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# **SPECIAL FEATURE: COVID-19 – ASPECTS OF FINANCIAL SECTOR RESILIENCE**

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## SPECIAL FEATURE: COVID-19 – ASPECTS OF FINANCIAL SECTOR RESILIENCE

### Introduction<sup>1</sup>

The global economic impact from the spread of the coronavirus (COVID-19) is pushing economies into recessions of uncertain magnitude and duration unseen in recent history. In June 2020, the IMF estimated that the world economy is likely to shrink by a stark 4.9%, which is by far worse than the peak of the Global Financial Crisis.<sup>2</sup> The impact on the euro area's economy is much more pronounced with economic activity forecasted to contract by 10.2%. Many countries took the measures necessary to contain the spread of the pandemic by closing borders, schools and non-essential services. Health authorities in some countries advocated other measures to contain the spread such as social distancing and a complete lockdown in some countries, while others advocated isolation for vulnerable people, in a bid to flatten the epidemiological curve and avoid overburdening healthcare systems. COVID-19 took its toll on the 'normal' social and economic life across the globe.

Malta was not immune to this pandemic. When it hit our shores, Malta took the necessary measures to contain as much as possible the virus spread, while limiting its social and economic implications. Being a small open economy, Malta is directly affected by foreign demand shocks – particularly in the services sector, especially within tourism. Apart from the direct impact following the closure of the sea and air ports, the ensuing fall in tourism demand had repercussions on most catering establishments, restaurants and bars – which had already reported a significant drop in sales prior to being shut down on Government's orders. Various activities were cancelled resulting in additional loss of revenue for the entertainment segment. The manufacturing industry was also hard hit, particularly due to supply-chain disruptions in source markets, but also due to a decline in world demand.

The economic effect of the pandemic is more aptly visible in consumption. While consumer demand for a range of essential goods trended upwards, demand for a number of other goods and services suffered. Locally-oriented businesses reacted to this falling demand and rising uncertainty by cancelling or postponing investment, while others embarked on a labour rationing response such as implementing a shorter work week schedule, as well as outright lay-offs. The measures taken by the Government to mitigate the impact on the labour market helped to contain the increase in the unemployment rate by just 0.7 percentage point between February and April 2020, up to 4.1%.

Apart from the direct impact on a number of economic sectors, COVID-19 is likely to have significant second-round effects on various other sectors of the economy. The pandemic is also testing the financial stability of countries worldwide as a number of risks could materialise, simultaneously. The ECB's *May 2020 Financial Stability Report* highlighted that the pandemic has effectively impacted various aspects of economic activity, and at times interacted with pre-existing vulnerabilities such as overvalued asset prices, weak profitability, still-high sovereign indebtedness and increased liquidity and credit risks in the non-bank sector.<sup>3</sup> While these already-present vulnerabilities had amplified the pandemic shock, the financial system proved to be broadly resilient in part due to the regulatory reforms instituted since the great financial crisis. Heightened risk aversion coupled with a broad economic fallout has also led to increasing demands on the financial system for funding and liquidity. Yet, the loss of income for borrowers and market uncertainty will also impinge on banks' asset quality and hence their profitability going forward.

This Special Feature provides an indication of some of the initial direct impacts on Malta's financial services sector as the outbreak continued to spread both locally and globally. Panel A attempts to shed light on the exposures of the financial services industry to COVID-19-sensitive sectors, while Panel B delves into the Central Bank of Malta's scenario analysis to assess banks' liquidity and solvency positions. Panel C sheds light on the measures the Central Bank of Malta, as the macroprudential authority, has put in place to ease the burden and limit the fallout from the pandemic. This Special Feature reflects the Central Bank of Malta's (CBM) perspective as of 20 June 2020.

<sup>1</sup> Prepared by Wendy Zammit, Head Financial Stability Surveillance and Research, and Andrew Spiteri, Manager within Financial Stability and Surveillance and Research. The authors would like to thank Alan Cassar, Chief Officer Financial Stability for his valuable suggestions.

<sup>2</sup> IMF, June World Economic Outlook. <https://www.imf.org/en/Publications/WEO/Issues/2020/06/24/WEOUpdateJune2020>

<sup>3</sup> <https://www.ecb.europa.eu/pub/financial-stability/fsr/html/ecb.fsr202005~1b75555f66.en.html>

## Panel A: The Financial Sector's Exposures to Hard-hit Sectors<sup>4</sup>

Some economic sectors are more prone to direct effects from the COVID-19 pandemic and hence are considered to be more sensitive, with their business models dented by low cash flows, which in turn affected their profitability and debt repayment capabilities. For the purpose of this Special Feature the productive sectors of the economy most sensitive to COVID-19 are deemed to be:

- NACE C: Manufacturing
- NACE F: Construction
- NACE G: Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles
- NACE H: Transportation and Storage
- NACE I: Accommodation and Food Services Activities
- NACE J: Information and Communication
- NACE L: Real estate
- NACE M: Professional, scientific and technical activities
- NACE N: Administrative and Support Service Activities
- NACE P: Education
- NACE R: Arts, Entertainment and Recreation
- NACE S: Other Service Activities.

The ECB's *Financial Stability Report* identified manufacturing, wholesale and retail trade, transportation, accommodation and food services, as well as arts and entertainment as COVID-19 sensitive sectors. The above list was, however, further augmented by those sectors identified in Malta Enterprise's wage supplement scheme, as well as those sectors which resorted more prominently to moratoria on their lending following the introduction of the Central Bank of Malta Directive No. 18.

### The Financial Sector Environment: Strengths and Weaknesses

The Maltese banking sector is facing this unprecedented shock from a relatively strong financial standing. Since the financial crisis, banks have strengthened further their capital buffers and continued to operate on the back of ample liquidity buffers, as customer deposits continued to flow in even during the peak of the pandemic. This is further reaffirmed by stress tests carried out by the Central Bank of Malta in the course of its work, showing that – overall – banks remained resilient and capital levels above regulatory minima with only a few banks showing some vulnerabilities ([refer to Chapter 3](#)). Owing to the disruptions caused by the spread of the virus, the ECB's Single Supervisory Mechanism (SSM) has provided temporary relief to significant institutions from capital and liquidity requirements, to provide even more room for banks to operate in case of need.

While at the current juncture liquidity is ample, if the pandemic persists and the path to recovery is prolonged, the liquidity position of some banks could be somewhat affected as potentially some borrowers could suspend repayments and start exercising drawdowns of already-committed credit lines. A slowdown in the real economy can lead to repercussions on the banks' asset quality as provisioning levels would need to be stepped up – coupled with potentially write-downs of loans – going forward. Credit risk in the banking sector had been abating for a number of years, supported by improved creditworthiness of borrowers on the back of a growing economy, targeted supervisory measures and due to active efforts by banks to de-risk their balance sheets. As a result, the NPL ratio of the core domestic banks fell to 3.2% in 2019, down from 7.2% in 2015. Banks are therefore in a much better position and more resilient to deal with this exogenous shock. Nonetheless, in case of a prolonged drag on the overall economy, NPLs are likely to increase in some sectors, although the measures taken by the banking sector (such as moratoria), the supervisory authorities and Government, including the COVID-19 Guarantee Scheme, should help in cushioning the effect to some extent, even though most measures are for a limited period.<sup>5</sup>

<sup>4</sup> Prepared by Wendy Zammit, Head Financial Stability Surveillance and Research, and Andrew Spiteri, Manager Financial Stability and Surveillance and Research. The authors would like to thank Alan Cassar, Chief Officer Financial Stability for his valuable suggestions.

<sup>5</sup> The COVID-19 Guarantee Scheme was put in place by the Malta Development Bank to provide guarantees to commercial banks for the provision of financing for working capital requirements and should also help in easing the burden on banks.

Meanwhile, in terms of profitability, domestic banks have historically outperformed their European peers. However, in recent times, profitability has been waning on the back of the prolonged low interest rate environment, coupled with increasing regulatory costs, investment in IT systems and other administrative expenses. The additional challenges from the COVID-19 implications on the economy will undoubtedly put additional strain on profitability, particularly through lower revenues. The increased uncertainty surrounding the pandemic and lack of clarity on how long this is going to take could trigger a credit crunch, particularly for the productive sectors most sensitive to the COVID-19 spread mentioned earlier. From a supply point of view, this is dependent on the capacity afforded on banks' balance sheet and their ability to absorb any asset quality deterioration without having to limit credit to the real economy. Months of social distancing have also disrupted the capital formation process and, ultimately, labour participation and productivity growth, with implications on credit demand. Indeed, while credit lines for NFCs may increase in the short term for working capital purposes to offset the shortfall in cash flows, other forms of corporate credit may be postponed in view of possible lower fixed investment. Moreover, mortgage lending – which for a number of years was the main driver of credit growth – is expected to slow down as the property market came to a virtual standstill during the period of containment measures, exacerbating further the slowdown that had already started towards the end of 2019. Indeed, Bank Lending Survey results have shown that most of the respondents observed a drop in demand for loans for house purchases in the first half of the year, which is also corroborated by the month-on-month drops in outstanding mortgages for April and May 2020.

Furthermore, adverse developments in financial markets could also result in lower profitability driven by loss in value for the banks' portfolios especially on the marked-to-market segment of their securities holdings.

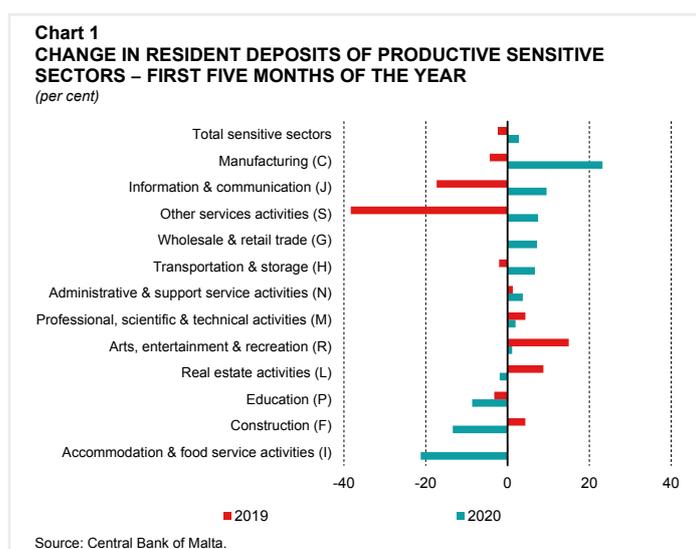
The rest of this Panel will take a static approach to the data gathered so far to be able to infer the likely exposure of the local financial sector to the aforementioned potential vulnerabilities.

## Domestic Exposure to Vulnerable Sectors of the Economy

### Banks

Banks' deposit funding from the productive sectors most sensitive to COVID-19 contagion mentioned earlier amounted to €5.1 billion in December 2019. This dropped to €4.7 billion by May 2020, equivalent to 16.6% of overall deposits. The largest share of these deposits pertained to Maltese entities, which amounted to €3.9 billion in May 2020, almost entirely (94.5%) held with the core domestic banks. The latter financed almost a fifth of overall resident lending.

Despite the COVID-19 pandemic, resident deposits from the productive sectors most sensitive to the spread continued to flow in, and increased by 2.6% in the first five months of 2020 (see Chart 1). At a sectoral level, there are wide divergences with the manufacturing sector recording around 23% growth in deposits while the accommodation and food services sector recorded a drop of 21.2%. This divergence reflected, albeit partially, the asymmetric impact in both timing and intensity of the pandemic across economic sectors. Deposits from resident households have also continued to flow in the domestic banking system, as the postponement



of both spending on durable goods amid lower consumer confidence, and lower spending on recreational activities and other consumer goods given the partial lockdown, resulted in higher savings. Between January and May 2020, resident household deposits rose by almost €500 million (+4.0%), mainly reported in the months of March and April, where deposits rose by around €420 million. In the first five months of 2019, deposits had increased by €231.1 million (2.0%).

The banks' liquidity and funding position is strong. Indeed, should an extreme situation be considered where all deposits of the productive sectors most sensitive to COVID-19 be withdrawn, this should not cause any funding constraints on the core domestic banks, with the loan-to-deposit ratio for core domestic banks increasing by around 13 percentage points to about 73%, still below the 100% mark. The aggregate ample liquidity position is confirmed by the liquidity stress tests described in Panel B, however, vulnerabilities are detected for some banks due to the severity of the scenarios which are designed to assess systemic risk.

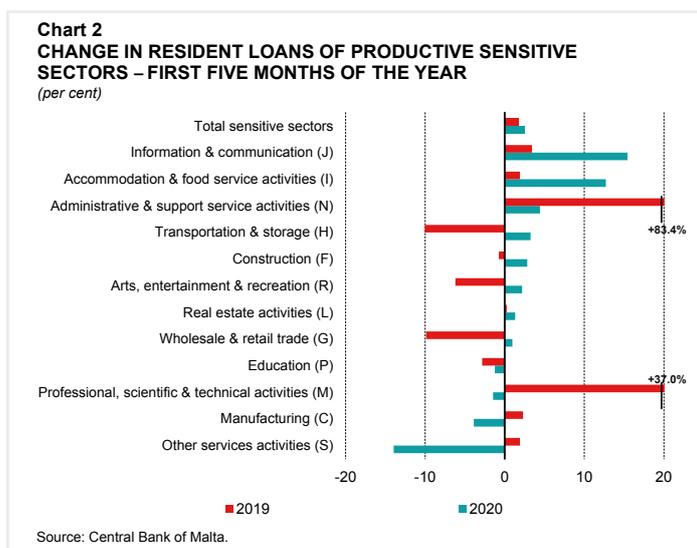
### Loan portfolio

The banking system's credit exposure to COVID-19 sensitive productive sectors amounted to €8.5 billion by the end of 2019, accounting for around 44% of all loans granted, and equivalent to just above a fifth of total assets, remaining relatively unchanged as at the end of May 2020. Around 60% of these exposures are related to non-resident lending largely by international banks, which have limited or no links with the Maltese economy.

Resident lending to the same productive sectors was lower and pertained mostly to the core domestic banks. At around €3.6 billion, this stood at almost a third of the overall resident lending and just 8.7% of the overall assets of the banking sector in 2019, which amounted to €41.4 billion. At €3.4 billion, the bulk of these exposures were granted by the core domestic banks. These were equivalent to 13.8% of the core domestic banks' assets, and almost a third of their loan book. In the first five months of the year, resident exposures to these sectors grew by 2.4% to €3.7 billion, which was almost entirely driven by higher lending towards the accommodation and food service activities sector, which rose by 12.7% (see Chart 2). Resident lending to the household sector totalled €6.1 billion in December 2019, and is largely with core domestic banks. During the first five months of the year, it grew by 1.1%. Yet, less than 10% of household loans are subject to moratoria as per Panel C. The resilience of banks against an increase in NPLs from loans to the productive sensitive sectors and mortgages granted a moratorium is tested separately in Panel B.

Lending to non-resident productive sensitive sectors is largely concentrated in the transport and storage sector, accounting for almost 45% of total non-resident lending to productive sensitive sectors, mainly driven by a non-EU branch. Non-resident lending is also prevalent in manufacturing and construction sectors. Meanwhile, resident lending is concentrated in the real estate sector and represented just above a quarter of resident lending to sensitive sectors (see Chart 3). This was followed by lending towards the wholesale and retail trade sector, construction and accommodation and food services sectors.

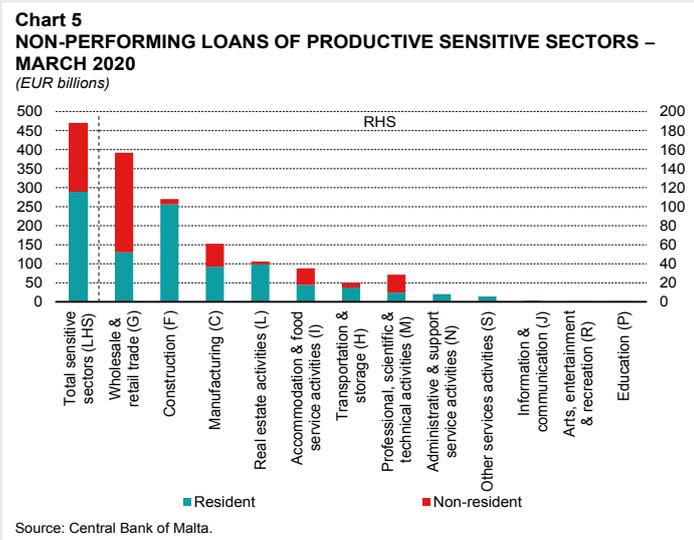
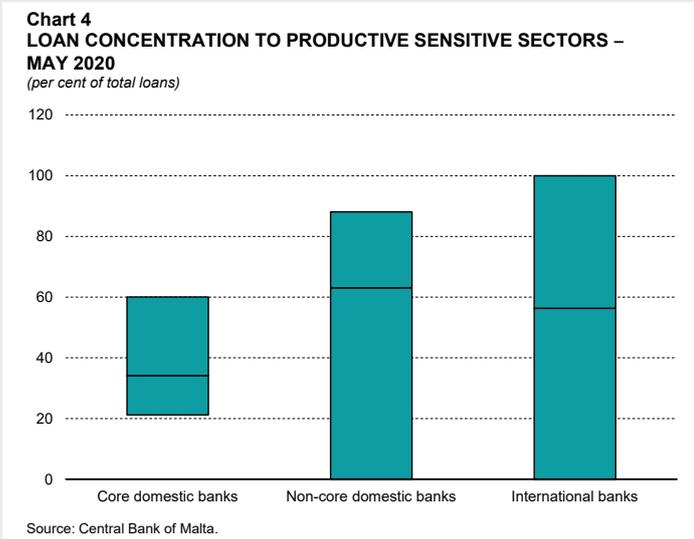
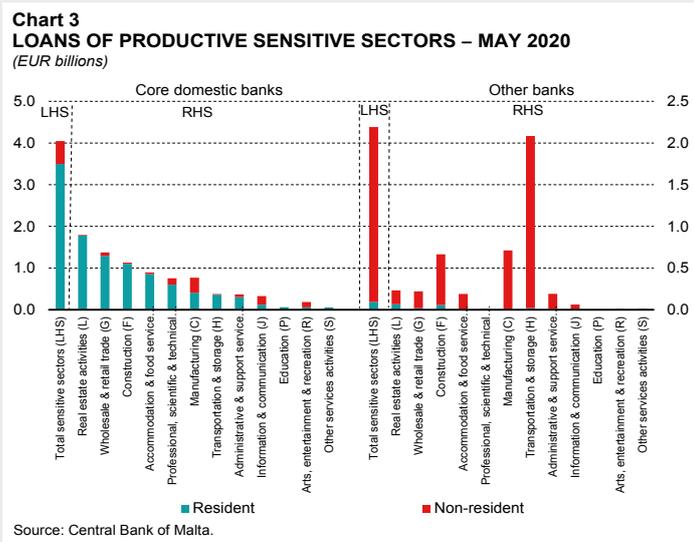
International banks are the most exposed to COVID-19 sensitive productive sectors, which on aggregate accounted for around 65% of their loan portfolio. However, significant heterogeneity exists among this group of banks, with some reporting no loans to these sectors, while others are entirely



exposed, also in view of their limited loan portfolio. The median international bank reported an exposure of 56.3% of their loan portfolio (see Chart 4). Non-core domestic banks' aggregate exposure stood at 48%, ranging from almost nil to around 88%, with a median level of just above 63%. Meanwhile, core domestic banks are the least exposed with the aggregate exposure standing at 32.8%, close to the median of 34.2%, with the range spanning between 21.2% and 60.0%. This relatively low exposure, as well as the heterogeneity within the group, reflected the significant but diverging exposure to household lending which on average represents around half of the loan portfolio.

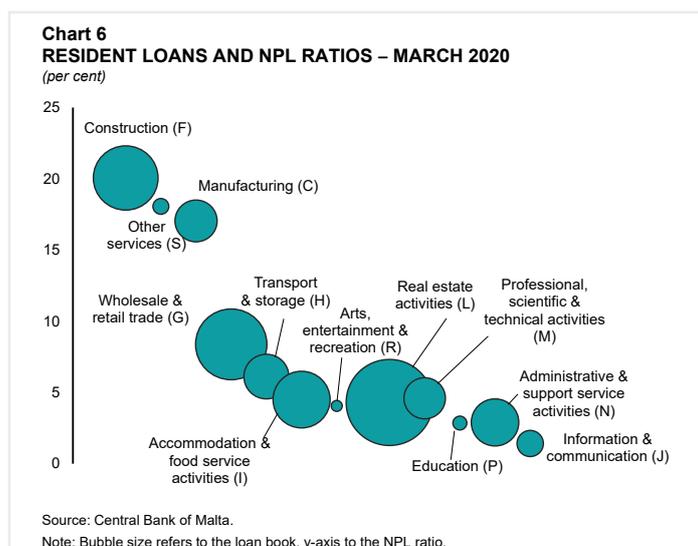
The level of NPLs could shed light on the vulnerability of each sector prior to the pandemic. Some of the sectors prone to the pandemic shock also exhibited elevated NPLs, presenting a riskier exposure to banks going forward. NPLs in these sensitive sectors amounted to around €470 million in March 2020 with around 38% being non-resident NPLs. Around 60% of the non-resident NPLs pertained to the wholesale and retail trade sector (see Chart 5).

Focusing on the resident element, in absolute terms, resident NPLs were mainly in the construction sector, followed by the wholesale and retail, real estate and manufacturing sectors. The average resident NPL ratio for COVID-19 sensitive sectors stood at 8.2% in March 2020 compared to the overall resident NPL ratio of 7.7%. Nevertheless, throughout the years, significant improvements were reported by a number of sectors, with the average NPL ratio for the sensitive sectors dropping from 9.9% in 2018, mainly driven by the real estate and construction, with the manufacturing



and accommodation sectors also reporting noticeable drops in NPLs.

Chart 6 combines the size of the loan portfolio with the corresponding NPL ratio for each vulnerable sector, to shed light on the magnitude of domestic banks' exposures at risk from the pandemic. As can be seen in the chart the construction and manufacturing sectors and to a lower extent wholesale and retail sector, among others exhibit an elevated NPL ratio, with local banks also having significant exposure in terms of their loan portfolio.



Going forward, as the economic slowdown by the COVID-19 pandemic is set to have a further impact, asset quality may deteriorate for a number of sectors, with the risk of reversing the improving trend recorded in the past few years.

### Investment portfolio

Banks are also exposed to these productive sensitive sectors through their securities portfolios. The rapid spread of COVID-19 took markets by surprise and left its mark, although stock markets have recovered somewhat since the start of the pandemic. Volatility, as determined by the VIX index, reached all-time highs as investors fled to safety. Asset valuations plunged but the extent of the impact on the banks' portfolios is largely dependent on their positioning and the extent to which they are valued at AMC or at FV through other comprehensive income. Although global equity markets have recovered somewhat, aided by central banks' timely actions as well as fiscal support, high uncertainty still lingers as the pandemic continues.

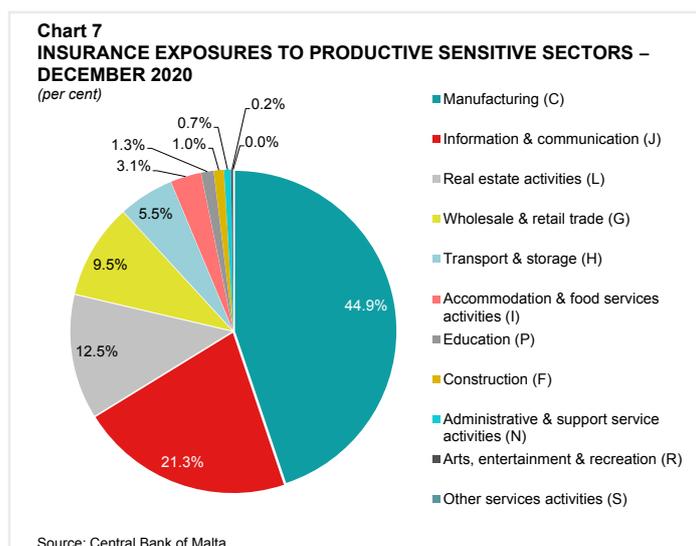
Domestic banks held €8.5 billion in debt securities as at the end of March 2020, equivalent to around a fifth of the overall assets. Of these, almost 40% are marked as available for sale, and hence susceptible to affect their P&L through market fluctuations. Direct exposures to the productive sensitive sectors are limited, as around 70% are invested in government bonds or supranational organisations, whereas around 27% are invested in financial sector-related bonds. The remaining 3.4% are invested in non-financial private sectors, of which around 3 percentage points pertain to productive sensitive sectors, largely in the professional, scientific and technical activities, and transportation and storage sectors. Around half of such holdings are rated as low or sub-investment grade bonds, with around a third rated as medium, while about 15% are high-investment-grade bonds, mainly reflecting bond holdings of non-EU branches.<sup>6</sup> Debt securities of the core domestic banks represented 21.1% of their total assets. Exposure is also predominantly held in government bonds (around 60% of total debt securities), followed by financial sector-related bonds (approximately 35%). Non-financial corporate bonds accounted for the remaining 5% of total debt securities holdings, of which around four fifths pertained to COVID-19 sensitive sectors. The latter are largely medium- or high-rated bonds, representing around 55% and 20% respectively, with the rest held as low or sub-investment grade bonds.

Yet, while the direct effects of holding securities in sensitive sectors are limited in terms of volumes, market movements could affect the banks' entire portfolio, for example through increased volatility in the markets, more so for those securities which are booked at FV rather than at original purchase cost.

<sup>6</sup> Investment-grade bonds carrying a rating of AA- or above are regarded as 'high-rated bonds'. 'Medium-rated bonds' are those rated between A- and A+, whereas 'low-rated bonds' are those rated between BBB- and BBB+. Sub-investment grade bonds are rated lower than BBB.

## Domestically-oriented Insurance Companies

The pandemic is also leaving its imprint on the insurance sector. While insuring against catastrophic events such as harsh weather conditions and other natural disasters has become the norm, insuring against a pandemic is less common. Businesses are inclined to insure against interruption of their activities, but such policies tend to exclude pandemic coverage, highlighting a business line which may grow in the future. Yet, the COVID-19 era has made it harder for insurers to assess and accurately model the risks that they take on, coupled with potential valuation losses on their securities portfolios. In the three months of social distancing, evidence showed that claims for road accidents halved, aiding the bottom line of insurers but on the other hand cash flows for other business lines could be affected due to delays in receipt of premia as the economy came to a virtual halt, and increased claims for business interruption.



Exposures by domestically-oriented companies to the productive sensitive sectors amounted to almost €563 million as at December 2019, equivalent to almost 15% of their overall assets. Of these, around €102 million pertained to resident entities, around four-fifths of which were held in equities with the majority of the rest held as debt securities. Of the debt securities, around 45% are low-investment-grade, with approximately another 30% medium-rated. Around 8% are high-investment-grade with the remainder either sub-investment or unrated. At a sectoral level, the largest exposure is towards the manufacturing sector, amounting to €252.5 million, followed by the information and communication sector (see Chart 7).

Overall exposures are mainly concentrated within the life undertakings. At around €522 million, these accounted for about 16% of assets. Exposures by non-life undertakings were more limited, amounting to €40.2 million, equivalent to 8.7% of total assets.

Initial estimates indicate that in the first quarter of 2020, the prevailing market conditions resulted in valuation losses for a number of insurance companies, in relation to securities holdings, although this may have improved as markets recovered in the second quarter of the year.

## Domestically-oriented Investment Firms

The Financial Stability Board highlighted that the COVID-19 pandemic has unearthed a number of vulnerabilities in the funds industry as financial markets went into a free fall with dramatic falls in asset prices.<sup>7</sup> Some market reactions were amplified by the need for investment funds to sell assets to meet large outflows as investors tried to realise their gains.

Domestically, based on security-by-security (SBS) data, debt securities of the productive sensitive sectors held by the domestically-oriented investment funds amounted to just above €100 million.<sup>8</sup> These amounted to 7.6% of overall debt securities, equivalent to 3.9% of assets. Such securities mainly pertained to the manufacturing and administrative sectors (see Chart 8). Meanwhile, equities of COVID-19 sensitive sectors amounted to €137.5 million, equivalent to 14.7% of all equity holdings, and just around 5.4% of assets.<sup>9</sup>

<sup>7</sup> <https://www.fsb.org/wp-content/uploads/P150420.pdf>

<sup>8</sup> SBS data for debt securities represent 94.0% of total debt securities holdings.

<sup>9</sup> SBS data for equity holdings represent 66.1% of total equity holdings.

Such equities were mainly related to the information and communication sector, manufacturing, transport, and retail and wholesale trade sectors. As a result, total exposures to the productive sensitive sectors add up to 9.3% of assets.

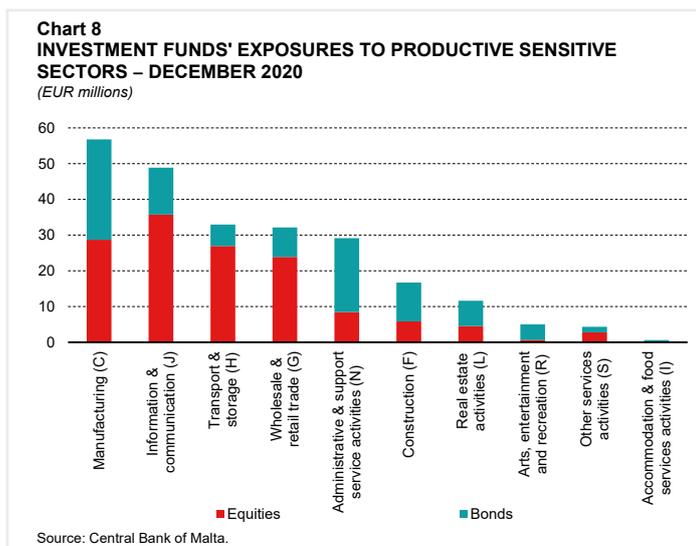
From discussions held with local fund managers, it appears that there were no abnormal redemptions during the first quarter of the year.

### Conclusion

The global economic impact from the COVID-19 related disruptions is expected to be significant. However, policymakers in the fiscal, monetary, micro- and macroprudential spheres took immediate actions to limit as much as possible the economic fallout from the pandemic while at the same time supporting economic recovery. The policy responses also helped the financial system to withstand the impact of the economic downturn.

The Maltese banking sector is facing this shock from a strong financial standing. It operates on the back of ample liquidity buffers and is generally well-capitalised. The resilience of the banking sector is further reaffirmed by stress tests carried out by the Central Bank of Malta, which show that in a severe adverse scenario, overall, banks remained resilient with capital levels above regulatory minima, and only a few small banks showed some vulnerabilities.

Prior to the pandemic, overall bank liquidity was ample and this continued to rise given that savings continued to increase during the pandemic. If the spread of COVID-19 persists and recovery is prolonged, certain banking models could come under pressure for liquidity owing to suspended repayments and drawdowns of already committed credit lines. COVID-19 will have an impact on the extent of new credit and banks' asset quality with a potential increase in provisioning levels and write-downs. The latter together with a prolonged low-interest rate environment would affect negatively banks' future profitability.



## Panel B: Stress Tests on Banks' Liquidity and Solvency Positions<sup>10</sup>

This panel aims to assess the banks' liquidity and solvency positions following the potential materialisation of specific adverse scenarios emanating from the COVID-19 pandemic. This panel also complements the stress tests featured in [Chapter 3](#), particularly the MST framework. Indeed, in order to have a more comprehensive picture of the impact from the evolution of the COVID-19 pandemic over a three-year horizon, the MST framework was run to assess the impact of changes in the macroeconomic and financial environment on banks' balance sheets under a baseline and an adverse scenario.

This Panel features a number of sensitivity tests based on March 2020 data aimed at assessing resilience against hypothetical adverse outcomes in the short term. The banks' liquidity position is tested against (i) a bank-run type scenario, (ii) the standard adverse scenarios simulating higher outflows during the 30-day horizon of the LCR framework, and (iii) the impact of additional scenarios testing partial or full withdrawal of commitments under the LCR framework. Furthermore, the banks' solvency position is tested against a potential deterioration in the credit quality of banks' debt securities portfolio, and a hypothetical sensitivity analysis in which NPLs in the non-financial corporate sectors most vulnerable to the pandemic and mortgages would increase, tested in isolation as well as combined together.

### Scenario analyses: Banks' Liquidity Stance

While at the reference date the public was urged to make payments using contactless debit or credit cards, and to engage in social distancing as a preventive measure, the uncertainty could have triggered higher deposit outflows. Moreover, the disruption of the performance in the productive sensitive sectors identified in Panel A and the possibility of other sectors being affected could have caused a strain on banks' liquidity profile. In this regard, the Central Bank of Malta assesses banks' liquidity position on a regular basis by means of two frameworks which have been extended to account for COVID-19 adverse repercussions.

#### *Persistent deposit withdrawals*

The persistent deposit withdrawals (PDW) framework assesses whether individual banks' liquidity buffers of the highest quality are sufficient to meet the assumed liquidity outflows arising from a bank-run type scenario. The framework uses March 2020 data and considers extreme shocks to the deposit outflows over a period of five days and the subsequent three weeks, and tests whether the shocked banks' counterbalancing capacity (CBC) is sufficient to meet the outflows. The CBC is defined as the quantity of funds at the banks' disposal to meet liquidity requirements, and is composed of, *inter alia*: cash, excess on their reserve requirement with the Central Bank of Malta, and funds raised following the sale of marketable securities. Under this test, a bank would fall short if the outflows on a specific day/week would exceed the available CBC.

The framework sources data from prudential reporting templates and makes use of granular information on banks' bond holdings complemented by market information to assess individual banks' counterbalancing capacity.

Two scenarios are considered. Under the first scenario, banks are allowed to obtain funding from standard Eurosystem monetary policy operations only against securities that were pledged with the ECB as at the reference date.<sup>11,12</sup> Under this scenario, banks would have to sell the remaining FV securities at fire sale prices.<sup>13</sup>

<sup>10</sup> Prepared by David Stephen Law, Senior Quantitative Analyst within Policy Crisis Management and Stress Testing Department, and Kirsten Abela, Quantitative Analyst within Policy Crisis Management and Stress Testing Department. The authors would like to thank Christine Barbara, Manager within Policy Crisis Management and Stress Testing Department, and Alan Cassar, Chief Officer Financial Stability, for their valuable suggestions.

<sup>11</sup> Eligible securities refer to securities that satisfy the requirements to be pledged as collateral for Eurosystem monetary operations.

<sup>12</sup> Securities pledged with the ECB are subject to a liquidity haircut as per the Guideline (EU) 2019/1033 on the valuation haircuts applied in the implementation of the [Eurosystem monetary policy framework \(ECB/2019/12\)](#). The haircuts in the framework are regularly updated in line with revisions to the ECB framework.

<sup>13</sup> Fire sale prices have been calibrated on the basis of market prices observed during the 2008 financial crisis.

Under the second scenario, banks can pledge all eligible securities with the ECB and sell the remaining FV securities at fire sale prices. This differs from the first scenario by also including other debt securities which are eligible and unencumbered. Given that the haircuts assumed for fire sale prices are higher than the valuation haircuts that would be applied by the ECB, this scenario results in banks having a higher CBC compared to the first scenario.<sup>14</sup> Moreover, in view of the ECB's ongoing commitment to provide liquidity assistance, this scenario is deemed more plausible.

Under scenarios one and two, it is assumed that banks do not make use of their AMC securities to raise funds, unless these are pledged or eligible for Eurosystem monetary policy operations. Banks purchase AMC instruments to receive a regular stream of coupon payments and the final principal upon maturity rather than with the intention of making capital gains by selling them when prices increase. While this accounting treatment insulates these financial instruments from market risk, banks would be at a disadvantage given that – by way of extreme assumption in this test – these securities cannot be used to obtain liquidity. The framework considers a third scenario that would generate additional counterbalancing capacity for the banks that hold AMC securities, boosting further the excess liquidity presented in scenario 2. Under this scenario, banks are assumed to taint their AMC portfolio and convert all securities held at AMC to FV through other comprehensive income (FVOCI) to be able to sell these securities. Core domestic banks had a small decline in the share of securities accounted for as AMC, while for non-core domestic banks, shifts were noted in a few banks from holding securities at FV to those accounted for as AMC.<sup>15</sup>

Furthermore, under both scenarios it is assumed that the intragroup funding and interbank funding would be suspended and withdrawn for the duration of the stress period.

In terms of outflows, the extent of liquidity outflows from deposits is determined according to the term-to-maturity, as well as customer category. The shocks are comparable to the cumulative outflow rates applied in the SSM 2019 Liquidity Stress Test (LiST) over a five-day period and a four-week period, and are more severe than the adverse scenario and closer to the magnitudes applied in the extreme scenario.<sup>16</sup>

Tables 1 and 2 present the results of the PDW framework under both scenarios as at March 2020 and reveal that the three bank categories manage to survive the test with ample excess liquidity throughout the stress test horizon. In the more severe scenario (scenario 1), excess CBC drops to 56%, 52% and 71% for core domestic, non-core domestic and international banks, respectively. Nonetheless, despite the overall positive result, a few weaknesses can be observed in individual banks by design of the framework which simulates severe deposit outflows to assess systemic risk and applies significant haircuts to the available CBC.

**Table 1**  
**STRESS TEST RESULTS – IMPACT OF PERSISTENT DEPOSIT WITHDRAWALS –**  
**SCENARIO 1, RESTRICTED ECB FUNDING, EXCESS LIQUIDITY TO TOTAL**  
**COUNTERBALANCING CAPACITY**

Scenario	Day 1	Day 2	Day 3	Day 4	Day 5	Week 2	Week 3	Week 4
Core domestic banks	85%	81%	77%	73%	69%	65%	61%	56%
Non-core domestic banks	84%	79%	74%	69%	65%	60%	56%	52%
International banks	89%	87%	85%	83%	81%	78%	74%	71%

Source: Central Bank of Malta calculations.

<sup>14</sup> See Box 2 in the [Financial Stability Report 2015](#) for further detail on the methodology and haircuts applied in the PDW stress test. The haircuts for ECB eligible securities have since been updated in line with the current guidelines issued by the ECB which also include haircuts for assets with a floating coupon. Previously the guideline prescribed the same haircuts as assets with a fixed coupon type.

<sup>15</sup> While this scenario is relevant for a few banks, the impact at bank category level is only marginally different from scenario 2 and thus the results are not being presented.

<sup>16</sup> The [methodology of the LiST](#) was published on the SSM website on 6 February 2019 and was run by the ECB on a sample of the banks it directly supervises, including three domestic banks.

**Table 2**  
**STRESS TEST RESULTS – IMPACT OF PERSISTENT DEPOSIT WITHDRAWALS –**  
**SCENARIO 2, UNRESTRICTED ECB FUNDING, EXCESS LIQUIDITY TO TOTAL**  
**COUNTERBALANCING CAPACITY**

Scenario	Day 1	Day 2	Day 3	Day 4	Day 5	Week 2	Week 3	Week 4
Core domestic banks	88%	85%	82%	78%	75%	72%	69%	66%
Non-core domestic banks	86%	82%	78%	74%	70%	66%	62%	59%
International banks	90%	88%	87%	85%	84%	80%	77%	75%

Source: Central Bank of Malta calculations.

### LCR-based liquidity stress test

The second framework is the LCR framework which assesses the banks' ratio of high quality liquid assets (HQLA) to net cash outflows against a threshold of 100%.

The framework as introduced in the *Financial Stability Report 2018*, is run on a baseline and four adverse scenarios. The baseline scenario applies the benchmark haircuts and inflow/outflow rates as prescribed by the [European Commission \(EC\) Delegated Regulation \(EU\) 2015/61](#) (hereafter, LCR Delegated Regulation) and acts as a monitoring tool for the LCR as reported by banks. The adverse scenarios target higher outflows while assuming that the HQLA buffer remains unchanged. The first adverse scenario assumes higher outflow rates than those applied in the baseline scenario (approximately 1.5 times higher except for categories for which the LCR Delegated Regulation already applies a 100% outflow rate and hence cannot be increased further). The remaining three adverse scenarios combine these higher outflow rates with additional withdrawals of fixed-term deposits which have a contractual maturity exceeding the 30-day period covered by the LCR Delegated Regulation. These scenarios target deposits placed by either residents, non-residents or both, respectively, and were designed to assume that customers would be willing to forfeit any accrued interest to access their funds.<sup>17</sup>

In addition to these standard LCR scenarios, the framework is flexible in a way that it allows new scenarios to be designed. In the midst of the uncertainty created by COVID-19, both in terms of the impact and the duration of the pandemic, consideration is given to the liquidity stance of banks should struggling NFCs and households (the retail sector) avail themselves of any approved but unutilised credit, be it on existing loans, overdrafts or credit cards. In this regard, four additional scenarios were considered whereby banks experience a partial or full withdrawal of commitments to NFCs and the retail sector. Table 3 provides a description of these scenarios.

**Table 3**  
**DESCRIPTION OF BASELINE AND ADVERSE SCENARIOS**

Scenario	Description
Baseline	Haircuts and outflow/inflow rates as prescribed by the LCR Delegated Regulation
Adverse:	
Scenario 1	Higher outflows compared to the LCR Delegated Regulation
Scenario 2	Scenario 1 with additional withdrawals of resident time deposits (>30 days)
Scenario 3	Scenario 1 with additional withdrawals of non-resident time deposits (>30 days)
Scenario 4	Scenario 1 with additional withdrawals from both resident and non-resident time deposits
Scenario 5	Baseline scenario with 50% withdrawal of committed facilities to NFCs
Scenario 6	Baseline scenario with 100% withdrawal of committed facilities to NFCs
Scenario 7	Baseline scenario with 100% withdrawal of committed facilities to retail, including mortgages
Scenario 8	Baseline scenario with 100% withdrawal of committed facilities to retail and NFCs

Source: Central Bank of Malta.

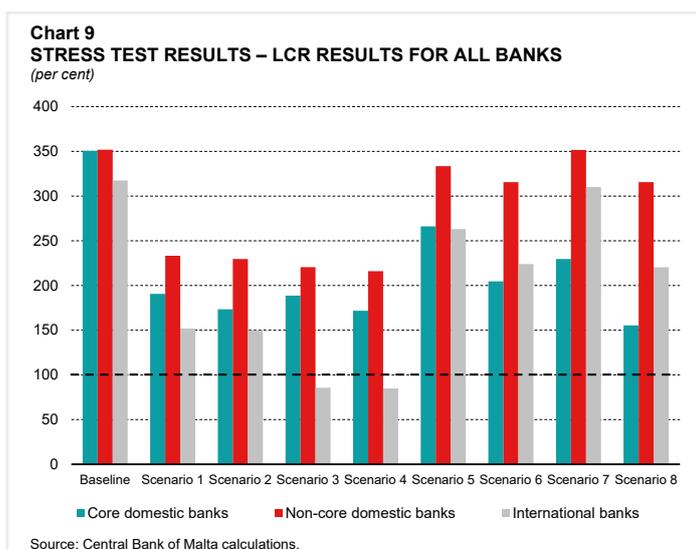
<sup>17</sup> See Box 4 in the [Financial Stability Report 2018](#) for further detail on the methodology and haircuts applied in the LCR stress test.

As at March 2020, the LCR under the baseline scenario stood at 351% for core domestic banks, 352% for non-core domestic banks and 315% for international banks. Under adverse scenario 4, which considers higher outflow rates for all resident and non-resident time deposits, the LCR falls to 172%, 216% and 85% for core domestic, non-core domestic and international banks, respectively. On the other hand, under adverse scenario 8, which considers a 100% withdrawal of committed facilities for both the NFCs and retail sector, the LCR falls to 130%, 337% and 297% for the core domestic, non-core domestic and international banks, respectively.

By design of the adverse scenarios and the severity of the shocks applied, weaknesses are identified at an aggregate bank level for the international banks (under adverse scenarios 3 and 4) as well as at an individual bank level for all eight adverse scenarios, with some banks experiencing an LCR below 100%. It should be noted that in times of stress, banks are allowed to breach the LCR requirement as long as they provide a plan outlining ways in which the LCR would be restored. This is especially the case now, as ECB Banking Supervision has announced that it will allow banks to operate temporarily below the LCR as part of the [temporary capital, liquidity and operational relief in reaction to COVID-19](#) via a press release published on the 12 March 2020. Moreover, the MFSA has also issued a [Circular](#) to extend these same relief measures to all credit institutions under its direct supervision. Therefore, these vulnerabilities have to be seen in the context in which the supervisors have announced that they will temporarily tolerate dips in the LCR requirements, in view of the current extraordinary circumstances.

Chart 9 shows the results for the three bank categories under the baseline and adverse scenarios. By focusing on the first four adverse scenarios, the largest drop is observed under scenario 1 due to a general tendency for reliance on short-term funding. Indeed, scenario 2 is only minimally different from scenario 1, mostly affecting core domestic banks given their higher share of resident deposits. Under scenario 3 there is a further significant impact on the LCR of international banks due to their reliance on non-resident term deposits as a source of funding. Indeed, the international banks category falls below the 100% requirement under both the adverse scenarios 3 and 4 due to the additional outflows applied to non-resident term deposits.

With regard to additional scenarios targeting the withdrawal of committed facilities, the largest impact is observed for core domestic banks being the main providers of mortgages and loans to domestic NFCs. While the data distinguish between the NFCs and retail sectors, it is not possible to determine the extent of commitments which could be revoked by the banks. In addition, the full withdrawal from committed credit lines to retail customers includes also mortgages for which a sanction letter was issued. While prospective clients could have more than one sanction letter from multiple banks after shopping around for the best rates and loan conditions, no new property sale contracts could be signed in the immediate months following the reference date due to COVID-19-related measures. Nonetheless, the adverse scenarios assume that these temporary measures are not in place and all committed funds are available for withdrawal and show that all three bank categories remain well above the 100% LCR requirement.



## Scenario analyses: Banks' Solvency

The uncertainty due to COVID-19 could affect the economic performance of a number of firms resulting in an increased risk of default on loans and debt securities issued by these firms. As a response, governments and policy makers have issued a number of fiscal, macroeconomic and financial measures with the aim of mitigating this risk, improving resilience of various sectors as well as economic agents and bolstering economic activity (refer to Panel C for further detail on the implementation of policy measures). For the purposes of stress testing exercises, even though firms might not default, the uncertainty surrounding the unfolding of COVID-19 could affect the pricing of their debt securities.

In this regard, the CBM has also conducted sensitivity tests to assess the impact on capital from a deterioration in the quality of the banks' holdings of debt securities as well as default on loans granted to the productive sensitive sectors as identified in Panel A and mortgages. The tests are carried out both to assess the effect on the portfolios in isolation as well as combined, as described below.

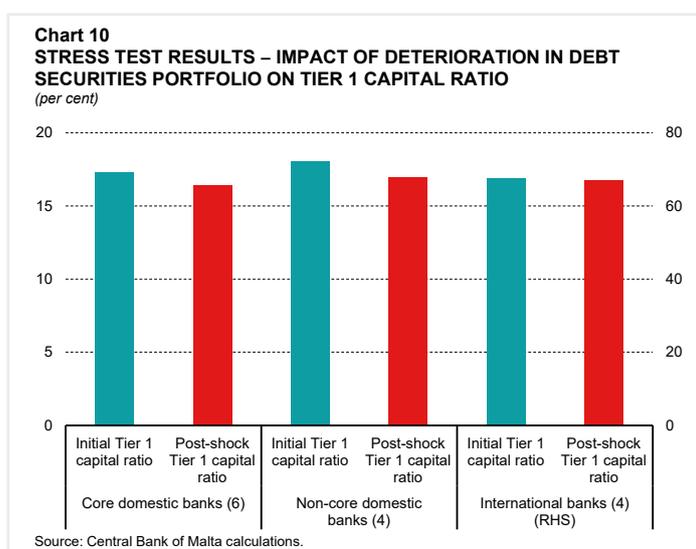
### Credit quality deterioration in the debt securities portfolio

In order to assess the impact of a deterioration in the credit quality and valuation of debt securities from companies operating within the identified sensitive sectors, the traditional credit quality deterioration (CQD) sensitivity analysis as reported in previous *Financial Stability Reports* could be modified to focus on the performance of these sectors. However, the traditional sensitivity test already takes into account possible contagion across all sectors and quantifies credit risk for debt securities held at AMC against a three-notch downgrade in their official rating, while a widening of credit spreads and valuation haircuts are applied for non-sovereign and sovereign non-AMC debt securities, respectively. Thus, the test is run on all holdings of debt securities as at March 2020, rather than only on those considered as sensitive sectors as described in Panel A.

As at March 2020, following the credit quality deterioration of banks' debt securities portfolio, the resulting Tier 1 capital ratios remain comfortably above the 6% regulatory requirement for all banks. Chart 10 shows that in such a scenario, Tier 1 capital ratios would fall from 17.26% to 16.43%, from 18.05% to 16.91% and from 67.53% to 66.96% for core domestic, non-core domestic and international banks, respectively.

### Credit quality deterioration in the loan portfolio

This sensitivity analysis has been designed to assess the impact on solvency from a hypothetical situation in which performing loans to the identified productive sensitive sectors (refer to Panel A of this Special Feature) and mortgages, which have been granted a moratorium (up to May 2020), would become non-performing.<sup>18</sup> This test excludes the effect on remaining sectors not identified as sensitive, given that these represent a negligible portion of the NFC portfolio and would not significantly influence the results. Banks which have not granted any moratoria on loans to the identified sensitive sectors and mortgages

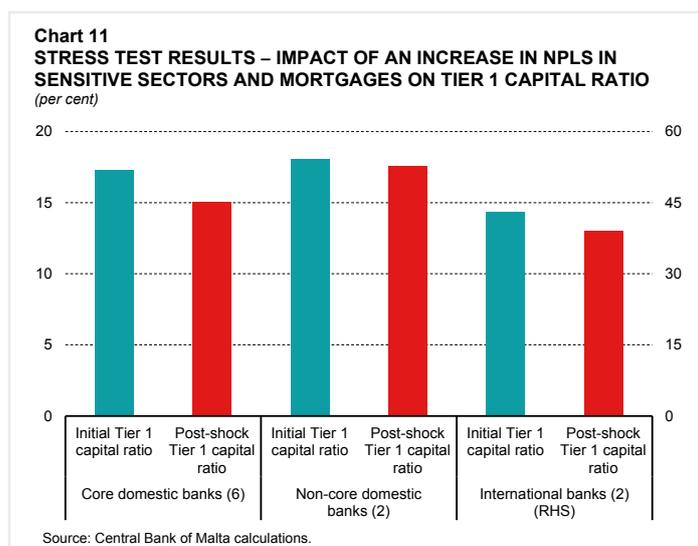


<sup>18</sup> While the test refers to bank data as at March 2020, the uptake of moratoria has been calibrated at May 2020 to capture both moratoria granted by banks at the onset of the pandemic, as well as after the Central Bank of Malta issued [Directive No. 18](#) on 13 April 2020 to regulate moratoria granted to credit facilities in exceptional circumstances.

are excluded from the analysis.<sup>19</sup> Upon classification of NPLs, the banks would need to increase their loan loss provisions based on the uncollateralised part of the loans. These provisions are charged to the P&L and in the case that operating profits provide only partial loss absorption, banks would need to release capital to offset the residual losses.

As at March 2020, the assumed increase in NPLs would have an impact on 10 banks, as only these banks have granted moratoria to the identified productive sensitive sectors and mortgages. Chart 11 shows that in such a scenario, Tier 1 capital ratios would fall from 17.26% to 15.07%, from 18.04% to 17.58% and from 43.10% to 39.02% for core domestic, non-core domestic and international banks, respectively – but remaining well above the regulatory Tier 1 capital ratio requirement of 6%.

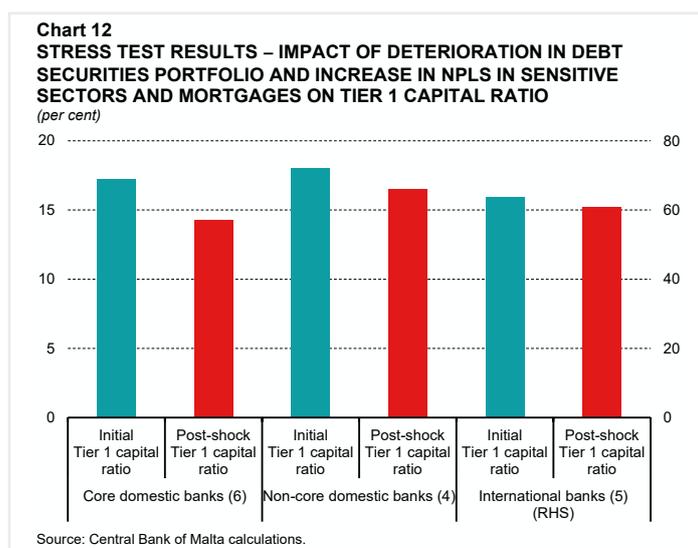
The impact on the Tier 1 capital ratio of the 10 banks in scope ranges between 0.08 and 7.37 percentage points, and is a worst case scenario assuming that none of the borrowers that were granted a moratorium would be in a position to honour their obligations.



### Credit quality deterioration in the debt securities and loan portfolio

To further assess the banks' solvency positions, the previous two sensitivity analyses are combined to consider a deterioration in the credit quality of both the debt securities portfolio as well as an increase in NPLs from the loans granted to the productive sensitive sectors (identified in Panel A) and mortgages. Fifteen banks fall within scope of this test, with the same 14 banks included in the sensitivity analysis on their debt securities portfolio plus another bank which does not hold debt securities but has granted moratoria to loans in the identified productive sensitive sectors.

The quantification of the impact of the combined scenario would result in a drop in the Tier 1 capital ratio of 3.02, 1.52 and 2.78 percentage points for core domestic, non-core domestic and international banks, respectively. Chart 12 shows that their Tier 1 capital ratio would drop from 17.26% to 14.24%, from 18.05% to 16.53% and from 63.75% to 60.97%, respectively. The materialisation of the assumed shocks would therefore leave all three bank categories in a comfortable position to absorb potential losses when compared to the regulatory minimum Tier 1 capital ratio of 6%. These results are



<sup>19</sup> For this reason, the starting Tier 1 capital ratio of non-core domestic and international banks varies from that presented in the previous section and [Chapter 3](#) due to the different sample of banks considered.

corroborated by the findings of the MST framework which by the end of the three-year test horizon show that core and non-core domestic banks would remain resilient to the pandemic-related scenario. Credit risk would be a major contributor to the overall losses experienced under the slower paced economic recovery assumed under the adverse scenario.

## Conclusion

As part of the stress testing frameworks presented in [Chapter 3](#), the CBM has run its MST framework based on scenarios tailored to the COVID-19 pandemic. The purpose of these scenarios is to focus on system-wide risks – thus idiosyncrasies, which are specific to individual institutions, may not be directly or specifically captured.

The scenarios applied in the MST consist of a baseline to account for the – at least partial – success of the containment measures introduced, and an adverse scenario assuming the implementation of additional measures to contain a second wave of infections that would further adversely influence the macroeconomic environment. Under the baseline scenario, it is observed that the overall losses experienced following the unfolding of the pandemic, which are characterised primarily by higher credit risk losses from both the holdings of debt securities and the loan portfolio (including mortgages), would affect non-core domestic banks more than core domestic banks due to their internationally-oriented business models. Moreover, even under the adverse scenario, core and non-core domestic banks manage to absorb the losses and satisfy the applicable capital requirements. The stress test results show overall resilience of the banking sector to the COVID-19-related scenarios, with capital depletion under the adverse scenario being more substantial for small individual banks. The results of the adverse scenario corroborate the findings of the ECB's [Vulnerability Assessment](#) for a sample of Eurosystem banks, which concludes that: “overall, the results show that the banking sector is well positioned to take on the pandemic-induced stress impact, but capital depletion in the severe scenario could be material.”

Panel B of this Special Feature complements the stress test results presented in [Chapter 3](#) with additional stress tests and sensitivity analyses run specifically to test resilience in terms of the liquidity and solvency position using data as at March 2020. While these data reflect at best the onset of COVID-19 and – in the meantime – banks are expected to be facing more dire conditions, a number of mitigation measures have been put in place to counteract the impact of the pandemic. Further detail on mitigation measures is provided in the next panel of this Special Feature.

With reference to the liquidity stress tests presented in this Panel, their results show broad resilience under both the adverse deposit withdrawals scenario (PDW framework) as well as the eight LCR adverse scenarios following an impact of higher outflows and a partial or full withdrawal of commitments. However, weaknesses can be observed in a few banks given the severe outflow rates applied to test for systemic risk. This is especially relevant for those banks that are reliant on short-term funding and further exacerbated for the category of international banks when these outflows are paired with withdrawals from non-resident term deposits.

When considering the PDW stress test, most banks would be able to survive an adverse bank-run type scenario for a protracted period extending beyond the one-month horizon. Vulnerabilities can be observed in some banks with regard to the LCR stress test. These vulnerabilities are to be expected given the severity of the assumed shocks in the respective scenarios, which are designed to assess systemic risk. Furthermore, these must be seen in the context of the current extraordinary circumstances and the banks' business models as a result of which it is expected that a few local banks would dip into an LCR lower than 100%. Such shortcomings are being tolerated during the crisis by the supervisors.

On the other hand, the solvency sensitivity analyses based on a deterioration in the credit quality of both the banks' debt securities portfolio and the increase in NPLs from moratoria granted on loans in the productive sensitive sectors and mortgages (tested individually and simultaneously) show an overall resilience in the banks' capital positions. The tests cover the entire debt securities portfolio and the loan portfolio (mortgages

and virtually all of the NFC loans portfolio as the productive sensitive sectors represent the main economic activities of NFC borrowers), respectively, and complement the findings of the MST by focusing on the short-term impact of specific asset classes.

Although the banking system in general appears to be resilient against the contemplated scenarios, stress tests are not to be construed as forecasts as they attempt to capture the effects of a contemplated scenario on banks' financial situation at a point in time. The duration and extent of the pandemic also remains unknown and thus any potential further deterioration in the macroeconomic environment would likely exacerbate the adverse impact on the results.

## Panel C: The CBM's Policy Response to the COVID-19 Outbreak<sup>20</sup>

The COVID-19 outbreak and the health measures taken to contain the pandemic presented a significant and unforeseen economic shock to businesses, as well as individual workers and households. Business disruptions have led to significant strains on cash flows and income, with some businesses experiencing a complete halt in cash inflows.

If left unaddressed, this temporary liquidity strain could lead to a forced fire sale of assets and result in the undue closure of otherwise solvent businesses. Indeed, as a result of business disruptions, some firms have found themselves in a position of temporary inability to service their bank lending, while others needed further financing for continued working capital needs. Persistent liquidity strains could also exacerbate the initial economic shock, and lead to a negative feedback loop. In the absence of adequate policy response, borrowers who were unable to continue servicing their debts would have otherwise defaulted, in accordance with the 90-days-past due criterion as specified in Article 178(1)(b) of CRR, or become forborne. Consequently, banks would be required to substantially increase prudential provisions to cover such losses, placing further strain on their profitability. Moreover, capital levels would be negatively impacted, thereby presenting an obstacle to the currently much needed bank lending capacity to continue financing economic activities in order to stimulate economic recovery. At the same time, affected borrowers seeking to obtain a mortgage on the back of the temporary reduced income will find it increasingly more difficult to meet the criteria stipulated in CBM Directive No. 16 'Regulation on Borrower-Based Measures.'

The ongoing work and policy measures that were introduced by the Central Bank of Malta, the ECB, European Supervisory Authorities, the MFSA and Government with the onset of the COVID-19 outbreak, played a crucial role in safeguarding financial stability in such circumstances. In exercising its macroprudential mandate, the Central Bank of Malta enacted a new Central Bank of Malta Directive No. 18 on Moratoria on Credit Facilities in Exceptional Circumstances, and also issued a Notice on the temporary easing of certain requirements of Central Bank of Malta Directive No. 16. Furthermore, the CBM issued Directive No. 17 on Business Continuity Measures concerning deposit and withdrawal of cash, deposit and encashment of paper-based instruments and provision of services through alternative delivery channels, and amended Central Bank of Malta Directive No. 8 on Monetary Policy Instruments and Procedures.

### Measures adopted by the Central Bank of Malta

#### *Amendments to Central Bank of Malta Directive No. 8 on 'Monetary Policy Instruments and Procedures'*

The Central Bank of Malta initially amended CBM Directive No. 8 on Monetary Policy Instruments and Procedures on 20 April 2020 to implement Guidelines ECB/2020/20 and ECB/2020/21.<sup>21,22,23</sup> The changes included collateral easing measures to facilitate Eurosystem counterparties in maintaining sufficient collateral in order to be able to participate in all liquidity-providing operations. Furthermore, the Governing Council of the ECB decided to temporarily increase its willingness to take on risks to support the provision of credit via its refinancing operations. In particular, the valuation haircuts applied to collateral were reduced by a fixed factor. Furthermore, national central banks could accept as collateral for Eurosystem credit operations marketable debt instruments issued by the central government of the Hellenic Republic.

<sup>20</sup> Prepared by Brendon Cassar, Economist within Policy Crisis Management and Stress Testing Department, and Joanne Ciantar, Analyst within Policy Crisis Management and Stress Testing Department. The authors would like to thank Stephen Attard, Head within Policy Crisis Management and Stress Testing Department, and Alan Cassar, Chief Officer Financial Stability for their valuable suggestions.

<sup>21</sup> Central Bank of Malta Directive No. 8 on Monetary Policy Instruments and Procedures. Source: <https://www.centralbankmalta.org/file.aspx?f=437>

<sup>22</sup> Guideline (EU) 2020/515 of the ECB of 7 April 2020 amending Guideline ECB/2014/31 on additional temporary measures relating to Eurosystem refinancing operations and eligibility of collateral (ECB/2020/21). Source: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020Q0515&from=EN>

<sup>23</sup> Decision (EU) 2020/506 of the ECB of 7 April 2020 amending Guideline (EU) 2015/510 on the implementation of the Eurosystem monetary policy framework and Guideline (EU) 2016/65 on the valuation haircuts applied in the implementation of the Eurosystem monetary policy framework (ECB/2020/20). Source: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020D0506&from=EN>

The Directive was further amended on 27 April 2020 to reflect the CBM's decision to reduce the minimum size threshold of domestic credit claims to €25,000 from €500,000.

The Directive was also amended on 18 May 2020, to implement Guideline ECB/2020/29.<sup>24</sup> The measures were aimed at mitigating the adverse impact on Eurosystem collateral availability of potential rating downgrades resulting from the economic fallout of the COVID-19 outbreak.

Together with the measures adopted in April 2020, these new measures aimed at ensuring that Eurosystem counterparties remain able to maintain and mobilise sufficient collateral in order to be able to participate in Eurosystem liquidity-providing operations and that therefore the Eurosystem is in a position to support the provision of credit to the euro area economy.

#### *Notice on the amendments to Directive No. 16 'Regulation on Borrower-Based Measures'*

The CBM also deemed it necessary to take additional measures to safeguard borrowers who have been negatively impacted by the COVID-19 pandemic and who may therefore be in a temporarily weaker financial position to obtain financing for purchasing RRE property. Furthermore, the COVID-19 pandemic caused serious disruptions in economic activity, including in the real estate market, particularly arising as a result of disruptions in banking and notarial services, increase in demand for cash buffers in such extraordinary times, and social distancing restrictions which had a negative impact on the search and negotiation processes between buyers and sellers.

As a result, on 1 June 2020, the CBM issued a Notice to amend Directive No. 16 on Borrower-Based Measures, which sets limits on the LTV ratio at origination (LTV-O), Debt-Service-to-Income (DSTI-O) ratio at origination, and term to maturity for RRE loans.<sup>25,26,27</sup>

In light of potential temporary shocks on borrowers' income as a result of the COVID-19 pandemic, borrowers purchasing a second property might find it more difficult to meet the 25% deposit requirement applicable as from 30 June 2020 and might therefore be unable to obtain the necessary financing, thereby reducing mortgage credit availability for new property buyers. As a result, in order to provide the necessary relief to prospective Category II borrowers, the CBM granted an extension of one year in the applicable LTV-O ratio for such borrowers, which currently stands at 85 per cent, up until 30 June 2021. This would enable such borrowers to disburse a lower amount of cash, namely to continue with a down-payment of 15% rather than the 25% as that originally anticipated by the Directive as from July 2020.

In light of the above-mentioned temporary income shock suffered by borrowers, the Central Bank of Malta provided for a temporary easing in the applicable stressed DSTI-O ratio for both Category I and Category II borrowers. Lenders can, at their own discretion and provided that a number of conditions are met, grant new RRE loans with a stressed DSTI-O ratio higher than the limit set in the Directive of 40%. As a result, lenders would be temporarily able to provide new mortgage loans where stressed debt servicing could amount to more than 40% of their income, subject to certain conditions.

The Central Bank of Malta granted the concession on the stressed DSTI-O ratio for a period of six months, until 1 December 2020, and indicated that it is to be applied on a forward-looking basis over the whole life cycle of the respective RRE loan.

<sup>24</sup> Guideline (EU) 2020/634 of the ECB of 7 May 2020 amending Guideline ECB/2014/31 on additional temporary measures relating to Eurosystem refinancing operations and eligibility of collateral (ECB/2020/29). Source: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020O0634&from=EN>

<sup>25</sup> Notice – Directive No.16 'Regulation on Borrower-Based Measures' – COVID-19 Related Measures. Source: <https://www.centralbank-malta.org/en/news/79/2020/8823>

<sup>26</sup> Central Bank of Malta Directive No. 16 in terms of the Central Bank of Malta Act (Cap.204) – Regulation on Borrower-Based Measures. Source: <https://www.centralbankmalta.org/file.aspx?f=72401>

<sup>27</sup> Directive No. 16 distinguishes between two categories of borrowers – Category I and Category II Borrowers. Category I borrowers refers mainly to borrowers purchasing their primary residence while Category II borrowers refers to borrowers purchasing RRE property for secondary residence purposes or for buy-to-let. Details on the full definitions of both Categories can be referred to in paragraph 6 of the Directive available in the link as per preceding footnote.

### *Central Bank of Malta Directive No. 17 on 'Business Continuity Measures concerning deposit and withdrawal of cash, deposit and encashment of paper based instruments and provision of services through alternative delivery channels'*

Following the advice of national health authorities for persons to remain indoors as much as possible, on 25 March 2020, the CBM issued Directive No. 17 on important measures concerning encashment of cheques to enable persons to avoid as much as possible visiting bank branches and other financial service providers, by depositing them through trusted third parties.<sup>28</sup> The measures were introduced after consultation with commercial banks as a temporary measure during the pandemic restrictions, and came into force on 26 March 2020. The Directive maintains banking services essential to the life of the community by setting minimum services to be provided by commercial banks and financial institutions, concerning:

- deposit, encashment and clearing of cheques, bank drafts and similar instruments;
- provision of services through alternative delivery channels;
- cheques marked as “only” for use by the beneficiary can be deposited by a trusted third party, subject to endorsement by both the payee and the third party;
- over-the-counter cash withdrawals from a deposit account associated with a payment card shall only be entertained if in excess of five hundred euro (€500).

### *Central Bank of Malta Directive No. 18 on Moratoria on Credit Facilities in Exceptional Circumstances*

On 13 April 2020, the Minister responsible for public health, with the concurrence of and after consultation with the Minister for Finance and Financial Services, the Superintendent of Public Health, the CBM and the MFSA, and following consultation with the Malta Bankers' Association, published Legal Notice 142 on Moratorium on Credit Facilities in Exceptional Circumstances Regulation. The Legal Notice gave the right to those borrowers who were materially affected by the COVID-19 outbreak to apply for a moratorium of six months on their loans, subject to the fulfilment of the eligibility criteria. Such criteria were regulated via the CBM Directive No. 18, which is also aligned with the guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis, issued by the EBA.<sup>29</sup>

#### *Features of Directive No. 18*

Directive No. 18 determines the eligibility criteria of applicants with the first consideration being that the debt servicing capability of various borrowers from a wide variety of economic sectors would have been negatively impacted by the COVID-19 outbreak in a heterogeneous manner. Moreover, the moratorium is open to all retail and non-retail clients including non-financial corporates, micro, small and medium sized enterprises, self-employed, persons in employment and households, who were not in arrears and were meeting fully their commitments prior to 1 March 2020.

Loans granted prior to 14 April 2020 can be in scope of the Directive and the accompanying Legal Notice 142.<sup>30</sup> The effects of COVID-19 were materialising in Malta in March 2020 with the first case reported on the 7 of March. Thus, any difficulties in repayment or defaults which were specifically as a result of COVID-19 should have manifested only after March and not before.

Applications for a moratorium are to be made on a voluntary basis, which application deadline was originally planned to expire on 30 June 2020, but was later extended to 30 September 2020.<sup>31</sup> Together with this application, obligors must present sufficient evidence to prove that their inability to continue servicing their debt is

<sup>28</sup> Central Bank of Malta Directive No. 17 in terms of the Central Bank of Malta Act (Cap. 204 of the Laws of Malta) – Business Continuity Measures concerning deposit and withdrawal of cash, deposit and encashment of paper based instruments and provision of services through alternative delivery channels. Source: <https://www.centralbankmalta.org/file.aspx?f=92791>

<sup>29</sup> EBA Guidelines on legislative and non-legislative moratoria on loan repayments applied in light of the COVID-19 crisis. Source: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Guidelines/2020/Guidelines%20on%20legislative%20and%20non-legislative%20moratoria%20on%20loan%20repayments%20applied%20in%20the%20light%20of%20the%20COVID-19%20crisis/882537/EBA-GL-2020-02%20Guidelines%20on%20payment%20moratoria.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Guidelines/2020/Guidelines%20on%20legislative%20and%20non-legislative%20moratoria%20on%20loan%20repayments%20applied%20in%20the%20light%20of%20the%20COVID-19%20crisis/882537/EBA-GL-2020-02%20Guidelines%20on%20payment%20moratoria.pdf)

<sup>30</sup> L.N. 142 of 2020 Moratorium on Credit Facilities in Exceptional Circumstances Regulations, 2020: <https://legislation.mt/eli/ln/2020/142/eng/pdf>

<sup>31</sup> See related press release on the following link: <https://www.centralbankmalta.org/en/news/14/2020/8832>

temporary and related to COVID-19. The evidence submitted is important for determining whether the issue is of temporary illiquidity and is a consequence of COVID-19 or an issue of longer-term insolvency.

The Directive also provides full flexibility to the borrower to be able to postpone temporarily interests and/or principal repayments, in part or in full. Thus, the borrower is able to adjust the repayments to its specific needs and can exit the moratorium before its expiry. During the period of the moratorium, interest continues to accrue. In line with this, in the 23 April CBM Communication, the CBM clarified that during the course of the moratorium, interest is to be accrued but not capitalised; in other words no interest compounding is to occur during this period.<sup>32</sup>

The moratorium allows a degree of certainty for businesses and individuals alike to be able to plan their cash flow management, which up to now has been extended to 12 months for those borrowers that had applied up to 30 June 2020, and by six months for new applicants following June 2020.

#### *Take-up of Moratoria up to May 2020<sup>33</sup>*

By the end of May 2020, the total value of loans subject to moratoria stood at €1.9 billion. Of these, 81% were granted to residents, largely by the core domestic banks and accounted for 10.2% of outstanding loans in the banking system.

Credit register data on the take-up of moratoria sheds light also on specific economic sectors that were hardest-hit by the COVID-19 pandemic. Table 4 ranks the sectors that were granted moratoria by the value of outstanding resident loans. The household sector attracted the lion's share of moratoria but these represented 9.8% of outstanding household loans.

Around 6,921 household loans were subject to a moratorium, of which 79% were mortgages to resident households. Non-resident mortgages subject to a moratorium were limited to just 1%. The rest were moratoria on consumer facilities, the bulk of which were to resident households (see Chart 13).

**Table 4**  
**RESIDENT EXPOSURES SUBJECT TO MORATORIUM – AS AT END MAY 2020**  
(number of loans; EUR million; percentage)

	Volume of loans <sup>(1)</sup>	Outstanding amounts <sup>(2)</sup>	Share in sector's outstanding loans <sup>(3)</sup>
Households	6,847	593.2	9.8%
Construction and real estate	487	293.3	19.4%
Accommodation and food service activities	370	194.4	45.7%
Financial and insurance activities	64	91.3	11.2%
Wholesale and retail trade; repair of motor vehicles and motor cycles	462	76.1	12.2%
Administrative and support service activities	72	76.1	23.0%
Professional, scientific and technical activities	81	62.6	20.2%
Manufacturing	148	44.7	21.3%
Information and communication	26	33.4	54.6%
Others	291	73.9	8.5%
<b>Total</b>	<b>8,847</b>	<b>1,538.9</b>	<b>13.7%</b>

Source: Central Bank of Malta.

<sup>(1)</sup> Number of loans subject to moratorium.

<sup>(2)</sup> Outstanding amount of loans subject to moratorium as at end month, in EUR million.

<sup>(3)</sup> The percentage of loans subject to moratorium in total outstanding loans held by the sector as at end of month.

<sup>32</sup> <https://www.centralbankmalta.org/en/news/79/2020/8805>

<sup>33</sup> Prepared by Wendy Zammit, Head Financial Stability Surveillance and Research Department, and Denis Cecchini Butsugan, Inspector Credit Reference Agencies within the Statistics Department. The authors would like to thank Alan Cassar, Chief Officer Financial Stability for his valuable suggestions.

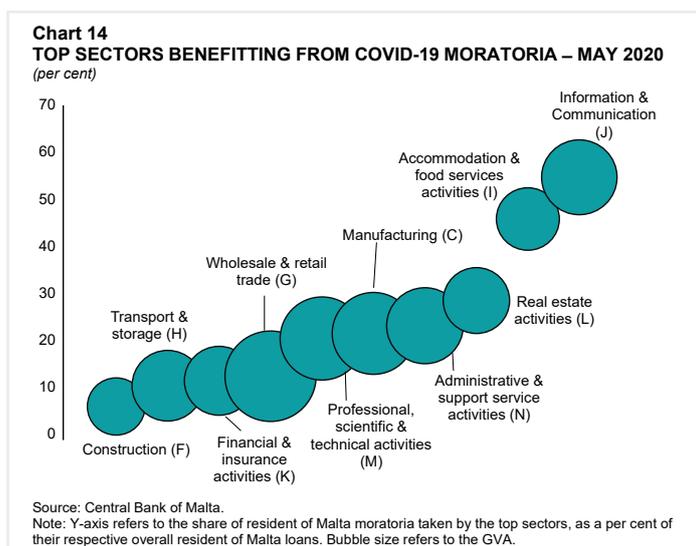
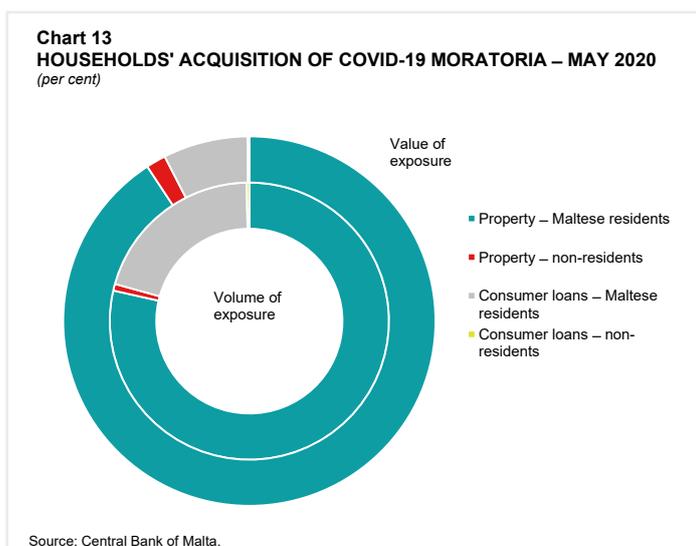
The real estate sector came to a virtual halt during the peak of the pandemic. In recent years, this sector has grown in importance with its share in overall gross value added standing at approximately 5% (see Chart 14). Up until May 2020, the related exposures subject to moratoria amounted to €258.7 million, accounting for some 28.3% of outstanding loans to the sector. Similarly, owing to social distancing, some of the projects suffered delays. A survey conducted by the Malta Association of Credit Management in May 2020 shows that 55% of respondents from the building and construction industry experienced no negative impacts from COVID-19 on their cash collection and cash flow to date.<sup>34</sup> However, 20% of the effected respondents noted that they failed to collect 40% – 60% of income that they used to collect in pre-COVID-19 times. Another 20% of respondents noted that they collected between 80% – 100% less than they used to. Indeed, 5.7% of outstanding loans to the resident construction sector were subject to moratoria.

The accommodation sector also suffered the brunt of the pandemic as airplanes were grounded, ports were closed, and hotels were shut down. Around €194 million of loans towards the accommodation sector

were subject to moratoria which accounted for 46% of outstanding loans towards this sector. The wholesale and retail trade sector was also affected with 12.2% of loans to this sector subject to a moratorium.

The professional, scientific and technical sector captures a variety of industries that offer expertise and provide services to other companies and even households. While some of these subsectors could continue providing their services remotely, their business was still affected negatively due to reduced cash flow and demand for their services, as other sectors were closed down. Some 81 loans were subject to a moratorium, equivalent to 20.2% of loans towards this sector.

The 'Others' category groups a number of sectors which in total have about €74 million of loans subject to a moratorium. Of these, the transportation and storage sector has about €28 million which accounted for around 10% of all the loans to this sector. In addition, the education sector which also captures childcare centres, had a total of €20 million of loans subject to a moratorium. This equates to about 68% of the outstanding loans pertaining to this activity. The arts, entertainment and recreation was also adversely hit as



<sup>34</sup> <https://www.macm.org.mt/media/articles/MACM%20Survey%20Covid19%20Construction%20May%202020.pdf>

major public events were either cancelled or postponed and venues were eventually closed down as part of the containment measures instituted following recommendations by the national health authorities. Around 40% of loans related to this sector were subject to a moratorium.

### **Conclusion**

As COVID-19 continues to spread across some countries, including Malta, consumers, firms and governments are rising to the challenge with response measures to minimise the medium- and long-term impacts on the economy. In particular, businesses and households affected by the crisis may face liquidity shortages and may be unable to affect timely payments on their financial commitments. This could in turn have negative repercussions on banks as it can lead to a larger number of defaults and increased own funds requirements for credit institutions. The policy measures introduced by the Central Bank of Malta, the supervisory authorities, international bodies and the Government to support credit institutions from the unprecedented economic shock in the wake of the COVID-19 pandemic help to avoid potential systemic financial crisis, and at the same time promote economic recovery.