Directive for Valuation of Financial Instruments

Adopted by Swedbank CFO

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Applies for The Swedbank Group

Group Framework Owner
Responsible for
The Head of Valuation Governance and Strategic change
Each BA Head (as applicable and Head of Treasury

Implementation Department)

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Abbreviations

Accounting Credit Value Adjustment	Accounting CVA
Business Areas	BA
Day 1 profit or loss	Day 1 PnL
Front Office	FO
Group Finance Operations	GFO
Group Risk	GR
New Product Approval Process	NPAP
The Valuation Group	The VG
The Valuation Steering Group	The VSG

Introduction

Purpose

The purpose of this Directive is to describe the Valuation Principles to be used for risk measurement and accounting /financial reporting purposes for equity, foreign exchange, fixed income/interest rate, commodity and all other Traded Financial Products in the Swedbank Group valued at Fair Value.

Further, this Directive serves to present the underlying principles by which the Swedbank Group has implemented a valuation set-up aligned with internal and external regulations, as well as to state the responsibilities for the different parts of the organisation regarding valuation in this context.

Valuation Risk

The Swedbank Group defines Valuation Risk as follows:

"The risk of incurring losses due to mismatches in the booked value for assets or liabilities valued at Fair Value and the actual price received for those assets or liabilities in an orderly market transaction".

The Swedbank Group's risk appetite is low and therefore, as a general rule, we strive for using mark-to-market instead of mark-to-model to retain the valuation risk at a low level.

Validity

The Directive shall be reviewed and approved by the CFO on a regular basis, at least once a year.

Scope

The valuation principles described in this Directive are only applicable for Financial Instruments valued at Fair Value i.e. the Directive excludes financial instruments designated according to fair value option, financial instruments valued at amortised cost and in relevant cases including impairment.

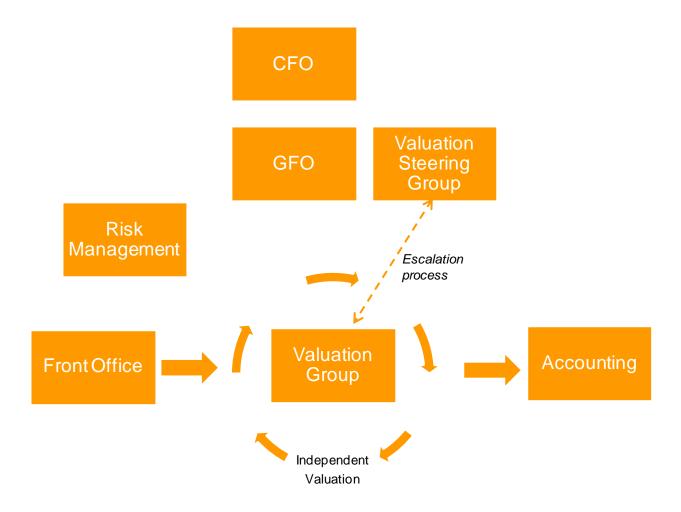
Local adjustments are allowed in accordance with the document <u>Instruction for Internal</u> <u>Regulation</u>.

Independent valuations are done in transaction currency.

The Directive outlines the general valuation principles for the Valuation Process, details are referred to in specific documents.

Organisation

The picture below describes the organisation that surrounds the valuation process.



The CFO is the overall responsible for setting the valuation principles in the organisation and for implementing the valuation process.

Head of Group Finance Operations (GFO) is responsible for ensuring the implementation of valuation principles for Traded Financial Products in the Swedbank Group.

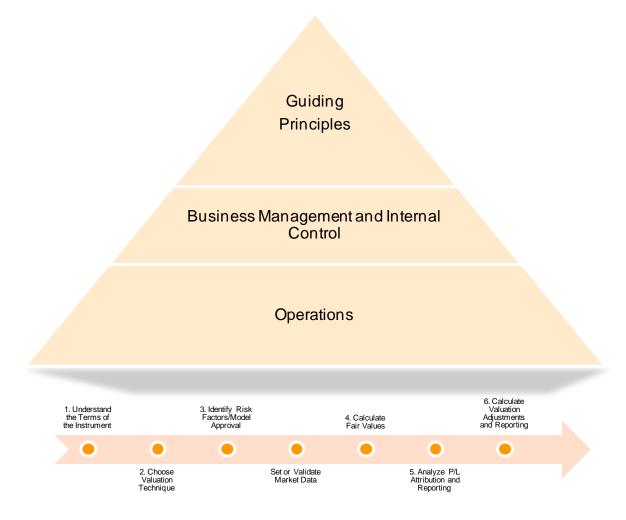
The Valuation Steering Group (VSG) is responsible for the decision making on principles for methods and models used to value financial instruments. The VSG consists of persons from different Business Areas (BAs), each VSG representative shall be competent to make decisions for her/his unit.

The Valuation Group (VG) is responsible for the day to day valuation of the Swedbank Group's Financial Instruments within the scope. And to ensure that the valuations are compliant with external and internal regulations and with best market praxis. New valuation principles should be proposed to the VSG for decision.

For more details regarding responsibilities please see the section Responsibilities.

Overview of the Valuation Process

The picture below gives a holistic view of the Valuation Process within the Swedbank Group.



The Guiding Principle for the Valuation Process is this Directive. The Directive is developed to meet internal and external requirements. The internal requirements (e.g. desired levels of risk taking) are stated in the document "*Policy on Enterprise Risk Management*" approved by the board. External requirements are, above all, stated in the regulatory framework IFRS 13 and the Swedish FSA's FFFS 2011:45.

The Guiding Principles are meant to support and guide the Valuation Process, whereas the Business management and Internal Controls are meant to monitor the process independently and guarantee the quality.

The horizontal arrow represents the logical, operational steps through which, all transactions have to be processed.

Valuation principles

It is Swedbank Group standard that market values are calculated in the Front Office (FO) systems, and that values are transported end of day to the sub-ledgers. Exceptions to this can be made in those cases where sufficient model support is not available in the front office systems. This however has to be approved by the VG.

The definition of setting Fair Values is to provide all necessary input independently from the position taking unit. Validating is to make sure that Fair Values set by the position taking unit is within acceptable valuation tolerances with respect to the nature of each Financial Instrument.

In accordance with internal and external regulations, we shall, at all times, be able to independently calculate the Fair Value of a financial instrument. If an external source is used for valuation we shall be able to assess that source and assure that the applied valuation methodology is in line with this directive.

In case of different opinions between FO and the VG, the burden of proof to show errors always rest within FO.

As mentioned before, this Directive is, above all, based upon IFRS 13, FFFS 2011:45 and internal regulations. This implies that reporting of market values and PnL for Financial Instruments must reflect Fair Value, as long as Fair Value can be estimated in a reliable manner.

IFRS 13 defines Fair Value as:

"The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date."

This definition sets out certain requirements for measuring Fair Value, Going Concern being one of them since it stresses that Fair Value is not the amount that would be received or paid in a forced transaction, involuntary liquidation or distress sale.

IFRS 13 (Paragraph B2) also states that fair value measurement requires an entity to determine the following:

- (a) the particular asset or liability that is the subject of the measurement (consistently with its unit of account)
- (b) for a non-financial asset (not within the scope), the valuation premise that is appropriate for the measurement (consistently with its highest and best use)
- (c) the principal (or most advantageous) market for the asset or liability
- (d) the valuation technique(s) appropriate for the measurement, considering the availability of data with which to develop inputs that represent the assumptions that market participants would use when pricing the asset or liability and the level of the fair value hierarchy within which the inputs are categorised.

Fair Value is obtained by calculating two separate components:

- Net present values, based upon quoted prices (according to the principals in IFRS 13) or theoretical market values, calculated at transaction level based on inter-bank mid-market prices assuming no uncertainties and risks
- Adjustments, calculated at portfolio levels, accounting for various uncertainties and risk elements related to net open positions at various portfolio levels

The Fair Value Hierarchy

IFRS 13 sets out requirements for valuation based upon the market activity for the specific instrument. Therefore this Directive sets out the guidelines for valuation under the three circumstances outlined below:

- Level 1: Unadjusted, quoted prices (Direct Price Feed)
 - o Valuation of Financial Instruments that are traded in active markets
 - Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date
- Level 2: Adjusted prices or Mark-to-Model (Observable input)
 - There are two main cases where instruments are classified as Level 2, those are:

- For listed instruments where the liquidity in most cases is good, but where
 from time to time, specific instruments, has a decline in the activity and the
 prices for those specific instruments/assets are no longer representative of
 a Fair Value and an adjustment has to be made on those prices
- 2. Where a valuation technique is used with input from an active market
- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly

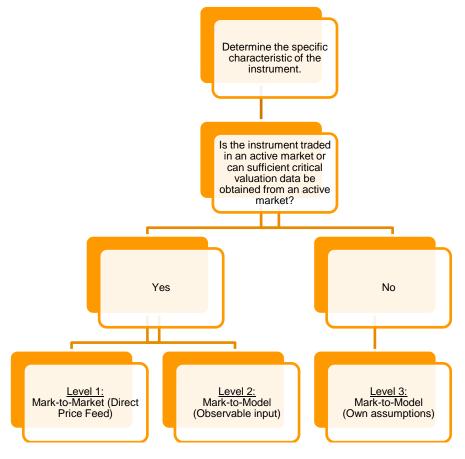
• Level 3: Mark-to-Model (Own assumptions)

- Valuation of Financial Instruments where market information is scarce or absent and Fair Value is obtained by using own assumptions
- Level 3 inputs are unobservable inputs for the asset or liability
- Significant adjustments to entire level 2 instruments

IFRS 13 gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1 inputs) and the lowest priority to unobservable inputs (Level 3 inputs).

The classification must be based on current market conditions. A certain product can have an active market for some combination of transaction parameters (e.g. currency, maturity, strike level etc) while failing to have an active market for other combinations.

The picture below shows the logical steps in order to determine an instrument's belonging in the Fair Value Hierarchy.



This assessment needs to be performed on at least a monthly basis. This is due to the fact that the market conditions may change and an instrument that was classified as Level 1 at inception might be Level 2 or level 3 at another time.

In some cases, the inputs used to measure the fair value of an asset or a liability might be categorised within different levels of the fair value hierarchy. In those cases, the fair value measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement. Assessing the significance of a particular input to the entire measurement requires judgement, taking into account factors specific to the asset or liability.

In order to achieve this, the following criteria need to be met at all times:

- Clear ownership and responsibility for valuation issues and valuation models
- Transparency through the whole valuation process
- Structured and documented methods, controls and models through the whole valuation process
- Valuation methods that are based on principles that are internationally recognised as representing best practice
- Coherent valuation of traded Financial Instruments by use of common valuation methods and data across BAs and impacted Group Functions and coherent valuation methods and data across products
- Independent price verification must be performed on an ongoing basis

Choosing pricing procedure/valuation technique

IFRS 13 states the following with regards to choosing a valuation technique:

"An entity shall use valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs."

Further, IFRS 13 also states:

Valuation techniques used to measure fair value shall maximise the use of relevant observable inputs and minimise the use of unobservable inputs.

The first step in choosing the adequate valuation technique is to understand the terms and structure of the instrument. This implies a full understanding of:

- The timing of the future cash flows
- The calculation of the future cash flows
- The timing and conditions for optionality in the contract
- The condition and location of the asset
- Restrictions, if any, on the sale or use of the asset
- The underlying risk in the specific instruments (e.g. Liquidity risk and credit risk)

Level 1

IFRS 13 defines Level 1 inputs as follows:

"Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date."

For active markets it is necessary to verify the quality of the applied quoted prices against other sources to ensure that the selected price source represents actual market levels. An ongoing assessment of the quality of the quoted prices must be performed to ensure that they fulfill the criteria for being in active markets.

To be considered as a quoted price/quoted market data in an active market, at least one of the following criteria needs to be fulfilled:

- Frequent and large volumes of transactions
- The bid-ask spread is low
- Possible to buy/sell large volumes without materially affecting the price
- At least three contributors are quoting prices
- Quotations are updated on a daily basis
- Market activity (Selling/Buying) has taken place on a regular basis

Further, the following has to be taken into account when assessing quoted prices in an active market:

- the principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability; and
- whether the entity can enter into a transaction for the asset or liability at the price in that market at the measurement date
- Major Market Moves after 16. 15 CET (for Interest Rates and FX products), or 17:30
 CET (for Equity products)

Level 2 and Level 3

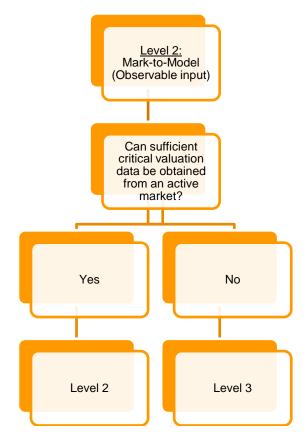
If no direct price feed in an active market exists, a theoretical value shall be the basis for the Fair Value (Level 2 or Level 3).

IFRS 13 defines Level 2 inputs as follows:

"Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly."

Level 2 valuation (Mark-to-Model with observable input) is performed as a general rule on OTC derivatives as long as the market data quality can be assured (se figure below). Further, Level 2 valuation can be performed on listed instruments/positions that are no longer considered to be traded in an active market. However, an assessment has to be performed to assure that sufficient critical valuation data is obtained from an active market. For example, for an option the volatility has to be obtained from an active market either directly or indirectly (using interpolation techniques and input from an active market).

If this cannot be achieved, the instrument will be considered as level 3. This is illustrated in the picture below:



As a general rule, the Swedbank Group strives for using valuation model inputs that are based on observable input from an active market, for example quoted interest rates or volatilities (Level 2).

If no observable prices/market data are available or sufficient critical valuation data cannot be obtained the basis for the Fair Value needs to be a theoretical value based on own assumptions (Level 3).

IFRS 13 defines Level 3 inputs as follows:

"Level 3 inputs are unobservable inputs for the asset or liability."

In this case, it is compulsory to verify and assess the input parameters, observable as well as unobservable. The assessment shall be carried out by the VG and if necessary the VSG to ensure that the inputs represent levels that other market participants would apply when assessing Fair Value of similar instruments. In addition, it is necessary to validate the theoretically calculated Fair Value estimates against actual market transactions (i.e. Back testing) or other forms of reliable external market data.

Although being unobservable the fair value measurement objective remains the same, i.e. an exit price at the measurement date from the perspective of a market participant that holds the asset or owes the liability. Therefore, unobservable inputs shall reflect the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk.

The theoretical valuation models shall be calibrated in such a way that they generate values for a Financial Instrument for which reliable mid prices are available – or have been available at another time – that coincide, or would have coincided, with the mid price of the Financial

Instrument. A good indicator that a proper valuation model/valuation technique is used is when minor differences are shown when back testing the valuation model against actual prices from market transactions.

For complete details of implemented valuation models, see *Approved Financial Instruments* in *Swedbank*.

For specific details of the validation process, see the document Valuation Model Validation.

Classification of Active Market vs. No Active Market

A Financial Instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions. The existence of published price quotations in an active market is the best evidence of Fair Value and when they exist they must be used to measure the financial asset or liability.

To be considered as a quoted price/quoted market data in an active market, the same criteria as mentioned under the section Level 1 needs to be fulfilled.

The implications of being in either an active or a non-active markets are related to Fair Value calculations, different procedures for valuation control and accounting. The classification of products with regards to the fair Value Hierarchy must be performed by the VG according to objective and well documented criteria.

Active Markets: Quoted Price

The general valuation principles are:

- Traded Financial Instruments in this category are valued using market quoted prices
 or rates from an external independent and qualified source that is read off at 16.15
 CET for Interest rates and FX products and at 17:30 CET for Equities. It is the
 Trading Calendar for the Swedish market that is followed in order to set the cut off
 time
- The price sources may be suggested by the position taking unit, but must be subject
 to approval by the VG. The VG has the mandate to independently decide on the price
 source, but are responsible for informing stakeholders of changes made
- Internal data sources can, if accompanied with sufficient controls, be accepted when no viable alternative exist
- The VG must keep an updated list of valuation data to be used (e.g. curves and RICs) and make it available for all stakeholders
- For the financial reporting of the valuation of Financial Instruments, all BAs and impacted Group Finance functions owning the relevant products shall apply the values provided from the VG

The use of Bid, Mid or Ask price

IFRS 13 states the following with regards to the use of Bid, Mid or Ask price:

If an asset or a liability measured at fair value has a bid price and an ask price (eg an input from a dealer market), the price within the bid-ask spread that is most representative of fair value in the circumstances shall be used to measure fair value regardless of where the input is categorised within the fair value hierarchy (ie Level 1,

2 or 3). The use of bid prices for asset positions and ask prices for liability positions is permitted, but is not required.

The Swedbank Group applies Mid prices as a general rule on all assets and liabilities. However, if another price class is deemed as more accurate for valuation purposes it may be used after the approval from the VG.

Special Circumstances

We will, on a continuous basis, analyze the financial markets and our surroundings for circumstances that might affect the reliability of quoted prices or our capacity for assessing those prices. Below we have listed some situations where special attention needs to be paid.

Early Close of Market

If the Swedisk Market closes earlier than 16.15 CET (for Interest Rates and FX products), or 17:30 CET (for Equity products) the quoted market price from that time does not always represent the best indication of Fair Value. This is e.g. the case when the Swedish markets close early.

The Swedbank Group's principle is that the Trading Calendar for the Swedish market is followed i.e. we take quoted prices from the time of the early market closure even for the markets which are still open, to have a consistent cut off time.

Swedish Holiday

If the Swedish Market is closed, local, independent valuations shall be performed in line with this directive. Full audit trail shall be ensured.

Major Market Moves After Market Close

This is the case if the financial markets experience severe stress so that 16.15 CET, or 17:30 CET, prices do not serve to reflect Fair Value. In most circumstances, the effect of the market moves will just occur the next business date and will therefore not disturb the reporting of the Swedbank Group's financial results, unless the market moves take place on a month end. If this situation should occur, the BAs and impacted Group Finance functions must report to the VG. The VG shall analyze the impact and report to relevant areas. Accounting must determine how the impact of the price changes should be accounted for in the external results after input from the VG on prudent markets values.

External and Internal Crisis

In case of a crisis the procedures within the document *Contingency Plan for the Valuation Process* shall be followed in order to assure valuations in line with this document.

No active market: Valuation Technique

If the market for a Financial Instrument is regarded as not active, or the Financial Instrument itself is not actively traded, in accordance with internal requirements, Fair Value must be established using a valuation technique. Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available, reference to the current Fair Value of another instrument that is substantially the same, discounted cash flow analysis and option pricing model.

For OTC products, a valuation model is always needed to value the product, no matter the liquidity in the market. However, if it can be proved that a OTC instrument is 100% equal to a standardized instrument with regards to cash flows and risks the standardized instrument's price can be used.

The split between active and no active markets is tied into the availability of quoted market prices/rates as input to the valuation technique. There are accounting implications related to

initial recognition in such circumstances that are treated in the Swedbank Group's Accounting Framework.

The general principles are:

- In order to keep the valuation and model risk low, the Swedbank Group shall strive for keeping instruments that can be valued by using mark-to-market as valuation technique instead of mark-to-model as this will reduce the complexity and uncertainty in valuations
- Only valuation techniques/valuation models approved by the VSG can be used for valuation. The specific valuation methodology for a given product is listed in the document Approved Financial Instruments in Swedbank
- It is the responsibility of the Position taking unit to suggest valuation techniques/valuation models for approval as well as documenting the use of the technique. Further requirements to model documentation and control are listed in the document Valuation Model Validation
- Fair Value must be estimated on the basis of the results of a valuation technique that makes maximum use of market inputs, and relies as little as possible on entityspecific inputs
- When a valuation model for a given product is approved in accordance with the New Product Approval Process (NPAP), it must be used by all BAs and impacted Group Finance functions of the Swedbank Group with approval to trade the specific product. Any exceptions to this have to be approved by the VSG
- An assessment for the need of a Fair Value adjustment is performed for each valuation technique to assure the coverage for model risk. For more information see the document *Model risk adjustment*

Day 1 PnL

IFRS 13 states that, in some cases, the transaction price (the price paid to acquire the asset or received to assume the liability (an entry price) might not be the same as the Fair Value. In those cases a Day 1 profit or loss (Day 1 PnL) is made.

When entering into a transaction, the Swedbank Group shall determine whether Fair Value at initial recognition equals the transaction price. This shall be done by taking into account factors specific to the transaction as for example:

- The liquidity of the market
- Complexity of the valuation model
- Valuation data

It is the VG's responsibility to identify Day 1 PnL. However, the position taking unit is responsible to highlight to the VG if a major Day 1 PnL could be occurring. For more details, see the document *Day 1 PnL process*.

Day 1 PnLs are recognized in the consolidated statement of income unless it qualifies for recognition as some other type of asset or liability. For more details regarding the accounting procedures for Day 1 PnL see the Swedbank Group's Accounting Framework.

Market Data for Valuation

As a general rule, market data shall be updated once a day and Fair Values shall be based on closing prices or prices captured just before closing. Furthermore, market data shall be

set independently from the position taking unit. Deviation from this must be documented and specific controls needs to be performed. It is the VG's responsibility to provide quality assured market date for valuation.

Market Data validation

The market data validation process aims to identify and correct illiquid or inadequate input. The process shall include documented statistical rules. At least the following steps needs to be included in the process:

- Find and correct stale prices
- Find and analyse market data that moves more than normal

Changes that are made needs to be commented and/or logged in the database, which shall include the corrected rate after the cleaning process.

Used market data, which has not been set by the VG, must be validated at least monthly by the VG according to well defined tolerance levels. The result of the validation tests shall be communicated and saved for future usage. The same requirements to store market data applies for validated and set market data. For further details see the document Market data validation process.

Market Data Sources

As a general rule, well known contributors such as ICAP and Tullet are preferred market data providers. So called generic quotes should be avoided when possible since the consistency in the quotes are hard to monitor.

Before using a quote it needs to be verified that there are no legal or financial restrictions to use the chosen contributor.

The quality of the price feed shall be evaluated in accordance with the procedures described in the document *Approved Market Data Sources and Preferred Markets*.

Deviation from this is allowed if the purpose of achieving a Fair Value is not met by using the hierarchies described in this document. However, any deviation needs to be approved by the VG and thoroughly documented.

For further details see the document Approved Market Data Sources and Preferred Markets.

Store Historical Market Data

Market data needs to be saved to meet internal as well as external regulatory requirements.

End of month and End of day data, needs to be saved for at least 7yrs.

Distribution of Market Data

The VG is responsible for distributing quality assured market data for fair value calculation of Financial Instruments.

Static Data

With static data we mean the information regarding a deal that does not change on a constant basis, such as nominal amount, counterparty, maturity etc. Valuations are dependent on that static data is correctly entered in the systems. It is the responsibility of the BAs to assure the correctness, completeness and consistency of static data in the systems.

Bootstrapping Methodology

The bootstrapping of zero coupon yields is performed locally in FO systems. It is the VG's responsibility for setting the bootstrapping methodology on the official valuation curves in the FO systems.

It is critical that the mode of discount factors (exponential, compound interest) and the interpolation technique (linear, cubic spline etc) are harmonized between the systems.

Reporting

Daily Reporting

Daily reporting is performed in line with the document Process for Daily PnL Reporting.

Violations

Violations of the valuation principles outlined in this document shall always be reported to the CFO and to the VSG. Any exceptions from the valuation principles outlined in this document require approval from the VSG and the CFO.

Escalation Governance

In order to assure awareness of valuation deviations the Swedbank Group has established clear escalation processes.

For further detail se the document Process for Daily PnL Reporting.

Fair Value Hierarchy

Level 3 instruments as well as changes from Level 1 or Level 2 to Level 3 shall be reported to the Head of GFO on a monthly basis and necessary means shall be taken. It is the VG's responsibility to perform this reporting.

Dav 1 PnL

The VG shall, on a monthly basis, report to the VSG the Day 1 PnL for the last month and aggregated for the year. Day 1 PnL shall be reported in accordance with the document *Process for Daily PnL Reporting* to the Head of the VG, FO Management, head of GFO and the Model Validation Group and be handled accordingly.

Fair and Prudent Value Adjustments and Reporting

Fair Values shall contain all available information on the market. As a consequence, the liquidity risk and credit risk must be included as a natural part of the Fair Value. Further, Fair Values shall also take into account the insecurity of using valuation models. Hence, model risk adjustments need to be performed. Moreover, an assessment with regard to the insecurity of the Fair Values needs to be performed, i.e. the valuation risk has to be measured and addressed accordingly.

Valuation adjustments on portfolio level are calculated once a month.

It is the VG's responsibility to assure that relevant adjustments are performed. If the VG does not perform the calculation of a specific adjustment a full audit trail needs to be documented.

Liquidity Risk Adjustments

IFRS 13 states that the most representative price within the Bid-Ask spread should be used, hence Bid and Ask, as well as Mid prices can be used if one of those is recognized as the most representative of Fair Value in the circumstances. Therefore, if such a value can be found no further adjustment needs to be done. For practical reasons, all revaluations are done in accordance with the section The use of Bid, Mid or Ask price. A separate analysis regarding the need for a liquidity adjustment and/or a Bid/Ask adjustment is done and adjusted for on an aggregated portfolio level.

Bid/Ask adjustments are performed on net market risk exposures.

For further details, please see the document *Liquidity adjustment*.

Accounting Credit Value Adjustment (Accounting CVA)

To consider the market value of counterparty credit risk for derivatives, Accounting CVA needs to be calculated every end of month. For practical reasons, this is done on an aggregated portfolio level rather than applying individual yield curves per counterparty.

For further details, see Accounting CVA and DVA methodology document.

Debt Value Adjustment

IFRS 13 states that we have to consider the impact on market values due to fluctuations in our own credit spread. DVA shall be calculated every end of month. For practical reasons, this is done on an aggregated portfolio level.

For further details, see Accounting CVA and DVA methodology document.

Model Risk Adjustment

When using a valuation technique/valuation model, the resulting Fair Value will obviously depend on the choice of valuation model and in some instances also on unobservable model parameters. The uncertainty pertaining to these choices must be reflected in the adjustment to Fair Value.

The Model Risk Adjustment relies on the input from:

- The Model Validation Process (for further reading see the document *Valuation Model Validation*)
- Sensitivity calculations where the parameters that are non-observable are varied to reflect expected changes
- Etc

For further information please see the document *Model Risk Adjustments*.

Valuation Adjustments Due to Capital Adequacy Requirements

According to FFFS 2011:45, chapter 12, a financial institution needs to evaluate whether it is necessary or not to implement extra valuation adjustments due to Capital Adequacy requirements. Whereas the Financial Reporting should reflect the Fair Value, the Capital Adequacy requirement valuation should rather be done based on a prudent approach.

For further details, please see the document *Valuation adjustments due to Capital Adequacy requirements.*

Reporting of Valuation Adjustments

Valuation Adjustments are calculated on portfolio level. The ambition is that Fair Value should be estimated on a daily basis, but the current infrastructure does not facilitate this target. Adjustments are therefore calculated on a monthly basis and are booked at the level of each BAs and impacted Group Finance functions in each legal entity of the Swedbank Group.

The VG is responsible for that a comprehensive report, documenting the adjustments, is submitted to relevant parties on a monthly basis.

Responsibilities

Overall governance

As described under the section Organisation and Overview of the Valuation Process the Swedbank Group is striving for a governance structure where responsibilities are clear for each part of the organization. In this part we describe the overall governance structure for the Swedbank Group.

The CFO is responsible for approving this document and it is the CFO's responsibility to assure the implementation of this document in the organisation. More explicitly, the CFO is responsible for:

- Reviewing and approving written policies related to fair valuations;
- Ongoing review of significant valuation model performance for issues escalated for resolution and all significant changes to valuation policies;
- Ensuring adequate resources are devoted to the valuation process:
- Articulating the bank's tolerance for exposures subject to valuation uncertainty and monitoring compliance with the board's overall policy settings at an aggregate firmwide level
- Ensuring the independence in the valuation process between risk taking and control units:
- Ensuring the appropriate internal and external audit coverage of fair valuations and related processes and controls;

GFO is responsible for the implementation of the principles outlined in this directive. The Head of GFO is responsible for that the PnL and balance sheet are correctly represented in the external financial reporting. This includes the responsibility to ensure that the correct principles, models and market data are used.

As mentioned before, the VSG is responsible for the decision making on principles for methods and models used to value financial instruments. This means explicitly:

- The VSG decides on new or changed principles for valuation methods and models
- The VSG discusses and resolves valuation related issues escalated from VG or other parts of the Swedbank Group

The VG is responsible for the day to day management of the valuation process. This involves the responsibility for assuring the adequate day to day use of valuation data (e.g. the usage of valuation curves) and data sources. The VG is also responsible for developing the valuation methodology within the Swedbank Group. Further, the VG proposes new valuation principles to the VSG.

All BAs and impacted Group Finance functions are responsible for following this Directive.

Best practice

The VG is responsible for continuously working on identifying and closing gaps to best market practice and for keeping Risk Control informed of identified gaps.

All units are responsible for keeping the VG, and other related departments, updated with regards to changes in the financial markets that might have impact on valuation methodologies.

New Product Approval Process

The trading unit is responsible for proposing the valuation approach to be used for a new instrument or for a change in an existing valuation model. The VG and the Model Validation Group must approve the approach including testing any new valuation model to be used.

The Head of the VG has the authority to approve or reject the launch of a new product from a valuation perspective. If necessary, The Head of the VG can consult the VSG for guidance in

the decision making process. For more information regarding the NPAP see the document <u>Group Directive on New Product Approval Process</u>.

Information to stakeholders

Other BAs and impacted Group Finance functions shall inform the VG about contact persons, when they have an approval to trade products in the VG's area of responsibility. The VG is responsible for informing all stakeholders about changes related to the valuation process as early as possible.

Publication of quality enhanced revaluation data

The VG is responsible for giving daily access to the data needed for the daily revaluation of products within its responsibility, enabling other stakeholders in the Swedbank Group to follow the VG's valuation set-up. This data is only to be used within the Swedbank Group and the VG has to give approval for the purpose for using the data.

In order for other BAs and impacted Group Finance functions s to be able to apply the same market prices, the VG must effectively distribute the information about which price providers that should be used for different markets and products to all stakeholders.

Provider of revaluation data for non-core markets

If other BAs and/or impacted Group Finance functions have approval to trade a product from the VG's responsibility, the VG might lack experience with certain market segments traded by another BA. In such situations, the VG and the relevant BA discuss the issue to find the best solution in order to establish an independent valuation.

Changes to current principles for valuation methodology and models

Changes to current principles for valuation methodology and valuation models must be approved by the VSG.

Examples on principles for valuation methodology and models are:

- adoption/removal of cross currency basis spreads
- methodology/model changes that causes PNL effects > 100MSEK

Price sources

The VG has the mandate to independently decide upon price source but is also responsible for informing stakeholders of any changes made.

Regular reviews

All valuation models must be reviewed, following the principles outlined in *Valuation Model Validation*. Further, the process regarding Fair Value Adjustment models should be reviewed on a regular basis.

Group Risk

Group Risk (GR) is responsible for the use of the valuation data that the VG produces when calculating risk figures. Further, GR is responsible for the validation process of valuation models.

Group Finance Operations

GFO decides the general accounting principles as well as specific exceptions from the Swedbank Group's principles. This implies the responsibility for assuring that all relevant accounting areas are covered in this document.

If GFO assesses that a valuation model or market data used does not meet the standards from a valuation perspective, GFO shall inform the VSG, the responsible Head of Business,

Market risk and the Model validation team about the shortcomings of the model and why the model does not meet the standards from a valuation perspective. GFO shall also propose possible alternative valuation approaches.

The responsible Head of Business is responsible for implementing a new model in the FO system if this is deemed necessary.