

UNDERSTANDING THE 'TARGET MARKET'

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1. Introduction

Information is the Research Department's main asset. Its main business is therefore the creation of good quality, relevant and timely information about institutional units' production, consumption, accumulation of assets, and financial intermediation through transactions across all relevant financial market instruments and accounting entries. This information comprises of both quantitative statistics, and qualitative analysis and interpretations. The purpose of this information is to facilitate a continuous and thorough assessment of the South African economy. Internally it informs the monetary policy decision-making process. Externally it informs stakeholder's investment decisions in South Africa and contributes to South Africa's international profile through compliance to international best practice in terms of methodology, codes and standards, coverage, and timeliness.

2. Discussion

In this context, the 'target market' refers to the SARB's respondents as suppliers of both quantitative and qualitative data of *institutional units*¹ at the level of establishments. Respondents of data at the level of establishments should be categorised in terms of both institutional sector class² and standard industrial classification³. This provides an analytical framework with the former being a systematic recording of economic transactions according to the *1993 System of National Accounts* (SNA), and the latter of economic activity in terms of industry clusters according to the Standard Industrial Classification of all Economic Activities (SIC) as published by Statistics South Africa. The former, includes individuals and non-producing households, whereas the latter excludes them as it only includes producing units.

The Research Department processes the data methodologically into information. The main international conceptual statistical framework applicable to all economies for the compilation of coherent, consistent and integrated macro-economic accounts is given by the manuals and guides of the International Monetary Fund (IMF) for the real sector, external sector, monetary and financial statistics and government finances. The manuals and guides recognise differences in conditions and institutional arrangements and deals with the treatment of new developments such as financial instruments and institutional arrangements. Ideally, the target market ought to be continuously re-assessed in response to changes in both the domestic and international economic landscape, such as on-going globalisation and the current international financial crisis. This entails a search for data-gaps, and a continuous re-evaluation of both the information needs of the central bank for monetary policy purposes and that of other stakeholders.

This brief background sets the context for the management of the target market. Respondents should preferably be identified at the level of establishments and should be classified both in terms of the institutional sector to which it belongs and its industry cluster.

¹ An enterprise or company is engaged in the production of a single or different goods or services. An institutional unit is an establishment, which is an enterprise or part of an enterprise whose principal activity is a single activity. The establishment could also be engaged in secondary activities. Therefore an enterprise can consist of more than one establishment, but an establishment belongs to only one enterprise. Institutional units own goods and assets, incur assets and liabilities, and engage in economic activities and transactions in their own right.

² See the "Institutional Sector Classification Guide for South Africa" February 2005.

³ See the "Standard Industrial Classification of all Economic Activities (SIC)" of Statistics South Africa.

The institutional sector classification of transactors engaging in economic activities such as production, consumption, saving and investment also in particular focus on the classification of holders of securities, recipients and suppliers of credit, and buyers and sellers of financial assets. In terms of this classification approach the total economy consists of an aggregation of institutional units into institutional sectors. A distinction is made between resident and non-resident institutional units as based on the concept of the centre of economic interest, and at the next level resident institutional units is disaggregated into legal entities and households (physical persons, and including the non-profit institutions serving households principally engaged in producing non-market services for households). The legal entities in turn are grouped into mutually exclusive institutional sectors, namely the financial (principally engaged in financial intermediation and auxiliary financial activities)- and non-financial (principally engaged in the production of market goods and non-financial services) corporate sector and government units (political responsibilities, non-market goods, and redistribution of wealth and income) in the general government sector. All of whom comprises of sub-sectors which could also be delineated in terms of the public- and private sector.

The private sector consists of all resident institutional units not controlled or owned by institutional units in the general government sector. Whereas, the public sector consists of all institutional units in the general government sector, and corporate sector both financial- and non-financial owned or controlled by units in the general government sector. The non-resident institutional units transacting with resident institutional units are grouped into the foreign sector or rest of the world. This classification approach is shown in Figures 1 and 2 as sourced from the Bank's "Institutional Sector Classification Guide for South Africa, February 2005".

The classification of respondents in terms of industries are conducted in terms of SIC as compiled by Statistics South Africa in their "Standard Industrial Classification of all Economic Activities" as published by them based on the guidelines of the United Nations. A high level abstract, as published in the the Bank's "Institutional Sector Classification Guide for South Africa, February 2005" is shown in Figure 3.

The intention is to establish and maintain a target market that sufficiently measures all of the following:

- the economic value of transactions (flows) in goods, services and financial instruments in domestic and foreign currency;
- the change in the value of financial and non-financial assets and liabilities (stocks) due to acquisitions or disposals and depreciation and holding gains and losses due to price changes; and
- activities (i.e. products and services) and their purpose, per institutional sub-sector and industry.

This also requires emphasis on a third dimension, namely financial instruments. Table 4, as sourced from the "Statistical Classification of Financial Market Instruments" published by the European Central Bank (ECB) in July 2005, is an account of the types of financial instruments traded in the various markets, and their various dimensions that should be measured. These are highlighted in particular due to their dynamic nature.

Finally, for the establishments in terms of institutional sectors and industries balance sheets accounting entries are categorised with assets and liabilities grouped with a distinction between financial and non-financial, national and foreign currency, and stocks and flows are linked, see the IMF manuals and guides.

Figure 1 Institutional units and sectors

Total economy	Financial corporate sector	Monetary authority	South African Reserve Bank Corporation for Public Deposits
		Banks	Banks Mutual banks South African branches of foreign banks Postbank Land Bank
		Insurers and pension funds	Insurers Medical schemes Pension and provident funds
		Other financial intermediaries	Collective investment schemes Finance companies Public-sector financial intermediaries Financial controlling companies
		Financial auxiliaries	Members of formal exchanges Trust companies Insurance brokers, agents and actuaries South African representative offices of foreign banks Other private-sector financial auxiliaries Public-sector financial auxiliaries
	Non-financial corporate sector	Private non-financial corporate sector	Incorporated business enterprises Quasi-corporations of households
		Public non-financial corporate sector	Public corporations Quasi-corporations of the general government sector
	General government sector	Central government	National government departments Extra-budgetary institutions Universities, universities of technology and technikons Social security funds
		Provincial governments	Provincial legislators Other provincial government units
		Local governments	Metropolitan councils District councils and municipalities Other local government units
	Household sector	Households Unincorporated business enterprises of households Non-profit institutions serving households Private trusts Friendly societies	
	Foreign sector – rest of the world	Foreign financial corporate sector	Financial companies listed on JSE Securities Exchange SA Foreign banks Other foreign financial corporations
		Foreign non-financial corporate sector	Non-financial companies listed on JSE Securities Exchange SA Other foreign non-financial corporations
		Foreign governments	
		International organisations	
Other non-residents			

Figure 2 Public sector

Public financial corporate sector

- 1.1 Monetary authority

- 1.2 Banks
 - 1.2.4 Postbank
 - 1.2.5 Land Bank

- 1.3 Insurers and pension funds
 - 1.3.1.2 Public-sector insurers
 - 1.3.3.2 Public-sector pension and provident funds

- 1.4 Other financial intermediaries
 - 1.4.3 Public-sector financial intermediaries
 - 1.4.3.1 National government financial intermediaries
 - 1.4.3.2 Provincial government financial intermediaries

- 1.5 Financial auxiliaries
 - 1.5.2 Public-sector financial auxiliaries
 - 1.5.2.1 Public Investment Commissioners (PIC)
 - 1.5.2.2 Other public-sector financial auxiliaries

Public non-financial corporate sector

- 2.2 Public non-financial corporate sector
 - 2.2.1 National government enterprises
 - 2.2.2 Provincial government enterprises
 - 2.2.3 Local government enterprises

General government sector

- 3.1 Central government
 - 3.1.1 National government departments
 - 3.1.2 Extra-budgetary institutions
 - 3.1.3 Universities, universities of technology and technikons
 - 3.1.4 Social security funds

- 3.2 Provincial governments
 - 3.2.1 Provincial legislators
 - 3.2.2 Other provincial government units

- 3.3 Local governments
 - 3.3.1 Metropolitan councils
 - 3.3.2 District councils and municipalities
 - 3.3.3 Other local government units

Figure 3 Standard Industrial Classification of all Economic Activities (SIC)

Category	Major division	Division
Agriculture, hunting, forestry and fishing	1	
Agriculture, hunting and related services		11
Forestry, logging and related services		12
Fishing, operation of fish hatcheries and fish farms		13
Mining and quarrying	2	
Mining of coal and lignite		21
Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying		22
Mining of gold and uranium ore		23
Mining of metal ores, except gold and uranium.....		24
Other mining and quarrying		25
Services activities incidental to mining of minerals		29
Manufacturing	3	
Manufacture of food products, beverages and tobacco products		30
Manufacture of textiles, clothing and leather goods		31
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials; manufacture of paper and paper products; publishing, printing and reproduction of recorded media		32
Manufacture of coke, refined petroleum products and nuclear fuel; manufacture of chemicals and chemical products; manufacture of rubber and plastic products		33
Manufacture of other non-metallic mineral products		34
Manufacture of basic metals, fabricated metal products, machinery and equipment and of office, accounting and computing machinery		35
Manufacture of electrical machinery and apparatus not elsewhere classified.....		36
Manufacture of radio, television and communication equipment and apparatus and of medical, precision and optical instruments, watches and clocks		37
Manufacture of transport equipment		38
Manufacture of furniture; manufacturing not elsewhere classified; recycling		39
Electricity, gas and water supply	4	
Electricity, gas, steam and hot water supply		41
Collection, purification and distribution of water		42
Construction	5	

Wholesale and retail trade; repair of motor vehicles, motor cycles and personal and household goods; catering and accommodation	6	
Wholesale and commission trade, except of motor vehicles and motor cycles		61
Retail trade, except of motor vehicles and motor cycles; repair of personal household goods		62
Sale, maintenance and repair of motor vehicles and motor cycles; retail trade in automotive fuel		63
Catering and accommodation		64
Transport, storage and communication	7	
Land transport; transport via pipelines		71
Water transport		72
Air transport		73
Supporting and auxiliary transport activities; activities of travel agencies		74
Post and telecommunications		75
Financial intermediation, insurance, real-estate and business services	8	
Financial intermediation, except insurance and pension funding		81
Insurance and pension funding, except compulsory social security		82
Activities auxiliary to financial intermediation		83
Real-estate activities		84
Renting of machinery and equipment, without operator, and of personal and household goods		85
Computer and related activities		86
Research and development		87
Other business activities		88
Community, social and personal services	9	
Public administration and defence activities		91
Education		92
Health and social work		93
Other community, social and personal service activities		94
Activities of membership organisations not elsewhere classified		95
Recreational, cultural and sporting activities		96
Other service activities		99
Private households, extra-territorial organisations, representatives of foreign governments and other activities not adequately defined	0	
Private households with employed persons		01
Extra-territorial organisations		02
Representatives of foreign governments		03
Other activities not adequately defined		04

Figure 4 Statistical classification of financial market instruments

1 Interest rate instruments	1.1 Deposits, loans and debt securities	1.1.1 Deposits and loans	1.1.1.1 ¹⁾ Short term (up to and including 1 year)	Further potential breakdown by: i. deposits versus loans; ii. currency of denomination; iii. type of collateralisation (e.g. repos); iv. rating; v. residence of counterparty; vi. counterparty sector (according to ESA 95); vii. industry (partially, according to NACE).
			1.1.1.2 ¹⁾ Long term (over 1 year)	
	1.1.2 Debt securities	1.1.2.1 Short term (up to and including 1 year ²⁾)	Further potential breakdown by: i. original maturity (in particular debt securities up to and including 1 year and debt securities from 1 year up to and including 2 years); ii. currency of denomination; iii. type of collateralisation/securitisation (e.g. covered bonds, asset-backed securities, mortgage-backed securities); iv. rating; v. coupon type (fixed, variable, zero); vi. residence of issuer; vii. sector of issuer (according to ESA 95); viii. industry (partially, according to NACE).	
		1.1.2.2 Long term (over 1 year ²⁾)		
1.2 Interest rate derivatives	1.2.1 Forward-type derivatives	Further potential breakdown by: i. type of market (exchange traded/OTC); ii. type of instrument; iii. counterparty sector.		
	1.2.2 Option-type derivatives			
2 Equity-related instruments	2.1 Stocks	2.1.1 Quoted stocks	Further potential breakdown by: i. residence of issuer; ii. ESA sector of issuer; iii. industry (partially, according to NACE).	
		2.1.2 Unquoted stocks		
		2.1.3 Other equity		
	2.2 Equity-linked derivatives	2.2.1 Forward-type derivatives		Further potential breakdown by: i. type of market (exchange traded/OTC); ii. type of instrument; iii. counterparty sector.
2.2.2 Option-type derivatives				
3 Investment and money market funds' shares/units and related instruments	3.1 Investment and money market funds shares/units	3.1.1 Money market funds	Further potential breakdown by: i. rating; ii. residence of fund.	
		3.1.2 Bond funds ³⁾		
		3.1.3 Equity funds ³⁾		
		3.1.4 Mixed funds ³⁾		
		3.1.5 Real estate funds ³⁾		
		3.1.6 Hedge funds ³⁾		
		3.1.7 Other funds ³⁾		
	3.2 Derivatives on investment and money market funds' shares/units	3.2.1 Forward-type derivatives	Further potential breakdown by: i. type of market (exchange traded/OTC); ii. type of instrument; iii. counterparty sector.	
		3.2.2 Option-type derivatives		
	4 Foreign exchange and related instruments	4.1 Foreign exchange	4.1.1 First currency pair	
...				
4.1.n n-th currency pair				
4.2 Foreign exchange derivatives		4.2.1 Forward-type derivatives	Further potential breakdown by: i. type of market (exchange traded/OTC); ii. type of instrument; iii. counterparty sector.	
	4.2.2 Option-type derivatives			
5 Commodity derivatives, credit derivatives and other financial markets instruments	5.1 Commodity derivatives	5.1.1 Forward-type derivatives	Further potential breakdown by: i. type of market (exchange traded/OTC); ii. type of instrument; iii. counterparty sector.	
		5.1.2 Option-type derivatives		
	5.2 Credit derivatives	5.2.1 Forward-type derivatives	Further potential breakdown by: i. type of instrument; ii. rating; iii. sector of the derivative writer.	
		5.2.2 Option-type derivatives		
	5.3 Other financial markets instruments			
Memo item: commodities	Gold			
	Oil			
	Other commodities			

1) Original maturity.

2) Residual maturity.

3) The type of funds and their definitions will be reviewed once the ECB has established its new approach for collecting statistics from investment funds.

Globalisation and the increased complexity of financial market instruments and transactions with specific reference to derivatives and off-balance sheet transactions conducted by economic agents complicates the measurement of the economy and the determination of the target market. This is also influenced by the strength of institutional arrangements in the delineated institutional sectors and or industries. The depth and breadth of the target market

is also influenced by the statistical agencies capacity and infrastructure. Both institutional arrangements in terms of the statistical agencies and the respondents determine the use of so-called alternative “administrative data”⁴ to supplement survey data. Institutional arrangements also extend to co-operation among agencies of government and the private sector to exchange information building data sets based on the mosaic concept. The web should also increasingly facilitate alternative ways to source data and enhance the statisticians’ ability to determine the target market. The target market is limited by the respondents ability carry the statistical burden imposed on them. Therefore, data needs and the target market should be evaluated in terms of a cost-benefit analysis.

The Research Department should determine its target market for sourcing data in this context. Currently, the part of the Department dealing with these issues are structured in terms of the IMF manuals and guidelines, namely

- Balance of Payments – external sector statistics
- National accounts – real sector statistics
- Business cyclical and labour analysis – prices and other indicators of real economic activity
- Capital market flow of funds – financial statistics of non-banks
- Money-and banking – monetary statistics
- Public finance – government finance statistics

The real sector statistics mostly relates to industries in the private- and public financial- and non-financial institutional sectors. The capital market and flow of funds deals in particular with private- and public non-bank financial institutions and their interactions with the real sector. Money-and banking focus narrowly on the banking sector whereas public finance deals with all public sector entities in the financial- and non-financial sectors and the government sector. All these groupings transact with non-residents.

From this it is evident that the division of labour along these lines requires excellent co-ordination to prevent duplication, data gaps and increased respondent burden. It also requires data sharing and the compilation of data sets across areas leading to a lack of ownership. This approach does not render institutional and industry specialists, but rather compilation specialists. The end result is only a macro assessment of the economy with information inconsistencies and an incomplete target market.

An alternative is an industry, institutional, financial instrument approach. Where part of the Department is structured according to the ten main SIC sectors of economic activity linked to their institutional sectors with specific focus on relevant financial market instruments. Within these clusters the data sourced should also provide where relevant for geographic distribution. The benefit of such an approach is the development of industry and institutional sector specialists. This should enhance the Departments understanding of the economic conditions in the target market and their impact on macro-economic variables, the continuous re-evaluation of the targeted respondents, improved liaison and measurement of relevant data.

Part of the Department should remain to be organised in terms of the IMF manuals and guidelines. This is where the abovementioned information is collated into the macro-economic accounts rendering methodological compilation specialists with a view on macro-economic developments.

Other issues to be considered in the determination of the target market are:

- Data gaps identified by the IMF for South Africa as a G-20 country in light of the financial crisis.

⁴ Government register data.

- Activities of non-bank financial intermediaries
 - Understanding and measuring structured products.
 - Systemically important institutions
 - The development of new financial intermediaries such as special purpose vehicles, hedge funds etc
- Sectoral balance-sheet data
 - Understanding the linkages and transactions between units and cross-border exposures
 - Changes in accounting practices and standards.
 - The measurement of off-balance sheet transactions, such as in the case of securitisation.
 - Collateral and sectoral leverage.
 - The classification of both the issuers and holders of securities.
- Measurement of
 - Prices and quantities
 - The requirements of and implementation of new IMF manuals and guidelines SNA 2008 and BPM6.
 - The implementation of the United Nations “International Standard Industrial Classification of All economic Activities (ISIC) Rev.4.
 - The development of financial instruments especially in the arena of derivatives, over-the-counter derivatives and credit derivatives, in particular credit default swaps.
 - The measurement of monetary aggregates in the light of the growth of money-market unit trusts.
 - The measurement of broader credit than bank intermediated only in light of such activities by non-bank financial intermediaries, such as finance companies.
 - The measurement of capital, goods and services flows in an increasingly globalised environment.
- Development
 - The developments on the bourses for financial instruments, such as the impact of ‘Plc’ companies on the indices and other statistics regarding their meaning for interpreting developments in the South African economy.
 - The development where large money managers cross trades in securities between their clients internally without going through a broker and the exchange.
 - Dis- and re-intermediation due to changes in regulation and legislation.
 - Developments in the various industries, financing, capital expenditure, employment, ect.

3. Conclusion

These issues reflects the changing landscape within which the Research Department must determine its target market and requires both industry/institutional sector specialists and methodological compilation specialists as well as specialised analysts to interpret the information within the context of understanding the relevant mechanisms. In addition to the alternative structure the Research Department should also focus attention on formal liaison with industry associations such as ASISA, regulators such as the Financial Services Board, National Credit Regulator, private-and public sector statistical agencies and in particular Statistics South Africa and the South African Revenue Services. The databases of the major banks, retailers, imports/exporters, bourses and others host a wealth of data that could be electronically transformed into information. In the process of determining the target market, the ‘what’ must be defined in terms of required data with a trade-off between cost and benefit relative to ‘availability’. This together with institutional capacity (structure and technology) determines expectations and priorities as to the ‘how’.

References

- Atkins. R., 2011, Regulatory Reform, Authority aims to give early warnings to avert crisis Financial Times, Frankfurt, 5 January.
- Bank of England., Cost-benefit analysis of monetary and financial statistics, A practical guide.
- Borio. C., 2010, The financial crisis: what implications for new statistics? Bank for International Settlements, 25 August.
- European Central Bank., 2005, Statistical Classification of Financial Market Instruments, July.
- Institutional Sector Classification Guide for South Africa., 2005, South African Reserve Bank.
- International Monetary Fund data and statistics., 2010, Last updated 22 December, <http://www.imf.org/external/data.htm>
- International Standard Industrial Classification of All Economic Activities (ISIC), Rev.4., 2008, United Nations Department of Economic and Social Affairs, Statistics Division Series M No.4/Rev.4, NewYork.
- McCrum. D., 2010, BlackRock trading platform plan set to hit Wall St profit centres, Financial Times, New York, 29 December.
- Monetary and Financial Statistics Manual., 2000, International Monetary Fund Report of the G-20 Data Gaps Initiative visit to South Africa., 2010, International Monetary Fund, December (for official use only).
- System of National Accounts., 1993, Commission of the European Communities, International Monetary Fund, Organisation for Economic Cooperation and Development, United Nations, World Bank.
- System of National Accounts., 2008, Pre-edited version Volume 1, Commission of the European Communities, International Monetary Fund, Organisation for Economic Cooperation and Development, United Nations, World Bank.
- 57th Session of the International Statistical Institute., 2009, South Africa Statistics: Our Past, Present and Future, Abstracts, 16-22 August, Durban www.statssa.gov.za/isi2009