## MACROPRUDENTIAL RECOMMENDATION ON NEW CREDIT AGREEMENTS FOR CONSUMERS – PROGRESS REPORT



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MAR. 2023

Data underlying the charts of the *Recommendation on new credit agreements for consumers – progress report* can be found in the attached file.

Data from some private sources are not released.



#### Contents

- 1 Macroprudential Recommendation within the legal framework of new credit agreements for consumers | 6
- 2 Macroeconomic environment and credit to households in 2022 | 9
- 3 Assessment of the degree of compliance with the Recommendation in 2022 | 12

#### Executive summary

In its capacity as macroprudential authority, the Banco de Portugal issued in July 2018 a Recommendation governing new credit for house purchase and new consumer credit for households (hereinafter referred to as the 'Recommendation'). The purpose of the Recommendation is to promote the adoption of prudent credit standards, strengthening credit institutions' resilience and mitigating borrowers' arrears in the future.

According to the methodology of the European Systemic Risk Board (ESRB, 2021), the Recommendation led to a change in the classification of macroprudential policy in Portugal from an accommodative to a neutral stance. Residual risk, after consideration of the Recommendation, falls within the range set out as the objective for financial stability. This classification was maintained in 2022.

In 2022 almost all new credit for house purchase recorded a loan-to-value (LTV) ratio of 90% or less. The average LTV ratio of new credit for the purchase of own and permanent residence, as defined in the Recommendation, decreased by 3 p.p. from the third quarter of 2018 and by 2 p.p. from 2021, to stand at 75% in 2022. In the year under review, 54% of new credit for house purchase had an LTV ratio of 80% or less. Around 93% of the stock of loans for house purchase had an LTV ratio of 80% or less in December 2022.

To prevent personal credit from being used to circumvent LTV ratio limits, institutions implemented a number of controls: (i) indicating in the internal rules that this type of operation is prohibited; (ii) monitoring personal credit granted close to the signing of agreements for credit for house purchase and (iii) collecting information on the origin of own capital. Signing simultaneous agreements for credit for house purchase and personal credit, to an amount likely to be used for the same purpose, proved to be of low materiality.

Around 91% of the amount associated with new credit for house purchase and consumer credit was granted to borrowers with a debt service-to-income (DSTI) ratio of 50% or less, calculated according to the definition in the Recommendation. The amount granted with a DSTI ratio between 50% and 60% and with a DSTI of over 60% was 6% and 3% of the total respectively. Both these shares were below the limits of the exceptions provided for in the Recommendation. However, use of the exceptions increased in 2022, notably for DSTI ratios between 50% and 60%.

Against a background of rising interest rates, the average actual DSTI ratio increased in 2022 compared with the previous year (from 23.5% to 25.1%). The risk profile of borrowers of new credit for house purchase continued to improve, with a decline in the share of credit granted to high-risk borrowers (debtors with a DSTI ratio of over 60%, calculated according to the Recommendation, and/or LTV ratio of over 90%), from 32% in the third quarter of 2018 to 3% in 2022.

From 1 April 2022 onwards the limit on the maximum maturity of new credit agreements for house purchase was set according to the borrower's age. In December 2022 the weighted average maturity of new credit for house purchase was 30.7 years, i.e. 2.7 years less than in July 2018, resulting from the institutions' broadly based compliance with convergence of the average maturity towards 30 years. A monthly convergence plan was set out for institutions that did not yet converge.

The Recommendation's regular payments requirement was still complied with at a high rate. The justifications provided by institutions for non-compliance with this requirement were mainly related to the granting of bridging loans.

### Macroprudential Recommendation within the legal framework of new credit agreements for consumers

In its capacity as macroprudential authority, the Banco de Portugal issued in February 2018 a Recommendation promoting the adoption of prudent credit standards for households. At the same time, the Recommendation set maximum limits to the loan-to-value (LTV) and debt serviceto-income (DSTI) ratios, to the maturity of new loans, and established a regular principal and interest payments requirement. Since 1 July 2018 the limits apply to new credit for house purchase, credit secured by a mortgage or equivalent guarantee, and consumer credit granted by credit institutions and financial companies having their head office or branch in Portugal.

#### What is the Recommendation?

#### Figure 1.1 • Summary of the macroprudential Recommendation on new credit agreements for consumers

#### Limits to the LTV (a)

- · Up to 90% for own and permanente residence;
- · Up to 80% for other purposes;
- · Up to 100% for immovable property held by credit institutions.

#### Limit to the DSTI (9)

- · 50% or less, with the following exceptions :
  - . Up to 10% of the total amount of new credit may be granted with a DSTI ratio of up to 60%;
  - Up to 5% of the total amount of new credit may exceed the limit of the DSTI.

#### Regular payment requirement

New credit agreements should have regular principal and interest payments.

#### Housing maturity limits:

- Maximum maturity:
  - · 40 years for borrowers aged 30 or under;
  - · 37 years for borrowers aged over 30 and up to and including 35;
  - · 35 years for borrowers aged over 35
- · Average maturity of the set of new credit agreements, in each quarter of each year, less than or equal to 30 years.

#### Consumer credit maturity limits:

- · Maximum maturity of 7 years for personal credit;
- · Maximum maturity of 10 years for car credit and personal credit for healthcare, education or renewable energy.

Notes: (a) The LTV ratio is the ratio of the total amount of credit agreements secured by immovable property to the minimum between the purchase price and the appraisal value of the immovable property pledged as collateral. (b) The DSTI ratio is the ratio of the total amount of monthly instalments of a borrower's total debt to his/her monthly income less taxes and compulsory social security contributions. The calculation of the DSTI ratio should assume that the instalments of the new credit agreement are constant and consider the impact of an interest rate rise according to maturity in the case of variable and mixed interest rate agreements and a reduction in income in the case of a borrower aged 70 and over at the planned expiry of the agreement, except if at the time of the creditworthiness assessment the borrower is already retired, as follows:  $\ln c_0 DSTI = x1^* \ln c + x2^* \ln c^* (1 - \alpha)$ , where:  $\ln c = c_0 \ln c_0 \ln c_0$ net income of the borrower; x1 = number of years during the period of the agreement when the borrower is aged 70 or under divided by the number of years of the agreement; x2 = number of years during the period of the agreement when the borrower is aged over 70 divided by the number of years of the agreement;  $\alpha \ge 0.2$  (as regards agreements with more than one borrower and in which information on aggregate income is only available for the group of borrowers, the age of the borrower with the earliest date of birth will be considered for the purpose of calculating the reduction in income). A shock on the interest rate of 1 p.p. should be considered for new business with a maturity of up to and including 5 years, of 2 p.p. for agreements with a maturity of 5 to 10 years, and of 3 p.p. for agreements with a maturity of over 10 years. In the case of credit agreements at a mixed interest rate, the institution should consider the heavier instalment for the customer between that resulting from applying the increase in the index, taking into account the maturity of the agreement in the variable interest rate period, and that resulting from the fixed rate period.

## What is the economic rationale of the Recommendation?

The adoption of this measure occurred relatively early in the financial cycle's expansionary phase, in an environment of low interest rates and conducive to the adoption of less tight credit standards by the financial sector. By encouraging the adoption of prudent credit standards, the Recommendation aims to increase the resilience of households and the financial sector to adverse shocks, mitigating borrowers' arrears in the future.

Limits on the LTV ratio contribute to a decrease in losses for credit institutions should borrowers default, since the lower weight of loans with regard to the asset value means that borrowers use a certain amount of own funds to begin with. Furthermore, by defining the value of the property as the minimum between the appraisal value and the purchase price of the immovable property, the Recommendation prevents the set limits from being circumvented through overvaluation of the property compared to the purchase price.

The limit on the DSTI ratio contributes to a decrease in households' probability of default by restricting the burden of the debt service-related monthly instalment on their income level. The limit on the DSTI ratio considers an interest rate rise in the case of variable and mixed interest rate agreements and a reduction in income in the case of a borrower aged 70 and over at the planned expiry of the agreement. This method of calculation aims to promote a safety margin for borrowers to cope with a future interest rate rise. The importance of this element of the Recommendation was evident in 2022, given the context of surging interest rates.

Limits on the maturity of new credit for house purchase are intended to avoid situations where the limit on the DSTI ratio is circumvented by extending the maturity of the agreement and allow for a future extension of the loan maturity in the event of borrowers' financial distress. The maximum maturity of new credit agreements for house purchase in Portugal is much higher than in other European Union (EU) countries. Stabilising the average maturity of new credit agreements for house purchase at high levels involves increased risk for institutions, since they are exposed to fluctuations in the economic and financial cycle over quite a long period. Credit agreements with high maturities result in higher exposure of households to over-indebtedness risk, especially in a context of rising interest rates.

In 2022 the Recommendation was amended to promote the gradual convergence of the average maturity of new credit agreements for house purchase towards 30 years by the end of 2022, as established from the start. This amendment occurred because the average maturity of new loans for house purchase had not been converging according to the defined path since 2020. With effect from 1 April 2022, the maximum maturity of new credit agreements for house purchase, previously set at 40 years for all borrowers, depends on the borrower's age: (i) it remains at 40 years for borrowers aged 30 or under; (ii) it was reduced to 37 years for borrowers aged over 30 and up to and including 35; (iii) it declined to 35 years for borrowers aged over 35. From 2023 onwards the weighted average maturity of each institution's new credit agreements for house purchase should not exceed 30 years. This recommendation will be monitored on a quarterly basis.

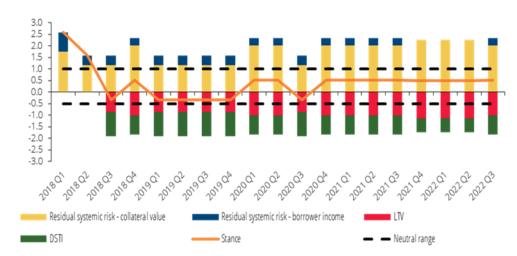
#### What benefits has the Recommendation had?

According to various studies, published in the *Working Papers* series and in *Banco de Portugal Economic Studies*, the Recommendation contributed to reducing: (i) household indebtedness and (ii) the probability of default and loss given default, with a positive impact on the banking system's capital ratio.

The European Systemic Risk Board (ESRB) considered the macroprudential policy adopted by Portugal to be appropriate and sufficient to mitigate the risks identified. As part of the ESRB assessment of risks and vulnerabilities in residential real estate markets in the EU for 2021, Portugal was assessed as medium risk, as in the previous assessment for 2019. However, Portugal was not the subject of any warning or recommendation by the ESRB, contrary to seven other European countries, given that the macroprudential policy adopted, in particular the Recommendation, continued to be considered appropriate and sufficient to address the risks identified.

According to an ESRB methodology (2021), the Recommendation prompted a change from a classification of 'accommodative stance' to 'neutral stance' from the third quarter of 2018 onwards, as residual risk - after its consideration - falls within the range set as the objective for financial stability.1 This effect shows that the Recommendation has an impact on neutralising residual systemic risk in the residential real estate sector, which in the third quarter of 2022 was also due to an increase in the debt burden (less resilience reflected in an increase in residual systemic risk associated with the borrower income segment) (Chart 1.1). On the other hand, the decline in the average LTV ratio of new credit for house purchase raised the system's resilience and reduced residual systemic risk associated with the collateral value segment.

Chart 1.1 • Macroprudential policy stance



Sources: ESRB (2021), ECB, OECD and Banco de Portugal. | Note: Residual systemic risk in each segment (collateral value and borrower income) corresponds to the difference between gross systemic risk and resilience weighted by the share of each segment and already taking into account the effect of systemic importance. Neutral range corresponds to the neutral level of residual systemic risk; residual systemic risk values after considering macroprudential policy above the neutral level entail an accommodative macroprudential policy stance, while values below the neutral level indicate a tight macroprudential policy stance. The LTV ratio represents the effect of the 90% limit imposed by the Recommendation to the ratio of the total amount of new credit agreements secured by immovable property to the minimum between the purchase price and the appraisal value of the immovable property pledged as collateral. The DSTI ratio represents the effect of the 50% limit imposed by the Recommendation to the ratio of the total amount of monthly instalments to the borrower's monthly income less taxes and compulsory social security contributions of a credit agreement exclusively for house purchase with a 37-year maturity, borrower aged 34 with a monthly income of €1.500, a variable interest rate equal to the average interest rate on new loans for house purchase, calculated taking into account a 3 p.p. increase in the reference rate for agreements with a maturity of over 10 years. The effect of the Recommendation assigned by this methodology (reflected in the LTV and DSTI bars) varies only due to the greater importance of each segment (collateral value and borrower income respectively) in defining the stance.

<sup>1</sup> For further details, see the Special issue entitled "Assessing the impact of the macroprudential Recommendation on the macroprudential policy stance with regard to credit for house purchase" of the Macroprudential recommendation on new credit agreements for consumers – progress report for March 2022.

## 2 Macroeconomic environment and credit to households in 2022

In 2022 the high and persistent level of inflation in the euro area prompted the Governing Council of the European Central Bank (ECB) to start a process of monetary policy normalisation. Interbank interest rates rose at a faster pace for all fixation periods in this period (4.04 p.p. in 421 days for the one-year Euribor) than in other episodes of rising interest rates within the euro area (Chart 2.1). The pass-through of monetary policy normalisation to interest rates on new credit for house purchase was fast, as a result of the high share of this type of variable rate credit agreement. In December 2022 the average interest rate on new credit for house purchase reached 3.2%, a peak since July 2014 and significantly higher than in January 2022 (0.8%).

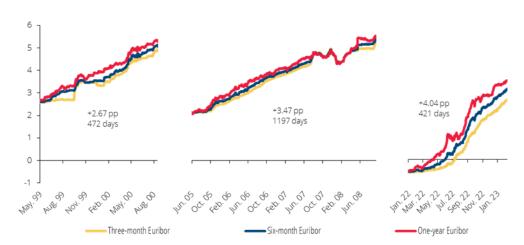


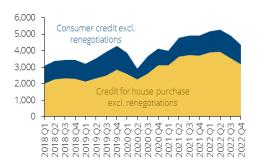
Chart 2.1 • Periods of Euribor increases | Per cent

Source: Refinitiv. | Notes: The three periods with the largest increases in interbank rates since 1997 have been selected. The reference values for changes and days shown in the chart refer to developments in the one-year Euribor. Latest observation: 14 February 2023.

In a context of rising interest rates, the amount of new credit for house purchase excluding renegotiations was lower in the fourth quarter of 2022 than in the same quarter a year earlier, but still remained above that of the same quarter in 2019. The amount of these new loans decreased from €3,707 million in the fourth quarter of 2021 to €3,160 million in the fourth quarter of 2022, despite remaining above the value for the same quarter in 2019 (€2,833 million) (Chart 2.2). New credit for house purchase excluding renegotiations fell by 14.8% in the fourth quarter of 2022, compared with 19.0% growth in the fourth quarter of 2021 (Chart 2.3). The amount of new consumer credit excluding renegotiations, at €1,203 million at the end of 2021, increased to around €1,300 million per quarter and in the first three quarters of 2022 (Chart 2.2). However, in the last quarter of the year this amount fell to similar values than at the end of 2021 (€1,187 million). For this type of credit, the annual rate of change decreased from its peak in the second quarter of 2021, i.e. 79.6%, to -1.3% in the last quarter of 2022 (Chart 2.3). Overall, the amount of new credit to households excluding renegotiations decreased from €4,910 million in the fourth quarter of 2021 to €4,347 million in the same quarter in 2022. Nevertheless, this figure is higher than that in the fourth quarter of 2019 (€4,295 million).

**Chart 2.2** • New credit for house purchase and new consumer credit | EUR millions

**Chart 2.3** • New credit for house purchase and new consumer credit | Annual rate of change, per cent





Source: Banco de Portugal. | Notes: Latest observation: Fourth quarter of 2022. Renegotiation means renegotiating the terms of the credit agreement.

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According to the *Bank Lending Survey*, from the second half of 2022 onwards, credit standards for housing loans tightened slightly and demand for this type of loan declined. In 2022 there was, on the one hand, a slight increase in the proportion of rejected applications for loans. On the other hand, the banks surveyed reported a significant decline in household demand for credit, which was stronger in credit for house purchase, since the second half of 2022. Lower consumer confidence, the increase in the general level of interest rates and to a lesser extent, housing market prospects were the factors banks identified as the main determinants of the decrease in consumer credit demand.

Over the same period, residential real estate prices continued to rise. There were different developments in housing prices compared to credit. The annual rate of change in housing prices increased in the first three quarters of 2022, from 11.6% in the last quarter of 2021 to around 13%. However, housing prices decelerated in the last quarter of 2022 with an annual rate of change of 11.3%.

The share of residential real estate transactions financed by domestic credit remained stable in the 2018-22 period, at around 46%. This is significantly lower than in the period before the sovereign debt crisis (76% in 2009-10) (Chart 2.4). The protracted period of low interest rates, rising housing demand by non-residents and limited housing supply contributed to this increase. However, the current environment of rising cost of credit, the expectation of ongoing interest rate rises, and the potential loss in real household income, may translate into moderate growth in residential real estate prices through lower demand for housing by both residents and non-residents.

9,000 90 Average share financed with 80 8.000 bank credit 2009-10: 76% Average share financed with 7.000 70 60 6,000 **EUR million** 50 cent 5,000 40 **a** 4.000 30 3,000 2,000 20 1,000 10 0 2011.01 2013 Q1 2015.01 2017 Q1 2019 01 2021.01 2009 O1 Transacted amount financed with bank credit ■ Transacted amount without bank credit financing % financed with bank credit • • • • % financed with bank credit excluding renegotiations

Chart 2.4 • Transactions in dwellings versus new credit for house purchase

Sources: Banco de Portugal and Statistics Portugal. | Notes: The way information on transactions in dwellings is calculated has been revised by Statistics Portugal. Transactions in dwellings where the buyer is part of the institutional sector of Households are now reported on a quarterly basis. For further details, see the note on the 'Housing Price Index' of Statistics Portugal. Renegotiation means renegotiating the terms of the credit agreement. Latest observation: 2022 Q4.

In 2022 the household indebtedness ratio narrowed slightly, remaining below the euro area average, while the saving rate fell to a record low. The household indebtedness ratio as a percentage of disposable income declined from 96.9% at the end of 2021 to 96.4% in the third quarter of 2022 (Table 2.1). The household saving rate as a percentage of disposable income has declined since the second quarter of 2021, and more recently it declined from 6.6% in the second quarter of 2022 to 4.7% in the third quarter of 2022 (Table 2.1). This historically low level of the saving rate is well below that observed for the euro area, and reflects high inflation, not matched by nominal income, and an increase in the debt burden in 2022. A low saving rate reduces borrowers' ability to withstand negative income shocks and to cope with their debt burden.

Table 2.1 • Developments in the household indebtedness ratio and saving rate | Per cent

	2019 2020			2021			2022					
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Indebtedness (% of disposable income)												
Portugal	94.8	94.8	95.7	96.4	97.3	97.7	97.1	97.4	96.9	96.6	96.3	96.4
Euro area	97.3	96.8	98.0	98.8	99.7	99.8	99.9	100.2	100.0	99.6	99.6	98.7
Saving rate (% of disposable income)												
Portugal	7.2	7.7	10.5	11.1	11.9	13.3	10.9	10.5	9.7	7.9	6.6	4.7
Euro area	13.4	14.3	17.4	18.4	20.1	21.2	19.7	19.2	18.1	16.4	14.9	14.3

Sources: Banco de Portugal, ECB and Eurostat (Banco de Portugal calculations). | Notes: Annualised figures. Non-consolidated figures for total debt. Figures for disposable income and saving are adjusted for seasonal and calendar effects.

## 3 Assessment of the degree of compliance with the Recommendation in 2022

In 2022 the Banco de Portugal monitored compliance with the limits set out in the Recommendation in order to prevent actions undermining its effectiveness or possible distortions of competition between institutions. The Banco de Portugal's assessment was based on the monthly reporting of compliance with the Recommendation by 13 credit institutions, representing around 93% of new credit to households, and on data available in the Banco de Portugal's Central Credit Register (CCR). In addition, institutions are asked for a self-assessment report on an annual basis, signed by at least one member of their Board or branch management, where applicable.

In 2022 the Banco de Portugal continued to interact closely with major institutions in the Portuguese financial system, including institutions specialising in consumer credit, via telephone, email and bilateral meetings, and by sending letters to Boards. The purpose of these contacts with such institutions was to gauge the degree to which the Recommendation is being implemented, clarify the information to be reported and check the compliance of advertising campaigns carried out by the institutions with the provisions of the Recommendation.

This Report reviews the period from July 2018, the first month the Recommendation was implemented, to December 2022, with a particular focus on 2022. As with previous reports, data for 2018 are used as a starting point to assess the evolution of the borrowers' risk profile throughout the period under review.

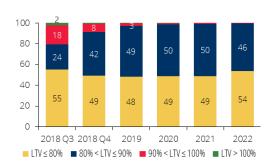
#### Loan-to-value (LTV) ratio

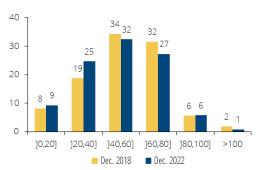
In 2022 almost all new credit for house purchase recorded an LTV ratio of 90% or less. The Recommendation establishes a limit of 90% on the LTV ratio for new credit for the purchase of own and permanent residence, a segment accounting for around 83% of total new credit for house purchase. In 2022 and as observed in previous years, the share of new credit for house purchase with an LTV ratio of over 90% was very residual (0.3%), resulting in a significant reduction from the third quarter of 2018 (20.5%). Around 54% of new credit for house purchase had an LTV ratio below 80%, representing an improvement from 2021 (49%), and was close to the value recorded in the third quarter of 2018 (55%) (Chart 3.1).

Although the macroprudential Recommendation only applies to new business and its influence on the stock of credit for house purchase is slow, between December 2018 and December 2022 there was a recomposition of the portfolio of loans for house purchase in terms of an LTV ratio of 80% or less. In December 2022, around 93% of the stock of loans for house purchase had an LTV of 80% or less. The share of loans for house purchase in portfolio with an LTV ratio of over 40% and of 80% or less decreased from around 66% in December 2018 to 59% in December 2022. The share of credit for house purchase with an LTV ratio of 40% or less increased from around 27% to around 34%. The share of loans with an LTV ratio of over 100% was very residual (around 1%) (Chart 3.2). Thus, there was an increase in the institutions' ability to absorb an unanticipated downward correction in residential real estate prices.

**Chart 3.1** • Distribution of new credit for house purchase by LTV ratio | Per cent

**Chart 3.2** • Distribution of the stock of loans for house purchase by LTV ratio | Per cent



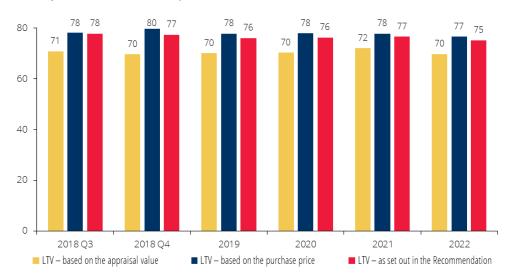


Source: Banco de Portugal. | Note: Information reported by a sample of nine institutions that in 2022 accounted for around 97% of the housing credit market.

Source: Banco de Portugal.  $\mid$  Note: This distribution is based on data available in the CCR.

In 2022 the weighted average LTV ratio of new credit for the purchase of own and permanent residence, as set out in the Recommendation, was around 75%, translating into a reduction compared with 2021 and the third quarter of 2018 (78%). Since 2018 the average LTV ratio calculated on the basis of the immovable property's appraisal value remains at around 70% (Chart 3.3). In 2022 the minimum between the property's purchase price and appraisal value (as set out in the Recommendation) remained on average closer to the property's purchase price. This implies that the property's appraisal value remained above its purchase price.

**Chart 3.3** • Evolution of the weighted average LTV ratio of new credit for the purchase of own and permanent residence | Per cent



Source: Banco de Portugal. | Notes: Information reported by a sample of nine institutions that in 2022 accounted for around 97% of the housing credit market. In some periods the value of the average LTV ratio weighted by the credit amount is different from the minimum between the value of the average LTV ratio weighted by the credit amount based on the purchase price and on the appraisal value. This is due to the fact that in some cases the minimum is the purchase price and in others the appraisal value.

The Banco de Portugal has been monitoring the possibility of personal credit agreements being used to circumvent the limits on the LTV ratio set out in the Recommendation. In 2022 a number of institutions were asked to provide information on the controls put in place or to be implemented to prevent such situations from occurring. According to the answers obtained, control is carried out by: (i) indicating it in the internal rules; (ii) monitoring personal credit granted close to the signing date of credit agreements for house purchase and (iii) collecting information on the origin of own capital. Signing simultaneous agreements for credit for house purchase and personal credit, to an amount likely to be used for the same purpose, either within the same credit institution or using different banks, has low materiality, according to the data collected so far (around 1% of the total amount in 2022). With regard to the cases identified, further action was taken to correct the situation.

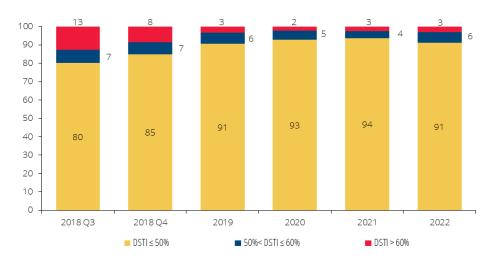
#### Debt service-to-income (DSTI) ratio

In 2022 around 91% of new credit agreements for house purchase and consumer credit was granted to borrowers with a DSTI ratio of 50% or less, calculated according to the definition in the Recommendation. This value is slightly lower than in 2021 (94%). The Recommendation introduced two exceptions: institutions may grant (i) up to 10% of the credit volume to borrowers with a DSTI ratio of between 50% and 60% (before April 2020 this threshold stood at 20%); and (ii) up to 5% of the volume of credit to borrowers with a DSTI ratio of over 60%. The use of both exceptions requires that institutions provide adequate justification and the Banco de Portugal accepts it. Since 2018 the share of new credit agreements with a DSTI ratio between 50% and 60% has declined, reaching a trough of 2.7% in February 2021. However, in 2022 there was a reversal of this trend to around 6% of the total amount of new loans granted (Chart 3.4). In the year under review, around 3% of the amount of new credit granted was associated with borrowers with a DSTI of over 60%, i.e. declining by around 10 p.p. from the third quarter of 2018. Financial institutions justified the use of exceptions with the proven financial capacity of borrowers, the existence of security or guarantees given by the borrowers' parents, the existence of other real collateral or the fact that these were loans to consolidate loans in other credit institutions.

Following the reduction observed since the implementation of the Recommendation, in 2022 and compared with the previous year, the average actual DSTI ratio increased (from 23.5% to 25.1% respectively). This increase is partly accounted for by the current environment of rising interest rates. Between the third quarter of 2018 and 2021 there was a less disperse distribution of the DSTI ratio, mainly associated with a decrease in the higher percentiles, with the 75<sup>th</sup> and 90<sup>th</sup> percentiles declining from 32.2% and 49.3% to 29.7% and 40.7% respectively. In 2022 there was a reversal of this trend, as the 90<sup>th</sup> percentile increased by around 2 p.p. against 2021 to 42.6%, but was still significantly lower than in 2018. At the same time, the 75<sup>th</sup> percentile also increased, to a similar value than recorded in the third quarter of 2018 (32.3%) (Chart 3.5).

When considering only new credit for house purchase, the average actual DSTI ratio increased from 21.9% in 2021 to 24.0%, to stand at a higher value than in the third quarter of 2018 (23.2%). The largest increase in the average actual DSTI ratio for this type of credit between 2021 and 2022 (by 2.1 p.p. compared with 1.6 p.p. when considering all new loans to households) resulted from greater exposure of credit for house purchase to interest rate rises. This is because this type of credit agreement is typically at a variable rate, while consumer credit agreements are at a fixed rate. However, the 90<sup>th</sup> percentile of the distribution of the actual DSTI ratio for new credit for house purchase in 2022 (40.0%) was still below the value for the third quarter of 2018 (42.1%) (Chart 3.6).

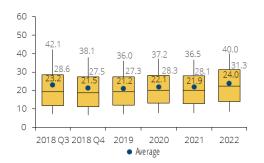
**Chart 3.4** • Distribution of new credit for house purchase and new consumer credit by DSTI ratio | Per cent



**Chart 3.5** • Distribution of the actual DSTI ratio for new loans to households

| Per cent

**Chart 3.6** • Distribution of the actual DSTI ratio for new loans for house purchase | Per cent



Source: Banco de Portugal. | Notes: Revised figures for the latest available data based on improved reporting. The chart represents the quartile distribution of the actual DSTI ratio, i.e. without taking into account the shocks on the interest rate and on borrower income set out in the Recommendation. The lower and upper ends correspond to the 10th percentile and the 90th percentile, while the bottom and top of the boxes correspond to the 25th and 75th percentiles. These distributions are based on data available in the CCR.

Source: Banco de Portugal. | Notes: The chart represents the quartile distribution of the actual DSTI ratio for new loans for house purchase, i.e. without taking into account the shocks on the interest rate and on borrower income set out in the Recommendation. The lower and upper ends correspond to the 10th percentile and the 90th percentile, while the bottom and top of the boxes correspond to the 25th and 75th percentiles. These distributions are based on data available in the CCR.

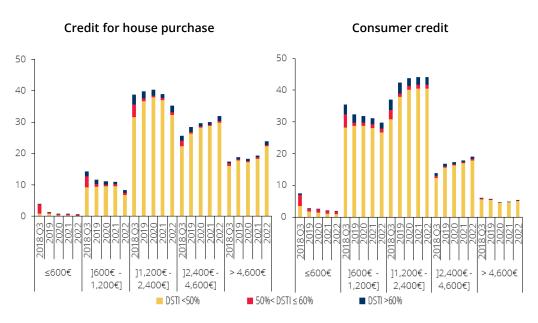
New credit for house purchase was mainly granted to borrowers with net monthly income of more than €1,200. In 2022, and as with previous years, credit for house purchase was mainly granted to borrowers with net monthly income of more than €1,200, while consumer credit was mainly to debtors with net monthly income between €600 and €2,400. From the third quarter of 2018 to the end of 2022 there was a downward trend in the share of new credit for house purchase, sharpening in 2022, associated with borrowers with net monthly income of less than €1,200. By contrast, there was an increase in the share of credit to borrowers with net monthly income of more than €2,400, especially in the category of borrowers with income of more than €4600 (Chart 3.7).

From 2018 to 2021 there was a decline in the share of new loans granted to borrowers with a DSTI ratio of over 50%, calculated according to the Recommendation, and with lower net income. This

change in structure was seen across all borrowers' net monthly income brackets, but more visibly in the lowest income levels, largely mirroring lower risk in credit granted.

In 2022, for lower income levels there was a slight decrease in the share of new credit agreements for house purchase for borrowers with a DSTI ratio of over 50%, calculated according to the Recommendation (from 0.31% in 2021 to 0.30% in 2022). For higher income brackets, notably net income of €1200 and higher, new credit for house purchase with a DSTI ratio of over 50% went up from 4.2% in 2021 to 6.8% in 2022. This reflects greater use of the exceptions considered in the Recommendation (Chart 3.7). In 2022 the shares of new credit for house purchase and new consumer credit associated with borrowers with net monthly income of €1,200 or less and a DSTI ratio of over 50% were not considerable, standing at 1.9% and 4.0% respectively.

**Chart 3.7** • New credit by interval of DSTI ratio and net monthly income of borrowers | Per cent



Source: Banco de Portugal. | Notes: DSTI as set out in the Recommendation. Based on information reported by a sample of 13 institutions that in 2022 accounted for around 93% of the housing credit market.

From the entry into force of the Recommendation in 2018 to 2022 there was a continued improvement in the risk profile of borrowers of credit for house purchase. The share of credit granted to high-risk borrowers, i.e. debtors with a DSTI ratio of over 60% – calculated according to the Recommendation – and/or an LTV ratio of over 90%, decreased from around 32% of the total amount of new credit for house purchase in the third quarter of 2018 to around 3% in 2022. This reduction was offset by an increase in the amount of credit granted to borrowers with a low risk profile (from 43% in the third quarter of 2018 to around 49% in 2022) and an increase in the total amount of new loans to borrowers with an intermediate risk profile, from 26% in the third quarter of 2018 to 48% in 2022 (Chart 3.8).

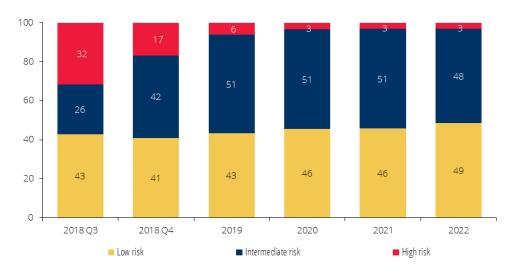


Chart 3.8 • Borrowers' risk profile in new credit for house purchase | Per cent

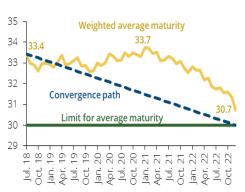
Source: Banco de Portugal. | Notes: On the basis of information reported by a sample of nine institutions that in 2022 accounted for around 97% of the housing credit market. Low risk: DSTI ≤ 50% and LTV ≤ 80%; High risk: DSTI > 60% and/or LTV > 90%; Intermediate risk: other cases.

#### **Maturities**

The weighted average maturity of new credit for house purchase was 30.7 years in December 2022, i.e. a reduction of 2.7 years since July 2018. Between July 2018 and December 2019 the average maturity of new credit for house purchase fell by about one year (to 32.6 years) as expected on the convergence path (Chart 3.9). However, between December 2019 and January 2022, during the pandemic period, no convergence was observed, with the weighted average maturity increasing and reaching the peak of the series (33.7 years) in January 2021. After this peak, a downward trend resumed, albeit above the recommended path, meaning that in December 2022 the average maturity was still slightly above 30 years (Chart 3.9). Nevertheless, institutions showed broadly based compliance with the convergence of the average maturity of new credit agreements for house purchase. To promote full compliance with the Recommendation, institutions that did not yet converge to the established threshold were requested a monthly convergence plan.

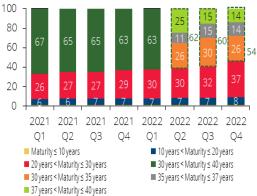
The adjustment of limits to maximum maturity in April 2022, as previously mentioned, led to a rise in the share of credit for house purchase granted with a maturity of up to and including 30 years from 36% to 46% between 2021 and 2022. In the last quarter of 2022 approximately 91% of new credit for house purchase had a maturity between 20 and 40 years, broken down into around 37% with a maturity between 20 and 30 years, around 26% between 30 and 35 years and around 14% both for maturities between 35 and 37 years and between 37 and 40 years (Chart 3.10).

**Chart 3.9** • Weighted average maturity of new credit for house purchase | In years



Source: Banco de Portugal. | Notes: On the basis of information reported by a sample of nine institutions that in 2022 accounted for around 97% of the housing credit market. The average maturity is weighted by the amount of credit granted.

**Chart 3.10** • Distribution of new credit for house purchase by maturity range | Per cent



Source: Banco de Portugal. | Notes: On the basis of information reported by a sample of nine institutions that in 2022 accounted for around 97% of the housing credit market. As of the second quarter of 2022, the dashed box and its value corresponded to the percentage associated with maturities of over 30 years and 40 years or less.

Loans to borrowers aged over 30 chiefly concerned credit agreements with lower maturities. Borrowers aged 30-35 mainly entered into credit agreements with maturities between 35 and 37 years (around 60% in the second half of 2022 against 3% in the first quarter of that year) (Chart 3.11). Borrowers aged over 35 increased their share of credit agreements with a maturity of less than 30 years (61% in the fourth quarter of 2022 compared with 52% in the first quarter of the year).

Institutions adopted procedures to reduce the share of credit granted above the new limits to the maximum maturity. In the last quarter of 2022 the share of new credit for house purchase exceeding the limits to the maximum maturity underwent an evident decrease in the different borrower age groups (Chart 3.11).



**Chart 3.11** • Distribution of the amount of new credit for house purchase by maturity and borrower age group | Per cent

Source: Banco de Portugal. | Notes: On the basis of information reported by a sample of nine institutions that in 2022 accounted for around 97% of the housing credit market. Data refer to 2022. This distribution is based on data available in the CCR.

In the EU context Portugal records high maturities for new credit for house purchase. In 2022 the average maturity of new credit for house purchase in Portugal (30 years and eight months) was above that recorded in EU countries for which information is available, ranging between 20 and 27 years (Chart 3.12).

Since the implementation of the Recommendation, the proportion of new credit for house purchase for borrowers aged 30 or less has not changed. In 2022 new credit for house purchase was mainly granted to borrowers aged 30-40. However, compared to 2017 – the year before the start of the Recommendation – the proportion of this age group declined (from 44% in 2017 to 40% in 2022). By contrast, the share of debtors aged 40-50 increased (from 27% in 2017 to 32% in 2022). The weight of the amount of loans granted to younger borrowers, i.e. aged 30 or under, remains almost unchanged since 2017, at around 16% (Chart 3.13).

Chart 3.12 • Annual maximum and average maturity of new credit for house purchase by country | In years

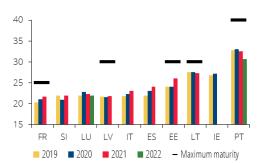
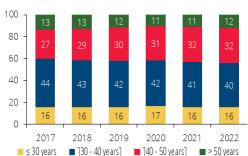


Chart 3.13 • Amount of new credit for house purchase by borrower age range | Per cent

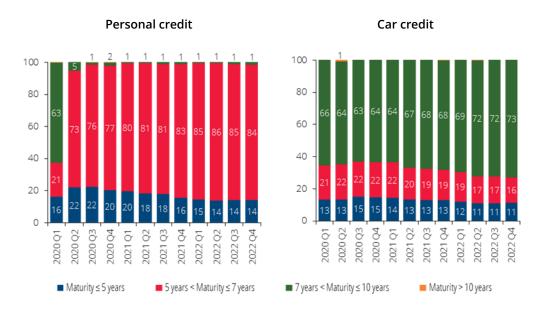


Source: Information published by the respective national authorities. | Note: In addition to Portugal, up to early 2023 Malta was the only EU country that adopted a maximum maturity of 40 years.

Source: Banco de Portugal. | Note: On the basis of information reported by a sample of nine institutions that in 2022 accounted for around 97% of the housing credit market.

In 2022 consumer credit with a maturity above the thresholds set out in the Recommendation was immaterial. From the second quarter of 2020 onwards, following the reduction in the maximum maturity of personal credit from 10 to seven years (with the exception of personal credit for education, healthcare and renewable energy, which will continue to have a maximum maturity of 10 years) the share of new personal credit with a maturity of over seven years was immaterial (Chart 3.14). In the fourth quarter of 2022 around 84% of new personal credit had a maturity between five and seven years. In car credit, whose recommended maximum maturity is 10 years, new loans in 2022 continued to have a maturity predominantly between seven and 10 years. In the fourth quarter of 2022 around 73% of the amount of new loans fell within this range. The share of new car credit with a maturity above the 10-year threshold was nil (Chart 3.14).

**Chart 3.14** • Distribution of new consumer credit by maturity range | As a percentage of the segment's total credit



Source: Banco de Portugal. | Note: Based on information reported by a sample of 13 institutions.

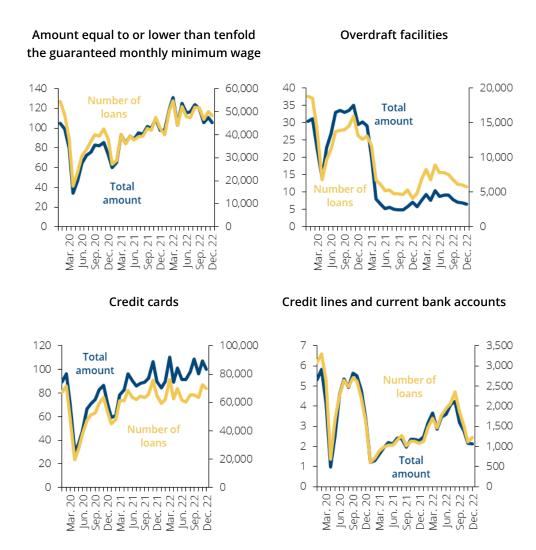
The average maturity of consumer credit remained stable throughout 2022, despite growing slightly in the last months of the year. The average maturity of personal credit has been stable at around 6.5 years since January 2020, reaching an average of 6.6 years in 2022. Personal credit for healthcare, education and renewable energy, whose maximum maturity remained at 10 years, continued to have a residual weight, accounting for around 3% of personal credit granted in 2022. The average maturity of car credit increased slightly to around 8.6 years throughout 2022, about two months higher than seen in 2021 (8.4 years) and 2020 (8.2 years).

#### Regular payments requirement

In 2022 the Recommendation's regular payments requirement was still complied with at a high rate. In the last quarter of 2022, only around 2% of total new credit failed to comply with the regular payments requirement. As in 2021, the explanations provided by institutions for not complying with this requirement were chiefly related with the granting of bridging loans (loans that only have a single capital payment, e.g. for down payments).

On average, developments in credit outside the scope of the Recommendation between 2020 and 2022 were similar to those in consumer credit covered by the Recommendation. New business to an amount equal to or lower than tenfold the guaranteed monthly minimum wage and credit cards appear to have stabilised at fairly similar values to those recorded before the pandemic crisis (Chart 3.15). This evolution was like that of consumer credit within the scope of the Recommendation and in particular, to that of personal credit, returning in the first half of 2022 to values close to those observed before the pandemic crisis. Conversely, at the end of 2022 and as in 2021, new business associated with overdraft facilities, credit lines and current bank accounts remained at a much lower level than before the outbreak of the pandemic (Chart 3.15).

Chart 3.15 • New credit outside the scope of the Recommendation | EUR millions (lhs)



Source: Banco de Portugal. | Notes: Based on information reported by a sample of 13 institutions. The committed amount is reported for overdraft facilities, credit cards, credit lines and current bank accounts.

#### References

ESRB (2021). Report of the Expert Group on Macroprudential Stance - Phase II (implementation).