Session 5

Surveys of monetary and financial conditions

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Background note on surveys of monetary and financial conditions

Kerry Wood and Paul Van den Bergh¹

All central banks, even those with limited statistical data collection activities, collect a minimum of key data related to monetary and financial conditions including on interest and exchange rates, financial institutions' balance sheets, and payment and settlement systems. In countries where central banks collect a vast array of statistics, monetary and financial conditions data are the most numerous and extensive. This reflects the fact that information in this area is of key importance to central banks in the conduct of monetary policy and the promotion of financial stability. It also reflects the operational or regulatory role that central banks play, for instance with respect to payment and settlement systems or bank supervision.

Central banks have traditionally been able to collect information on monetary and financial conditions through censuses, ie full reporting by banks, which were the most important, if not the sole, financial intermediaries which they regulated (some central banks in emerging market countries may continue to be in this somewhat privileged situation). This has changed as banking supervision has moved to independent supervisory authorities, exchange controls have been liberalised, non-bank financial intermediaries have become more important and financial markets have become more diversified and complex. In some instances, where the supervisory role of the central banks has been shifted to another agency, special arrangements under acts of parliament have been set up so that statistics reported by financial institutions to the supervisory agency are forwarded to the central bank. Even so, the development of new types of financial institutions, instruments and markets have generated new data requirements for central banks. New types of data collection techniques have therefore been adopted, including cut-off-tail reporting as well as fixed and random sampling. The new techniques allow central banks to interpolate monetary and financial conditions from samples to a broader population.

Despite this trend towards the use of surveys, censuses remain the main method central banks use to collect statistics on monetary and financial conditions — around 50 per cent of central bank collections. Cut-off-tail reporting is used in around 10 per cent and sample surveys in around 30 per cent of data collections. Unlike external sector statistics, different types of monetary and financial conditions data tend to be collected mostly with one method. For example, censuses are mainly used to collect data on balance sheets, debt securities, while sample surveys are primarily used to collect data on market interest rates, credit standards, and new financial instruments.

Data collected by central banks surveys on monetary and financial conditions

In general, monetary and financial conditions data are used to assess domestic macroeconomic conditions and help guide the formulation of monetary and financial stability policy. They are also an input into research. Central banks also have international obligations

¹ Monetary and Economic Department of the Bank for International Settlements.

to comply with data requirements for bodies such as the Bank for International Settlements (BIS) and the International Monetary Fund (IMF). These statistics are also published by central banks due to ongoing interest from financial institutions, academia, and the general public.

More specifically, there are around 10 main types of data on monetary and financial conditions that are collected by central banks:

- Interest rates. These include lending and deposit rates of banks (most of which are collected through a full reporting by these institutions), as well as representative interest rates in money and capital markets (most of these are collected through sampling). In some cases data are also collected on expectations of interest rates.
- *Exchange rates.* This includes nominal bilateral exchange rates (spot and forward), nominal and real effective exchange rates, and, in some cases, expectations of exchange rates.
- Bank balance sheets. The most important data in this area are the balance sheet and income statements that banks regularly file with their supervisor. These include data on assets (total and risk-weighted assets, claims on residents and nonresidents, non-performing loans and provisions, impaired assets), liabilities (including tier 1 and tier 2 capital, liabilities to non-residents), and income and loss (pre- and after-tax income, interest and non-interest income and expenses, and preand after-tax profits). These data are typically provided with various breakdowns (eg claims on and liabilities to non-residents or to other financial institutions), so that they can be used to construct monetary and credit aggregates and serve as input for the financial account statistics. Some of these data are used to report aggregate data to the BIS International Banking Statistics or the IMF Financial Soundness Indicators.
- Balance sheet data of other financial institutions. This includes data on insurance companies, pension funds, investment funds and hedge funds.
- Credit standards, terms and conditions. Apart from bank balance sheets and interest rates, many central banks also carry out so-called bank lending surveys in order to identify determinants and expectations about credit supply and demand and their effect on credit conditions for households and businesses. This information is often collected through sample surveys and is usually qualitative (most questions in these surveys tend to be backward-looking).
- Debt securities. With the growth of capital markets, central banks have become more interested in monitoring developments in this area, in particular for debt securities. Key data are aggregate amounts outstanding, gross issuance, redemptions and cancellations, sector of the issuer, type of security, maturity, and interest rate type. In some cases, including the ECB and Euro area central banks, security-by-security databases are being set up (ie census). Good securities data are needed for compiling money and banking statistics, the flow-of-funds and statistics on the balance of payments and International Investment Position (and external debt).
- Turnover and amounts outstanding in foreign exchange and derivatives markets. In many countries foreign exchange markets have grown rapidly and data are collected on spot, forward and swap transactions. Good data on exchange-traded and over-the-counter transactions in futures and options for financial instruments are also becoming important. In some countries these data are collected regularly as a contribution to the BIS statistics in this area.
- *Payments and settlements.* These data include information on the number and value of accounts held with banks and non-banks, number of institutions offering payment

services, electronic (e-)money institutions, number of cards issued, card function (such as cash, payment, e-money), number of ATM and POS terminals, the number and value of transactions (cash, cheque, credit and debit cards), large-scale and retail payment system transactions, instructions handled by trading platforms, clearing houses and securities settlements systems, and number of participants in these systems. Central banks also collect information and statistical data from other infrastructures such as stock exchanges, electronic trading platforms, clearing organisations, netting schemes and collateral arrangements.

- Housing. Developments in real estate markets have started to be monitored more closely in recent years. Some central banks collect information on prices and rents for houses and apartments, vacancy rates, selected data on mortgages, transaction prices on houses, and characteristics of houses, such as location, size, quality, and proximity to schools and public transport in order to construct house price indices (Greece, Ireland and Poland). Central banks are also interested in housing finance developments, in particular the development of new mortgage instruments and credit risk transfer mechanisms involving mortgage loans (eg mortgage-backed securities, mortgage bonds).
- Various other surveys. These include various data collections on the characteristics of financial products such as credit card and mortgage loan features (eg annual and special fees, introductory and ongoing interest rates, applicable periods, rewards on purchases, revolving facilities, offset account balances, and flexible repayment periods and amounts). Some central banks also carry out surveys to monitor new financial instruments such as new loan commitments and drawdowns (Argentina, Hong Kong, and Estonia) or new deposits (South Korea). Surveys can also be used, as in the case of the Federal Reserve (1998) to understand banks' behaviour in the interbank money market and large-value payment system.

Methodological guides

Some of the more common financial statistics, such as exchange rates and interest rates are simple enough not to require international standards. For most other data, there are agreed international standards with user guides to assist compilers report data. This has been important for transparency and international comparability.

The main methodological guide used to compile financial statistics is the IMF Monetary and Financial Statistics Manual (MFSM 2000). This provides central banks with a broad guide on how to define and classify a range of statistics including monetary gold and SDRs, currency and deposits, debt securities, loans, shares and other equity, insurance technical reserves, derivatives, other accounts receivable and payable, and other financial instruments. There is also a framework for the construction of monetary, credit and debt statistics. The nature, uses and structure of the flow of funds is outlined. The MFSM 2000 also provides a guide on accounting issues such as valuation methods, timing of recording, amounts outstanding, flows, consolidation, and netting.

The various documents of the Basel Committee on Banking Supervision (eg Basel II) are becoming an important guide for the compilation of prudential supervision statistics. These, as well as the BIS methodology for cross-border banking statistics, have been used to develop the IMF Compilation Guide for Financial Soundness Indicators, which provides guidelines on the calculation of aggregate balance sheet data for the banking sector.

The BIS Committee on Payments and Settlements has agreed with the ECB on the definitions and coverage of payment and settlement statistics. These are published in the BIS Red Book. However, there remains notable differences in the treatment of data in

Europe. The differences in methodology are even greater for data reported by the United States and Japan. So far, few central banks outside the EU and G10 regularly publish data on payment and settlement systems.

With regard to securities statistics, there is no agreed international framework for the compilation of data apart from the general methodology of the national and financial accounts. Most national securities statistics focus on the issue(r)s of securities, that is on the liabilities side of the different sectors in the economy. Little information is available on the holdings of securities. Work underway at the BIS to facilitate a stylised framework for securities statistics suggests that most countries report data either on a "location of issue" or "residency of issuer" approach. A better documentation of the national data would go a long way in allowing to combine national data on domestic securities markets with the BIS data on international securities issues.

With respect to housing prices, there are no agreed international standards, which results in wide disparities across national definitions, let alone international statistics. Central banks and national statistical agencies calculate a range of measures including hedonic, median, repeat sales price index, and simple index. There are differences in reference dates, such as the time of settlement, contract exchange, or final approval of loan. Some measures adjust for compositional change. The IMF compilation guide for Financial Soundness Indicators provides an overview of various methodologies and makes a number of recommendations.

Examples of recent data collection exercises with respect to monetary and financial conditions

Central banks' current and planned data collection exercises to monitor monetary and financial conditions reflect their varied policy interests and data needs. In some cases specific exercises have been carried out or are planned to fill information gaps in particular areas, in other cases they are designed to analyse and issues of topical interest. The following are some examples of recent data collections in individual countries:

- India completed an ad hoc census of non-deposit-taking non-bank financial institutions in 2006. This collection gave access to key balance sheet items in order to build a database for policy purposes.
- Also last year, Russia started new collections on pension funds and insurance companies to gather data on assets and liabilities by instrument and credit and debtor sectors.
- Chile is planning to survey issues concerning bank notes and coins, focusing on the availability of notes, note security features, and the acceptance of notes by the public.
- In 2007, Slovakia has commenced a quarterly survey of consumer credit, leasing, and factoring companies to gather data on key balance sheet items.
- In 2006, Macedonia started a new quarterly bank lending survey to gain insight into factors affecting the supply and demand of credit to and from the household and business sectors, and expectations in the next quarter. A survey of financial institutions is also planned in 2009 to gather financial accounts statistics.
- Last year, Australia conducted a survey looking at surcharges in credit transaction.
- In 2007, Australia and Norway are planning surveys to examine costs of different payment instruments.

- Australia conducted a one-off bank survey in 2006 on foreign exchange settlement practices. Such surveys are occasionally organised through the Committee on Payment and Settlement Systems.
- In 2006, Austria started a monthly survey on government deposits held with resident and non-resident banks, and on loan conditions.
- Poland started a quarterly survey on housing prices and rents and characteristics of dwellings in 2006.
- Some central bank are considering the conduct of surveys of hedge funds and their activity.

Issues for discussion

- What issues do central banks confront when sampling non-regulated financial institutions? What special arrangements are required, for instance with respect to agreements with the respective regulators/supervisors of these firms? What are the implications for money and credit aggregates, financial accounts, and flow of funds statistics?
- Can cut-off-tail sampling be readily applied where there are a large number of financial institutions with small balance sheets? What are the costs and benefits?
- Do central banks have a comparative advantage over national statistical agencies at surveying financial conditions? While central banks may be more familiar with coverage and conceptual issues, would national statistical agencies be better at survey design and conduct?
- How will continuing financial innovation and deregulation affect sample design for monitoring monetary and financial conditions? What issues need to be considered, such as the balance between accuracy and reporting burden, the need to adequately sample new players that may be hesitant to reply to surveys (eg hedge funds)?
- How useful are surveys with qualitative responses, such as those in bank lending surveys, compared to quantitative data? Can surveys of market sentiment yield additional information to that contained in asset prices (eg yield curve, futures and options prices, risk premia, implied volatility measures, implied probabilities of default, spreads on credit derivatives)?
- Are response rates for surveys on monetary and financial conditions affected by cycles in interest rates or risk appetite/aversion? For example, does the response rate decline as interest rates increase or risk appetite decreases, and vice versa?

The use of a survey for the compilation of the Austrian contribution to the harmonised interest rate statistics for the euro area

Alois Klein¹, Aurel Schubert² and Gunther Swoboda³

1. Introduction

Interest rates in general and the retail interest rates of financial intermediaries in particular play a central (economic policy) role in a modern economy. The availability of information on interest rates helps the central bank to observe and analyze the transmission of interest rate policy and the effects it has on wide parts of the economy and the people, i.e. the monetary policy transmission mechanism. Retail bank interest rates are an important signal that borrowers and depositors receive about the central bank's intentions and actions, where they "feel" monetary policy taking place. When these interest rates change, borrowers and depositors adjust their economic behavior accordingly. By the end of 2003, after five years of Economic and Monetary Union (EMU), the Eurosystem succeeded in implementing a harmonized ECB interest rate statistical framework which gives a very broad overview of the interest rates applied by the financial intermediaries to deposits and loans. This constitutes an important milestone in the Eurosystem's supply of information.

2. Analytical significance of euro area-wide interest rate statistics

The role of bank interest rates depends directly on the significance of the banking sector as a financial intermediary in the economy. The financial markets of the euro area countries are strongly bank-based systems. Traditionally, banks have played a major role in Europe even if this role varies in degree in each country. Austria is among the countries where banks' intermediation role continues to be significant.⁴

Article 105 of the Treaty on European Union stipulates that the primary objective of the European System of Central Banks (ESCB) – and thus of the Eurosystem – shall be to maintain price stability in the euro area. Without prejudice to the objective of price stability, the ESCB, and the Eurosystem, shall support the general economic policies in the Community. Furthermore, the ESCB – like every central bank – shall assume special responsibility with regard to financial stability. In accordance with Article 105 (5) of the Treaty on European Union, the ESCB shall also contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system.

¹ Deputy head of the monetary and supervisory statistics department at the Austrian National Bank.

² Director of the statistics department at the Austrian National Bank.

³ Senior Expert at the Austrian National Bank.

⁴ ECB (2002), Report on Financial Structures.

In order to fulfill the mandate of maintaining price stability, the Eurosystem has devised a monetary policy strategy which is based on two pillars. The first pillar focuses on analyzing the development of the monetary aggregate (the broadly defined money stock M3) and the second pillar on observing and assessing a very wide array of economic indicators that may suggest inflationary risks. Apart from real activity indicators (e.g. GDP, consumption growth, investment growth), this wide array also includes price and cost indicators and, in addition to exchange rates, financial market indicators, in particular various interest rates.

While money market rates (EONIA and EURIBOR) and capital market returns were reported during the first five years of EMU, no retail bank interest rates for the euro area were collected on a harmonized basis in all Member States. The information available in this respect, which was also published regularly in the ECB Monthly Bulletins (Table 3.4 – Retail bank interest rates), related to national interest rates aggregated into standard categories but compiled in different ways (basis of reference: new business and/or outstanding amounts, type of data: nominal or effective interest rates, and compilation method: sampling approach or census). The catalogue of indicators within the framework of this short-term approach comprised ten indicators.⁵ The European Central Bank (ECB) explicitly stressed in a footnote to these statistics that these nonharmonized indicators were useful in identifying trends, they had only little informative value as to retail interest rate levels in the euro area and neither were they sufficiently differentiated to meet the analytical requirements of the single monetary policy. Therefore, they were only of limited use for illustrating the transmission of the ECB's interest rate policy signals to bank customers or for analyzing financial stability.

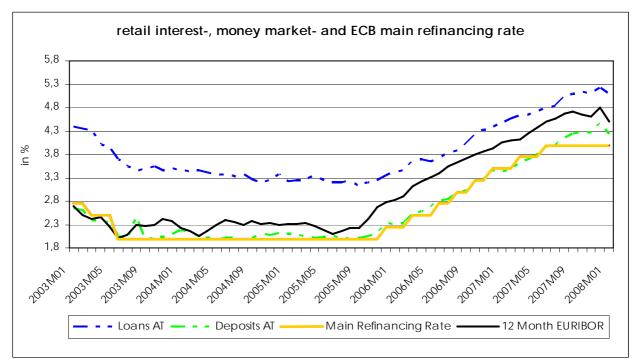
Retail bank interest rates, however, play an important transmission role in the pass-through of the central bank's monetary policy impulses via the so-called interest rate channel. A quicker and fuller pass-through of central bank interest rates via money market and capital market interest rates to retail bank interest rates strengthens monetary policy transmission via this channel.⁶ Central bank decisions have a direct impact on the money market and may thus feed through to interest rates. The effects of changes in money market interest rates on capital market interest rates and, subsequently, on retail bank interest rates are not subject to the direct influence of the central bank and may last longer and be of varying degrees. Yet it is especially these interest rates that have the strongest impact on the consumption and investment decisions of households and enterprises and thus on the real economy. Bank decisions on interest rates on deposits and loans, however, also affect financial sector profitability and thus financial stability. This, too, may have effects on the real economy.⁷ Chart 1 shows the development of the ECB main refinancing rate together with the development of the 12-months-EURIBOR and the retail interest rates for deposits and loans vis-á-vis private households and nonfinancial corporations.

⁵ The indicators comprised interest rates on overnight deposits, deposits with an agreed maturity of up to 1 year, over 1 and up to 2 years and over 2 years, deposits redeemable at notice of up to 3 months and over 3 months, loans to enterprises with an agreed maturity of 1 year and over 1 year and loans to households for consumption and loans to households for house purchase.

⁶ For an empirical analysis of the pass-through of monetary policy impulses in the euro area on the retail bank interest rates, see De Bondt (2002).

⁷ De Bondt (2002) differentiates between a short-term and a long-term pass-through of interest rate changes. Her empirical findings suggest that euro area banks pass on interest rates in the short term (one month) to a maximum degree of 50%, but in the longer run to a degree of up to 100%. According to banks' calculations, the pass-through process has significantly quickened since the start of EMU.

Chart 1 Development of retail vs. key interest rates



Interest rate changes are driving forces for portfolio shifts. With declining interest rates, for example, the opportunity cost of holding cash and very short-term, low-return deposits will fall; as a consequence, investors shift their portfolios, which, in turn, may have repercussions on the monetary aggregates.

Another issue of interest from an economic policy, but also from an analytical point of view, refers to the effects of the business cycle on retail interest rates charged by banks. Especially the impact of the cyclical position on the risk premia charged for loans is of importance, i.e. to what extent will they rise when the economy slows down and how fast and to what extent will banks reduce them when the economy recovers. Normally, banks raise and cut risk premia procyclically, and therefore these moves can counteract the changes in central bank interest rates.

Changes in bank interest rates always go hand in hand with distributive effects. Interest rate cuts will ease the burden for borrowers, generating positive income effects. Broken down by sectors, this applies mainly to the corporate sector and the general government sector, which are both net debtors by tradition. On the other hand, interest rate cuts mean negative changes in income for depositors. This affects in particular the household sector, which is normally the group of biggest net creditors in an economy.⁸ The new interest rate statistics allow to estimate such income effects, especially by taking into account outstanding amounts.

In addition to the undisputed relevance of euro area-wide interest rate statistics, national data play an important role in assessing the effects of monetary policy. As long as the integration of the national financial markets in the euro area has not been achieved in full, considerable regional differences in the interest rates on deposits and loans will persist. Together with

⁸ For the latest results on the financial wealth of households and enterprises in Austria, see Andreasch/ Schubert/Wimmer (2003).

regional differences in inflation rates, the effects of the ECB interest rates on the real economy may vary significantly among Member States. For these differences, too, the interest rate statistics now available provide a reliable basis for analysis.

Differences in national interest rates for comparable products in an environment of completely liberalized cross-border capital flows are also an indicator of a lack of market integration, whereas an increasing convergence of interest rates may suggest increasing integration.

Finally, the levels of and changes in the interest margins between deposits and lending rates as well as the interest spreads compared to alternative investment instruments provide important information to the institutions involved in prudential supervision as regards bank profitability, the sustainability of bank profits and the degree of competitive pressure. Conclusions about banks' competitive situation can also be drawn from shifts in their product policies in terms of amounts of new business. Thus, the euro area central banks are able to observe structural developments in the banking and financial system more closely and to better analyze and carry out their financial stability tasks.

3. outline of the scheme and national implementation

3.1 Statutory basis

On the basis of its powers as laid down in the ECB statistics regulation,⁹ the ECB adopted a regulation containing the essential outlines and details of this reporting obligation, which was directly addressed to the potential reporting agents in the euro area. Regulation (EC) No 63/2002 of the ECB concerning statistics on interest rates applied by MFIs to deposits and loans visà-vis households and nonfinancial corporations (ECB/2001/18) thus constitutes the central supranational statutory basis for the interest rate statistics.

In line with the principle embodied in Article 5.2 of the Statute of the ESCB and the ECB, according to which the NCBs of the euro area are to collect the necessary statistical information to the extent possible, the individual countries have adapted their national reporting systems on the basis of the ECB regulation on interest rate statistics and have adopted reporting guidelines for the interest rate statistics. The reporting framework for the Austrian interest rate statistics is based, from a national point of view, on the separately prepared reporting obligations for interest rate statistics established by the OeNB pursuant to Article 44 (1) Federal Act on the Oesterreichische Nationalbank and based on ECB Regulation 2001/18.¹⁰

3.2 Subject of reporting

The new interest rate statistics show the interest rates applied by MFIs in Austria to eurodenominated deposits and loans vis-à-vis households and nonfinancial corporations resident in EMU Member States,¹¹ covering both interest rates relating to new business and to the stock of all deposits and loans. Since foreign currency loans play a major role in the domestic

⁹ See Regulation (EC) No 2533/98 of the Council of 23 November 1998 concerning the collection of statistical information by the ECB.

¹⁰ See the reporting instructions and reporting form for the ECB interest rate statistics at <u>http://www.oenb.at/de/stat_melders/melderservice/bankenstatistik/meldebestimmungen_bankenstatistik.jsp</u> (in German).

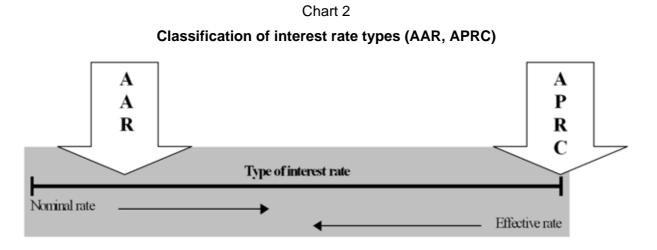
¹¹ Households and nonfinancial corporations cover all nonfinancial sectors other than public households (general government) as defined by the European System of Accounts (ESA 1995).

market, in Austria interest rates for this business line are also collected, albeit only relating to new business.

3.3 Type of interest rate

The following two types of interest rates form the basis for the harmonized interest rate statistics in the euro area:

- the annualized agreed rate (AAR)
- the annual percentage rate of charge (APRC)



In the bandwidth between nominal interest rate and effective rate, the AAR represents an interest rate that is very close to the nominal interest rate, while the APRC is, in fact, a typical effective interest rate.

3.3.1 Annualized Agreed Rate (AAR)

As a general rule, the reporting agents are required to provide the annualized agreed rate for both new business and the stock of all deposits and loans. It contains only interest payments on deposits and loans, but no other charges that may apply (for inquiries, administration, preparation of the documents, etc.). This interest rate is agreed between the reporting agent and the customer for a deposit or loan, converted to an annual basis and quoted in percentages per annum. In the event of intrayear interest payments on deposits and loans the agreed rate shall be annualized by means of the following formula:

 $AAR = (1 + r_{ag} / n)^{n} - 1.$

with

AAR as the annualized agreed rate;

r_{ag} as the agreed interest rate per annum;

n as the number of interest capitalizations per year (e. g. n = 2 for semiannual interest capitalizations).

In principle, the reported interest rates on customers' deposits or loans are to reflect the interest received or paid by the reporting agent; in other words, interest rate components that are borne by third parties must not be included in the calculation of the interest rate to be reported. For example, subsidies granted for deposits under building and loan contracts must not be taken into account when determining the interest payment, since they do not represent costs for the reporting agent.

3.3.2 Annual Percentage Rate of Charge (APRC)

In addition to annualized agreed rates, the reporting agents are required to provide for new business in respect of consumer credit and loans to households for house purchases the annual percentage rate of charge (APRC) as defined in Article 1(2)(e) of the Consumer Credit Directive.¹² The annual percentage rate of charge is calculated on the basis of the following mathematical equation, as defined in Article 33 Austrian Banking Act, which reflects the national implementation of the above-mentioned EU Directive:

$$\sum_{K=1}^{K=m} \frac{A_{K}}{(1+i)^{tK}} = \sum_{K'=1}^{K'=m'} \frac{A'_{K'}}{(1+i)^{tK'}}.$$

with:

i as the APRC (including fees)

 $A_{\mbox{\scriptsize K}}$ as the amount of loan disbursement

 A'_{K} as the amount of interest payments, repayments and payments of charges

 $t_{\mbox{\scriptsize K}}$ as the interval between the date of the first loan disbursement and subsequent disbursements

 $t_{K'}$ as the interval between the date of the first loan disbursement and the dates of interest payments, repayments and payments of charges

The annual percentage rate of charge covers the total costs of a loan to the consumer. These total costs comprise an interest rate component and a component of other (related) charges (fees, commissions, etc.).

3.4 Business coverage, time reference point

3.4.1 Interest rates on new business

The interest rates on new business include all new deposit and loan contracts concluded or agreed within a reference month.

They comprise:

- All financial contracts, terms and conditions that specify for the first time the interest rate of the deposit or loan;
- All new negotiations of existing deposits and loans (this includes parts of the contract not referring to the interest rate).

According to this definition, new business does not include:

- Prolongations of existing deposit or loan contracts that are carried out automatically, i.e. without the customer's active involvement;
- Changes in floating interest rates on account of automatic interest rate adjustments (agreed in advance) performed by the reporting agent;
- A change from fixed to floating interest rates or vice versa which has been agreed at the start of the contract.

¹² Directive 87/102/EEC of 22 December 1986 for the approximation of the laws, regulations and administrative provisions of the Member States concerning consumer credit as amended by Directive 98/7/EC of the European Parliament and of the Council of 16 February 1998.

3.4.2 Interest rates on outstanding amounts

The reporting scheme for interest rates on outstanding amounts referring to deposits and loans is based on a snapshot observation. Basically, all deposits and loans outstanding on the last day of the month are included in the calculation of the interest rate to be reported. Bad loans and loans for debt restructuring at interest rates below market conditions must not be taken into account.

3.4.3 Special provision for specific new business categories with regard to weightings

It should be specially emphasized that for reasons of simplifying the definition and methodology, for specific categories of deposits and loans the definition of new business applies to the outstanding amounts at a certain point in time at the end of the reporting period. This means the outstanding amounts at the end of the month must be used for calculating the average interest rates of new business in the following categories (see also section 5.6):

- overnight deposits placed by households and nonfinancial corporations;
- deposits redeemable at notice held by households; and
- bank overdrafts vis-à-vis households and nonfinancial corporations.

This approach was chosen against the background of the problem of applying the definition of new business to these categories. Since these categories are often subject to fluctuations in the outstanding amounts, it would have meant a disproportionately great effort for the reporting agents – apart from technical uncertainties – to capture amounts of new business within the meaning of the general definition of new business.

3.5 Methodology

3.5.1 Capital-(volume)-weighting of interest rates

An essential element of the new interest rate statistics is the weighting of interest rates according to the volume in the course of calculating the average interest rates on deposits and loans to be reported. Both at the level of the reporting agents and in calculating the average interest rates for Austria and the euro area the underlying amounts (new business, stock of all deposits and loans) of an interest category are used for weighting.

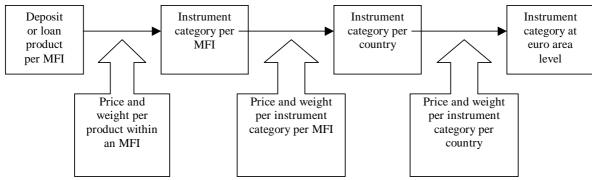


Chart 3 Principle of volume weighting in calculating average interest rates

While the weighted average interest rates on outstanding amounts referring to loans and deposits may be taken in full from the existing MFI balance sheet statistics, the amounts of new business must be also reported by the reporting agents.

3.6 Instrument categories

For consistency reasons the classification criteria followed, to the extent possible, the definitions applying to the harmonized MFI balance sheet statistics, in particular as far as the classification of economic sectors and product categories according to the requirements of the European System of Accounts (ESA 1995) is concerned.

The interest rates must be reported broken down by several criteria:

- by product category (deposits, loans);
- by economic sector (households including nonprofit institutions and nonfinancial corporations);
- by maturity (overnight deposits, deposits redeemable at notice, deposits with agreed maturity; loans are broken down by initial rate fixation);
- by amount (only for loans to nonfinancial corporations [up to EUR 1 million or over EUR 1 million]); and
- by purpose (bank overdrafts, consumer credit, loans for house purchases and for other purposes).

Additional remarks, details:

- For all categories the respective annualized agreed rate must be reported; in addition, for consumer credit and loans for house purchases the annual percentage rate of charge (APRC) must be reported (for definitions, see section 5.3).
- The initial period of fixation of the interest rate is defined as a predetermined period of time at the start of a contract during which the value of the interest rate cannot change. If after an initial period of fixation the interest rate automatically changes to a floating rate (as agreed in advance), this change is not included in the interest rates on new business. New lending business without any interest rate fixation (floating rates) is captured in the category of up to one year initial rate fixation.
- Bank overdrafts are generally defined as debit balances on current accounts, including in particular advances on current account. All bank overdrafts are captured independently of whether they are within or beyond the limit agreed between the reporting agent and the customer. Penalties on overdrafts in excess of the agreed limits are covered by the annualized agreed rate only if they are an interest rate component.

Altogether, the harmonized reporting scheme to be complied with by all NCBs in the euro area comprises 45 interest rate indicators (14 for interest rates on outstanding amounts and 31 for interest rates on new business). As parts of the amounts needed for weighting may be taken from the MFI balance sheet statistics, the reporting agents are required to report only the amounts for a total of 27 categories.

In addition to the harmonized indicators for the euro area interest rate statistics, the Austrian reporting scheme, however, comprises the following eight categories (interest rates and amounts of new business) because of their special importance:

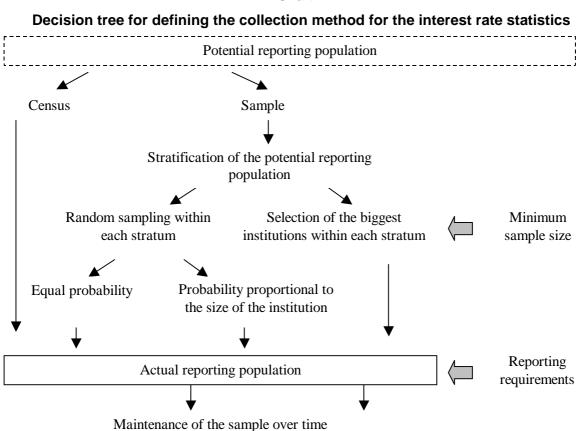
- loans to households and nonfinancial corporations denominated in U.S. dollars, Swiss francs, Japanese yen and pound sterling; and
- savings deposits with agreed maturity held by households (four maturity bands).

3.7 Reporting population

3.7.1 Possible collection methods for interest rate statistics

Unlike volume statistics, price statistics are suitable for applying alternative collection methods, allowing to derive sufficiently stable overall results already from the reports of a subpopulation.

Therefore, the ECB regulation provides not only for a census but also for a sample survey to compile the interest rate statistics. In a sample survey only a selection of the credit institutions in the potential reporting population is asked to report, which considerably reduces the banking sector's reporting burden as well as the NCBs' processing effort.



In order to ensure that the national samples are representative in terms of interest rates and amounts of new business to be reported, the ECB regulation laid down minimum requirements for a number of criteria for the use of the sampling approach:

- Stratification of the institutions into homogeneous strata¹³ to reduce sampling error;
- Selection of institutions (random sampling or selection of the largest institutions);
- Minimum sample size (the maximum random error for interest rates on new business on average over all instrument categories does not exceed 10 basis points at a confidence level of 90%);

Chart 4

¹³ The strata shall be defined such that the intrastratum variance of the interest rates is lower than the extrastratum variance (Huygens theorem).

- In the absence of such data the sample size may be assumed to be sufficiently large if it covers at least 30% of the potential reporting population (but no more than 100 institutions) or if at least 75% of the relevant stock of deposits and loans are covered by the sample; and
- The sample must be updated at intervals of at most two years.

The variables to be estimated by means of the sample are the interest rates on and the amounts of new business as well as the interest rates on outstanding amounts. In the case of the interest rates, the volume-weighted average interest rate determined on the basis of the individual strata serves as the direct estimator for the interest rates on deposits and loans to be reported to the ECB.

A different approach must be used for the amounts of new business, as these data are quantitative data. In this case the amounts are extrapolated per stratum according to the share of the reporting agents of this stratum in the overall stock of deposits or loans of this stratum.

3.7.2 Selection of reporting agents for the Austrian interest rate statistics

In light of the great number of credit institutions in Austria, with a very large proportion of relatively small banks, it was decided – in line with the core principle of these statistics, i.e. the weighting of amounts to derive average interest rates – to apply a representative sampling approach for selecting the reporting agents. Moreover, this variant seems to be the most cost-efficient approach to produce the required results also from an overall economic perspective.

Accordingly, the actual task was to identify a suitable stratified sample for the collection of data for the harmonized interest rate statistics against the background of the following factors and considerations with regard to the sampling method:

- At a total of about 820 MFIs, the smallest 500 institutions represent only 5% of total assets, whereas the largest 10 institutions represent far more than 50%.
- Some 700 MFIs belong to one of the three decentralized banking sectors (Raiffeisen, Volksbank and savings banks), whose business and customer structures are quite similar.
- Inclusion only of institutions that also report statistical balance sheet data (contribution to the ECB consolidated balance sheet) (about 370 MFIs¹⁴) because these data are required for volume weighting of specific interest rate indicators.
- Because of considerable implementation costs, the stability of the sample should be guaranteed. Particularly for smaller institutions the relative implementation and operating costs are very high.

As the previous interest rate statistics¹⁵ were not suitable to serve as calculation basis for stratification, in particular due to the small number of reporting agents, regulatory statistical data of the quarterly report under the Austrian Banking Act were used alternatively. The major advantage of these data was that they were widely available to all Austrian credit

¹⁴ Pursuant to ECB Regulation 2001/13, the "tail" principle is used for collecting the base data for the consolidated balance sheet of the Austrian MFIs. This means that the data collection must comprise at least 95% of all MFIs, in terms of total assets. Accordingly, the number of reporting agents contributing to the ECB consolidated balance sheet is only just below 370 of more than 800 MFIs.

¹⁵ Collection period from 1995 until mid-2003.

institutions. From the data of the quarterly report, implied interest rates¹⁶ on loans and deposits were calculated on a highly aggregated basis per individual institution. These interest rates provided the basis for model calculations to identify, to the optimum extent, the number of strata and the reporting agents per stratum.

As stipulated by the regulation, each NCB that chooses the sampling approach identifies at least one stratification criterion to ensure that the sample of credit institutions and other institutions is representative of the participating Member State and the sampling error small. In simulations the most suitable stratification criterion for the sample chosen in Austria turned out to be the "credit institution sector."¹⁷ However, certain additional adjustments had to be made in order to meet all quality standards stipulated in the ECB regulation. For instance, the sectors joint stock banks and special purpose banks were pooled, and the central institutions and large banks (like savings banks in provincial capitals) from the multi-tier sectors were added. The latter were removed from the multi-tier sectors, for their business spectrum deviated significantly from that of a great number of small institutions in these sectors.

Thus, the sampling scheme applied at the start of the MIR statistics in January 2003 was based on five strata. The first bigger review of our sample after two years showed that the banks, which are mainly acting in the border region with Germany had a disturbing influence on the interest rates in some of the strata. As a consequence we introduced a sixth stratum which includes all banks that are especially engaged in other euro area countries except Austria (defined as banks which make more than 50 % of their total deposits and/or loans (min. 100 Mio Euro) in the euro-area with customers outside Austria). The following table shows the detail of the scheme:

Table 1 Details on the stratified sample of the Austrian interest rate statistics					
As	s per December 31, 2007	Number of banks; total reporting population	Number of banks; sample	Coverage ¹	
Stratum 1	Joint stock banks, special purpose banks and other large banks	133	54	76 to 100%	
Stratum 2	Savings banks ²	49	15	38 to 69%	
Stratum 3	Raiffeisen credit cooperatives ²	552	18	9 to 12%	
Stratum 4	Volksbank credit cooperatives ²	66	13	29 to 84%	
Stratum 5	Building and loan associations	4	4	100%	
Stratum 6	Banks which are especially enga- ged in other euro area countries	5	5	100%	
	Total	809	109		

¹ Coverage bandwidth referring to outstanding amounts of deposits and loans in the individual instrument categories. ² Excluding large banks that are included in the stratum of joint stock banks, special purpose banks and other large banks.

¹⁶ Interest rates on outstanding amounts as implicit rates referring to the average of a period are calculated as quotients, with the numerator as the accumulated flow of interest during the reference period, i.e. the accrued interest payable on deposits and receivable on loans, and the denominator as the average period stock.

¹⁷ According to the established classification of the Austrian credit institutions into seven major sectors (joint stock banks, savings banks, state mortgage banks, Raiffeisen credit cooperatives, Volksbank credit cooperatives, building and loan associations, special purpose banks).

The largest stratum in terms of volume is the stratum of "joint stock banks, special purpose banks and other large banks." As this stratum turned out to be the least homogeneous by comparison, most reporting agents were chosen from this stratum, which produced a very high coverage relating to the stock of all deposits and loans.

As only banks that report the monetary statistics were to report the interest rate statistics and, moreover, the new reporting scheme would impose a very high relative cost burden on small MFIs, the largest institutions within a stratum were selected from the individual strata as actual reporting agents. Since the multi-tier sectors are highly homogeneous (as illustrated by low variances in these strata but also by the comparison of the calculated average implied interest rates on loans and deposits of the sample with the actual overall average of the stratum), a relatively small number of banks was sufficient to obtain a representative picture of these strata.

From the potential reporting population in Austria, the OeNB eventually selected 88 institutions as reporting agents. After two years the number of reported agents was extended to 102 and two years later to 109. The coverage achieved by means of this sample is on average about 77% in terms of the relevant deposits and about 82% in terms of the relevant loans.

To sum up the sample which was chosen for MIR statistics keeps down reporting costs for MFIs by excluding the majority of the potential reporting population. At the same time the sample design has proven its reliability by providing stable figures for more than five years.

The Federal Reserve's Senior Loan Officer Opinion Survey

Gretchen Weinbach¹

Overview

The Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices is a useful source of information about conditions in U.S. bank credit markets. The survey was designed to allow Fed staff to monitor credit standards on and terms of business and household borrowing from banks over time, to monitor changes in demand for loans, and to gather insights into specific developments in credit markets, as needed. The results of the survey are reported to the public and also to the Board of Governors and the Federal Open Market Committee. In what follows, I review the purpose of the survey; the scope of the survey, including some specifics on sample selection methodology; and uses of the survey data.

Purpose of the survey

The Federal Reserve initiated the Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) in 1964. The survey is used to monitor credit supply and demand conditions at banks, aid the interpretation of quantitative data on balance sheet flows, help build a more complete picture of bank credit conditions and their impact on the macroeconomy, and gain insight into important developments in U.S. loan and credit markets. Moreover, it aids the understanding of complex bank lending practices that have evolved over time, especially at the largest banks, and provides information on special topics that are of particular interest.

Since its inception, the SLOOS content and respondent panels have been revised periodically to accommodate changes in lending practices and to keep the survey as rich as possible. Every three years, the collection of SLOOS data is reviewed, as is the case with other data collected by the Fed: Collection of the survey data is justified in a formal process that includes scrutiny from Fed staff as well as a 90-day public comment period. The original survey was conducted at 120 domestic banks and consisted of 22 standard questions. Subsequent revisions to the survey included: Provision to include special questions in each survey and a reduction in respondent count by half in 1981; enlargement of the respondent panel to include large U.S. branches and agencies of foreign banks in 1990; and expansion of the foreign bank panel in 1994.

Survey scope

The survey covers two groups of commercial banks operating in the United States: domestic banks and foreign banks. The domestic banks are generally large U.S. commercial banks; the foreign bank panel is comprised of selected branches and agencies of foreign banks that operate in the U.S. Banks' participation in the survey is voluntary. The Fed is authorized to

¹ Adviser, Division of Monetary Affairs, Board of Governors of the Federal Reserve System.

conduct the survey up to six times each year. However, the survey is typically conducted four times a year, once each quarter, timed so that its results are available for the January/February, April/May, August, and October/November meetings of the FOMC. Occasionally a special survey is conducted, such as in March 2001 when U.S. economic growth was deteriorating and in September 1998 during the global financial market turbulence. Most survey questions are the same over time. Special survey questions are developed by staff at the Federal Reserve Board using a collaborative process and keeping an eye on respondent burden.

Survey administration. The survey is distributed by the twelve Federal Reserve Banks. Survey questions are emailed to staff at each Federal Reserve Bank, who, in turn, email the questions to each respondent bank located in their District. Respondent banks are asked to complete the survey within two weeks. Responses may be sent by email, FAX, or reported by telephone to Federal Reserve Bank staff; Reserve Bank staff often follow up with respondents by phone. Federal Reserve Bank staff email the responses to the Federal Reserve Board on a flow basis. Some informal validity edits are performed by staff at the Reserve Banks and at the Board, any issues are resolved by having Reserve Bank staff contact respondents, and then the survey responses are stored in a database.

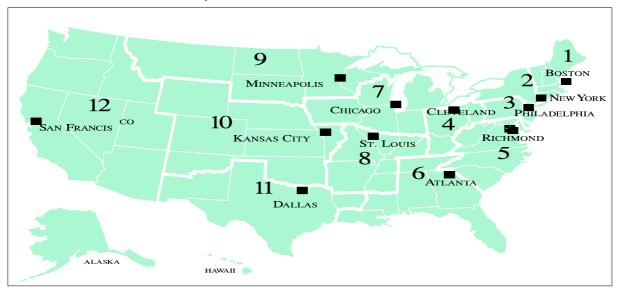
Survey questions. Survey questions are drafted with the aim of eliciting useful information without imposing undue burden on respondents. The questions are generally qualitative, and mainly take the form of asking banks to use a five-point scale to rate how lending conditions and demand for several broad categories of loans have changed over the past three months. For example, a scale of 1 (tightened considerably) to 5 (eased considerably) is used to rate changes in each of several credit terms. Banks are typically asked to use a similar five-point scale to rate the importance of several possible reasons for change. Quantitative questions are occasionally included. In that case, difficulty and quantitative content are minimized to the extent possible, with approximate values or estimates sought, usually in terms of percentages rather than dollar amounts. As would be expected with this sort of voluntary survey, a respondent may decline to answer a particular question if doing so would entail excessive research or a burdensome data review. Nonetheless, overall response rates have been quite high; only rarely do respondents decline to answer a particular question. The individual bank information provided by each respondent is treated as confidential.

The survey of domestic banks currently contains about 15 standard questions. Standard questions are repeated in each survey in order to gauge responses over time. These questions cover the major categories of lending to businesses and households: commercial and industrial (C&I) loans; commercial real estate loans; residential real estate loans; and consumer loans. The survey of foreign banks contains the standard questions relating to business lending (foreign banks are not typically engaged in retail lending).

Each survey also contains several special questions tailored to issues of the day (the survey of foreign banks includes the special questions as appropriate). The special questions touch on a wide variety of topics. Over the past year, special questions have included: changes in banks' lending policies on backup lines of credit for commercial paper programs and prime nonconforming residential mortgage loans; banks' involvement in, and their assessment of the outlook for, the syndicated loan market; effects of the reforms to U.S. bankruptcy law that took effect in fall 2005 on banks' balance sheets and loan performance; and expected changes in asset quality over the coming year.

Sample selection

The Fed is authorized to survey up to 60 domestically chartered commercial banks and up to 24 U.S. branches and agencies of foreign banks. The Fed employs a non-probability or nonrandom sampling technique in sample selection. To ensure adequate geographic coverage, the panels are distributed as evenly as possible across the twelve Federal Reserve Districts (see map) while balancing the need to keep respondents heavily weighted toward very large banks.



Map of the Federal Reserve Districts

Very large banks are important because they are leaders in developing and practicing new banking techniques. Given the limited authorized panel sizes, selecting the largest banks also provides greatest coverage of aggregate industry assets. The panels also include large and medium-sized banks in order to allow for greater diversity of responses and to provide broader coverage of the banking system as a whole.

Domestic bank panel. There are currently about 7,300 domestically chartered commercial banks in the U.S. In selecting domestic banks for the SLOOS, three constraints are imposed:

- **Size:** Eliminate banks from consideration that have less than \$3 billion in domestic assets or a ratio of C&I loans to total loans of less than 5 percent.
- **Geographic diversity:** Include no more than 8 and no less than 2 respondents from each of the twelve Federal Reserve Districts. Mergers sometimes cause violations of this constraint that are not immediately rectified.
- **Mutual independence:** With some exceptions, eliminate a bank from consideration if it is a subsidiary of a bank holding company that is already represented in the panel (because its responses would likely not be independent of those of the related bank already providing responses).

The domestic bank SLOOS panel currently accounts for about 60 percent of aggregate industry assets and 65 percent of aggregate C&I loans at all domestic banks.

Foreign bank panel. There are currently about 260 branches and agencies of foreign banks in the U.S. In selecting foreign banks for the SLOOS, two constraints are imposed:

- **Size:** Select the largest, ranked by total domestic assets, but exclude an institution if the dollar amount of C&I loans on its books is small.
- **Geographic diversity:** Consider the location of the parent bank in order to keep the panel representative of all foreign banks' countries of origin.

The foreign bank SLOOS panel currently accounts for about 60 percent of total industry assets and nearly 70 percent of C&I loans at all foreign banks in the U.S.

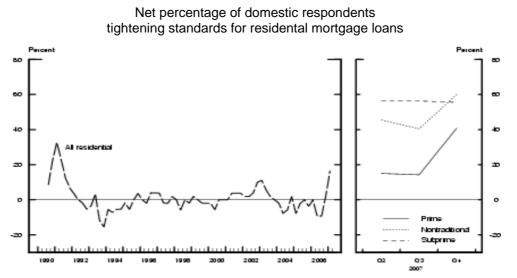
Uses of the survey data

The survey data have been useful for monitoring credit conditions at banks over time. From the survey results, Board staff tabulate and summarize aggregate responses in report form.

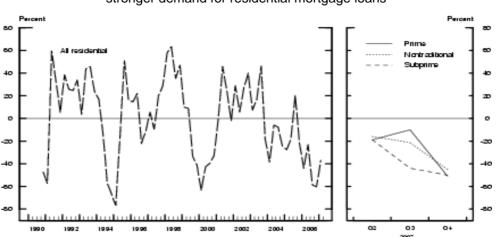
These reports review the survey results and present graphs of time series of net responses to many of the standard questions. Survey results are used by Fed policymakers to help form a complete picture of U.S. macroeconomic and financial market conditions. Survey results are reported in staff meetings, to the Board of Governors in briefings, to the FOMC in Greenbooks and Bluebooks, and to the public on the Board's web site (www.federalreserve.gov). The financial press also regularly reports on the survey results, based on the information provided on the Board's web site. Finally, highlights of the survey results appear regularly in the Board's semi-annual *Monetary Policy Report to the Congress* and annually in a *Federal Reserve Bulletin* article on bank profits and balance sheet developments, each produced by Board staff.

Example of survey results. In the latest survey, which generally reflected changes in credit conditions in the third quarter of 2007, significant net fractions of domestic banks reported tighter standards on prime, nontraditional, and subprime residential mortgages. In addition, about half of the respondents, on net, indicated that demand had weakened for each of these three types of residential mortgages.

Measures of supply and demand for residential mortgage loans



Note: For data starting in 2007:O2, changes in standards for prime, nontraditional, and subprime mortgage loans are reported separately.



Net percentage of domestic respondents reporting stronger demand for residential mortgage loans

Note: For data starting in 2007:O2, changes in demand for prime, nontraditional, and subprime mortgage loans are reported separately.

Survey of ownership of deposits with scheduled commercial banks in India – evolution, methodology and issues

Deepak Mathur¹

The Reserve Bank of India has been conducting the survey of ownership of deposits with scheduled commercial banks to obtain the composition and ownership pattern of bank deposits. The estimates arrived at through this survey are an important source of information on the changes in profile and structural shifts in composition and ownership pattern of deposits. The periodicity, coverage, methodology, etc. of the survey has, over time, undergone modifications to meet the data requirements emerging out of the changes taking place in the economic and banking environment of the country as also keeping in view the data availability. The section I of the paper traces the evolution of the survey, particularly from the 1970s, i.e., from the period after nationalization of 14 major commercial banks in July 1969. The section II discusses the changes in methodology, specifically the changes in sampling design adopted for the survey. The important issues and challenges faced in the conduct of the survey are discussed in concluding section III.

I. Evolution of the survey

The evolution of the survey can be broadly divided into three phases – period up to 1972, 1973 to 1988 and 1990 and onwards, broadly coinciding with pre-nationalisation period, the period immediately after nationalisation and the recent period. The post-nationalisation era witnessed massive branch expansion and also opening of branches by banks in hitherto unbanked rural and semi-urban areas, and deposit mobilsation from wider sections of population thus requiring continuous modifications in the survey to keep pace with the changes taking place in the banking sector.

Phase I: The survey of ownership of deposits was conducted by the Banking division of Reserve Bank's Economic Department by calling for an annual return from head offices of banks. It was designed principally for analytical purposes. The data for the period 1951 onwards are available in the "Statistical Tables relating to Banks in India". The first such data were included in the 1965 issue of the publication. An article covering data from 1961 to 1971 was published in September 1973 issue of the Reserve Bank of India Bulletin. The scope and periodicity of the survey as also the classification of data collected underwent changes between 1961 and 1971. These pertained to reference date, coverage of scheduled and non-scheduled banks based on the size of their deposits, and also changes in proforma of the survey and ownership classes. Further, data on maturity classification of fixed deposits was introduced from March 1967.

The system had several limitations. For example, the banks did not obtain full particulars of account holder in respect to fixed deposit accounts and as such reporting on ownership

¹ Assistant Adviser in the Department of Statistics and Information Management, Reserve Bank of India, Mumbai and views expressed are his personal. Guidance and encouragement from Dr Balwant Singh and Mr. A. P. Gaur and assistance rendered by Ms. Rajashree Rajpathak in preparation of this paper is gratefully acknowledged. Usual disclaimer applies.

pattern of fixed deposits suffered. Another major shortcoming of the system of reporting by head offices was that regional variables in ownership pattern could not be estimated. Further, frequency distribution of deposit accounts according to their size was not available.

Phase II: The Reserve Bank of India (RBI) constituted the Committee on Banking Statistics in April 1972 under chairmanship of Mr. A Raman, Director, Credit Planning Cell, RBI and the Committee included as members, officials from RBI and commercial banks. The committee examined the issue of systematizing the reporting of banking data to ensure the availability of fairly comprehensive information with minimum time lag. It submitted its report to RBI in August 1972. Although, major concern of the committee related to reporting of detailed data on bank credit, it recommended a system named Basic Statistical Return (BSR) system for reporting by banks, which covered different aspects of credit, deposits, employment and investments of the banks. The committee recommended introduction of BSR-2 return with six monthly periodicity for branch level information on employment and deposits (according to type of deposits) for submission by all the branches. It recommended introduction of a return on ownership of deposits (BSR-4) to provide pattern of ownership of deposits, comparable in nature to the data on sectoral flow of credit. Further, it also recommended to obtain branch level data to bring out regional variables in deposits, which could not be done based on returns submitted by head offices of banks. The committee deliberated on the issue of collecting account-wise information as such data were called for in respect of credit accounts. However, mainly due to very large number of deposit accounts and difficulties expressed by bankers, BSR-4 was recommended as a consolidated return to be submitted by branches. The periodicity of the return was recommended to be once in two years, as the extent of annual variations in ownership pattern of deposits was considered insignificant. The return called for data on deposits (classified in to current, savings and fixed deposits) according to economic sector/sub-sectors, which owned them, and also on maturity classification of fixed deposits (as per original maturity). The major sectors were Government sector, Corporate sector-Non-financial, Corporate sector-Financial, Other institutions and Individuals (including Hindu undivided families).

The survey with March 1976 as the reference date, collected branch-wise data, in contrast to bank-wise returns submitted by head offices of banks for the 1971 survey. Besides, State-wise and population group wise regional data, the survey also used "old" and "new" office classification, based on date of opening of office ("new" signifying offices opened after nationalization of major banks). The deposit category "others" to cover miscellaneous deposits like staff security deposits, margin deposits and staff Provident fund deposits was introduced in the 1976 survey (but subsequently merged in current and fixed deposits due to very low share). The surveys for 1978 and 1980 were conducted on a sample basis, while the 1982 survey covered all the offices of commercial banks. The surveys for 1984, 1986 and 1988 were again conducted on a sample basis. Further, while the Regional Rural Banks were covered in 1976 and 1978 surveys, they were excluded from 1980, 1982, 1984, 1986 and 1988 surveys, as their share in deposits of all commercial banks was very small. Although, the coverage of economic sectors has undergone changes periodically, a significant change related to inclusion of inter-bank deposits from 1984 survey onwards.

Phase III: The BSR system underwent revisions effective March 1990 and consequently there were certain changes in the survey of ownership of deposits. The periodicity of the survey was modified to annual (as on March 31) from biennial earlier, and collection of information on maturity pattern was discontinued (as this information was to be collected through BSR-2 return on deposits and employment, from all branches). Further, the Regional Rural Banks were included in the survey. The survey has since then been conducted on a sample basis.

Current survey: The survey with March 31, 2007 as reference date is the latest completed survey and the results of the March 2008 survey are expected to be released during the third quarter of 2009. The deposits are classified into Current deposits, Savings deposits and Term deposits while the major economic sectors according to which ownership is to be

classified are Government sector, Private corporate sector, Financial sector, Household sector and Foreign sector.

II. Methodology

The survey is currently conducted on a regular annual basis. The basic data for the survey flows from the branches of scheduled commercial banks that are selected in the sample for survey. The format for the BSR-4 return, together with guidelines for filling-in the same are provided to the head/controlling offices of the banks along with a list of branches selected for the particular year's survey. They in turn arrange to have the returns duly completed by the branches and after preliminary scrutiny submit the same to RBI. The data collected through the return are extracted by the branches from their system. Software developed for the purpose of data entry, is provided to the banks. Further, the banks unable to use the data-entry software for certain reasons, submit data either in any other acceptable electronic form, like Excel spreadsheet, or submit paper returns.

The data so received are processed at RBI using the software developed in-house. The data are edited by putting them through rigorous computer programs to check their consistency, validity and integrity and wherever required, necessary corrections are carried out. The processing is done generally in batches, which are prepared bank-group wise. The tabulations as per pre-decided tabulation plan are generated thereafter. The SAS software is used for major part of data processing and generation of tabulations. An article presenting salient results of the survey is published in the Reserve Bank of India Bulletin and select summary data are included in "Statistical Tables relating to Banks in India".

The sampling design adopted for the survey has undergone periodic revisions. The distribution of aggregate deposits of scheduled commercial banks is highly skewed with a few bigger bank branches having major share of deposits and a large number of smaller bank branches sharing a small portion of deposits. For example, data for the quarter ended December 2008 shows that top 17.4 per cent of 77,750 reporting offices of banks accounted for 72.9 per cent of the aggregate deposits of scheduled commercial banks, while bottom 39.4 per cent of reporting offices held mere 4.3 per cent deposits. Further, different States/Union territories and each bank group and population group also possess distinct characteristics and heterogeneity. Therefore, in spite of changes in the design, the sampling techniques followed over the years were stratified sampling, using State/union territory, population group, bank group and deposits size of branches as criteria for stratification. The population groups are (i) rural, (ii) semi-urban, (iii) urban and (iv) metropolitan and the bank groups, are (i) State Bank of India and its Associates; (ii) Nationalised Banks; (iii) Regional Rural Banks, (iv) Other Indian Scheduled Commercial Banks and (v) Foreign Banks. Brief description of the sampling design adopted for the surveys since March 1984 survey is presented below:

March 1984 survey used a stratified unistage sampling design, where bank branches constituted the sampling unit. Population group-wise strata were formed for each State/Union Territory and branches having deposits above a cut-off point were selected with certainty. Such cut-off limits were determined individually for each stratum. The remaining branches of each stratum were further stratified based on major banks/group of banks. Samples in different proportions (e.g., 10 per cent for rural population group) were selected from each ultimate stratum by systematic sampling with varying probabilities, where probabilities of selection were based on aggregate deposits of the branch (as available from quarterly return on aggregate deposits and gross bank credit).

The 1986 survey also used stratified sampling design and strata were formed based on population groups and major banks/group of banks. Branches having deposits above a cutoff point were selected with certainty; cut-off points were determined separately for each population group. Linear systematic sampling was used to draw the sample from the remaining branches and samples in different proportions (e.g., 5 per cent for rural population group) were selected from each stratum.

The 1988 survey used a stratified sampling design, and while the top branches (in terms of their total outstanding deposits) were selected with certainty from each stratum formed as State/Union territory X Population group X Bank group, the sample from remaining branches was selected by adopting circular systematic sampling.

For the 1990 survey, the sampling strategy was to select top branches (in terms of their total outstanding deposits) and the remaining branches were grouped into State/Union territory x population group x deposit size strata and a 10 per cent sample was selected from each stratum through circular systematic sampling. For the three subsequent annual surveys (1991, 1992 and 1993), the design was same as the one used for 1990 survey, except that besides State/Union territory, population group and deposit size, one more criteria, viz., bank group was also used for stratification.

The sampling procedure applied for annual surveys from 1994 to 2003, was to select with certainty, the select top branches (in terms of their total outstanding deposits) as also all the branches of such small union territories that had 10 or fewer branches. Remaining branches were selected using circular systematic sampling after arranging the branches in the descending order of deposits. The sample size was kept at 6000 up from 2000 while for the surveys during 2001–2003, the sample size was increased to 10,000.

For the 2004 survey, a stratified sampling design was used, wherein based on State/Union Territory, population group of the centre where bank branch was located, and bank group, all branches of the scheduled commercial banks (SCBs) in the country were classified into 379 basic strata. Re-introduction of State/Union Territory as stratification criteria was considered necessary to obtain valid estimates at State/Union Territory level. Similarly, the population groups included an additional group covering four major metropolitan centers for which separate estimates are generated in the survey. All branches in small basic strata were selected with certainty. In the remaining basic strata, each stratum was further stratified into 2 or 3 sub-strata taking into account the range in total deposits of the branches in the strata and number of deposit accounts. For this purpose, threshold values were determined for each basic-stratum taking into account above two characteristics. In such basic strata, Size Class Strata (SCS) were formed as per descending order of deposits. The branches having aggregate deposits greater than threshold value-I were included under SCS-I. The SCS-II covered branches having aggregate deposits between threshold value-I and threshold value-II and the SCS-III included all branches having aggregate deposits up to the threshold-value-II. Thus, 912 Size Class Strata (ultimate strata) were formed. The branches under SCS-I were included in the sample with certainty. In SCS-II and SCS-III of each basic stratum, sample branches were selected by circular systematic sampling after arranging the branches within the SCS in descending order of their aggregate deposits, subject to selecting a minimum of 2 branches from each SCS. The sample size in the case of SCS-II varied from about 20 to 50 per cent of branches (depending upon the total size of SCS). If the number of units (branches) exceeded 200, 15 per cent of branches were drawn as sampling units. In the case of SCS-III, 10 per cent sample was selected. Based on the above, 9.933 branches were selected for the survey. In all, 2,292 bank branches were selected with certainty. Out of the remaining universe of 63,778 bank branches, 7,641 branches were selected using above sampling design from sub-strata SCS-II and SCS-III.

A Stratified sampling design is being used for selection of branches of banks since 2005 survey. The branch-wise data on aggregate deposits outstanding as on March 31 of the survey year based on quarterly BSR-7 return, was used for construction of the sampling frame for 2005, 2006 and 2008 surveys, while such data or as on last Friday of December 2006 of has been used for 2007 survey. The choice of reference period (March or previous December) for frame construction has relative merits, as use of March data ensures that as reference date for frame and for survey are same, the issues of subsequent closure of branches or

opening of new branches do not arise. On the other end, the lag in getting March data, results in delay in launching of the survey. All the branches of the SCBs in the country are first stratified into basic strata based on State/Union Territory, population group of the centre where bank branch is located, and bank group. Thereafter, each stratum is sub-stratified into 3 size classes based on deposits outstanding (up to Rs. 25 crore, Rs. 25 crore to Rs. 100 crore and above) to form the ultimate strata. The branches in the "Rs. 100 crore and above" strata are selected with certainty, while 10 per cent and 15 per cent sample, with a minimum of 3 branches in each stratum, are selected from the "up to Rs. 25 crore" and "Rs. 25 crore to Rs. 100 crore" strata, respectively, using Simple Random Sampling (SRS). The sample thus selected consisted of 10,154 branches in 2005, 10,431 branches in 2006 and 11,431 branches for the 2007 survey. The sample for the March 2008 survey consisted of 13,512 branches.

III. Issues

The survey has been conducted by the Reserve Bank of India for over 5 decades in some form or the other and has stabilized. The results are regularly used for estimation of household sector saving as also for compilation of flow of fund account of the economy. As regards other sectors, the survey data are useful in crosschecking of data on their assets as bank deposits available from their annual accounts and other records. A number of policy makers and researchers also look ahead to the survey results for their data requirements. However, a number of issues, mainly relating to collection of data have been surfacing, time and again, while conducting the survey.

- Availability of data was an issue in the initial years of the survey. Although, the banks were able to correctly classify deposit type (current, savings and term deposits), difficulties arose in respect of ownership of term deposits, as the banks did not obtain occupation/profession of deposit holders belonging to individuals' category. Further, still in some cases the banks do not properly capture such details and consequently classify large amounts under "others – not classified elsewhere" category, particularly for household sector deposits. To take care of this misreporting, banks are constantly advised to take adequate precautions and care as also to sensitize their staff on the importance of these data.
- The survey is conducted on a sample basis and thus keeps the reporting burden on banks to the minimum. The return form is kept simple and thus easy to comprehend and complete at branch level.
- The "fixed" sample method (where set of sampled branches are surveyed for more than one year) is administratively convenient (both for Reserve Bank and responding banks) as well as results in better data quality. However, it suffers from putting regular workload on such sampled branches as also due to closure/conversion of bank branches or changes over time in "top" branches (in terms of deposits). Hence, "dynamic" sample, where branches are selected for each survey independent of previous surveys, has been in use for the survey. In dynamic sample, the same branch may not be selected every year, so it does not create any regular workload for the branch.
- As branch level deposit data (total and according to deposit type) are available from other sources, it is observed that data reported by some branches in different returns are not consistent. Further, in some cases data reporting unit (Rupees thousand) is not uniformly followed or the figures under totals/sub-totals differ from the sum of constituent items.

- At times, non response occurs as a few branches included in the sample get closed or merged with other branches or converted to non-administratively independent offices, subsequent to launch of the survey.
- Like some other regular surveys, this survey also suffers from delayed response and incomplete response by banks. This is tackled through continuous monitoring and follow-up by the department, both at central office level and through its regional offices. Regular interactions are held with bankers. As non-response, particularly nil response from small strata, causes problems at estimation stage, concerted efforts are made to ensure adequate response from such critical strata. These strata, generally relate to remote and less developed sparsely populated regions.
- The Bank makes efforts to ensure that data related issues are minimized for timely receipt of quality data. These include providing detailed instructions together with the blank return, developing and forwarding Data-entry software to the banks (the software requires only a PC and DOS as operating system and is user friendly) and conducting workshops for the benefit of the bank officials, etc.

Minot Purwahono¹ and Siti Muarofah²

A. Background

Direct Investment (DI) is one of the most important factors for the growth of Indonesian economy. The long-term nature of DI as well as its direct impact on the real sector, make it more favorable than portfolio investment. It becomes more important given the declining trend of official foreign aids and a limited government budget. Direct investment from private sector institutions is expected to have a bigger role in the economy.

Regarding the statistics, the important role of DI drives the urgency to make available comprehensive, reliable, accurate and timely DI data and information. DI data in Indonesia, at present, consists of DI from Balance of Payment (BOP) side and DI from administrative side (compiled by the Board of Investment).

As BOP compiler, Bank Indonesia (BI) conducted semi-annual survey on DI, starting from 2002, to collect DI inward and DI outward data, on quarterly basis. The data was collected from the survey mainly to support BOP and International Investment Survey (IIP) construction. BI publishes BOP every quarter of the current reporting year and IIP every year (on September).

B. Concept and definitions

Direct investment (DI) in Indonesia refers to non residents' investments in Indonesian enterprises, while DI abroad refers to Indonesian investments in enterprises abroad. DI comprises of the initial transaction between the two entities (the transaction of acquiring ordinary shares of the enterprises of at least 10%) and all subsequent transactions not only between direct investment enterprise and direct investor but also between direct investment enterprises related to the direct investor (branch, subsidiary, and associate).

C. Scope and coverage

DI data on Indonesia's BOP and IIP covers all the components of FDI data required under the international guidelines for BOP and IIP compilation (The Fifth Edition of The Balance of Payments Manual/BPM5).

The DI-Survey collects transaction and position data of:

(i) Liabilities to and claims on non residents (direct investors and direct investment enterprises) in the form of equity capital

¹ Economist at Balance of Payment Department, Bank Indonesia Head Office, up to April 2008, now Senior Analyst at Bank Indonesia Semarang Office, Central Java.

² Economist at Balance of Payment Department, Bank Indonesia Head Office.

- (ii) Liabilities to and claims on non residents (direct investors and direct investment enterprises) in the form of other capital. Since 2007 report, data on liabilities to non residents (direct investors and direct investment enterprises) in the form of other capital is not covered in the survey any more, but obtained from BI external debt reporting system (SIUL).
- (iii) Reinvested earnings (RE) of the reporting enterprises, and RE of the direct investment enterprises of the reporting enterprises.

D. Respondents

The respondents are selected based on purposive sampling method. The survey covers more than 800 resident enterprises, including banks, Non Bank Financial Institutions/NBFIs and non financial companies. These samples are derived from the list of the BI International Transaction Reporting System (ITRS) and the BI external debt reporting system.

Respondents of Non Financial Companies

They are selected from the companies with the total assets/turnover of more than Rp. 100 billions (equivalent USD 10 millions). Representation of each economic sector is considered on the basis of the administrative investment data (2001–2003) from the Investment Coordinating Board report.

Respondents of Financial Companies

The sample covers banks (state banks, foreign banks, and joint venture banks) and non bank financial institutions/NBFI (insurance, financing and securities companies).

E. Data collection

The survey is conducted on a semi annual basis. The reporting year survey is conducted for the previous year data, e.g. 2007 survey collect 2006 data, with 6 months lag. The forms are sent via postal mail/email. Respondent submission data is collected through postal mail/email. In the survey in Semester I 2008, response rate was about 50%, an increase from the average response rate from previous surveys (40%).

F. Survey strategy

1. Setting pilot questionnaire

The pilot questionnaire is made based on the FDI Survey guideline. In order to reduce respondent burden, the questionnaire is designed by eliminating data that can be obtained from other sources like external debt reporting system and international transaction reporting system (ITRS).

2. Pilot survey (for limited samples)

The pilot survey is held as a preliminary survey before a final survey is sendt to all respondents. The pilot questionnaire is discussed with selected respondents to get their feedbacks. The feedback is used to evaluate the effectiveness of the questionnaire.

3. Finalize Questionnaire

Set the final form based on pilot survey and its evaluation.

4. Disseminate information and tutorials to all respondent candidates (class session and one-to-one tutorial for respondents needing special assistance)

The purpose of the tutorial is to provide a clear understanding about concept and definition of each item in the questionnaire. All respondent candidates are assisted to fill the survey form in order to get the accurate data and information.

5. Maintain continuous communication with respondents

BI provides Account Officers (AO's) to monitor by phone the progress of survey, whether the questionnaires are received by the respondents and also to assist the respondents who have difficulties in completing the questionnaire. The AO's maintain the communication with respondents during the survey period.

6. Report the survey result to the respondents and provide incentives such as a gift

In order to increase the response rate of survey, BI provides gift to respondents who complete and send back the questionnaires. At the end of survey, BI sends a brief report of DI analysis based on survey's findings.

7. Maintain the good relationship with the respondents

BI maintains good relationship with the respondents, i.e. provide assistance to the companies who need data and information relating to economic and monetary statistics.

G. Survey problems

1. Absence of a directory of Direct Investor (DI) and Direct Investment Enterprises (DIE)

The population of DI and DIE in Indonesia is unknown. This problem causes difficulties in determining the appropriate size of sample.

2. Low response rate

The impact of this problem is that the data and information collected from the survey is less accurate. This problem is mainly due to the respondents' lack of concern with regard to data/statistics, respondents' lack of understanding of FDI concepts and definitions, and respondents' burden.

3. No clear identification of indirect investment of DI and DIE

This problem is due to the lack of respondents understanding of the framework of FDI relationship, included the concept of affiliated/sister companies. On the other hand, complete data and information regarding Indonesia FDI companies and their affiliates is not available.

4. Inconsistency of reported data

Besides reporting data through FDI surveys, some respondents also report the same data to the external debt system and ITRS. In some cases, their reported data are inconsistent. It is believed that this is due to the lack of understanding of the reporters.

H. Survey challenges

1. Develop a business register (cooperation with The National Statistics)

Investment Coordinating Board, the National Statistics (NSO) and BI are trying to develop a business register containing a list of all companies in Indonesia. This business register will be used to update FDI survey list.

2. Integrating the External Debt Reporting System and International Transaction Reporting System (ITRS)

BI has started a multi year work-program to integrate external debt reporting, ITRS reporting, and other surveys in order to acquire more reliable, comprehensive and accurate data, to lessen the respondent's burden and also to increase the response rate.

3. Develop direct reporting

Direct reporting system is used to get data directly from the companies. At present, companies report positions and transactions which are not settled through domestic banks. All transactions settled through domestic banks are reported by domestic banks. With direct reporting, all data are expected to be reported directly by the company, so that the reported data will be more accurate and comprehensive.

Monetary indicators surveys

Beatriz Biasone¹

Introduction

The Central Bank of Argentina, through its Statistics Department, carries out several monetary indicators surveys. Some data has been collected since 1953. These surveys are independent from the monthly balance sheet observance that all credit institutions fulfill regularly for the Financial Institutions Surveillance.

Monetary surveys give more dynamic information, than the balance sheet observance because of their higher frequency (daily) and their more exhaustive breakdowns.

Objective

The main purpose in having such monetary indicators, most of them on a daily basis, is to monitor market conditions, help monetary policy formulation and also assist in surveillance.

This information is extensively used by different Central Bank departments, specialized audiences (eg analysts, researchers or policymakers) and the general public (citizens, journalists, students). It is available with five days' lag for daily information, one month and a half for monthly regimes and one month and a half for quarterly data.

The Central Bank of Argentina survey system

In Argentina, all entities included in Financial Institutions Law (N° 21.526) are required to provide this information. There are currently 85 financial institutions divided into 12 public banks, 56 private banks (national and foreign capital owned), 15 financial companies and 2 credit institutions, reporting regularly to the Central Bank, through the monetary survey system named SISCEN in Spanish (Centralized System of Informative Requirements).

The SISCEN system is organized into 16 regimes, standardized in a matrix format which ensures the electronic transmission and the logical consistency of the data submitted.

The information transmitted is subjected to a lot of automatic checks and error messages are automatically generated and sent to the corresponding institution. Missing data is also asked for in a daily and automated way. These mechanical tests are supported by analyst staff from the Statistics Department, who keep in touch by email or phone with the responsible contact persons in each financial institution. After the information is validated, it is published on the Central Bank web site. It is also compiled in the monthly publication of the Statistical Bulletin, available in paper format and on the web page.

¹ Main General Manager of Monetary Programming at the Central Bank of Argentina.

Table 1

Different monetary indicators are surveyed through the SISCEN¹

Surveys fulfilled by all financial institutions	Frequency		
Deposits and main liabilities of the financial system	Daily		
Main assets of the financial system	Daily		
Interest rates on loans granted to local financial institutions (call money)	Daily		
Interest rates on loans granted to local financial institutions by foreign financial institutions	Daily		
Interest rates on loans granted to the non financial private sector	Monthly		
Interest rates on deposits	Monthly		
Turnover velocity for deposits	Monthly		
Information on the holders and debtors of loans and deposits	Monthly		
Financing based on activity	Quarterly		
Information on deposit segments	Quarterly		
Banking loans and deposits based on political geographical areas	Quarterly		
Surveys fulfilled by financial institutions with head office or branches located in Buenos Aires city or Greater Buenos Aires	Frequency		
Interest rates on loans granted to the non financial private sector	Daily		
Interest rates on deposits	Daily		
BAIBOR – Buenos Aires interbank offered rate	Daily		
Interest rates on loans granted to prime companies Daily			
¹ For more information see <u>http://www.bcra.gov.ar/pdfs/estadistica/bolmetin.pdf</u> .			

Each survey collects numerous relevant characteristics, which are accurately codified, such as the type of loan or deposit, stocks and flows, maturities, local and foreign currency operations and holder and debtor sector. The latter, depending on the survey, could be: non financial public sector, financial sector, individuals, financial service enterprises, other enterprises, foreign residents)

The matrix format and the codified data collected through the surveys allows to regroup the information and show a wide range of outputs focused on different objectives.

The importance of having daily information

Having daily information on monetary indicators has been crucial in some periods of Argentine history. Nowadays, it allows a constant surveillance of market conditions supporting a better monitoring for monetary policy. It is also important in terms of seasonal factors that would be lost with monthly averages and can be detected through the daily collection. Besides, daily data enhance, complement and support normative innovation and normative changes.

Census and surveys

In Argentina there is a strong regionalism which has associated different behaviors between Buenos Aires and the rest of the country. The banking density level of individuals varies among small or big cities. Provincial banks commonly cater for the public sector (they are mostly provinces' financial agents and have a lot of public employees among their clients). Many banks cater for specific productive sectors (primary sector, industry) and for particular corporations (multinational, small and medium enterprises). These extensive differences across the country justify the collection of information from all types of financial institutions, in order to capture the wide variety of characteristics associated with different practices within the financial system.

However, while Buenos Aires and Greater Buenos Aires provide good coverage for some topics, surveys are used for others, because of data opportunity and because of operational problems, particularly when entities in small towns have to compile and process interest rate information.

What have we learnt?

The fluent and not necessary so formal contact with information providers improves data quality and survey fulfillment. A precise methodology and guidelines to provide background on the information process are essential. They ensure data consistency and coherence and also give transparent rules for information and operational requirements. The extensive data collected through the SISCEN allows to implement routine checks confronting information from different surveys, which is very helpful for improving data quality. Finally, compiling gross data provides versatility to produce different outputs which can be seen as new information.

Central Bank of Bosnia and Herzegovina Statistics of monetary and financial sector; Survey on banks' loans by purpose¹

Amir Hadziomeragic² and Vidosav Pantic³

In 2005 the Central Bank of Bosnia and Herzegovina (CBBH) started the surveillance of commercial banks' loans to households (HHs) in order to explain credit expansion and the main purposes of such loans in Bosnia and Herzegovina (BiH).

The survey sample comprises 8 out of 32 banks that extend 70–80% of loans to HHs. All banks surveyed respond regularly.

Survey results show that more than 70% of loans covered by the survey was reported to be extended for general consumption purposes, in line with the widely accepted opinion that HHs prefer taking out loans with less complicated procedures (in terms of collaterals, mortgages, supporting documentation, etc.).

However, a very large part of loans reported to be intended for general consumption purpose seems to have been actually used for other purposes, which may indicate that HHs have been trading off complicated documentation procedures against less convenient interest rates, usually choosing the latter.

Further analysis of the survey results shows that if general purpose loans were to be excluded, more than one half (58% loans disbursed in 2007) of loans to HHs would be related to housing (see categories P1, P2 and P3in Table 1), which is line with the ongoing boom in the real estate market in BiH.

Survey results also indicate that HHs (or their guarantors) are good re-payers, as the ratio Repayments/Disbursements is fairly high (ie.72% in 2007). CBBH experts also concluded that the market for bank loans is highly concentrated, as the eight biggest banks hold three quarters of outstanding loans stocks in BiH, to HHs as well as to NFIs, according to commercial banks balance sheets.

Generally speaking, the *Survey on banks loans by purpose* has only partially met expectations so far since it provides no info on the actual purpose of loans that HHs reported to be used for the purpose of general consumption. Therefore the results of the Survey are not being disseminated yet.

¹ The CBBH approve that the IFC may publish the presentation "Survey on banks' loans by purpose" that was prepared by Mr Hadziomeragic and Mr Pantic, based on results of the "Survey on banks' loans by purpose" conducted by CBBH's Monetary and Financial Sector Statistics Section (provided by Ms Snezana Janjic, Coordinatior of the Monetary and Financial Statistics Section) in the IFC Buletin 30. For further contacts concerning this Survey please contact Mr. Hadziomeragic and for other Monetary Statistics issues (compilation practice, publishable data or surveys conducted) please either address Mr Hadziomeragic (ahadziomeragic@cbbh.ba), Ms Janjic (sjanjic@cbbh.ba) or Ms Cosic (ncosic@cbbh.ba).

² Head of Economic Research and Statistics Division at the Central Bank of Bosnia and Herzegovina.

³ Currently Head of the Risk Management Division at the Central Bank of Bosnia and Herzegovina (at the time of prepairing the presentation also working in the Economic Research and Statistics Division).

Table 1

Results of the survey on banks' loans by purpose for 2007

Loans to HH	Disburs	sements	Repayments		
P1. for building or purchase of new housing units	Amount in KM mil	Share in%	Amount in KM mil	Share in%	
P2. for purchase of the current housing units	91.237	3,4	42.047	2,3	
P3. for repairing the current housing units	241.692	9,1	128.327	7,0	
P4. or purchase of cars	49.428	1,9	36.153	2,0	
P5. for business	23.441	0,9	29.183	1,6	
P6. Credit cards	190.941	7,2	100.942	5,5	
P7. for other purposes (consumers' general-purpose loans)	58.696	2,2	57.472	3,1	
Total loans of polled banks	2.009.603	75,4	1.446.786	78,6	

Flows, in KM thousands

Note: In 2007H1 P6 were not reported separately, but included in P7.

Source: CBBH; Monetary statistics.

Table 2

Results of the survey on banks' loans by purpose for 2007

	Stocks at12/31/06		Stocks at 6/30/07		Stocks at12/31/07	
Loans to HH	Amount in KM mil	Share in%	Amount in KM mil	Share in%	Amount in KM mil	Share in%
P1. for building or purchase of new housing units	241	7,0	258	6,6	290	6,7
P2. for purchase of the current housing units	392	11,4	449	11,5	505	11,7
P3. for repairing the current housing units	210	6,1	214	5,5	223	5,2
P4. or purchase of cars	63	1,8	62	1,6	57	1,3
P5. for business	116	3,4	157	4,0	206	4,8
P6. Credit cards			73	1,9	74	1,7
P7. for other purposes (consumers' general- purpose loans)	2.418	70,3	2.678	68,8	2.953	68,5
Total loans of polled banks	3.440	100	3.891	100	4.309	100

Note: On December 31, 2006 aggregate P6 were not reported separately, but included in P7.

Source: CBBH; Monetary statistics.