



Survey ZIR_U, ZIR_K
Forms ZIR1 – ZIR4

Interest rate risk reports

NOTES

These notes cover interest rate risk reports for both parent company (ZIR_U) and group reporting entities (ZIR_K).

I. SURVEY CHARACTERISTICS

PURPOSE OF SURVEY

The purpose of the survey is to analyse both the interest rate risk in the banking book of the individual institutions and the interest rate situation in general.

SURVEY COVERAGE

Information on interest rate risks in the banking book based on all significant cash flows by repricing maturity (according to FINMA_Circ. 2019/2 ~~en~~ «Interest rate risks – banks»; only available in French (as *Risques de taux – banques*), German (as *Zinsrisiken – Banken*) and Italian (as *Rischi di tasso d'interesse – banche*)).

REPORTING ENTITY

Interest rate reports are collected on a quarterly basis for the parent company reporting entity (ZIR_U) and on a half-yearly basis for the group reporting entity (ZIR_K). In view of margin note 3 of FINMA_Circ. 2019/2 ~~en~~ «Interest rate risks – banks» (only available in French (as *Risques de taux – banques*), German (as *Zinsrisiken Banken*) and Italian (as *Rischi di tasso d'interesse – banche*)), a consolidated approach can be dispensed with.

TYPE OF SURVEY

Full sample survey

REPORTING INSTITUTIONS

All banks and securities dealers in Switzerland are to report data, subject to margin notes 4 and 49 of FINMA_Circ. 2019/2 ~~en~~ «Interest rate risks – banks» (only available in French (as *Risques de taux – banques*), German (as *Zinsrisiken – Banken*) and Italian (as *Rischi di tasso d'interesse – banche*)).

FREQUENCY

Interest rate risk reporting is carried out quarterly for ZIR_U (reference date: last day of the quarter) and semi-annually for ZIR_K (reference date: last day of the half-year).

DEADLINE

The data must be submitted within 45 days.

PARTICIPANTS

The Swiss National Bank collects the data in conjunction with the Swiss Financial Market Supervisory Authority FINMA.

II. GENERAL REMARKS

1. REPORTING IN FORM ZIR1

All banking book positions must be reported in the interest rate risk reporting form.

1.1 GENERAL REMARKS ON ENTRIES IN FORM ZIR1

The survey of interest rate risk is based on the capture of all significant cash flows according to their repricing maturities. A repricing maturity is the period of time until the interest rate is re-fixed. Assets whose notional volume makes up less than 1% of the balance sheet transactions as well as liabilities and off-balance sheet transactions whose notional volume makes up less than 1% of the total of balance sheet and off-balance sheet transactions shall not be deemed material, provided that they are only reported in the maturity bands up to 12 months. Cash flows (raw data) are entered in form ZIR1 and always include the nominal value (principal) and interest payments, with nominal cash flows and interest payment flows also reported separately. For positions with significant margin payment flows from original client transactions, the margin payment flows should be reported additionally if the bank can exclude margins on these positions for interest rate risk management purposes, i.e. the bank has implemented a system of income breakdown. Cash flows should be reported in the agreed (non-discounted) form. Cash inflows are stated without a plus sign and cash outflows with a minus sign. The data is always entered by maturity band, with the allocation to a band made on the basis of the repricing maturity. For example, when determining the nominal cash flow, the repricing maturity for a fixed-rate mortgage is the term of the mortgage (usually a fixed-rate period of two to ten years), whereas in the case of a money market mortgage it corresponds to the agreed shorter fixed-rate term (e.g. 3, 6 or 12 months until the interest rate is reset in line with money market conditions within the total term).

The following five categories should be differentiated when reporting the raw data:

- Category I: Positions with determined repricing maturities
- Category II: Positions with undetermined repricing maturities
- Category III: Positions with no repricing maturity
- Category IV: Own funds
- Category V: Non-linear derivatives

For all positions in Categories I to IV, the reporting is based on cash flows.

For all positions in Categories II, III, and V, the nominal values minus any value adjustments should also be reported as absolute amounts (Category IV only nominal values).

All transactions concluded on a forward basis in all categories should be made available from a technical systems standpoint and shown in the interest rate risk report, i.e. off-balance-sheet positions such as forward interest rate swaps and forward mortgages. This includes prolongations, replacements and product switches. For Category I these forward transactions should also be displayed in a separate column for information purposes.

Non-interest bearing assets or liabilities (e.g. non-interest bearing deposits, rental guarantee deposit, dormant assets) which may be subject to modelling of a repricing maturity are to be reported in Category II using the KUZ method to determine the repricing maturity. Automatic and behavioural optionalities such as early redemption and withdrawal options should be taken into account where relevant, i.e. where market interest rates or customer conditions change.

(Linear) interest rate derivatives should be listed separately for receivables and liabilities and broken down into the receiver and payer components. All derivatives whose value is also dependent on interest rate differences should be included.

Derivative positions with foreign currency legs should be shown in the relevant currency form, i.e. FX and cross-currency swaps etc. should be broken down into their legs and displayed as an interest rate derivative. In other words each leg should be listed in the corresponding currency sheet, which means that products with foreign currency components will be split between different reporting forms. The proportion of the total without foreign currency leg is reported in each reporting form. Fixed-fixed cross-currency swaps should be reported as receiver swaps on both sides.

Non-linear interest rate derivatives are reported at their contract volumes, and do not have to be revalued on a scenario-specific basis and integrated into the cash flows (Category V). Alternatively they can be included as a cash flow under «other interest derivatives» (Category I). Either all cash flows or no cash flows from non-linear derivatives should be included.

1.2 METHOD FOR DETERMINING REPRICING MATURITY

For all existing positions in Categories II – IV, institutions must report their internal methods for determining repricing maturities (AVA = based on assumptions, STA = statistical approach, KUZ = no determination of repricing maturity, EFZ = actual repricing maturity for category IV). If the KUZ method is selected, no cash flows may be reported.

1.3 CURRENCIES

All positions in Categories I to V are reported in CHF. All foreign currency amounts should be converted to CHF at the spot rate on the reference date.

The survey form contains a list of some 22 currencies, including the collective category «Other currencies». If the proportion of assets or liabilities in the balance sheet amounts to 10% or more for one of these currencies, form ZIR1 should be completed for each such currency. The ZIR1 form must always be completed for positions in CHF.

All other currencies, i.e. those not included in the list of currencies and/or accounting for less than 10% of the balance sheet total, should be amalgamated and reported as «Other currencies». A separate ZIR1_U should be filled in for this purpose. For currencies included in the currency list whose share amounts to less than 10% of the balance sheet total, completion of form ZIR1 is voluntary. For all currencies reported under «Other currencies» which account for at least 10% of the balance sheet total or are voluntarily reported separately, information should be provided on both currency and volume in form ZIR4.

Precious metals and their derivatives are excluded from the reporting requirements for the survey on interest rate risk.

2. REPORTING OF THE INTERNALLY CALCULATED RISK MEASURE, PRESENT VALUE , NET INCOME AS WELL AS SUPPLEMENTARY INFORMATION IN FORMS ZIR2 – ZIR4

In addition to reporting raw data as described in Section 1, institutions are required to report their own internal interest rate risk measure as at the same reference date, which they have calculated using their own institution-specific risk method. The following information must be reported or considered in forms ZIR2 – ZIR4:

- The most important internal measure of interest rate risk relevant to the institution in question (appropriate descriptor and value in CHF, years or %). A breakdown by foreign currency is only necessary where this functionality exists. Institutions using gap analysis as their main interest rate risk measure should report these figures in a comprehensible manner in terms of the assumed maturity buckets and interest rate changes in the «in CHF» field. Only one figure should be given for an indicator.
- Form ZIR2_A must be completed for all currencies (including the «other currencies» group) in respect of which form ZIR1 has been completed.

- A «0» should only be reported if the amount in question is zero.
- Similarly, the change in net present value of the positions in Categories I, II and V for a shift in the yield curve must be provided for the standard interest rate shock scenarios as per Annex 2 of FINMA_Circ. 2019/02 «Interest rate risks – banks» and as per the rules of FINMA_Circ. 2016/1 «Disclosure – banks» (only available in French (as *Publication – banques*) and German (as *Offenlegung - Banken*)) in respect of the table IRRBB1. Losses should be entered with a minus sign.
- Similarly, the change in net present value of the positions in Category I for a shift in the yield curve must be provided for the standard interest rate shock scenarios as per Annex 2 of FINMA_Circ. 2019/02 «Interest rate risks – banks» and as per the rules of FINMA_Circ. 2016/1 «Disclosure – banks» in respect of the table IRRBB1. Losses should be entered with a minus sign.
- When determining the change in net present value under the standard scenarios, no components of capital may be considered with the exception of temporary components of the supplementary capital.
- When determining the change in net present value under the standard scenarios, positive changes in the present value may also be considered.
- In addition, the change in replacement values (for Category V) must be reported. The change in implied volatility when using an option pricing model may be disregarded. Negative values should be entered with a minus sign.
- The discount curve for ZIR1_U cash flows, which are not in Annex 2 of FINMA_Circ. 2019/2 «Interest rate risks – banks», should be representative to the higher shocks (e.g. USD curve).
- Similarly, the change in net interest income compared to the bank's internal base scenario must be reported as per the rules of FINMA_Circ. 2016/1 «Disclosure – banks» and with a parallel shift of the yield curve as per the rules of Annex 2 of FINMA_Circ. 2019/2 «Interest rate risks – banks», along with the net interest income as per the bank's internal base scenario.
- Non-material positions pursuant to section 1.1 shall also be deemed non-material for reporting the change in net interest income compared to the bank's internal base scenario, provided that these positions already contribute less than 1% to the total net interest income in the baseline scenario.
- The base scenario may be determined using proprietary interest rate forecasts or on the basis of forward rates.
- For the bank's internal base scenario and for the parallel shift of the yield curve as per Annex 2 of FINMA_Circ. 2019/2 «Interest rate risks – banks», the interest income and interest expense per position of Categories I and II should be provided. For Categories III to V, the interest income and interest expense should be reported on an amalgamated basis. Negative interest income or positive interest expenses should be recorded under interest income and interest expense but with a changed sign.
- When applying interest rate scenarios, the change in customer conditions on both the asset and liability side can be modelled using internal assumptions (e.g. elasticities).
- Interest rate changes must be applied instantaneously to the current yield curve and the resulting yield curve kept constant across the simulation horizon.
- In the income simulation for the one-year horizon, a constant balance sheet structure should be assumed, as per FINMA_Circ. 2016/1 «Disclosure – banks».
- This means that any cash flows falling due should be replaced by cash flows from new interest business that has identical characteristics in respect of volume, repricing maturity and credit-related spread components. As regards the latter, the current value rather than the original value may be used if the original value is no longer available.
- As regards the commercial margin as a component of the customer condition, deviations from the assumption of a constant balance sheet are permissible if it would otherwise lead to economically meaningless income simulations.
- An average portfolio basis may be used for the constant balance sheet assumption if implementation on an individual position basis would entail disproportionate costs. The portfolios should be as homogeneous as possible.

- Sight deposits with the SNB, sight deposits with foreign central banks and sight deposits with clearing houses recognised by FINMA are not included in the income simulation. The same applies for liabilities.
- Only derivatives that contribute to net interest income are included in the income simulation.
- In addition, Tier 1 capital pursuant to Art. 18 para. 2 CAO must be reported.

In form ZIR2_B, the average repricing maturities of the existing portfolio (without forward transactions) should be reported across all currencies and for CHF (including interest payments) in keeping with the IRRBBA1 disclosure table of FINMA-Circ. 2016/1 «Disclosure – banks». The average volume-weighted prolongation assumptions for new business on actually expiring positions across all currencies should also be reported (expert-based forecast of the expected average prolongation term of these transactions). If there are no assumptions regarding expected prolongations, the average repricing maturities may be used.

- These values are not part of the income simulations in form ZIR2_A.
- As in the income simulations, positions which expire in a horizon of one year ($30 \times 12 = 360$ days) should be used for determining prolongation assumptions. Transactions likely to be extended on multiple occasions should not be included in the volumes on a multiple basis.
- When reporting average prolongation assumptions and repricing maturities, irrelevant cells should be left blank if there are no transactions. The only exception is if these values are zero, in which case «0» should be reported.

For the supplementary information (ZIR3 and ZIR4) the following applies:

- Reporting anomalies: Deviations from the intended norms for accounting and/or technical reasons (e.g. minus instead of plus sign or vice versa (errors of sign)) are referred to as «anomalies». In such cases, explanatory notes on the part of the reporting institution are obligatory. Anomalies are reported in ZIR4 (Question 04).
- Data on the «Value at Risk» risk measure should only be entered if this is the relevant internal risk measure.
- Details of currencies reported under «Other currencies» which account for at least 10% of the balance sheet total and are not listed in Annex 2 of FINMA-Circ. 2019/2 «Interest rate risks – banks», or which are listed in Annex 2 of FINMA-Circ. 2019/2 «Interest rate risks – banks» but account for less than 10% of the balance sheet total and are therefore reported under «Other currencies». These currencies are reported in ZIR4 (Question 05).
- Questions which are not applicable should be answered in ZIR4 as «n/a».

III. NOTES ON ITEMS SURVEYED

The following explanations of the allocation of balance sheet positions to categories show the positions to be included in the economic interest risk report ~~is for the most part~~ based on FINMA's regulations on bank accounting procedures (FINMA-Circ. 2015/1 «Accounting – banks»).

CATEGORY I: POSITIONS WITH DETERMINED REPRICING MATURITY

Forward-forward transactions, swaps, futures, forwards and FRAs are treated as a combination of a long and a short position, as described in margin notes 81 – 87 of FINMA-Circ. 2008/20 «Market risks – banks» (only available as French (as *Risques de marché – banques*), German as (*Marktrisiken Banken*) and Italian (as *Rischi di mercato – banche*)); the long position is entered as a receivable and the short position as a liability.

When calculating cash flows, any value adjustments recognised are deducted. Subordinated bonds included in eligible capital and dotation capital are assigned to Category IV and not Category I.

The following positions from FINMA ~~Circ.~~^{RS} 2015/1 «Accounting – banks» with a defined interest rate repricing maturity should be reported in Category I and classified in the relevant sub-category:

- «Amounts due from banks»
- «Amounts due from customers»
- «Amounts due from securities financing transactions» (from banks or customers)
- «Mortgage loans» (money market or fixed-rate mortgages)
- «Other financial instruments at fair value»
- «Financial investments»
- «Amounts due to banks»
- «Liabilities from securities financing transactions» (in respect of banks or customers)
- «Amounts due in respect of customer deposits»
- «Liabilities from other financial instruments at fair value»
- «Cash bonds»
- «Bond issues and central mortgage institution loans» not included in eligible capital
- «Provisions» not included in eligible capital (other liabilities)
- «Interest rate derivatives in the banking book» (receivables and liabilities)

With respect to the «of which» position «Money market mortgages with defined repricing maturities», the classification by capital commitment should be reported along with the repricing maturity. In the absence of a repricing maturity, the capital commitment may be used as a proxy for the repricing maturity, up to a maximum maturity of one year. The figures should be reported inclusive of interest payments.

CATEGORY II: POSITIONS WITH UNDETERMINED REPRICING MATURITY

The positions in Category II are divided into seven sub-categories:

- a) «Receivables from banks»
- b) «Receivables from clients»
- c) «Variable mortgage receivables»
- d) «Other receivables»
- e) «Sight liabilities in personal and current accounts»
- f) «Other liabilities»
- g) «Liabilities from client deposits, callable but not transferable (savings)»

The banks must report the following data in form ZIR1:

- a) «Receivables from banks»:
 - Total asset positions in this sub-category less any value adjustments recognised, including «Amounts due from securities financing transactions» and «Other financial instruments at fair value».
- b) «Receivables from clients»:
 - Total asset positions in this sub-category less any value adjustments recognised, including «Amounts due from securities financing transactions» and «Other financial instruments at fair value».
- c) «Variable mortgage receivables»:
 - Total asset positions in this sub-category less any value adjustments recognised.
- d) «Other receivables»:
 - Total asset positions in this sub-category less any value adjustments recognised, including «Amounts due from securities financing transactions» and «Other financial instruments at fair value».
- e) «Sight liabilities in personal and current accounts»:
 - «Amounts due in respect of customer deposits», accounts with no withdrawal restrictions and transferable accounts
 - Products highly sensitive to changes in interest rates, e.g. deposits based on money market rates, are reported in the next item (other liabilities) rather than in this category.
- f) «Other liabilities»:
 - Total liability positions in this sub-category:

- «Amounts due to banks»
 - «Liabilities from securities financing transactions»
 - «Liabilities from other financial instruments at fair value».
- g) «Liabilities from client deposits, callable but not transferable (savings)»:
- Amounts due in respect of customer deposits: accounts with withdrawal restrictions; not transferable, i.e. not suitable for payment transactions, e.g. saving and investment accounts, call deposits, tied pension obligations.

CATEGORY III: POSITIONS WITH NO REPRICING MATURITY

Institutions should report the amount of each of the following positions in form ZIR1:

- a) «Financial investments»: total less any value adjustments recognised
- b) «Holdings»: total less any value adjustments recognised
- c) «Tangible and intangible assets»: balance sheet value
- d) «Other assets, prepaid expenses and accrued income»: total less any value adjustments recognised
- e) «Other liabilities, deferred income and provisions not calculated as equity capital»
(where not already included in Category I): total of the three positions.

In the last two positions, the replacement values of non-rate-sensitive derivatives should be reported where these were not included as cash flows in Category I.

Sight deposits with the Swiss National Bank, sight deposits with clearing houses recognised by FINMA, and sight deposits at a foreign central bank should be reported in the «of which» position of other assets within Category III. The same applies for liabilities.

CATEGORY IV: ELIGIBLE CAPITAL

Institutions should report the following positions in form ZIR1:

- a) «Own funds»
- b) «of which: endowment capital» for publicly owned banks
- c) «of which: subordinate bonds issued»

Banks making assumptions in respect of repricing maturities for own funds should report on these repricing assumptions. Negative eligible capital in foreign currencies is possible due to provision shortfall.

CATEGORY V: NON-LINEAR DERIVATIVES

For non-linear derivatives on obligations or interest rates in the banking book, banks must report the contract volume in form ZIR1, irrespective of whether these non-linear interest rate derivatives were included as cash flows in «Other interest-rate derivatives». The change in replacement values should be reported in form ZIR2_A. If non-linear derivatives have a significant impact on the bank's interest rate risk, FINMA may request more detailed information about these instruments.

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