FSB
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FSB Principles for Sound Residential Mortgage Underwriting Practices

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Definitions

Definitions often differ across jurisdictions. For the purposes of these Principles, the following definitions are used:

Appraisal:	A comprehensive assessment of the property characteristics, which will include determining an opinion of the collateral's value. In some countries the same process is known as a "valuation" or the terms are used interchangeably.
Balloon payment:	The remaining amount of principal that becomes due and payable on the final instalment payment for a loan that is not fully amortised.
Collateral:	The property or property rights upon which the residential mortgage loan is secured.
Collateral management:	For purposes of these Principles, collateral management concerns all tasks and processes within the mortgage underwriting process where collateral is involved, e.g. appraisal of collateral, the constitution of collateral, review of its legal existence and enforceability and entry of collateral-related data in the lender's information technology systems.
Debt-to-income (DTI):	Annual or monthly total debt servicing requirements, including principal, interest, taxes and insurance, as a percentage of annual or monthly income that is available to repay the debt.
Down payment:	Up-front payment from the buyer for a portion of the purchase price, which reduces the balance of the loan against the property.
Equity:	Difference between the appraised value of the property and the total claims held against the property.
Loan-to-income (LTI):	Annual or monthly mortgage loan servicing requirements as a percentage of annual or monthly income that is available to repay the loan.
Loan-to-value (LTV):	The ratio of the amount of the loan outstanding to the appraised value of the residential property.
Mortgage loan:	A loan that is collateralised against a residential property, including purchase, home equity loans, home equity lines of credit (HELOCs) and refinancings.
Mortgage insurance:	A type of insurance where the lender receives compensation against loss from default on the part of a borrower on a mortgage loan (also known as mortgage default insurance or mortgage guaranty insurance).
Variable rate mortgage:	A loan in which the interest rate rises and falls possibly based on the movement on an underlying index. The term variable rate mortgage is used interchangeably with adjustable rate mortgage.

I. Introduction

In March 2011 the Financial Stability Board (FSB) published a thematic review of residential mortgage underwriting and origination practices.[1] Based on the findings of the review, six recommendations were set out, one of which asked the FSB to develop an international principles-based framework for sound underwriting practices. After providing sufficient time for implementation, the FSB will conduct a follow-up review to assess progress made in implementing the framework. Given that the underlying risks can differ across jurisdictions, the Principles are high-level rather than aimed at detailed international standards.

As the global crisis demonstrated, the consequences of weak residential mortgage underwriting practices in one country can be transferred globally through securitisation of mortgages underwritten to weak standards. As such, it is important to have sound underwriting practices at the point at which a mortgage loan is originally made. In response to the crisis, a number of FSB members have encouraged stricter underwriting practices so as to limit the risks that mortgage markets pose to financial stability and to better safeguard borrowers and investors. Internationally agreed Principles will help to strengthen residential mortgage underwriting practices and enable supervisors to more effectively monitor and detect the erosion of underwriting practices particularly when the housing market is booming.

The FSB Principles are intended to apply to loans to individuals (consumers) that are (i) secured either by residential mortgage or by another comparable security commonly used in some jurisdictions on immovable residential property; (ii) secured by a right related to immovable residential property; and (iii) loans for which the purpose is to acquire or retain rights in immovable residential property. However, some or all of the Principles may not necessarily be appropriate or applicable for certain niche forms of finance.[2] Jurisdictions should nonetheless seek to apply all Principles that are relevant. In all instances, a robust and effective assessment of individual affordability must underpin any sustainable lending model. It is important to note that the Principles focus on the credit granting decision rather than wider issues of credit risk management.

Jurisdictions should ensure that entities that originate a mortgage, or own the resulting risk, adhere to these FSB Principles, including any entities involved in outsourcing of mortgage underwriting. The Principles span the following areas, some of which proved to be particularly weak during the global financial crisis that started in 2007: (i) effective verification of income and other financial information; (ii) reasonable debt service coverage; (iii) appropriate loan-to-value ratios; (iv) effective collateral management; and (v) prudent use of mortgage insurance. The report also sets out an implementation framework to promote minimum residential mortgage underwriting standards, and describes tools that could be used to monitor and supervise these standards.

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[1] http://www.financialstabilityboard.org/publications/r_110318a.pdf.

[2] For example, equity release products (reverse mortgages) and bridging finance are explicitly designed to be repaid from the proceeds of the sale of the property, so some of the Principles will be less applicable to them. Borrowing by high-wealth borrowers or purchasers of buy-to-let properties should generally be considered within the scope of these Principles, but they might not apply to such borrowing in the same way as they would to the bulk of mortgage lending (see Principle 6).

In general, the range of residential mortgage underwriting practices reflects the distinct real estate markets, cultural differences and socioeconomic policies that shape each jurisdiction's mortgage market. Hence, these Principles should be implemented according to national circumstances, and as appropriate to national institutional arrangements, whether through legislative, regulatory or supervisory measures, or through industry practices.

II. Principles

The *FSB Principles for Sound Residential Mortgage Underwriting Practices* aim to provide a framework for jurisdictions to set minimum acceptable underwriting standards. Jurisdictions should ensure that lenders adopt sound mortgage underwriting standards against which supervisors can monitor and supervise. Lenders may choose to outsource aspects of the activities covered by these Principles, for example to credit intermediaries, credit bureaus and appraisers, but jurisdictions should ensure that lenders retain responsibility for all such tasks. The examples presented in *italics* provided throughout the Principles should be interpreted as such, and jurisdictions should implement the Principles accordingly.

The Principles will assist FSB members in their efforts to improve financial stability and prudential standards. They also refer to consumer protection issues that contribute to these objectives, but the Principles are not intended to be a statement of consumer protection standards. Jurisdictions will want to adopt the consumer protection standards that are appropriate to them.

1. Effective verification of income and other financial information

A borrower's underlying income capacity is a key input into effective mortgage underwriting. Jurisdictions should ensure that lenders verify and document each applicant's current employment status, relevant income history, and other financial information (e.g. credit scores, credit registers) submitted for mortgage qualification. While income verification can help to measure a borrower's "ability to repay", other financial information can help to measure or to infer a borrower's historical "propensity to repay".

1.1 **Jurisdictions should ensure that lenders make reasonable inquiries and take reasonable steps to verify a borrower's underlying income capacity.** Lenders should obtain sufficient income history on the borrower and make appropriate efforts to capture any variability in the borrower's income by collecting and analysing sufficient income history. These income reports should be based on authoritative sources. Lenders may require even more extensive history or third-party verification to document income and profit capacity for borrowers who are self-employed, entrepreneurs, or have seasonal or irregular sources of income.

1.2 **Jurisdictions should ensure that lenders maintain complete documentation of the information that leads to mortgage approval.** Lenders should document the income history collected for each applicant, including the steps taken to verify income, and maintain this documentation for a number of years after origination of

the loan. A proper record with an adequate explanation of the steps taken to verify income capacity should be readily available for supervisors.

- *For example, the documentation could contain income information disaggregated into wage/salary and the more volatile components such as overtime, commissions, bonuses, equity pay, seasonal and irregular income, where variable pay is a significant part of the total income. In case a lender uses internal scoring methods, information about data and algorithm requirements for scoring borrowers should also be available.*

1.3 **Jurisdictions should ensure that incentives are aligned with accurate representation of borrowers' income and other financial information.** The loan documentation requirements should be designed to help identify misrepresentation of information either by the borrower, the lender or the credit intermediary. When fraud is detected, it should be possible to have recourse as appropriate to the jurisdiction's legal system.

2. Reasonable debt service coverage

One of the most fundamental components of prudent underwriting is an accurate assessment of the borrower's ability to repay the mortgage. This is important to help ensure prudent mortgage underwriting standards minimise defaults and losses, and thus, promote stability of the financial system. Furthermore, it is an important factor in reducing the likelihood of consumer over-indebtedness and the negative social and economic impact of forced sales.

2.1 **Jurisdictions should ensure that lenders, while taking into account data protection rules in their jurisdiction, appropriately assess borrowers' ability to service and fully repay their loans without causing the borrower undue hardship and over-indebtedness.**

- Jurisdictions should ensure that lenders (i) establish appropriate processes to assess the borrower's ability to repay the loan; (ii) review these processes at regular intervals; and (iii) maintain up-to-date records of those processes.
- Jurisdictions should ensure that lenders take into account all relevant factors that could influence the prospect for the loan to be repaid according to its terms and conditions over its lifetime. This should include an appropriate consideration of other servicing obligations, such as the level of other debt (secured and unsecured), the interest rate and outstanding principal on such debt, and evidence of delinquency. Lenders should also include an assessment of whether the loan can be expected to be repaid, including principal, interest, taxes and insurance, within the specified loan amortisation period from the borrowers' own resources (income and assets) without inducing undue hardship and over-indebtedness.
- Temporarily high incomes should be suitably discounted. If the loan term extends past normal retirement age, lenders should take appropriate

account of the adequacy of the borrower's likely income and repayment capacity in retirement.

- The assessment of the borrower's ability to repay should neither be based on the assumption that the property will appreciate in value (unless the purpose of the loan is to construct or renovate the immovable residential property) nor on an expected significant increase of the borrower's repayment capacity.

2.2 **Jurisdictions should ensure that lenders make reasonable allowances for committed and other non-discretionary expenditures in the assessment of repayment capacity.**

- This could include establishing the borrowers' actual obligations, including appropriate substantiation and consideration of normal living expenses.
- Lenders should also include risk limits in their internal loan policies, such as specifying minimum levels of residual net income after meeting obligations or fixed ratios of repayment to some measure of gross or net income (*e.g. debt-to-income ratio, loan-to-income ratio*).

2.3 **Jurisdictions should ensure lenders make prudent allowances for future negative outcomes.** Lenders should include an increase in benchmark interest rates in the case of variable rate mortgages or an unfavourable change (for a borrower) in the exchange rate in the case of mortgages granted in foreign currencies. As such, repayment capacity calculations should take into account the highest payment currently scheduled to apply during the term of the loan rather than solely utilising the first few payments at the prevailing interest rate or foreign exchange rate. Lenders also should consider the increase in future payments due to negative amortisation, balloon payment, or deferred payments of principal or interest.

2.4 **Jurisdictions should ensure that lenders provide borrowers with sufficient information to clearly understand the main elements which are taken into account in order to determine a borrower's repayment capacity, the main characteristics of the loan including the costs, and risks associated with the loan in order to enable borrowers to assess whether the loan is appropriate to their needs and financial circumstances.** It is important that customer information be clear, concise, reliable, comparable, easily accessible, timely, and comprehensive (i.e. the information should also take into account the effect of variation in interest rates and the combined effect of the loan and any other product linked to it). This information should be provided to borrowers without charge and effectively present the total cost of the mortgage during its lifetime, taking into account the loan terms.

3. Appropriate loan-to-value (LTV) ratios

Collateralisation is an important dimension of mortgage underwriting standards. From an historical perspective, high-LTV ratio loans consistently perform worse than those with a high

proportion of initial equity. While it is common for individual lenders to apply a cap on LTV ratios, it is not necessary for regulators and supervisors to mandate such a cap if they satisfy themselves that the underwriting standards are sufficiently prudent and are unlikely to be eroded under competitive pressure. However, jurisdictions may consider imposing or incentivising limits on LTV ratios according to specific national circumstances.

3.1 **Jurisdictions should ensure that their regulatory and supervisory frameworks appropriately incentivise prudent approaches to the collateralisation of mortgage loans.** However, the LTV ratio should not be relied upon as an alternative to assessing repayment capacity (see Principle 2 for more details).

3.2 **Jurisdictions should ensure that lenders adopt prudent LTV ratios with an appropriate level of down payment that is substantially drawn from the borrower's own resources, not from, for example another provider of finance, to ensure the borrower has an appropriate financial interest in the collateral.**

3.3 **Where national frameworks specify controls, standards or incentives on LTV ratios, these jurisdictions should ensure that lenders satisfy themselves that the LTV ratio takes into consideration the "real value" of the available equity, which could be calculated on the basis of:**

- a robust and prudent approach to property appraisals (see Principle 4);
- all loans that are collateralised against the same property or for financing part of the cost of the property. This should include loans provided alongside the main mortgage (e.g. top-up loans, renovation or decoration loans); and
- any increase in loan authorisation being subject to a full assessment of the borrower's repayment capacity and to an appropriate LTV ratio at the point of the new mortgage underwriting, and not rely on the excess equity. Any subsequent refinancing utilising a second charge or lien should lead to the calculation of a new LTV ratio where possible. Particular caution should be exercised about drawing down on the equity in the property if that would raise the current LTV ratio above the level originally agreed.

3.4 **Jurisdictions should ensure that lenders refrain from relaxing LTV ratios at the time of a boom in the property market.**

4. Effective collateral management

Collateral management and sound appraisal processes are essential to the mortgage business. The property and the appraised property value are of utmost importance for risk limitation and mitigation.

4.1 **Jurisdictions should ensure that lenders adopt and adhere to adequate internal risk management and collateral management processes, which include sound**

appraisal processes. Proper collateral management should include onsite inspections by lenders or appraisers; but onsite inspections could be exempted if the lender or appraiser is able to demonstrate that the risk posed has been adequately assessed through the overall collateral management process.

- *For example, a flat or an apartment in a multi-family building which had recently undergone an on-site inspection could be exempted.*

4.2 **Jurisdictions should ensure that lenders adopt appraisal standards and methods that lead to realistic and substantiated property appraisals.**[3] Property appraisal reports should be supportable and therefore reflect the current price level and the property's function as collateral over the entire life of the mortgage**.** Property appraisal reports should not reflect expected future house price appreciation.

4.3 **Jurisdictions should ensure that lenders require all appraisal reports to be prepared with appropriate professional skill and diligence, and that appraisers (whether internal or external) meet certain qualification requirements**. Appraisers, and providers of appraisal systems, should be independent from the lender's respective mortgage acquisition, loan processing and loan decision process. In addition, they should not have an interest in the result of the appraisal. Coercion, improper compensation schemes and other inappropriate influence on appraisers should be sanctioned.

4.4 **Jurisdictions should recognise the importance of sound regulation and oversight of appraisers, either through self-regulation or statutory means.**

4.5 **Jurisdictions should ensure that lenders maintain adequate appraisal documentation for collateral that is comprehensive and plausible.** It should include an examination of all aspects relevant to the property value. The scope and extent of the appraisal report should be commensurate with the property value and inherent risks.

4.6 **Jurisdictions should ensure that lenders satisfy themselves that the claim on collateral is legally enforceable and can be realised in a reasonable period of time.** This includes that borrowers should have or will have clear title to the property and the characteristics are as they have been represented. The types of property accepted as collateral and the related mortgage underwriting policies should be clearly documented. The property serving as collateral should be appropriately insured against damage.

4.7 **Jurisdictions should ensure that lenders deduct significant incentives or benefits offered in the context of buying the property (e.g. vendor financing of down**

[3] Standards such as the International Valuation Standards by the International Valuation Standards Council or the Red Book by the Royal Institution of Chartered Surveyors could serve as a starting point.

payments, sales and financing concessions) that may inflate the price of the property in the course of the appraisal process.

5. Prudent use of mortgage insurance

Mortgage insurance is used in some jurisdictions as a form of credit support for mortgage loans, and a way to provide additional financing flexibility for lenders and borrowers.

5.1 Jurisdictions should ensure that where mortgage insurance is used, it does not substitute for sound underwriting practices by lenders. Lenders should conduct their own due diligence including comprehensive and independent assessment of the borrower's capacity to repay, verification minimum initial equity by borrowers, reasonable debt service coverage, and assessment of the value of the property. In addition, mortgage insurers should have their own prudent underwriting practices consistent with the Principles in this framework. In summary, mortgage insurance should not be considered as an alternative for due diligence.

5.2 Jurisdictions should ensure that lenders carry out prudent and independent assessments of the risks related to the use of mortgage insurance, such as counterparty risk and the extent and details of the coverage of the mortgage insurance policies. The effectiveness of mortgage insurance depends on the financial strength of the provider and a clear understanding of the policy coverage, which should be frequently monitored and assessed by the lender.

5.3 Jurisdictions should ensure that all mortgage insurers be subject to appropriate prudential and regulatory oversight and, where used, represent an effective transfer of risks from lenders to insurers. However, in the case of government entities, comprehensive regulatory oversight may suffice. Through the use of mortgage insurance, credit risks, particularly those for high LTV loans, are transferred from lenders to insurers. Given that credit risks are often concentrated within a smaller number of institutions, jurisdictions should carefully monitor mortgage insurers' exposure to such risk concentrations.

6. Implementation framework

Underlying the FSB Principles set out above is an understanding that mortgage underwriting standards are multi-dimensional and interrelated. Lending standards should be applied in a coordinated way, leading to a balanced approach that can vary with the national or economic context. Such an approach aims at preventing excessive build-up of risks (e.g. "risk layering"), avoiding one-dimensional policies that could exclude some creditworthy categories from housing finance, and dampening cycles that could arise from neglecting important dimensions, both in overheating phases (undue relaxation) or downturns (procyclical standard tightening). The following actions form a basis for addressing underwriting risk, although jurisdictions may employ alternative means to counter the build-up of excessive risk.

6.1 **Jurisdictions should ensure that there is an effective framework of mortgage underwriting standards against which regulators and supervisors can monitor and supervise.** This framework could be set centrally by regulators or supervisors, in addition to requiring lenders to have board-approved mortgage underwriting policies. In either case, the framework should meet Principles 1 to 5 and have regard to the interconnectedness of these aspects and the opportunities for arbitrage.

6.2 **Jurisdictions should ensure that lenders consider more conservative underwriting criteria to compensate for situations where the underlying risks are higher.**

- *For example, more conservative underwriting standards (e.g. LTV ratios or servicing requirements) could be considered where:*
    - *there are considerable risks that an asset price bubble is building up in the property market as a whole or in specific segments or geographical areas;*
    - *the loan is in a market segment that, compared with other mortgage loans in that jurisdiction, tends to perform worse than average in a property downturn (depending on the jurisdiction, examples of such a market segment might include luxury apartments, buy-to-let investors, second homes, cash-out refinancers, etc.);*
    - *there is a lack of full recourse against borrowers; or*
    - *other aspects of the underwriting standards are looser than the typical setting in the jurisdiction.*

6.3 **Jurisdictions may want to impose absolute minimum levels of particular dimensions of mortgage underwriting standards below which no mortgage would be deemed acceptable, irrespective of the settings across the other dimensions.** One consideration could be whether a particular product or contract feature is harmful to the borrower's interests.

- *For example, the supervisor could specify that initial LTV ratios above 100 percent are not acceptable under any circumstances or that stated income, i.e. on a pure declarative basis (see Principle 1) is not acceptable and lenders should always conduct due verification.*

6.4 **Jurisdictions may want to require appropriate compensatory tightening in one or more dimensions to offset an easing in other dimensions.**

- *For example, prolonged processes to foreclose delinquent loans could be offset by lower LTV ratios or foreign currency denominated loans could be offset by tighter serviceability requirements.*

6.5 Jurisdictions may want to articulate the circumstances under which the supervisor would expect a material tightening of mortgage underwriting standards, either at an individual institution or across the whole industry.

- *For example, a supervisor could articulate that it reserves the right to demand tighter standards at a particular institution that has material weaknesses in its management controls.*

7. Effective supervisory tools and powers

Jurisdictions should provide for appropriate monitoring and supervision of mortgage underwriting practices. Supervisors should consider the optionality embedded in the relevant loan terms and conditions, and the information used to verify that the loan meets the standard.

7.1 Jurisdictions should give supervisors and regulators the authority to monitor, and where applicable to supervise, mortgage standards and practices. These powers could include:

- collecting data on mortgage underwriting standards and other matters necessary to carry out their regulatory functions and ensure compliance with the framework they have articulated as set out in Principle 6, or (subject to necessary confidentiality restrictions) requiring other agencies to collect data for this purpose on their behalf;
- specifying the data they will collect to fulfill this requirement;
- requiring entities under their prudential and regulatory framework to be capable of tracking portfolios and originations according to the mortgage underwriting standards observed;
- aligning other parts of the supervisory framework (*e.g. stress-testing, compensation regulations or guidance*) with the objective of ensuring prudent lending practices in the mortgage market.

7.2 Jurisdictions should consider subjecting the framework of mortgage underwriting standards described in Principle 6.1 to periodic review. A forward-looking approach should be developed as much as possible, taking into account the fact that significant delinquencies generally appear some years into the life of a loan. The framework should also be mindful of the phase of the cycle in each jurisdiction, and thus avoid adjustments that enhance the procyclical nature of mortgage markets.

7.3 Jurisdictions may want to give supervisors and regulators the authority to require lenders to identify groups of loans with a higher risk profile and that these loans be underwritten to a set of norms specific to them within the overall framework described in Principle 6.

- *For example, they could require lenders not to process solely through automated systems loans extended to borrowers whose situations make risk assessment complex.*

7.4 Jurisdictions should ensure that supervisors or other authorities disclose an assessment of mortgage underwriting practices in their jurisdiction, including the set of entities that are not prudentially regulated, whenever significant changes have been detected.

- The authority or authorities responsible for publishing such an assessment should have the powers to collect such data as are required to make that assessment, or to receive those data from the agency that is authorised to collect it.
- Jurisdictions should specify the relative level of oversight of different types of lenders according to their importance in the financial system and the risks they pose.