



Frequently Asked Questions - Macroprudential measures

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LTV, DSTI and maturity limits (last update: 31 Jan 2022)

1. Why has Banco de Portugal adopted this measure?

As the national macroprudential authority, Banco de Portugal aims to promote financial stability and adopt measures to prevent systemic risks, i.e. risks that may spread to the financial system and the economy in general. The Portuguese economy continues to have high indebtedness levels and a low household saving rate by historical standards. In addition, the recent economic recovery, amid very low interest rates and a strong rebound in housing prices, has been accompanied by an easing of credit standards by financial institutions. Although the current situation does not pose a risk to financial stability in the short run, the maintenance of these factors may create incentives for the excessive easing of credit standards. The measure that Banco de Portugal has just adopted as preventive action is aimed at preventing the accumulation of excessive risk in the banks' balance sheets and ensuring that households obtain sustainable financing, minimising the risk of arrears.

2. Which credit agreements are covered by the measure?

The measure applies to new credit agreements relating to residential immovable property, credit agreements secured by a mortgage or equivalent guarantee and consumer credit concluded from 1 July 2018 onwards. In compliance with the provisions of Notice of Banco de Portugal No 4/2017 of 22 September 2017, the Recommendation excludes certain types of credit agreement, such as overrunning and credit agreements intended to address arrears situations. The Recommendation also does not apply to transactions for an amount up to tenfold the guaranteed monthly minimum wage or in which a credit increase during the lifetime of the agreement is available to the consumer for a period of up to three months. In any case, Banco de Portugal will monitor at least once a year the evolution of credit agreements for consumers excluded from the scope of this Recommendation.

3. What is this measure?

The macroprudential measure consists of the introduction of limits in credit granted from 1 July 2018 onwards to (i) the ratio of the amount of credit relating to residential immovable property, secured by a mortgage or equivalent guarantee, to the value of the immovable property pledged as collateral (LTV), (ii) the ratio of the amount of monthly instalments of a borrower's total debt to the borrower's monthly income less taxes and compulsory social security contributions (DSTI) and (iii) the maturity of the loan. In particular, the following limits are established: to the ratio of the loan amount to the value of the property pledged as collateral (LTV – loan-to-value): of 90% for credit for own and permanent residence; of 80% for credit for purposes other than own and permanent residence; of 100% for credit for purchasing immovable property held by the credit institutions and for property financial leasing agreements; of 50% to the ratio of the monthly instalment amount calculated with all the borrower's loans to his/her income (DSTI – debt service-to-income), with the following exceptions: up to 10% of the total amount of credit granted by each institution may be granted to borrowers with a DSTI of up to 60%; up to 5% of the total amount of credit granted by each institution may exceed the

limits laid down regarding the DSTI. To calculate the DSTI, monthly instalments of the new credit agreement should be assumed to be constant throughout the agreement's lifetime. In the case of variable and mixed interest rate agreements, the impact of an interest rate rise must be considered. Furthermore, the DSTI should be calculated taking into account a reduction of the income of the borrower where, at the planned expiry of the agreement, the borrower will be aged 70 or over, except where at the time of the creditworthiness assessment the borrower is already retired. to the original maturity of the loans: of 40 years in credit agreements for house purchase and credit secured by a mortgage or equivalent guarantee, for borrowers aged 30 or under; 37 years for borrowers aged over 30 and up to and including 35; and 35 years for borrowers aged over 35, and gradual convergence towards an average maturity of 30 years by the end of 2022; of 7 years for new personal credit; of 10 years for new personal credit for education, healthcare and renewable energy, provided that these purposes are duly evidenced; and of 10 years for new car credit. The definitions of personal credit and car credit and of personal credit purposes correspond to those provided for in Instruction of Banco de Portugal No 14/2013. The limits introduced by this Recommendation correspond to caps and as such do not replace the institutions' mandatory assessment of the adequacy of the different indicators' values and other relevant criteria used in the assessment of each borrower's creditworthiness. Furthermore, the macroprudential measure establishes that credit agreements have regular principal and interest payments.

4. Why were three limits introduced simultaneously?

The reason for defining limits for the different indicators is that these complement one another when signalling credit-related risks or losses, as well as the fact that, when applied simultaneously, the limits contribute to a mutual reinforcement of their respective efficacy. The LTV and DSTI indicators play a role in the assessment of the different credit risk components. The DSTI tends to signal the probability of default, by associating the value of the monthly instalment of loans with the borrower's income. In turn, the ratio of the credit outstanding to the value of the property pledged as collateral, given by the LTV, provides information on potential losses to the financial system in case of default. However, limits to the LTV may become less restrictive in a context of rising housing prices, which is why they are 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 maturity of loans is also relevant for determining the 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. The adoption of limits to the original maturity of loans prevents limits to the DSTI ratio from being circumvented by the extension of the maturity of loans. Hence, the application of the three limits makes it possible to reduce the probability of default and losses to the financial system in case of default and prevents each individual limit from being easily circumvented.

5. Why are interest rate increases and income reductions considered in the calculation of the DSTI?

The DSTI indicator is sensitive to factors that may change debt service charges or the borrower's income. Hence, it is important to ensure that the value of the indicator resulting from a loan taken out at a variable or mixed rate may accommodate an expected rise in interest rates. The probable reduction in the borrower's income upon retirement should also be taken into consideration when calculating this indicator. Most credit relating to residential immovable property is granted at a variable rate, the most common being agreements index-linked to the Euribor rate. Given that this rate stands at a very low level, the purpose of considering in the DSTI calculation a 3 p.p. increase applied to this reference rate in loans with a maturity of over 10 years is to prevent the expected rise in the Euribor from putting the loan at an excessive risk threshold, which may lead to arrears. For the calculation of the DSTI for loans with a maturity of 10 years or less, a lower increase in the interest rate is considered, since the probability of the Euribor rate increasing by 3 p.p. in a shorter period of time is lower. The reduction in income upon the borrower's retirement in the calculation of the DSTI results from the fact that this situation is usually accompanied by a fall in income, which is expected to be more significant for the younger generations.

6. Why are there exceptions to the DSTI limit?

The DSTI is an indicator of the borrower's degree of financial effort associated with debt service. Although this criterion is key for ascertaining, in general terms, the probability of credit default, there are other important factors for ascertaining credit risk. For example, the borrower's level of wealth, the existence of a guarantor, or the amount of the borrower's other regular expenses, also affect the ability to pay credit, although they are not considered for calculation of the DSTI. Hence, taking into account the wider group of indicators used by credit institutions when assessing specific risk situations, Banco de Portugal allows institutions to exceed the limit to the DSTI in some cases. However, institutions will have to account for these exceptions. Banco de Portugal grants a certain flexibility to institutions when applying the measure, on the assumption that it is used carefully and according to strict risk analysis standards. These exceptions and their underlying reasoning will be duly assessed by Banco de Portugal.

7. Why is the lower of the purchase price and the appraisal value of the immovable property used as the LTV denominator?

The determination of the property value is a critical variable for the calculation of the LTV and hence for the importance of this ratio as a risk indicator. The capacity of the LTV to signal potential losses to the financial system stemming from default depends on whether the variable considered for the property value corresponds to the market value at a given time or the value of a possible property resale. Usually there is some subjectivity when determining the property value, both by an appraiser and the respective buyer or seller, often involving a discrepancy between the property transaction value and its bank appraisal. Hence, using the lower of the two values when calculating the LTV is a prudent procedure in the assessment of risk associated with immovable property, consistent with the recommendations of the European Systemic Risk Board and the practices observed in a number of European countries. There are, however, situations in which it is not possible to

determine the property's purchase price or in which this is not an appropriate reference for its market value, such as the case of immovable property acquired through legacies or gifts. In these cases, the LTV should be calculated based on the appraisal value.

8. Why are different limits to the LTV considered for different types of credit?

It is more likely that in the event of financial difficulties borrowers favour compliance with credit agreements for the purchase of or secured by own and permanent residence, because they value the safeguarding of their residence. International experience also highlights the importance of distinct, stricter limits in the case of purposes other than the purchase of own and permanent residence. With the rise in the levels of arrears in credit relating to residential immovable property in the wake of the financial crisis, institutions have accumulated a considerable volume of immovable property due to default. Given that this interferes with the institutions' business model, the less strict limit for financing the purchase of property held by institutions (LTV of 100%) is designed to facilitate the reduction of non-productive assets in institutions' balance sheets. In property financial leasing agreements, the introduction of a limit of 100% to the LTV ratio is also warranted, given that 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).

9. How have the different limits been calculated?

Quantitative limits were defined based on impact studies conducted by Banco de Portugal. These limits were also compared to relevant international references. The studies analysed the probability of default and losses to the financial system related to the different LTV and DSTI levels, as well as the impact of imposing various limits on credit and other variables relevant to financial stability. In the course of this process, Banco de Portugal collected and analysed information on the credit standards currently followed by Portuguese institutions, and also assessed expectations as to the future evolution of these criteria. 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 limits were defined with the purpose of reinforcing suitable credit granting practices, limiting credit to higher-risk borrowers, without however affecting most lending.

10. Why did Banco de Portugal decide to implement the measure as a recommendation?

A recommendation may be considered less binding than other forms of action by Banco de Portugal, such as a notice or an instruction, insofar as it does not establish sanctions for the institutions' non-compliance. Hence, this form of regulation grants credit institutions greater flexibility in their action. Similarly to macroprudential authorities from other European Union countries that chose similar forms of intervention, Banco de Portugal, with the greater flexibility associated with this type of measure, has sought to avoid market disturbances, which are difficult to forecast in the current circumstances, given the more recent nature of macroprudential policy and the greater uncertainty about its impact. However, the Recommendation is subject to the "comply or explain" principle. This allows Banco de Portugal to assess the adequacy of the justifications presented by the institutions. In the event that the explanation presented by institutions is considered inadequate, Banco de Portugal may issue other measures within its competences as the national macroprudential authority. For this purpose, Banco de Portugal will monitor the implementation of this Recommendation at least once a year.

11. Which credit institutions are covered by this measure and how may it affect market competition?

The measure applies to all entities authorised to grant credit covered by the Recommendation in Portugal, namely credit institutions and financial companies that have their head office or a branch in Portuguese territory. Since the Recommendation applies to institutions granting credit in Portugal, whether they have their head office in Portuguese territory or abroad, its implementation is expected to cause no distortions to market competition. Banco de Portugal will monitor the institutions' compliance with the Recommendation and assess the adequacy of the justifications presented in the event that the Recommendation is not adopted, thus contributing to the prevention of potential distortions of competition.

12. How can consumers assess their debt capacity in the light of the Recommendation?

The important limits for consumers assessing their creditworthiness are the LTV and the DSTI, which in turn depends on the maturity of the loan. Debt capacity will correspond to the lowest value resulting from the application of the first two criteria. The LTV applies to credit relating to residential immovable property and credit secured by a mortgage or equivalent guarantee and allows, as regards purchase of own residence, indebtedness equivalent to 90% of the housing purchase price (assuming that the bank appraisal is not lower than that value, nor is it a property held by the institution or a property financial leasing agreement). The DSTI applies to credit in general, including that already taken by the consumer. Hence, in the numerator, the amount of monthly instalments of all the borrower's loans should be added, even those that are not covered by the recommendation. Illustration of a calculation of debt capacity: Credit for the purchase of own permanent residence Purchase price of €190,000 Appraisal value of €200,000 34-year-old borrower with a monthly income less taxes and compulsory social security contributions of €1,500 Credit with a maturity of 37 years (resulting in a 1-year period after the borrower turns 70) Annual interest rate of 2%, resulting from a spread of 2.25 p.p. over a 6-month Euribor rate equivalent to -0.25% The borrower has no prior loans Credit allowed by the limit to the LTV: $0.9 * 190 = €171,000$ (the purchase price is lower, and thus applied in the numerator) Credit allowed by the limit to the DSTI: Assuming that no exception applies, the borrower may enter into debt up to $DSTI = 50%$, corresponding to the following monthly instalment: $DSTI = 0.5 = MI / MInc$ $MI = 0.5 * MInc = MI = 0.5 * 1500 * [1 - 0.2 * 1/37] = 745.95$ MI = monthly instalment considering a 3 p.p. rise in the Euribor rate MInc = monthly income considering a 20% reduction in the borrower's income referring to the agreement

period when the borrower was aged over 70 = $1500 * [1 - 0.2 * 1/37]$ The loan equivalent to a monthly instalment of €745.95, calculated as a 5% interest rate (2% + 3 p.p. rise in the Euribor rate) and a maturity of 37 years, is €150,770. This monthly instalment does not correspond to that actually paid by the borrower when taking out the loan, since it was calculated from a DSTI that considers an increase in the interest rate. The monthly instalment actually paid by the borrower is €480.84, corresponding to 32% of his/her income. Hence, the borrower with the above characteristics may enter into debt totalling up to €150,770, which corresponds to the lowest result from the two criteria. The Bank Customer Website, managed by Banco de Portugal, features simulators to calculate the value of the monthly instalment associated with each loan, based on the respective amount, interest rate and maturity.

13. Are regular payments required for all agreements or are there any exceptions?

It is admissible for institutions to justify non-compliance with the regular payments requirement when, after analysing a given situation, it is found that the requirement does not fit the specific nature and circumstances of the respective agreement, such as for bridging loans (temporary loans with only capital drawdowns and no repayments until the maturity date), loans for down payments on house purchases, student loans (including mutual guarantee student loans) and specific credit facilities for urban regeneration.

14. I am thinking about switching my loan to another credit institution. Do the limits set in the recommendation apply to my case as well?

According to Article 2 of the Recommendation, “credit agreement” means 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, with the exceptions referred to in Article 1, such as 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). Switching loans from one credit institution to another is no exception. When a loan is switched to another credit institution, a new agreement is entered into between it and the borrower switching the loan. To enter into this new agreement the credit institution must observe a list of procedures, particularly regarding the assessment of the risk underlying the transaction, which includes assessing the customer's creditworthiness. Credit institutions are required to comply with these procedures when entering into a new credit agreement regardless of whether that agreement was a switched loan or not, and thus are subject to the criteria set forth in the Recommendation.

15. What were the changes made to the Recommendation in 2020?

Banco de Portugal has decided to reduce the upper limit for the maturity of new personal credit from 10 to 7 years, with the exception of credit for education, healthcare and renewable energy, provided that these purposes are duly evidenced. New car credit will continue to have a maturity of 10 years. In addition, and to contain potential unwanted effects resulting from the introduction of an upper limit of 7 years to the personal credit maturity on the level of the ratio of the monthly instalment amount calculated with all the borrower's loans to his/her income (DSTI– debt service-to-income). In this sense, the exceptions provided for in the Recommendation for granting credit to borrowers with a DSTI ratio above 50% will be reduced to closer to the value currently used by institutions. Thus, up to 10% of the total amount of new credit granted by each institution may have a DSTI of up to 60%, continuing to allow institutions to consider other important aspects for assessing borrowers' creditworthiness that are risk mitigating factors. The 5% exception to the DSTI limits will be maintained. The definitions of personal credit and car credit correspond to those provided for in Instruction No 14/2013 of Banco de Portugal.[1] [1] The following definitions shall apply: (i) personal credit – credit with repayment time schedule, amount and duration of the loan set out at the start of the agreement, with the exception of car credit; (ii) personal credit for education purposes – credit to finance education expenses; (iii) personal credit for healthcare purposes – credit to finance healthcare expenditure.; (v) personal credit for renewable energy – credit to finance renewable energy equipment; and (vi) car credit – credit for the purchase of a car or other vehicles, with repayment time schedule, amount and duration of the loan set out at the start of the agreement.

16. Why was the Recommendation revised in 2020?

In the past two years Banco de Portugal has been monitoring developments in credit granting activity to ensure the effectiveness of the Recommendation. In this sense, the maintenance of the upward trend of the average maturity and average amount of new consumer credit, in particular personal credit, poses an increased risk for the financial system, as it implies that borrowers will be exposed to fluctuations in the business cycle for longer periods. These developments occurred amid: a still high household indebtedness level; a protracted very low interest rate environment, which may encourage search-for-yield behaviour materialised in an easing of credit standards; and high consumer confidence, supported by expectations of continued growth in disposable income that strengthens credit demand. However, the current economic environment is characterised by high uncertainty and a slowdown in economic activity. In fact, projections for economic growth published by Banco de Portugal and the main international organisations have been revised downwards, with risks to economic activity mostly on the downside. In the medium term the changes introduced to the Recommendation foster the reduction of borrowers' probability of default, improving the quality of the institutions' credit portfolio. This effect is particularly significant given the borrowers' vulnerability to a potential deterioration in labour market conditions.

17. What are the changes made to the Recommendation in 2022?

The Banco de Portugal has decided to reduce the upper limit to the maturity of new credit for house purchase and credit secured by a mortgage or equivalent guarantee to 37 years for borrowers aged over 30 and up to and including 35; and 35 years for borrowers aged over 35. In the case of borrowers aged 30 and under, the upper limit to the maturity of these credits remains at 40 years. The Banco of Portugal, as the macroprudential authority, will continue to monitor compliance with

the Recommendation and may adopt the additional measures it considers appropriate to achieve the purpose of convergence of the average maturity of new credit for house purchase towards 30 years.

18. Why is the Recommendation being revised in 2022?

Credit institutions have broadly complied with the guidelines set out in the macroprudential Recommendation relating to new credit for house purchase and consumer credit. Nevertheless, the average maturity of new loans for house purchase has not undergone linear and gradual convergence towards 30 years. In addition, the average maturity of credit for house purchase in Portugal remains somewhat high compared to other European Union countries. The adoption of limits to the original maturity of loans is aimed at: (i) avoiding that limits to the DSTI ratio are circumvented by the extension of the loan maturity; (ii) easing the extension of the maturity and the restructuring of the loan in the event of borrowers' arrears, potentially reducing default; and (iii) reducing the divergence from the average maturity of new credit agreements for house purchase in other European Union countries. Given the strong concentration of new credit for house purchase in longer maturities, the Banco de Portugal considers that the maximum maturity of new business should be reduced to contribute to the gradual and linear convergence of the average maturity of new credit agreements for house purchase towards 30 years by the end of 2022.