

The comparability of Labour Force Survey (LFS) and Quarterly Labour Force Survey (QLFS)

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Hello! Format of the paper:

- Sampling design and sample size
- Changes in questionnaire design
- Other changes
 - Derivation of labour market status
 - Labour force participation rates (LFPRs)
 - Unemployment rates
 - Derivation of formal/informal sector status
 - Newly derived variables
 - Unemployment status
 - Underemployment status

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OHS → LFS → QLFS

- 1993-1999: OHS (once a year)
- 2000-2007: LFS (twice a year)
- 2008- : QLFS (four times per year)
 - In March 2005, consultants from the International Monetary Fund (IMF) were appointed to revise all aspects of the LFS. All documents, At the end, it was decided to re-engineer the LFS, and this took place in October 2005. Eventually, Stats SA came up with a decision that the LFS would take place on a quarterly basis from 2008, i.e., QLFS.
 - Comparability issues between OHSs and LFSs are already discussed in detail in various papers, such as Burger and Yu (2006), Casale, Muller and Posel (2005), Wittenberg (2004) and Yu (2007)

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Sampling design - LFS

- **5 rotating groups** (Starting from LFS 2001 September):
 - Representative of all provinces and strata (which are District Councils (DCs) within provinces)
 - A Master Sample of 3 000 Primary Sampling Units (PSUs) from the population census used as the sampling frame for the LFS since 2000.
 - The selected dwelling units would remain in the sample for **five** consecutive surveys, with **20%** of these dwelling units rotating out at each round of the survey.
 - The unit of sampling was the dwelling unit and the unit of observation was the household.
 - The advantage of this type of design is that it provides the basis for monitoring changes in the work situation of members of the same households over time, while retaining the larger picture of the overall employment situation in the country. It also allows for both longitudinal and cross-sectional analysis

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Sampling design - LFS

| | | | | | Balance |
|---------|--------|--------|-------|-------|---------|
| Round 0 | | 30 000 | | | 30 000 |
| Round 1 | 24 000 | | 6 000 | | 30 000 |
| Round 2 | 18 000 | 6 000 | 6 000 | | 30 000 |
| Round 3 | 12 000 | 6 000 | 6 000 | 6 000 | 30 000 |
| Round 4 | 6 000 | 6 000 | 6 000 | 6 000 | 30 000 |

Rotation of dwelling units within PSUs
Labour Force Surveys (LFSs)

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Sampling design - QLFS

- **4 rotating groups** (Starting from QLFS 2008: Q1):
 - The sample covers the non-institutional population except for workers' hostels, and is based on information collected during the 2001 Census.
 - The sample is designed to be representative at the provincial level and within provinces at the metro/non-metro level.
 - Within the metros, the sample is further distributed by geography type, and there are four geography types, namely urban formal, urban informal, farms and tribal areas.
 - There are 3 080 PSUs, and they are assigned to **four rotation groups**. Dwellings selected from the PSUs assigned to rotation group "1" are rotated in the first quarter, while dwellings selected from the PSUs assigned to rotation group "2" are rotated in the second quarter, and so on, i.e., each sampled dwelling will remain in the sample for **four** consecutive quarters.

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Sampling design - QLFS

| | | | | | Balance |
|---------|--------|-------|-------|-------|---------|
| Round 0 | 26 000 | | | | 26 000 |
| Round 1 | 19 500 | 6 500 | | | 26 000 |
| Round 2 | 13 000 | 6 500 | 6 500 | 6 500 | 26 000 |
| Round 3 | 6 500 | 6 500 | 6 500 | 6 500 | 26 000 |

Rotation of dwelling units within PSUs
Quarterly Labour Force Surveys (QLFSs)

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Sample size

- LFSs: With the exception of LFS2000a (which was considered to be a pilot study for the newly introduced LFSs), each survey consisted of around 26 000 – 29 000 households, and the number of people interviewed was about 100 000.
- QLFSs: The number of households and people decrease slightly to approximately 26 000 and 95 000 respectively.

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Questionnaire design

- Section 1: Particulars of each person in the household.
- Section 2: A few important questions covering economic activities are asked, which determine the labour market status (i.e., employed, unemployed, inactive) of the individuals.
- Section 3: This section asks questions which help distinguishing the unemployed from the economically inactive people.
- Section 4: Only the employed are asked to take part. Various questions are asked about the work situation of the employed.

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Changes – Section 1

- Numerous questions are no longer asked:
 - The questions regarding whether the respondent lives in the same household with his/her spouse/partner.
 - The language that the respondent most often speaks at home
 - Reading and writing ability
 - **Attendance at educational institution at the time of the survey**
 - **Field of education**
 - Questions about the respondent's time spent on fetching water or wood/dung for home use
 - The person bringing the most money into the household

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Changes – Section 2

- Similar questions are asked in both LFSs and QLFSs, with the exception that the categorization of the answer to the question regarding the work activities in the last seven days (i.e., Question 2.1 in LFS and Question 2.4 in QLFS) has changed

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Changes – Section 2

| | LFS – Question 2.1 | QLFS – Question 2.4 |
|---|---|---|
| Self-employed | a) Run or do any kind of business | b) Run or do any kind of business |
| Employee | b) Do any work for a wage c) Domestic worker | a) Work for wage, including domestic work |
| Unpaid work | d) Unpaid in a family business | c) Unpaid in a family business |
| Other work | e) Work in family's plot, farm, food garden, etc f) Construction or repair work at own home, plot, etc g) Catch fish/wild animals for sale or family food | Only asked in Question 2.6, but Question 2.6 is NOT considered when deriving labour market status! |
| Begging | h) Beg for money | |
| Immediately classified as employed if... | Answer is "Yes" in a), b), c), d), e), f) or g)!! | Answer is "Yes" in a), b) or c) |

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Changes – Section 3

- Two more categories in the answer to the question ‘How do you support yourself?’, namely ‘child support/foster care grants’, and ‘other welfare grants’.
- With regard to the respondents’ action to look for work or to start a business, two new categories are included in the QLFS, namely ‘Searched through job advertisement(s) / Searched the internet’ as well as ‘Sought financial assistance to look for work or start a business’ Furthermore, in the QLFS, the respondents can declare more than one job-seeking action.

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Changes – Section 3

- ‘How long has been trying to find work or start a business?’: the number of categories has changed across the two surveys
 - More categories at the longer end might give a better representation of the length of job search
 - This helps identify the people who are unemployable more clearly.
- A similar finding is observed in the question ‘How long ago was it since last worked?’
 - This helps identify the people who are unemployable more clearly.

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Duration of finding work / starting business

The question about the respondent’s duration of finding work or starting a business

| LFS – Question 3.10 | QLFS – Question 3.6 |
|-----------------------------------|----------------------------------|
| 1: Less than a month | 1: Less than 3 months |
| 2: 1 month to less than 2 months | 2: 3 months – less than 6 months |
| 3: 2 months to less than 3 months | 3: 6 months – less than 9 months |
| 4: 3 months to less than 4 months | 4: 9 months – less than 1 year |
| 5: 4 months to less than 6 months | 5: 1 year – less than 3 years |
| 6: 6 months to less than 1 year | 6: 3 years – 5 years |
| 7: 1 year to less than 3 years | 7: More than 5 years |
| 8: 3 years or more | 8: Don’t know |
| 9: Don’t know | |

- | | | |
|--|--|--|
| <p>About 30%</p> <ul style="list-style-type: none"> • 90% are Blacks • 60% are female • 70% don’t have Matric • Mean age: 33 yrs | <p>About 12%</p> <ul style="list-style-type: none"> • 90% are Blacks • 60% are female • 65% don’t have Matric • Mean age: 29 yrs | <p>About 22%</p> <ul style="list-style-type: none"> • 90% are Blacks • 60% are female • 75% don’t have Matric • Mean age: 35 yrs |
|--|--|--|

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When the respondent last worked

The question about how long ago the respondent last worked

| LFS – Question 3.15 | QLFS – Question 3.13 |
|---|----------------------------------|
| 1: More than a week but less than a month | 1: Less than 3 months |
| 2: 1 month – less than 2 months | 2: 3 months – less than 6 months |
| 3: 2 months – less than 3 months | 3: 6 months – less than 9 months |
| 4: 3 months – less than 4 months | 4: 9 months – less than 1 year |
| 5: 4 months – less than 5 months | 5: 1 year – less than 3 years |
| 6: 5 months – less than 6 months | 6: 3 years – 5 years |
| 7: 6 months – less than 1 year | 7: More than 5 years |
| 8: 1 year – less than 2 years | 8: Don’t know |
| 9: 2 years – less than 3 years | |
| 10: 3 years or more | |
| 11: Don’t know | |

- | | | |
|--|---|--|
| <p>About 30%</p> <ul style="list-style-type: none"> • 85% are Blacks • 55% are female • 80% don’t have Matric • Mean age: 39 yrs | <p>About 7%</p> <ul style="list-style-type: none"> • 85% are Blacks • 60% are female • 70% don’t have Matric • Mean age: 34 yrs | <p>About 25%</p> <ul style="list-style-type: none"> • 85% are Blacks • 52% are female • 80% don’t have Matric • Mean age: 40 yrs |
|--|---|--|

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Changes – Section 4

- A new question is asked right at the beginning of QLFS, which helps identifying the employed with **more than one job/business**.
 - The proportion of employed with more than 1 job hovers around 0.6%-0.8% in the three 2008 QLFSs.
- The number of options of the question that helps identify whether the employed works as employee or self-employed has changed.
 - Self-employed as % of all employed stabilizes at 15% in QLFSs
 - This proportion is higher in the LFSs

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Employees vs. Self-employed

| LFS – Question 4.3 | Classified as | QLFS – Question 4.4 | Classified as |
|---|---------------|---|---------------|
| 1: Working for someone else for pay | Employee | 1: Working for someone else for pay (including paid domestic workers, gardeners or security guards) | Employee |
| 2: Working for one or more private households as a domestic employee, gardener or security guard | Employee | 2: An employer (employing one or more employees) | Self-employed |
| 3: Working on his/her own or on a small household farm/plot or collecting natural products from the forest or sea | Self-employed | 3: Own-account worker (not employing any employees) | Self-employed |
| 4: Working on his/her own or with a partner, in any type of business (including commercial farms) | Self-employed | 4: Helping without pay in a household business | Self-employed |
| 5: Helping without pay in a household business | Self-employed | | |

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Changes – Section 4

- Lots of questions relating to working conditions are not asked anymore.
 - Note: Union membership question also not asked.
- **Formal/Informal sector** question asked slightly differently in QLFS
- Earnings questions:
 - Will be asked for the first time in 2009Q3.
 - How frequent will the questions be asked?
 - Will the questions be asked in exactly the same way as in LFSs?

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Formal/Informal sector question

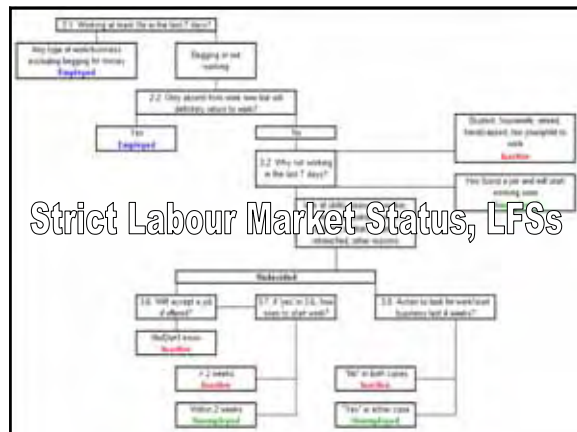
| LFS – Question 4.22 | QLFS – Question 4.17 |
|--|--|
| Is the organization / business / enterprise / branch where works | Is your place of work |
| 1. In the formal sector | 1. In the formal sector |
| 2. In the informal sector (including domestic work) | 2. In the informal sector |
| 3. Don't know | 3. Private household |
| | 4. Don't know |
| <i>Formal sector employment is when the employer (institution, business or private individual) is registered to perform the activity. Informal sector employment is when the employer is not registered.</i> | <i>Formal sector employment is where the business, institution or private individual is registered in some way with the government or statutory bodies to perform the activity. Registration may involve collecting taxes (e.g., PAYE), making UIF contributions or having a business licence.</i> |
| | <i>Informal sector employment is where the business or private individual is not registered with government or any statutory body in any way.</i> |

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Other changes – Labour market status

- The LFS algorithm clearly distinguishes the strict labour market status from the broad one
- The QLFS algorithm **no longer** distinguishes the strict labour market status from the broad labour market status.
- Under both the strict and broad definitions of labour market status in LFS, the working-age population is divided into three groups, namely employed, unemployed and inactive. In contrast, in QLFS, the working-age population is divided into four groups, namely employed, unemployed, inactive and discouraged job seekers.

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Strict Labour Market Status, LFSs

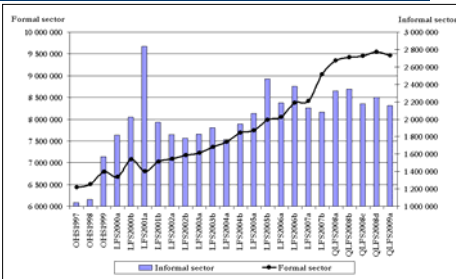


Broad Labour Market Status, LFSs



Labour Market Status, QLFSs

Other changes – Formal/Informal sector status



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Other changes – Newly derived variable: Unemployment status

- Five categories of the unemployed:
 - People who have lost their job (i.e., job loser)
 - Job leaver
 - New entrant
 - Re-entrant
 - Other – last worked more than 5 years ago

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Other changes – Newly derived variable: Under-employment status

- Two categories of the underemployed:
 - 1: Underemployed
 - 0: No, not underemployed
- If the employed's usual weekly work hours is less than 35 (regardless of the number of jobs he/she has) and if he/she would have liked to work more hours than he/she actually has worked, providing the extra hours would be paid and if he/she is available to start this extra work in the next four weeks, then he/she is defined as under-employed.

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Other changes – Newly derived variable: Under-employment status

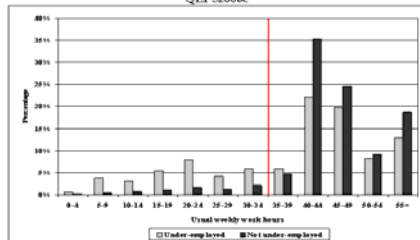
- However, when the under-employed are analyzed in greater detail, it is found that only approximately one-third of them usually work less than 35 hours per week in each of the first three QLFSs, but one expects this proportion to be 100% under the definition as explained in the QLFS metadata.

| | Under-employed? | | |
|-----------|-------------------|--------------------|---------------------|
| | Yes | No | All employed |
| QLFS2008a | 2 372 113 (17.4%) | 11 264 882 (82.6%) | 13 636 995 (100.0%) |
| QLFS2008b | 2 095 628 (15.2%) | 11 653 664 (84.8%) | 13 749 292 (100.0%) |
| QLFS2008c | 2 017 362 (14.8%) | 11 651 168 (85.2%) | 13 668 530 (100.0%) |
| QLFS2008d | 618 922 (4.5%) | 13 242 900 (95.5%) | 13 861 822 (100.0%) |

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Other changes – Newly derived variable: Under-employment status

Usual weekly work hours of the employed by underemployment status, QLFS2008c



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Other changes – Newly derived variable: Under-employment status

Underemployment status (Correcting the mistakes in the first three QLFSs)

| | Under-employed? | | |
|-----------|-----------------|--------------------|---------------------|
| | Yes | No | All employed |
| QLFS2008a | 649 619 (4.8%) | 12 987 376 (95.2%) | 13 636 995 (100.0%) |
| QLFS2008b | 608 876 (4.4%) | 13 140 412 (95.6%) | 13 749 288 (100.0%) |
| QLFS2008c | 626 163 (4.6%) | 13 042 367 (95.4%) | 13 668 530 (100.0%) |
| QLFS2008d | 618 922 (4.5%) | 13 242 900 (95.5%) | 13 861 822 (100.0%) |

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Conclusion

- QLFS: New methodology to derive labour market status
- QLFS: No more clear distinction between strict and broad labour market status
 - It has become difficult to look at the *long-term trends* in LFPRs and unemployment rates under each definition (especially under the broad definition)
- QLFS: New methodology to distinguish formal sector workers from informal sector workers
- QLFS: Newly derived variables – unemployment status and under-employment status