

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS

Financial risk management

Risk management framework

All of the Branch's activities involve, to varying degrees, the defining & enabling, identifying and assessing, managing, aggregating & reporting and governing of risks or combinations of risks. An established Risk Management Framework and ownership structure ensures oversight of, and accountability for the effective management of risk at Group, Regional and Site levels. The framework also complies with the Banking Act No 30 of 1988, as amended.

The Branch's Risk Function consists of Wholesale Credit & Market Risk, Wealth & Personal Banking (WPB) Risk, Operational and Resilience Risk, and CRO & Administration which encapsulates Risk Strategy, Enterprise Wide Stress Testing and certain Operational Risk aspects. The HSBC Group provides overall written policies and procedures on Risk management covering specific areas such as Credit risk, Liquidity risk, Market risk and Operational and Resilience risks. The Local Management through the Executive Committee and the Risk Management Committee monitors the execution of Risk management policies and procedures.

Risk appetite and tolerance limits for key types of risks

Bank's risk appetite defines its desired forward-looking risk profile, and informs the strategic and financial planning process. Furthermore, it is integrated with other key Risk management tools such as Enterprise Wide Stress Testing (EWST), Country Risk Map, Top & Emerging Risks (T&Es) and Risk Appetite Statement (RAS) to help ensure consistency in Risk management practices.

The Bank sets out the aggregated level and risk types it accepts in order to achieve its business objectives in the Risk Appetite Statement ('RAS'). This is reviewed on an ongoing basis, and formally approved by Risk Management Committee every six months, with the Regional Risk Appetite and Governance team providing oversight. The bank's actual performance is reported monthly against the approved RAS to the Risk Management Meeting ('RMM'), enabling senior management to monitor the risk profile and guide business activities to balance risk and return. This reporting allows risks to be promptly identified, mitigated and drive a strong risk culture. Risk Appetite and tolerance thresholds are decided by respective Risk Stewards in collaboration with respective business lines.

Stress testing

Enterprise Wide Stress Testing ("EWST") evaluates the potential vulnerabilities in the Bank's overall profitability, asset portfolio, liquidity, operations and capital strength under remote, yet plausible, stressed environments by assessing a variety of risks that the Bank is exposed to. Equally, it assists in the formulation of possible mitigating actions that could be considered in such circumstances.

EWST is a mandatory local regulatory reporting requirement to be met annually. The process incorporates Local capital rules, Provisioning rules, and Financial reporting rules, and is an integral part of the Bank's annual ICAAP submission. The exercise covers Wholesale Credit Risk (including concentration risk), WPB Credit Risk, Traded Credit Risk & Market Risk, Funding Risk (including IRRBB) and Operational Risk.

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Financial risk management (contd)

Risk management framework (contd)

Stress testing (contd)

Stress tests that can be applied to a bank are broadly of two categories: sensitivity tests and scenario tests. HSBC Sri Lanka follows scenario based methodologies for the exercise. Scenario tests assess the impact to the bank's financial position due to simultaneous movements in a number of variables based on a single event experienced in the past or a plausible market event that has not yet happened.

HSBC Sri Lanka performs EWST under three stress scenarios with ascending levels of severity, i.e minor, medium and major. The approach for 2020 is to leverage on the HSBC Group Internal Stress Testing (GIST) scenarios. The severity of the GIST scenario (adjusted but largely the equivalent of the major scenario) are scaled down to 50% and 10% respectively to arrive at the medium and mild scenarios.

Stress Testing results are reviewed by both local and regional subject matter experts before being presented for approval to the "Design Authority (DA)" consisting of CFO, CRO & Regional Head of Stress Testing. As the final step, results are shared with the local Risk Management Committee.

Internal stress tests are used in our enterprise-wide risk management and capital management frameworks. Risks to our capital plan are assessed through a range of scenarios which explore risks that management needs to consider under stress including potential adverse macroeconomic, geopolitical and operational risk events, and potential events that are specific to HSBC. Based on insights gained from the exercise, the management decides whether risks can or should be mitigated through management actions, or, whether to absorbed through capital if they were to crystallise.

Credit risk

Credit risk is defined as the risk of financial loss if a customer or counterparty fails to meet an obligation under a contract. Credit risk arises principally from cash and cash equivalents, direct lending, trade finance and also from certain other products such as derivative instruments and off balance sheet transactions such as letters of credit and guarantees.

Credit risk:

- Is measured as the amount which could be lost if a customer or counterparty fails to make repayments. In the case of derivatives, the measurement of exposure takes into account the current mark to market value to the Branch of the contract and the expected potential change in that value over time caused by movements in market rates;
- Is monitored within limits, approved by individuals within a framework of delegated authorities. These limits represent the peak exposure or loss to which the Branch could be subjected should the customer or counterparty fail to perform its contractual obligations;
- Is managed through a robust risk control framework which outlines clear and consistent policies, principles and guidance for risk managers.

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Financial risk management (contd)

Credit risk (contd)

Credit risk management (contd)

The role of the independent credit control unit is fulfilled by the local Risk team which is a part of the Asia Pacific Risk function. Credit approval authorities are delegated by Regional Office (ASP) to Chief Executive Officer (CEO) or Head of WPB Risk for Wealth and Personal Banking and Head of Wholesale Banking who in turn delegates limit to local risk executives.

The principle objectives of our credit risk management are;

- To maintain across the Branch a strong culture of responsible lending and a robust risk policy and control framework.
- To both partner and challenge Branch's businesses in defining, implementing and continually re-evaluating our risk appetite under actual and scenario conditions; and
- To ensure there is independent, expert scrutiny of credit risks, their costs and their mitigation.

Credit quality of financial instruments

Branch's credit risk rating systems and processes are designed to differentiate exposures in order to highlight those with greater risk factors and higher potential severity of loss. In the case of individually significant accounts that are predominantly within the wholesale businesses, the risk ratings are reviewed regularly and any amendments are implemented promptly. Within Branch's WPB businesses, risk is assessed and managed using a wide range of risk models to maintain risk reward balance.

Branch's risk rating system facilitates the internal ratings-based ('IRB') approach under Basel III adopted by the HSBC Group to support Prudential Regulation Authority (PRA) reporting requirement and to make risk-based pricing decisions. Credit quality of customers are assessed taking into account their financial position, past experience and other factors. Special attention is paid to problem exposures in order to accelerate remedial action.

HSBC Group and regional credit review and risk identification teams regularly review exposures and processes in order to provide an independent, rigorous assessment of credit risk across the Group, reinforce secondary risk management controls and share best practice. Internal audit, as a tertiary control function, focuses on risks with a global perspective and on the design and effectiveness of primary and secondary controls, carrying out oversight audits via the sampling of global/regional control frameworks, themed audits of key or emerging risks and project audits to assess major change initiatives.

Impairment assessment

The Branch computes Expected Credit Losses (ECLs) appropriately.

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Financial risk management (contd)

Credit risk (contd)

Credit risk management (contd)

Credit impaired loans

HSBC determines that a financial instrument is credit impaired and in stage 3 by considering relevant objective evidence, primarily whether:

- contractual payments of either principal or interest are past due for more than 90 days;
- there are other indications that the borrower is unlikely to pay, such as when a concession has been

granted to the borrower for economic or legal reasons relating to the borrower's financial condition; and

- the loan is otherwise considered to be in default. If such unlikelihood to pay is not identified at an earlier stage, it is deemed to occur when an exposure is 90 days past due. Therefore, the definitions of credit impaired and default are aligned as far as possible so that stage 3 represents all loans that are considered defaulted or otherwise credit impaired.

Impairment and credit risk mitigation

The existence of collateral has an impact when calculating ECLs on stage 3 assets. (credit impaired assets) When an account is classified as default or when the Branch no longer expect to recover the principal or interest due on a loan in full or in accordance with the original terms and conditions, it is assessed for ECLs individually, where recovery is projected for each loan using a discounted cash flow method. If exposures are secured, the current net realizable value of the collateral will be taken into account when assessing the need for individually assessed ECLs.

WPB portfolios are generally assessed for impairment on a collective basis as the portfolios typically consist of large groups of homogeneous loans.

The impairment requirements under IFRS 9 are based on an Expected Credit Losses ('ECL') concept that requires the recognition of ECL in a timely and forward-looking manner.

The assessment of credit risk, and the estimation of ECL, are unbiased and probability-weighted, and incorporate all available information which is relevant to the assessment including information about past events, current conditions and reasonable and supportable forecasts of future events and economic conditions at the reporting date. In addition, the estimation of ECL should take into account the time value of money.

In general, HSBC calculates ECL using three main components: a probability of default, a loss given default ('LGD') and the exposure at default ('EAD').

The 12-month ECL is calculated by multiplying the 12-month PD, LGD and EAD. Lifetime ECL is calculated using the lifetime PD instead.

The 12-month and lifetime PDs represent the probability of default occurring over the next 12 months and the remaining maturity of the instrument respectively.

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Financial risk management (contd)

Credit risk (contd)

Credit risk management (contd)

Impairment and credit risk mitigation

ECLs are calculated for all WPB products and will be done on product level. The determination of ECL is based on the concept of 'staging' which reflects the general classification of credit deterioration of an asset which is primarily on delinquency days. Assets must be allocated into appropriate credit deterioration stages (Stage 1, Stage 2 and Stage 3) before ECL calculations can be performed. The stages drive the recognition of ECLs.

ECL is determined via a two-step approach, where the financial instruments are first assessed for their relative credit deterioration, followed by the measurement of the ECL (which depends on the credit deterioration categories).

Financial instruments that are performing are considered to be 'Stage 1'. Financial instruments which are considered to have experienced a significant increase in credit risk are in 'Stage 2'. Financial instruments for which there is objective evidence of impairment so are considered to be in default or otherwise credit impaired are in 'Stage 3'.

An assessment of whether credit risk has increased significantly since initial recognition is performed at each reporting period by considering the change in the risk of default occurring over the remaining life of the financial instrument. The assessment explicitly or implicitly compares the risk of default occurring at the reporting date compared with that at initial recognition, taking into account reasonable and supportable information, including information about past events, current conditions and future economic conditions. The assessment is unbiased, probability-weighted, and to the extent relevant, uses forward-looking information consistent with that used in the measurement of ECL. The analysis of credit risk is multifactor. The determination of whether a specific factor is relevant and its weight compared with other factors depends on the type of product, the characteristics of the financial instrument and the borrower. Therefore, it is not possible to provide a single set of criteria that will determine what is considered to be a significant increase in credit risk and these criteria will differ for different types of lending, particularly between WSB and WPB. However, unless identified at an earlier stage, all financial assets are deemed to have suffered a significant increase in credit risk when 30 days past due. In addition, wholesale loans that are individually assessed, typically WSB customers and included on a watch or worry list, are included in stage 2.

In the absence of a significant increase in credit risk, 12-month ECL should be recognized from initial recognition (except POCI). Financial instruments that are credit-impaired upon initial recognition are POCI (Purchase or originated credit impaired). Therefore, performing financial instruments in Stage 1 will recognize 12-month ECL. The underlying principle of the ECL model is that lifetime ECL is recognized when there has been a significant increase in credit risk since initial recognition..

The transfers between the stages are symmetrical, ie a financial instrument could deteriorate from Stage 1 to 2 or 3, but it can also recover from stage 3 to 2 or 1. The only exception being POCI financial assets, where it will always remain in this category until derecognition.

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Financial risk management (contd)

Credit risk (contd)

Credit risk management (contd)

Write off of loans and receivables (contd)

Loans (and the related impairment allowance accounts) are normally written off, either partially or in full, when there is no realistic prospect of recovery. Where loans are secured, this is generally after receipt of any proceeds from the realization of security. In circumstances where the net realizable value of any collateral has been determined and there is no reasonable expectation of further recovery, write-off may be earlier.

Credit cards, personal instalment loans and auto loans are generally written off at 180 days. It is done on the billing date of the month, the account reaches 180 days and non performing home loans are written off once it's in non-performing loan status for 60 months. The process is done manually and any exception is tracked and rectified the next day. However early write off could be triggered by the circumstance of the account for example on death, bankruptcy, early settlement etc.

Usually Collections/Recovery activities may continue after charge off and Legal action would be taken if the parties are unable to reach an amicable settlement.

Collateral management and valuation

It is the Branch's practice to lend on the basis of the customer's ability to meet their obligations out of cash flow resources rather than rely on the value of collateral which is an important credit risk mitigation mechanism. Depending on the customer's standing and the type of product, facilities may be provided unsecured. However, for other lending a charge over collateral is obtained and considered in determining the credit decision and pricing. In the event of default, the Branch may utilize the collateral as a source of repayment. Some of the collateral types that are used in order to mitigate credit risk of the Wholesale segment includes deposits under lien, property mortgages, machinery mortgages and corporate and bank guarantees. The main types of guarantees are the parental corporate guarantees issued by a parent company on behalf of a subsidiary, where the creditworthiness of the corporate guarantee is assessed based on the financial strength of the parent company. Guarantees issued by a third party to secure borrowings of a company is also accepted, however is not common and will be accommodated only on an exceptional basis post establishing the financial strength of the guarantor. Valuation of tangible collateral is periodically done according to bank's collateral policy.

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Credit risk (contd)

Credit risk management (contd)

Collateral management and valuation

The secured facilities extended to WPB customers consist of home loans, vehicle loans (at present both of these products are limited only to Bank's staff), facilities against shares and cash back facilities. Accordingly the nature of collateral relating to WPB facilities consist of property, vehicles, shares (Colombo Stock Exchange) and cash for respective facilities.

Depending on its form, collateral can have a significant financial effect in mitigating our exposure to credit risk.

Financial risk management (Contd)

Liquidity risk

Liquidity and funding risk is the risk that the Branch does not have sufficient financial resources to meet its obligations as they fall due or that it can only do so at excessive cost. Liquidity risk arises from mismatches in the timing of cash flows. Funding risk arises when the liquidity needed to fund illiquid asset positions cannot be obtained at the expected terms and when required.

Liquidity and funding risk is:

- **Measured** using the European Banking Authority - Delegated Act - Liquidity Coverage Ratio (EBA DA LCR) and Net Stable Funding Ratio (NSFR),
- **Monitored** against the Group's liquidity and funding risk framework and overseen by Regional and local Asset and Liability Management Committees ('ALCO's); and
- **Managed** on a stand-alone basis with no reliance on any related party (unless pre-committed) or the Central Bank of Sri Lanka, unless this represents routine established business as usual market practice.

Management of liquidity and funding risk

The Branch uses the HSBC's liquidity and funding risk management framework ('LFRF') that employs two key measures to define, monitor and control the liquidity and funding risk of each of its operating entities. The **Net Stable Funding Ratio ("NSFR")** is used to monitor the structural long-term funding position, and the **Liquidity Coverage Ratio ("LCR")** is used to monitor the resilience to severe liquidity stresses. The NSFR and LCR are monitored on a daily basis by the local management team, with monthly monitoring carried out by the Regional Office.

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Financial risk management (contd)

Liquidity risk (contd)

NSFR

This ratio monitors if the bank has sufficient stable funding to its illiquid assets. The equity and liability side of the balance sheet is considered to “provide” stable funding while on and off balance sheet assets are considered to be “requiring” stable funding. Proportion of stable funding provided/required by each balance sheet item is predetermined based on EBA regulations.

LCR

This ratio monitors the ability of the Branch to withstand a severe liquidity stress. To ensure resilience under a liquidity stress, the bank is expected to maintain a sufficient stock of High Quality Liquid Assets (“HQLA”) which will allow the bank to honour the net cash outflow due within the next 30 days from the start of the stress period. Outflows are assumed to originate from the liabilities of the Branch while inflows within the next 30 days are assumed to originate from the assets held by the Branch. The outflow and inflow rates are determined based on EBA regulations.

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Financial risk management (contd)

Market risk

The risk that movements in market factors, including foreign exchange rates, interest rates, credit spreads and equity prices, which will reduce the income or the value of Branch's portfolio is considered as market risk.

Exposure to market risk is separated into two portfolios:

- Trading portfolios comprise positions arising from market-making and warehousing of customer derived positions.
- Non-trading portfolios comprise positions that primarily arise from the interest rate management of our WSB and WPB banking assets and liabilities, financial investments designated at fair value through other comprehensive income.

Monitoring and limiting market risk exposures

Branch's objective is to manage and control market risk exposures while maintaining a market profile consistent with our risk appetite.

Branch uses a range of tools to monitor and limit market risk exposures, including:

- Sensitivity analysis, the sensitivities of the net present values of assets and expected liability cash flows, in total and by currency, to a one basis point parallel shift in the discount curves used to calculate the net present values.
- Sensitivity limits are set for portfolios, products and risk types, with the depth of the market being one of the principal factors in determining the level of limits set.
- For foreign exchange risk, the total net short foreign exchange position and the net foreign exchange positions by currency.
- Value at risk ('VAR') which is a technique that estimates the potential losses that could occur on risk positions as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence and,
- In recognition of VAR's limitations the Branch augment VAR with stress testing to evaluate the potential impact on portfolio values of more extreme, though plausible, events or movements in a set of financial variables.

Risk management

Limits are set for portfolios, products and risk types, with market liquidity being a primary factor in determining the level of limits set. Group Risk, an independent unit within HSBC Group Head Office, is responsible for our market risk management policies and measurement techniques. Each of major operating entity has an independent market risk management and control function which is responsible for measuring market risk exposures in accordance with the policies defined by Group Risk, and monitoring and reporting these exposures against the prescribed limits on a daily basis.

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Financial risk management (contd)

Market risk (contd)

Risk management (contd)

Both the VAR and Stressed VAR models the Branch uses are based predominantly on historical simulation. These models derive plausible future scenarios from past series of recorded market rates and prices, taking into account interrelationships between different markets and rates such as interest rates and foreign exchange rates.

The historical simulation models used incorporate the following features:

- Historical market rates and prices are calculated with reference to foreign exchange rates and commodity prices, interest rates, equity prices and the associated volatilities;
- Potential market movements utilized for VAR are calculated with reference to data from the past two years;
- Potential market movements employed for stressed VAR calculations are based on a continuous one year period of stress for the trading portfolio.

Branch routinely validates the accuracy of the VAR models by back-testing the actual daily profit and loss results, adjusted to remove non-modelled items such as fees and commissions, against the corresponding VAR numbers.

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Financial risk management (contd)

Market risk (contd)

Risk management (contd)

Interest Rate risk in the Banking Book (IRRBB)

HSBC Sri Lanka has a comprehensive interest rate risk management process where interest rate risk generated at the business level is transferred to Markets Treasury to manage centrally. Markets Treasury has the required expertise to manage and hedge interest rate risk of the Bank. Interest rate risk transfer to Markets Treasury is carried out through the Interest Rate Risk Transfer Pricing mechanism and the Interest Rate Risk Behaviouralization policy, which are reviewed and approved annually by Asset and Liability Management Committee (ALCO).

The interest rate risk in the banking book is transferred to Markets Treasury through a specialized system which provides the visibility on the interest rate risk exposures with real time data on the transferred balances, rates and any mismatches that are prevalent. In addition, the market limit monitoring systems available at HSBC allows Markets Treasury to have an up to date view on the PVBP (Present Value of Basis Point) movement. These mechanisms and systems enable Markets Treasury to actively manage the IRRBB of HSBC Sri Lanka. Furthermore, from a reporting standpoint ALCO also has oversight to the monthly Net Interest Margin monitoring tool, which gives visibility of the overall NII (Net Interest Income) of the bank and at customer group level and product level. With this tool, NII is analyzed in detail and action taken to correct any issues.

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Financial risk management (contd)

Operational risk

The objective of our operational risk management is to manage and control operational risk in a cost effective manner within targeted levels of operational risk consistent with our risk appetite.

A formal governance structure provides oversight over the management of operational risk. A country level Risk Management Meeting (RMM) is held on a monthly basis to discuss key risk issues and review the effective implementation of our operational risk management framework.

Risk and Control Owners supported by Risk Stewards are responsible for maintaining an acceptable level of internal control, commensurate with the scale and nature of operations. They are responsible for identifying and assessing risks, designing controls and monitoring the effectiveness of these controls. The Risk Management Framework helps management to fulfil these responsibilities by defining a standard risk assessment methodology and providing a tool for the systematic reporting of operational loss data.

Some of the key action taken to mitigate operational risk include the following:

Risk and Control Assessment process is in place that facilitates the assessment of risk and the associated control environment for all operational risks faced by the bank.

Classification of all information based on the potential risk to the Branch, its customers and related parties. This classification is used to invoke policies and procedures to protect the confidentiality and integrity of information.

Vendor management process is in place where due diligence performed by business departments forms part of the risk assessment process. Selecting a financially viable and non sanctioned vendor with appropriate capability, skills and experience is essential part of the HSBC vendor due diligence process in managing risk.

The Branch has also undertaken steps to mitigate the risk of continuation of business through comprehensive Business Continuity Planning, taking into account the risks to the business, impact analysis, resource requirements etc. The Business Continuity Plans are updated regularly, tested and approved. The plans describe how normal business can be resumed following an adverse event or business interruption ensuring minimum impact to the business and customers.

With regard to outsourcing of activities, HSBC Group policy is to outsource activities either internally to Global Service Centre's (GSCs) and affiliates or externally to third parties, where this enables the work to be performed more efficiently gaining economies of scale within the business, due to lack of specialist knowledge or resource constraints. Guidance on the outsourcing of work is contained in the Group policies & procedures and the outsource direction issued by Central Bank of Sri Lanka and Hong Kong Monetary Authority.

Group Insurable Risk (IR) is mandated by the Group Management Board (GMB) to arrange global insurance policies covering: Crime, Civil & Cyber Liability (CCC), Directors' & Officers' Liability including Outside Directors' & Officers' (D&O/ODL), Pension Trustees Liability (PTL). Collectively the three policies are the "Financial Lines Insurance Programmes/Policies". Cover is provided for HSBC Holdings plc and all wholly and majority owned subsidiaries. Policies are placed with insurers in the UK, US, Bermuda and other international markets by the Group's global insurance broker (Aon).

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Financial risk management (contd)

Operational risk (contd)

The Branch is investing in digital technology to improve the service it provides to customers and stay competitive. The mobile apps are one of the ways the Branch helps customers to manage their money more quickly, conveniently and safely.

Cybersecurity continues to be a focus area and is routinely reported at the Board level to ensure appropriate visibility, governance and executive support for the ongoing cybersecurity activities. The branch continues to strengthen and invest significantly in both business and technical controls in order to prevent, detect and respond to an increasingly hostile cyber threat environment. These include enhancing controls to protect against advanced malware, data leakage, infiltration of payments systems and denial of service attacks.

The Branch has given priority for the Baseline Security Standards introduced by Central Bank of Sri Lanka and compliant with relevant requirements to assure the level of security to customers and regulator.

The Branch continues to monitor and improve service resilience across its technology infrastructure, enhancing problem diagnosis/resolution and change execution capabilities to reduce service disruption to the customers .

A centralized database is used to record the results of the operational risk management process. Operational risk self-assessments are input and maintained by business units. Risk and Control Assessments are input and maintained by Risk Owners. To ensure that operational risk losses are consistently reported and monitored at HSBC Group level, all branches are required to report individual material losses in excess of a particular threshold which are monitored against risk appetites set.

Capital management

Qualitative disclosures

Capital adequacy ratio (CAR) is calculated based on the Central Bank of Sri Lanka (CBSL) directions stemming from Basel III accord. These guidelines require the Bank to maintain a CAR not less than 8.5% with minimum Tier 1 capital with buffers in relation to total risk weighted assets and a minimum total CAR with buffers of 12.5% in relation to total risk weighted assets.

Tier 1 Capital – Core Capital

This includes assigned capital, statutory reserve fund, published retained profits, accumulated other comprehensive income, general and other reserves. The assigned capital is the amount provided by HSBC Asia Pacific to conduct its operation in Sri Lanka. In order to avoid stress on capital and in line with the guidance given by the Basel Committee on Banking Supervision, licensed banks can stagger audited additional credit loss provisions arising from SLFRS 9 when compared with credit loss provisions under LKAS 39 as at first day of adoption of SLFRS 9, net of any other adjustment on first day impact to retained earnings and net of tax effects, throughout a transitional period of four years for the purpose of calculating CAR under Banking Act Directions No. 01 of 2016 on Capital Requirements under Basel III.

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Financial risk management (contd)

Capital management (contd)

Tier 2 Capital – Supplementary capital

Revaluation gains and general provision are the only constituents of supplementary capital for the Branch. As per the CBSL regulations a prudential revaluation is done reflecting the full possibility of price fluctuations and forced sale, with prior approval from CBSL, which is then subject to a discount of 50%. According to explanatory note no. 03 of 2019 on interpretations of Banking Act Directions no.01 on capital requirements under Basel III for licensed commercial banks and licensed specialized banks; general provisions consist of impaired assets from stage 1 and 2 on the proportion of 100% and 50% respectively. This is subject to 1.25% of risk weighted assets on credit risk under the standardized approach shall be applicable for Tier 2 capital.

Capital adequacy

The Branch follows the Capital Planning and Guidance as set out by its Group Office, while ensuring that all requirements as set out by the local regulator are complied with.

All growth measures as targeted in the Rolling Operating Plan (ROP) are reviewed in line with impact to Capital Adequacy Ratio (CAR) limits set by CBSL. Any remittance of profit to Regional offices is evaluated in terms of impact to CAR. Further, exchange rate fluctuations to a maximum of 20% are taken into account when forecasting CAR, which is carried out on a monthly basis. HSBC Sri Lanka will ensure that all business growth and profit remittances are carried out in full compliance with the prudential limits set by CBSL, while ensuring sufficient capital to absorb the impact of a 20% movement in foreign exchange rates. The minimum expected CAR will ensure optimal Single Borrower Limits, optimal Deposit Insurance fee levels and also ensure ability to continue derivative trading activity.

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Fair value of financial assets and liabilities (contd)

Fair value of financial instruments carried at fair value

Fair value hierarchy

Fair values of financial assets and liabilities are determined according to the following hierarchy:

- Level 1 – valuation technique using quoted market price: financial instruments with quoted prices for identical instruments in active markets that the Branch can access at the measurement date.
- Level 2 – valuation technique using observable inputs: financial instruments with quoted prices for similar instruments in active markets or quoted prices for identical or valued using models where all significant inputs are observable.
- Level 3 – valuation technique with significant unobservable inputs: financial instruments valued using valuation techniques where one or more significant inputs are unobservable.

Valuation of financial instruments

The best evidence of fair value is a quoted price in an actively traded principal market. The fair values of financial instruments that are quoted in active markets are based on bid prices for assets held and offer prices for liabilities issued. Where a financial instrument has a quoted price in an active market, the fair value of the total holding of the financial instrument is calculated as the product of the number of units and quoted price. The judgment as to whether a market is active may include, but is not restricted to, the consideration of factors such as the magnitude and frequency of trading activity, the availability of prices and the size of bid/offer spreads. The bid/offer spread represents the difference in prices at which a market participant would be willing to buy compared with the price at which they would be willing to sell. Valuation techniques may incorporate assumptions about factors that other market participants would use in their valuations, including:

- the likelihood and expected timing of future cash flows on the instrument. Judgement may be required to assess the counterparty's ability to service the instrument in accordance with its contractual terms. Future cash flows may be sensitive to changes in market rates;
- selecting an appropriate discount rate for the instrument. Judgement is required to assess what a market participant would regard as the appropriate spread of the rate for an instrument over the appropriate risk-free rate;

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Fair value of financial assets and liabilities (contd)

Fair value of financial instruments carried at fair value (contd)

Valuation of financial instruments (contd)

• judgement to determine what model to use to calculate fair value in areas where the choice of valuation model is particularly subjective, for example, when valuing complex derivative products. A range of valuation techniques is employed, dependent on the instrument type and available market data. Most valuation techniques are based upon discounted cash flow analyses, in which expected future cash flows are calculated and discounted to present value using a discounting curve. Prior to considering credit risk, the expected future cash flows may be known, as would be the case for the fixed leg of an interest rate swap, or may be uncertain and require projection, as would be the case for the floating leg of an interest rate swap.

The majority of valuation techniques employ only observable market data. However, certain financial instruments are valued on the basis of valuation techniques that feature one or more significant market inputs that are unobservable, and for them the measurement of fair value is more judgemental. In developing unobservable inputs, the reporting entity need not undertake all possible efforts to obtain information about market participant assumptions. However, the reporting entity shall not ignore information about market participant assumptions that is reasonably available without undue cost and effort. Therefore, the reporting entity's own data used to develop unobservable inputs shall be adjusted if information is reasonably available without undue cost and effort that indicates that market participants would use different assumptions.

Control framework

Fair values are subject to a control framework designed to ensure that they are either determined or validated by a function independent of the risk-taker.

For all financial instruments where fair values are determined by reference to externally quoted prices or observable pricing inputs to models, independent price determination or validation is utilised. In inactive markets branch will source alternative market information to validate the financial instrument's fair value, with greater weight given to information that is considered to be more relevant and reliable. The factors that are considered in this regard are, inter alia:

- the extent to which prices may be expected to represent genuine traded or tradable prices;
- the degree of similarity between financial instruments;
- the degree of consistency between different sources;
- the process followed by the pricing provider to derive the data;
- the elapsed time between the date to which the market data relates and the balance sheet date;
- the manner in which the data was sourced.

Fair value adjustments

Fair value adjustments are adopted when Branch considers that there are additional factors that would be considered by a market participant which are not incorporated within the valuation model. The Branch classifies fair value adjustments as either 'risk-related' or 'model-related'. Movements in the level of fair value adjustments do not necessarily result in the recognition of profits or losses within the income statement. For example, as models are enhanced, fair value adjustments may no longer be required. Similarly, fair value adjustments will decrease when the related positions are unwound, but this may not result in profit or loss.

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Impact from COVID19 pandemic

Liquidity and Funding

• The Branch's strategic business units frequently monitor the liquidity demands in order to ensure the bank preserve the customer relationships while enhancing controls. The branch enhanced the monitoring mechanisms during the pandemic to regularly track internal/external variables that can affect the bank as well as customers and maintained strong engagement with the regional teams for expert guidance.

• The Branch was able to manage liquidity risk within the banks risk appetite regardless/irrespective of leeway's provided by Central Bank of Sri Lanka in their circulars surrounding extraordinary measure on COVID 19.

Credit Risk - Mitigation, Recognition and Measurement

In response to the COVID-19 outbreak, governments and regulators around the world have introduced a number of support measures for both personal and wholesale customers in market-wide schemes. In relation to personal lending, the majority of relief measures, including payment holidays, relate to existing lending, while in wholesale lending the relief measures comprise payment holidays, refinancing of existing facilities and new lending under government-backed schemes.

The recognition and measurement of Expected Credit Losses (ECL) involves the use of significant judgement and estimation. The Branch form multiple economic scenarios based on economic forecasts, apply these assumptions to credit risk models to estimate future credit losses, and probability-weight the results to determine an unbiased ECL estimate. Management judgemental adjustments are used to address late-breaking events, data and model limitations, model deficiencies and expert credit judgements. Economic scenarios have been used to capture the exceptional nature of the current economic environment and to articulate management's view of the range of potential outcomes. Scenarios produced to calculate ECL are aligned to HSBC's top and emerging risks. Scenarios are drawn from consensus forecasts and distributional estimates. The central scenario is deemed the 'most likely' scenario, and usually attracts the largest probability weighting, while the outer scenarios represent the tails of the distribution, which are less likely to occur. The central scenario is created using the average of a panel of external forecasters, while consensus upside and downside scenarios are created with reference to distributions for select markets that capture forecasters' views of the entire range of outcomes.. The economic assumptions presented in this section have been formed by HSBC with reference to external forecasts specifically for the purpose of calculating ECL. Economic forecasts are subject to a high degree of uncertainty in the current environment. Limitations of forecasts and economic models require a greater reliance on management judgement in addressing both the error inherent in economic forecasts and in assessing associated ECL outcomes. The Branch's central scenario features an improvement in economic growth in 2021 as activity and employment gradually return to the levels experienced prior to the outbreak of COVID19.

Compared with the consensus central scenario, the consensus upside scenario features a faster recovery in economic activity during the first two years, before converging to long-run trends In the consensus downside scenario, economic recovery is considerably weaker compared with the central scenario. GDP growth remains weak, unemployment rates stay elevated and asset and commodity prices fall before gradually recovering towards their long-run trends.

Impact from COVID19 pandemic

Credit Risk - Mitigation, Recognition and Measurement (contd)

The calculation of ECL under IFRS 9 involves significant judgements, assumptions and estimates. The level of estimation uncertainty and judgement has increased during 2020 as a result of the economic effects of the COVID19 outbreak, including significant judgements relating to: the selection and weighting of economic scenarios, given rapidly changing economic conditions in an unprecedented manner, uncertainty as to the effect of government and central bank support measures designed to alleviate adverse economic impacts, and a wider distribution of economic forecasts than before the pandemic. The key judgements are the length of time over which the economic effects of the pandemic will occur, the speed and shape of recovery. The main factors include the effectiveness of pandemic containment measures, the pace of roll-out and effectiveness of vaccines, and the emergence of new variants of the virus, plus a range of geopolitical uncertainties, which together represent a very high degree of estimation uncertainty, particularly in assessing downside scenarios.

- estimating the economic effects of those scenarios on ECL, where there is no observable historical trend that can be reflected in the models that will accurately represent the effects of the economic changes of the severity and speed brought about by the COVID19 outbreak. Modelled assumptions and linkages between economic factors and credit losses may underestimate or overestimate ECL in these conditions, and there is significant uncertainty in the estimation of parameters such as collateral values and loss severity; and
- the identification of customers experiencing significant increases in credit risk and credit impairment, particularly where those customers have accepted payment deferrals and other reliefs designed to address short-term liquidity issues given muted default experience to date. The use of segmentation techniques for indicators of significant increases in credit risk involves significant estimation uncertainty. Models are used to reflect economic scenarios on ECL estimates. As described above, modelled assumptions and linkages based on historical information could not alone produce relevant information. Under the unprecedented conditions experienced in 2020, and it was necessary to place greater emphasis on judgemental adjustments to modelled outcomes than in previous years. We have developed globally consistent methodologies for the application of forward economic guidance into the calculation of ECL for WSB and WPB credit risk. These standard approaches are described below, followed by the management judgemental adjustments made, including those to reflect the circumstances experienced in 2020.

For wholesale, a global methodology is used for the estimation of the term structure of probability of default ('PD') and loss given default ('LGD'). For PDs, we consider the correlation of forward economic guidance to default rates for a particular industry in a country. For LGD calculations, we consider the correlation of forward economic guidance to collateral values and realization rates for a particular country and industry. PDs and LGDs are estimated for the entire term structure of each instrument. For impaired loans, LGD estimates take into account independent recovery valuations provided by external consultants where available or internal forecasts corresponding to anticipated economic conditions and individual company conditions. In estimating the ECL on impaired loans that are individually considered not to be significant, we incorporate forward economic guidance proportionate to the probability-weighted outcome and the central scenario outcome for non-stage 3 populations. For WPB, the impact of economic scenarios on PD is modelled at a portfolio level.

THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
SRI LANKA BRANCH
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

Impact from COVID19 pandemic

Credit Risk - Mitigation, Recognition and Measurement (contd)

Historical relationships between observed default rates and macroeconomic variables are integrated into IFRS 9 ECL estimates by using economic response models. The impact of these scenarios on PD is modelled over a period equal to the remaining maturity of the underlying asset or assets. The impact on LGD is modelled for mortgage portfolios by forecasting future loan-to-value ('LTV') profiles for the remaining maturity of the asset by using national level forecasts of the house price index and applying the corresponding LGD expectation. These models are based largely on historical observations and correlations with default rates.