

The Riksbank's proposal for new statistics on households' financial assets and liabilities

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S V E R I G E S R I K S B A N K

This report aims to become part of a dialogue between public authorities and interested parties in society with regard to the Riksbank's proposal for new statistics collection methods. Public authorities and other interested parties can present their written views on the proposal no later than 17 November 2017.

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Foreword

The Riksbank uses a large volume of statistics and data to fulfil its various tasks as Sweden's central bank. One of a central bank's tasks includes being responsible for statistics on behalf of the general public. The Riksbank's statistics regarding the balance of payments, financial markets and securities form the base for financial statistics in Sweden.

One important question discussed over many years is the increasing level of household indebtedness and the economic risks this entails. Aggregate statistics show that the higher indebtedness also leads to an increase in their assets, which means that households' balance sheets are increasing at a rapid rate. However, we know little about how this increase in debt and wealth is distributed among households in Sweden. Statistics Sweden is responsible for this type of statistics but is not able to show how households' assets and liabilities are allocated, partly because the individual expenditure is no longer available due to a tax reform in 2007 and partly because Statistics Sweden does not have the opportunity to collect data from financial institutions to produce the statistics requested.

For public authorities that are responsible for the supervision and oversight of the financial institutions, for analyses of the effects of economic policy, for designing so-called macroprudential policy measures and so on, the lack of detailed data on the financial position of the household sector is a deficiency. More detailed household data would be very valuable in many different areas, such as analyses of the functioning of the economy, risk assessments of financial institutions, and the formulation of economic policy measures.

There have also been international discussions on more detailed date in the wake of the financial crisis and particularly in countries with a rapid rise in indebtedness. In many other European counties the data situation is better than that in Sweden. The European System of Central Banks has also taken the initiative to collecting detailed data on corporate sector debt next year. The plans are to increase this collection in the near term to also cover household debt.

To remedy the shortage of data, the Riksbank wishes to investigate in greater detail the conditions for a new collection of detailed data on households' assets and liabilities. The Riksbank itself would find this very useful, and it would also be useful for other public authorities and the general public if these statistics were published. This can be achieved through cooperation with Statistics Sweden, which is the public authority responsible for statistics.

The Riksbank is in this report inviting other public authorities and interested parties to take part in a dialogue. Interested parties can present their written views on the proposal to the Riksbank no later than 17 November 2017. The Riksbank also intends to meet with public authorities, branch representatives and other interested parties for discussions.

Stockholm, October 2017 Jyry Hokkanen Head of statistics, Sveriges Riksbank

Summary

There is a shortage of basic statistics describing developments in household assets and debts. The Riksbank could collect this data to strengthen its own analyses, and also share the data with Statistics Sweden to benefit the general production of statistics. The Riksbank wishes to have a dialogue with various interested parties in society regarding the need for and usefulness of this data.

Detailed data on households balance sheets is lacking

Swedish households' assets and liabilities have increased substantially in recent years, but there is very limited knowledge of which groups of households are highly indebted and how vulnerable they are to shocks to the economy. The lack of knowledge is due to the fact that there has been no detailed data on households' balance sheets available over the past ten years. This is a problem when one wishes to study the effects of various economic policy measures, but also in the research on the functioning of the economy as a whole.

The Riksbank wishes to collect data that can be used as a basis for new statistics. The lack of statistics on households' financial status means that the Riksbank wishes to investigate the possibility of gathering detailed data on households' assets and liabilities. These can then form the basis for statistics that Statistics Sweden can compile and publish. Statistics Sweden has the task of publishing statistics on households' finances, but at present can only do so at aggregate level. Statistics Sweden has no legal capacity to collect the necessary data from financial institutions, but can receive data that the Riksbank collects.

The data can be used in assessments and evaluations

The data collected would be invaluable to the Riksbank with regard to assessing the resilience of the household sector to various economic shocks and assessing the effects of monetary policy on the economy as a whole. Other authorities such as Finansinspektionen (the Swedish Financial Supervisory Authority) and the Ministry of Finance would also find the data on household finances useful, for instance, in formulating macroprudential policy measures or when following up measures that have already been decided and that affect household borrowing.

A new collection of detailed data raises questions regarding data protection, secrecy, disclosure and so on. The data at the Riksbank is protected by supervision secrecy but parts of the material can after a review of the purpose be disclosed to Finansinspektionen. The data is not used as a basis for general taxation of households.

The purpose of this report is to begin a dialogue with various interested parties in society and gather their views on the Riksbank's proposal. One important question is how one views the need for detailed data and its usefulness. Another question is what possible obstacles and problems the collection of data might entail.

Written comments on the above questions can be sent to the Riksbank no later than 17 November 2017.

The Riksbank's proposal for new statistics on households' financial assets and liabilities

The lack of detailed information on households' assets and liabilities means that the Riksbank is considering starting a new collection of this data from financial institutions. Such data can then be used as a basis for statistics on households' financial status and thereby fill a gap in the public statistics. This report describes the Riksbank's need of this type of data and outlines the scope of this type of collection.

1. Households' balance sheets are important to economic developments

Household consumption comprises the largest individual component in the Swedish gross domestic product. Analyses of household consumption are therefore important for understanding economic developments. According to economic theory, households base their decisions on saving and consumption partly on their current financial situation and partly on their expectations of future earnings and developments in prices. To be able to produce analyses and forecasts, economic-policy decision-makers like the Riksbank need to have good information on, for instance, households' current wealth. The authorities also need this data to evaluate the effects of monetary and fiscal policy or of macroprudential policy measures.

Households' status is also important when assessing the risks inherent in economic developments. Households' high and rising debts are one of the single most important causes of vulnerability in the Swedish economy, which has been pointed out by the Riksbank, the IMF and the European Commission, among others. The Riksbank currently makes analyses of household debt, but to obtain a more comprehensive picture of the risks and an idea of which households are the most vulnerable, the debt needs to be seen in relation to households' assets at an individual level.

There is currently a shortage of statistics on households' financial status

Despite households' balance sheets being very important for economic developments, there is currently insufficient knowledge of the financial position of Swedish households. The statistics on household assets and liabilities that are available are limited to aggregate measures. Although Statistics Sweden has been publishing information since 2016 on households' total real and financial wealth, broken down into a few different asset and liability types, there has long been a shortage of more detailed data on the assets and liabilities and how they are distributed among households. When wealth tax was abolished in 2007 and wealth data was no longer reported in tax returns, the central basic data for wealth statistics also disappeared. Statistics Sweden has investigated whether the missing data could be collected from alternative sources, but has not found any. One important problem is that Statistics Sweden as the authority responsible for these statistics currently lacks the legal mandate to itself gather in the necessary data from financial companies to create national statistics on households' assets and liabilities.

 $^{^{\}rm 1}$ See, for instance, the IMF (2016a, 2016b and 2017) and the European Commission (2017).

Many have pointed to the lack of information for a long time

In recent years, several instances have pointed to the lack of detailed date on households' assets and liabilities and to the need to establish this type of statistics at a level that will satisfy the different analysis needs. In 2011, new data on household wealth was called for in the Riksbank's inquiry into the Swedish housing market.² A government inquiry into households' over-indebtedness pointed to the same needs a few years later.³ In 2016, the International Monetary Fund, IMF, recommended in an assessment of financial stability in Sweden that the authorities should act quickly to gather in data on households' balance sheets.⁴

Lack of data is a problem for economic policy

The lack of information on households' assets and liabilities makes it difficult to evaluate different types of imbalance and vulnerability in the economy. There is also a risk that it will lead to poorly balanced decisions regarding fiscal and monetary policy and unsuitable macroprudential policy measures.

The lack of detailed household data is a problem for the Riksbank. A better data base would enable more accurate analyses of both the effects of the monetary policy measures and the impact of households on financial stability. One current issue that needs further analysis is the rapid build-up of household debt over the past 15 years. At present, these analyses are mostly made using aggregate data or data that only refers to households' liabilities and not their assets. Even if this sort of analysis is valuable in itself, there are certain questions that cannot be answered when there is a lack of information on households' overall balance sheets.

The lack of detailed household data is also problematic for Finansinspektionen and the Swedish Ministry of Finance. It is difficult to make accurate analyses of the effects of new economic-policy measures, for instance, the effects of new macroprudential policy measures. When the authorities need to follow up how measures already decided on (such as the recently introduced amortisation requirement) are being complied with, it is also difficult to do so without adequate data. More detailed knowledge of households' finances would also make it easier for the authorities to design new tools and measures and ensure that regulations are observed.⁵

2. The Riksbank needs data to analyse financial stability and monetary policy

Micro data on households' assets and liabilities is important for the Riksbank's assignments with regard to both monetary policy and financial stability. Maintaining financial stability is a necessary condition for the Riksbank's capacity to conduct monetary policy. Households' growing debts have long been said to be the greatest threat to financial stability in Sweden. An important part of the financial stability analysis concerns assessing what resilience indebted households have when economic developments deteriorate. If their resilience to economic shocks is low, there is a risk that their problems could spread to the rest of the economy. This is partly because household demand can decline, and partly because the banks may have problems if many households (and/or companies) find it difficult to service their debts. Households' resilience depends on whether the households with large debts also have good incomes and assets that can be sold off if their finances deteriorate. Aggregate

² Sveriges Riksbank (2011).

³ SOU 2013:78.

⁴ IMF (2016b).

⁵ The European Systemic Risk Board (ESRB) has recommended that all EU countries should improve their statistics regarding the property sector (ESRB/2016/14). Detailed information on households' financial status and loans for housing and commercial property would, together with the statistics on corporate credits (KRITA) now being implemented, significantly improve the Swedish statistics on loans to buy property.

data on the household sector's total assets and liabilities cannot answer the question of whether the households with large debts also have large assets. Instead, one needs micro data at household level to answer this question. Such data can make it possible, for instance, to calculate debt in relation to assets for all households in the economy to find out how many households are vulnerable in the event of a negative economic development.

By analysing households' assets and liabilities, the Riksbank can also gain a greater understanding of how economic changes affect households' finances and ultimately GDP and inflation. This can thereby lead to a better understanding of how economic variables such as GDP develop, and thereby provide greater opportunity to conduct a well-balanced monetary policy. Monetary policy affects households' finances in many ways, some of which depend on households' assets and liabilities. For instance, an increase in the interest rate contributes to households facing increased costs for their debts, but can also mean that they receive increased income from their assets. The net effect on households' incomes depends on what type of assets and liabilities the household has, and at present there is no available data on this.

Over the past ten years, both assets and liabilities in the household sector have increased, which indicates - all else being equal - that an interest rate increase will tend to lead to a greater effect on households' incomes and consumption than before. Exactly what the effects will be depends partly on how assets and liabilities are distributed in the economy, as the tendency to change consumption when incomes change can be expected to differ from one group to the next. For instance, the effect of a rate increase on consumption will be greater if the increase in debt has been among households with low incomes and small assets, than if it has been among households with high incomes and large assets. Micro data on households' assets and liabilities is thus necessary to be able to answer questions on changes in households' sensitivity to interest rates and the effects of this on consumption.

To answer the questions regarding financial stability and monetary policy, it is not enough to have information on the amount of individual households' assets and liabilities. One also needs to have information on the properties of the assets and liabilities. For instance, if one is to assess households' resilience one needs information on whether their assets consist of property, equity, mutual funds or bank deposits. Another important part of the financial stability analysis concerns assessing the resilience of the financial institutions. To do this, one needs information on which assets and liabilities were issued by which institution. To be able to analyse the impact of monetary policy, one needs, for instance, information on the maturities of households' loans and on how long they have fixed the interest rates on the loans.

In many cases it may be important to study economic developments for various groups of individuals, for instance, different age groups or households in different regions. To do this, one must also have information on the age of the individuals and which municipality they live in. Statistics Sweden could then combine micro data on households' assets and liabilities with further register data and thereby enable further research and analysis that could benefit the Riksbank and other economic-policy decision-makers.

All in all, there are thus several important reasons why the Riksbank should extend the analysis of households' assets and liabilities. The lack of detailed data and necessary statistics means that the current analysis is inadequate. An entirely new collection of detailed data needs to be established to meet the analytical needs. As Statistics Sweden is not at present able to collect detailed micro data, the Riksbank should instead do this to meet its own requirements for analyses.

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⁶ See, for instance, Flodén et al. (2016).

Micro data are the basis for all statistics

Micro data is a collective term for data at individual level, that is, data on individual people or companies. Micro data can consist, for instance, of individual people's responses to questionnaires or the data on individuals and companies contained in the authorities' registers. A table with millions of observations of micro data is not interesting in itself to analyse economic developments. Instead, the micro data is used to produce statistics that are usable for decision-makers in the private and public sectors and for individuals who want to be able to follow developments in society.

Using micro data as a base will make it possible to produce different types of statistics. For instance, it is common that data at household or company level is aggregated to produce statistics at country level, so-called macro statistics, which is done for instance when calculating GDP and inflation. However, micro data forms the basis for these macro statistics, also known as macro data.

When micro data is aggregated to become macro data, however, some information is lost as the aggregate data cannot answer questions about different types of individual or company. For instance, the aggregate statistics cannot give a response to the question of whether the households with large debts also have large assets. To respond to these questions, the underlying micro data needs to be detailed.

With access to underlying micro data on households' assets and liabilities, it will be possible to produce different types of statistics in addition to the usual macrostatistics. For instance, it will be possible to produce different measurements as to how assets and liabilities are distributed among the population. Combined with other micro data, it will also be possible to study statistical correlations, such as whether individuals with large debts in relation to their assets run a greater risk of personal bankruptcy than others.

The analysis of micro data thus does not involve studying individual people's behaviour. It is the patterns in the data that are analysed and individual data is then always anonymised. Studies of micro data concern being able to respond to questions as to how different groups of individuals act in the economy on the basis of the individuals' different characteristics.

3. Proposal for Riksbank's data collection

The Riksbank has the possibility to collect data and pass parts of it on to Statistics Sweden

The Riksbank can, pursuant to the Sveriges Riksbank Act, collect data from financial institutions to carry out its tasks in the fields of financial stability and monetary policy. This means that the Riksbank can collect data on households' assets and liabilities from financial institutions and use them in its analysis work. Some of this data can then be passed on to Statistics Sweden, where it can be combined with data on households' real wealth and in this way create comprehensive national statistics on households' real and financial assets assets and liabilities. The Riksbank's data can also meet the analytical requirements of other public authorities (such as the Ministry of Finance and Finansinspektionen) as well as the research community. However, there are limits as to how other public authorities can use the data that the Riksbank and Statistics Sweden have at their disposal; for instance, the data cannot be used as a base for taxation of individual households.⁷

A collection of data on households' assets and liabilities raises more questions regarding, for instance, scope, data protection, disclosure, cost, etc. The following section reviews these questions in more detail.

⁷ This is for the simple reason that there is no general taxation on financial wealth. <u>If</u> such taxation were introduced, the Swedish Tax Agency would base the taxation on an even more comprehensive base that would also include foreign assets.

Scope of the collection

The earlier wealth statistics were based on micro data in the form of each individual's tax return data and were thus comprehensive but not particularly rich in detail. As the tax returns no longer contain data on wealth, this data needs to be collected in a different way. The Riksbank therefore needs to collect detailed data on liabilities and assets for individuals registered as resident in Sweden. Examples of assets that would be covered are bank deposits, equity, bonds, mutual fund holdings and pension savings. The liabilities side would include both mortgages and other credits.

The Riksbank can collect data from the financial institutions and companies that are under Swedish supervision, such as banks, fund management companies and insurance companies. In the same way, the Riksbank can obtain access to information on a large share of households' pension assets including occupational pensions, an area where there is currently no detailed information available. It is also possible to collect information from foreign bank branches operating in Sweden and from Swedish branches operating abroad.

The number of reporting institutions should initially be limited to the largest and most important institutions, to ensure that a sufficiently large share of the desired population is reached. It may also be appropriate to gradually increase the collection to cover more financial instruments. A gradual extension of this collection would mean that the usability of the data increased gradually.

The modern means of collecting micro data is to do so asset by asset and liability by liability. At present, a detailed collection of data is developed loan by loan within the framework of the European collaboration on corporate credits, what is known as the AnaCredit project. In this database, every loan will be linked to a quantity of information, such as amount, interest rate, fixation period, currency, coupon, protection, which is also collected. There are also plans for a corresponding collection with regard to households' loans in the coming years. A list of examples of variables that may be collected is included in Appendix 2.

As the collection could be comprehensive, it appears natural to begin with an annual collection and then to possibly increase the frequency later. It is also possible to allow certain parts of the data collection process to have different frequencies. Particularly important data could be reported quarterly or monthly. The decisive factor could be whether a new collection could replace the existing reporting.

A new major collection of data as outlined in this report entails many practical issues and considerations that need to be resolved. One difficulty with the material collected will be to treat households correctly as it is not so easy to make this identification. It is therefore important that the quality of the data reported is good from the start. Another consideration is to determine which institutions will be encouraged to report. There are, for instance, reasons why the collection should be limited to only large institutions. It may be interesting to study households that have high debts even in smaller institutions such as credit card companies and payday loan companies, as these households may be a risk group. One reason against a broad collection of data is that the reporting burden may be too heavy for smaller institutions. These and other questions must be duly investigated before the collection process begins.

Data are sensitive and protected

To enable the data collected from different reporters to be put together, it needs to be collected together with personal identity numbers. As the data is sensitive, it is important to take the necessary organisational and technical measures to ensure that it is protected.

Data on households' assets and liabilities is protected by supervision secrecy pursuant to Chapter 30, Section 4 of the Public Access to Information and Secrecy Act. This means that the data would not normally be disclosed to a third party. The supervision secrecy also entails professional secrecy regarding the data. Employees who come into contact with data

⁸ The Swedish equivalent is called KRITA and reporting to this will begin in 2018, see RBFS 2017:2.

protected by professional secrecy are obliged to observe secrecy not only during their employment but also after their employment has ceased. A person who reveals or unlawfully makes use of confidential information can be convicted of breach of professional secrecy.

The Riksbank already observes the provisions in the Personal Data Act, which has the purpose of protecting personal integrity in connection with processing personal data. During spring 2018 the new General Data Protection Regulation will replace the Personal Data Act and the new provisions will at the same time be incorporated into Swedish legislation.

A fundamental principle when processing data is that the employees working with the data shall not have access to more data than is necessary for their particular work tasks. This means that only a few security-cleared employees who work with production of statistics and with IT systems will have access to the identified personal data. It is also important that there are technical systems that trace how the personal data is used.

Analysts at the Riksbank will only have access to anonymised data. This data is also regarded as sensitive, however, and the employees will therefore only have access to the data material necessary for them to carry out the planned analysis work. The Riksbank also has ethical guidelines that clarify the employees' responsibility to take action in such a way that the Riksbank's reputation is not damaged.

There is always a risk of unauthorised access to the data collected. The Riksbank has long experience of managing IT systems of national importance, for instance in the field of electronic payments and cash management and should therefore be well-suited to also protecting data on household assets and liabilities.

Under certain circumstances the Riksbank may also be obliged to disclose data covered by professional secrecy to other public authorities. In general, the law says that the Police authority, for instance, may have the right to certain data on request. If this occurs, the Riksbank will examine each individual case to see whether the data can be disclosed. Individual people always have the right to know about data on themselves stored in public authorities' registers.

Cooperation with Statistics Sweden on production of statistics

The Riksbank can hand over collected and identified data to Statistics Sweden for the production of statistics on the household sector's total real and financial assets and liabilities. In this case, the handover of the data is through a so-called balancing of interests pursuant to Chapter 10, Section 27 of the Public Access and Secrecy Act that the interest of disclosing the data to Statistics Sweden can be considered to take priority over the interest of secrecy in this case. At Statistics Sweden the data is covered by confidentiality of statistics, Chapter 24, Section 8 of the Public Access and Secrecy Act. The data given to Statistics Sweden can be enriched with further data on households' real assets and form the base for more complete statistics on the total assets and liabilities in the household sector. Statistics Sweden has the possibility to disclose anonymised micro data to researchers after the customary confidentiality assessment.

Consequences for the reporters

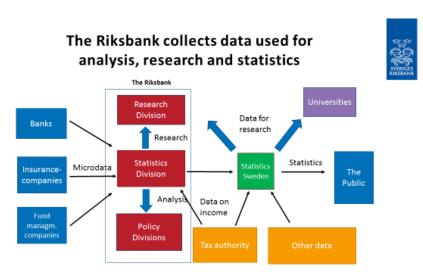
The collection also means that the institutions reporting the data need to invest in automated systems for reporting data. These systems are expensive to construct but automated reporting contributes to keeping down the day-to-day operational costs and can enable coordination with other data collection. It is therefore important that the Riksbank conducts a dialogue with the financial institutions regarding long-term stable reporting requirements.

Data flows

Figure 1 shows the flow of information between reporters, statistics producers and statistics users. The reporters (banks, insurance companies and fund management companies) deliver micro data to the Riksbank's Statistics Division. The Statistics Division prepares the micro data for further analysis, including enriching it with income data. The prepared micro data is used for research and analysis in the Riksbank's work on financial stability and monetary policy.

The Riksbank hands over the micro data to Statistics Sweden, which combines the information on households' assets and liabilities with other data in Statistics Sweden's register, for instance data on households' real assets. Based on these combined data, Statistics Sweden publishes different types of statistics, including households' total wealth. Anonymised statistics may in turn be useful to students, researchers and other public authorities, both in Sweden and abroad.

Diagram 1. Data flows



4. The continued process for the Riksbank's proposal

The purpose of this report is to invite various interested parties in society to a dialogue with the Riksbank and and gather their views on the Riksbank's proposal. Following the assessment of such a discussion and other views received, the Riksbank <u>could</u> begin an internal investigation to examine more closely the technical and practical conditions for the data collection. Such an investigation could be complete in autumn 2018 and a decision on the data collection could therefore be taken during the late autumn 2018. Collection of the data could begin in 2020 at the earliest.

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Appendix 1

Data situation in some other countries

Sweden was for a long time a leading light with regard to accessibility and usability of micro data on households' finances. Today, Denmark is one of few countries that collect all-inclusive data on households' assets and liabilities through a collaboration between the central bank, the statistical authorities and the tax authorities. The majority of the data is collected from tax returns and some data is collected in especially by the central bank. Based on the micro data collected, the Danish authorities have drawn the conclusion that the households with the highest debts also have the highest incomes and large net assets (see Figure 2). Sweden lacks the micro data to make the same type of analysis.

Many other countries collect micro data for certain types of asset and liability. For instance, several central banks collect data on households' liabilities in so-called credit registers. This is done in Germany, Spain, Portugal and Italy, among other countries. The global financial crisis caused many countries to realise that they need micro data on households' assets and liabilities to be able to assess the situation in the banking sector. For instance, the Irish central bank needed to collect micro data from the Irish banks in the middle of the country's banking crisis to be able to assess the banks' capital requirements.⁹

A further number of countries collect information on debts and assets via questionnaires sent directly to households. For instance, the countries in the euro area hold regular surveys by questionnaire under the leadership of the ECB (the Household Finance and Consumption Survey). However, the results of questionnaires may be assessed as less reliable than data collected from financial institutions, partly because households do not always want to state their assets and liabilities or do not understand how different types of assets and liabilities should be reported. It is therefore often difficult to obtain a consistent picture of assets and liabilities when the results from questionnaires are compared with micro data reported by financial institutions.

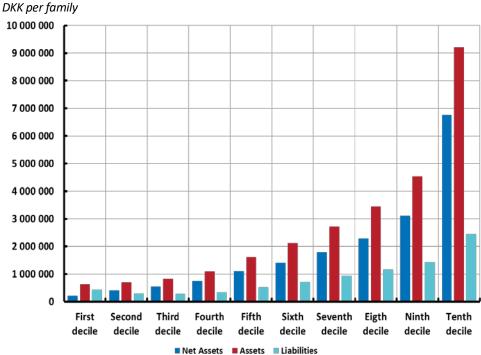


Figure 2. Households' assets, liabilities and net wealth in Denmark 2015

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 $^{^{\}rm 9}$ McElligott, R. and O'Brien M. (2013).

Appendix 2

Examples of variables that should be collected

Examples of variables for financial	Examples of variables for	
liabilities	financial assets	
Type of instrument	Instrument	
Counterpart	Identifier	
Counterpart role	Denomination currency	
Inception date	Reporting base	
Settlement date	Nominal amount/Number of shares	
Maturity date	Type of valuation	
Outstanding nominal amount	Valuation	
Currency	Valuation currency	
Joint liability amount	Accrued interest in valuation	
Commitment amount at inception	Accrued interest	
Off-balance sheet amount	The issuer's name	
Accrued interest	Issuer's corporate registration number	
Accumulated write-offs	Issuer sector	
Accumulated impairment amount	Issuing country	
Type of impairment	Issue date	
Book value	Maturity date	
Agreed annual interest	Type of protection	
Next interest rate reset date	Most recent split ratio	
Fixed-rate period	Most recent split date	
Reference rate	Most recent dividend amount	
Interest rate spread/margin	Most recent dividend type	
Amortisation type	Most recent dividend date	
Payment frequency	Most recent dividend currency	
Type of protection		
Protection value		
Protection allocated value		
Third party priority claims against the protection		
Protection valuation approach		
Original protection value		

Arrears for the instrument
Probability of default
Default status of the instrument
Date of the default status of the instrument
Date of past due for the instrument
Default status of the counterpart
Date of the default status of the counterpart