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Banking statistics guidelines and customer classification,
Section “MFI interest rate statistics”

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Guidelines on MFI interest rate statistics

I. Focus of the survey and definitions

The survey focuses on the interest rates applied in Germany by domestic banks (MFIs) to **euro**-denominated deposits and loans vis-à-vis households and non-financial corporations domiciled in EMU member states. The interest rate statistical data are collected for outstanding amounts and new business for the instrument categories defined in the **reporting schemes ZA and ZB**.

Households and non-financial corporations include all non-financial sectors except for general government according to European System of Accounts (ESA) 2010[1]. For the purposes of these statistics, **households** are summarised in detail under the ESA sectors "Households" (S.14) and "Non-profit institutions serving households" (S.15), while **non-financial corporations** correspond to the ESA sector S.11.

The ESA sector "**Households**" is identical to the definition of "**Households**" in the monthly balance sheet statistics, and also includes sole proprietors.[2] According to ESA 2010, non-profit institutions serving households consist of "non-profit institutions which are separate legal entities, which serve households, and which are private other non-market producers. Their principal resources, apart from those derived from occasional sales, are derived from voluntary contributions in cash or in kind from households in their capacity as consumers, from payments made by general government[3] and from property income." This category includes, for example, churches, political parties, professional associations and research organisations, sport and leisure associations, trade unions and charitable organisations. According to ESA 2010, **non-financial corporations** include all enterprises (including partnerships) other than banks, insurance corporations and other financial institutions; in the monthly balance sheet statistics, they are referred to as **other enterprises**.

For enterprises see general guidelines on monthly balance sheet statistics number 20

[1] Included in Annex A of Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union (ABl. L 174, 26 June 2013).
[2] In Regulation ECB/2013/34 also called sole proprietorship and partnerships without legal status (accordingly, section 2.119d of ESA 2010). See also statistics guideline 2 - customer classification, II. 2. a) Self-employed persons (including sole proprietorships)
[3] NPIs controlled and mainly financed by general government are classified in the general government sector (see section 2.140c of ESA 2010).

II. Explanatory notes on the reporting system

1 Type of interest rate to be reported

a) Annualised agreed rate and narrowly defined effective rate

Either the **annualised agreed rate (AAR)** or the **narrowly defined effective rate (NDER)** is to be reported for positions 01 to 26 of reporting scheme ZA and for positions 01 to 23 and 32 to 91 of reporting scheme ZB. The only difference between these calculation methods is their underlying process of annualising interest payments. While the AAR is based on a formula that can only be applied to deposits and loans with regular capitalisation of interest payment, the NDER is calculated iteratively, and can therefore be applied to all types of deposits and loans.

Both calculation methods cover **all interest payments on deposits and loans** but **no other charges that may apply**, such as the costs for inquiries, administration, preparation of documents, guarantees and credit insurance. If a disagio has been agreed, this is to be considered as an interest payment at the start of the contract (time t_0). A disagio is defined as the difference between the nominal amount of the loan and the amount received by the customer. An agio, the opposite of a disagio, should also be considered in the interest rate statistics. Loan fees for unused current account credit lines, as well as commitment fees for granted but unused credit lines, are not to be included in the AAR / NDER calculation.

In principle, the interest payments covered in the AAR / NDER reflect what the reporting agent pays on deposits and receives for loans. If there is a discrepancy between the amount that a contracting party pays and that which another party receives, the point of view of the reporting agent is decisive. In compliance with this principle, the **interest rates** are recorded on a **gross basis before tax**, since the pre-tax interest rate reflects what the reporting agent pays on deposits and receives for loans. In addition, **subsidies** granted to households or non-financial corporations **by third parties** are not taken into account when determining the interest payment, because the subsidies are not paid or received by the reporting agent. If, for example, a reporting agent charges 10% interest p.a. for a loan, but only 6% p.a. is to be paid by the borrowing customer, with a third party paying the other 4% p.a. as a subsidy, then the interest rate statistics are to show an interest rate of 10% p.a. This is regardless of whether the subsidy provider makes payments to the customer directly or via the reporting agent. Consequently, only the interest components which the reporting institution charges as interest will be included in the interest rate statistics, and not the part which the borrower pays to the reporting agent. Accordingly the governmental incentive for a deposit under a savings and loan contract, for example, is not included in the interest rate calculation.

Favourable interest rates that reporting agents apply to their employees are covered in the interest rate statistics. Where regulatory arrangements are in place, for example interest rate ceilings and restrictions, these are reflected in the interest rate statistics. Therefore, any change in the rules determining regulatory arrangements is shown in the interest rate statistics as a change in the interest rate.

Interest bearing as well as non-interest bearing deposits and loans are to be reported in the interest rate statistics. Negative interest rates on deposits should be included in MFI interest rates provided that such rates are not exceptional having regard to market conditions.

Reporting agents apply a **standard year of 365 days** for the compilation of the AAR, i.e. the effect of an additional day in leap years is ignored. The interest rates are to be specified to **no less than two**, but **no more than four, decimal places.**

Annualised agreed rate (AAR)

The **AAR** is defined as the interest rate that is individually agreed between the reporting agent and the household or non-financial corporation for a deposit or loan, converted to an annual basis and quoted in percentages per annum. If interest payments agreed between the reporting agent and the household or non-financial corporation are capitalised at regular intervals within a year, the agreed rate is annualised by means of the following formula to derive the AAR:

$$x = \left(1 + \frac{r_{ag}}{n}\right)^{n} - 1,$$

where

x   is the AAR,

r_{ag} is the interest rate per annum that is agreed between the reporting agent and the household or non-financial corporation on a deposit or loan, whereby the interest capitalisation for the deposit and all payments and repayments related to the loan takes place at regular intervals within one year, and

n   is the number of interest capitalisation periods for the deposit and (re)payment periods for the loan per year, i.e. "1" for yearly payments, "2" for semi-annual payments, "4" for quarterly payments and "12" for monthly payments.

In those cases in which the frequency of repayments and interest payments do not match, the rate of interest capitalisations is used for calculating the AAR.

Example 1: Calculating the AAR

1.1 An interest rate of 10% is agreed upon for a €10,000 loan with a maturity of 5 years. The interest is capitalised quarterly. Thus, the AAR is

$$x = \left(1 + \frac{0.1}{4}\right)^{4} - 1 = 0.10381289 = 10.3813\%.$$

1.2 An interest rate of 10% is agreed upon for a loan with a maturity of 5 years. The interest is capitalised annually. This results in an AAR of 0.1, i.e. 10%.

1.3 An interest rate of 10% is agreed upon for a loan with a maturity of 5 years. The interest is only capitalised after 5 years at the end of the loan's maturity. Thus, the AAR is

$$x = \left(1 + \frac{0.1}{\frac{1}{5}}\right)^{\frac{1}{5}} - 1 = 0.084471771 = 8.4472\%.$$

1.4 An interest rate of 10% is agreed upon for a €10,000 loan with a maturity of 5 years. The interest is capitalised quarterly. The loan amount is disbursed minus a discount (disagio) of 2%. Thus, the AAR is

$$x=\frac{\left(1+\frac{r_{ag}+\frac{Disagio}{Duration}}{n}\right)^{n}-1}{1-Disagio}=\frac{\left(1+\frac{0.1+\frac{0.02}{5}}{4}\right)^{4}-1}{1-0.02}=\frac{0.108126761}{0.98}=0.110333429=11.0333\%.$$

Narrowly defined effective rate (NDER)

The **NDER** is the interest rate which, on an annual basis, equalises the present values of all commitments (deposits or loans, payments or repayments, interest payments), future or existing, agreed between the reporting agent and the household or non-financial corporation. It is in accordance with the definition in article 3 (i) of the European Parliament and Council's guideline 2008/48/EC from 23 April 2008 concerning consumer loan agreements and the repealing of the Council's guideline 87/102/EEC.[4] The NDER corresponds with the effective interest rate's interest components. The NDER formula is shown in the following example.

Example 2: Calculating the NDER

An interest rate of 10% is agreed upon for a €10,000 loan with a maturity of 5 years. The interest is capitalised quarterly.

The following formula is the basis for the NDER

$$K=\sum_{n=1}^{N}(CF_n\cdot DF_n)=\sum_{n=1}^{N}\left(CF_n\cdot\left(\frac{1}{1+i}\right)^{\frac{D_n}{365}}\right)$$

where

K is the size of the loan
N is the total number of payments
CF_n is the n^{th} payment (from customer to bank)
DF_n is the discount factor of the n^{th} payment
i is the NDER (or the annual percentage rate of charge (APRC) according to PAngV) and
Dn the number of days until the n^{th} payment

[4] OJ L 133 of 22 May 2008, p 66.

Debiting and crediting	Days until the nth payment [D_n]	nth payment from customer to bank (in €) [CF_n]	Discount factor for the nth payment to the bank $1/(1+i)^\wedge(D_n/365)$ [DF_n]	Net present value of payments to bank (in €) $CF_n \cdot DF_n$
14.02.01	91.25	250	0.975610	243.90
14.05.01	182.50	250	0.951814	237.95
14.08.01	273.75	250	0.928599	232.15
14.11.01	365.00	250	0.905951	226.49
14.02.02	456.25	250	0.883854	220.96
14.05.02	547.50	250	0.862297	215.57
14.08.02	638.75	250	0.841265	210.32
14.11.02	730.00	250	0.820746	205.19
14.02.03	821.25	250	0.800728	200.18
14.05.03	912.50	250	0.781198	195.30
14.08.03	1 003.75	250	0.762145	190.54
14.11.03	1 095.00	250	0.743556	185.89
14.02.04	1 186.25	250	0.725420	181.36
14.05.04	1 277.50	250	0.707727	176.93
14.08.04	1 368.75	250	0.690465	172.62
14.11.04	1 460.00	250	0.673625	168.41
14.02.05	1 551.25	250	0.657195	164.30
14.05.05	1 642.50	250	0.641166	160.29
14.08.05	1 733.75	250	0.625527	156.38
14.11.05	1 825.00	10.250	0.610271	6 255.27
				Σ 10 000.00

This results in an NDER of 0.103813 or 10.3813%.

Note: A comparison between example 1.1 and 2 shows that in cases of regular capitalisation of interest payments on deposits and loans, the NDER is identical to the AAR.

b) Effective annual rate of interest according to article 3 (g) of guideline 2008/48/EC (APRC)

The effective annual rate of interest is to be reported in accordance with article 3 (g) of guideline 2008/48/EC for items 30 and 31 of the reporting scheme ZB. The **annual percentage rate of charge (APRC)** covers the "**total cost of the credit to the consumer**". The total costs comprise an interest rate component (which is identical to the NDER)[5] and a component for all other charges, such as costs for inquiries, administration, preparation of the documents, guarantees and credit insurance. Commitment fees are **not** to be included in the APRC

[5] Concerning the reporting of subsidies see section II. Explanatory notes on the reporting system, 1. a) Annualised agreed rate and narrowly defined effective rate.

calculation, as at the time the agreement is concluded (date t_0), it is not known whether these fees will be charged at all.

The total new business from items 13 to 15 of scheme ZB is to be included in the interest rate calculation for the "loans for consumption to households" (item 30 of scheme ZB) overall position. However, all transactions from items 16 to 19 of scheme ZB are to be included in the calculation of the overall position's reporting value "housing loans to households" (item 31 of scheme ZB).

2. Business coverage

a) Interest rates on outstanding amounts

Outstanding amounts are defined as the stock of all deposits placed by households and non-financial corporations with the reporting agent and the stock of all loans granted by the reporting agent to households and non-financial corporations resident in the EMU member states. For this **point-in-time data collection**, the reporting agents report a volume-weighted average interest rate for each reporting item in scheme ZA on the last day of the month. It covers all contracts in place on the reference day.

b) Interest rates and volumes for new business: overnight deposits, deposits redeemable at notice, credit card debt, as well as revolving loans and bank overdrafts

For practical reasons, overnight deposits (items 01 and 07 of scheme ZB), deposits redeemable at notice (items 05 and 06 of scheme ZB), extended credit card debt (items 32 and 36 of scheme ZB), as well as revolving loans and overdrafts (items 12 and 23 of scheme ZB) do not show the actual new business, but rather the outstanding amount at the end of the month. This means that the **total outstanding debit/credit balance amount at the end of the month** is to be used to create the reporting data for these instrument categories.

The interest rates that are to be reported for overnight deposits, deposits redeemable at notice, extended credit card debt, as well as revolving loans and bank overdrafts, reflect the volume-weighted average interest level at the end of the month for the total outstanding amount on these accounts. It covers the balance sheet positions of all outstanding contracts that have been agreed in all the periods prior to the reference date.

To calculate the interest rates on accounts that can either be a loan or deposit, depending on their balance, reporting agents distinguish between the periods with a credit balance and the periods with a debit balance. The reporting agents report weighted average interest rates referring to the **credit balances** as **overnight deposits** and weighted average interest rates referring to the **debit balances** as **overdrafts**.

See the monthly balance sheet statistics guidelines for credit card debt and revolving loans

c) Interest rates and volumes for new business: deposits with an agreed maturity, repos and all loans excluding credit card debt, as well as revolving loans and overdrafts

For deposits with an agreed maturity (items 02 to 04, 08 to 10 of scheme ZB), repos (item 11 of scheme ZB) and all loans excluding extended credit card debt, as well as revolving loans and overdrafts (items 13 to 22, 30 and 31, 33 to 35, 37 to 85 and 88 to 91 of scheme ZB), **new**

business is defined as any new **agreement** between the household or non-financial corporation and the reporting agent in the reference period. New agreements comprise:

i) all financial contracts that specify the interest rate of the deposit or loan for the first time, and
ii) all renegotiations of existing deposits and loans.

Renegotiations within the meaning of ii) require the **active** involvement of the household or non-financial corporation in adjusting the terms and conditions of an existing deposit or loan contract (including the interest rate).
Tacit agreement is also considered to be "active involvement".

For the separate reporting of **renegotiated loans** to households or non-financial corporations (items 88 to 91 of scheme ZB) only loans that have been granted but not yet repaid at the time they are renegotiated are to be included.
In case of purchased or transferred existing loans and leasing claims, the "new" credit institution has to report these as renegotiated loans if renegotiations of terms and conditions took place with the debtors of the acquired claims.

As part of a merger between credit institutions, the merged partner's old outstanding amounts are only to be shown in the outstanding amounts and do not represent new business for the purposes of the interest rate statistics, as long as it did not lead to renegotiations of the conditions with the merged institution's customers.

Changes to the loan or deposit amount of existing contracts for the remaining maturity which were not foreseen when the contract was concluded, but are a result of renegotiations, are only shown as new business with the increased amount. However, a reduction is not to be reported as negative new business.

No new agreements exist in the following cases, i.e. they are not to be considered in the interest rates and volumes for new business, but **only in the interest rates for the outstanding amounts**.

– Prolongations of existing deposit and loan contracts that occur automatically, i.e. without the active involvement of the household or non-financial corporation and do not involve a renegotiation of the terms and conditions of the contract (including the interest rate). "Without the active involvement of the customer" means that the interest rate is adjusted **automatically** according to a rule laid down in the agreement **without** customer **intervention**.

– Changes in floating interest rates due to automatic interest rate adjustments (agreed in advance) by the reporting agent.

– A change from a fixed to a floating interest rate or vice versa which has been agreed at the start of the contract (time t_0).

– If only the collateral of a loan is changed during the new negotiations, and this has no effect on the interest rates or loan amount, this change is not to be considered as new business.

– Loans where the customer has not accepted any interest rate offer before the expiry of the extension period and which have therefore been transferred to a temporary rate are to be entered in the outstanding amounts (scheme ZA) with the temporary interest rate; this is not new business.

Prolongations which have not been agreed at the start of the contract (t_0) and which are concluded for a future date (t_2) to the applicable standard conditions of this future time point, are to be shown as new business at the time the renewal is concluded (t_1) with the standard conditions valid at this time. The actual standard conditions granted are only incorporated into the report via the outstanding amounts.

If a **loan** (as long as it is not credit card debt, a revolving loan or overdraft) is not taken out in full at the start of the contract, but rather **in tranches** at various points in time (t_0, t_1,...,t_n), then this loan is covered **only once as new business with the full loan amount** at the time the agreement is concluded. The individual tranches are to be included in the outstanding amounts in those months in which they are paid out. If a renegotiation of the terms and conditions of the loan takes place after time t_0, the full amount granted and not yet repaid by the time the renegotiation takes place should be reported under renegotiated loans.

Volume-weighted average interest rates for all **new agreements concluded** for deposits and loans during the reporting month are to be reported as new business. Both the interest rate and the new business volume are to be reported for the items 02 to 04, 08 to 11, 13 to 22, 33 to 35, 37 to 85, and 88 to 91 of scheme ZB.

For repos, see the monthly balance sheet statistics guidelines

Example 3: Calculating the reporting items for new business and outstanding amounts

In the reporting month, the following new loans are agreed upon by a reporting agent for the “Loans in euro / to households / loans for consumption / with an agreed maturity or initial period of interest rate fixation of over 1 and up to 5 years."

– Loan 1 of €10,000 at an interest rate of 5.25%.

– Loan 2 of €20,000 at an interest rate of 5.00%. The first tranche of €5,000 is paid out immediately.

The interest is to be paid annually.

The following items are to be reported for the reporting month

New business (item 14 of scheme ZB)		Outstanding amounts (item 10 of scheme ZA)
Volume-weighted interest rate	Volume	Volume-weighted interest rate
$\frac{(5.25 \cdot 10000 + 5.0 \cdot 20000)}{30000} = 5.0833\%$	€30,000	$\frac{(5.25 \cdot 10000 + 5.0 \cdot 5000)}{15000} = 5.1667\%.$

3. Time reference point

a) Time reference point for interest rates on outstanding amounts

The interest rates for the outstanding amounts (items 01 to 26 of scheme ZA) are to be compiled as a snapshot of **end-period observations**. At the booking cut-off date on the last day of the reference month, the interest rates are to be calculated as volume-weighted averages of the interest rates which are applied for the total stock of deposits and loans. At this date, the reporting agent has to calculate the corresponding interest rates and volumes for all outstanding deposits and loans vis-à-vis households and non-financial corporations and to compile a weighted average interest rate for each instrument category. The interest rates for the outstanding amounts only cover contracts that are still outstanding at the time of the data collection.

b) Time reference point for interest rates and volumes for new business: overnight deposits, deposits redeemable at notice, extended credit card debt, as well as revolving loans and overdrafts.

The new business interest rates for overnight deposits (items 01 and 07 of scheme ZB), deposits redeemable at notice (items 05 and 06 of scheme ZB), extended credit card debt (items 32 and 36 of scheme ZB), as well as revolving loans and overdrafts (items 12 and 23 of scheme ZB) are to be compiled as a snapshot of **end-period observations.**

The reported interest rates are to be calculated as volume-weighted averages of the interest rates applied to the total stock of deposits and loans of these specific instrument categories at the booking cut-off date on the last day of the reporting month. At this date, the reporting agent has to collect the corresponding interest rates and volumes for all overnight deposits, deposits redeemable at notice, extended credit card debt, as well as revolving loans and bank overdrafts vis-à-vis households and non-financial corporations, and to compile a weighted average interest rate for each instrument category. The interest rates and volumes only cover contracts that are still outstanding at the time of the data collection.

For accounts that can either be a deposit or a loan, a differentiation has to be made between months with credit balances and months with debit balances. Only the balance at the booking cut-off date on the last day of the month determines whether the account is an overnight deposit or an overdraft in that month.

c) Time reference period for interest rates and volumes for new business: deposits with agreed maturity, repos and all loans excluding extended credit card debt as well as revolving credits and overdrafts

The new business interest rates for deposits with an agreed maturity (items 02 to 04, 08 to 10 of scheme ZB), repos (item 11 of scheme ZB) and all loans excluding extended credit card debt as well as revolving loans and overdrafts (items 13 to 22, 33 to 35, 37 to 85, and 88 to 91 of scheme ZB), are to be calculated as average values for the entire reporting month.

For each of these instrument categories, the reported interest rate is to be calculated as a volume-weighted average of the interest rates of all new business cases during the reference month in the relevant category. These weighted average interest rates are to be transmitted to the Bundesbank together with the amount of new business conducted during the reporting month for each instrument category. The report covers all new business conducted during the entire month. Therefore, operations which start and end within the reporting period are to be reported as new business, whereas they are not to be accounted for in the outstanding amounts because of the month-end analysis. As a general rule, the contract date is the determining factor when categorising the new business to a reporting month.

All renegotiations of existing deposit or loan contracts should be taken into account as new business, even if the same contract is renegotiated more than once during the reference period.

Agreements that are subject to a suspensive condition pursuant to section 158 (1) of the German Civil Code, e.g. that still require approval from the credit committee, are only to be covered as new business in the interest rate statistics after they have fulfilled the suspensive condition (approval). Agreements which have been granted to the customer, but still require approval by the customer, are only to be covered as new business by the reporting agent after the signed agreement has been received.

4. Instrument categories

a) Preliminary remarks

When calculating interest rate statistical data for the outstanding amounts and new business, only **deposits and loans denominated in euro** are to be covered, pursuant to the reporting scheme. As a general rule, **all products** that fall within an instrument category are to be taken into account. Exceptions to this rule include **bad loans**[6] and **loans for debt restructuring** at interest rates below market conditions; neither are these to be included in the calculation of the average weighted interest rates for the outstanding amounts nor in the new business. Offsetting is to be processed according to the balance sheet statistics framework (see III. General reporting rules and other explanatory notes; Offsetting).

Only on balance sheet transactions are to be included in the interest rate statistics. The exceptions to this are forward operations and irrevocable lending commitments with condition agreements which are only to be included as new business in interest rate statistics' at the time the agreement is signed or when the agreement conditions have been newly negotiated. From the time of the debiting and crediting, these exceptions are to be accounted for in the outstanding amounts in line with their original maturity.[7]

As a general rule, all deposit and loan categories require a **sectoral breakdown**. Here has to be distinguished between indicators vis-à-vis households (including sole proprietors as well as non-profit institutions serving households) and vis-à-vis non-financial corporations. Data for sole proprietors are to be shown as an "of which"-item under households (item 33 to 35 of the reporting scheme ZB) for the new business category "loans for other purposes". For the new business of loans (excluding extended credit card debt as well as revolving loans and overdrafts), data for renegotiated loans are to be reported as an "of which"-item for the sum of renegotiated loans to households depending on their purpose (items 88 to 90 of scheme ZB) and for the sum of all loans to non-financial corporations (item 91 of scheme ZB). **No sectoral breakdown** is required for repos (item 05 of scheme ZA as well as item 11 of scheme ZB) and deposits redeemable at notice (items 05 and 06 of scheme ZB). There is no differentiation between households and non-financial corporations in the aforementioned instrument categories.

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[6] For reasons of consistency and simplification the definition laid out in the solvency (Liquiditätsverordnung) can be chosen (loans for which individual value adjustments have been made, provided that they are currently impaired).
[7] See also section II. monthly balance sheet statistics, general guidelines, II. Maturity classification.

Unless otherwise stated in the paragraphs below, the instrument breakdown for the purposes of the interest rate statistics and the definitions of the types of instruments follow the asset and liability categories set out in Annex II part 2 of regulation ECB/2013/33 from 24 September 2013 concerning the monetary financial institutions sector's balance sheet (ABl. L 297, 07 November 2013) and respectively the monthly balance sheet statistic guidelines.

b) Notes on selected deposit categories

No maturity breakdown is required for repos (item 05 of scheme ZA as well as item 11 of scheme ZB) as they are assumed to be predominantly very short-term. In addition, for repos no sectoral breakdown is required, but repos rather relate to households and non-financial corporations without differentiation.

For repos see also III. General reporting rules and other explanatory notes, sales and repurchase transactions, securities and precious metal lending transactions

Overnight deposits (items 01 and 07 of scheme ZB) cover all overnight deposits **whether or not** they are **interest bearing.** Prepaid money card amounts and amounts connected with software-supported electronic money are also to be taken into account. Overnight deposits are compiled analogously to the outstanding amounts at the end of the reference month. Therefore they are **not** to be included in the interest rate calculation for the outstanding amounts of deposits of households or non-financial corporations with agreed maturities of up to two years (items 01 and 03 of scheme ZA).

Non-financial corporations' **deposits redeemable at notice**[8] are to be compiled together with those of households (including non-profit institutions serving households). Deposits redeemable at a notice of 3 months before the end of the quarter are to be categorised under the maturity breakdown "of over 3 months" (item 06 of scheme ZB).

c) General notes on the loan categories

For the purposes of interest rate statistics, revolving loans are defined as in the guidelines on monthly balance sheet statistics.

Overdrafts are debit balances on current accounts. The interest rate on overdrafts corresponds with the interest rate that is charged to the account when a credit balance (overnight deposit) becomes a debit balance (overdraft). This means that the overnight deposits and overdraft relate to the same account. Overdrafts have no fixed maturity[9] and are in general granted without the customer having to contact the bank in advance before using it. Usually the reporting agent sets an upper limit on the overdraft that the household or non-financial corporation can use. **All bank overdrafts are to be included** regardless of whether they are within or beyond the limit agreed between the reporting agent and the household or the non-financial corporation. Overdrafts therefore include approved overdraft facilities and non-approved overdrafts, as well as current account credits. Penalties on non-approved overdrafts are only to be included in the reported interest rates if they represent an interest component. If the overdraft penalty fee is a non-interest rate related charge, however, it is not covered by the AAR.

[8] See also section II. monthly balance sheet statistics, general guidelines, II. Maturity classification.
[9] A limited permission usage of an overdraft is not to be interpreted as a maturity.

Extended credit card debt is covered in an own category, and not covered in the revolving loans and overdrafts. The total amount owed by the borrower is to be reported, irrespective of whether it is within or beyond any limit agreed beforehand between the lender and the borrower with regard to the size and/or maximum period of the loan.

As for the interest rates for **outstanding amounts** (scheme ZA), the revolving loans and overdrafts generally are to be included in the instrument categories loans for house purchase or loans for consumption and other purposes to households as well as loans to non-financial corporations depending on their purpose and sectoral classification. Each of them is covered by **original maturity of up to 1 year** (items 06, 09 and 12 of scheme ZA). If a clear classification in instrument categories is not possible, loans can be classified according to the monthly balance sheet statistics, general guidelines, III. General reporting rules and other explanatory rules – instrument categories. For the data concerning the new business (scheme ZB) for revolving loans and overdrafts an individual instrument category is included (positions 12 and 23 of scheme ZB). Loans reported under this category are not reported under any other new business category.

Example 4: Reporting overdrafts

At the end of the month, the current account in question has a debit balance of €1000. It is assumed that the overdraft was granted to the customer (a household) for consumer purposes. An interest rate of 12% is charged (with annual interest capitalisation). The following data are to be included in the report to the Bundesbank for this transaction:

New business (scheme ZB)	Outstanding amounts (scheme ZA)
Scheme, item number / interest rate / volumes	Scheme, item number / interest rate
ZB, item 12 / 12.0000% / €1000	**ZA, item 09 / 12.0000%**

For the classification of diverse card products the respective accounting settlement system is decisive for the MFI-interest rate statistics.[10]

For the purposes of the interest rate statistics, **credit card debt** has the same meaning as “credit card debt” in Annex II part 2 of regulation ECB/2013/33 and in the general guidelines on the monthly balance sheet statistics.

Only the interest rates related to **extended credit card debt** is to be reported as new business (items 32 and 36 of scheme ZB). The interest rate for **convenience credit** is not reported separately, as it is by definition 0%. However, the outstanding convenience and extended credit card debt are together included on outstanding amounts according to the sectoral classification in the maturity breakdown with the shortest original maturity in the portfolio items (items 09 and 12 of scheme ZA).[11] Neither extended credit card debt nor convenience credit card debt is reported under any other new business indicator.

Loan amounts that can be called with cards counting as debit cards and have to be retired in previously agreed rates (**debit cards with payment and credit function**) are to be reported

[10] For the classification of each card in debit cards and extended credit card debt see monthly balance sheet statistics, general guidelines, III. General reporting rules and other explanatory rules – debit or credit cards.
[11] For the classification to instrument categories the same rules as for revolving credits and overdrafts shall apply. Additionally see monthly balance sheet statistics, general guidelines, III. General reporting rules and other explanatory rules – Intended purpose (loans by type of loan).

analogous to credits in tranches.[12] The maturity breakdown in the outstanding amounts follows the definition of the monthly balance sheet statistics, general guidelines, II. Maturity classification through approximate calculation of the original maturity. For the classification according to the purpose of the loan – for outstanding amounts and new business – the rules for revolving credits and overdrafts as well as credit card debt shall apply.[13]

Extended credit card debt, convenience credit card debt, as well as revolving loans and overdrafts are to be included in the interest rate calculation of outstanding amounts with an original maturity of up to 1 year depending on their purpose and sectoral classification (item 06, 09 and 12 of scheme ZA).[14]

For the purposes of the interest rate statistics, all secured and unsecured loans together (items 06 to 08 and 15 to 20 of scheme ZA as well as items 16 to 19, 31 and 89 of scheme ZB) and separately only the secured loans[15] which have been granted for **investing in housing (including house construction and modernisation)** (items 58 to 61 of scheme ZB) are to be compiled as **housing loans to households**. However, please note that for new business, any revolving loans and overdrafts are to be shown separately and must not be included in the loans to households for housing with a floating rate and up to 1 year period of initial rate fixation (position 16 of scheme ZB).

Loans to households for consumption and other purposes (items 09 to 11 and 15 to 20 of scheme ZA as well as items 13 to 15, 30 and 55 to 57 as well as 88 of scheme ZB) are **loans that are granted for personal use in the consumption of goods and services**. In new business, secured and unsecured loans together (items 13 to 15 and 30 of scheme ZB) and only secured loans (items 55 to 57 of scheme ZB) are compiled separately.[16] Loans for consumption include, in particular, loans to households for purchasing durable goods, such as vehicles, furniture, domestic appliance, TV and radio equipment or computers, or to finance a holiday. For interest rates for outstanding amounts (items 09 to 11 of scheme ZA), loans for consumption and other purposes to households are consolidated in one instrument category. However, please note that with respect to new business, extended credit card debt as well as revolving loans and overdrafts are to be shown separately and must not be included in the loans for consumption to households with a floating rate and up to 1 year period of initial rate fixation (item 13 of scheme ZB).

Loans to households for other purposes (items 09 to 11 and 15 to 20 of scheme ZA as well as items 20 to 22 and 33 to 35 as well as 90 of scheme ZB) are **loans to the household sector, which are not covered by the aforementioned categories** (e.g. loans for business purposes, debt consolidation, training and further education). Extended credit card debt, convenience credit card debt, as well as revolving loans and overdrafts are to be included with the outstanding amounts with an original maturity of up to 1 year (item 09 of scheme ZA). However, please note that with respect to new business, any extended credit card debt, as well as revolving loans and overdrafts are to be shown separately and must not be included in the

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[12] See II. Explanatory notes on the reporting system, 2. c) Interest rates and volumes for new business: deposits with an agreed maturity, repos and all loans excluding credit card debt, as well as revolving loans and overdrafts.
[13] See monthly balance sheet statistics, general guidelines, III. General reporting rules and other explanatory rules – Intended purpose (loans by type of loan).
[14] See monthly balance sheet statistics, general guidelines, III. General reporting rules and other explanatory rules – Intended purpose (loans by type of loan).
[15] See II. Explanatory notes on the reporting system, 4. f) Breakdown by secured loans with collateral and/or guarantees.
[16] See II. Explanatory notes on the reporting system, 4. f) Breakdown by secured loans with collateral and/or guarantees.

loans to households for other purposes with a floating rate and up to 1 year of initial rate fixation (item 20 of scheme ZB).

All loans to non-financial corporations are to be included as **loans to non-financial corporations** in the outstanding amounts (items 12 to 14 and 21 to 26 of scheme ZA). This also includes extended credit card debt, convenience credit card debt, as well as revolving loans and overdrafts which are incorporated into the maturity breakdown with an original maturity of up to 1 year (item 12 of scheme ZA). However, with regard to new business, extended credit card debt, revolving loans and overdrafts (items 23 and 36 of scheme ZB) are to be differentiated from loans for other purposes (items 37 to 54 and 62 to 85 as well as 91 of scheme ZB). Secured and unsecured loans together to non-financial corporations (items 37 to 54, 80, 82 and 84 of scheme ZB) and only secured loans to non-financial corporations (items 62 to 79, 81, 83 and 85) are to be compiled separately from one another.

d) Breakdown by amount category

For loans to non-financial corporations (items 37 to 54 and 62 to 85 of scheme ZB) three categories of amounts are distinguished: “up to €0.25 million”, “over €0.25 million and less than €1 million" and “over €1 million”. The amount refers to the single loan transaction considered as new business.

e) Breakdown by original and residual maturity, notice period or initial rate fixation

Depending on the type of instrument and on whether the MFI interest rate refers to outstanding amounts or to new business, the statistics provide a breakdown by original and residual maturity, periods of notice and/or initial period of fixation of the rate. These breakdowns refer to time bands or ranges. For example an interest rate on a deposit with an agreed maturity of up to two years (items 01 or 03 of scheme ZA) refers to an average rate across all deposits with an agreed original maturity between two days and a maximum of two years weighted by size of the deposit (see also 4.b General notes on selected deposit categories; overnight deposits).

The breakdown by original- and residual maturity as well as period of notice follows the definitions set out in Part 2 of Annex II to Regulation ECB/2013/33) or in the general section of the guidelines on monthly balance sheet statistics. A breakdown by original maturity is applied to all deposit categories other than repos referring to outstanding amounts and all lending categories referring to outstanding amounts (see scheme ZA). For the loans of outstanding amounts an additional breakdown by original maturity in combination with residual maturity and next interest rate reset is required (items 15 to 26 of scheme ZA). A breakdown by original maturity is also applied to new business on deposits with agreed maturity and a breakdown by period of notice to new business on deposits redeemable at notice (see scheme ZB). The interest rates for new business on loans are to be classified according to the initial period of rate fixation (see scheme ZB). For the purposes of interest rate statistics, the initial period of rate fixation is defined as the initial period which was agreed at the start of the contract, during which the value of the interest rate will not change. The initial period of rate fixation may be shorter or equal to the original maturity period.

The value of the interest rate is only considered to be unchangeable if it is defined as an exact level (e.g. 6%) or as a differential to a reference rate at a fixed point in time (e.g. 6-month EURIBOR rate on 31 December 2002 plus 2%). If at the start of the contract a procedure to calculate the lending rate is agreed for a certain period of time, however, such as “6-month

EURIBOR rate plus 2% for three years", this is not considered to be an initial rate fixation period, as the interest rate level (in line with the reference rate) may change during the three years.[17]

The statistics on new business only reflect the interest rate that is agreed for the initial period of interest rate fixation at the start of the agreement or as part of a renegotiation of the loan agreement. If the interest rate automatically changes to a floating rate after the initial period of rate fixation (as agreed previously), the transaction at this point is not to be reported as new business again, but instead just to be included in the interest rate calculation for the outstanding amounts.

In **new business**, **loans** to households for which no fixed interest rate was agreed (i.e. loans with a **variable interest rate**) are to be included in the maturity breakdown "**loans with a floating rate or initial rate fixation up to 1 year**". However, these types of loans to non-financial corporations are to be included in the maturity breakdown "**loans with floating rate or initial rate fixation up to 3 months**" according to their size. In addition, loans to non-financial corporations with a floating rate and initial rate fixation up to 1 year period in connection with an original maturity of over 1 year are to be compiled additionally as an "of which" category (items 80 to 85 of scheme ZB).

f) Breakdown by secured loans with collateral and/or guarantees

The reason "*of which*" items for loans to households and non-financial corporations are being introduced, showing only collateralised loans, is to break down loans in new business into more homogeneous risk groups. The objective is to improve the information content of the statistics by taking credit risk into account and to allow more in-depth analyses as well as cross-country comparisons. To this end, all collateralised loans to households and non-financial corporations must be reported in the relevant new business categories with the exception of credit card debt, revolving loans and overdrafts as well as other loans (see items ZB 55 to 79 as well as 81, 83 and 85 of the reporting scheme for new business).

Existing loans, which fulfil the definition of new business according to the guidelines of MFI interest rates statistics[18] and which, accordingly, are at the time of new negotiation to be shown as new business, have to be checked again whether they fulfil the prerequisites of counting as secured loans. Thus, it is possible for a credit to change its status during its total maturity.[19]

For the purposes of the interest rate statistics, a loan is considered to be secured if collateral in at least the same value as the loan amount has been posted, pledged or assigned. The total value of the collateralisation can be calculated as the sum of all protection instruments provided for this loan that can be recognised when calculating the prudential capital requirements according to the respective approach used. The collateral must be taken into account according to the time of the conclusion of the loan agreement, which was concluded on the basis of such cover, even if the collateralisation effect is not yet legally effective at this time.

Where the **Credit Risk Standardised Approach (CRSA)** and the **Internal Ratings Based Approach with supervisory loss given default (F-IRBA)** are used, the following collateral is to be taken for the purposes of the interest rate statistics:

[17] For the definition of new business see II Explanatory notes on the reporting system, 2. c) Interest rates and volumes for new business.
[18] See II. Explanatory notes on the reporting system, 2. c) Interest rates and volumes for new business.
[19] Thus, the approach for MFI interest rate statistics differs from the original collateralisation principle of the monthly balance sheet statistics.

funded credit protection

1. financial collateral pursuant to article 197 (1 to 6) and article 198 under consideration of article 197 (8) of Regulation (EU) No. 575/2013;
2. real estate collateral according to the specifications outlined under “VII annex B5” in the “Guidelines on the annexes to the monthly balance sheet statistics”;
3. cash on deposit held with, or a certificate of deposit or similar instrument held by a third-party institution in a non-custodial arrangement pursuant to article 200 (a) of this Regulation;
4. life insurance policies pursuant to article 200 (b) of this Regulation;
5. debt securities which must be repurchased by the issuing third-party institution on request pursuant to article 200 (c) of this Regulation;

Where the **F-IRBA** is applied, the following collateral assets are also to be recognised:

1. IRBA receivables assigned or pledged as collateral pursuant to article 199 (5) of this Regulation;
2. other IRBA physical collateral pursuant to article 199 (6) of this Regulation;
3. the treatment of lease exposures as collateralised by the leased asset is governed by article 199 (7) of this Regulation;

unfunded credit protection

1. unfunded credit protection provided by eligible providers of unfunded credit protection pursuant to article 201 (1) of this regulation; article 201 (2) shall apply accordingly;
2. guarantees pursuant to article 203 of this Regulation
3. for IRBA exposures with special recognition of unfunded credit protection pursuant to article 202 of this Regulation

valuation principles

Financial collateral may be recognised at its market value at most. Real estate collateral must be valued according to the specifications outlined under “VII annex B5” in the “Guidelines on the annexes to the monthly balance sheet statistics”. A cash on deposit held with, or a certificate of deposit held by a third-party institution has to be assessed at the nominal value of the cash on deposit or the certificate of deposit. For life insurance policies the surrender value is applicable. Debt securities which must be repurchased by the issuing third-party institution on request are to be recognised with

- the nominal value, if the debt security must be repurchased at this value or with
- the value, with which it would have to be recognised as eligible financial collateral if it must be repurchased at the market value.

Other physical collateral must be valued at the well-established and publicly available market prices as stipulated in article 199 (6)(b) of this Regulation. IRBA receivables assigned as collateral must be recognised at their book value. The value of a unfunded credit protection is, if it

- is capped at the maximum value, the maximum value
- is a guarantee, that does not cover all payments owed by the borrower in the guaranteed position, the value reduced by the amount of the not covered payments or maximum value of the guarantee.

In all other cases the amount, that has to be paid at the protection buying institution in the warranty case, is recognised.

For institutions that **calculate** their capital requirements according to the **IRBA using own estimates of loss given default (A-IRBA)**, the total value of the collateral is calculated as the sum of all protection instruments provided for this loan that are eligible for use under the A-IRBA. In terms of the recognition of guarantors, A-IRBA institutions must, pursuant to article 183 (1) of this Regulation, have clearly specified criteria for the types of guarantors they recognise. Under the A-IRBA, all protection instruments must be recognised at the value determined (by the institution) that is also the basis of further calculations for the banking supervision.

Please note that at the first time of its provision the classification of a real estate loan must be applied consistently for the purposes of both the balance sheet statistics and the interest rate statistics. As a consequence, all newly granted loans that are deemed to be secured by real estate for the purposes of the monthly balance sheet statistics must also be reported as collateralised in the new business of interest rate statistics. The reverse is not true, however, as the definition of a collateralised loan differs significantly between the balance sheet statistics and the interest rate statistics. While only real estate collateral is recognised for the purposes of the balance sheet statistics, the definition of collateralisation for interest rate statistics includes the collateral instruments stated above available under prudential regulations.

5. Dealing with selected specific products

a) Step-up/step-down products

Step-up/step down products are predominantly deposits and loans with a fixed maturity. The interest rate for the whole maturity of the deposit or loan and the other terms and conditions are agreed in advance at time t_0 when the contract is signed. Step-up/step-down products are distinguishable by a fixed maturity to which an interest rate is applied that increases (decreases) from year to year by a pre-fixed number of percentage points.

Example 5: Calculation of interest rate for step-up/step-down products

For Step-up/step-down products, it is recommended to calculate the interest rate based on the narrowly defined effective rate (NDER) as this enables the “interest rate levels” to be taken into consideration on an accrual basis. The interest rate can also be calculated provisionally as a geometric mean in accordance with the following example as a “quasi” annualised agreed rate (AAR).

An example of a step-up deposit is a deposit with an agreed maturity of four years, which receives 5% interest in the first year, 7% in the second, 9% in the third and 13% in the fourth.

The AAR on new business, which is covered at time t_0 in MFI interest rate statistics, is the geometric average of the factors “1 + interest rate” minus 1 and thereby:

$$x = (1.05 \cdot 1.07 \cdot 1.09 \cdot 1.13)^{\frac{1}{4}} - 1 = 0.08459976 = 8.4600\%.$$

The AAR on outstanding amounts that is covered from time t_0 to t_3 is the rate applied by the reporting agent at the time of calculation of the MFI interest rate, i.e. using the example of a deposit with an agreed maturity of four years 5% at time t_0 7% at time t_1, 9% at time t_2 and 13% at time t_3.

b) Umbrella contracts

An ‘umbrella contract’ allows the customer to draw loans on several types of loan accounts up to a certain maximum amount applying to all loan accounts together. At the time of the agreement on an umbrella contract, the form the loan will take and/or the date at which the loan will be drawn and/or the interest rate are not specified, but a range of possibilities may be agreed. Such an umbrella contract is **not** covered by MFI interest rate statistics. However, as soon as a loan agreed under an umbrella contract is drawn, it is covered under the corresponding item in MFI interest rate statistics, both in new business and outstanding amounts. The manner in which the loan is dealt with in the statistics regarding new business depends on the type of account which the customer has chosen to use for the loan.

c) Saving deposits with a basic interest rate plus a fidelity and/or growth premium

Saving deposits with a basic interest rate plus a fidelity and/or growth premium may exist. At the time the deposit is placed, it is not certain whether or not the premium will be paid. The payment depends on the future unknown saving attitude of the household or non-financial corporation. Such fidelity or growth premiums are not included in the AAR on new business until the fidelity and/or growth premium has actually been granted by the reporting agent (items 05 and 06 of scheme ZB)

d) Loans with associated derivative contracts

Loans may be offered to households or non-financial corporations with associated derivative contracts, i.e. an interest rate swap/cap/floor etc. As a convention, such associated derivative contracts shall **not** be included in the AAR on new business. The AAR on outstanding amounts always covers the rates applied by the reporting agent at the time of the calculation of MFI interest rates. Hence, if such a derivative contract is exercised and the reporting agent adjusts the interest rate charged to the household or non-financial corporation, this is reflected in the statistics on outstanding amounts.

e) Deposits with fixed or variable interest-bearing components

Deposits may be offered comprising two components: a deposit with an agreed maturity to which a fixed interest rate is being applied and an embedded derivative with a return that is linked to the performance of a defined stock exchange index or a bilateral exchange rate subject to a minimum guaranteed return of 0%. The maturity of both components may be the same or may differ. The AAR on new business covers the interest rate for the deposit with agreed maturity as it reflects the agreement between the depositor and the reporting agent and it is known when the money is placed. The return on the other component of the deposit, linked to the performance of a stock exchange index or a bilateral exchange rate, is only known ex post when the product matures and therefore cannot be covered by the new business rate. Hence, only the guaranteed minimum return (usually 0%) is covered. The AAR on outstanding amounts always covers the interest rate applied by the reporting agent at the time of the calculation of MFI interest rates. Until the day of maturity, the rate on the deposit with agreed maturity is captured as well as the guaranteed minimum return on the deposit containing the embedded derivative. Only at maturity do the MFI interest rates on outstanding amounts reflect the AAR that is paid by the reporting agent.

f) Repo savings accounts

Deposits with a maturity of over two years may include pension savings accounts (see Annex II part 2 of regulation ECB/2013/33). The main part of the pension saving accounts may be placed in securities. The remaining part of the pension saving accounts may be held in cash and the interest rate is determined by the reporting agent in the same way as for other deposits. At the time the deposit is placed, no interest rate is agreed between the household and the reporting agent for the part invested in securities. An interest rate is only set for the remaining part of the deposit. Therefore, only the part of the deposit that is not invested in securities is to be included in the interest rate statistics. The interest rate to be reported for new business is the rate agreed between the household and reporting agent at the time the deposit is placed for the part of the deposit not invested in securities. The interest rate for the outstanding amounts is the rate applied by the reporting agent on the deposit part of the pension savings account at the time of the interest rate calculation.

g) Saving plans for housing loans

Saving plans for housing loans are long-term saving schemes that may provide a low return but, after a certain period of saving, give the household or non-financial corporation the right to a housing loan at a discounted rate. Following Part 2 of Annex II to Regulation ECB/2013/33, these savings plans are classified under **deposits with agreed maturity over two years** as long as they are used as a deposit. As soon as they are transformed into a loan, they are classified as housing **loans to households**. Reporting agents report as new deposit business the interest rate that is agreed at the time the initial deposit is placed. The corresponding amount of new business is the amount of money that has been placed. The increase of this amount on the deposit over time is only covered by the outstanding amounts. At the time when the deposit is transformed into a loan, this new loan is recorded as new lending business. The interest rate is the discounted rate that is being offered by the reporting agent. The weight is the total amount of the loan that is being granted to the household or non-financial corporation.