



BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

Risk-Informed Pricing

PART A	OVERVIEW	1
1.	Introduction.....	1
2.	Applicability	2
3.	Legal provision	2
4.	Effective date.....	2
5.	Interpretation	3
PART B	POLICY REQUIREMENTS	5
6.	Governance of loan/financing pricing	5
7.	Pricing policy	6
8.	Estimation of pricing components.....	7
9.	Profit cross-subsidisation practices	10

PART A OVERVIEW

1. Introduction

1.1 The pricing of loans/financing is a key element in risk management. A risk-informed approach to pricing can ensure that financial service providers' exposure to the risks associated with lending/financing activities is adequately compensated, while mitigating a purely commercially-driven pricing strategy which can undermine the financial service providers' financial soundness and long term business sustainability. In an environment of more intense competition, Bank Negara Malaysia views that it is imperative for financial service providers to adopt a risk-informed approach in the pricing of loan/financing products.

Objective

1.2 The Risk-Informed Pricing policy document sets out standards that define the responsibilities of financial service providers to adopt a risk-informed approach in the pricing of retail loan/financing products. This is to ensure that decisions on retail loan/financing pricing are consistent with the approved risk appetite.

Scope of policy

1.3 This policy document sets out requirements that must be complied with by financial service providers on the following:

- (i) Governance of loan/financing pricing;
- (ii) Retail loan/financing policy;
- (iii) Estimation of pricing components; and
- (iv) Profit cross-subsidisation practices.

2. Applicability

- 2.1 This policy document is applicable to financial service providers as defined in paragraph 5.2.
- 2.2 The requirements of the policy document are applicable to retail loan/financing products extended to individuals that are approved **on and subsequent to 17 March 2014**.
- 2.3 For credit and charge cards, this policy document shall be read together with the pricing requirements in the Credit Card Guidelines and Credit Card-i Guidelines.

3. Legal provision

- 3.1 The requirements in this policy document are specified pursuant to:
- (i) Sections 47(1), 56, 123(1) and 266 of the Financial Services Act 2013 (FSA);
 - (ii) Sections 57(1), 65, 135(1) and 277 of the Islamic Financial Services Act 2013 (IFSA); and
 - (iii) Sections 41 and 126 of the Development Financial Institutions Act 2002 (DFIA).

4. Effective date

- 4.1 Financial service providers are required to comply with the requirements of this policy document with effect from **17 March 2014**.

5. Interpretation

5.1 The terms and expressions used in this policy document shall have the same meanings assigned to them in the FSA, IFSA and DFIA, as the case may be, unless otherwise defined in this policy document.

5.2 For the purpose of this policy document:

“**S**” denotes a standard, requirement or specification that must be complied with. Failure to comply may result in one or more enforcement actions;

“**G**” denotes guidance which may consist of such information, advice or recommendation intended to promote common understanding and sound industry practices which are encouraged to be adopted;

“**Financial service provider**” or “**FSP**” refers to-

- (i) a licensed bank under the FSA;
- (ii) a licensed Islamic bank under the IFSA; and
- (iii) a prescribed institution under the DFIA.

“**Retail loan/financing products**” refers to loan/financing facilities extended to individuals including but not limited to mortgage loan/financing, vehicle loan/financing and personal loan/financing;

“**Product programme**” refers to a sub-class of retail loan/financing product that may be differentiated from other retail loan/financing product sub-classes by its target customer segment and/or product features. For example, within the mortgage loan/financing portfolio, a FSP may offer multiple mortgage loan/financing programmes to various customer segments that exhibit different credit risk levels and needs (e.g. new graduates, mass market, high net worth market);

“Hurdle rate” refers to the risk adjusted breakeven point in pricing where income is sufficient to cover expected credit loss, associated funding costs and overhead costs;

“Expected loss rate” or “EL” is defined as the loss rate expected for a defined group of borrowers/obligors. It is the product of the borrower’s/obligor’s probability of default (PD) and the loss given default (LGD).

$EL (\%) = PD (\%) \times LGD (\%);$

“Profit cross-subsidisation” refers to the practice of assuming that profits generated from certain profitable retail products will continue to be sufficient to subsidise loans/financing originated at unprofitable rates.

PART B POLICY REQUIREMENTS

6. Governance of loan/financing pricing

- S** 6.1 FSPs shall establish the following:
- (i) A pricing policy that is consistent with the FSPs' risk appetite and approved by the board of directors (the board);
 - (ii) Proper documentation of the process, methodology and data used for estimation of pricing components for the purpose of, among others, back-testing;
 - (iii) Processes for ensuring pricing policies and practices remain consistent with the approved risk appetite and risk management strategy. This must include effective internal controls over occurrences of deviations or exemptions from pricing policies and pricing variations from the approved threshold;
 - (iv) Systems and processes for measuring and monitoring profitability at the portfolio and product programme levels;
 - (v) Systems and processes for assessing and reporting the impact of any underestimation of risk in price setting on the profitability and the adequacy of loan/financing loss provisions and capital under both normal and stressed conditions; and
 - (vi) An effective independent review process to ensure that the pricing framework is appropriate relative to risks assumed by the FSPs and that the price setting is operating effectively based on a risk-informed approach. This includes regular review and back-testing of the criteria, methodologies, assumptions and inputs used in estimating price, investigation into significant deviations or exemptions from the pricing policy and the reasons or bases for such deviations or exemptions. Significant findings together with remedial measures must be escalated to the board or an appropriate committee established by the board. The review must be conducted by a party independent of the parties involved in developing the pricing methodology and estimating the pricing

components, users of the pricing methodology and parties that are likely to benefit by way of compensation from influencing the pricing process.

Responsibilities of the board of directors (board)

- S** 6.2 The board shall ensure that the business plans and strategies for the FSP's retail lending activities and the pricing strategies are consistent with the approved risk appetite and supported by appropriate risk management policies and practices.
- S** 6.3 The board shall ensure that retail lending activities are well-supported by a pricing policy that addresses the different risk profile of borrowers and the risk characteristics of credit facilities offered. The pricing policy shall be approved by the board or an appropriate committee established by the board. The board shall ensure that it obtains timely reports on matters covered under paragraphs (v) and (vi) and take appropriate actions to address risks from imprudent pricing practices.
- S** 6.4 The board must be satisfied of the viability of continuing participation in the retail lending business with a given pricing strategy, having regard to the impact of competitive pricing on loan/financing loss provisions, profitability and capital.

7. Pricing policy

- S** 7.1 FSPs' pricing policy must be documented and supported by operational procedures to ensure effective implementation of the policy.
- S** 7.2 The pricing policy must:
- (i) describe the objectives of the FSP's pricing framework and how they relate to the risk appetite, risk management strategies and business plans;
 - (ii) define roles and responsibilities of the board, senior management,

- business units and other relevant functions with respect to pricing;
- (iii) specify pricing components used in setting prices for retail loan/financing products and internal requirements for the estimation of pricing components. This should incorporate the requirements set out in Part 8 of this policy document;
 - (iv) specify the scope and frequency of independent reviews including the person responsible to conduct independent reviews and report the findings to the board as specified in paragraphs 6.1 (vi) and 6.4 of this policy document;
 - (v) set qualifying criteria for customers to be eligible for a given loan pricing range¹;
 - (vi) set approval authority and limits governing the pricing of product programmes¹;
 - (vii) address how deviations to pricing policy will be handled. This includes defined circumstances under which deviations to pricing policy may be permitted, the approval authority and corresponding limits for deviations, requirements for reporting and monitoring of occurrences and performance of deviation cases and actions that may be taken to address any risk of under-pricing arising from the deviations; and
 - (viii) address the scope, frequency and granularity of senior management reporting to the board on the analysis of profitability² at the product programme level.

8. Estimation of pricing components

- S** 8.1 The pricing of retail loan/financing facilities shall be based on a risk-informed approach. While FSPs maintain ultimate discretion over pricing, FSPs shall

¹ The qualifying criteria, approval authority and limits are typically established before the roll-out of a product programme.

² Profitability analysis conducted after the roll-out of a product programme would allow FSPs to identify profit or loss at the product programme level. This facilitates back-testing of the estimated pricing parameters with the actual parameters in order to assess whether pricing is appropriately aligned with the risks assumed.

determine the hurdle rate of each product in accordance with the requirements in paragraphs 8.2 to 8.10 to support risk-informed pricing decisions.

Expected Loss

- S** 8.2 EL³ is a significant element that determines pricing for loan/financing products. The estimation of EL must be determined at the product programme level and cover one economic cycle which includes one good and one bad economic period. In circumstances where the EL estimation is based on credit loss data incorporating only one good economic period due to unavailability of credit loss data from a bad economic period, FSPs shall apply an appropriate margin of conservatism on the estimation to reflect the likely effect of the bad economic period.
- S** 8.3 Where proxy data is used to estimate EL, FSPs must ensure that the data used relates to products or borrowers that bear similar characteristics to the specific products and risk profile of borrowers for which EL is being estimated. FSPs shall consider the need to make appropriate adjustments to any proxy data used. For example, when using historical credit card losses as a proxy to estimate losses for a new personal loan/financing product, an FSP shall consider the potential underestimation of loss amount⁴ and apply an appropriate margin of conservatism to the proxy data.
- S** 8.4 In cases where expert judgment is used to estimate EL, an FSP shall ensure that there must be proper documentation setting out the basis of such judgment, including any limitation in the use of expert judgment.

³ In most cases, EL varies across different retail credit products and different types of borrower segments (e.g. mass, affluent and high net worth customer segments).

⁴ Although credit card facilities and personal loan/financing products share several similar features such as being unsecured and used to finance personal consumption, default rate and loss amounts for credit card could be lower than personal loans/financing, due to among other reasons the low repayment amount required to ensure that credit card facility remains performing as compared to a personal loan/financing. This can result in a lower default rate on credit cards.

- S** 8.5 The seasoning effect⁵ of the loan/financing product must be incorporated in the estimation of EL in order to capture any incremental changes in default rates during the lifespan of a product.

Funding Costs

- S** 8.6 Funding costs must incorporate all costs associated with the funding of the loan/financing product or programme. This includes costs for managing funding gaps (for example, by holding liquefiable assets and/or maintaining standby credit facilities) as well as costs attributable to the management of re-pricing gap risks.
- S** 8.7 The determination of costs attributed to the management of funding gaps must be supported by prudent analyses of the costs and stability of FSP's funding sources.
- S** 8.8 FSPs shall ensure that for re-pricing gap risk, assumptions on the pre-payment of loan/financing during normal period adequately account for potential behavioural changes during bad economic period.

Overhead Costs

- S** 8.9 Overhead costs shall incorporate overhead and all costs associated with the retail lending activities.
- G** 8.10 In the absence of granular data and information for computation or estimation of overhead costs for a particular product programme, FSPs may use institution-wide average as an alternative estimate.

⁵ Seasoning effect is normally observed in a loan/financing that is structured with interest/profit-only payment in the early years of the repayment period, such as mortgage loans/financing for residential properties under construction.

9 Profit cross-subsidisation practices

- S** 9.1 FSPs that engage in the practice of profit cross-subsidisation shall assess its sustainability and ensure that they are able to manage the impact on overall profitability and capital if profits from certain products fail to materialise, resulting in insufficient returns to compensate the risks assumed.
- S** 9.2 The use of profit cross-subsidisation as part of retail loan/financing pricing strategy must be approved by the board.
- S** 9.3 FSPs shall:
- (i) identify and monitor the performance of credit loan/financing that are subsidising other products in the retail portfolio;
 - (ii) establish early triggers for review of pricing which may include a loss threshold which indicates that the existing profit cross subsidisation strategy is no longer sustainable due to, among other reasons, material adverse changes in the FSP's overall cost structure and changes in market conditions or intensity of competition; and
 - (iii) report to the board or an appropriate committee established by the board when triggers are likely to be breached or have been breached together with the remedial actions to be taken, including revision in pricing and a review of the strategy for cross-subsidisation.