

Box 2 Interpreting enterprise- and household-surveyed employment measures

Within the broader framework of statistics collection, primarily with the purpose of informing analysis and policy formulation, Statistics South Africa (Stats SA) engages the labour market through two distinct quarterly sample surveys, that is, the household-based *Quarterly Labour Force Survey* (QLFS) and the enterprise-based *Quarterly Employment Statistics* (QES) survey. Information derived from both these surveys serves as key input towards the understanding of historical and current trends in the labour market. Although these measures track well over the long term, occasional differences in trend have at times perplexed labour market analysts. To compound the interpretation challenge, but fortunately also to enrich labour market analysis, various additional labour market indicators are compiled and published by different private-sector institutions.

Although both official surveys by Stats SA measure employment in South Africa, employment is defined differently by these two surveys. Also, different samples, estimation procedures and concepts are applied in the execution of these surveys. Despite these differences in construction and execution, the time series data that emanate from these two surveys track fairly well over time – the QLFS has been available since 2008. At times, conflicting signals, however, result from these two data sources, requiring special interpretational insights to align their informational content. There are a number of quantifiable differences between these two surveys that assist the process of alignment and interpretation, with other differences, however, posing more measurement challenges. Information contained in this box endeavours to assist this process of interpretation. As indicated in the accompanying table, the QLFS and QES differ in terms of coverage, scope, reference period, employment definition and concept.

Of significance when interpreting data from these two employment sources is the distinction made between counting jobs in the QES survey as opposed to counting the number of employed persons in the QLFS survey. Another is how paid and unpaid workers are counted. There are also special cases that occur periodically, such as the employment of workers by the Independent Electoral Commission and decennial census workers, for which employment is counted differently.

Count of jobs versus count of employed persons. In the QES survey, the employment estimate provides a count of all non-agricultural jobs, implying that a person who holds more than one job would appear on more than one payroll and thus would be counted for each job. By contrast, the household survey provides an estimate of employed persons and each worker is counted once, regardless of how many jobs he or she holds.

Differences between the *Quarterly Labour Force Survey (QLFS)* and the *Quarterly Employment Statistics (QES)* survey

	QLFS (household based)	QES (enterprise based)
Coverage	Private households (including workers' hostels) Civilian population (not institutions) aged 15 years and older Total employment (including formal and informal sector, private households, agriculture and small businesses)	VAT-registered businesses (payroll) Employees only Formal non-agricultural sector
Scope	Quarterly sample survey of 33 000 dwellings (sampling unit is dwelling; unit of observation is the household)	Quarterly sample survey of 21 000 non-agricultural formal enterprises
Reference period	A week prior to the interviews Collection in the middle two weeks of the middle month of each quarter	Payroll on the last day of the quarter
Definition of formal non-agricultural employment	Employers and own-account workers whose businesses are registered for tax (income tax or VAT) Employees whose employers deduct income tax from their salaries Employees whose employer does not deduct income tax but who work for an establishment with more than 5 employees	Employees on payroll of primarily VAT-registered businesses
Standard industrial classification	All industries	Excludes agriculture and private households
Employment concept	Estimates of employed persons	Estimate of jobs that are paid for (i.e. those on a payroll of a firm; if a person appears on two payrolls, he or she is counted twice)
Employment definition	Includes employers, own-account workers, unpaid family workers, persons employed in agriculture, private households and those who are temporarily absent from their job	Employees only

Reference periods and paid versus unpaid workers. The reference period for the household survey is one week prior to the interview. Information is obtained in the middle two weeks of the middle month of each quarter. The QLFS counts a person as employed if the person performed at least one hour of work during the reference week, whether as a wage or salary worker, as a self-employed individual in his or her own business or farm, or as an employee of a private household. Unpaid workers are counted if they worked at least fifteen hours in a family-owned business. Workers away on temporary unpaid absence are also included as employed. This category includes workers who have a job at which they did not work during the survey week because they were on vacation, were sick, needed to take care of family or a personal obligation, were on maternity or paternity leave, were involved in a labour dispute such as a strike, or could not work due to bad weather.

The QES reference period is the payroll's last day of the quarter. The pay period can be weekly, semi-monthly, monthly or other. Workers must have received pay for the pay period in order to be counted, regardless of whether they were present or on paid leave. Those on paid leave for the entire pay period are included in the survey, whereas those on unpaid leave are not. Workers on strike or on other unpaid work action for the entire pay period are not included in the QES employment estimates.

Scope of coverage. The QLFS includes those employed, unpaid family workers, agricultural workers, those on unpaid leave, and employees of private households. The QES survey is a non-agricultural business establishment survey, excludes the unincorporated self-employed, and records only workers that are paid.

Age limit. QLFS data on employment are restricted to persons aged 15 years and older, while there is no age limit on those reported in the QES survey. The QLFS provides employment data categorised by age.

Institutionalised workers. By definition, institutionalised persons in any type of institution, such as a prison or mental health facility, are not counted in the QLFS because the QLFS sample represents the civilian non-institutionalised population.

Persons on active duty in the military. In the QLFS, active duty members of resident armed forces are considered to be out of the scope of the survey.

According to the Standard Industrial Classification (SIC) framework, employers and employees involved in labour broking, self-employment and those not well defined are classified in the 'finance, insurance, real-estate and business services' category. Recent legislative changes related to the registration and regulation of labour brokers have complicated discrepancies between the two surveys and administrative employment data. The QES does not include sub-contractors and consultants who are self-employed and not part of an enterprise. Furthermore, the QES does not include employees who are paid a commission, even though such employees receive this payment regularly from labour brokers. Conversely, the QLFS records subcontractors, consultants and workers who are only paid a commission.

Concerning welfare-to-work programmes, the QES and the QLFS treat these workers differently, depending on whether jobs are subsidised or unsubsidised. Paid, unsubsidised employment is covered by both surveys, while subsidised employment is treated differently. Workers in subsidised jobs would be covered by the QLFS, being considered employed, regardless of who remunerates them. Under the QES, if the subsidy is paid directly to the welfare beneficiary and the employer does not pay wages, then the employee would not be counted as employed. Consequently, more welfare-to-work employment is captured by the QLFS than the QES.

In terms of data strengths and limitations, Stats SA does not publish seasonally adjusted labour market data, that is, data that are adjusted for normal seasonal variations that occur regularly in certain periods of the year. For example, the hiring of seasonal workers to assist with year-end holiday activity imparts an irregularity into employment outcomes between successive periods. The seasonal adjustment of time series data affords the analyst the opportunity to better engage with the cyclical trend and irregular component in the data, enhancing the informational value thereof. To this end, the South African Reserve Bank (the Bank) publishes seasonally adjusted labour market data in the *Quarterly Bulletin*, sourced from the QES as published by Stats SA. Seasonally adjusted data from the QLFS are, however, not published by the Bank, apart from the unemployment rate.

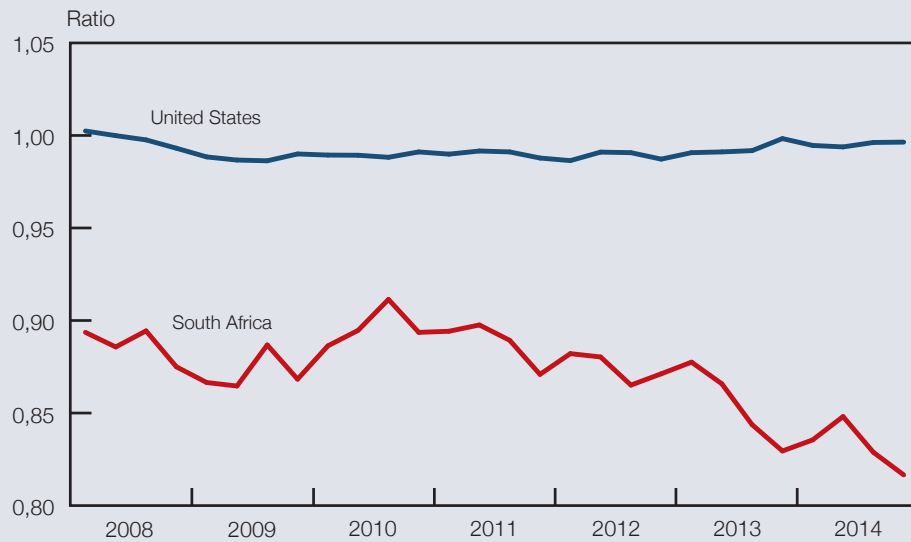
It is most likely that both surveys include at least some undocumented immigrants. However, neither the enterprise nor household survey is designed to identify the legal status of workers. Therefore, it is not possible to determine how many are counted in either survey. The household survey includes questions that identify the foreign and native born, but it does not include questions about the legal status of the foreign born. Data on legal immigrants, derived from records held by the Department of Home Affairs, are published by Stats SA every three years.

The ratio between the QES and the QLFS employment time series serves as an indicator of the degree of divergence between the outcomes of these two employment measures. QLFS data should, however, first be adjusted to only represent formal non-agricultural employment through attrition. In the United States (US), this ratio has historically tended to remain around 1,0 regardless of the stance of the economy. In South Africa this ratio is significantly below 1,0 and fairly volatile as shown in the accompanying figure. This is an indication of the higher degree of discrepancy in household and payroll employment survey outcomes in South Africa compared to that in the US.

To address these discrepancies between the QLFS and the QES survey, Stats SA implemented a review process of its sample frame for the QES that commenced in 2013. The bias towards the inclusion on the QES sample frame of companies with a large turnover, but not necessarily employing a large number of employees, was addressed first. As such, non-value-added tax (VAT) firms have now been included

in the sample since the second quarter of 2013 (published from the fourth quarter 2014 QES release). Over and above the South African Revenue Service (SARS) IRP5 data set, Stats SA is researching other data sources such as the Unemployment Insurance Fund database, and will reconcile all of these to the Department of Trade and Industries' business register. The new 2013 sample frame for the QES was designed to assist in addressing and benchmarking the imprecise administrative data that are encountered.

Ratio of enterprise-surveyed employment to household-surveyed formal non-agricultural employment (United States and South Africa)



Sources: Statistics South Africa and US Bureau of Labor Statistics (BLS)

Questions remain about the possible effects of labour brokers on employment measurement and the inclusion of undocumented workers in the two surveys. To address these and other issues, Stats SA continuously strives to improve its survey methodology and practices through dedicated research initiatives. It is important that data users and analysts familiarise themselves with the distinct characteristics of both these surveys to be able to properly assess their informational content and the way in which they inform the stance of the South African labour market.