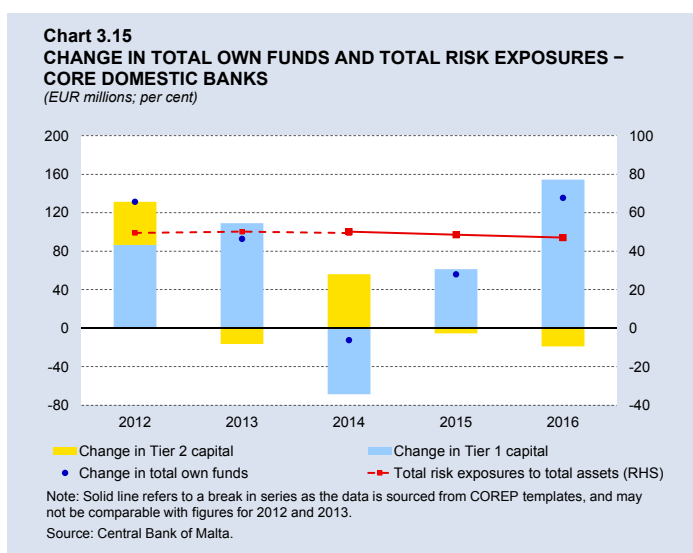
Core domestic banks also met the Net Stable Funding Ratio (NSFR) which is to come into force in January 2018.<sup>14</sup> Latest results based on a sample of the core domestic banks indicate that these banks are already in a position to meet the requirements should these be implemented now, and fully phased-in at 100%.

### 3.1.4 Capital and leverage

During 2016 core domestic banks strengthened further their capital position, with the total capital ratio improving by 1 percentage point to 16.0%. Such increase was due to a stronger capital base, with total own funds expanding by 9.3%, primarily resulting from higher retained earnings and other reserves (see Chart 3.15). Total risk exposure increased by 2.3% owing to higher mortgages, loans to institutions and equity holdings, reflecting developments in the banks' balance sheet.

Despite an expansion in total risk exposures, the risk profile of core domestic banks eased somewhat in 2016, as evidenced by the expansion in total assets which was more than double that of risk-weighted exposures (see Chart 3.16). As a result, the risk profile (defined as total risk exposures to total assets) decreased by 1.5 percentage points to 47.1%, indicating that the average risk weights of total assets declined. This shift reflects the persistent prudent behaviour of the core domestic banks in their operations and the fact that such banks are not actively searching for higher yields despite the continuing challenging macro-financial environment.

The rise in total own funds resulted from a 13.1% increase in Tier 1



<sup>14</sup> Banks will be required to finance their long-term activities with stable sources of funding, thereby lowering maturity transformation risk and enhancing the bank's resilience against possible funding constraints.

capital, pushing up this category of capital ratio to 13.4% in 2016 up from 12.1% a year earlier (see Chart 3.17). One bank also raised 'additional Tier 1 capital', though this constituted a minor proportion in total own funds.

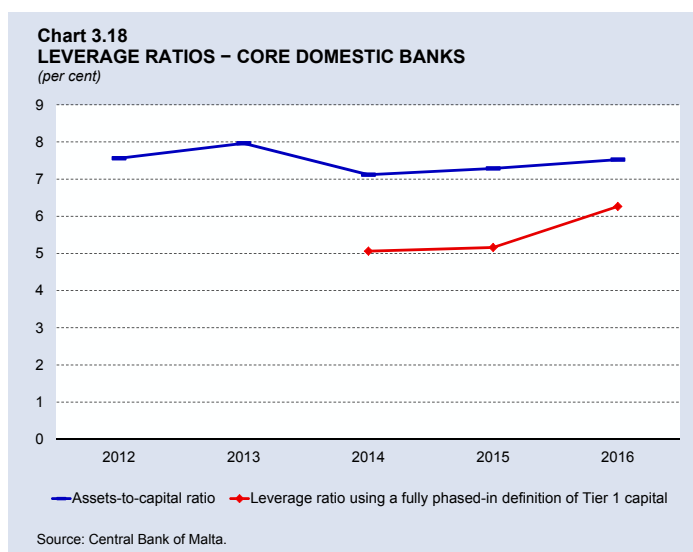
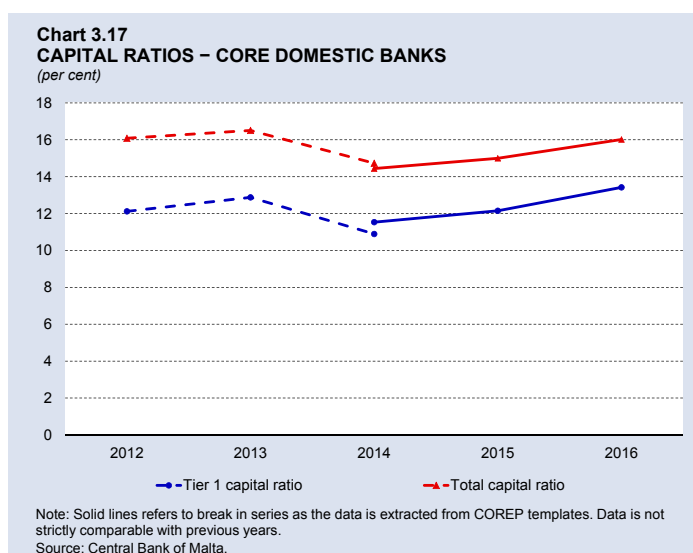
By contrast, the majority of core domestic banks reported lower Tier 2 capital, down by 6.8%. This reflected an overall drop in subordinated loan capital, although one bank continued to issue such debt instrument in anticipation of upcoming MREL requirements.

The fully phased-in leverage ratio governed under the CRR/CRD IV improved by 1.1 percentage points to 6.3% in December 2016, with all core domestic banks exceeding the 3% minimum regulatory requirement (see Chart 3.18). When taking into account a more simplistic definition of the leverage ratio, expressed as capital and reserves over total assets, the ratio rose by 0.2 percentage point over the previous year to 7.5% in 2016. The faster expansion in capital and reserves (8.7%) compared to assets (5.3%) resulted in lower leverage for the core domestic banks, albeit the ratio varied considerably across banks, ranging from 5.7% to 15.3%.

### 3.2 Non-core domestic banks

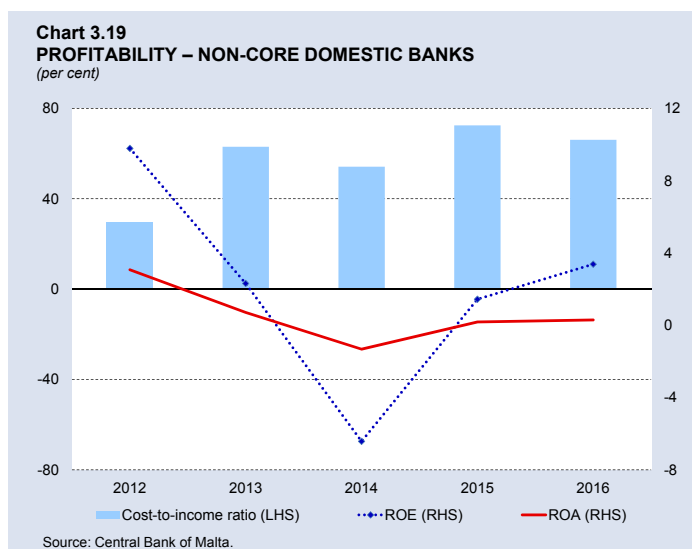
In 2016, the number of non-core domestic banks decreased from six to five, as one bank was reclassified as an international bank, in line with its new business profile which involves negligible links with the domestic economy.<sup>15</sup> In 2016, non-core domestic banks registered an expansion of 3.2% in balance sheet size, with total assets reaching around a quarter of GDP. Although these banks remained oriented towards international business, resident assets accounted for around a quarter of their balance sheet size, whereas resident liabilities funded 26.6% of their assets. Nevertheless, connectedness with the real economy remained contained, with limited systemic implications. Overall, non-core domestic banks remained well capitalised, with improved profitability levels and more cost-efficient compared to previous years.

<sup>15</sup> As a result of the acquisition by MFC Industrial Ltd, Bawag Malta Bank Limited, previously a non-core domestic bank, was renamed to MFC Merchant Bank Ltd which is now classified as an international bank.



### 3.2.1 Profitability

The ROE and ROA (after tax) rose to 3.4% and 0.3%, respectively in 2016 up from 1.4% and 0.2% a year earlier (see Chart 3.19). This improvement reflected higher profits which stemmed predominantly from higher non-interest income and lower operating expenses. In contrast, NII continued to trend downwards, contracting by almost a third over 2015. This occurred on the back of narrower interest margins, coupled with a higher increase in customer deposits than customer loans. The cost-efficiency of non-core domestic banks ameliorated in 2016, with the cost-to-income ratio dropping to almost 66% from 72.5% a year earlier, though remaining comparatively higher than the average ratio of the core domestic banks, and to that of small domestic banks in the euro area. The improved efficiency was recorded on account of a rise in gross income coupled with lower operating expenses.



The developments in profits indicated that non-core domestic banks managed to reduce their reliance on interest-bearing activities, particularly from intermediation and overcoming the challenges posed by the low interest rate environment. Indeed, the proportion of NII to gross income contracted to 31.2%, down from 43.5% a year earlier, while non-interest income as a proportion of gross income increased by 12.0 percentage points to 68.8%, pointing towards a shift in their core operations.

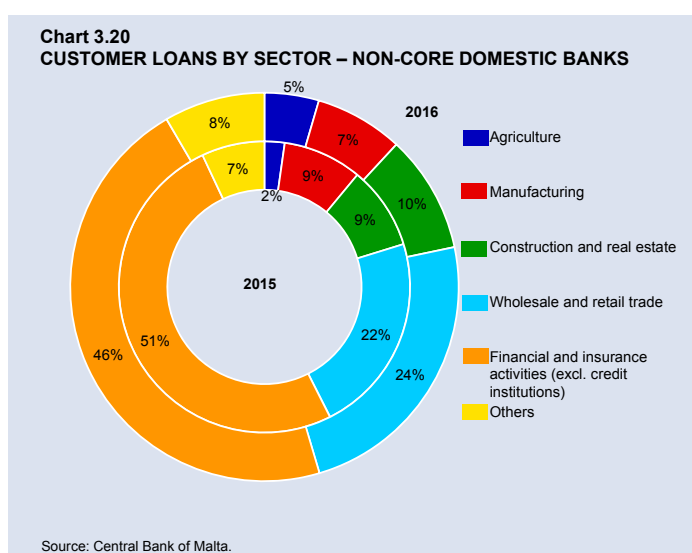
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### 3.2.2 Asset quality

#### Loan portfolio

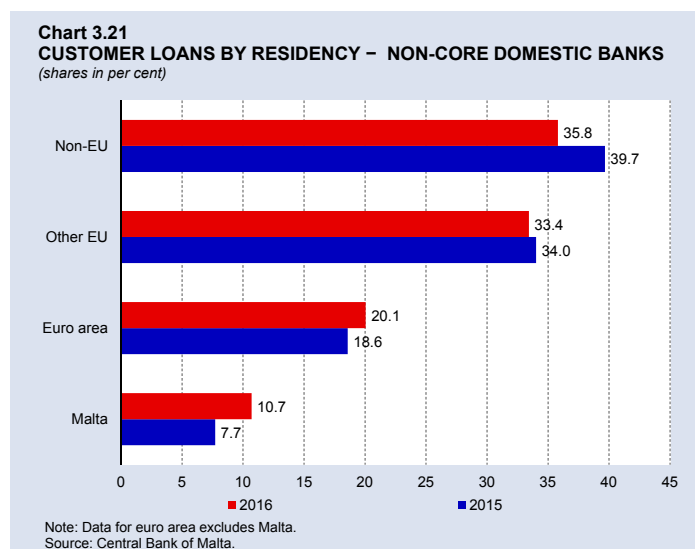
In 2016, customer loans grew by 6.0% to €756.7 million accounting for 31.1% of the banks' total assets, up from 30.3% a year earlier. From a sectoral perspective, total customer loans predominantly with non-residents, are mainly concentrated in the financial and insurance activities (excluding credit institutions) and to a lower extent, in the wholesale and retail trade sectors. These accounted for around 46% and 24% of the total customer loans portfolio, respectively (see Chart 3.20).

Resident customer loans doubled during the year but still represented just 10.7% of the loan book,



and to less than 1% of the total resident customer loans (see Chart 3.21). Higher resident lending was channelled towards the financial and insurance sector and the real estate sector, with the latter representing the largest share, accounting for around half of total resident customer loans granted by non-core domestic banks.<sup>16</sup>

Non-resident customer loans grew by 2.6% to €675.7 million and represented over a quarter of the banks' total assets. The growth in these loans emanated from higher lending channelled to EU Member States, outweighing the contraction in loans to non-EU countries, though the latter still accounted for the bulk of total customer loans.



Claims on banks dropped by over a fifth, owing to lower placements by banks with their parent and affiliate companies, which were however partly offset by higher placements with unrelated non-resident credit institutions. As a result of these developments, the share of claims on banks to total assets dropped by almost 10 percentage points, albeit remaining a considerable asset component, at 28.8% of total assets. Despite the negative overnight deposit facility rate, placements with the Eurosystem increased to 9.5% of total assets, up from 2.4% a year earlier.

In terms of loan quality, the NPL ratio continued to trend downwards to 3.4% in 2016, from 3.9% in the previous year. This improvement mainly stemmed from lower NPLs, both from the resident and non-resident segments, where the latter accounted for the bulk of NPLs. The coverage ratio deteriorated somewhat from 65.2% in 2015 to 53.9% in 2016, due to lower specific provisions, partly reflecting lower NPLs on the loan book of one bank.

### Securities portfolio

During 2016, non-core domestic banks expanded their securities portfolio by 12.1%, reaching over a third of total assets by the end of the year. This increase mainly reflected higher equity holdings, which grew by almost a third over 2015 and accounted for 41.5% of the banks' total securities portfolio or 14.1% of total assets.

The size of the bond portfolio remained fairly stable in 2016, although the structure changed, significantly. By the end of 2016, non-core domestic banks reported higher holdings of bonds issued predominantly in the United States and also by the European Investment Bank; gaining the largest share of around 37% in the banks' bonds portfolio (see Chart 3.22). On the other hand, domestically-issued bonds (mainly MGS) fell by just over a third and accounted for around a quarter of the banks' bond portfolio, down from over 38% in 2015. Non-core domestic banks also reduced their holdings in euro area bonds (other than those issued in Malta), primarily those issued in Austria. This pushed down the proportion of such holdings by almost 5.5 percentage points to 29.4% of the bond portfolio.

In line with the change in the geographical structure of the bond portfolio, the credit quality of the bond portfolio improved as the share of high-quality bonds increased from 44.6% of total bonds in 2015 to

<sup>16</sup> Around 59% of resident lending by non-core domestic banks is denominated in foreign currency.

almost 70%.<sup>17</sup> Concurrently these banks shed some medium-rated and unrated bonds. Meanwhile, this group of banks reported an insignificant amount of non-performing debt securities. As a result, the NPE ratio declined to 2.6% from 3.0% in 2015.

### 3.2.3 Funding and liquidity

Customer deposits remained the main funding source for the non-core domestic banks, growing by 38.3% in 2016 and financed around two-thirds of total assets, up from 50% a year earlier. This increase stemmed entirely from foreign households. Higher household

deposits were partly offset by lower deposits from non-bank financial institutions and private corporates. Resident customer deposits which financed 14.1% of total assets remained fairly stable compared to a year ago. While most of the non-core domestic banks have actively tapped the local deposit market, largely by offering more attractive interest rates on deposits than core domestic banks, their market share remained minimal at just 2.2% of the overall resident customer deposits in Malta. Indeed, the weighted average interest rate for resident deposits offered by the non-core domestic banks stood at 2.0%, while that offered by the core domestic banks averaged at 0.4%. Similar to the core domestic banks, the majority of customer deposits have a term to maturity of less than one year. The interest rate spread (that is the difference between the weighted average interest rate on total deposits and that of total loans) is narrower for non-core domestic banks than for the core domestic banks.

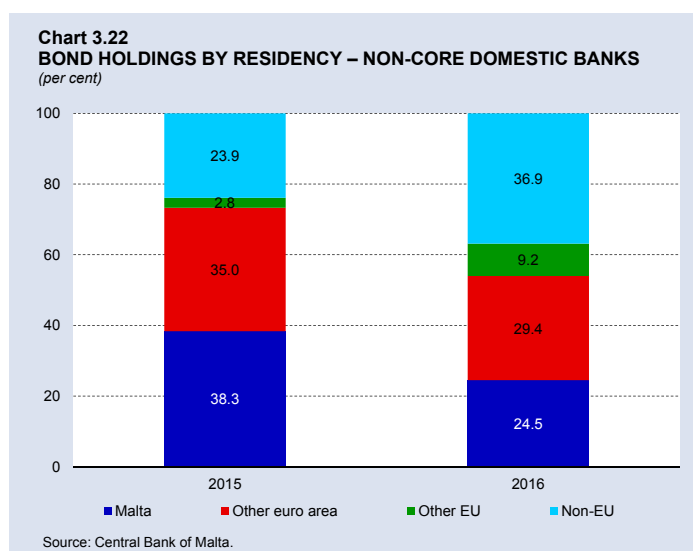
Interbank funding mostly from unrelated credit institutions located in non-EU countries contracted by around a third in 2016. Nevertheless, such funding remained the second most important source of funding, financing around a fifth of the banks' balance sheet value, down from 27.1% in 2015, as banks embarked on altering their funding strategies. Furthermore, the low reliance on Eurosystem funding declined further from 3.0% of total assets at the end of 2015 to just 1.0% in 2016.

Excluding the bank that was reclassified as an international bank, capital and reserves remained fairly stable and accounted for 8.3% of total balance sheet size of this group of banks.

The strong liquidity position of non-core domestic banks was evidenced by the high LCR governed under the CRR/CRD IV framework, which stood at 194.9%.<sup>18</sup> The high liquidity level was also supported by the low customer loan-to-deposit ratio, which stood at 46.5% as at end 2016, down by 14.2 percentage points as customer deposits increased, significantly.

### 3.2.4 Capital and leverage

In 2016, owing to the reclassification of one of the non-core domestic banks, the total capital ratio declined from 22.1% to 15.5%, whereas the Tier 1 capital ratio dropped by 6.3 percentage points to 12.3% as at end 2016 (see Chart 3.23). Should this reclassification be excluded, the total capital ratio and Tier 1 capital ratio



<sup>17</sup> High-rated investment grade bonds are rated as AAA to AA-, medium rated as A+ to A-, and low-rated investment grade are rated as BBB+ to BBB-.

<sup>18</sup> The LCR ratio will be progressively implemented in accordance with the CRR as follows: 70% from 1 January 2016, 80% from 1 January 2017, and 100% from 1 January 2018. The LCR will be fully phased in by 2018, one year earlier than required under Basel requirements.

would have weakened by much less, from 16.7% and 13.0% in 2015 to 15.5% and 12.3%, respectively at the end of the year.

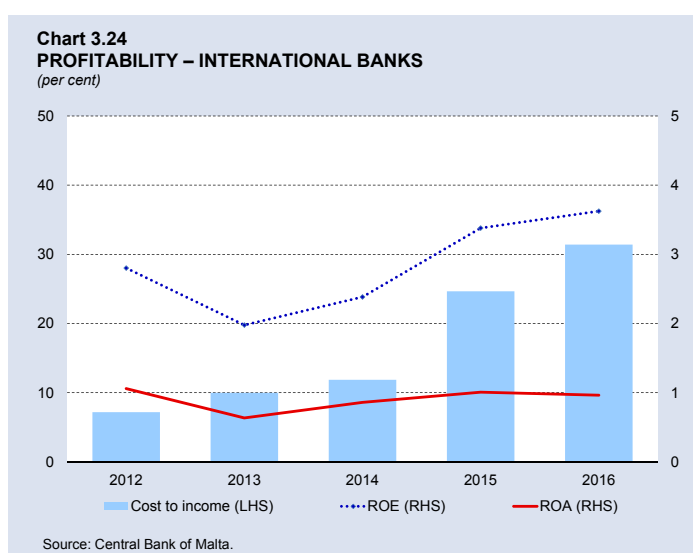
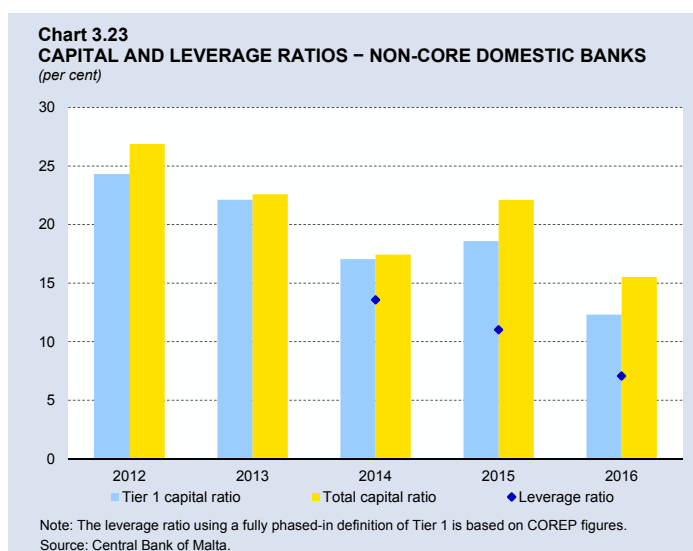
The leverage ratio governed under the CRR/CRD IV framework stood at 7.1%, narrowing from 11.0% a year earlier, largely reflecting the impact of the reclassification of one bank. Excluding the latter effect, the leverage ratio would have decreased by 0.6 point from 7.7% in 2015. All banks in this category reported a leverage ratio above the 3.0% regulatory minimum.

### 3.3 International banks

During 2016, the number of international banks remained unchanged at 15, as a large international bank ceased operations whereas a non-core domestic bank was reclassified as an international bank.<sup>19</sup> Total assets contracted by 9.1% over the previous year, largely reflecting the operations of the two largest branches of foreign banks, which shed off some of their debt securities and reduced interbank placements. As a result, the share of total assets of international banks to GDP dropped from 261.4% in 2015 to 222.7% in 2016. Links with the domestic economy remained negligible. Thus while these banks are exposed to potential country and counterparty risks, such vulnerabilities are not of a systemic nature and are deemed to be low and contained.

#### 3.3.1 Profitability

During 2016, net profit before tax of international banks weakened by almost 19.0%, predominantly driven by one bank which reported lower returns following the repositioning of its securities portfolio. Should this bank be excluded, net profits before tax would have remained largely stable compared to the previous year. Lower profits arose from weaker interest income from securities owing to a contraction in the securities portfolio of the two foreign branches. Lower trading profits, higher operating costs and other non-interest expenses have also contributed to the drop in profits. Notwithstanding, the ROE (excluding branches) improved by 0.2 percentage point to 3.6% whereas the ROA remained fairly stable, hovering at around 1% (see Chart 3.24).



<sup>19</sup> Deutsche Bank surrendered its licence in June 2016, owing to the Group's decision to streamline its foreign operations.

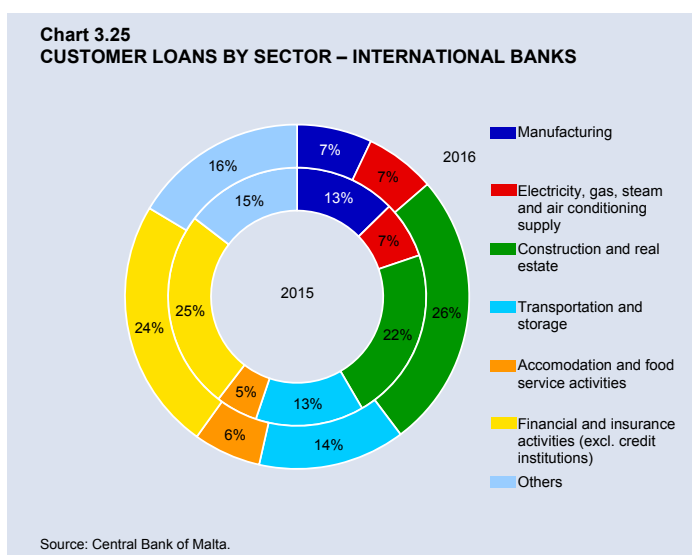
However, this category of banks reported some erosion in efficiency levels as the cost-to-income ratio rose by 6.8 percentage points to 31.4% in 2016, but remained well below the euro area average. The high cost efficiency largely reflects the business model of these banks, which do not have a branch network and employ a relatively small pool of staff when compared to the other banks.

### 3.3.2 Asset quality

#### Loan portfolio

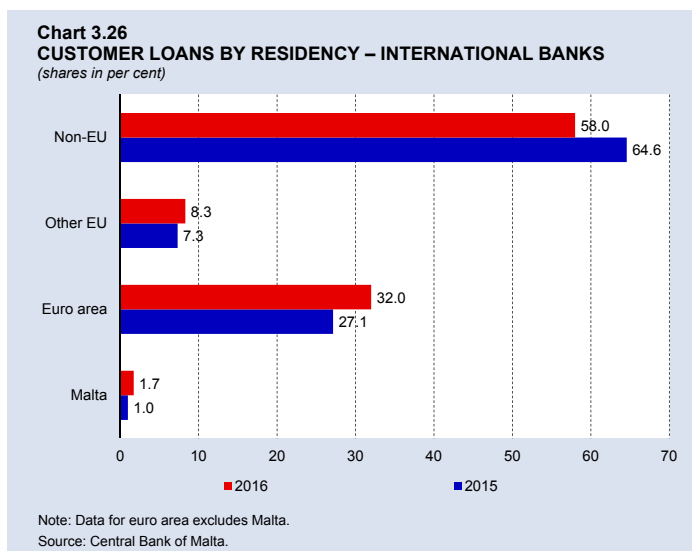
As at the end of 2016, total customer loans amounted to almost a quarter of the banks' total assets. These increased by around €240 million or 4.8% during the year, mainly channelled towards the financial and insurance sector (excluding credit institutions); construction and real estate business; and the transportation and storage sectors. Customer loans are largely channelled to non-residents though there was some effort by some banks to also tap the domestic market (see Chart 3.25).

Customer loans granted to euro area countries (excluding Malta) represented the largest increase, up by 23.6% over 2015, amounting to around a third of total customer loans (see Chart 3.26). This increase was partly offset by lower lending to 'non-EU' residents, down by 5.8%; albeit still representing the largest share of customer loans. As a result, the customer loans-to-deposits ratio rose to 108.2% by end 2016, up from 104.1%, a year earlier. Resident customer loans almost doubled in 2016, but these still accounted for a mere 1.6% of the international banks' total customer loans, and for 0.9% of total resident customer loans in Malta, though this is linked to a specific transaction by one of these credit institutions.



Interbank placements declined by around 20% and were the major contributor behind the contraction in total assets. This was mainly due to lower intra-group placements and placements with unrelated institutions by the two largest branches of foreign banks.

Although the NPL ratio rose to 1.8% in 2016, asset quality remained healthy reflecting the low level of NPLs. In terms of economic activity, such loans were reported in the non-resident real estate sector and consumer credit. However, the increase in NPLs brought along



higher provisions, which also doubled in amount, and kept the coverage ratio fairly stable at 54.0% by end 2016.

### *Securities portfolio*

The securities portfolio of the international banks contracted by 15.8% in 2016, owing to lower holdings of Turkish government paper by the two branches of foreign banks.<sup>20</sup> International banks also reported a contraction in holdings of bonds issued by unrelated credit institutions. As a result of these developments, the share of the securities portfolio in total assets contracted by 3.7 percentage points to almost 47%. Holdings of securities issued domestically remained minimal, accounting for a mere 0.1% of the international banks' total assets, or 0.2% of their securities portfolio. Given the relatively high exposure to Turkish Government bonds by the foreign branches, equivalent to 82.7% of total securities held, the overall quality of this portfolio was rather low given the low rating of such bonds. Should these branches be excluded, the securities portfolio of the remaining international banks was mainly composed of US and EU sovereign debt securities.

Furthermore, the NPE ratio for this group of banks stood low, at less than 1%.

### **3.3.3 Funding and liquidity**

Given the diversified business models adopted by this group of banks, the funding strategy of international banks varied significantly. Several banks funded their activities from the wholesale market, with some relying more extensively on intra-group funding. A few other international banks tapped the retail market to fund their operations, predominantly from non-resident corporate deposits. While some of these banks also tapped the resident retail deposit market, resident customer deposits were still somewhat small accounting for just 1.4% of total resident customer deposits in the banking system by end 2016.

During the year, customer deposits grew by 0.9% and financed around a fifth of the banks' total assets. This increase stemmed from resident customer deposits originating from various economic sectors including financial intermediaries, investment funds and insurance companies; professional, scientific and technical activities; and wholesale and retail trade reported predominantly by one bank. This growth offsets the 2.2% drop in non-resident customer deposits.

The funding structure remained broadly stable during 2016 with international banks mainly funding their operations through placements by non-resident banks; financing around 69% of total assets, down from around 71% in the previous year. This financing is mainly composed of funds from unrelated credit institutions, which contracted by almost a fifth in 2016, whereas funding from related credit institutions declined by 3.0%. The latter mirrors the transactions executed by the two branches of foreign banks.

As the bank which ceased operations in 2016 had a large capital base, the capital and reserves of international banks dropped by almost a third by end 2016. In this regard, capital and reserves accounted for almost 5% of total liabilities in 2016, down from 6.3% a year earlier.

These banks continued to operate on the back of ample liquidity buffers. At 332.0%, the LCR significantly exceeded the 70% regulatory minimum.

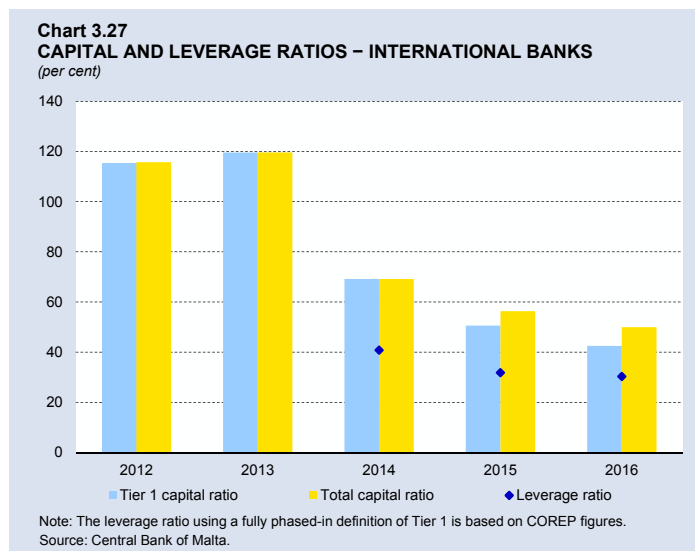
### **3.3.4 Capital and leverage**

In spite of a declining trend, capital remained well-above the minimum regulatory requirement. In 2016, the total capital ratio weakened by 6.4 percentage points to 50.0%, owing to an increase in total risk exposures and a contraction in own funds impacted by the bank which ceased operations (see Chart 3.27). Total own

<sup>20</sup> According to Fitch ratings, Turkey's sovereign debt is BBB- with a negative outlook, whereas Standard & Poor's rates Turkish sovereign debt as non-investment grade at BB with outlook negative.



funds contracted by 4.5% whereas total risk exposures expanded by 7.7%. Excluding the bank which ceased operations, total own funds would have expanded by 13.0%, though the total capital ratio would have still eased from 51.9% in 2015 to 50% in 2016, as total risk exposures grew at a faster pace reflecting the higher customer lending. Similarly, the Tier 1 capital ratio declined by 8.1 percentage points to 42.5% as total own funds were mainly composed of Tier 1 capital. The leverage ratio dropped by 1.5 percentage points to a healthy 30.3%, surpassing the 3% regulatory minimum.



## 4. STRESS TESTS

A range of stress testing models are used to analyse the resilience of the domestic financial system to extreme, yet plausible events. Stress testing exercises are used as a tool to examine the robustness of the banking system under different hypothetical adverse scenarios. The degree of severity of a scenario is a crucial element in a stress testing framework. While a too optimistic scenario creates a false sense of security, a too pessimistic scenario could make a bank seem unrealistically fragile and raise a false alarm. Striking a balance between the two ends is thus necessary. It is also important that the contemplated scenario is 'economically reasonable' and reflective of the potential risks that can have a significant impact on the banks within a sample.

The stress testing exercises undertaken were aimed at capturing elements of credit risk, market risk, sovereign risk and liquidity risk. More specifically, the following four scenarios were considered:

- (i) credit quality deterioration in the securities portfolio
- (ii) persistent deposit withdrawals
- (iii) a drop in property prices
- (iv) interest rate risk in the banking book.

The risk outlook remains similar when compared to the *2015 Financial Stability Report*, whereby the probability of all individual scenarios materialising is considered to be low. Core domestic banks are in a better position to absorb potential losses following an overall increase in loan loss provisions and strengthening of capital ratios. The stress tests reveal that the banking sector is resilient to the different scenarios.

The stress test exercises are univariate in nature and the results are to be considered as indicative given that possible second round effects and the effect of other simultaneous shocks are excluded in these exercises.

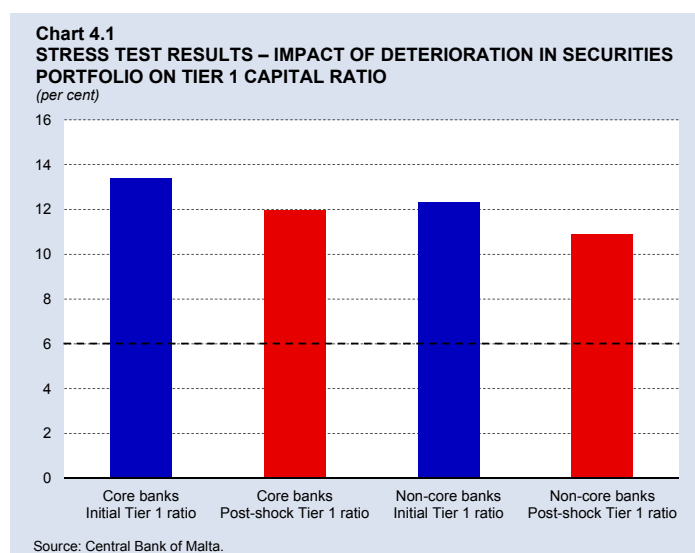
### Scenario 1: Credit quality deterioration

Core and non-core domestic banks' securities portfolio is assessed against deterioration in its credit quality. The methodology builds on the methodology adopted in preceding European Banking Authority (EBA) EU-wide stress testing exercises and allows for a distinction in the accounting treatment of banks' securities, i.e. whether marked-to-market or held-to-maturity (HTM). In the case of the former, the shock to the market price of credit risk is sourced from the iTraxx European Senior Financial index, given that the vast majority of banks' securities are denominated in euro. The widening of spreads for marked-to-market securities is commensurate with the largest almost monotonic increase in the Index between April 2011 and September 2011. Conversely, credit risk on HTM securities is quantified by assuming a three-notch downgrade in the securities' credit quality and applying the respective higher probability of default by credit grade. HTM securities are amortised and therefore not affected by market price movements. However, when the amortised cost is higher than the nominal value, the difference needs to be provided for. By contrast, if the amortised cost is below par, the booked difference already takes into account part of the losses assumed to materialise. In line with international practice, a loss given default of 40% is assumed when quantifying the expected loss.

The magnitude of the shocks applied to the securities portfolio distinguishes between sovereign and non-sovereign exposures. Resulting losses are charged directly to capital, while risk weighted assets are assumed to remain constant.

The vast majority of banks' securities portfolio is investment grade. Indeed, around 93% of the core domestic banks' portfolio and 80% of the non-core domestic banks' securities portfolio is rated at A- or better. The rating grades are based on a composite index estimated on the basis of the second best credit rating of the three major rating agencies, namely Fitch, Moody's and Standard & Poor's. The structure of the securities portfolio indicates that banks are not taking excessive risks or embarking on an aggressive search for higher yield that would change their risk profile, despite operating with ample liquidity. Core domestic banks

continued to shift towards floating rate notes (FRN), although the increase in such securities was minor. FRNs are appealing in a low interest rate environment, given that one of the benefits of holding non-fixed income securities is that the increase in coupons earned in the eventual increase in interest rates would offset the valuation losses on marked-to-market securities that would hit banks' balance sheets given the inverse relationship between prices and yields. Moreover, a slight shift towards non-sovereign securities and HTM securities was noted during the second half of the year.



The quantification of the assumed severe shocks to HTM and non-HTM securities in core and non-core domestic banks' securities portfolio would result in a drop in the Tier 1 capital ratio of -1.39 percentage points and -1.43 percentage points, respectively. The resulting capital ratio for core and non-core domestic banks would be 11.98% and 10.88%, respectively. The materialisation of the assumed shocks would therefore leave the banks in a comfortable position to absorb potential losses when compared to the 6% Minimum Tier 1 capital threshold (see Chart 4.1 for an exhibit of results).

## Scenario 2: Persistent deposit withdrawals

The liquidity stress testing framework tests for a bank-run type of scenario which assesses whether individual banks' counterbalancing capacity is sufficient to meet the assumed liquidity outflows arising from persistent deposit withdrawals. A survival period of five consecutive days and up to four weeks is assumed. The liquidity stress test is run on both core and non-core domestic banks' balance sheets.

The test makes use of granular information on banks' bond holdings as well as market information including bid-ask spreads to assess individual banks' counterbalancing capacity. The latter is defined as the quantity of funds at the disposal of a financial institution to meet liquidity requirements and includes elements such as cash, the excess on the reserve deposit requirements, and the sale of marketable assets, amongst others. Banks' counterbalancing capacity, which is tested under two different conditions, is shocked so as to reproduce a scenario when a bank is forced to sell fair value securities to meet deposit withdrawals, at a time when liquidity conditions are adverse. Under the first set of conditions (Scenario 1), banks are allowed to obtain European Central Bank (ECB) funding only against securities that were pledged with the ECB as at December 2016 – the reference date.<sup>1</sup> Under this scenario, banks would have to sell the remaining fair value securities at fire sale prices. Banks that hold securities until maturity would be at a disadvantage given that, by way of assumption, unless these are pledged, no use of such securities can be made to obtain liquidity.

Under the second set of conditions (Scenario 2), banks are allowed to pledge all eligible securities with the ECB and sell the remaining fair value securities at fire sale prices.<sup>2</sup> The main difference between the two sets of conditions relates to the use of eligible securities that are unpledged. Given that the haircuts assumed for fire sale prices are higher than the valuation haircuts that would be implemented by the ECB, the second set of conditions renders the test slightly more lenient than the first.<sup>3</sup>

<sup>1</sup> Securities pledged with the ECB are subject to a liquidity haircut as per ECB Guideline. [https://www.ecb.europa.eu/ecb/legal/pdf/en\\_ecb\\_2016\\_32\\_f\\_sign.pdf](https://www.ecb.europa.eu/ecb/legal/pdf/en_ecb_2016_32_f_sign.pdf).

<sup>2</sup> Eligible securities refer to securities that can be pledged with the ECB as collateral for Eurosystem credit operations.

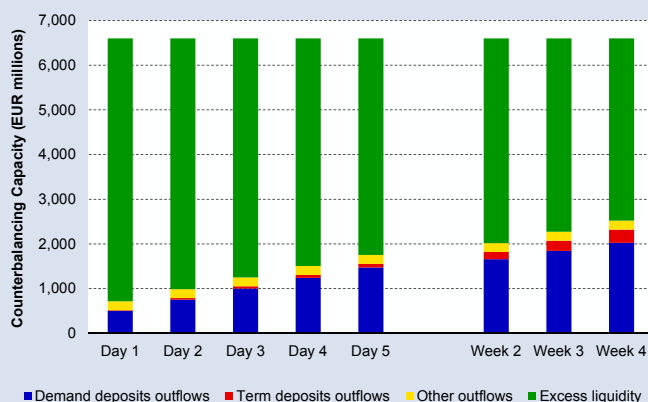
<sup>3</sup> See Box 2 in the 2015 FSR for further detail on the methodology and haircuts applied in the liquidity stress test.

Charts 4.2 to 4.5 represent the results for the core and non-core domestic banks under the two sets of conditions, respectively. The bar chart plots the liquidity flows and the excess liquidity for the first five days followed by the subsequent three weeks. The total length of the bar in the chart represents the counterbalancing capacity which is assumed to remain fixed. As the scenario proceeds in time, the liquidity outflows increase and excess liquidity contracts. The system is assumed to remain liquid if all deposit withdrawals could be met by the available post-shock counterbalancing capacity, and therefore, if excess liquidity persists.

As mentioned in Chapter 3, banks are currently operating with ample liquidity. Indeed, a high increase in banks' counterbalancing capacity was noted, thereby confirming that banks are in a better position to withstand a liquidity shock. Banks' comfortable liquidity stance is also backed by the liquidity stress test results whereby banks would be able to face persistent deposit outflows with relative ease for more than four weeks, under the assumptions applied in the test, even when ECB funding is restricted and banks are forced to obtain funding through the sale of fair value securities.

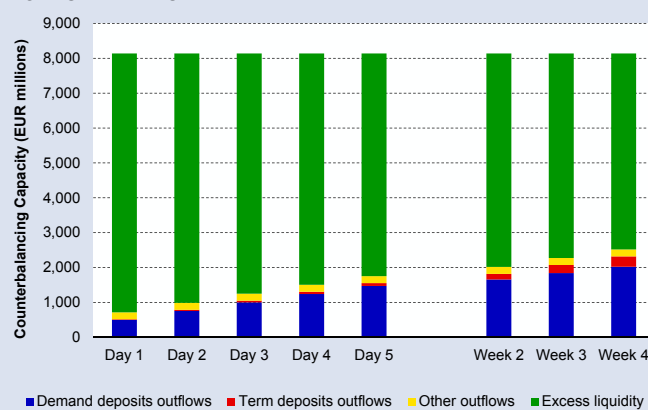
As expected *a priori*, excess liquidity under Scenario 2 is higher than under Scenario 1 given that, under the former scenario, banks are allowed to obtain ECB funding against all eligible securities and not only on the pledged securities, which attract lower valuation haircuts compared to fire sale prices. Deposit outflows remain the same under both scenarios as per the applicable assumptions. While banks end up with excess liquidity towards the end of the survival

**Charts 4.2**  
STRESS TEST RESULTS – IMPACT OF PERSISTENT DEPOSIT WITHDRAWALS – SCENARIO 1, RESTRICTED ECB FUNDING, CORE DOMESTIC BANKS



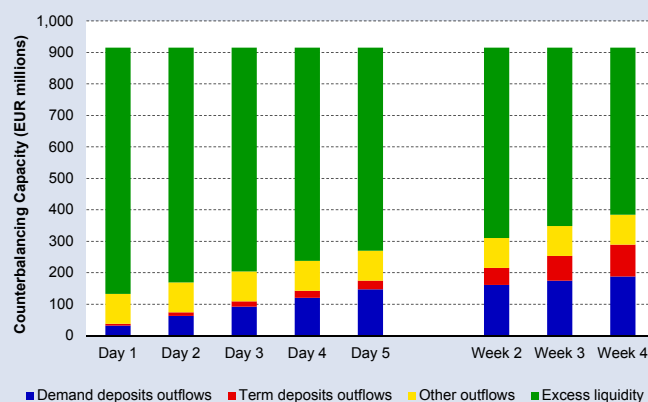
Source: Central Bank of Malta.

**Chart 4.3**  
STRESS TEST RESULTS – IMPACT OF PERSISTENT DEPOSIT WITHDRAWALS – SCENARIO 2, UNRESTRICTED ECB FUNDING, CORE DOMESTIC BANKS



Source: Central Bank of Malta.

**Chart 4.4**  
STRESS TEST RESULTS – IMPACT OF PERSISTENT DEPOSIT WITHDRAWALS – SCENARIO 1, RESTRICTED ECB FUNDING, NON-CORE DOMESTIC BANKS



Source: Central Bank of Malta.

period of around €4.08 billion and €0.53 billion under Scenario 1 adverse, this excess liquidity increases to €5.62 billion and €0.50 billion under Scenario 2, for core and non-core domestic banks, respectively (see Charts 4.2 to 4.5 for an illustration of results).

### Scenario 3: A drop in property prices

The test quantifies the impact of exogenous shocks to house prices on core domestic banks' balance sheets over a one year simulation horizon. The shocks would affect banks' capital position owing to a drop in the value of collateral and to

a corresponding increase in non-performing loans (NPL). To refine further this stress test, amendments were carried out in the framework, thereby rendering the results incomparable to preceding *Financial Stability Report* results. The existing relationship between house prices and NPLs is now determined via STREAM, the Bank's macro-econometric model.<sup>4</sup> Moreover, the new framework caters for a different reaction of household and non-financial corporates (NFC) NPLs to changes in house prices. The strength of the estimated links between house prices and NPLs within STREAM differs by sector by way of model specifications, with household NPLs being more affected by a change in property prices than NFCs.

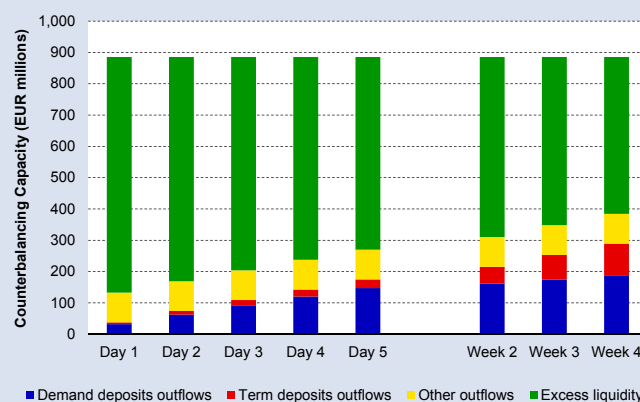
The magnitude of the assumed shocks to house prices is determined on the basis of the historical standard deviations of the property price index. Two scenarios are considered: a 7.5% shock under a baseline scenario, equivalent to one historical standard deviation, and a 30% drop in house prices under an adverse scenario, equivalent to around four historical standard deviations.<sup>5</sup>

The drop in property prices is assumed to fully translate into lower property-related collateral values. It is worth noting that the vast majority of collateral of core domestic banks is property-related. Non-real estate related non-resident syndicated loans were excluded from the exercise in order for the test to be applicable only to those loans that are property-related. Non-core domestic banks are also excluded from the test given that, owing to their business models, their loan portfolios are not concentrated in property-related facilities. To note that the shock to property prices is applied to collateral values that are already discounted by haircuts that banks normally apply when approving loans.

The test assumes that as collateral values decline, loan loss provisions on NPLs would have to increase accordingly, given that NPLs are to be covered by a combination of both. Furthermore, the drop in property prices is assumed to coincide with an increase in NPLs arising from negative wealth effects, with additional NPLs leading to a further increase in loan loss provisions.

The impact of the assumed shocks under this test would influence both the numerator and denominator of the Tier 1 capital ratio. The increase in NPLs is assumed to influence the level of risk weighted assets

**Chart 4.5**  
STRESS TEST RESULTS – IMPACT OF PERSISTENT DEPOSIT WITHDRAWALS – SCENARIO 2, UNRESTRICTED ECB FUNDING, NON-CORE DOMESTIC BANKS



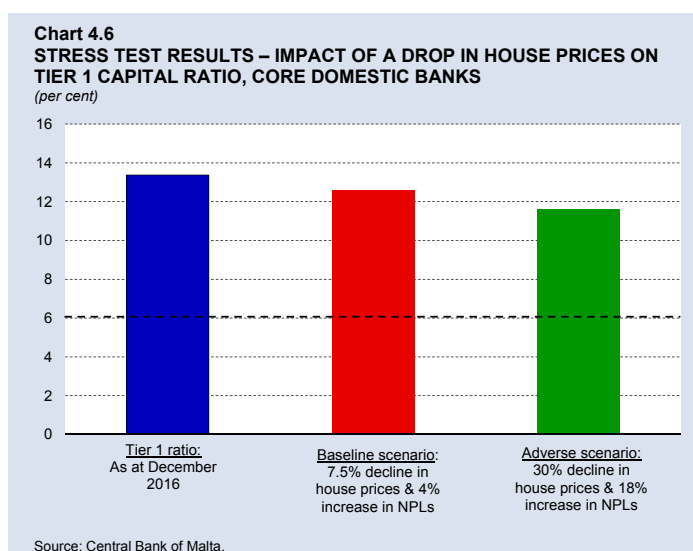
Source: Central Bank of Malta.

<sup>4</sup> <https://www.centralbankmalta.org/macro-econometric-model>

<sup>5</sup> To note that the magnitude of the adverse shock is comparable to the real estate shocks applied in the 2016 Irish FSAP (Financial Sector Assessment Programme) and the 2016 UK stress test. "Ireland Financial Sector Assessment Program, Technical note – Stress Testing the Banking System", IMF Country Report No. 16/315, September 2016. Publication available at <https://www.imf.org/external/pubs/ft/scr/2016/cr16315.pdf>. "Stress testing the UK banking system: 2016 results", Bank of England, November 2016. Publication available at <http://www.bankofengland.co.uk/financialstability/Documents/fpc/results301116.pdf>.

given that NPLs attract a higher risk weight than performing loans. The increase in provisions, computed following the drop in house prices and the consequent increase in NPLs, is charged to capital by the equivalent of the uncollateralised part of the facility.

Results show that core domestic banks at the aggregate level would comfortably withstand the assumed shocks, both under the baseline and adverse scenarios. During 2016, core domestic banks continued to improve their loss absorption capacity by increasing loan loss provisions as well as improving their capital stance. Given the increase in loan loss provisions, the impact of the test on banks is milder (see Chart 4.6 for an exhibit of results).



#### Scenario 4: Interest rate risk in the banking book – impact on net interest income

Interest rate risk in the banking book (IRRBB) refers to the current or prospective risk to banks' capital and earnings arising from movements in interest rates. On the one hand, when interest rates change, the present value of future cash flows can change and in turn, so would the economic value of equity (EVE). In other words, a change in interest rates would affect the underlying value of banks' interest rate sensitive assets and liabilities. On the other hand, changes in the interest rates would also affect banks' earnings instantaneously by altering interest rate sensitive income and expense streams, consequently affecting net interest income (NII).

Both effects are complementary to each other and need to be taken into account when quantifying the impact of movements in interest rates on the financial position of banks. However this exercise is a sensitivity analysis which aims to quantify solely the impact of changes in interest rates on NII. As a main source of profitability and funding of core and non-core domestic banks, changes in earnings and expenses from interest-bearing banking book assets and liabilities may result in a release or accumulation of capital.

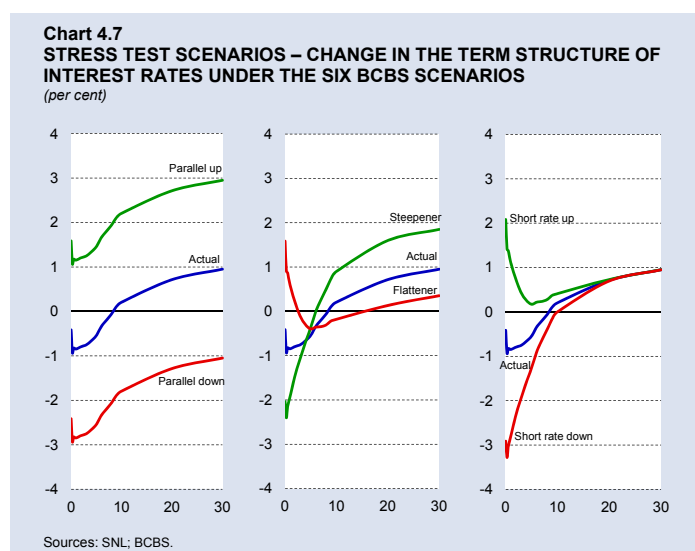
The exercise applies six scenarios for changes in the interest rate term structure, as prescribed by the Basel Committee for Banking Supervision (BCBS) and the EBA guidelines, on the banking book of core and non-core domestic banks.<sup>6,7</sup> The scenarios considered in this exercise affect the term structure of interest rates differently depending on the maturity of the instruments being considered and the currency in which they are denominated.<sup>8</sup> Only EUR, GBP and USD are being considered as material currencies in which the banking book is denominated. The shocks applied in the six scenarios are hypothetical and exhaustive as they consider all possible changes in the term structure of interest rates and consequently do not, in any way, indicate

<sup>6</sup> Refer to Annex 2 of [www.bis.org/bcbs/publ/d368.pdf](http://www.bis.org/bcbs/publ/d368.pdf) and the EBA Guidelines on the Management of interest rate risk arising from non-trading activities. <https://www.eba.europa.eu/documents/10180/1084098/EBA-GL-2015-08+GL+on+the+management+of+interest+rate+risk+.pdf>.

<sup>7</sup> The ECB also draws its hypothetical shocks from the BCBS standards in its 2017 sensitivity analysis of interest rate changes on the banks' banking books as part of its Annual Supervisory Review and Evaluation Process (SREP). The aim of the exercise is to provide information to the ECB on interest rate sensitivity of banks' assets and liabilities and NII to hypothetical interest rate changes. <https://www.bankingsupervision.europa.eu/press/pr/date/2017/html/sr170228.en.html>.

<sup>8</sup> The BCBS prescribed scenarios considered are: Parallel Up; Parallel Down; Steepener; Flattener; Short Rate Up and Short Rate Down.

any scenario as being more likely than the other. Indeed, recent policy statements by monetary authorities in advanced countries suggest that further interest rates cuts are unlikely. Chart 4.7 shows the six scenarios for the EUR yield curve as at December 2016 sourced from SNL, and the shocks applied as per Annex 2 of the BCBS Guidelines.<sup>9</sup> Similar charts can be set up for GBP, USD or other currencies included in the BCBS Guidelines. Given that the scenarios for each currency display similar movements, only the EUR yield curve is being reported.



This exercise focuses on the impact on NII as produced from banking book asset classes, namely: loans, securities, deposits, own bond issuances and interbank (assets and liabilities with other credit institutions). In the absence of granular information on derivatives, these instruments, particularly those held to hedge against adverse movements in interest rates, are excluded from the exercise. The sensitivity analysis assumes a constant balance sheet over a one-year horizon; thereby, any instruments which mature within the year are rolled over with similar instruments at the prevailing interest rates in the respective scenario. The impact on NII would influence retained earnings of banks, in turn affecting banks' capital position. Results are presented hereunder in terms of the impact on banks' Tier 1 capital ratio under the various scenarios applied.

In the case of loans, since the rate is variable, these are re-priced immediately and the shock to interest rates corresponds to the overnight rate regardless of the term to maturity of the respective loan. The largest impact on loans occurs under the 'Short Rate Down' scenario since this scenario is the one to impact most the overnight rates when compared to the other scenarios.

For securities, the largest impact to NII occurs either under the 'Parallel Down' or the 'Short Rate Down' scenario. Although the impact for each bank under both scenarios is quite comparable, the worse outcome occurs depending on the maturity of the securities held by the respective bank.

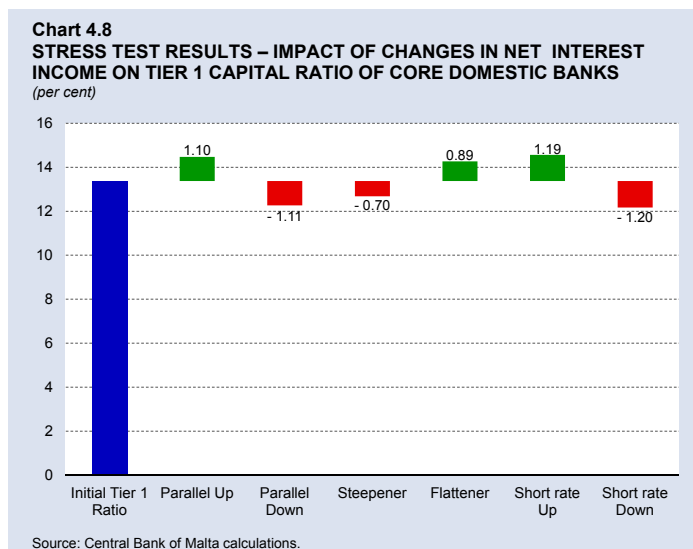
In the case of deposits, the change in NII is influenced by the sight and current deposits, as well as, fixed term deposits which are locked for less than a year, as the latter are rolled over at the prevailing shock to interest rates. The highest shock to interest rates on deposits and consequently the highest increase in the associated interest expense occurs under the 'Short Rate Up' scenario.

With regards to own bond issues, only four banks had quoted bonds on the Malta Stock Exchange as at the reference date. All of these pay a fixed interest rate and have a term to maturity longer than one year and thus do not have an impact on NII.

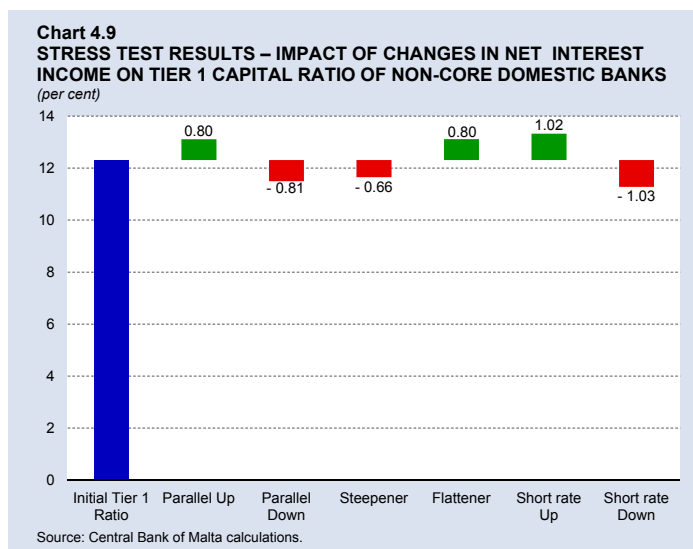
Finally, in terms of interbank exposures, the worst outcome depends on whether the bank is a net holder of interbank assets or net holder of interbank liabilities. With the exception of one bank, domestic banks are net holders of interbank assets and experience the worst outcome for NII under the 'Short Rate Down' scenario.

<sup>9</sup> SNL is a useful online repository collecting publicly available information on companies and market into a common format. Information is easily accessible and directly downloadable to Excel.

Upon netting for all asset and liability classes tested in the sensitivity analysis referred to above, the worst impact from the six BCBS exhaustive scenarios on NII for all banks occurs under the 'Short Rate Down' scenario. Under this scenario, the net interest margin, expressed as the difference between interest income and expenses divided by the interest-bearing assets, is equal to -0.97% and -1.24%, respectively for core and non-core domestic banks. In addition, this scenario leads to a drop of 1.20 and 1.03 percentage points resulting in a Tier 1 capital ratio of 12.17% and 11.28%, respectively for core and non-core domestic banks. Consequently, the banks' Tier 1 capital ratios remain well above both the minimum regulatory requirement of 6% and the 8% threshold set for the baseline scenario of the Comprehensive Assessment conducted by the ECB in 2014.



In contrast, the 'Short Rate Up' scenario yields the most favourable results. In this case, the net interest margin is equal to 0.95% and 1.22%, respectively for core and non-core domestic banks. In addition, this scenario leads to an increase of 1.19 and 1.02 percentage points in the Tier 1 capital ratio to 14.56% and 13.32%, respectively for core and non-core domestic banks.



See Charts 4.8 and 4.9 for an exhibit of results under all scenarios for both core and non-core domestic banks.



## 5. DOMESTIC INSURANCE COMPANIES AND INVESTMENT FUNDS

### 5.1 Domestic insurance companies

The implementation of the Solvency II risk-based regulatory regime in 2016 marked an important milestone for the European insurance sector. In Malta, the insurance sector adapted smoothly to the new regulatory framework, surpassing the new regulatory capital benchmarks. Owing to this development, certain figures for 2016 are not strictly comparable with previous years.

In 2016 the European Insurance and Occupational Pensions Authority (EIOPA) conducted a new insurance stress test to assess the resilience of insurance companies to the current challenging environment of prolonged low interest rates and the potential effects stemming from reassessment of risk premia. The aim of the stress test was to identify the main vulnerabilities present in the European insurance sector rather than a pass/fail exercise. Furthermore, the stress test did not attempt to assess capital requirements for the industry and there was no recalculation of post-stress Solvency Capital Requirement (SCR) or Minimum Capital Requirement (MCR).<sup>1</sup> In this regard, there were no direct recapitalisation requirements linked to the stress test results and individual company results were not publicly-disclosed. Domestically, two life insurance companies representing 93.0% of the total life undertakings in Malta participated in this stress test. The results show that these undertakings were able to withstand both low-for-long yields and drops in asset values.<sup>2</sup>

There were 56 insurance and reinsurance companies operating from Malta in 2016, managing a balance sheet of €10.5 billion, down from €13.7 billion in 2015. During the year, 12 insurance companies closed down, whereas seven new licenses were issued. However, since their main line of business covers risks situated outside Malta, these structural changes did not impact the domestic insurance scene. Indeed, the majority of the insurance companies operating from Malta mainly cover foreign insurance policies, whereas only eight insurance companies cover risks situated in Malta. This analysis focuses on the financial soundness of these eight insurance companies, hereafter referred to as 'domestic insurance companies' and comprise three life insurance principals, four non-life insurance principals, and one non-life Protected Cell Company (PCC), which in total have assets amounting to €3.9 billion as at end 2016, equivalent to 39.1% of gross domestic product (GDP).<sup>3</sup>

The insurance industry is inherently linked with the rest of the economy. On the assets side, domestic insurers have important links with monetary financial institutions (MFI), mainly owing to the structural landscape of the financial sector, and also with the Sovereign through holdings of Malta Government Stocks (MGS), which accounted for 13.3% of their total assets in 2016 (see Chart 5.1). Insurance companies, however, are small players in the Government's funding plans, equivalent to less than 8% of total outstanding government debt. To a lesser extent, insurers are also exposed to the local corporate sector, mainly through investments in bonds and equities issued by corporates (excluding banks) in Malta. Such investments represented 2.3% of insurers' total assets in 2016.

The funding of the domestic insurance companies is mainly generated through premia paid by resident households, accounting for 82.3% of their funding (see Chart 5.2).<sup>4</sup> Almost all of these policies are booked as technical reserves held against estimated claims on the insurers' balance sheet.<sup>5</sup> Furthermore, households

<sup>1</sup> The SCR reflects the amount of capital required to meet all obligations over one year, taking into account underwriting risk, pricing risk, provisional risk, market risk, credit risk, liquidity risk and operational risk, and is measured at a 99.5% VaR confidence level. The MCR reflects the minimum level of security below which the amount of financial resources should not fall. If the level of eligible basic own funds falls below the MCR, the authorisation of the insurer would be withdrawn.

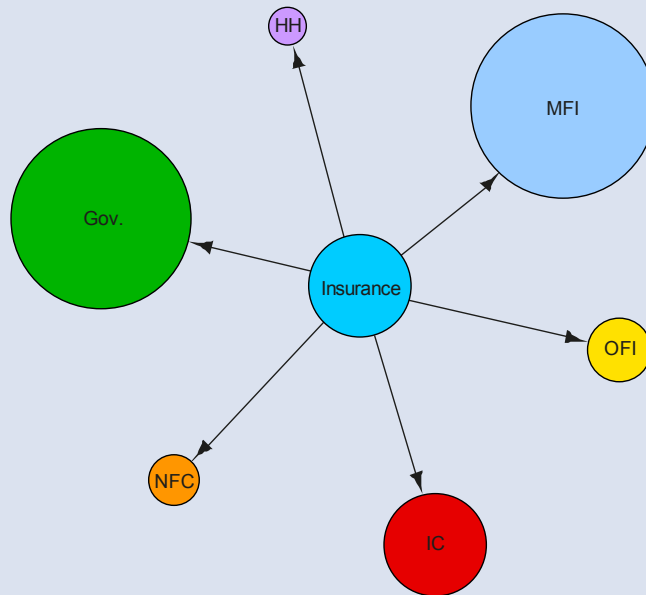
<sup>2</sup> Source: MFSa Newsletter 2016; EIOPA Stress Test 2016 results: <https://eiopa.europa.eu/pages/financial-stability-and-crisis-prevention/stress-test-2016.aspx>.

<sup>3</sup> A PCC company is a single legal entity comprising a core business activity and a number of activities, which are segregated from the main business, called "cells". The undertakings of one cell have no bearing on the other cells, with each cell identified by a unique name. The assets, liabilities and activities of each cell are also ring-fenced from other cells.

<sup>4</sup> Liabilities data is as at end 2015.

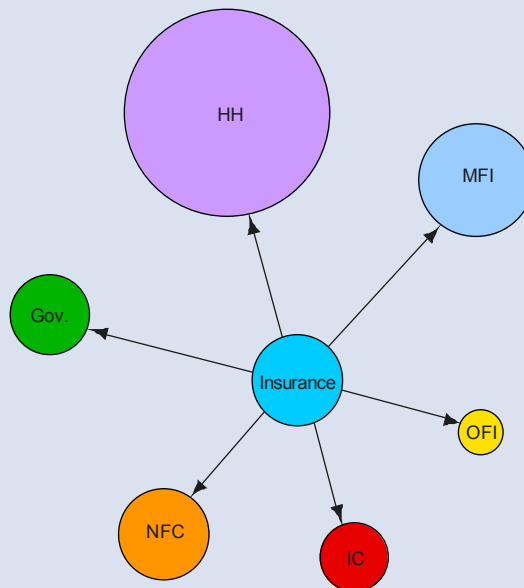
<sup>5</sup> The rest of the funding of the domestic insurance companies relate to other accounts receivable, shareholdings and loans received.

**Chart 5.1  
EXPOSURES ON THE ASSETS SIDE**



Insurance=Domestic Insurance Sector; Gov.=Government; MFI=Monetary Financial Institutions; IC=Other Insurance Companies; NFC=Non-Financial Corporates; HH=Households; OFI=Other Financial Institutions.  
Source: Central Bank of Malta.

**Chart 5.2  
EXPOSURES ON THE LIABILITIES SIDE**



Insurance=Domestic Insurance Sector; Gov.=Government; MFI=Monetary Financial Institutions; IC=Other Insurance Companies; NFC=Non-Financial Corporates; HH=Households; OFI=Other Financial Institutions.  
Source: Central Bank of Malta.

hold a small amount of the insurers' unquoted shares. On the other hand, these insurance companies play an important role in providing risk protection and investment avenues to Maltese households and non-financial corporates (NFC). In 2016, insurance policies formed 14.0% (€2.6 billion) of households' net financial wealth and 0.3% (€73.9 million) of the financial assets held by domestic NFCs. Insurance density of domestic insurers amounted to around €1,165 (up from €1,044.1 in 2015) while insurance penetration remained stable at 5.1%.<sup>6</sup>

As observed in previous years, in 2016 risks stemming from the domestic insurance sector remained contained, with the sector remaining resilient to external challenges such as low interest rates. Capital levels remained adequate even under the more stringent Solvency II regime. This new framework further increased the risk focus of the insurance companies, compelling them to hold capital commensurate with their individual underwriting, credit, market and operational risks. Furthermore, the stable funding through periodic premia, are in turn invested in bonds and equities. Risks arising from their participation in non-traditional non-insurance (NTNI) activities remained contained.

The insurance sector has always been vulnerable to shifts in long-term interest rates, becoming more evident owing to a prolonged low interest environment. This poses profitability risks and a potential drive towards search-for-yield behaviour by investors, in a bid to close funding gaps. However, for the domestic insurance companies, this risk is relatively on the low side as they do not have legacy products offering guaranteed rates which are likely to be higher than the going rate. Indeed, there has been no evidence of a widespread change in the products offered or in the composition of their investment portfolio in recent years; a trend which was observed among a number of insurance companies in Europe.

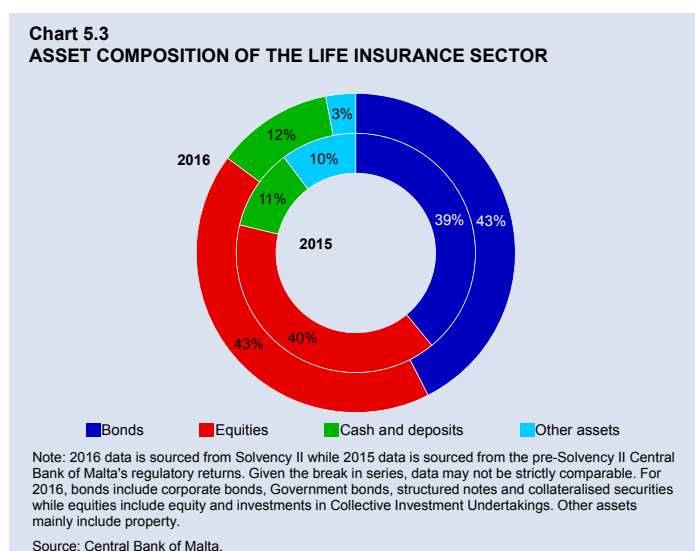
### 5.1.1 The domestic life insurance sector

By end 2016, the total assets of the three domestic life insurance companies amounted to €3.5 billion, decreasing by 2.7% over 2015. Domestic life business remained concentrated in two companies which are subsidiaries of two core domestic banks. As in the previous year, these held 97.1% of assets and 96.8% of gross premia written by the domestic life sector.

#### Asset quality

The asset composition of the domestic life insurers remained largely focused on bond and equity holdings, each comprising 43.0% of total assets, with the rest mainly held in cash and deposits with domestic banks (see Chart 5.3). The structure of the investment portfolio remained largely stable compared to earlier years, in spite of the more risk-based Solvency II framework, which introduced changes in definitions of asset classes.

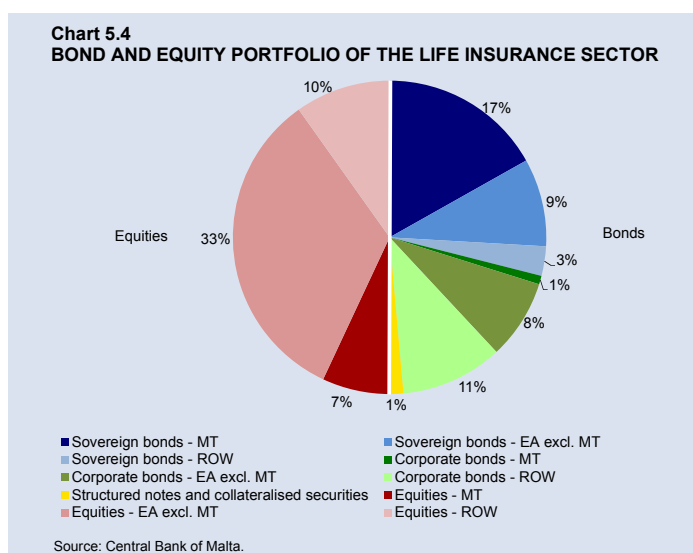
The bond portfolio is mainly composed of sovereign bonds, the majority of which are MGS. The rest is highly diversified across a large number of countries, but mainly invested in high-rated sovereign and supranational issues including France and Germany, and with the



<sup>6</sup> Insurance density is measured as gross premia per capita while insurance penetration is calculated as gross premia over GDP. Population estimates are sourced from Eurostat.

European Investment Bank. Corporate bond holdings were mainly issued outside the euro area, by banks in various jurisdictions including the United States; and by NFCs and other financial institutions (OFIs) in the United Kingdom.<sup>7</sup>

Euro area corporate bonds, which accounted for around 8% of the investment portfolio, were composed of bonds issued by OFIs and banks in the Netherlands, as well as by NFCs and banks in France (see Chart 5.4). With regards to holdings of domestic corporate bonds, these were predominantly issued by banks and to a lesser extent, by OFIs and NFCs. Most of the aggregate corporate bond portfolio was held in the form of plain vanilla bonds and hybrid bonds, with minor participation in subordinated bonds.<sup>8</sup> The rest of the investment portfolio consisted of a minor proportion of structured notes and collateralised securities.

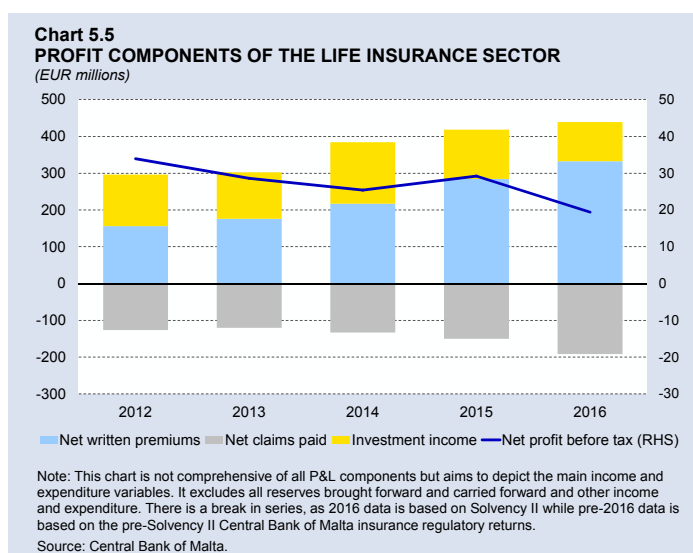


Meanwhile, almost two-thirds of the life insurers' equity portfolio was invested in the euro area (excluding Malta). Equity issued in Malta accounted for 14.0% of total equity, whereas the rest consisted of equity issued in non-euro area countries. Equity holdings mainly consisted of common equity and shares in collective investment undertakings, with the latter mainly in equity funds, debt funds, asset allocation funds and money market funds.

The domestic life insurance companies' involvement in NTNI activities remained minimal, with loans dropping from €9.6 million to €5.6 million during the year. These formed only 0.2% of the life insurers' assets and mainly consisted of uncollateralised loans to Italian NFCs.<sup>9</sup>

### Profitability

The life insurance sector registered profits before tax of €19.4 million in 2016, a third less than the previous year (see Chart 5.5). Despite a 16.9% increase in net premia, profits were hindered by higher net claims (+27.5%), mainly relating to maturing policies and a drop in



<sup>7</sup> OFIs include Other Financial Intermediaries (Financial Vehicle Corporations and Finance Companies); Financial Auxiliaries (E-money Institutions, Payment Institutions (exchange bureaux and other payment institutions), Investment Service Providers, Insurance Agents and Brokers, and Financial Head Offices); and Captive financial institutions and money lenders.

<sup>8</sup> Hybrid bonds contain bonds with debt and equity-like features.

<sup>9</sup> This may include automatic premium loans.

investment returns (-20.5%), owing to realised capital losses and downward market movements on unit-linked investments.<sup>10</sup>

As a result of lower profits, the ROE (after tax) fell to 5.1% in 2016 from 8.2% a year earlier, comparatively lower than the median of 9.1% for euro area insurers in 2016. The ROA (after tax) dropped to 0.4% from 0.6% in 2015, compared to a median of around 1% in the euro area.<sup>11</sup>

The risk retention ratio (net premia/gross premia) which signals the proportion of risk retained on the books of the life insurance companies, stood at 97.5% in 2016, up from 95.4% in 2015. A higher ratio indicates a larger proportion of risk retained on the insurers' books than in earlier years. Such risk retention is also higher compared to insurance companies in the European Union with a median risk retention ratio of 92.3%.<sup>12</sup>

### *Funding*

Given that insurance companies mainly finance their operations through periodic inflows of premia, they face counterparty credit risk in the event of mass lapses and surrenders. In 2016, technical reserves held in respect of life policies amounted to €3.1 billion, down by 3.2% since 2015. These reserves formed almost 90% of total liabilities, the majority (60.9%) of which were held against policies that are not index-linked or unit-linked. This means that the total amount of premia paid against most of the policies is utilised entirely to provide insurance cover to policyholders. The rest of the reserves are held against unit-linked and index-linked policies. In this case, part of the premium paid is utilised to provide insurance cover to the policy holder, while the rest is invested on behalf of the policyholder. For index-linked policies, the returns are linked to the performance of one or more indices. The remaining 10.4% of the life insurers' liabilities mostly related to shareholders' funds.

### *Capital and leverage*

All the domestic life insurance companies were adequately capitalised, with an aggregate Solvency II ratio of 579.3% by end 2016, well-above the 100% minimum required.<sup>13</sup>

The capital base of the life insurers rose by 3.3% during the year. Coupled with a drop in assets, this pushed the leverage ratio (capital/assets) up by 0.4 percentage point to 7.6%.

## **5.1.2 The domestic non-life insurance sector**

The domestic general business is run by five companies, with their assets increasing by 8.3% during the year to €381.0 million. This sector remained small when compared to life business, accounting for less than 10% of the total domestic insurance sector in 2016. One of these companies is a subsidiary of a core domestic bank and partially owns a domestic life insurance company.

### *Asset quality*

In 2016, equity holdings were the main component of the domestic non-life insurers' assets, accounting for almost 40% of total assets (see Chart 5.6). Equity holdings also increased significantly, in part attributed to

<sup>10</sup> Investment returns capture interest receivable, dividends receivable, rental income, exchange differences, income from financial investments at fair value through Profit and Loss, gains/losses from revaluation of financial assets (net fair value gains/losses), gains/losses from revaluation of investment property (net fair value gains/losses) and gains/losses from revaluation of investment property (net fair value gains/losses), other technical income, interest expense, share of losses from related parties, investment expenses and other "allocated investment return".

<sup>11</sup> Source: Euro area ROE and ROA are sourced from S&P Capital IQ and relate to 114 insurance undertakings and brokers from 23 EEA countries. Figures quoted for the euro area refer to life and non-life segments.

<sup>12</sup> Source: ECB's Statistical Data Warehouse (SDW), latest data at 2015. Figures quoted for the European Union refer to life and non-life segments.

<sup>13</sup> The ratio is defined as eligible own funds divided by each company's respective SCR. Breach of an adequate level of capital commensurate with the risks faced by the individual insurers will compromise the protection of policyholders and beneficiaries, and result in supervisory consequences. In 2016, for the domestic life insurers, the total eligible own funds to meet the SCR stood at €520.1 million and the SCR at €89.8 million.

changes in definition owing to the introduction of Solvency II. Bond holdings formed just under 15% of assets and the remainder were kept predominantly in cash and deposits, and fixed assets such as their own real estate.

Over three fourths of equity holdings consisted of common equity, predominantly intragroup shareholding (see Chart 5.7). The rest were mainly held in collective investment undertakings, largely in bond funds and to a lesser extent in equity funds based in Germany and Ireland.

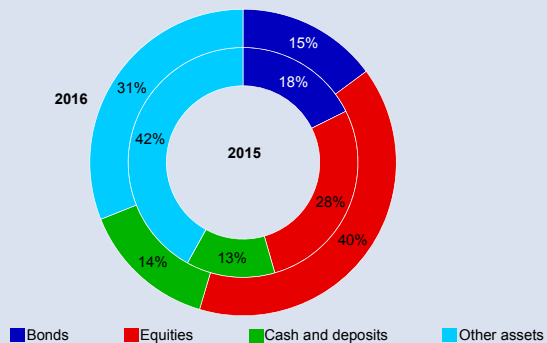
The majority of the bond portfolio (56.3%) was composed of corporate bonds, whereas the rest consisted of sovereign bonds. Corporate bonds were well diversified, both in terms of counterparty and country of origin; including the United Kingdom, the United States, the Netherlands, Malta and France. Slightly more than half of the sovereign bond holdings related to the Maltese Government, while the rest were mainly held in debt issued by Eurozone sovereigns.

Loans granted by the non-life insurance companies amounted to €5.7 million in 2016, up from €3.0 million a year earlier. However, these accounted for just 1.5% of the non-life sector's total assets. Such lending mainly consisted of uncollateralised loans to domestic insurance companies.

### Profitability

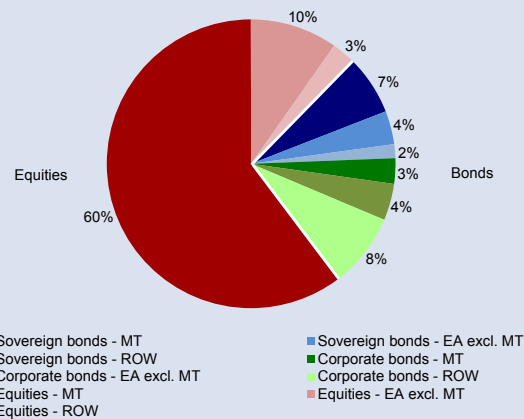
The non-life sector registered a slight drop of 0.7% in profits before tax to €17.4 million as at the end of 2016 (see Chart 5.8). The drop was spurred by a decrease of 22.7% in investment returns, mainly due to adverse fair value market movements, and to a lesser extent by increased claims, as otherwise premia grew by 10.0%. The increase in premia mainly resulted

**Chart 5.6**  
**ASSET COMPOSITION OF THE NON-LIFE INSURANCE SECTOR**



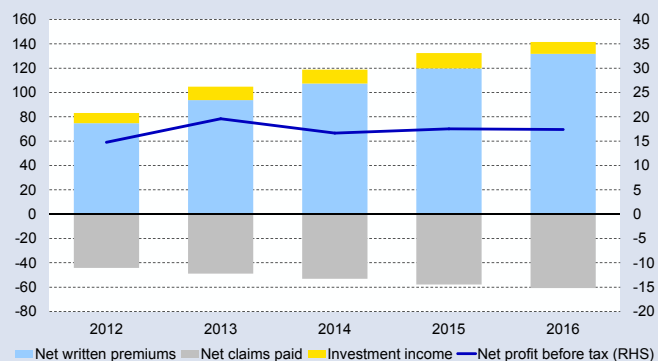
Note: 2016 data is sourced from Solvency II while 2015 data is sourced from the pre-Solvency II Central Bank of Malta's regulatory returns. Given the break in series, data may not be strictly comparable. For 2016, bonds include corporate bonds, Government bonds, structured notes and collateralised securities while equities include equity and investments in Collective Investment Undertakings. Other assets mainly include property.  
Source: Central Bank of Malta.

**Chart 5.7**  
**BOND AND EQUITY PORTFOLIO OF THE NON-LIFE INSURANCE SECTOR**



Source: Central Bank of Malta.

**Chart 5.8**  
**PROFIT COMPONENTS OF THE NON-LIFE INSURANCE SECTOR**  
(EUR millions)



Note: This chart is not comprehensive of all P&L components but aims to depict the main income and expenditure variables. It excludes all reserves brought forward and carried forward and other income and expenditure. There is a break in series, as 2016 data is based on Solvency II while pre-2016 data is based on the pre-Solvency II Central Bank of Malta insurance regulatory returns.

Source: Central Bank of Malta.

from business growth, also due to new insurance agents writing business on behalf of the domestic non-life insurers. Despite the marginal fall in profits, underwriting operations of the domestic non-life business remained profitable, as shown by the combined ratio which stood at 82.8%, below the 100% threshold.<sup>14</sup> This is in line with the median combined ratio across the euro area for non-life business lines.<sup>15</sup>

During the year, the ROA and ROE (after tax) remained relatively stable at 3.4% and 8.7%, respectively. The risk retention ratio stood broadly unchanged at 80.0%, but considerably lower than the EU median ratio of 92.3%.<sup>16</sup>

### Funding

The funding structure of the non-life insurers varied from that of the life sector, with technical reserves financing 40.8% of total assets in 2016. These reserves were mainly held on behalf of resident households' policies, with the rest of the liabilities composed of shareholders' funds.

### Capital and leverage

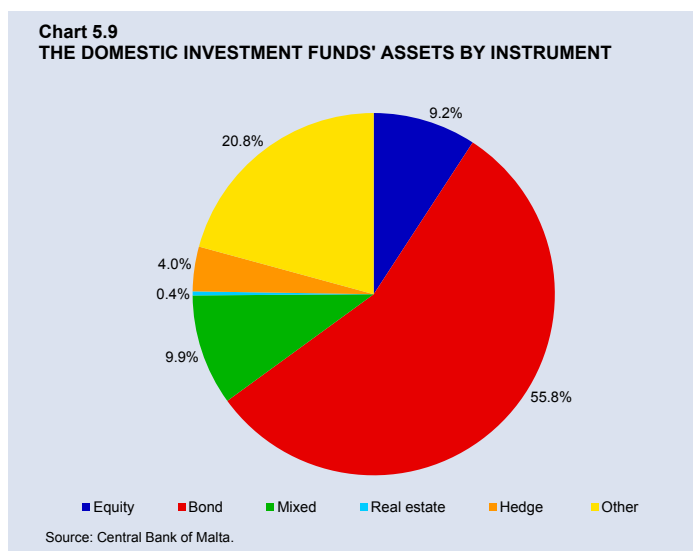
In 2016, the non-life insurers' total eligible own funds amounted to €364.2 million while the SCR stood at €69.4 million. As a result the Solvency II ratio stood at 524.9%, exceeding the minimum threshold of 100%.

The capital base of the non-life insurance companies rose by 1.1% to €145.5 million in 2016. However, since assets increased at a faster pace than capital, the leverage ratio (capital/assets) dropped to 38.2%, from 40.9% in 2015.

## 5.2 Domestic investment funds

Domestic investment funds can pose potential financial stability risks, predominantly through their links with the domestic banking sector and the economy. In 2016, the size of the investment funds sector in Malta contracted by 15.6% to €8.5 billion, though this mainly stemmed from the closure of a number of funds which had no systemic links with the domestic economy. As a result, by end 2016, the size of the total investment funds sector in Malta was equivalent to 85.6% of GDP, down from 108.2% a year earlier.

The segment of domestic investment funds which are regarded as the most systemically-relevant, since they mostly carry out business with residents, grew by 2.4% in 2016 and accounted for 16.4% of GDP by the end of the year. This segment of the industry comprised six Professional Investor Funds (PIF) and six Collective Investment Schemes (CIS). Domestic investment funds were mainly bond funds, accounting for around 56% of their total assets, followed by equity funds; though to a much lower extent (see Chart 5.9). In 2016, growth wholly originated from the PIF sector, which grew by 18.5%



<sup>14</sup> The combined ratio is measured as the sum of net claims incurred and the net operating expenses as a proportion of net earned premia. A combined ratio of less than 100% portrays underwriting profit as insurers are taking in more in premia than paying out in claims and other expenses.

<sup>15</sup> Source: EIOPA (sample based on 1,608 solo non-life undertakings in EEA).

<sup>16</sup> Source: SDW. Data is based as at end 2015.

to €382.4 million (see Chart 5.10). Assets held by CIS contracted by 1.7% to €1.2 billion by end-2016, largely due to the closure of one umbrella fund.

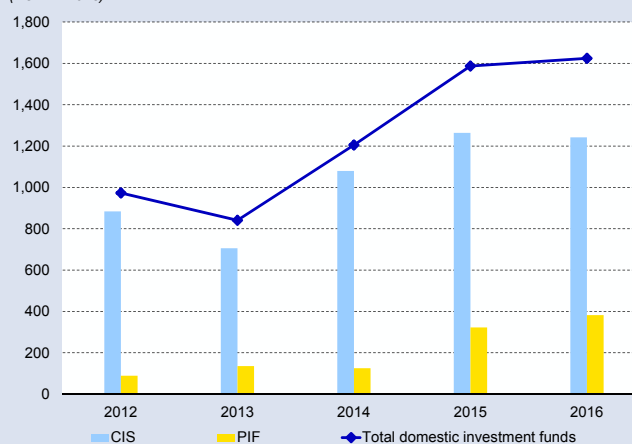
Excluding the impact of the closure of this umbrella fund, total investment assets of CIS would have increased by 16.3%. Bond holdings, which are a major investment instrument of CIS, shrank by 4.4% since 2015 to €906.3 million largely due to lower MGS holdings (see Chart 5.11). Holdings of euro area sovereign bonds (excluding Malta) contracted by 27.5%, though these accounted for a very small share of the investment portfolio. On the other hand, holdings of corporate bonds issued by domestic NFCs and banks increased significantly, though the latter at a comparatively slower pace. In addition, bond holdings issued by NFCs operating in France and Germany and by captives and money lenders in Luxembourg and the Netherlands, also rose.

Equity holdings of CIS dropped by 12.0% to €181.0 million on account of lower holdings of equities issued by domestic NFCs and OFIs, as well as equities issued in the United Kingdom and the United States. Excluding the impact of the closure of the umbrella fund, equity holdings would have risen, mainly driven by those issued by non-money market funds (non-MMF) in Luxembourg and Ireland. The drop in CIS assets was partly offset by an increase in deposits, which almost doubled to €94.4 million. Growth was not broad-based, but emanated from one fund which increased its deposits with banks operating in Malta.

In spite of one fund ceasing operations, PIFs' assets grew and remained largely focused on equities, with bonds only accounting for around 10% of the overall investment portfolio. Such growth was spurred by an increase of around 60% in loans channelled by one fund to non-EU countries. On the other hand, the investment portfolio of PIFs acted as a drag on asset growth, contracting by 21.4% over 2015 to €133.8 million as at end-2016. The drop was mainly underpinned by domestic equity holdings, largely issued by non-MMF investment funds, as bond holdings issued in countries outside the euro area increased (see Chart 5.12).

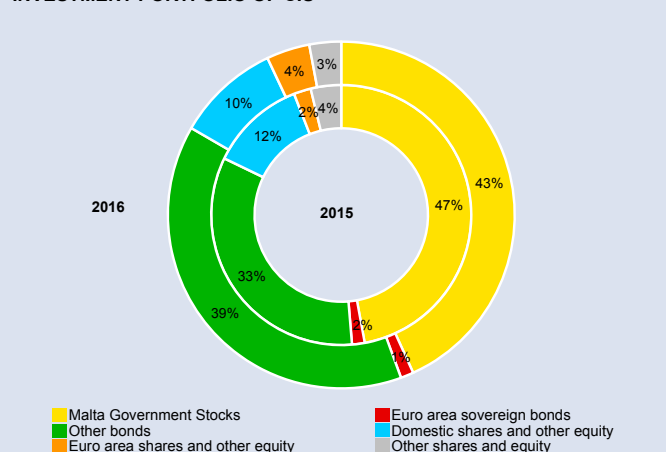
Given the retail nature of CIS, households remained their main shareholders in line with levels observed over the past years (see Chart 5.13). Households' investment in CIS accounted for 5.6% of their net financial wealth. On the other hand, banks and to a lesser extent NFCs, were the main shareholders of PIFs given the relatively

**Chart 5.10**  
**TOTAL ASSETS OF THE INVESTMENT FUNDS SECTOR**  
(EUR millions)



Source: Central Bank of Malta.

**Chart 5.11**  
**INVESTMENT PORTFOLIO OF CIS**

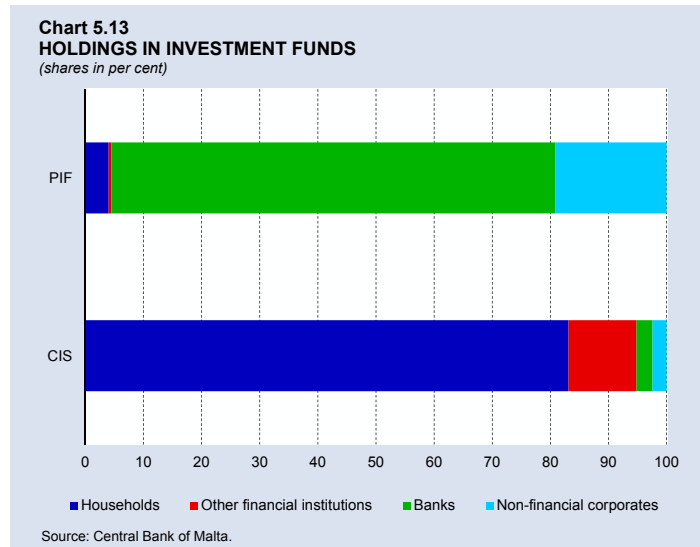
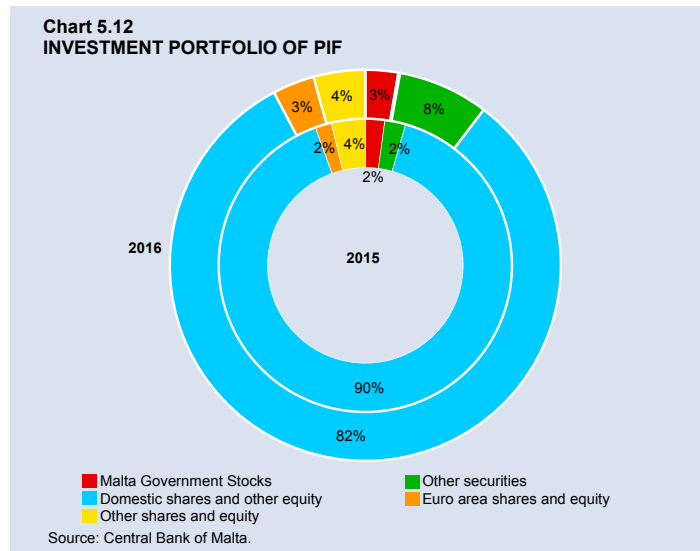


Source: Central Bank of Malta.



high minimum entry requirements to invest in such schemes. Combined, these accounted for 95.5% of PIF shareholders.

The main financial stability risks stem from the extent of the domestic investment funds' links with the real economy and the banking sector, which could act as a conduit in times of stress. Indeed, the core domestic banks managed around 70% of the net asset value of the domestic investment funds. Moreover, domestic funds held 15.0% of their assets with banks operating in Malta, mainly in the form of deposits, and also through equity and bond holdings. Despite the strong links between domestic investment funds and the banking sector in Malta, contagion risk is deemed to be low, given the funds' prudent investment strategies. Furthermore, funds are set up as separate legal entities and are subject to strict regulations under the Maltese companies' law and the Investment Services Act. Moreover, unlike what is being observed in the rest of the European Union, bank-like activities by these funds are largely contained and limited only to a few funds that transact with non-residents. As a result, financial stability risks for the domestic system are deemed to be limited and low.





**APPENDICES  
AND  
GLOSSARY**



**Appendix A  
IMPLEMENTED POLICY MEASURES**

<b>Capital Buffer for Other Systemically Important Institutions (<a href="#">O-SII</a>)</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>Implementation date</b>		
Medifin	0.125%	0.250%	0.375%	0.500%	1 Jan. 2016		
HSBC Group Malta	0.375%	0.750%	1.125%	1.500%			
Bank of Valletta Group	0.500%	1.000%	1.500%	2.000%			
<b>Countercyclical Capital Buffer (<a href="#">CCyB</a>)</b>							
	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Implementation date</b>
All credit institutions	0%	0%	0%	0%	0%	0%	1 Jan. 2016
<b>Macro-prudential policy Reciprocity</b>							
	<b>2016</b>		<b>2017</b>		<b>Implementation date</b>		
<a href="#">Reciprocity</a> of the Systemic Risk Buffer implemented by Estonia	1.0% for exposures exceeding €200 million		1.0% for exposures exceeding €200 million		24 Oct. 2016		
<b>Measures Addressing Credit Risk (<a href="#">BR/09/2016</a>)</b>							
	<b>2017</b>				<b>Implementation date</b>		
All credit institutions	Implementation of NPL Reduction Plan for banks which exceed the 6% NPL ratio threshold				2 Jan. 2017		









## Glossary

**Asset Purchase Programme (APP):** includes all purchase programmes under which private sector and public sector securities are purchased to address the risks of a too prolonged period of low inflation.

**Bail-inable:** any capital instrument, debt instrument, liability or other item which can be reliably, credibly and readily available for write-down and/or conversion into equity.

**Bank Recovery Resolution Directive:** establishes a common approach within the European Union to the recovery and resolution of banks and large investment firms.

**Bid-ask spread:** is the difference between the lowest price the market is offering to sell an underlying asset and the highest price the market is willing to pay.

**Business Conditions Index (BCI):** is an indicator composed of the following variables: the term-structure of interest rates; industrial production; an indicator for the services sector; the economic sentiment indicator; tax revenues; unemployment; private sector credit and gross domestic product.

**Collective provisions:** the amount of provisions allocated for the estimated losses incurred on a collective basis, but which have yet to be individually identified.

**Combined ratio:** is the sum of net claims incurred and net operating expenses as a proportion of net premia earned. A combined ratio of less than 100% signals underwriting profit.

**Composite Indicator of Systemic Stress (CISS):** an indicator compiled by the European Central Bank which is based on 15 financial stress measures split equally in five categories, including the financial intermediaries sector, money markets, equity markets, bond markets and foreign exchange markets.

**Countercyclical capital buffer (CCyB):** requires credit institutions to set aside additional common equity tier 1 capital during periods of excessive credit growth. The aim of the CCyB is to increase banks' resilience in good times to be able to absorb potential losses that could arise in a downturn, enabling continued supply of credit to the real economy.

**Collective Investment Undertakings:** raise capital from investors (fund holders) to carry out collective investments in transferable securities and/or in other financial assets.

**Cost-to-income ratio:** is defined as operating expenses (net of amortisation but including intangible assets other than goodwill) to gross income (net interest income and non-interest income).

**Coverage ratio:** the ratio of total provisions and interest in suspense to total non-performing loans (NPL).

**Credit standards:** refer to the banks' internal guidelines for loan approvals. These specify the borrower's characteristics such as income levels, age and employment status, which the banks consider in their credit scoring methods.

**Credit terms and conditions:** refer to the conditions of a specific loan. These consist of the interest rate, loan size, fees, collateral requirements, maturity and other conditions.

**Customer deposits:** deposits of (i) money market funds (ii) central government (iii) other general government, and (iv) other remaining economic sectors, including households and corporates, but excluding the financial intermediation sector.

**Customer loans:** loans to (i) money market funds (ii) central government (iii) other general government, and (iv) other remaining economic sectors, including households and corporates, but excluding the financial intermediation sector.

**DJ Stoxx 600:** an index derived from the STOXX Europe total market index and a subset of the STOXX Global 1800 index. With a fixed number of 600 components, the STOXX Europe 600 index represents large, mid- and small capitalisation companies across 17 European countries.

**Economic Sentiment Indicator:** a composite indicator by the European Commission made up of five sectoral confidence indicators with different weights: industrial confidence indicator, services confidence indicator, consumer confidence indicator, construction confidence indicator, and the retail trade confidence indicator.

**Eurosystem funding:** credit provided to eligible counterparties (banks) on a collateralised basis. The ECB coordinates the operations and the national central banks carry out these transactions.

**Fair Value:** is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants on measurement date (IFRS 13).

**Floating Rates:** also known as variable or adjustable rates, refer to any type of debt instrument, such as a loan, bond, mortgage, or credit that does not have a fixed rate of interest over the life of the instrument.

**Harmonised Index of Consumer Prices (HICP):** is an indicator of consumer prices according to a harmonised approach and a single set of definitions across the European Union.

**Haircuts:** a risk control measure applied to underlying assets whereby the value of such assets is calculated as the market value less a percentage (the "haircut"). The size of the haircut reflects the perceived risk of holding such an asset.

**High Quality Liquid Assets (HQLA):** comprised of Level 1, Level 2A and Level 2B assets. Level 1 assets include cash, central bank reserves, and certain marketable securities backed by sovereigns and central banks, among others. Level 2A assets include, for example, certain government securities, covered bonds and corporate debt securities. Level 2B assets include lower-rated corporate bonds, residential mortgage backed securities and equities that meet certain conditions.

**Impairment charges:** costs incurred as a result of the decline in the value of assets. These include write-down of loans, investments and non-financial assets, net of recoveries and reversals from an impaired state.

**Impairment losses:** the amount by which the carrying amount of an asset or cash-generating unit exceeds its recoverable amount.

**ITRAXX index:** is an index composed of credit default swaps covering senior European financials.

**Leverage ratio:** calculated by dividing Tier 1 capital by the bank's average total consolidated assets (sum of the exposures of all assets and non-balance sheet items). Credit institutions are required to maintain a minimum leverage ratio of 3%.

**Liquidity coverage ratio (LCR):** promotes the short-term resilience of a bank's liquidity risk profile by ensuring that a bank has an adequate stock of unencumbered high-quality liquid assets (HQLA) that can be easily and immediately converted into cash to meet a bank's liquidity needs for a 30-calendar day liquidity stress scenario.

**Loan loss provisions:** include collective provisions and specific provisions.

**Loan-to-deposit ratio:** the ratio for assessing a bank's liquidity by dividing the bank's total loans by its total deposits. If the ratio is too high, it means that banks might not have enough liquidity to cover any unforeseen fund requirements; if the ratio is too low, banks may not be earning as much as they could be earning.

**Loan-to-value ratio:** the amount lent for the purchase of a property expressed as a proportion of the market value of the property purchased.

**Minimum Capital Requirement (MCR):** refers to the minimum level below which the amount of eligible basic own funds should not fall. When the latter falls below the MCR, there would be supervisory intervention and the insurer's license can be withdrawn, if the insurance company is unable to re-establish the amount of eligible basic own funds at the level of the MCR within a short period of time.

**Net Interest Income:** the difference between the revenue/interest generated by a bank from assets and the expenses/interest paid on its liabilities.

**Non-Interest Income/Expenses:** this refers to the income/expenses related to non-interest activities, such as dividend and trading income, fee and commission income, and operating expenses.

**Non-performing exposures ratio:** credit facilities and debt securities which are classified as non-performing, as a share of the total credit facilities and debt securities held by the bank.

**Non-performing loans:** credit facilities with payments of interest and/or capital overdue by 90 days or more, as well as those facilities about which a credit institution has reason to doubt the eventual recoverability of funds in full without realisation of collateral.

**Non-performing loans ratio:** non-performing loans expressed as a percentage of total outstanding loans and advances.

**Own Funds:** refers to the summation of Common Equity Tier 1 (CET1) capital, Additional Tier 1 capital, Tier 2 capital as well as deductions from the different types of capital, and transitional provisions for own funds in terms of grandfathering.

**Other Systemically Important Institutions (O-SII):** are institutions that, due to their systemic importance, are more likely to create risks to financial stability. While maximising private benefits through rational decisions, these institutions may bring negative externalities into the system and contribute to market distortions.

**Overnight deposit facility:** a standing facility offered by the Eurosystem for eligible credit institutions to deposit excess funds with the national central bank. The interest rate on the overnight deposit facility represents the floor of the overnight interest rates.

**Probability of default:** the likelihood that a debt will not be paid on time.

**Probability of a simultaneous default by two or more large and complex banking groups:** an estimate of the probability of a systemic event within a period of one year, as measured by the systemic risk measure (SRM). The SRM, which is computed by the ECB, covers a sample of 15 banks.

**Protected Cell Company (PCC):** is a corporate structure in which a single legal entity is comprised of a core and several cells that have separate assets and liabilities. The protected cell company has a similar design to a hub and spoke, with the central core organization linked to individual cells. Each cell is independent of each other and of the company's core, but the entire unit is still a single legal entity.

**Public Sector Purchase Programme:** the purchase of public sector bonds (such as government bonds and debt securities of euro area institutions and agencies) by the euro area central banks for monetary policy purposes, with the aim of exerting downward pressure on the level of market interest rates.

**Repurchase agreement (repo):** a contract of sale for securities accompanied by an agreement authorising the seller to buy back the securities at a later date.

**Return on assets (ROA):** annual net income before (or after) tax divided by a 12-month average value of total assets.

**Return on equity (ROE):** annual net income before (or after) tax divided by a 12-month average value of shareholders' funds.

**Risk retention ratio:** is calculated as the proportion of risk which is retained within insurance companies, defined as premia written net of reinsurance, as a proportion of gross premia.

**Risk-weighted assets (RWA):** assets multiplied by their respective risk weights as specified in the Capital Requirements Directive.

**Solvency Capital Requirement (SCR):** the capital required for insurers to meet their obligations over the next twelve months with a probability of at least 99.5%.

**Specific provisions:** are 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.

**STREAM:** is the Central Bank of Malta's Structural Macro-Econometric Model of the Maltese economy, which is a traditional structural model built around the neo-classical synthesis.

**Systemic stress:** is the risk of disruption in the financial system with the potential to have serious negative consequences for the internal market and the real economy.

**Technical reserves:** the funds set aside by insurance companies from profits to cover claims.

**Tier 1 capital ratio:** Tier 1 capital which is mainly composed of equity and retained earnings, expressed as a percentage of risk-weighted assets.

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

**Value at Risk:** VaR measures the worst expected loss under normal conditions over a specific time interval at a given confidence level.

**VDAX:** a measure of the implied volatility of the DAX, which is a blue chip stock market index consisting of the 30 major German companies trading on the Frankfurt Stock Exchange.