

Temporary Employment Services in South Africa: Assessing the Industry's Economic Contribution

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EXECUTIVE SUMMARY

Whilst post-Apartheid South Africa has witnessed steady albeit unspectacular economic growth, we remain an economy with extraordinarily high unemployment rates. Employment has however grown, at a similarly low rate to economic growth. The nature of employment growth has importantly though, adapted to the structural changes of the South African economy through utilising an ever-increasing employing number of temporary workers. Despite the growth in temporary employment services (TES), colloquially known as the “labour broker” sector, this sector has been thoroughly under-researched in South Africa.

The paper takes as its general focus, an assessment of the role played by the TES sector in contributing to employment and output growth in post-apartheid South Africa. We consider in turn the characteristics of TES workers and the potential welfare consequences of this type of employment. Data for most of the analysis is drawn from representative labour force surveys.

Data

TES employment is not easily identified using South African survey data. This is because national labour force and household survey data do not specifically list TES providers as a separate sector of choice in the questionnaire. This probably, in part, explains the dearth of research in this area. With some careful data work, we find that the sector is possible to capture – albeit in a far more statistically circuitous and complicated manner – when compared against other sectors. Ultimately, there is a case of ‘statistical hidden identity’ as the TES sector is coded explicitly within the financial and business services sector. We find the sub-category defined as ‘Business Services Not Elsewhere Classified’ is dominated by labour recruitment, activities of employment agencies and hiring out of workers amongst other activities that are part of this sector to a lesser extent. The paper therefore uses ‘Business Activities NEC’ as a proxy for the TES industry category.

Is it notable that the majority of jobs that have been created within the finance and business sector since 1995 have been in the ‘Business Services Not Elsewhere Classified’ sub-category. Specifically, the data indicates that over the 1995-2014 period 66% of all the jobs

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created within Financial & Business Services were created in this 'Business NEC' or 'Other' sub-sector amounting to around 1.3 million of 2 million jobs created since 1995 within the finance and business sector.

Aggregate and Sectoral Employment Trends

Although there has been an expansion in aggregate employment, the bulk of this improvement was reserved for people with higher levels of education as the labour force consists of a large contingent of less-educated, new labour market entrants with minimal levels of skills and experience suited for work. As such, economic gains have been uneven perpetuating high levels of inequality. On the face of it TES however, appear to have absorbed a lower skill set of workers and thus provides a potentially interesting case study of a sector whose employment expansion is explicitly focused on semi-and unskilled workers. To better understand this, section two explores the nature of TES employment growth in the context of broad sectoral employment growth.

Between 1995 and 2014, the structure of the economy has resulted in employment taking on a very specific trend. The tertiary sectors accounted for the highest share of employment created since democracy, at 71.7 percent in 2014, followed by the secondary sectors (20.8 percent). The primary sectors employed only 7.5 percent of workers in that year. From this, it is clear that employment growth in the post-apartheid era has been unevenly distributed across the various sectors of the economy, with most of the growth concentrated in the tertiary sector. Crucially, we find that of the 5.6 million net new jobs created since 1995 in South Africa, close to 5 million of these were in the tertiary sectors.

Considered at a sector level, our results suggest that aggregate employment growth in post-apartheid South Africa has been driven by the Financial and Business Services sector on the one hand, and the Wholesale and Retail Trade sector on the other hand. If we take the Business Activities N.E.C/Other category to be representative of TES or labour broking employment, it is worth noting that annual average employment growth of employment within this sub-sector at 8.7 percent exceeded Finance and Business services sector employment growth, the national employment growth rate and indeed the growth of every single other main sector of the economy. Wholesale and Retail, wherein the informal sector is dominant, has thus been also been a key job generator within the domestic economy. The data shows that these two main sectors alone accounted for close to 3 million new jobs created in South Africa over the 19-year period between 1995 and 2014, 25 percent of which were from the TES sub-sector. In terms of employment created over the period 1994-2001, the TES sector alone accounted about 14 percent of all jobs created in the South African economy in this period. It is evident that the Business Services N.E.C sub-sector accounted for a significant share in total employment growth since 1995 and is considered to be a key driver of job creation in the South African labour market in the post-apartheid period.

Characteristics of TES workers

The perception generally, is that labour brokers employ low skilled workers who are then employed under poor working conditions without an employment contract. This however, has not been tested using national survey data and we examine this further in the report. Section three uses various sources of data to examine the existing perceptions of this industry.

We find that more than half of the 784 434 workers employed in the TES sub-sector in 2014 were sales and service workers, while about 26 percent were elementary workers. This result suggests that semi-skilled sales and services workers are over-represented in the TES sector and elementary workers under-represented when compared with the occupational breakdown at a national level. The notion that this sector is dominated by unskilled workers is therefore not borne out in the data.

South Africa's exceptionally high levels of youth unemployment, reaching 36 percent in 2014, suggests that the labour market is excluding a large cohort of young people. The data suggests that the TES sector is absorbing young people at a far greater rate than the Finance and Business sector as well as the overall labour market. Put differently, this sector is disproportionately employing more young people than the national economy or other sectors. It is notable that 70 percent of young people employed by TES are absorbed either in to medium or low skilled occupations. The bulk of TES workers thus have either secondary education with, or without, a matric. This qualification and occupation data for young people suggests that the sector is a vital first port of entry into the labour market for young people, with either incomplete schooling or a Matric. For a society where youth unemployment rates regularly exceed 50 percent, this role played by the sector in absorbing young people into productive employment is fundamentally important to both the labour market and the economy as a whole.

Another commonly held view of labour broking services is that temporary workers (indirectly employed) are unlikely to be made permanent workers and as such, are vulnerable to fluctuating and inconsistent earnings, and other forms of vulnerability. Labour force data suggests that around 60 percent of TES employees are permanent and 22 percent on a limited contract. Amongst non-TES employment, we see an increase in limited contracts whilst permanent contracts have stayed at relatively the same proportion since 2008, and 3 percent higher than those in TES employment. The increase in limited contracts for non-TES employment in post-recession South Africa suggests that the nature of labour demand in this period was more risk averse given the volatility of the business environment. As such, both non-TES and TES employment saw an increase in limited contracts but the majority of employment remained permanent and as such, the data suggests that the majority of workers were afforded some protection through their employment contract.

Public discourse suggests that the TES industry is dominated by large firms. Inspection of various data sources, will suggest that the TES industry is split into two distinct types of firms: A few large corporate players and number of small and medium sized firms with 20-60 full time staff members. We find that the number of firms with under 20 workers dominate the industry. Small business is a key employer in South Africa and the National Development Plan has pushed support for small business as part of its agenda to facilitate employment creation.

TES and Household Welfare

In section four of the paper we examine the impact and contribution of the TES sector employment on household welfare. In order to understand the impact of TES on household poverty, we estimate whether the earnings received by a TES worker results in any significant change in the poverty status of households. The key conclusion drawn from this analysis is that at each of the poverty estimates, and the corresponding poverty lines, the removal of TES earnings results in more households being worse off either through an increasing poverty headcount or poverty gap ratio. It is estimated that as a result of the loss of TES earnings, between 280 000 and 362 000 more households would be below the poverty line.

Impending regulation through the Labour Relations Amendment Bill (2013) aims to curtail labour broking activities as well as to change the nature of the temporary employment relationship whereby the indirect employer becomes jointly or severally liable for the employee. We consider the potential employment losses that could result because of these amendments and how this would impact household welfare. We find that employment losses would result in sharply rising levels of household poverty. An important backdrop to this analysis is that it illustrates that this sector employs semi- and unskilled workers who are in households close to the poverty line. As a result TES earnings, have an indirect role in the welfare of their relevant households.

Contribution to the Economy

The TES sector has been useful to the South African economy in that it has allowed firms to adjust to the structural changes of the economy by adjusting their cost base and staffing needs in response to the business cycle. TES are used across a wide range of sectors including clothing and textile industry, the chemical sector, the health sector and local government and essentially, have allowed these sectors to expand their employment base. Further, TES employment has been concentrated in provincial economic hubs such as Gauteng, Western Cape and KwaZulu Natal suggestive of their role in the South African economy. Section five aims to quantify the contribution of TES to the economy.

The value of output in the Business Activities NEC/Other (or TES) sub-sector is not easily accessible through public data but given that total employment number have been estimated, we use an output employment elasticity² to backward engineer an estimate of the impact of employment through TES on output. Using the most recent and robust estimated employment elasticity for South Africa, it follows that a 6.9 percent increase in employment results in a 8.85% contribution to output or GDP. TES employment therefore contributed R256 157 million to GDP in 2013. To put this into context, the TES contribution was greater than that of Agriculture (2.1 percent), Utilities (2.7 percent) and Construction (3.5 percent) in 2013.

We examine the interaction of growth and employment further and find that the finance and business sector was one of the few sectors that experienced labour neutral growth suggesting that gross value add and employment grew at a similar rate. Whilst it is not possible to distinguish value add from the TES sub-sector as opposed to the Finance and Business Services sector, given the notable growth of both employment and output it is very probable that value add too is driven by the TES sub-sector. Indeed, employment growth of 8.7 percent for the 1995 to 2014 period, was higher than employment growth observed for all sectors. Put simply, the data suggests that apart possibly from the Community Services sector, the TES industry was over this period, the only labour-intensive sector in the South African economy.

The relative lack of research on this TES industry has left the public as well as policy makers under-informed about the characteristics as well as economic and welfare contribution of TES employment to the South African economy. The evidence found in terms of employment trends and characteristics in the TES sector, would suggest that the sector firstly has been the single highest creator of jobs in the economy – going at a rate faster than all other main sectors of the economy. Secondly, the majority of these jobs are concentrated in semi-skilled, service-orientated occupations, so countering the perception of the sector being an unskilled-intensive employer. Thirdly, and perhaps most crucially, the industry is very clearly biased towards providing employment for young people and in particular ensuring that a significant share of these workers move into permanent positions. Fourthly, the fact that this channel of employment is also provided through a fair number of small businesses reinforces the importance of this sector to employment creation in South Africa since 1994. Fifthly, we've found a significant number of households would be worse off if TES earnings are removed and therefore the industry contributes to household welfare. Finally, the flexible nature of employment has contributed to expansion of industry, tax income to the fiscus and through this, economic growth. These are key considerations for policy makers to take forward when engaging in the debate around the labour broking industry.

(End of Executive Summary)

² We use the elasticity of 0.78 from the 2012 Kemp study. See Table A3 in the Appendix.

Temporary Employment Services in South Africa: Assessing the Industry's Economic Contribution

1. Introduction

Despite experiencing one of the longest periods of uninterrupted economic growth since the 1960s, South Africa in the democratic era faces possibly one of its most intractable policy challenges – namely that of an extraordinarily high rate of unemployment. By any reasonable assumption of country comparisons then, South Africa possesses one of the highest ILO-defined unemployment rates in the world. In this upper middle income country, on average over a 20-year period, the data show that one out of every four members of the labour force is jobless. In the period since 1994 though, employment has steadily increased at a rate consistent with economic growth. Of particular importance however, and the focus of this paper here, is to try to understand the nature of employment changes and their impact in one particular sector, namely the temporary employment services (TES) industry. The sector, colloquially known in South Africa as the 'labour broker' sector, has grown rapidly and is now a key feature of the South African economy and its labour market.

Yet surprisingly little academic research has been undertaken on the sector, be it simple bean-counting exercises or more serious modelling work. We attempt, in this paper, to hopefully go some way towards closing this gap. The paper takes as its general focus, an assessment of the role played by the TES sector in contributing to employment and output growth in post-apartheid South Africa. We go on to consider the characteristics of TES workers and the potential welfare consequences of this type of employment. Data for most of the analysis is drawn from representative labour force surveys.

The paper is structured as follows. Section 2 presents aggregate and sectoral employment trends relative to the TES sector for South Africa over the past nineteen years. Of particular interest is the growth of the tertiary sector through the Finance and Business service sector that encompasses TES provider employment. Section 3 examines the characteristics of TES workers by occupation, age and the nature of contracts. Section 3 also uses various data sources to examine TES firm size and whether there is a small business bias. Section 4 considers the effect that TES employment has on household welfare and poverty status including the potential welfare effect given potential employment loss in the sector. Section 5 examines the contribution of TES employment to GDP in comparison with other sectors of employment.

2. Aggregate Employment Trends: The TES Sector in Context

Table 1 shows the broad trends in the South African labour force, employment and unemployment between 1995 and 2014. Over the past 19 years, there has seen a considerable increase in employment from 9.6 million in 1995 to 15.1 million in 2014. Employment growth increased significantly over the period at an average rate of 2.4 percent per annum. The data in Table 1 suggests that in the first nineteen years of post-apartheid South Africa, the economy generated approximately 5.4 million jobs. Over the same period though, some 8.5 million individuals entered the labour market, in search of jobs. The consequence of the latter was an increase in the number of narrowly defined unemployed by 3 million resulting in an unemployment rate of 25.2 percent. While this rate has declined since 2001 where the unemployment rate stood at 29.4 percent, it has increased significantly since 1995 where the unemployment rate was 17.6 percent.

Table 1: The South African Labour Force, 1995 to 2014 (thousands)

Category	1995	2001	2014Q1	Change		AAG
	'000s	'000s	'000s	'000s	% Change	1995-2014 % Change
Official definition estimates						
Labour Force	11 676	15 836	20 153	8 477	72.6	2.9
Employment	9 645	11 181	15 084	5 439	56.4	2.4
Unemployment	2 032	4 655	5 069	3 037	149.5	4.9
Unemployment rate	17.6%	29.4%	25.2%			

Source: OHS 1995; LFS September 2001; QLFS Quarter 1, 2014 (Statistics South Africa).

Notes: 1. 1995 data is reweighted according to the 1996 Census. Data in 2000-2007 has been re-weighted according to the 2001 Census, while data from 2008 has been re-weighted according to the 2011 Census.

2. The change in definitions of the broad unemployment rate renders the 2014 estimate incomparable with those of 1995 and 2001.

Persistently high levels of unemployment in the post-apartheid period have meant that the gains from economic growth have been unevenly distributed, so generating higher levels of income inequality (Bhorat & Van der Westhuizen, 2013; Woolard & Leibbrandt, 2014). Although there has been an expansion in aggregate employment, the bulk of this improvement was reserved for people with higher levels of education as the labour force consists of a large contingent of less-educated, new labour market entrants with minimal levels of skills and experience suited for work. On the face of it the TES however, appears to have absorbed a lower skill set of workers and thus provides a potentially interesting case study of a sector whose employment expansion is explicitly focused on semi-and unskilled workers. To better understand this, we explore the nature of TES employment growth in the context of broad sectoral employment growth.

2.1. The Advent of Temporary Employment Service Providers

The rise of labour broking, or the temporary services employment (TES) industry as it is known globally has become the fulcrum around which a series of debates on decent work and labour regulation in South Africa have been pursued. Benjamin (2009) cites that the number of TES agencies registered with the Services Sector Education Training Authority (SSETA) alone rose from 1 076 in 2000 to 3 140 in 2006, while the National Association of Bargaining Councils (NABC) estimated that almost 1 million workers were employed through labour brokers in 2010 (SABPP, 2012). In many senses then, these debates may be strangely correlated with the rapid rise and prevalence of the industry.

It is not possible to directly ascertain the number of workers employed through labour brokers in the South African economy, since the nationally representative household surveys do not probe whether workers are employed through labour brokers. We attempt however, through using these surveys, a nuanced approach to examine the advent of labour broking.

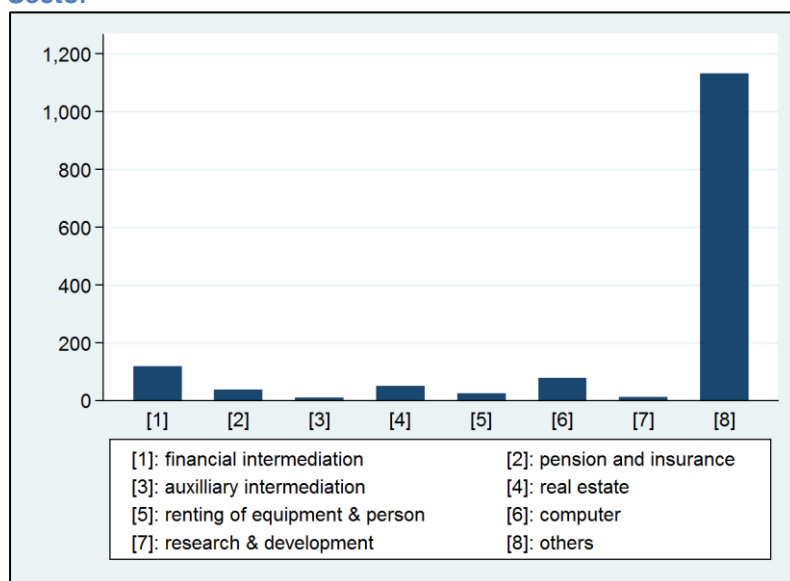
2.2.A Case of Statistical Hidden Identity

The difficulty with the labour force and household survey data was that TES providers were not listed as a separate sector of choice in the questionnaire. However, it turns out, upon careful examination, that the sector is possible to capture – albeit in a far more statistically circuitous and complicated manner – when compared against other sectors.

Essentially the case of statistical hidden identity in the case of the TES sector lies explicitly with the financial and business services sector.

Figure 1 below presents the change in employment, in absolute terms, for those coded by sectors within financial and business services. The data suggests a key result: Of the total number of jobs created within this sector since 1995, the overwhelming majority of these have been in the sub-category defined simply as 'Business Services Not Elsewhere Classified'. Specifically, the data indicates that over the 1995-2014 period 66% of all the jobs created within Financial & Business Services were created in this 'Business NEC' or 'Other' sub-sector. Put differently, of the close to 2 million jobs generated in this sector, about 1.3 million emanated from the 'Other financial and business services'.

Figure 1: Change in Employment (1,000s), 1995-2014: Financial & Business Services, By Sub-Sector



Source: OHS 1995; QLFS Quarter 1, 2014 (Statistics South Africa).

Closer inspection of the Business Services N.E.C category reveals that it consists in the main of activities noted officially in the QLFS metadata as:

“labour recruitment and provision of staff; activities of employment agencies and recruiting organisations; hiring out of workers (labour broking activities; disinfecting and exterminating activities in buildings; Investigation and security activities; building and industrial plant activities; photographic activities; packaging activities; other business activities; credit rating agency activities; debt collecting; agency activities; stenographic, duplicating, addressing, mailing list or similar activities; other business activities”

We would argue here that despite the detailed list in this category, in the main the dominant forms of activity and therefore employment, has been within the employment agency, labour brokering and security services activities. Based on these estimates above then, this result would suggest that job growth within the Financial & Business Services main sector, has effectively been driven by the rapid rise in two nodes of economic activity – security services and labour brokers. This is critical, as it suggests on the one hand, that the high incidence of crime in South Africa has in fact resulted in a rapid employment expansion within the sub-sector providing crime prevention services. In addition, the rise in the use of employment agencies, for long noted in public debates in South Africa, is now powerfully evident in these official labour force statistics estimates. There would be two important caveats here. Firstly that clearly outside of employment agencies and security services, other activities within this sub-sector will have generated employment. Hence, the approximately 1.3 million jobs within this sub-sector would not all be representative of security workers and labour broker (or TES) employees. Secondly, given the fact that sector of employment is self-reported by individuals within the

survey, the growth in labour broker employment in particular may be an underestimate of the true growth in jobs within the labour broker sub-sector.³

In order to understand where employment is actually created within the Business Activities Not Elsewhere Classified (NEC) sector, the table below presents the changes in the three main occupation groups⁴ within this sector for the periods 1999 to 2014 and 2001 to 2014 in Table 2.⁵

Table 2: Change in Employment: Business Activities Not Elsewhere Classified (“Other”)

Year/Activity	1999	2001	2014	Average Annual Growth Rates	
				1999-2014	2001-2014
Business Activities NEC/Other	312 401	398 022	970 783	7.9	7.1
Selected Occupations					
Protective Services Workers NEC	147 165	169 360	419 176	7.2	7.2
Helpers, cleaners in offices, hotels, etc.	40 715	58 774	143 771	8.8	7.1
Farmhands and Labourers	131	0	55 710	49.7	

Source: OHS 1999: LFS September 2001; QLFS Quarter 1, 2014 (Statistics South Africa)

Protective Services Workers Not Elsewhere Classified⁶ accounted for the relatively largest share of the employed in all three years, at between 42 and 47 percent. Helpers and cleaners in establishments such as offices and hotels accounted for the second largest share, which is a reflection of the increase in the use of contract cleaning services over the period. Finally, in 2014, over 55 000 of the employed in this sub-sector were classified as Farmhands and Labourers, in contrast to zero in 2001 and only 131 in 1999. While the absolute number of these workers is small in 2014, the enormous growth rate can be seen as evidence of the increased number of labour broker workers employed as farm-hands and labourers.

2.3. Employment Trends by Main Sector

Given that it is now possible to empirically and robustly establish employment in the TES sector, this section goes on to examine labour broking employment relative to the remaining main sectors of the economy. This section considers the structure of the economy and its impact on the trends in employment between 1995 and 2014 more closely, taking into account the TES sector. Based on the discussion above, we assume ‘Business Activities NEC’ is a proxy for the TES industry category. Table

³ For example, one would expect that a respondent employed through an employment agency to work on a construction site, or on a mine, would note his or her sector of employment to the fieldworker, as Construction or Mining – rather than the Financial & Business Services.

⁴ These are the main occupations in the first quarter of 2014.

⁵ The detailed occupations were not recorded in the 1995 OHS.

⁶ The category specifically includes security guards, security patrolmen, security patrolwomen, bodyguards, coastguards, beach guards, lifeguards, beach patrolmen, beach patrolwomen, traffic wardens, game wardens, bird sanctuary wardens, wildlife wardens, taxi-guards, traffic coordinators.

3 examines the sectoral distribution of employment change in South Africa during the period. Tertiary sectors accounted for the highest share of employment created since democracy, at 71.7 percent in 2014, followed by the secondary sectors (20.8 percent). The primary sectors employed only 7.5 percent of workers in that year. It is clear from the results below that employment growth in the post-apartheid era has been unevenly distributed across the various sectors of the economy, with most of the growth concentrated in the tertiary sector.

A particularly worrying result has been the significant reduction in employment in the economy's primary sectors. Collectively then, Mining and Agriculture have shed 561 000 jobs over a 19-year period. For two sectors which are both export oriented and unskilled-intensive, this is a startling result. It should be noted that this large erosion of jobs took place amidst both a global economic growth boom and fairly positive commodity price movements. One factor contributing to the sharp decline in agricultural employment was the promulgations in March 2004, of a minimum wage for the sector (Bhorat, Kanbur and Stanwix, 2011).

Table 3: Sectoral Distribution of Employment Change

Year/ Sector	1995		2001		2014Q1		AAG 1995 to 2014	Change	
	'000s	Share	'000s	Share	'000s	Share		'000s	Share
Primary	1 696	17.9	1 732	15.5	1 135	7.5	-2.1	-561	-10.0
Agriculture	1 247	13.2	1 178	10.5	710	4.7	-2.9	-537	-9.5
Mining	449	4.8	554	5.0	424	2.8	-0.3	-25	-0.4
Secondary	1 988	21.0	2 348	21.0	3 138	20.8	2.4	1 150	20.4
Manufacturing	1 452	15.4	1 620	14.5	1 808	12.0	1.2	356	6.3
Utilities	86	0.9	94	0.8	130	0.9	2.2	44	0.8
Construction	449	4.8	634	5.7	1 200	8.0	5.3	751	13.4
Tertiary	5 774	61.0	7 058	63.1	10 808	71.7	3.4	5 034	89.5
Retail	1 684	17.8	2 454	22.0	3 195	21.2	3.4	1 511	26.9
Transport	483	5.1	546	4.9	897	5.9	3.3	414	7.4
Finance	592	6.3	1 035	9.3	2 050	13.6	6.8	1 458	25.9
CSP	2 205	23.3	1 989	17.8	3 433	22.8	2.4	1 228	21.8
Private Household	809	8.6	1 034	9.2	1 234	8.2	2.2	425	7.6
Total	9 458	100	11 179	100	15 081	100.0	2.5	5 623	100.0
TES	199	2.1%	398	2.6%	970	6.4%	8.7	771	13.7

Source: OHS 1995; LFS September 2001; QLFS Quarter 1, 2014 (Statistics South Africa).

Note: AAG is the average annual growth rate, estimated as the average of the growth rates from 1995 to 2014. Other and unspecified categories are not shown here.

The aggregate employment numbers in the table are different to the values in Table 1 because Table 2 does not include the employed in other or unspecified industry category.

The numbers provided in the '1995' column for TES are actually for 1996 as it was not possible to disaggregate TES employment in 1995.

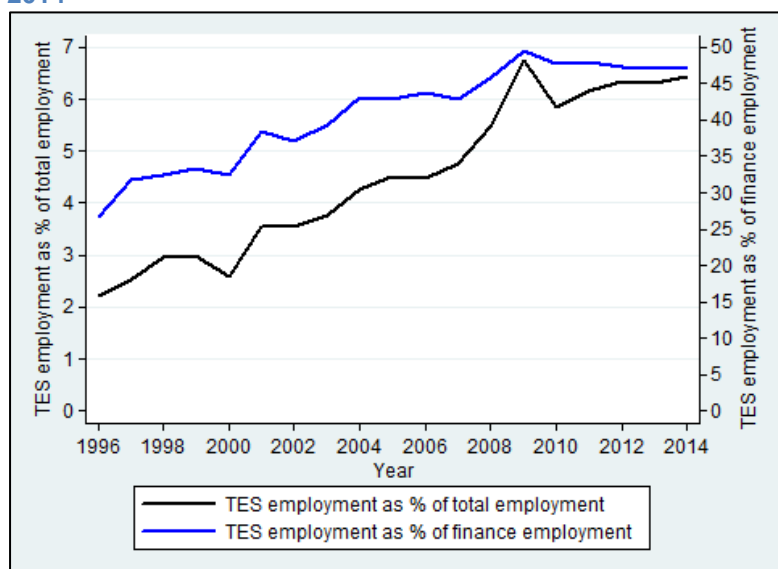
The secondary sectors also experienced employment expansion over the 19-year period, with Manufacturing and Construction adding about 356 000 and 751 000 jobs respectively, whilst employment in the Utilities sector, which is the smallest sector, barely changed. The poor performance of Manufacturing though reflects a wider concern around both the lost opportunities in Manufacturing since the 1960s (Rodrik, 2008) and the sector's ongoing lack of dynamism and competitiveness in the post-apartheid period.

Employment in the tertiary sector grew by 5 million, representing 89 percent of the increase in employment over the period representing the highest relative growth amongst all the sectors (as shown in Table A1 of the Appendix). This is a crucial result: It suggests that of the 5.6 million net new jobs created since 1995 in South Africa, close to 5 million of these were in the tertiary sectors. In particular, our results suggest that aggregate employment growth in post-apartheid South Africa has been driven by the Financial and Business Services sector on the one hand, and the Wholesale and Retail Trade sector on the other hand. If we take the Business Activities N.E.C/Other category to be representative of TES or labour broking employment, it is worth noting that annual average employment growth of employment within this sub-sector at 8.7 percent exceeded Finance and Business services sector employment growth, the national employment growth rate and indeed the growth of every single other main sector of the economy. The increased share of TES employment in the past decade, which has more than doubled since 2001, is strongly indicative also, of the rapid growth of this sector. Wholesale and Retail, wherein the informal sector is dominant, has thus been also been a key job generator within the domestic economy. The data shows that these two main sectors alone accounted for close to 3 million new jobs created in South Africa over the 19-year period between 1995 and 2014, 771 000 or 25 percent of which were from the the TES sub-sector. Put differently, half of the employment created within the Financial & Business Services sector was from the the TES sub-sector.

To contextualise the rapid growth of TES, we consider growth of this subsector relative to the Finance and Business Servies sector and overall employment growth in the figure below. TES employment as a percentage of finance industry employment increased rapidly from 26.64% in 1996 to 47.36% in 2014. As a proportion of total employment, TES employment nearly trebled by increasing from 2.22% to 6.44% during the same period.

Whilst there was a sharp reduction in TES employment following the recession in 2008, the long-run upward trajectory and growth of this industry is notable. The levelling off of this growth rate, since 2010 may be representative of two possible factors: First, that the recession has had a general attenuating impact on employment. Second, though, pending legislation to ban or curtail TES employment may also have influenced this tapering off of employment in the sector.

Figure 2: TES employment as proportion of total employment and finance employment, 1996-2014



Source: OHS 1996-1999: LFS September 2001-2007; QLFS Quarter 4 2008-2013, QLFS Quarter 1 2014 (Statistics South Africa)

From the data presented thus far, it is evident that employment growth in TES has been far more rapid than that of all broad industry categories, and hence it accounts for an increasing share of finance employment, as well as an increasing share of total employment. Whilst the contribution to employment creation has certainly been significant in the past two decades, it is also important to examine the characteristics of those employed in TES, to fully assess the value of this sector to the South African economy.

3. Employment Within the TES Sector

The perception generally, is that labour brokers employ low skilled workers who are then employed under poor working conditions without an employment contract. This however, has not been tested using national survey data which we consider in the section that follows.

3.1. Occupational Trends Within the TES Sector

The table below compares the occupational composition of the formally employed in the Business Services N.E.C. subsector with the occupational composition of aggregate formal employment (excluding Business Services N.E.C.). In the subsector which includes TES, just under 50 percent of workers were classified as sales and services workers, with almost 26 percent classified as elementary workers. Clerical workers accounted for just ten percent of employment in this sub-sector. In total, these three occupations represented around 80% percent of total employment recorded in the Business Services N.E.C category within the Financial and Business Services Sector. Unskilled workers and service-related occupations would therefore

seem to dominate the employment distribution within the labour brokering sub-sector.

The occupational composition of this subsector differed significantly from the occupational composition of aggregate employment in the same year. Sales and services workers only accounted for approximately 13 percent of total formal employment (excluding TES), while elementary workers accounted for around a fifth of the remainder of the formally employed when TES are excluded. The share of services and sales workers in TES is almost four times greater than their share in total formal employment whilst the share of elementary workers in formal employment is almost three-quarters of the share of elementary workers in TES. The evidence therefore suggests that sales and service workers are over-represented in the Business Services N.E.C category (or TES) within Financial and Business Services Sector in comparison to the aggregate level and, in addition, the elementary workers are slightly under-represented in comparison with their share in aggregate formal employment (exclusive of TES).

Table 4: TES and Formal Sector Employment: A Comparison of Occupational Distributions

	Other Formal Employment		TES (Formal Employment)		Ratio of Share (%): TES/Other
	Number	Share (%)	Number	Share (%)	
Managers	792 534	8.0	35 005	4.1	0.51
Professionals	2 127 612	21.5	75 780	8.9	0.41
Clerical Workers	1 399 841	14.2	87 847	10.4	0.73
Service and Sales Workers	1 263 910	12.8	390 433	46.1	3.60
Agr. & Fishing Workers	26 500	0.3	404	0.0	0.00
Craft & Trade Workers	1 160 077	11.7	15 277	1.8	0.15
Operators & Assemblers	1 042 171	10.5	24 339	2.9	0.28
Elementary Workers	2 076 654	21.0	218 209	25.8	1.23
Total	9 889 299	100.0	847 294	100	1.00

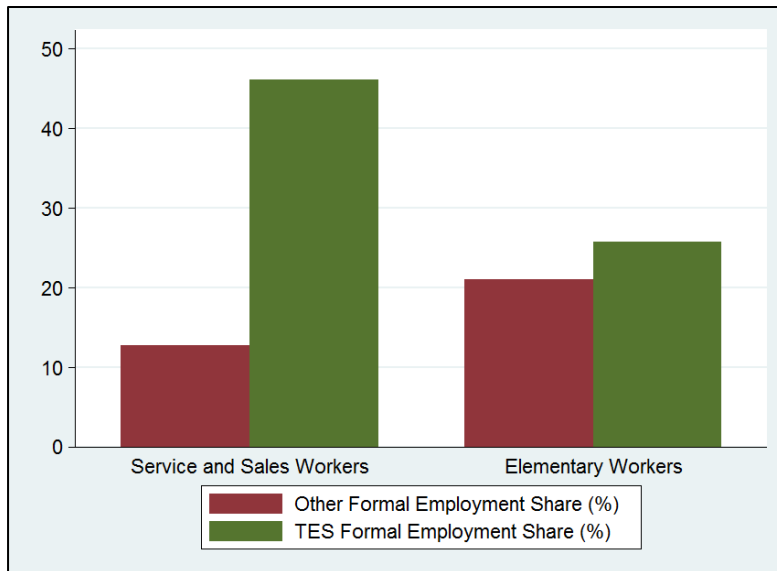
Source: QLFS 2014 Quarter 1, 2014 (Statistics South Africa, own calculations)

Notes: The ratio is based on the share of formal non-TES employment to TES employment.

There is a generic, almost dominant view that the most vulnerable workers in triangular employment relationships are those employed or supplied by unregistered labour brokers (also colloquially in South Africa known as the "bakkie brigade"). These workers would typically be unskilled and therefore classified as elementary workers in the labour force survey. The figure however below graphically presents the under-representation of elementary workers in the subsector including TES relative to services and sales workers. The proportion of services and sales workers is almost double that of the proportion of elementary workers in TES suggesting a skilled and semi-skilled bias amongst TES employers. This result would seem to suggest that one of the key characteristics of the TES sector is an over-representation of service and sales workers, relative to unskilled workers when

examining national shares of employment by occupation. The notion that the sector is dominated by unskilled, ‘bakkie brigade’ type of employment is therefore not statistically verifiable.

Figure 3: Share of Formal Employment and TES Sectors by Occupation



Source: QLFS 2014 Quarter 1, 2014 (Statistics South Africa, own calculations)

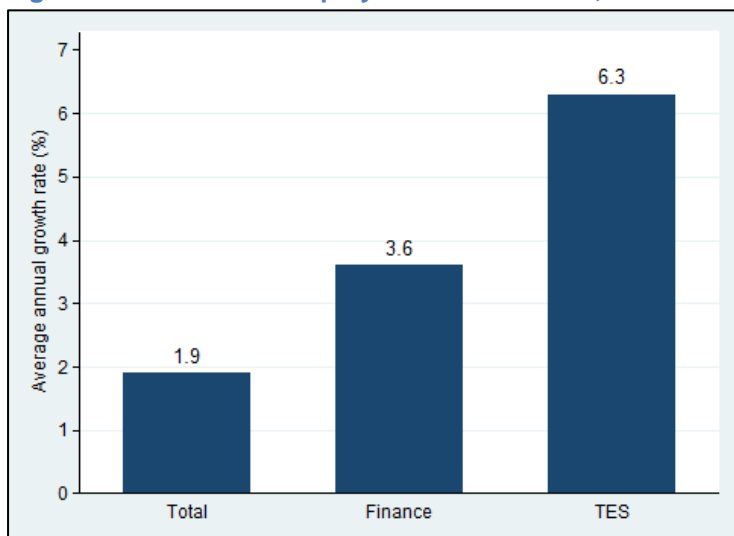
It is evident that the Business Services N.E.C sub-sector accounted for a significant share in total employment growth since 1995 and is considered to be a key driver of job creation in the South African labour market in the post-apartheid period. In addition, more than half of the 784 434 workers employed in this sub-sector in 2014 were sales and service workers, while about 26 percent were elementary workers. This result suggests that semi-skilled sales and services workers are over-represented in the TES sector and elementary workers under-represented in comparison with the occupational breakdown at a national level. To reiterate then, the notion that this sector is dominated by unskilled workers is therefore not borne out in the data.

3.2. TES Sector Employment by Age

South Africa’s exceptionally high levels of youth unemployment, reaching 36 percent in 2014, suggest that the labour market is excluding a large cohort of young people. There are at least in the first instance, two obvious reasons why this may be the case. First, inadequate quantity of education, together with the low quality of such education would render many young people unemployable. Second, the labour market does not have the capacity to absorb the sheer number of young people that are entering the labour market annually. The figure below suggests that the average growth of young people entering the labour market between the ages of 15 and 29 years, is 1.9 percent annually. In 2014, 15 percent of Finance and Business Services

sector employment was made up of young people whilst 7 percent of the TES sector is made up of youth (as shown in greater detail in Appendix A2.1 and A2.2).

Figure 4: Youth Total Employment: AAG Rates, 1996-2014



Source: OHS 1996 and QLFS Quarter 1 2014 (Statistics South Africa)

However, the TES sector has absorbed youth at a faster rate than Finance and Business Services. We find that the average annual growth rate of young people in TES employment between 1996 and 2014 is 6.3 percent compared to 3.6 percent of youth employment in the Finance and Business services sector and more than 3 times the total employment rate.

Examining youth employment in greater detail through a break down of occupations, we find that youth employed in services and sales through TES is around 20 percent greater than the youth employed in services and sales in other formal employment. However, broader formal employment employs 9 percent more young people in high skilled occupations through managers and professionals.

Table 5: TES and Formal Sector Employment, Youth by Occupation

	Other Formal Employment		TES (Formal Employment)		
	Number	Share (%)	Number	Share (%)	Ratio
Managers	110 565	4.55	3 305	1.55	33.45
Professionals	417 008	17.17	24 788	11.62	16.82
Clerical Workers	431 583	17.77	34 510	16.18	12.51
Service and Sales Workers	357 011	14.70	74 384	34.88	4.80
Agr. & Fishing Workers	5 196	0.21	0	0.00	N/A
Craft & Trade Workers	337 580	13.90	8 433	3.95	40.03
Operators & Assemblers	191 294	7.88	4 985	2.34	38.37
Elementary Workers	578 472	23.82	62 853	29.47	9.20
Total	2 428 709	100.00	213 258	100.00	11.39

Source: QLFS 2014 Quarter 1, 2014 (Statistics South Africa, own calculations)

Notes: The ratio is based on the share of formal non-TES employment to TES employment.

The TES industry does also employ a larger proportion of youth in elementary occupations than can be seen at an aggregate level. From this, it is evident that the bulk of TES employment for youth is made up of services and sales and elementary workers whereas the bulk of youth in formal employment are located in professionals, clerical workers and elementary occupations. If we exclude graduates employed in high skilled occupations, we see that medium-skilled young people employed in TES sector have a greater probability of being employed in services and sales than other formal employment that seems to have a bias towards clerical and craft workers.

From the data presented, it is very clear that the TES sector is absorbing young people at a far greater rate than the Finance and Business sector as well as the overall labour market. Put differently, this sector is disproportionately employing more young people than the national economy or other sectors. It is in many senses, a youth-based industry. It is notable that 70 percent of young people employed by TES are absorbed either in medium or low skilled occupations. The bulk of TES workers thus have either secondary education with, or without, a matric. This qualification and occupation data for young people then, suggested that the sector is a vital port of entry for young people, with incomplete schooling or a Matric, who are hoping to gain entry into the labour market. For a society where youth unemployment rates regularly exceed 50 percent, this role played by the sector in absorbing young people into productive employment is fundamentally important to both the labour market and the economy as a whole.

3.3. Are TES Workers Less Likely to be Permanent Employees?

A commonly held view of labour broking services is that temporary workers (indirectly employed) are unlikely to be made permanent workers and as such, are vulnerable to fluctuating and inconsistent earnings, and other forms of vulnerability. Data from the industry suggests that the temporary to permanent placements conversion rate between July 2013 and June 2014 was 19.9 percent. This means that 19.9 percent of TES workers who were initially employed on a temporary basis were permanently employed at June 2014. This result contrasts however, with the findings using the QLFS data, which show that more than half of the TES employees are actually permanently employed.

Table 6: TES and Formal Sector Employment, Duration of Contract

TES formal sector employees			
	Limited	Permanent	Unspecified
2008	15.9*	65.7*	18.4*
2009	19.5*	63.5	17.0*
2010	18.3*	64.5	17.3*
2011	20.5*	63.2	16.2*
2012	21.5*	59.9*	18.7*
2013	21.2*	59.0	19.9*
2014	22.2*	59.7	18.2*
Other (non-TES) formal sector employees			
	Limited	Permanent	Unspecified
2008	11.8	62.2	26.0
2009	11.4	64.5	24.1
2010	11.1	65.6	23.3
2011	12.1	65.2	22.7
2012	12.6	64.7	22.7
2013	14.7	61.9	23.4
2014	14.4	62.9	22.8

Source: QLFS Quarter 4 2008-2013, QLFS Quarter 1 2014 (Statistics South Africa)

* The proportion in the TES sector is significantly different from the proportion in the non-TES sector at $\alpha = 5\%$.

Whilst permanent workers in TES have declined by 6 percent and those on a limited contract have increased by 7 percent since 2008, around 60 percent of TES employees are still permanent and just 22 percent on a limited contract. Even amongst non-TES employment, we see an increase of around 3 percent for limited contracts whilst permanent contracts have stayed at relatively the same proportion since 2008, and at just 3 percent higher than TES employment. The increase in limited contracts for non-TES employment in post-recession South Africa suggests that the nature of employment demand was more temporary given the volatility of the business environment. As such, both non-TES and TES employment saw an increase in limited contracts but the majority of employment was still on a permanent contractual basis and as such, the majority of workers were afforded some protection through their employment contract. This section has used labour force data to characterise the TES subsector and has shown existing perceptions, are in fact not true if we consider what the data tells us. We also find that the bulk of TES workers are in medium skilled occupations and this is true overall, and for the youth employed by TES.

3.4. Employment and Firm Size

Public discourse suggests that the TES industry is dominated by large firms. Inspection of various data sources, will suggest that the TES industry is split into two distinct types of firms, a few large corporate players and a number of small and medium sized firms with 20-60 full time staff members (Singer, 2014). The African Professional Staffing Organisation (APSO) and Career Junction carried out a survey in 2010 with a sample of 197 recruitment companies from across South Africa. The

data collected by APSO suggests that 66.5 percent of the recruitment companies have under 10 employees. Further, this data suggests that of those surveyed, 90 percent of recruitment companies have less than 50 employees and 86 percent with up to 25 employees. This data seems to suggest that the bulk of this TES industry is made up of small and medium enterprises.

Table 7: Firm Size Distribution of TES Sector, 2010

Firm size	% Firms
0-10 Employees	66.50%
11-25 Employees	19.80%
26-50 Employees	4.10%
51-100 Employees	2.00%
More than 100 Employees	8.10%

Source: APSO Survey data

Whilst the sample above is small, this trend is further corroborated by data representing 611 labour recruitment firms that were levy paying members of the Services Seta in 2013 [SSETA has not confirmed use of their data]. Their member database suggests that 12 percent of labour recruitment firms employed between 1 and 19 employees while 58 percent of firms employed under 50 employees. This means that around 70 percent of the 611 levy paying members labour recruitment service firms were from small and micro business in 2013.

Table 8: SSETA Labour Recruitment Service Members, By Firm Size.

Firm size	Number of firms	Proportion
Micro (1-19)	73	11.95%
Small (20-49)	354	57.94%
Medium (50-150)	89	14.57%
Large (150+)	95	15.55%
Total	611	100.00%

Source: Services SETA member database for 2014

The National Development Plan (NDP), has expressed support for small business in the form of credit and market access as well as in terms of more business-friendly regulation. Since the primary focus of the NDP is employment creation, it has recognised the potential of small business to generate jobs. Furthermore, in 2014, a new ministry of Small Business Development was created which to some extent recognises the challenges of small business development in South Africa but also maintaining that that this is indeed a priority of the national government. In 2013, it was found that around half of South Africans found work in businesses with less than 10 people and around 80 percent found work in firms with less than 50 workers which suggesting that small business does generate employment. Whilst small and micro TES firms may not be a typical small business, the evidence presented thus far has shown that the industry has grown exponentially and employment along with it. It would at first glance appear to be counterintuitive in terms of South Africa's

development goals to implement regulation that suppresses small businesses in the TES industry.

Ultimately then, our overview of employment trends and characteristics in the TES sector, would suggest that the sector firstly has been the single highest creator of jobs in the economy – going at a rate faster than all other main sectors of the economy. Secondly, the majority of these jobs are concentrated in semi-skilled, service-orientated occupations, so countering the perception of the sector being an unskilled-intensive employer. Thirdly, and perhaps most crucially, the industry is very clearly biased towards providing employment for young people and in particular ensuring that a significant share of these workers move into permanent positions. Finally, the fact that this channel of employment is also provided through a fair number of small businesses reinforces the importance of this sector to employment creation in South Africa since 1994.

4. The Household Poverty Impact of the TES Sector

A crucial exercise in attempting to understand the impact and contribution of the TES sector is to examine the impact that these firms have on household welfare. Analytically, we consider to what extent TES earnings have resulted in household welfare gains. We also consider the potential welfare loss in the event of declining TES employment.

4.1. TES Earnings and Household Welfare

In order to understand the impact of TES on household poverty, we estimate whether the earnings received by a TES worker results in any significant change in the poverty status of households. In order to estimate this we use the Labour Market Dynamics 2012 (LMD) data on industry category and earnings of the employed. However, questions on non-wage income and total household income are not asked in any labour surveys, including the LMD survey. Hence, total household income is estimated by adding wage income to child grant income and old-age grant income.⁷

The most commonly used poverty measures are those proposed by Foster, Greer and Thorbecke (1984)⁸. For the purpose of this analysis, we used the Foster-Greer-

⁷ These two amounts are proxied by using the following assumptions:

- Individuals aged 0-17 years all receive child grants, and the monthly amount is R280 (according to the 2012/2013 Budget Review).
- Males aged 65+ years and females aged 60+ years all receive old-age pension, with a maximum amount of R1200 per month (according to the 2012/2013 Budget Review).

⁸ The FGT is as follows:

$$P_{\alpha} = \frac{1}{n} \sum_{i=1}^q \left(\frac{z - y_i}{z} \right)^{\alpha} \Big| (y_i \leq z)$$

Thorbecke (FGT) class of poverty estimates including the poverty headcount ratio, poverty gap ratio and squared poverty gap ratio. First, we identify the households where TES earnings are available and then define the sample as ‘TES households’ in order to examine their current poverty status in the three poverty lines proposed by Woolard and Leibbrandt (2006). To examine the poverty-reducing impact of the sector, we simulate an impact on household poverty, if such employment (or earnings) was removed from the household. The table below presents the estimated poverty headcount ratio and poverty gap ratios, before and after TES earnings of households were removed at three poverty lines. The key conclusion drawn from the table below is that at each of the poverty estimates, and the corresponding poverty lines, the removal of TES earnings results in more households being worse off either through an increasing poverty headcount or poverty gap ratio.

Table 9: Household Poverty Increasing Impact of TES Worker Removal

Type of Household	Poverty headcount ratio	Poverty gap ratio	Squared poverty gap ratio
Poverty line: R2 532[#]			
TES worker households	0.3547	0.1716	0.1091
TES worker households - exclusion	0.3795	0.1883	0.1216
Difference	-0.0248	-0.0167	-0.0125
Poverty line: R3 864[#]			
TES worker households	0.4798	0.2578	0.1720
TES worker households - exclusion	0.5032	0.2771	0.1879
Difference	-0.0234	-0.0193	-0.0159
Poverty line: R7 116[#]			
TES worker households	0.6389	0.3997	0.2918
TES worker households - exclusion	0.6581	0.42	0.3107
Difference	-0.0192	-0.0203	-0.0189

Source: LMD 2012 (Statistics South Africa, own calculations)

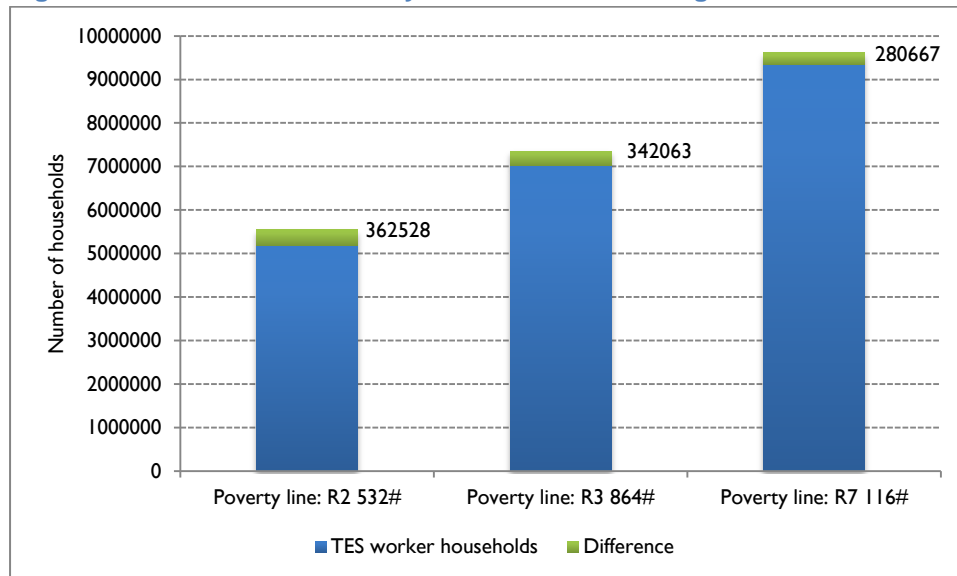
[#] Per capita per annum in 2000 prices.

There are approximately between 5 and 9 million households in the economy, depending on definition, living below the poverty line. For households where TES workers reside, our data suggests that at the lowest poverty line (R2 532), approximately 35.5 percent of these households are poor. This increases to 63.9 percent at the highest poverty line (R7 116). In turn though, our estimates show that without such earnings from the TES sector, the first-round poverty-reducing impact would see household poverty levels increasing to somewhere from 38.0 percent to 65.8 percent, depending on the poverty line used. Put differently, without the

P_α = measure of poverty; q = number of poor people; n = total number of people; z = poverty line
and y_i = income of the i -th person in the population

operation of the sector, as an approximation of first-round effects, between 280 067 and 362 528 more households would be in poverty, as seen in the figure below.

Figure 5: Households in Poverty Increase: TES Earnings Removal



Source: LMD 2012 (Statistics South Africa, own calculations)

Notes: The 'Difference' refers to the increased number of households that would be below the poverty line if TES earnings were removed from households.

Per capita per annum in 2000 prices.

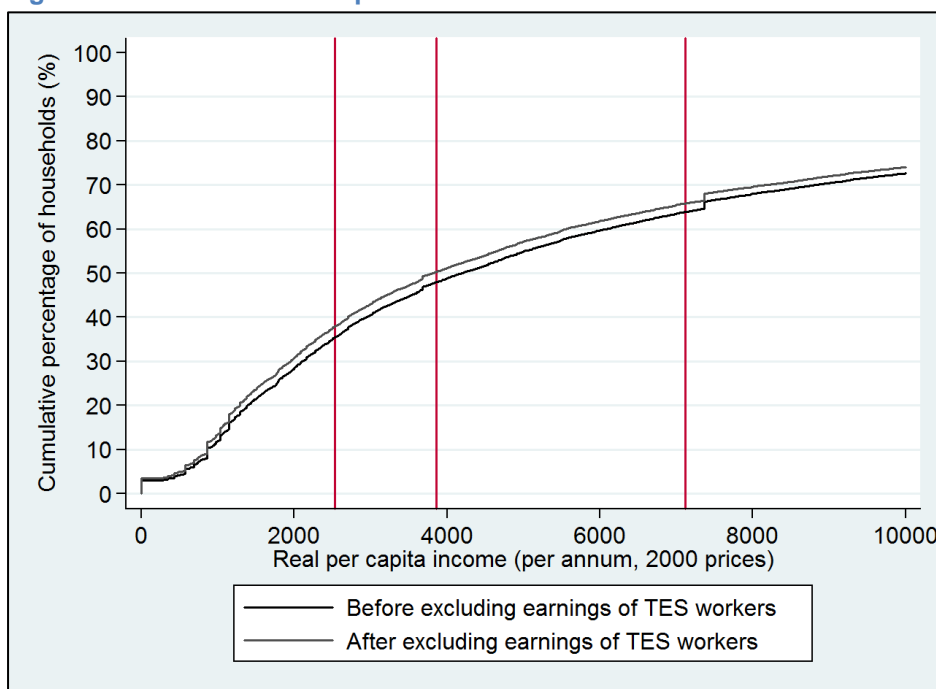
To contextualise this, the loss in earnings for TES households results in a 7 percent increase in household poverty at the R2532 poverty line; a 5 percent increase at the R3 864 poverty line and a 3 percent increase at the R7 116 poverty line.

Relative poverty, as measured by the poverty gap, estimates the depth of poverty by estimating on average how far the poor are from the poverty line. The squared poverty gap similarly measures the severity of poverty gap and places more weight the further a person's observed income is below the poverty line. The poverty gap suggests households with TES earnings have a lower depth of poverty and are around 1-2 percent closer to the poverty line than those households without TES earnings, as shown in the table above. At the upper bound, the poverty gap declined by two percentage points to 40.0 percent for households with TES earnings. At the lower bound, the poverty gap declined by 1.7 percent to 17.1 percent for households with TES earnings. A similar pattern is observed for the squared poverty gap estimates where we also see a decline closer to 2.0 percent for households with TES earnings at the upper bound and those at the lower bound that experienced a change closer to 1.0 percent. Overall, these results suggest that the poorest households within which TES earnings are available experienced a marginally lower improvement than those households who were better off (at the upper bound poverty line). However, the difference between improvement at the upper bound and lower

bound was generally less than 1 percent. Ultimately, the poverty gap and squared poverty gap ratio suggest that TES earnings reduce the severity of poverty.

The cumulative density functions measure the cumulative percentage of households over the income distribution when TES earnings are included and then subsequently excluded from main earnings. Examining this over the income distribution (up to ZAR 10 000) allows us to consider whether the above findings, that households are better off when TES earnings are included, is isolated to a specific level of income or chosen set of poverty lines. The figure indeed indicates that across the distribution, fewer households are found at lower levels of income before TES earnings are excluded from main earnings.

Figure 6: Household Per Capita Income: With and Without TES Workers



Source: LMD 2012 (Statistics South Africa, own calculations)

Specifically at all poverty lines, when TES earnings are excluded, the proportion of households below each of the three poverty lines is greater than when TES earnings are included. Ultimately, the evidence suggests then that TES earnings play a role in household poverty reduction in the economy.

4.2. TES Employment Loss and Household Welfare

The Labour Relations Amendment Act was passed in the second half 2014 and curtails labour broking but stops short of an outright ban. The Act has resulted in the TES sector becoming far more regulated where the client or indirect employer is jointly and severally liable for the employee. In addition there are further restrictions on the utilisation of Temporary Employment Services. This has a number of implications for businesses wanting to size up or down on a project basis or in response to the business climate.

In turn, the new legislation may create a disincentive for employers previously making use of TES for the purpose of flexible employment. The importance of flexible employment arrangements have been recognised elsewhere including by the ILO and in 2008 the European Union, in collaboration with the confederation of trade unions across Europe, legitimised the TES industry across 28 countries whilst strengthening the regulatory framework with regard to worker benefits.

The figure below considers the potential welfare effects of TES workers losing their jobs, on the level of household poverty. It should be noted that transition mechanisms or indeed first and second-round employment effects on job losses are not considered in this analysis. At both poverty lines, the number of households below the poverty line increased sharply as the extent of employment declines. If half of TES workers lost their jobs, 100 000 (at the R2 532 poverty line) or 150 000 (at the R3 864 poverty line) more households would be in poverty. If all TES workers lost their jobs, at both poverty lines we find 350 000 more households would be in poverty.

Figure 7: Impact of TES Employment Loss on Household Poverty Levels



Source: LMD 2012 (Statistics South Africa, own calculations)

In summary, we find that not only does TES employment contribute to household earnings in a way that reduces poverty but employment losses within the TES sub-sector are likely to result in sharply rising levels of household poverty. One important backdrop to these results is that they illustrate that the sector employs workers who are in households relatively close to the poverty line. Sectors which employ higher earning workers, would be much less likely to see such sharp increases in household poverty, should their earnings be reduced to zero. Ultimately the semi- and unskilled biased nature of employment in the sector means that it plays a central, indirect role in the welfare levels of the relevant households.

5. The Economic Contribution of the TES Provider Sector

The analysis thus far has shown the extent to which atypical employment in the form of the TES industry has contributed to, and acted as a driver of national employment growth since 1994. The nature of the South African economy and the structural changes that have occurred over the past twenty years have lent themselves to this type of employment relationship. Market research has found that private employment services offered a uniquely placed support to government and other organisations to manage structural changes and the pace of changing dynamics within the labour market (CAPES, 2014). It was further discussed that TES allowed stakeholders to leverage the changing business environment to their advantage by adjusting their cost base and staffing needs. Infrastructure development for example, a key feature of post-Apartheid South Africa, employed a significant number of temporary workers on a project basis (Budlender, 2013). Similarly the clothing and textile industry, the chemical sector, the health sector through nursing and local government have also increased employment as a result of TES (Budlender, 2013). TES providers are therefore well established with a number of the larger providers existing for more than 10 years.

Given the scope and scale of TES usage in industry, this sector is inevitably contributing to the economy, although little research on measuring its contribution has been undertaken. Indicative of the sector's economic contribution is the concentration of TES coverage across key industries and in provincial economic hubs including Gauteng, Kwazulu Natal and Western Cape. This section examines the relative economic contribution of this sector as well the broader relationship between employment and economic growth and the potential role of TES within this context.

5.1. Relative GDP Contribution of the TES Sector

The value of output in the Business Activities NEC/Other (or TES) sub-sector is not easily accessible in public data but given that we have estimated employment above, we use an output employment elasticity⁹ to backward engineer an estimate of the impact of employment through TES on output. A recent study by Kemp (2011:16) suggests that between 1994 and 2011, the average output elasticity of formal sector employment was 0.78 percent. This means that a one percent increase in output (gross domestic product) is associated with a 0.78 percent increase in formal sector employment. By using this elasticity estimated through the Cobb-Douglas production function, the multiplier impact on output and hence gross domestic product (GDP) in the economy, through the TES sector, can be calculated.

⁹ We use the elasticity of 0.78 from the 2012 Kemp study. See Table A3 in the Appendix.

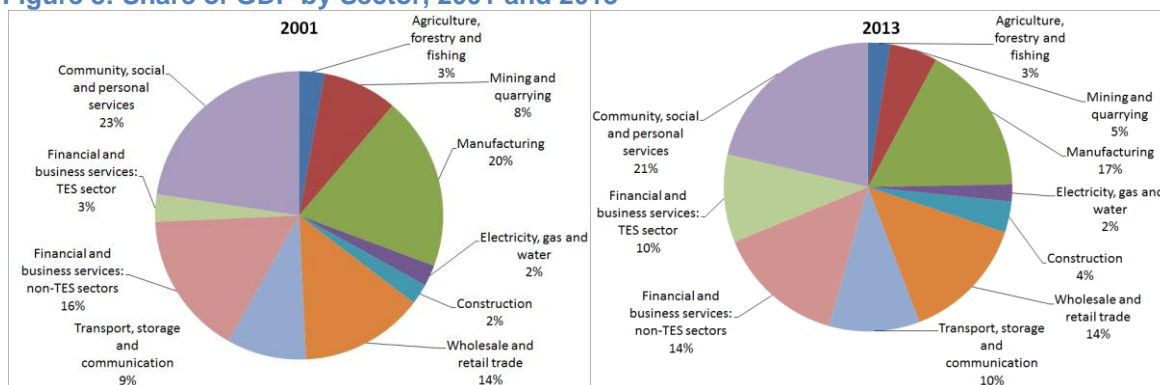
In 2014, there were 970 783 workers in the Business N.E.C subsector, without which employment would be 6.9% lower. Using the Kemp Elasticity above, it follows that a 6.9 percent increase in employment results in 8.85 percentage contribution to output or GDP. If we put a value to this using GDP in 2013 of R3 385 369 million, if TES employment had been absent, GDP in total Rand value terms in 2013 would be 8.85 percent lower amounting to approximately R3 129 212 million. TES employment therefore contributed R256 157 million to GDP in 2013. Considered at a sectoral level, the R256 157 million that comes from the business services subsector makes up 39.27 percent of Financial and Business Services sector output. It should be noted that what we have used here is a simple elasticity and not a calibrated volume model, and therefore our estimates do not, and cannot, capture the direct and indirect effects of the TES sector on the economy. Hence, the TES contribution to GDP is probably under-estimated in this analysis.

In a unique attempt to understand the relative economic contribution of the TES industry against other industries, the figure below uses the estimation above to compare the growth in GDP by sector between 2001 and 2013. Firstly, the primary sectors exhibit little to no growth with agriculture falling by 1 percent and mining increasing its share of GDP by 3. Secondly, the secondary sector yields mixed results with the Manufacturing sector declining dramatically by 2 percentage points and the Construction sector increasing from a 2 to 3 percent share of GDP. Thirdly, the tertiary sector has grown from 51 percent of GDP in 2001 to 56 percent of GDP in 2013. In part this growth has been driven by the TES sector that grew from 3 percent in 2001 to 10 percent in 2013¹⁰. Financial and Business Services has also realised a 5 percentage-point increase in GDP whilst Community and Social Services declined by 2 percent.

The figure is unique as aggregate data normally disguises the growth of TES within Finance and Business Services but here, it is possible to see the role of TES within the growing tertiary sector. It is important to note then, that amidst a declining primary manufacturing sector in the economy, the TES industry has increased its contribution to GDP share in the 12-year period under review.

¹⁰ Using the elasticity of 0.78 from the 2012 Kemp study and the same methodology as adopted in Table A3 in the Appendix, the GDP of the financial services sector excluding the TES workers is estimated for the two years. The TES sector's contribution to the GDP is then derived as the difference between the GDP by the financial services sector (as published on the SARB Quarterly Bulletin) and the estimated GDP of the financial services sector excluding the TES workers.

Figure 8: Share of GDP by Sector, 2001 and 2013

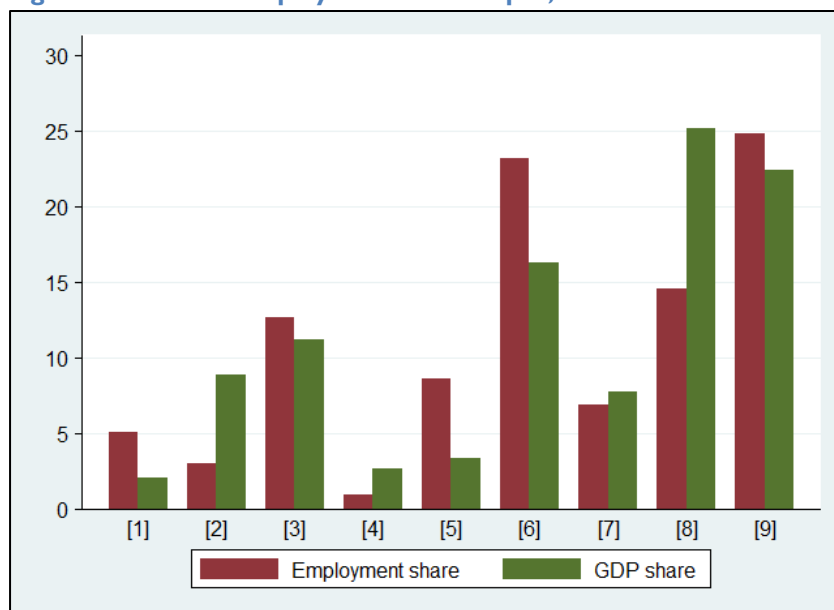


Data source: SARB; Authors calculations

Whilst in the previous section, we considered employment loss at the microeconomic level on household welfare; we investigate here the potential impact of employment losses on GDP. Using the 2013 estimates, if we assume that TES employment reduced by half, GDP in 2013 would have been approximately 2.6 percent lower, amounting to a R3 299 792 million loss. This is estimated under the assumption that there is no capital substitution for employment loss and that the employment loss has only led to a pure loss of economic activity. The estimated loss in GDP however, does suggest that the subsector is a key driver of both output and employment in the Finance and Business Services sector and in turn, total GDP and employment. Interestingly, this sub-sector has grown in terms of output and employment despite the lack of access to external government support through investment incentives that a number of key sectors such as manufacturing benefit from.

Comparing shares of employment and output by sector for 2013, similarly suggests that TES has become a relatively significant contributor to the economy, in a short space of time. To put this into context, as the figure below shows, the 5.4 percent contribution to GDP from the TES subsector was greater than the contribution to output by Agriculture (2.1 percent), Utilities (2.7 percent) and Construction (3.5 percent).

Figure 9: Share of Employment and Output, 2013



Source: QLFS 2013 Q4, SARB

Note: [1]: Agriculture, forestry and fishing
 [2]: Mining and quarrying
 [3]: Manufacturing
 [4]: Electricity, gas and water
 [5]: Construction
 [6]: Wholesale and retail trade
 [7]: Transport, storage and communication
 [8]: Financial and business services
 [9]: Community, social and personal services

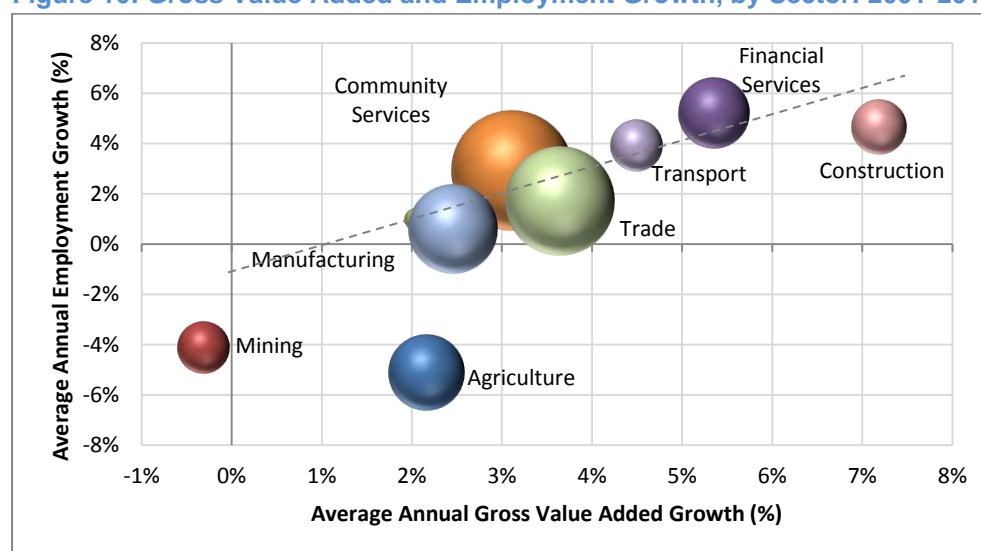
The TES subsector also contributes a larger share of employment (6.4 percent) than Utilities (0.91 percent), Agriculture (5.13 percent) and Mining (3.05 percent). If the TES subsector is excluded from the Finance and Business Services sector, we find that the share of Finance and Business to GDP is five percent points lower and the employment share 6 percent points lower.

A common misconception of the TES industry is that it does not contribute to the economy but once again, the data presented suggests otherwise. In addition, the economic contribution of this industry stems from particular unique trends that have characterised this industry such as absorbing unemployed youth, providing training through learnerships and apprenticeships to up-skill workers, facilitating sector transitions depending on the economic environment and allowing firms to take advantage of business opportunities such as medium-term infrastructure projects. Furthermore, the TES industry is estimated to generate R40 billion a year which contributes to tax revenue for the fiscus (Singer, 2013). Whilst the data presented has provided evidence of TES as a driver of the Finance and Business Services sector, the section that follows considers broader sectoral interactions of gross value add, employment and gross capital formation.

5.2. Gross Value Add, Employment and Capital Formation in the TES Industry

The figure below explores the interaction between GDP and employment growth by sector between 2001 and 2012. We expect that sectors in which there was positive output growth in the period would have been more likely to create jobs in the economy, while declining sectors would have shed jobs. Each of the bubbles in the figure represents a sector, while the size of the bubbles indicates the relative size of employment in that sector in the base year, 2001. The vertical axis measures average annual employment growth, while the horizontal axis shows the annual growth in gross value added, both in percentage terms. Thus, the co-ordinates for the centre of each of the bubbles are the relevant sector's employment and gross value added growth for the period. The 45 degree line divides the figure into two sections: Bubbles below the line show sectors in which employment growth was lower than gross value added growth, while bubbles above the line show sectors in which employment growth exceeded output growth.

Figure 10: Gross Value Added and Employment Growth, by Sector: 2001-2012



Source: SARB & Stats SA (LFS 2001 and QLFS 2012), Author's Calculations

Notes: Employment and GVA figures for 2012 were used because the 2013 QLFS used 2011 Census weights for the 2013 data that 'inflates' the 2013 figures in comparison to 2012. Using the 2013 data would therefore incorrectly represent the annual employment growth.

The figure firstly shows that the primary sectors of the economy fared particularly badly in the period between 2001 and 2012: Output growth was negative for Mining (-0.3 percent) and lowest among positive-growth sectors for Agriculture (2.2 percent). Furthermore, these are the only two sectors that experienced a contraction in employment in the period, with employment growth in agriculture and mining contracting by 5.1 percent and 4.1 percent respectively. The discrepancy between output and employment was the highest in the two primary sectors.

For Mining, employment decreases outstripped the decreases in growth. Poor performance of the mining sector can be attributed to a range of factors, including a

strongly appreciating rand in the mid-2000s, infrastructural constraints (such as rail transport), the energy crisis in South Africa, and the application of new mining laws (OECD, 2008), while damaging widespread strike action in the mining sector in 2010 and 2011 would have further exacerbated the problem.¹¹

Among the secondary sectors output growth in Construction was high, at 7.2 percent between, but employment growth in this sector was much lower at 4.7 percent. The construction boom can be attributed to, among other factors, infrastructure projects related to the 2010 World Cup, the construction of the Gautrain rapid-rail system, and several other public and private sector investment initiatives including those undertaken by Eskom and Transnet (Hanival & Maia, 2008). In contrast, neither the manufacturing nor utilities sectors saw a significant increase in employment over the period. The relatively poor employment results for manufacturing can, in part, be linked to the impact of the recession on the South African economy where the manufacturing sector, together with construction, experienced the largest job losses. Semi-skilled workers, in particular, were negatively affected. Furthermore, informal sector workers were also particularly hard hit during the recession, and accounted for a disproportionate share of jobs lost.

As discussed in the previous section, the tertiary sectors achieved relatively high output growth. Nonetheless, employment growth did not exceed output growth and only the finance and community services sectors experienced employment growth that was close to gross value added growth. Specifically, gross value added growth for the Finance and Community services sectors stood at 5.4 and 3.1 percent for the period, while employment growth was 5.3 and 3.0 percent respectively. These two tertiary sectors thus experienced labour-neutral growth, while all other sectors saw output growth that was faster than employment growth. Whilst it is not possible to discern value added from the TES sub-sector from the Finance and Business Services sector, given the notable growth of both employment and output it is very probable that value added too is driven by the TES sub-sector. Indeed, employment growth of 8.7 percent noted earlier for the 1995 to 2014 period, was higher than employment growth observed in the figure above for all sectors. Put simply, the data suggests that apart possibly from the CSP sector, the TES industry was over this period, the only labour-intensive sector in the South African economy.

6. Conclusion

The findings of this paper suggest in the first instance, that the post-1994 labour market environment in South Africa is marked by a sharp rise in the use of temporary employment services. Indeed, the results from research around South Africa's labour

¹¹ We note that employment numbers for the mining industry from the household surveys (LFS and QLFS) are lower than numbers from firm-based data. Furthermore, the underestimation of employment within the mining and quarrying sector in the QLFS relative to the firm-based data is substantially larger than in the LFS compared to firm-based data. The QLFS thus seems less able to capture mining employment than the LFS (DPRU, 2013).

regulatory regime, the strength of the union-wage premia and so on remain relatively unimportant when compared against the rapid rise in the use of TES. Put differently, employers in South Africa have voted with their feet, and opted at an increasing rate, not to employ workers directly but rather through TES providers. Examining the employment growth in the Finance and Business Services subsector gives an indication of high levels of employment growth that arise from the TES industry.

The lack of research on the TES industry has left the public discourse uninformed and misleading with regard to the characteristics of TES workers. It is clear however, that contrary to perceptions workers in TES are medium-skilled and largely in services and sales type occupation workers and not simply unskilled workers in elementary occupations. Further, as TES has grown, it has absorbed young people at a rate faster than observed for overall levels of employment and within the Finance and Business Services sector. In addition, labour force data suggests that TES workers are more likely to be permanent rather than working on a limited contractual basis. In this empirical profile of a fast growing, semi-skilled and youth-intensive employer – the notion of the industry being dominated by the “bakkie brigade” is erroneous in the extreme. The predominance of SME firms as well as the statistically meaningless difference in forms of employment – further reinforce the need to re-centre economic policy and labour debates around the sector.

In terms of the impact of TES more broadly, we find that TES contributes to both household welfare as well as economic growth. We find that TES earnings have kept between 3 and 7 percent of households above the poverty line, constituting over 300 000 households in the economy. Households with TES earnings were found to be less worse off than households without TES earnings suggesting the pro-poor impact of TES employment. Furthermore, the TES sector contributed around 9 percent to GDP in 2013 which is significant in the context of South Africa’s low levels of economic growth. The TES industry, through offering flexible employment arrangements, has become an important driver of employment and output growth and this should remain a key consideration in any debate around regulation, or altering the nature of the sector through exogenous policy interventions.

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Appendix

Table A1: Growth in employment by sector, 1995-2014

	Growth		Employment share (%)		Share of relative change (%)
	Absolute (Number)	Relative (%)	1995	2014	
Primary	-561	-33.08	17.9	15.5	-9.98
Agriculture	-537	-43.06	13.2	10.5	-9.55
Mining	-25	-5.57	4.8	5.0	-0.44
Secondary	1 150	57.85	21.0	21.0	20.45
Manufacturing	356	24.52	15.4	14.5	6.33
Utilities	44	51.16	0.9	0.8	0.78
Construction	751	167.26	4.8	5.7	13.36
Tertiary	5 034	87.18	61.0	63.1	89.53
Retail	1 511	89.73	17.8	22.0	26.87
Transport	414	85.71	5.1	4.9	7.36
Finance	1 458	246.28	6.3	9.3	25.93
CSP	1 228	55.69	23.3	17.8	21.84
Private Household	425	52.53	8.6	9.2	7.56
Total	5 623	59.45	100.0	100.0	100.00
TES	771	387.44	2.1	2.6	13.71

Source: OHS 1995; QLFS Quarter 1, 2014 (Statistics South Africa).

Table A2.1: Youth (15-29 years) employment by age cohort, 1996-2014

Year	Total Employment	Finance and Business Services Employment	TES Employment
1996	2 473 459	278 110	81 959
1997	2 438 980	239 195	81 875
1998	2 590 502	299 273	112 773
1999	2 966 618	367 220	128 686
2000	3 620 656	372 211	144 537
2001	3 162 977	390 596	172 102
2002	3 146 847	398 272	135 580
2003	3 161 328	380 067	152 075
2004	3 183 101	386 419	197 927
2005	3 312 330	408 833	193 404
2006	3 542 094	415 689	206 983
2007	3 733 624	470 187	220 703
2008	3 978 179	539 286	246 613
2009	3 512 359	590 991	314 705
2010	3 357 454	473 075	253 918
2011	3 464 524	513 390	253 010
2012	3 415 867	529 963	267 998
2013	3 650 475	519 661	251 443
2014	3 497 684	530 034	247 833
Average annual growth rate (%): 1996-2014	1.9	3.6	6.3

Source: OHS 1996-1999: LFS September 2001-2007; QLFS Quarter 4 2008-2013, QLFS Quarter 1 2014
(Statistics South Africa)

Table A2.2: Youth employment broken down, 1996-2014

Year	15-19 years			20-24 years			25-29 years		
	[I]	[II]	[III]	[I]	[II]	[III]	[I]	[II]	[III]
1996	154 973	12 185	3 262	943 579	126 471	38 996	1 374 907	139 454	39 701
1997	139 880	9 578	4 925	849 369	98 444	27 645	1 449 731	131 173	49 305
1998	151 542	12 226	3 113	944 894	121 068	40 254	1 494 066	165 979	69 406
1999	221 269	12 081	4 047	1 078 320	140 441	44 174	1 667 029	214 698	80 465
2000	348 907	7 900	3 979	1 218 209	131 688	40 520	2 053 540	232 623	100 038
2001	233 018	11 873	6 334	1 081 046	127 384	52 695	1 848 913	251 339	113 073
2002	224 604	9 907	3 454	1 060 606	127 540	37 114	1 861 637	260 825	95 012
2003	181 826	8 322	4 205	1 045 421	121 883	35 845	1 934 081	249 862	112 025
2004	193 549	8 082	2 682	1 093 514	122 981	56 710	1 896 038	255 356	138 535
2005	229 480	8 937	6 334	1 185 394	148 695	74 612	1 897 456	251 201	112 458
2006	223 515	11 098	2 742	1 233 564	134 346	61 499	2 085 015	270 245	142 742
2007	196 344	7 629	5 320	1 325 550	169 269	62 518	2 211 730	293 289	152 865
2008	181 531	12 802	8 194	1 414 811	180 116	75 397	2 381 837	346 368	163 022
2009	131 985	15 867	9 208	1 236 256	202 716	103 529	2 144 118	372 408	201 968
2010	98 655	12 393	9 818	1 130 623	147 362	78 561	2 128 176	313 320	165 539
2011	119 841	14 376	5 424	1 154 061	154 780	80 226	2 190 622	344 234	167 360
2012	102 866	12 814	4 071	1 139 945	163 069	79 324	2 173 056	354 080	184 603
2013	130 895	9 318	5 040	1 198 490	148 160	72 174	2 321 090	362 183	174 229
2014	107 426	6 862	2 657	1 117 406	144 774	74 229	2 272 852	378 398	170 947
Average annual growth rate (%): 1996-2014	-2.0	-3.1	-1.1	0.9	0.8	3.6	2.8	5.7	8.4

Source: OHS 1996-1999: LFS September 2001-2007; QLFS Quarter 4 2008-2013, QLFS Quarter 1 2014
(Statistics South Africa)

Table A2.3: Demographic characteristics of TES and non-TES formal sector employees, 2014

	Other formal employment	TES formal employment
Race		
African	68.9	77.2
Coloured	12.5	9.8
Indian	3.7	3.1
White	14.9	9.9
White	100.0	100.0
Gender		
Male	57.6	61.6
Female	42.4	38.4
	100.0	100.0
Area type		
Urban	81.1	87.6
Rural	18.9	12.4
	100.0	100.0
Age		
15-24 years	8.6	8.2
25-34 years	33.0	38.6
35-44 years	30.7	36.9
45-54 years	19.3	12.4
55-65 years	8.4	3.9
	100.0	100.0
Educational attainment		
No education	1.7	0.6
Grades 0 – 7	5.4	2.9
Grades 8 – 11	32.4	44.2
Grade 12	34.6	40.3
Diploma/Certificate	13.1	8.4
Degree	12.9	3.7
	100.0	100.0

Source: QLFS Quarter 1 2014 (Statistics South Africa)

Table A3: Estimation of the Increase of GDP due to TES Employment

	2014Q1
Step 1: Find out total employment with and without TES employment	TES workers: 970 783 Total employment, including TES workers: 15 084 089 Total employment, excluding TES workers: 14 113 306
Step 2: Calculate the percentage change of employment	$\frac{15084089 - 14113306}{14113306}$ = 6.8785%
Step 3: Calculate the percentage change of output	$6.8785\% / 0.78$ = 8.8186%
Step 4: Find out the 2013 GDP (Rand million) from SARB Bulletin	3 385 369 million (2013 prices)
Step 5: Calculate GDP had the TES employment been zero (let me assume it as x)	$\frac{(3385369 - x)}{x} = 8.8186\%$ $3385369 - x = 0.08186x$ $1.08186x = 3385369$ $\therefore x = 3129212$
Step 6: Increase of GDP as a result of TES employment	$3\ 385\ 369 - 3\ 129\ 212$ = 256 157 million (2013 prices)

Table A4: Before and After Excluding Earnings of TES Workers, LMD 2012

	Poverty line: R2 532[#]	Poverty line: R3 864[#]	Poverty line: R7 116[#]
TES workers households	5 185 039	7 013 763	9 339 502
TES workers households – exclusion	5 547 567	7 355 826	9 620 169
Difference	362 528	342 063	280 667

Source: LMD 2012 (Statistics South Africa, own calculations)

Notes: [#] Per capita per annum in 2000 prices.

Table A5: FGT Poverty Indices for Potential Losses in Employment

% of TES employment losses	Poverty headcount ratio	Poverty gap ratio	Squared poverty gap ratio
Poverty line: R2 532			
0%	0.3547	0.1716	0.1091
10%	0.3561	0.1719	0.1092
20%	0.3575	0.1723	0.1093
30%	0.3584	0.1727	0.1095
40%	0.3599	0.1733	0.1098
50%	0.3616	0.1740	0.1101
60%	0.3638	0.1749	0.1106
70%	0.3668	0.1762	0.1113
80%	0.3707	0.1784	0.1125
90%	0.3757	0.1820	0.1150
100%	0.3795	0.1883	0.1216
Poverty line: R3 864			
0%	0.4798	0.2578	0.1720
10%	0.4810	0.2584	0.1723
20%	0.4819	0.2590	0.1727
30%	0.4836	0.2598	0.1731
40%	0.4857	0.2608	0.1737
50%	0.4878	0.2619	0.1744
60%	0.4908	0.2634	0.1753
70%	0.4943	0.2654	0.1766
80%	0.4975	0.2681	0.1786
90%	0.5001	0.2718	0.1817
100%	0.5032	0.2771	0.1879
Poverty line: R7 116			
0%	0.6389	0.3997	0.2918
10%	0.6408	0.4007	0.2925
20%	0.6422	0.4018	0.2932
30%	0.6443	0.4030	0.2941
40%	0.6464	0.4045	0.2952
50%	0.6484	0.4062	0.2965
60%	0.6504	0.4081	0.2980
70%	0.6521	0.4103	0.2999
80%	0.6542	0.4128	0.3024
90%	0.6564	0.4160	0.3057
100%	0.6581	0.4200	0.3107

Source: LMD 2012 (Statistics South Africa, own calculations)

Notes: # Per capita per annum in 2000 prices.