MACROPRUDENTIAL MEASURE WITHIN THE LEGAL FRAMEWORK OF CREDIT FOR CONSUMERS

BANCO DE PORTUGAL
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Executive summary

As the national macroprudential authority,[1] Banco de Portugal is entrusted with defining and implementing macroprudential policy, notably identifying, monitoring and assessing systemic risks, as well as proposing and adopting measures to prevent, mitigate or reduce these risks, so as to reinforce financial sector resilience. Systemic risk is considered the risk of disruption in financial services that may, among other consequences, affect the flow of credit, stemming from the materialisation of risk sources in the financial system or part of it, with the potential to have negative consequences for the real economy. In the case of systemic crises boosted by the excessive expansion of credit agreements relating to residential immovable property, associated with the creation of real estate market bubbles, the costs for the economy can be particularly significant.

The national macroprudential authority considers that, on the one hand, in the current economic environment, household indebtedness is still high by international standards, and the financial system is highly exposed to credit relating to residential immovable property. On the other hand, this credit's new business has increased strongly and the stock of consumer credit has grown significantly. In addition, the recent economic recovery, amid very low interest rates and a rebound in house prices, has been accompanied by an easing of credit standards, in an environment of increased competition among institutions.

In accordance with its mandate, the national macroprudential authority deems it appropriate to issue a Recommendation on new credit agreements for consumers,[2] in particular credit relating to residential immovable property, credit secured by a mortgage or equivalent guarantee, and consumer credit, with a view to introducing limits to some of the criteria that institutions should comply with in the assessment of borrowers' creditworthiness. The macroprudential measure intends to take preventive action in the field of consumer credit by recommending the adoption of limits to new business, in a context of easing of credit standards and an anticipated sharpening of this trend.

The macroprudential measure includes a set of recommendations on (i) limits to the ratio of the loan amount to the value of the property pledged as collateral (LTV – loan-to-value ratio) that, for the purpose of this measure, should be calculated based on the minimum of the property's purchase price and appraisal value, (ii) limits to the ratio of the amount of monthly loan payments to his/her monthly income less taxes and compulsory social security contributions (DSTI – debt service-to-income ratio), (iii) limits to the maturity of loans and (iv) regular interest and principal payment requirements. This measure is targeted at reinforcing adoption by the Portuguese financial system of prudent credit standards, so as to guarantee the system's resilience, improving its ability to absorb adverse shocks. By defining prudent credit standards, this measure also helps promote borrowers' access to sustainable financing, mitigating the risk of default. In sum, this measure helps minimise the materialisation of systemic risk, thus avoiding potential serious consequences for the economy going forward.

The measure reinforces the importance of promoting a suitable assessment of risk in this type of credit agreement, already addressed by a series of European Union and national legal initiatives governing credit agreements for consumers. It assumes that a consumer credit agreement should only be concluded when the result of the creditworthiness assessment shows that the consumer is likely to comply with the obligations of the credit agreement.

This measure, presented as a Recommendation, is addressed to all entities authorised to grant credit in Portugal, namely credit institutions and financial companies that have their head office or a branch in Portuguese territory. The Recommendation will be implemented as of 1 July 2018, so as to allow institutions to adapt their information collection and organisation systems.

1. Motives for applying a macroprudential measure within the legal framework of credit for consumers

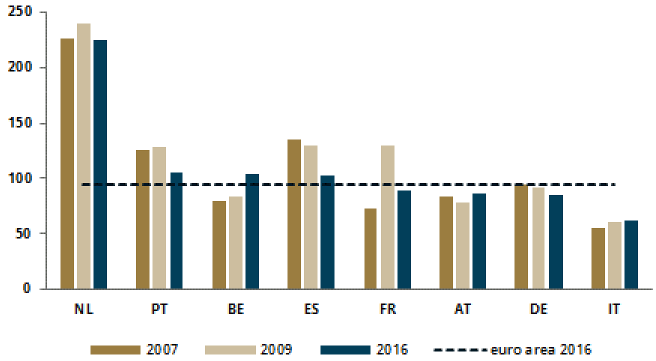
The macroprudential policy consists in identifying, monitoring and assessing systemic risks, as well as proposing and adopting measures to prevent, mitigate or reduce such risks in order to reinforce financial sector resilience. Systemic risk is considered the risk of disruption in financial services that may, among other consequences, affect the flow of credit, stemming from the materialisation of risk sources in the financial system or part of it, with the potential to have negative consequences for the real economy.[3] The implementation of macroprudential policy requires an assessment to identify systemic risk factors in a timely manner and to define and calibrate the policy instruments to mitigate them.[4]

This document assesses and identifies the vulnerabilities and risks affecting the Portuguese financial system relating to credit granting to consumers, namely credit relating to residential immovable property and consumer credit. In addition, it presents a macroprudential policy measure to prevent the build-up of risk and reinforce the Portuguese financial system's resilience to potential adverse shocks, thus also contributing to promoting borrowers' access to sustainable funding, mitigating the risk of default.

Household indebtedness is a key factor of financial stability and sustainable economic growth. Financial difficulties affect the ability to make debt repayments, which may have a considerable impact on financial institutions' asset quality and profitability. Furthermore, the financial condition of households has implications on consumption and residential investment decisions, with an impact on economic activity in general.

Total household debt accounted for 107% of disposable income in the third quarter of 2017. In 2016 the household financial debt ratio in Portugal (106%) remained above the euro area average and among the area's highest (Chart 1), notwithstanding its narrowing since 2009.

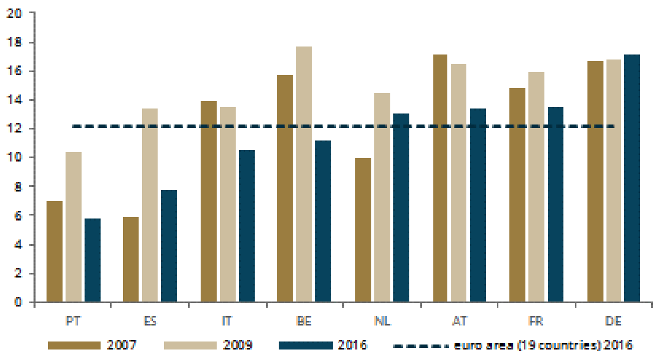
Chart 1 – Household financial debt | as a percentage of disposable income



Source: Eurostat. Banco de Portugal calculations. Note: consolidated data of financial accounts. Financial debt corresponds to the sum of debt securities (with a nil or almost nil value in the case of households) and loans, whichever is the counterparty sector.

In addition, the household saving rate declined to record lows, to stand at 4.4% of disposable income in the year ended in the third quarter of 2017, according to the provisional accounts of Statistics Portugal. The household saving rate, at 5.8% in 2016, is one of the lowest in the euro area, accounting for less than half of the average rate of the 19 euro area countries, i.e. 12.1% that year (Chart 2). The still-high indebtedness level, combined with a low saving rate, renders households more vulnerable to reductions in income and short-term interest rate rises. The current indebtedness levels of the Portuguese economy and the coexistence of factors that are normally conducive to credit expansion – interest rates at a very low level, recovery in economic activity and high real estate price growth – account for greater monitoring and prevention of the potential ensuing risks.

Chart 2 – Household saving rate | as a percentage of disposable income

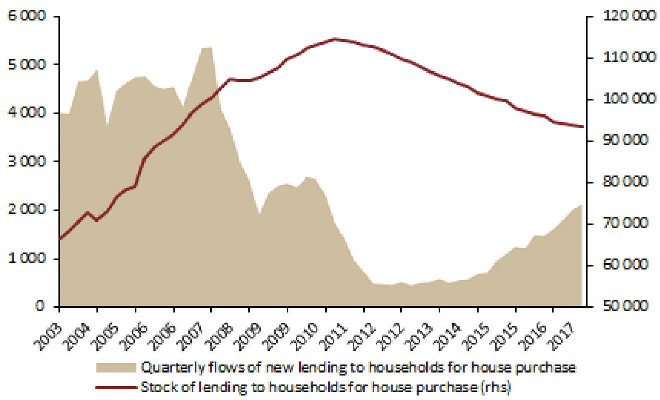


Source: Eurostat. Banco de Portugal calculations. Note: provisional figures for Portugal, France and the Netherlands for 2016.

Credit relating to residential immovable property plays a very important role in total household debt (71% in June 2017). The amount of new credit relating to residential immovable property has been increasing since 2013, accelerating from 2015 onwards, although remaining below the values recorded before the financial crisis (Chart 3). The share of housing unit transactions financed by new business has been rising since 2015, after bottoming out at around 20% at the end of 2013. In the second quarter of 2017 this proportion already stood at 45%, although still falling short of the 2009 values (around 65%). However, in terms of stocks, the amounts for this credit continue to decrease, albeit at a lower rate than observed in the past few years. In fact, early repayments and repayments due to expiration of agreements still exceed new business. This is reflected in a fall, albeit slight, of the stock of credit relating to residential immovable property (2% in the third quarter of 2017 compared to the same period a year earlier).

The Portuguese banking system shows high direct and indirect exposure to the real estate sector,[5] accounting for approximately 40% of the banking sector's total assets. Banks are particularly exposed to the real estate market, mainly through credit relating to residential immovable property, which accounted for 28% of total assets in September 2017.

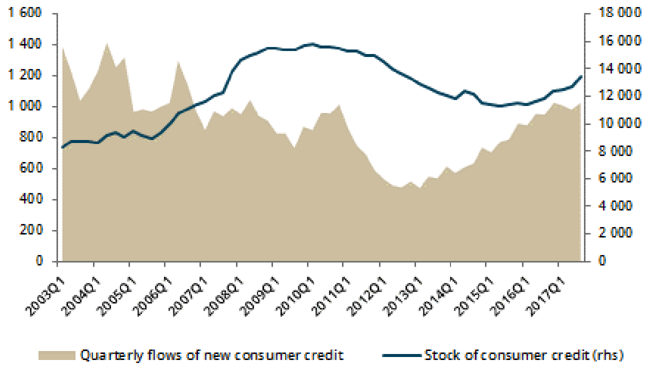
Chart 3 – Lending to households for house purchase (stock and flows) | EUR million



Source: Banco de Portugal.

Although accounting for a low share of the system's total assets (less than 4%), the stock of consumer credit has been rising significantly, accelerating in the third quarter of 2017 vis-à-vis the previous quarter. New consumer loans continued to increase in the first nine months of 2017, albeit decelerating from the changes observed in 2016 (Chart 4).

Chart 4 – Consumer credit (stock and flows) | EUR million



Source: Banco de Portugal.

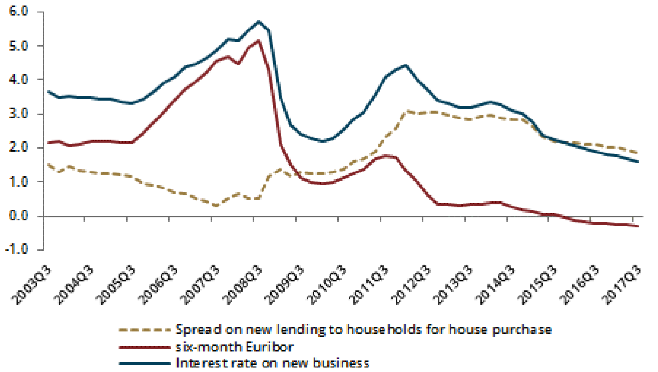
A prolonged low interest rate environment, combined with economic recovery, creates incentives for greater competition among banks and a potential excessive easing of credit standards, while promoting recourse to credit on the demand side. In this context, granting credit to borrowers with a higher risk profile is encouraged, thus increasing the probability of default from the moment interest rates increase and/or economic conditions deteriorate. The interest rate rise implies an increase in debt servicing costs, which may become too high and compromise the ability of consumers that are more indebted and/or have lower income to make their debt repayments, possibly increasing their default. This risk is higher with a variable interest rate regime and/or when household indebtedness remains high.

In the most recent period there is evidence of an easing of consumer credit standards. Such practices may become more marked in the current environment.

The variable interest rate regime continues to predominate in credit relating to residential immovable property in Portugal, and the fixed rate regime is used only during relatively short periods vis-à-vis the maturity of loans. Given that interest rates remained at record lows over a very long period of time, key interest rates should rise soon, although interest rates are expected to increase gradually. In consumer credit, by contrast, the fixed interest rate regime predominates: in 2016, 80% of personal credit and 78% of car credit was granted at a fixed rate,[6] these shares having increased compared to 2015.

In addition, average spreads on new lending to households for house purchase, after peaking in 2011, have been declining considerably, although remaining above the average spreads observed immediately before the financial crisis (Chart 5). In any case, the recent downward trend of spreads shows that banks have eased their credit standards.

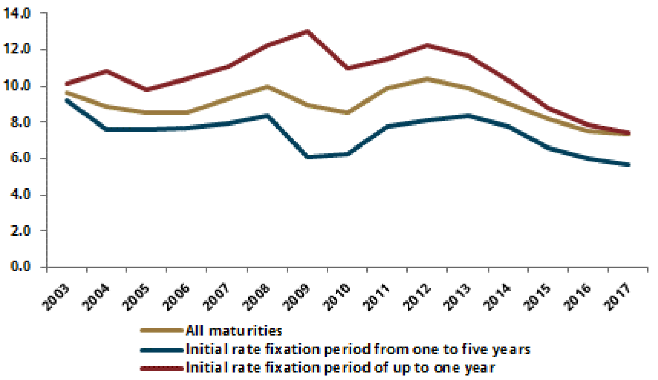
Chart 5 – Interest rates and average spreads on new lending to households for house purchase | per cent



Source: Banco de Portugal and Thomson Reuters. Note: average spread calculated as the difference between the interest rate on new lending to households for house purchase and the six-month Euribor.

The average interest rates on new consumer credit followed a downward trend, but remain at clearly higher levels than lending to households for house purchase for dealing with the risk of transactions (Chart 6).

Chart 6 – Average interest rates on new consumer credit by initial rate fixation period | per cent



Source: Banco de Portugal.

Institutions that eased their credit standards when granting credit to households, especially relating to residential immovable property, have also tended to extend the original maturity in new credit agreements (Chart 7). Following a period of reduction and stabilisation between 2011 and 2014, from 2015 onwards the average maturity of new credit relating to residential immovable property increased further, remaining at high levels and reaching 33 years in 2016. According to the information collected from institutions, which account for very high coverage of these credit agreements, a very significant share of new credit relating to residential immovable property has a 40-year maturity. Moreover, some institutions have even longer maturities and grant credit to borrowers whose age significantly exceeds the expected retirement age at the expiry of the credit agreements.

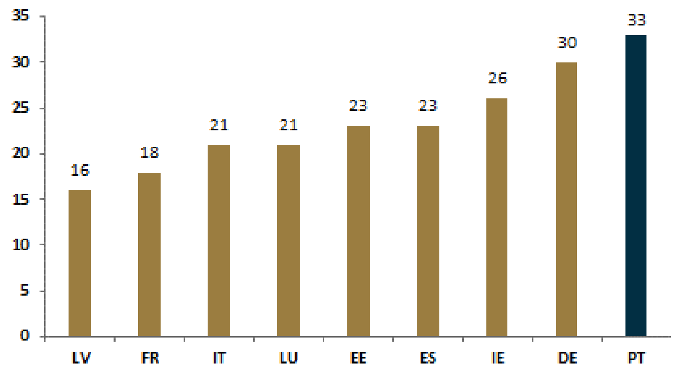
This trend becomes even more damaging if institutions, when assessing the borrowers' creditworthiness when granting them credit, do not consider the reduction in income that will tend to occur with the transition from work into retirement. According to the European Commission,7 the replacement rate of the public system's old-age pensions for Portugal was 58% in 2013 (and 43% in the European Union) and the projection for 2060 is 31%, compared to a 36% projection for the European Union on average. In a context of uncertainty surrounding the evolution of the borrower's income upon transition from work into retirement, credit granting should be prudent and consider a significant reduction in income when this transition occurs. This will mitigate the risk of default, avoiding situations of great financial vulnerability for borrowers.

Chart 7 – Maturity of credit agreements relating to residential immovable property in Portugal | in number of years

Source: Banco de Portugal.

The maturity for credit relating to residential immovable property granted in Portugal is high by European standards – the average maturity of loans granted was 33 years in 2016 (Chart 8).

Chart 8 – Average maturity of new loans (2016), by country | in number of years



Source: European Central Bank and national authorities.

Although the trend of extending maturities was more marked in credit relating to residential immovable property, it was also observed in consumer credit. In 2016 average maturity increased in most consumer credit sub-segments, as already seen in 2015. In 2016, for example, there was an increase in the importance of car credit agreements with longer maturities (more than seven years), both as regards loans for the purchase of new vehicles and loans for the purchase of used vehicles.[8] Notwithstanding this trend, the original maximum maturity in consumer credit agreements continues to be 10 years.

The long repayment periods on the credit agreements prevent the introduction of any adjustments that may be necessary for borrowers to overcome difficulties in paying their loans.

Other indicators that confirm the easing of credit standards in credit relating to residential immovable property are the loan-to-value (LTV) ratio, the loan-to-income (LTI) ratio, and the debt service-to-income (DSTI) ratio. Recent data point to a significant percentage of agreements with a high LTV ratio applied on the date the credit was granted. In the absence of other factors that may mitigate credit risk in these agreements, a study by Banco de Portugal[9] concluded that credit transactions with less tight credit standards (i.e. higher LTV, LTI and DSTI ratios) tend to be associated with a higher default rate.

Therefore, Banco de Portugal considers it appropriate to recommend the setting of maximum limits to the LTV and DSTI ratios and to the maturity, signalling – both to banks and consumers – the need to pursue prudent credit granting practices. In a context of sharp growth in residential real estate market prices, setting these limits will tend to mitigate the risk of interaction between residential real estate prices and the credit cycle, with positive consequences for financial stability.

Although in the run-up to the recent financial crisis credit relating to residential immovable property has grown considerably, house prices have increased relatively modestly in Portugal, with no evidence of overvaluation, in contrast with some euro area countries.[10] Currently, according to papers by Banco de Portugal,[11] recent developments in housing prices are not synchronised with the Portuguese credit cycle. However, a greater pressure from housing demand, fostered by credit, may contribute to an ongoing upward trend for prices, a scenario that should be avoided for putting financial stability at risk.

In Portugal, although the levels of arrears in credit relating to residential immovable property have risen in the wake of the financial crisis, they have remained relatively restrained. This might reflect, on the one hand, the absence of a real estate bubble in Portugal, and on the other, the concentration of credit relating to residential immovable property mostly in households with a lower probability of default, in contrast to consumer credit. However, the fact that credit relating to residential immovable property in Portugal is mostly granted at a variable rate and with long maturities appears to have rendered ECB's monetary policy transmission easier, translating into a sharp decline in interest rates on said credit. This may not occur in the future should there be no systemic crisis in the euro area that triggers monetary policy response. In that case, debtors may not benefit from a decrease in the ECB's interest rates, which will tend to increase default.

Hence, considering the current environment of (i) high household indebtedness by international standards; (ii) high exposure of the financial system to credit relating to residential immovable property; (iii) strong increase in this credit's new business; (iv) sharp increase in the stock of consumer credit; (v) economic recovery and very low interest rates; (vi) significant rise in residential real estate sector prices; and (vii) increased competition among institutions, accompanied by an easing of credit standards, it is important to ensure that the dynamics of credit granted to consumers do not promote the build-up of excessive risk in the banks' balance sheet and that borrowers have access to sustainable financing, minimising default.

2. Proposal for a macroprudential measure to reinforce banking sector resilience within the legal framework of credit agreements for consumers

As the national macroprudential authority, Banco de Portugal has at its disposal a range of policy measures to mitigate identified risks to financial stability and minimise the probability of their materialisation, reinforcing financial system resilience. In the current environment, Banco de Portugal sees fit to introduce a preventive macroprudential measure targeted at credit for consumers, namely credit relating to residential immovable property, credit secured by a mortgage or equivalent guarantee and consumer credit. Consumer means a natural person acting with purposes other than those of his or her commercial or professional activity in the credit agreements covered by the provisions of Decree-Law No 133/2009 of 2 June 2009 and Decree-Law No 74-A/2017 of 23 June 2017.

Designing a macroprudential policy measure implies selecting the most suitable macroprudential instrument(s) to address the risks identified and should be guided by the principles set out in the macroprudential policy strategy,[12] which involves choosing between capital instruments and instruments related to credit standards, such as limits to the LTV and DSTI ratios and maturity.

Given the intended preventive nature of macroprudential action, with risks starting to build up, Banco de Portugal considers that the introduction of limits to the ratio of the total amount of credit agreements secured by immovable property to the appraisal value of the immovable property pledged as collateral (LTV) and to 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 (DSTI), as well as the introduction of limits to the maturity of loans, are the most suitable instruments to promote the Portuguese financial system's sustained adoption of prudent credit standards. These will help ensure this sector's resilience to potential adverse shocks. In fact, by focusing on new credit transactions, these instruments have a gradual impact on the credit stock. They are also more selective, when compared to additional capital buffers, given that the maximum limits defined only apply to new loans to borrowers with a higher risk profile. The combination of limits, in turn, is designed to minimise the limitations of each instrument, which stand out when they are applied individually, thereby intensifying the measure's effectiveness.

In addition, Banco de Portugal considers that the macroprudential measure should be implemented as a Recommendation, observing the 'comply or explain' principle. Given that the macroprudential measure is innovative and somewhat complex, choosing a non-binding legal instrument was warranted. It is thus necessary to gather experience on how institutions will implement it and its potential impact. Although it is not a binding measure, the institutions' degree of compliance will be assessed based on the applicable reporting, and the justifications they present will be appraised in the event the Recommendation is not complied with. Hence, it will be possible to gauge the adequacy of credit standards. Finally, the type of act adopted is in line with the practice of most European macroprudential authorities. These tend to rely on recommendations rather than on more binding acts when introducing this type of measure.

The combination of limits was chosen taking into account national and international guidelines on the borrowers' creditworthiness assessment when granting credit and an analysis of the costs and benefits associated with each instrument. The calibration of the various instruments' levels was based on an analysis of both international experience in the adoption of similar instruments and current banking practices in Portugal. Over the course of this process, Banco de Portugal collected and analysed information on the credit standards currently applied by Portuguese institutions, and also assessed expectations as to the future evolution of these standards. Subsequently, Banco de Portugal consulted the Associação Portuguesa de Bancos (APB), Associação de Instituições de Crédito Especializado (ASFAC), Associação Portuguesa de Leasing, Factoring e Renting (ALF) and Associação Portuguesa para a Defesa do Consumidor (DECO) with regard to a draft recommendation on new credit agreements for consumers. The National Council of Financial Supervisors (CNSF) was also consulted in accordance with the applicable law.

The calibration of the measure corresponds to the standards that Banco de Portugal considers to be suitable for consumer credit, and in some instances does not differ substantially from current banking practices, anchoring credit standards so as to avoid further easing.

The macroprudential measure includes four recommendations to reinforce its effectiveness, as already mentioned. On the one hand, the limits to the DSTI ratio, by restricting the monthly instalment associated with loan amounts for a given income level, contribute to a decrease in the borrower's probability of default. On the other, the limits to the LTV ratio, by requiring a minimum collateral value pledged for debt servicing upon conclusion of the agreement, contribute to minimising financial system losses in the event of default. The limits to the LTV ratio also help reduce the borrower's probability of default if they require the use of equity. However, limits to the LTV may cease to be active in a context of a sharp rise in housing prices, due to the pro-cyclical effect stemming from the method of calculation of this indicator, which is why it is combined with limits to the DSTI and to the maturity. In fact, limits to the DSTI act as automatic stabilisers, given that they become tighter in the expansionary phase of the credit cycle, since real estate prices tend to grow faster than the borrowers' income.

The adoption of limits to the original maturity of loans is warranted, on the one hand, in order to prevent limits to the DSTI ratio from being circumvented by the extension of the loan maturity, and, on the other, due to the role they play in determining risk associated with credit agreements. In shorter-term loans it will be easier to extend the maturity in case of borrowers' arrears, facilitating loan restructuring and potentially reducing default. As illustrated in Section 1, Portugal stands out for presenting a much higher average maturity for new credit agreements relating to residential immovable property than in European Union countries.

To prevent possible disruptive effects in credit granting, some exceptions were introduced to the limits set out, allowing banks to consider other important risk-mitigating aspects for the borrowers' creditworthiness assessment. As an example, exceptions were introduced as regards compliance with the limits to the DSTI ratio, so as to include specific cases of credit granting that, although not complying with the limits set out in this Recommendation, are nevertheless considered by institutions to observe appropriate criteria in the risk assessment of borrowers. In any case, Banco de Portugal will assess the adequacy of the institutions' justifications.

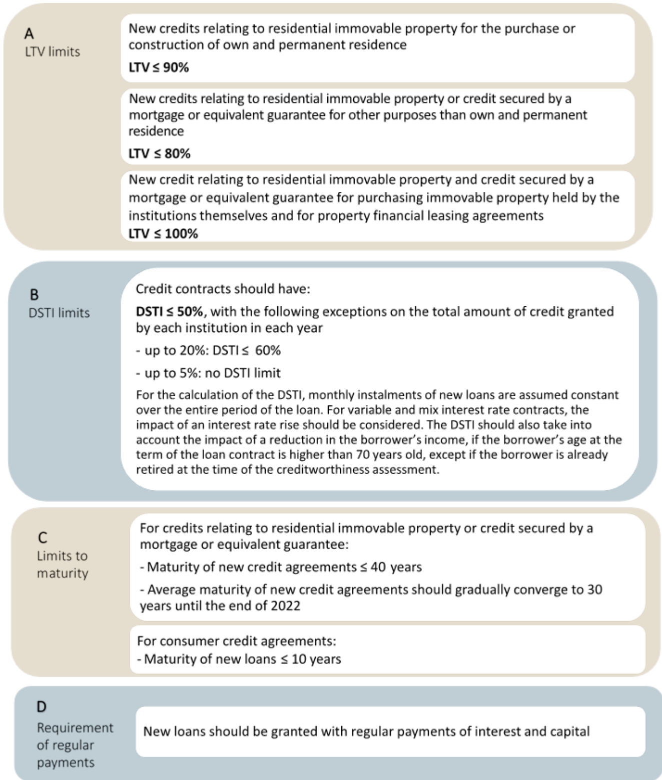
The macroprudential measure presented reinforces the importance of promoting an adequate assessment of risk in these types of credit agreement, which has also been addressed by a number of European Union and national legal initiatives governing credit agreements for consumers. Among these are, at European level: Directive 2014/17/EU of 4 February 2014 on credit agreements for consumers relating to residential immovable property (the 'Mortgage Credit Directive'), partially transposed by Decree-Law No 74-A/2017 of 23 June 2017, and Directive 2008/48/EC of 23 April 2008 on credit agreements for consumers, transposed into Portuguese law through Decree-Law No 133/2009 of 2 June 2009.

At national level, so as to regulate the creditworthiness assessment obligation provided for in Decree-Law No 74-A/2017 of 23 June 2017 and also in Decree-Law No 133/2009 of 2 June 2009, Banco de Portugal recently published Notice No 4/2017 of 22 September 2017 laying down the principles and rules to be observed by institutions in said assessment. In accordance with this Notice, which reflects the guidelines issued by the European Banking Authority on the creditworthiness assessment obligation (EBA's guidelines on creditworthiness assessment), a credit agreement for consumers shall only be concluded where the outcome of the consumer's creditworthiness assessment indicates that the obligations resulting from the credit agreement are likely to be met in the manner required under that agreement's terms and conditions. The limits set out under the macroprudential measure should thus be considered as caps to be applied by institutions, without prejudice to the result of the borrowers' creditworthiness assessment.

Furthermore, in compliance with the provisions of Article 10 (4) of Notice No 4/2017, Banco de Portugal, through an instruction, set forth the criteria for assessing the impact on consumer creditworthiness of a rise in the index applicable to credit agreements with variable or mixed interest rate.

The content of the macroprudential measure to be adopted by institutions when granting new consumer credit is presented below in greater detail. It is composed of four recommendations that should be considered and implemented as a whole. These are complementary in nature, which is key to ensuring the effective and efficient pursuit of the objective of reinforcing banking sector resilience, also contributing to household access to sustainable financing (Figure 1).

Figure 1 – Summary of the macroprudential measure



2.1 Scope of the Recommendation

The limits are applied upon conclusion of a credit agreement. A credit agreement is defined as an agreement whereby an institution grants or promises to grant credit to a consumer under the form of a loan, payment deferment, revolving credit or any other equivalent financial agreement, including financial leasing.

The Recommendation applies to credit agreements governed by Decree-Law No 74-A/2017 of 23 June 2017 (hereinafter 'Decree-Law No 74-A/2017') and Decree-Law No 133/2009 of

2 June 2009, as amended by Decree-Laws No 72-A/2010 of 18 June 2010, No 42-A/2013 of 28 March 2013, and No 74-A/2017 of 23 June 2017 (hereinafter 'Decree-Law No 133/2009'). Decree-Law No 74-A/2017 sets forth the legal framework governing credit agreements relating to residential immovable property, laying down the rules applicable to consumer credit secured by a mortgage or other rights on immovable property, partially transposing Directive 2014/17/EU on credit agreements for consumers relating to residential immovable property. In turn, Decree-Law No 133/2009 transposing to Portuguese law Directive No 2008/48/EC of 23 April 2008 on credit agreements for consumers, applies to this type of credit agreement. Hence, the Recommendation applies to new credit agreements relating to residential immovable property, agreements for credit secured by a mortgage or equivalent guarantee and credit agreements for consumers, with the exceptions set forth in Decree-Law No 74-A/2017 and Decree-Law No 133/2009.

In line with Notice of Banco de Portugal No 4/2017 of 22 September 2017, the scope of the Recommendation also excludes overrunning[13] and credit agreements intended to prevent or address arrears situations namely through refinancing or consolidation of other credit agreements, as well as through the renegotiation of the terms and conditions of already existing credit agreements. Considering the still high level of non-performing loans on the Portuguese banks' balance sheet, when designing this measure Banco de Portugal took into consideration the exclusion of credit intended to prevent or address arrears situations. These are situations in which credit risk has materialised or is about to and, as such, greater flexibility in the design of these agreements is deemed acceptable from the risk management viewpoint.

The Recommendation also does not apply to credit agreements for a total amount equal to or lower than the equivalent to tenfold the guaranteed monthly minimum wage, in accordance with the provisions of Notice No 4/2017. Specifically, in the cases provided for in Article 9 of Notice No 4/2017, i.e. in the event of a credit agreement concluded for a total amount equal to or lower than the equivalent to tenfold the guaranteed monthly minimum wage, institutions may estimate the consumer's regular income based on sufficient information obtained from the consumer, and are not required to gather evidence of this income to assess the consumer's creditworthiness. Banco de Portugal has decided that as regards the conclusion of low-amount credit agreements, institutions may measure income indirectly, namely through scoring models, without requiring the observance of procedures that might excessively hamper the consumer credit market, namely in the current environment of progressive digitalisation of sales channels. Hence, these procedures have not been included in this macroprudential measure, an option that does not compromise the monitoring of these agreements' developments, as well as the credit standards used by institutions.

This measure also excludes increases in the total amount of credit during the lifetime of credit agreements falling under the scope of this macroprudential measure, provided that the total amount of credit resulting from the increase is equivalent to tenfold the guaranteed monthly minimum wage, or the total amount of credit agreements resulting from the increase is only available to the consumer on a temporary basis, for a period of up to three months.

In addition, the scope of this Recommendation excludes credit agreements in the form of an overdraft facility and other credit with no defined repayment schedule (including credit cards and credit lines), given the difficulty in applying some of the measures envisaged in the Recommendation to these agreements, notably as regards the calculation of limits to the DSTI – whose formula requires, for the numerator, the repayment amount under the new credit agreement to be constant – and the application of limits to the original maturity of agreements, given that this type of agreement has no previously defined repayment schedule or determined duration. However, when monitoring implementation of the Recommendation, Banco de Portugal will pay attention to developments in this type of credit agreement.

Finally, the scope of this Recommendation also excludes credit agreements concluded under the subsidised housing loans for the disabled provided for in Law No 64/2014 of 26 August 2014, and those concluded under Law No 63/2014 of 26 August 2014 laying down the conditions applicable to loans for house purchase or construction of own residence by armed forces disabled people.

Although excluded from the scope of this macroprudential measure, these loans should be considered in the calculation of the DSTI, provided that they present a defined repayment schedule.

The limits apply to all entities authorised to grant credit in Portugal, namely credit institutions and financial companies that have their head office or a branch in Portuguese territory.

2.2 Recommendation A – Limits to the LTV

In accordance with Recommendation A, new credit agreements relating to residential immovable property and credit secured by a mortgage or equivalent guarantee should observe the following limits:

- Limit to the LTV of 90% for credit for own and permanent residence;
- Limit to the LTV of 80% for credit for purposes other than own and permanent residence;
- Limit to the LTV of 100% for credit for purchasing immovable property held by the credit institutions themselves and for property financial leasing agreements.

The LTV ratio should be calculated as the ratio of the total amount of credit agreements secured by immovable property to the value of the immovable property. The ratio numerator should consider the amount of a loan or loans secured by the same immovable property, thus considering the whole credit (fully or partially) secured by mortgages on the same property (linked credit) with a view to preventing regulatory arbitrage. In the denominator, the immovable property value should correspond to the minimum between the purchase price and the appraisal value of the immovable property pledged as collateral.[14] The property valuation should follow the guidelines set forth in the legal framework applicable to real estate appraisers, provided for in Law No 153/2015 of 14 September 2015 governing the taking up and pursuit of the business of real estate appraisers providing services to entities within the Portuguese financial system.

The definition of distinct limits to the LTV depending on the purpose of the loan is warranted by the fact that it is more likely that in the event of financial difficulties borrowers favour compliance with the obligations of credit agreements for the purchase of or secured by own and permanent residence, because they value the safeguarding of their house. International experience also points to distinct, stricter limits in the case of purposes other than the purchase of own and permanent residence.

The distinct features of property financial leasing agreements compared to conventional housing loans warrant the introduction of a limit of 100% to the LTV ratio. This type of agreement consists in the leasing of an asset, in which the legal ownership of the immovable property remains with the institution until the end of the agreement (and the financial lessee is not required to purchase the property at the end of the agreement).

The need for institutions to continue on with the reduction of non-performing assets on the balance sheet, which are partly comprised of immovable property, warrants the introduction of a limit of 100% to the LTV ratio to be applied to loans financing the purchase of property held by the institution.

2.3 Recommendation B – Limits to the DSTI

In accordance with Recommendation B, new credit agreements should observe the following limits:

- Limit to the DSTI = 50%, with the following exceptions:
  - up to 20% of the total amount of credit granted by each institution in each year may be granted with a DSTI of up to 60%.
  - up to 5% of the total amount of credit granted by each institution in each year may exceed the limits to the DSTI.

The DSTI should be calculated as the ratio of the total amount of monthly instalments associated with the borrower's loans to his/her income. The calculation of the DSTI numerator should consider the instalments of credit agreements already concluded and the instalments of the new credit agreement. The total amount of monthly instalments for all loans refers to the sum of instalments paid on a monthly basis regarding all of the borrower's loans, as reported in the Central Credit Register. For this purpose, when concluding a new credit agreement, institutions should consider the instalments of all agreements reported in the Central Credit Register, even in the case of instalments of agreements falling outside the scope of the Recommendation, provided that they present a defined repayment schedule.

The monthly instalment of the new credit agreement should be calculated assuming that it is constant throughout the agreement's lifetime and consider the impact of an increase in the interest rate agreed. The requirement of calculating the DSTI assuming a constant instalment scheme aims to avoid the creation of the illusion of consumers' ability to pay the debt over the course of the lifetime of the agreement, when the instalment scheme is non-constant, such as with increasing instalments, grace periods or forbearance, considering the lowest-value instalments, which would imply a more favourable DSTI for consumers in the short term. This type of agreement tends to be associated with higher default ratios. Given the expectations of a rise in interest rates, the calculation of the DSTI also takes into account, in the numerator, an interest rate rise, which varies depending on the original maturity of agreements and the interest rate scheme. Hence, the intention is to test whether borrowers are able to bear the debt burden resulting from an expectable rise in interest rates.

In Portugal, the materialisation of this scenario may have a particularly important impact on the ability to pay back loans, since credit granting to consumers, especially for house purchase, continues to be mostly at variable or mixed interest rates, as already mentioned. However, the value of the actual DSTI ratio for consumers will be different, because it will be calculated based on the interest rates applied in the agreement.

As an illustration, assuming a credit agreement with a maturity of 40 years, variable interest rate, -0.3% index and fixed spread throughout the agreement's lifetime at 2.3 p.p., the DSTI ratio associated with this agreement that is actually borne by the borrower – 31% – is equivalent to the DSTI ratio calculated taking into account a 3 p.p. increase in the index for agreements with a maturity of over 10 years, i.e. 50% (Table 1).

Table 1 – Equivalence between DSTI with and without a 3 p.p. increase in the index

Maturity of the agreement	Interest rate = index + spread	Actual DSTI (without a 3 p.p. increase in the index)	DSTI (with a 3 p.p. increase in the index)
40	2%	31%	50%

Banco de Portugal has determined, through an instruction, that in the case of a credit agreement at a variable interest rate or a credit agreement at a mixed interest rate,[15] institutions should assess the impact of an increase in the index applicable to consumer creditworthiness, as described in Table 2.

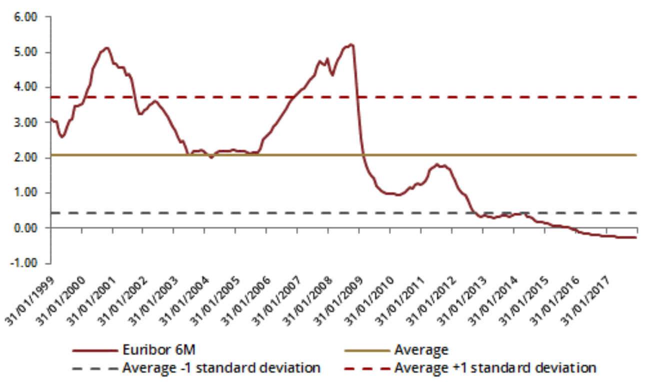
Table 2 – Increase in the index

Interest rate scheme	Maturity of the contract and increase in the index		
	up to and including 5 years	more than 5 and up to and including 10 years	over 10 years
Variable and mixed*	+1 p.p.	+2 p.p.	+3 p.p.

Note: * 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.

The calibration of the increase in the index was based, on the one hand, on future expectations of interest rate developments, with an analysis of forward rates for different maturities. This analysis showed that, up to a five-year maturity, the impact foreseen in market rates is around 1 p.p., and for a maturity of up to 10 years, this impact goes up to around 2 p.p.. On the other hand, for the longer maturities that characterise credit agreements relating to residential immovable property, the calibration has also taken into account historical developments in reference interest rates, particularly the six-month Euribor (Chart 9). From 1999 to the end of 2017 the average of the six-month Euribor was 2.1%, with a standard deviation of 1.7%, suggesting a range between 0.4% and 3.7% (standard deviation of ± 1 on average). Over the course of this period, only twice did the Euribor reach peaks around 5% (in 2000 and 2008). It has remained in negative territory since mid-2015, stabilising in the meantime at close to -0.3%. This analysis, jointly with the expectation that a rise in the Euribor will tend to be gradual, warrants considering a 3 p.p. increase in the index for maturities of over 10 years, with a variable rate.

Chart 9 – Six-month Euribor | per cent



Source: Thomson Reuters.

For the calculation of the DSTI denominator, it is recommended that the annual income of a borrower be divided into 12 months. Income is defined as the annual income of a borrower, less taxes and compulsory social security contributions, as per the latest tax statement and/or information on income received in the three months before the creditworthiness assessment, pursuant to the provisions of Article 7 of Notice of Banco de Portugal No 4/2017 of 22 September 2017.

In addition, the calculation of the DSTI considers a reduction in the borrowers' income as of the age of 70, given that a material decrease is expected in the transition from work into retirement. As already mentioned, there is evidence of some institutions starting to consider even longer maturities, assuming borrowers' ages will considerably exceed the expected retirement age at the expiry of the agreement. In addition, institutions, when assessing the borrowers' creditworthiness, tend not to consider the reduction in income likely to occur with the transition from work into retirement. However, in the light of the projections of the European Commission's *The 2015 Ageing Report*, these reductions might be significant and, if they are not taken into account when credit is granted, they may compromise compliance with the obligations of credit agreements.

Hence, adopting a prudent approach and considering that, in particular, credit agreements relating to residential immovable property are typically very long-term, which heightens the uncertainty as to the evolution of income, Banco de Portugal recommends that, in the calculation of the DSTI denominator, a reduction of at least 20% of current annual income be applied 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.

Hence, in the event the agreement only has one borrower and assuming a reduction in income of at least 20%, the income (Inc_DSTI) to be considered for calculating the DSTI results from a weighted average, as described in the formula below:

$$Inc\_DSTI = x1 * Inc + x2 * Inc * (1 - \alpha)$$

Where:

Inc = Current monthly net income of the borrower;
x1 = number of years during the period of the agreement when the borrower is aged 70 or less 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;
$\alpha \geq 0.2$.

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.

The impacts considered on the interest rate and income for the purposes of calculating the DSTI are a materialisation of the European Banking Authority's Guidelines on the creditworthiness obligation (EBA's guidelines on creditworthiness assessment), which are also reflected in Notice of Banco de Portugal No 4/2017. These Guidelines state, in particular, that if the maturity of the loan is extended beyond the borrower's expected retirement age, institutions should pay special attention to whether the borrower's probable income is adequate or if he/she is able to continue complying with the obligations resulting from the credit agreement during retirement.

Finally, institutions may consider other important risk-mitigating elements when assessing draft credit agreements other than the LTV and DSTI criteria, such as the existence of guarantors or additional guarantees. Hence, to prevent any disruptive impact on credit granting, the following exceptions have been introduced to the 50% limit to the DSTI: up to 20% of the amount of agreements concluded every year by each institution may exceed this limit, provided the DSTI, calculated according to this Recommendation, is less than or equal to 60%. These institutions are also allowed to exceed these limits up to 5% of the credit amount granted annually. This exception may be particularly important, for example, in credit for financing education services. Should credit institutions use the exceptions mentioned above, they will have to submit to Banco de Portugal an explanation of the risk-mitigating elements considered in the transactions covered by the exception, for an assessment of compliance with the Recommendation.

2.4 Recommendation C – Limits to the maturity

In accordance with Recommendation C, new credit agreements should observe the following limits:

- Limit of 40 years to the original maturity and gradual convergence towards an average maturity of 30 years by the end of 2022 for new agreements for credit relating to residential immovable property or credit secured by a mortgage or equivalent guarantee;
- Limit of 10 years to the original maturity for new consumer credit agreements.

In line with international guidelines, and in recognition of the importance of ensuring that the original maturity of loans allows some flexibility in case of default or difficulties in the payment of credit agreements, limits should be applied to the original maturity, depending on the type of credit. Imposing these limits also increases the effectiveness of limits applied to the DSTI due to the extension of the loan's maturity. In addition, given that the original maturities within the framework of credit relating to residential immovable property are high by international standards, institutions are recommended, where applicable, to start a gradual reduction of the average maturity of new credit agreements relating to residential immovable property and credit agreements secured by a mortgage or equivalent guarantee, so as to reach 30 years by 2022.

2.5 Recommendation D – Regular payment requirements

Credit agreements that include grace periods for principal and/or interest should be avoided. Banco de Portugal considers credit agreements that establish the regular payment of interest and principal over the course of the loan as good risk management practice. As a rule, the use of mechanisms such as the introduction of grace periods or forbearance should be reserved for agreements intended to prevent or address arrears situations. Institutions must fully justify the existence of other types of agreement.

2.6 Further provisions

Date of application of the Recommendation

The Recommendation will be implemented as of 1 July 2018, covering all new agreements concluded from this date onwards falling within the scope of the Recommendation. This option allows institutions to adapt their information collection and processing systems.

Assessment of compliance with the Recommendation

For Banco de Portugal to be able to assess compliance with the Recommendation, institutions should ensure that they have the suitable means and processes to observe this Recommendation and to allow Banco de Portugal's timely access to the relevant data and information for monitoring the respective compliance.

Banco de Portugal assesses the justifications presented by the institutions and, where applicable, decides whether the provisions of recommendations were observed, and if not, whether institutions have provided a proper justification. Should Banco de Portugal consider the justification presented by institutions to be inadequate, it may issue other measures within its competences as the national macroprudential authority.

Banco de Portugal will monitor implementation of the Recommendation at least once a year and define on a timely basis the type and frequency of information reporting. Given that the Recommendation will apply to new credit agreements concluded as of 1 July 2018, the first reporting of information will cover credit granted between this date and 31 December 2018. Hence, in 2018 the exceptions envisaged in Recommendation B should be observed based on credit agreements granted between 1 July and 31 December 2018. For subsequent years the assessment of compliance with the Recommendation will focus on agreements concluded between 1 January and 31 December of each year.

Suitable risk management criteria

Institutions should apply suitable risk management criteria in all credit transactions, including those covered by this Recommendation. The limits introduced by this Recommendation correspond to caps and do not replace these institutions' mandatory assessment of the adequacy of the different indicators' values and other relevant criteria used in the assessment of each borrower's creditworthiness, as provided for in Notice of Banco de Portugal No 4/2017 of 22 September 2017 and other applicable legislation. This means that a credit agreement for consumers is only concluded when the outcome of the borrowers' creditworthiness assessment indicates that the obligations resulting from the credit agreement are likely to be met in the manner required under that agreement's terms and conditions.

Notes

1 Pursuant to its Organic Law, approved by Law No 5/98 of 31 January 1998, in its current version.

2 Consumer means a natural person acting with purposes other than those of his or her commercial or professional activity in the credit agreements covered by the provisions of Decree-Law No 133/2009 of 2 June 2009 and Decree-Law No 74-A/2017 of 23 June 2017.

3 Basto, Rita B. (2013); "A macro-prudential policy for financial stability", *Financial Stability Report*, Banco de Portugal, November.

4 Banco de Portugal, "Macro-prudential policy strategy", December 2015.

5 Direct exposure results from the ownership of (both commercial and residential) property in lieu of payment (due to default). Indirect exposure relates to credit both to households and non-financial corporations secured by immovable property, as well as credit granted to enterprises in the construction sector and real estate activities, and exposure to real estate investment funds.

6 Banco de Portugal, *2016 Retail Banking Markets Monitoring Report*.

7 European Commission, 2015, *The 2015 Ageing Report: Economic and budgetary projections for the 28 EU Member States (2013-2060)*.

8 Banco de Portugal, *2016 Retail Banking Markets Monitoring Report*.

9 Banco de Portugal, *Financial Stability Report*, June 2017, Special Issue 3 "Banking sector's exposure to mortgage loans: analysis of LTV and LTI/DSTI and implications for financial stability".

10 Lourenço, R.; Rodrigues, P. (2015), "House prices: bubbles, exuberance or something else? Evidence from euro area countries," *Working Papers* 2015/17, Banco de Portugal.

11 For further details, see Box 5 "House price developments in Portugal and implications for financial stability", *Financial Stability Report*, December 2017, Banco de Portugal. However, there is evidence that house prices at national level are close to the levels warranted by economic fundamentals, although there may be excessive price increases in specific geographic areas, namely large urban centres.

12 Banco de Portugal, "Macro-prudential policy strategy", December 2015.

13 As defined in Article 4(1) (e) of Decree-Law No 133/2009: overrunning means the overdraft tacitly accepted by the creditor, allowing consumers to have at their disposal funds in excess of the balance of their deposit account or of the agreed overdraft facility.

14 This definition of the LTV ratio denominator is consistent with the Recommendation of the ESRB on closing real estate data gaps (ESRB/2016/14).

15 Credit agreements concluded with a mixed interest rate include a fixed interest rate period and a variable interest rate period.

Abbreviations

ESRB	European Systemic Risk Board
p.p.	percentage points