

Gender and the South African Labour Market: Policy relevant research possibilities using South African tax data

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RESEARCH THAT MATTERS - STAKEHOLDER WORKSHOP

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Background to the Scoping Study

South Africa has a rich history of publicly available survey data, used extensively to study the labour market and its gendered dynamics.

SA has limited firm-level data, and in particular matched employee-employer data, contributing to gaps in the literature.

The availability of the tax data provides an opportunity to contribute to the literature

This scoping paper provides guidance on how the SARS tax data can be used to contribute to our knowledge on the experience of women in the labour market

Data

Background to the SARS tax data

SARS administrative tax data:

- Anonymised Company Income Tax (CIT)
- Value Added Tax (VAT)
- Customs
- IRP5 and individual tax assessment data

Eleven year panel: 2008-2018, although firm data lags

Each individual is linked across time to the formal sector firms that employ them

Background to the SARS tax data

Gender variable became available at the end of 2017:

Tax year	Missing	Female	Male	Total
2008	839 936	6 046 598	8 435 735	15 322 269
2009	439 752	6 461 279	8 725 662	15 626 693
2010	903 124	6 455 695	8 368 276	15 727 095
2011	775 966	6 743 647	8 784 780	16 304 393
2012	716 346	7 195 521	9 173 485	17 085 352
2013	734 608	7 224 912	9 269 647	17 229 167
2014	726 011	7 555 546	9 509 997	17 791 554
2015	743 791	7 985 558	9 708 359	18 437 708
2016	738 574	7 770 914	9 474 126	17 983 614
2017	877 804	8 765 575	9 902 777	19 537 156
2018	702 572	7 629 875	9 034 049	17 366 496

Source: Authors' own estimate based on the IRP5 data.

Background to the SARS tax data

Variables available:

- Individual: Gender, age, income, deductions, allowances, benefits, medical scheme contributions, and employment period information
- Firm: host of variables incl. firm size, profit, loss, capital, customs data, industry, sector, tax paid, revenue, location, etc.

Variables not available:

- Individual level data beyond the above
- LM state outside of formal emp.
- Hours/days worked

Pros:

- Large sample
- Regular collection
- Relatively reliable
- Less costly

Cons:

- No research methods guiding collection
- No meta data
- No clarity on data updates
- Only formally employed
- Not publically available

Literature

Fundamentals: gender, employment and wages

What we know:

- Quite a lot!
- Feminisation of the labour force (Casale, 2004)
- Worse employment outcomes for women (Leibbrandt et al. 2010)
- Gender wage gap (Burger & Yu, 2007, Casale & Posel, 2011; Muller, 2009; Ntuli, 2007), largest at the bottom of the distribution (Bhorat & Goga, 2013, Ntuli, 2007).
- Wittenberg (2017) shows QLFS typically underreports wage income at the top end (reluctance to disclose, top-earners missing in survey data; exclusion of benefits like pension and bonuses).

What the SARS data can tell us:

- Formal-sector wage gap: existing studies may underestimate formal sector wage gap. Large penalties to non-disclosure make the SARS data more accurate at the top end.
- Diaz-Bazan (2015) suggests combining survey and administrative data
- Incomes of self-employed may be underestimated in SARS data (Wittenberg 2017)
- Intensity of employment by gender: SARS data gives the proportion of the year which the individual is employed for

Worker flows

What we know:

- Handful of studies looking at worker flow, job flow and job churn
- Gender differentials in transitions out of the formal sector (Banerjee et al. 2008)
- Job creation and destruction using QES (Kerr et al. 2014) – 20% of total jobs in 12 months
- Worker flows and job churn using SARS data (Kerr et al., 2018). High but considerable heterogeneity - no gender variable available at this time.

What the SARS data can tell us:

- Evaluate work flows and related concepts by gender, this is yet to be done in SA.
- Job creation and destruction by firm
- Worker flows (hires + separations)
- Job churn (worker flows in excess of job reallocation)

Tenure, employment spells and wages

What we know:

- Very little
- International studies suggest +ve relationship between tenure and wages, with returns higher for men than for women (Ioakimidis, 2012; Munasinghe et al., 2008)
- In SA, Mckeever (2006) find employment spells in the formal sector are longer for men than for women, but data is from a small geo area and is from 1991.

What the SARS data can tell us:

- 10-year panel tracks workers moving in and out of formal LM over time
- Can evaluate tenure, employment spells and wages by gender
- Descriptive or econometric?
- We don't know where workers 'go' when exiting SARS data – Banajeree et al (2008) suggest workers transitioning in and out of formal employment are most likely to be moving into unemployment

Other demand-side factors

What we know:

- Not much
- Using SARS data: Wage premium associated with trading firms (Bhorat et al., 2017; Edwards et al. 2017; Matthee et al., 2017). No gender available at the time of the studies.
- SARS data: Individual effects more important than firm effects (Bhorat et al., 2017). No gender variable available at the time of study.

What the SARS data can tell us:

- Gender-disaggregated study of the relationship between trade and wages
- More generally: demand-side determinants of wages by gender (fixed effects?).

Summary

This paper has identified five primary areas with scope for further research on the gender dynamics of the formal South African labour market:

1. Worker flows and job churn
2. Tenure, employment spells and wages
3. Intensity of employment
4. The formal sector gender wage gap
5. Demand-side determinants of female employment and wages.

Conclusion

Administrative data has some advantages over survey data

SA has a strong repository of survey-data based supply-side analysis, but scarcity of firm-level data means limited analysis of demand-side factors affecting women in the labour market.

The SARS tax data is the first large-scale matched employer-employee panel dataset in South Africa.

Availability of SARS worker-firm panel creates a unique opportunity to contribute to the literature on the gender dynamics of the labour market in South Africa.

Note the limitations of the SARS data

Thank You

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