

September, 2015

Mr Jakob Lund  
Basel Committee on Banking Supervision  
Bank for International Settlements  
Centralbahnplatz 2  
CH-4002 Basel  
Switzerland

Dear Mr Lund

**HSBC comments regarding the Basel Committee on Banking Supervision (BCBS) document:**

**Basel III Consultative Document: Interest Rate Risk in the Banking Book**

**Introduction**

We are grateful to have the opportunity to comment on the Consultative Document (CD) on Interest Rate Risk in the Banking Book (IRRBB).

**Capital for IRRBB**

HSBC supports the notion that capital should be held to support potential future losses in the banking book that would arise from a potential future movement in interest rates. The amount of capital held should reflect the loss that would result from an interest rate shock determined to a required confidence level.

HSBC considers that the key question with regards to the level of capital required for IRRBB is to define precisely what a potential loss arising from IRRBB is, and for this to be consistent with the definition of a potential loss elsewhere in the capital framework where it is defined as a negative contribution to P&L.

Where interest rate risk occurs in the trading book and the transactions that give rise to this risk are accounted for through P&L based on fair value, the base case economic value has already been fully recognised through P&L and capital. Any expected reduction in economic value of the trading book due to interest rate movements, typically measured through the use of Value at Risk (VaR), represents the potential future loss that should be capitalised.

However where interest rate risk occurs in the banking book and the transactions that give rise to this risk are accounted for through P&L based on amortised cost, the base case economic value has not been recognised through P&L and capital. An expected reduction in the economic value (negative economic value sensitivity) of the banking book due to interest rate movements does not represent a future loss, unless the expected economic value is negative. The sensitivity risk is not the future loss risk unless the economic value becomes negative.

HSBC therefore considers that capital is required for IRRBB where the economic value of the banking book becomes negative due to a movement in interest rates, and not where the economic value is sensitive to a movement in interest rates as outlined in the CD. Regulatory capital for IRRBB should therefore be required where under a determined interest rate shock the expected economic value of the banking book is negative with the amount of capital required being the extent to which the expected economic value is negative (i.e. the loss).

We note that the CD includes a partial offset for embedded gains under the net interest profit approach under one of the potential capitalisation approaches, which additionally appears to recommend summing an NII value with an EVE value. Further recognition for embedded gains is dismissed due

to the “added complexities” of this issue. (p31). These complexities can be avoided by just adopting an economic value model as set out below.

### **Economic Value of the Banking Book**

HSBC considers that the economic value of the banking book can only be measured based on the present value of expected net interest income, which by definition includes the customer margin.

The economic value of the banking book can be determined in one of three ways:

- the present value of projected net interest income based on a perpetual balance sheet (static or dynamic). This approach is very complex as it requires the use of perpetual projecting and annuity discounting,
- the present value of all projected cash flows (principal and interest) including the repayment of Tier 1 capital, based on a run off balance sheet scenario. This is the same approach as the first method, but it uses a run off scenario instead of a perpetual scenario which greatly simplifies the projections process and discounting cash flow calculations; or
- the second approach can be varied to exclude the repayment of Tier 1 capital. The present value now represents the present value of net interest income and Tier 1 capital under a run off scenario, and is commonly referred to as the Economic Value of Equity (EVE). The economic value of the banking book can then be calculated from this EVE by deducting the Tier 1 capital.

### **Banking Book vs Trading Book**

There appears to be a regulator objective to ensure that the banking book does not have a more favourable capital treatment to the same interest rate risk in the trading book, so as to avoid the opportunity for “regulatory arbitrage”. A number of regulators appear to view a Pillar 1 economic value sensitivity approach to IRRBB capitalisation as the best way to achieve this objective, in line with the approach used for the trading book.

HSBC concurs with this objective, but considers this is best achieved by ensuring that an expected future loss in the banking book is capitalised to the same extent as an expected future loss in the trading book. However as stated above it is the definition of an expected future loss that varies significantly between the banking book and trading book, and this variance does not represent an inconsistency in the capital treatment of the risk, but a fundamental difference in the way the economic value has been reflected through P&L and the way the economic value sensitivity will be reflected through P&L.

In practice a firm with a negative economic value sensitivity to interest rates that is small relative to its customer margin is unlikely to ever require any capital for IRRBB as a loss is unlikely. However a firm with a negative economic value sensitivity to interest rates that is large relative to its customer margin will require capital for IRRBB as a loss is far more likely.

### **Pillar 2 – Capital Planning Buffer**

#### *Available For Sale – Specific Capital Planning Buffer*

AFS securities and any Fair Value Hedge (FVH) derivatives hedging AFS securities are included as part of the banking book, and are reflected in any economic value calculation based on the assumption that they are held to maturity. Any variation in the fair value of the AFS portfolio taken to an AFS reserve will reverse out over the remaining life of the security (as assumed in the economic value assessment), however changes to the fair value of AFS taken to reserves generally impact Common

Equity Tier 1 (CET1). HSBC considers that a Pillar 2 capital planning buffer should be maintained with the regards the CET1 sensitivity arising from interest rate risk on the AFS portfolio, and this should be based on the same approach used to determine the capital requirement for interest rate risk in the trading book (VaR).

### *General Capital Planning Buffer*

In line with other risks, capital for IRRBB should only be held to support an expected negative contribution to P&L arising from a move in interest rates. Any capital required for scenarios where revenue is assessed to be insufficient to support operating expenses, dividends, growth or macro-economic stress scenarios should be assessed holistically across all risk and P&L types as part of a pillar 2 capital planning buffer, and not as part of the capital required for IRRBB.

Economic value sensitivity and therefore net interest income sensitivity will contribute towards the potential need for a capital planning buffer, but capital specifically for IRRBB should only be required where economic value is negative.

### **Economic Value Models**

The Economic Value of Equity (EVE) is calculated by projecting the principal and interest cashflows associated with all existing balances in the regulatory banking book based on a run-off scenario. The principal cash flows modelled include the repayment of any banking book internal funding provided to the trading book but exclude the repayment of any Tier 1 capital.

EVE is therefore calculated based on a scenario where all customer balances are assumed to run off based on their maturity profile. This scenario is consistent with the scenario embedded within VaR models used to assess the capital requirements of the trading book. The key difference however is that although both model a run off, maturity and re-pricing profiles in the trading book are generally certain and can be modelled based on contractual terms, whereas maturity and re-pricing profiles in the banking book are uncertain and require the use of behaviouralisation assumptions.

Behaviouralisation assumptions are required for any banking book balance where the interest rate re-pricing profile and/or maturity profile is uncertain, or where balances do not generally behave in line with their contractual features.

The CD outlines a standardised approach to behaviouralisation assumptions, however, HSBC considers that by definition behaviouralisation has to be firm specific as it is driven by balance sheet structure and local market conditions. The sensitivity of non-interest bearing current account balances to changes in interest rates and managed rate pass on assumptions vary significantly by jurisdiction depending on the structure of the local savings market and the savings ratio. Equally prepayment speeds on mortgages vary significantly by jurisdiction depending on the structure of the local mortgage market. These variations cannot be captured within a standardised approach and should be reflected through the use of an advanced approach.

HSBC considers that regulators should focus on a supervisory approach to oversee how individual firms establish their behaviouralisation assumptions and ensure that changes to behaviouralisation assumptions are not influenced by an interest rate view.

### **Treatment of Tier 1 Capital**

The treatment of Tier 1 capital has little impact on the IRRBB capital requirement when it is based on loss rather than sensitivity.

1. Where Tier 1 cash flows (repayment) are reflected in the economic value calculation, the economic value and a loss identified where the economic value is negative.
2. Where Tier 1 cash flows (repayment) are not reflected in the economic value calculation, the economic value will represent the economic value of equity. The economic value will be higher than calculated under 1 and a loss identified where economic value is below the book value of Tier 1.

In terms of sensitivity the inclusion of Tier 1 removes the sensitivity on the current Tier 1 investment but will create future re-investment sensitivity if the principal repayment of Tier 1 is modelled to occur beyond the maturity of the existing Tier 1 investment.

HSBC considers that for IRRBB economic value modelling Tier 1 should be excluded and Tier 2 included as this reflects both the accounting treatment and the principal and coupon variability.

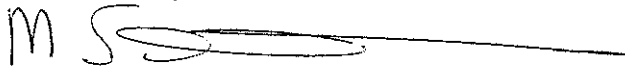
### **Disclosure**

HSBC agrees with the notion of an open IRRBB management framework and, within reason, considers that any disclosure which increases public understanding of our IRRBB framework is to be encouraged. However, we believe enforced public disclosure of quantitative key risk parameters (as mentioned in Table 14, point “k” of the CD) will by necessity be either too high level, or too granular.

An average of key risk parameters (for example, modelled prepayment rates) across a whole range of portfolios will ultimately be representative of no single HSBC portfolio and will be too high level to serve any useful purpose. A more granular disclosure, for example prepayment rates by country, may instead produce a surplus of information that will not be easily digested by the public but indeed may be used by competitor banks to calibrate their own models and glean proprietary information.

HSBC stands ready to engage and help any future design or calibration discussions around the framework for capitalisation of IRRBB.

Yours Sincerely,



Mark Sinclair

Group Head of Liquidity and Structural Interest Rate Risk; Group ALCM