



## UNEMPLOYMENT INSURANCE IN SOUTH AFRICA A DESCRIPTIVE OVERVIEW OF CLAIMANTS AND CLAIMS

Haroon Bhorat Sumayya Goga David Tseng





**Haroon Bhorat** is a professor of economics and the director of the Development Policy Research Unit (DPRU) located in the School of Economics at the University of Cape Town.

**Sumayya Goga** is a senior research associate at the DPRU.

David Tseng is a researcher at the DPRU.

#### Abstract:

This study, primarily descriptive in nature, is one of the first to examine the claiming behavior of unemployment benefit recipients within the South African Unemployment Insurance Fund (UIF) system. The design of the UIF system in South Africa is crucial in determining access to the system in terms of days of benefits, as well as determining benefit amounts. From the perspective that South Africa has one of the highest unemployment rates in the world, the UIF system is stringent in that the days of benefits are dependent on prior work history, though income replacement benefits are progressive with regard to previous income. The data shows that women, youth, poorer claimants and contract employees face the lowest potential claim days when claiming their benefits, while youth, poorer claimants and claimants with relatively short potential claim periods are eligible to claim a relatively larger proportion of their previous employment salaries as replacement benefits. Importantly, though, in the period between 2005 and 2011, those with the lowest potential claim periods were also subject, on average, to lower absolute benefits compared to their wealthier counterparts. We do find though that claimants represent a subsect of vulnerable potential contributors. Finally, we do not find evidence in this descriptive overview of moral hazard effects, though this would have to be investigated further through more thorough survival analysis techniques.

#### Note:

The Africa Growth Initiative (AGI) at the Brookings Institution engages in quality policy analysis with six leading African think tanks. With the help of these research partners, Brookings taps into the latest trends and data from the region, accesses local expertise and knowledge, and works to elevate the voice of African scholars in policy discussions in Washington and across the globe. This working paper is authored by scholars in AGI's partner think tank, the Development Policy Research Unit (DPRU) at the University of Cape Town. The DPRU specializes in socio-economic research, with a focus on labor markets, poverty and inequality. The DPRU's Web site can be found at http://www.dpru.uct.ac.za/.

For questions or comments on this working paper, please contact Haroon Bhorat at haroon.bhorat@uct.ac.za.

## CONTENTS

1. Introduction	.1
2. Institutional Overview of the South African Unemployment Insurance System	3
3. A Descriptive Overview of UIF Claimants and Claims	9
3.1 Data	9
3.2 Distribution of Claims: Cohort Characteristics	9
3.3 Claimant Variation over Time: Unemployment Insurance and Potential Contributors $\dots$ 1	10
3.4 Access to Credit Days, Claimant Behavior and Average Incentives	19
4. Conclusion	;4
References	36
Endnotes	37
Appendix	39

## LIST OF FIGURES

Figure 1: Income Replacement Rates by Monthly Incomes, 2002-20125
Figure 2: Nominal IRR-Salary Elasticities, 2000-20077
Figure 3: Real IRR-Salary Elasticities (2003 constant prices), 2000-2007
Figure 4: Claimants and the Claiming Rate, 2005-201111
Figure 5: Claimant Gender Representation within the UIF System, 2005-2011
Figure 6: Claimant Age Representation within the UIF System, 2005-2011
Figure 7: Claimant Education Representation within the UIF System, 2005-2011
Figure 8: Share of UIF Claimants by Reason for Termination of Employment, 2005-2011 16
Figure 9: Share of UIF Claimants by Credit Quintiles, 2005-2011
Figure 10: UIF Claimants by Real Salary and Credit Quintiles, 2005-2011
Figure 11: Available Credits over Incidence of Claiming, by Gender, 2005-2011 21
Figure 12: Available Credits over Incidence of Claiming, by Age Group, 2005-201122
Figure 13: Available Credits over Incidence of Claiming, by Real Salary Quintiles, 2005-2011 24
Figure 14: Available Credits over Incidence of Claiming, by Reason for Termination of Employment, 2005-2011
Figure 15: Average Income Replacement Rate over Incidence of Claiming, by Gender, 2005-2011
Figure 16: Average Income Replacement Rate over Incidence of Claiming, by Age Group, 2005-2011
Figure 17: Average Income Replacement Rate over Incidence of Claiming, by Education, 2005-2011
Figure 18: Average Income Replacement Rate over Incidence of Claiming, by Credit Quintile, 2005-2011
Figure 19: Average Income Replacement Rate over Incidence of Claiming, by Real Salary Quintile, 2005-2011

## LIST OF TABLES

Table 1: Credit Exhaustion Rate	(%), by Working History, 2005-2011	
---------------------------------	------------------------------------	--

# UNEMPLOYMENT INSURANCE IN SOUTH AFRICA A DESCRIPTIVE OVERVIEW OF CLAIMANTS AND CLAIMS

Haroon Bhorat, Sumayya Goga and David Tseng

## **1. INTRODUCTION**

The South African economy suffers from the debilitating effects of very high unemployment rates, with African workers, women, youth and those with incomplete schooling disproportionately affected (DPRU, 2011). Not only are official unemployment rates astoundingly high-standing at 25 percent in the third quarter of 2011 (DPRU, 2011)-but many of the unemployed in the South African economy have also never worked before (Banerjee et al., 2008). The unemployment insurance system is a system offering subsistence income to eligible recipients to alleviate the harmful economic and social effects of income loss due to unemployment shocks. It is prevalent in many industrialized economies in the world but much less so in developing countries. In South Africa, both employers and employees contribute to the Unemployment Insurance Fund (UIF), and this fund is then used to provide income replacement benefits such as unemployment, illness, maternity, adoption and dependant's benefits. In this descriptive overview, we are only concerned with the unemployment insurance aspect of the UIF. The UIF system plays a key role in South

Africa's social security architecture, particularly since it is the only arm of South Africa's social security that caters for the unemployed—more specifically, the portion of the unemployed that were previously employed. Administratively, unemployment insurance is collected by the UIF, which falls under the auspices of the Department of Labour.

While unemployment insurance is meant to smooth consumption, importantly, it is also meant to improve the transition process of labor market participants from unemployment to employment.<sup>1</sup> This research mainly considers the impact of the unemployment insurance system on the labor market through a descriptive analysis of claimants and claims. The administrative data utilized in this paper—and obtained from the UIF—covers all UIF claimants quarterly from 2005Q1 to 2011Q3. The paper is organized into three sections: Section 2 provides an institutional overview of the unemployment insurance system in South Africa, highlighting the main aspects of this system in South Africa as well as changes to the system over time. In Section 3 we undertake a four-part descriptive overview of UIF

claimants and claims between 2005 and 2011: First, we briefly dwell on the data and some challenges with it before considering the evolution of the claimant pool over time. Then, we analyze how different subsects of claimants are represented in the claimant pool in comparison to potential contributors. In the final subsection we consider access to the UIF system, potential moral hazard effects and system incentives through an analysis of potential benefits days, credit exhaustion rates and average income replacement rates. Section 4 concludes.

## 2. INSTITUTIONAL OVERVIEW OF THE SOUTH AFRICAN UNEMPLOYMENT INSURANCE SYSTEM

South Africa has a long history of unemployment insurance with the promulgation of the first Unemployment Insurance Act (Act No. 30 of 1966) during the apartheid years. However, coverage during these years was restrictive in a number of ways, excluding African workers, informal sector workers, agricultural laborers, seasonal workers, domestic workers and government employees. The low level of coverage was due to the exclusion of African workers, as well as complications created by the Bantustan policy on agricultural workers, migrant workers, domestic workers and seasonal workers (Cooper, 1984).

With the onset of democracy in 1994, the statute governing unemployment insurance was amended. The amended Unemployment Insurance Act (Act No. 63 of 2001) (referred to as the Act from here on) came into effect on April 1, 2002.<sup>2</sup> The new Act established the Unemployment Insurance Fund which consists of contributions made by employers and employees on a monthly basis and from which contributors who become unemployed are entitled to insurance benefits. The Act applies to all employees and their employers except for the following categories, among others:

- Employees who are employed for less than 24 hours a month with a particular employer and those employers;
- Employees who receive remuneration under a learnership agreement registered in terms of the Skills Development Act (Act No. 97 of 1998) and their employers;
- Employees in national or provincial governments and their employers;

The Act only covered domestic and seasonal workers and their employers 12 months after it came into effect. Furthermore, the Unemployment Insurance Amendment Act (Act No. 32 of 2003) made the following change regarding domestic workers: A domestic worker employed in more than one household was eligible to claim unemployment insurance benefits if the total income earned from all households by that domestic worker fell below the benefit level that the person would have received if wholly unemployed. In effect then, poorly paid domestic workers became eligible for unemployment insurance as well. In terms of learnerships, the Unemployment Insurance Amendment Act (Act No. 32 of 2003) resulted in the exclusion of employees who enter into a contract with an employer for the sole purpose of a learnership from contributing to the Fund, while those who are already in employment and then enter into a learnership contract with their employers are liable as contributors.

Although the Unemployment Insurance Fund plays a vital role in providing subsistence income in times of income shocks, some key segments of the labor market are excluded from receiving benefits. First, since only contributing employees are eligible for the UIF, the unemployed who have never worked before are excluded from this insurance system. Second, employees working in the informal sector of the economy are also not eligible to claim from the UIF. Arguably, then, with the exclusion of those who have never worked before as well as informal sector workers, some of the most vulnerable unemployed labor market participants in South Africa are excluded. Third, government employeesthough employed in the formal sector-cannot claim unemployment insurance, due probably to security of tenure.

A contributor is entitled to one day of unemployment benefits for every six days of employment but a contributor may only accrue a maximum of 238 days (or 34 weeks) of benefits at any given time. In effect, a person who has been employed continuously for more than four years and then becomes unemployed can only claim a maximum of 238 days of accrued benefits less any benefits received during the period. In practical terms, the days of benefits are calculated as follows:

$$DB_i = (WD_i \div 6) - DBR_i$$

where  $DB_i$  is the days of benefits applicable to person *i*;  $WD_i$  is the total number of days that person *i* was employed as a contributor in the four-year period immediately preceding the date of application for benefits;<sup>3</sup> and  $DBR_i$  is the days of any benefits (excluding maternity benefits) received in the four-year period immediately preceding the date of application for benefits.<sup>4</sup>

Importantly, benefits can only be claimed if the reason for unemployment is involuntary and the unemployment period lasts for more than 14 days. Thus, unemployment benefits can, for instance, be claimed if a contributor's fixed-term contract has come to an end, a contributor has been dismissed or the business where a contributor was employed has gone insolvent. Voluntary unemployment due to resignation and disciplinary dismissals disqualify employees from claiming UIF benefits. Furthermore, contributors cannot claim benefits if they are in receipt of a state pension, any benefit from the Compensation Fund, or benefits from any unemployment fund or scheme established by a company bargaining council. In June 2009, however, a regulation with the intention to include persons who are in receipt of a state pension as contributors to the fund was published (Notice 871 of 2009), and this notice came into operation retroactively from February 7, 2007 (Notice 32614 of 2009). Applications for benefits should be made within six months of the termination of the contract of employment, but applications made after six months can also be accepted.

Employers and employees to whom the Act applies are obliged to contribute an amount equal to one percent of the employee's remuneration on a monthly basis. The benefit amount for claimants is dependent on the wage level of the contributor prior to applying for unemployment insurance. More specifically, benefits are calculated as follows:

$$\beta_i = \omega_i \times IRR \mid \beta_i$$
 for a maximum of 238 days

where  $\beta_i$  is the daily benefit applicable to person *i*;  $\omega_i$  is the daily wage of person *i* prior to the episode of claiming,<sup>5</sup> and the IRR is the income replacement rate applicable to the person, based on their wage level.<sup>6</sup>

In turn,

*IRR* = 
$$\lambda(\omega_i)$$
, given that 0.38 <  $\lambda$  < 0.60

The IRR is determined by a sliding scale; that is, a higher IRR is applicable to those with a low previous salary while a lower IRR is applicable to those with a higher previous salary. In effect, low-income claimants receive a larger proportion of their salary in benefits while high-income claimants are eligible for a lower proportion of their salary in benefits. The IRR is at a maximum of 60 percent when income equals 0 and reaches its minimum of 38 percent when income is equal to the "benefit transition income level." The benefit transition income level is determined by the 1953 International Labour Organization Convention (Convention No. 102), which states that the wage for a skilled manual worker should determine the appropriate income level at which to set the ceiling for membership of a social insurance scheme. Though the Act set the initial benefit transition income level at nominal 8,099 South African rands (R) (\$887.97) per month, it gave the minister the discretion to change the benefit transition income level from time to time to reflect the changing patterns of income. The benefit transition income level was amended four times between 2002 and 2012 and currently stands at nominal R12,478 (\$1,402.46) per month.

Importantly, we note that if a claimant earns more than the benefit transition income level, they are entitled to benefits which are applicable to contributors who earn at the benefit transition income level. Benefits are thus capped at the level that a person at the benefit transition income level would earn. Since the formula above calculates daily benefits, the total benefit amount to which a claimant is entitled is the daily benefit amount multiplied by the number of days for which the claimant is entitled to receive benefits. The days of benefits, in turn, are dependent on accumulated credits, as detailed above.

Figure 1 clearly shows the progressive relationship between the IRR and income in South Africa for the range of benefit transition income levels in the period between 2002 and 2011. Importantly, even with changes in the benefit transition income level over time, the IRR always remains between 38 and 60 percent. As a consequence, the same nominal salary in 2002 and 2011 may have different applicable IRRs. For example, a claimant with a salary of R2,000 a month in 2004 (when the annual benefit transition income level was R8,836) would have been subject to an IRR of 48.24 percent while another claimant with a monthly salary



of R2,000 in 2011 (when the annual benefit transition income level was R12,478) would have faced an IRR of 51.2 percent.

Notwithstanding changes in benefit transition income levels, IRRs for those with higher incomes is lower than for those with lower incomes. For example, using a benefit transition income level of R8,099 per month, a claimant in 2002 who had continuously worked for more than 4 years, earning about R10,000 per month would have been eligible for a 38 percent constant replacement rate for as long as 238 days, while a claimant who had continuously worked for more than 4 years earning about R2,000 per month would have been eligible for a 48.24 percent constant replacement rate for as long as 238 days.

The manner in which benefits are determined in South Africa is different in comparison to some other countries around the world. For example, in countries such as Slovenia and Chile, income replacement rates are generally designed so that they are dependent on the duration of unemployment (they decline as the period of unemployment increases) and invariant to income (Hartley et al., 2010). The variance of income replacement rates within the duration of unemployment in these systems is meant to incentivize workers to return to productive employment, as well as to prevent moral hazard effects; that is, to prevent workers from becoming reliant on insurance benefits, thus hindering the job search. In contrast, the IRR in the South African case is determined in the opposite manner: It is progressive in income and invariant to the duration of unemployment spell.

Another way of examining the IRRs with respect to income is by means of elasticity measures. The elasticity is calculated as the percentage change in IRR over the percentage change in income. Figure 2 presents the IRR-salary elasticities between 2000 and 2007 based on different benefit transition income levels. Essentially, the elasticities measure the responsiveness of the IRR to changes in claimants' previous employment income. We are interested in the elasticity of the IRR to income over time, since UIF-income thresholds have become progressively higher in the period between 2000 and 2007. It is useful to note that the elasticities are always negative since the IRR is, by design, progressive: The IRR always decreases when incomes increases.

The higher the absolute elasticity measure, the faster the IRR is decreasing over income and vice versa. The overall elasticities peak at roughly 0.17-0.19, implying that the changes in IRR relative to changes in salary are relatively low, or inelastic. Put differently, changes in claimants' income have very little impact on the subsequent replacements that beneficiaries receive in real terms. Despite this fact, it is clear from Figure 2 that the elasticities first increase at a decreasing rate before flattening out at the peaks, suggesting that the progressivity of the UIF system-where higher incomes are associated with lower income replacement rates-is increasingly more aggressive as income rises until the turning points. After the peaks, the progressivity marginally declines before reaching the respective minimum income thresholds, where the elasticity collapses due to the fixed income replacement rate of 38 percent.

At nominal incomes of roughly R4,000, the IRR-salary elasticities were virtually the same for all years, despite different income thresholds. The implication is that at this particular point of income, claimants are neither better nor worse off by gaining/losing additional income in terms of changes in income replacement rates associated with changing benefit transition income levels. This implies a modest stationarity in the benefit system at that particular income-juncture.



Notably, the slopes and peaks for the IRR-salary elasticities have marginally declined over time. In terms of the elasticities' tangents, the decreasing slopes may suggest that the potential changes in incentives based on changes in salaries of claimants may be lower over the years. At incomes below roughly R4,000, the decline in the slopes over time suggests that the incentives to accept lower wages in order to get higher IRRs decline over the seven-year period. At above R4,000 though, due to the relatively low-income threshold of R8,099 in 2001, the rate of decline in elasticity is more rapid than in 2007, where the income threshold was higher at R12,478.

Figure 3 presents the inflation-adjusted IRR-salary elasticities for the period between 2000 and 2007. Arguably, after adjusting for inflation, the elasticities

between different minimum income threshold systems are almost the same across all years, with the only significant difference being the points at which elasticities collapse at the respective salary thresholds.

In sum, South Africa's unemployment insurance system can be seen to be fairly stringent for several reasons. First, it excludes a large chunk of unemployed workers, since informal sector workers, government employees and, most importantly, those who have never worked before or those who work less than 24 hours per month are excluded from being contributors and, thus, from receiving unemployment benefits. Second, the claim period is determined by the number of credit days earned through prior employment. Thus, the UIF provides less days of benefits for those with shorter employment spells in the four years prior to



unemployment compared to those with longer spells of employment. It could thus potentially be argued that, under certain labor market conditions, the system provides less support in terms of days of benefits to those in more vulnerable employment. Third, the "raw" income replacement rate in South Africa (ranging from 38 to 60 percent and inversely related to the contributors' income level) is low when compared with some other countries with unemployment insurance systems. For example, the IRR in Slovenia and the Czech Republic is 80 percent and 65 percent respectively (van Ours & Vodopivec, 2008).<sup>7</sup>

On the other hand, as seen in Figure 3, South Africa's IRR is aggressively progressive with regard to income, thus ensuring that the system provides relatively better support to more vulnerable workers. Furthermore, the UIF system in South Africa is purely contributor funded and operates without any government subsidies (National Treasury, 2011). In the fiscal year ending March 31, 2010, the fund paid out R4,536 million in benefits with 628,595 approved claims. Thus, with about 4.2 million unemployed individuals in South Africa at the end of March 2010, around 15 percent of the unemployed received unemployment benefits (Department of Labour, 2010).

## 3. A DESCRIPTIVE OVERVIEW OF UIF CLAIMANTS AND CLAIMS

## 3.1 Data

The Unemployment Insurance Act (Act No. 63 of 2001) provided for the creation and maintenance of a database of contributors, beneficiaries and employers. It is from this database that the claimant and claim data for this descriptive overview was obtained. More specifically, the data for this study is a subset of the complete UIF database maintained by the Unemployment Insurance Fund. The UIF database is made up of a number of distinct, though interconnected, components. The first component of the database consists of records of contributors, including their identification numbers, education levels, dates of birth, dates of death, contact details, language preferences and postal codes. Notably, race data is not collected. The second component of the database is a compilation of employment data of the contributors, including employment start dates, employment end dates, salary amounts and reasons for employment termination. The employment start and end dates are used to determine the number of days of benefits to which claimants are entitled, while salary data is used to calculate the income replacement rates applicable to claimants.

Importantly for this study, the UIF database captures detailed information on claims. This information includes the type of claim (whether it is an unemployment claim or other type), application date, claim status (whether or not it has been approved) and the claim approval date. Of particular interest to us is the number of credit days accumulated prior to the application, the average salary in the six months prior to the claim, the IRR applicable to the claimant at the time of claiming and the daily benefit amount applicable to the claimant. Furthermore, detailed information on payments made to claimants is captured, including the payment method, the days of claims paid, the balance credit days, the payment amount relating to the days of claim paid and the dates on which payments were made.

The claimant data, though immensely useful, has the following limitations: First, the data set has a shortage of background characteristics on claimants, including, for instance, the number of dependents. This kind of data would have been useful in understanding claimant behavior. Second, the estimates of claimants in the database may not be a complete sample of the unemployed who are eligible for unemployment insurance in South Africa since individuals can choose whether or not to claim. In other words, some contributors—despite being unemployed and eligible for unemployment insurance and are therefore not observed here.

These entitled yet non-claiming contributors are likely to be dissimilarly distributed in characteristics when compared to claimants, with the result that our descriptive and coefficient estimates may be biased. Non-claiming may be related to a number of factors, including gross income level, distance to a labor center, number of dependents or even a claimant's optimism about being re-employed (Oswald, 1997). Furthermore, with the given data set we are not able to correct for this bias since the data set does not include information on the contributors who are entitled to claim UIF benefits but do not. The descriptive overview below, then, is an overview of claimants who are eligible for, choose to and have accessed the UIF system.

## 3.2 Distribution of Claims: Cohort Characteristics

In this subsection we briefly analyze claims in the data set between January 2005 and September 2011. In

the next subsection we consider claim patterns more analytically by considering the evolution of claimants relative to potential contributors (or those who are potentially eligible to contribute to and claim from the Fund), by various covariates over time. Appendix 1 shows that there were a total of 2,973,434 claims, 63 percent of which originated from male claimants. More than a third of all claims came from youth (35 years and below), while 35-44 year olds accounted for 30 percent of claims. In terms of educational attainment, claims originating from individuals with education through grade 12<sup>8</sup> dominate the sample, accounting for over half of all claims. However, it is notable that individuals with incomplete schooling (those with below grade 8, grades 8-9 and grades 10-11) account for approximately 44 percent of all claims in the period between 2005 and 2011. These claims, in turn, are dominated by those with education through grades 10-11 (22.3 percent of total claims). As expected, claims originating from those with tertiary education are very small, at just 2.4 percent of all claims.

The provincial data, shown in Appendix 1, reveals a disproportionate use of the UIF system in the South African economy. Most claims in the period originated in Gauteng (24.9 percent), while Kwa-Zulu Natal (19.6 percent) and the Western Cape (16.3 percent) also accounted for large proportions of claims. In turn, provinces like the North West, Northern Cape and Limpopo accounted for less than 4 percent of claims each. Appendix 1 also highlights the importance of the UIF system to contract workers-more than 40 percent of all claims in the period originated from claimants whose contracts had expired, and they therefore found themselves out of work. In turn, claims from dismissals (24.2 percent) and retrenchments (23.1 percent) each accounted for just under one-fifth of total claims between 2005 and 2011.

Appendix 1 shows that the majority of claims in the period were first-time claims (88.6 percent). Furthermore, while around 85 percent or more of claims were also first-time claims for each of the covariates (gender, age, education, credit quintiles,<sup>9</sup> salary quintiles, province and reason for termination of employment), the following are moderate exceptions: In the first credit quintile, only 75.2 percent of claims were first-time claims while 17.9 percent of claims were second-time claims. Similarly, for those claiming because their contracts had expired, 80.2 percent of claims were first-time claims and 14.9 percent were second-time claims. It tentatively appears that those in the lowest credit quintile and those working contract jobs have a higher probability of claiming again compared to all other types of workers.

## 3.3 Claimant Variation over Time: Unemployment Insurance and Potential Contributors

As an introduction to a more in-depth analysis of the data on claimants, Figure 4 shows the number of claimants quarterly between 2005Q1 and 2011Q3 as well as the annual claiming rate. The claiming rate is the proportion of claimants to potential UIF contributors in the economy.<sup>10</sup> The sample of potential contributors—called the UIF contributor sample—is estimated from nationally representative household surveys by excluding informal sector workers and workers in national, provincial and local government from the sample of all those employed in the economy, since these groups do not contribute to the Fund and are therefore not eligible to claim from the UIF.<sup>11, 12</sup>

Most notably, the figure shows that there was a large increase in the number of claimants in the period; they increased from around 43,000 in the first quarter of 2005 to 179,000 by the third quarter of 2011. We can

decompose this change into three specific periods. The UIF system was a relatively new system in 2005, having been launched in April of 2002 and only incorporating domestic and seasonal workers by April of 2003. Therefore, in the early years of the UIF system, the take-up rate would have been expected to be low, with a surge in the number of claimants as the scheme gained popularity; thus accounting for the large increase in the number of claimants between the first quarter of 2005 and the fourth quarter of 2005. The figure then shows a leveling off in the number of claimants between the fourth quarter of 2005 and the second quarter of 2008. In this period, employment growth was high, with the economy growing faster than ever since the onset of democracy in 1994. In fact, between 2005Q3 and 2008Q2 the UIF contributor sample rose by over 1.5 million, from 7.9 million to 9.7 million. Thus, in the period between 2005 and 2008 when the number of potential UIF contributors grew substantially in the economy, the number of UIF claimants was stable at around 94,000 claimants per quarter.



the employment data for the claiming rate is an average of quarterly employment data. In turn, for 2008 to 2011, the employment data for the claiming rate is an average of quarterly employment data from the QLFS, while for 2005, 2006 and 2007, employment data from the September round of the LFS was used. The figure shows a fairly stable claiming rate between 4 and 4.5 between 2005 and 2008, with the claiming rate increasing substantially to 5.6 percent in 2009 and 6 percent in 2010.<sup>13</sup> The higher claiming rate in 2009 and 2010 can be attributed to both a relative decline in the UIF contributor sample and a relative increase in claimants due to the recession.<sup>14</sup>

In the discussion that follows, we consider how the use of the UIF system in South Africa has changed over time by examining "representation ratios" by gender, age and education. These ratios show the representation of various sub-groups of claimants in the UIF system relative to their representation in the UIF contributor sample.<sup>15</sup> More specifically, the representation ratios are as follows:



where  $(X_i^c)/(X_j^c)$  represents, for example, female (*i*) over male (*j*) claimants ( $X^c$ ) while  $(X_i^e)/(X_j^e)$  represents female (*i*) over male (*j*) UIF contributors ( $X^e$ ). The base rates used in this analysis are therefore (potential) UIF contributors. In essence, we are considering the ratio of claimants relative to the ratio of those who can potentially claim, by various covariates. If the ratio of female to male claimants is in concert with the ratio of female to male UIF contributors we expect the overall ratio, called the "representation ratio" to be 1. However, if, for example, females are under-

represented in the claimant sample compared to their representation in the UIF contributor sample we expect the ratio to be less than 1. In turn, if they are overrepresented, the ratio will be greater than 1.

Figure 5 shows that between 2005 and 2011, the female-to-male representation ratio was below 1, thus showing that female claimants were underrepresented in the UIF system compared to their representation in the contributor sample. The fact that the representation ratio is less than one throughout the period may point to the vulnerability of females in formal non-government employment: Female contributors may, on average, have less stable employment and thus less credit days with which to claim unemployment insurance with the result that they claim less often than males. Alternatively, females may find it more difficult than males to access the UIF system, due perhaps to location or other responsibilities, with the result that they claim less often.

Furthermore, women have become more disadvantaged with time since the representation ratio has declined from 0.99 in 2005 to 0.75 in 2011. In fact, during 2009 and 2010 when the impact of the recent global recession was most severely felt in South Africa, the female-to-male representation ratio stood at its lowest levels in the period at 0.71 and 0.73 respectively. These numbers may illustrate that during difficult economic conditions, women bear the brunt of the vulnerability in terms of their access to the UIF system. In sum, though males dominate the contributor sample, the data shows that they display an even greater dominance as far as claiming UIF is concerned.



Figure 6 shows that between 2005 and 2011 youth were underrepresented in the claimant sample compared to their representation in the UIF contributor sample. In fact, the representation ratio stood at a very low 0.34 in 2005, but increased to 0.75 by 2011 due to a doubling of youth claimants from 85,000 in 2005 to 178,000 in 2011. However, despite an improvement in the representation ratio, in 2011 youth were still significantly underrepresented in the claimant sample compared to the contributor sample. We note, though, that

this underrepresentation is somewhat unsurprising, since coverage is dependent on, among other factors, prior work histories, which are typically shorter and fewer in number for young people.

Nonetheless, the rising representation ratio is an important development, particularly in the context of the youth unemployment problem in the South African labor market: In 2005, every one broadly unemployed person between 35 and 65 years of age was matched



Sources: UIF 2012 and LFS/QLFS 2005-2011, own calculations.

Note: The youth to non-youth representation ratio is the ratio of youth to non-youth claimants over the ratio of youth to non-youth UIF contributors. Youth employed and youth claimants are those between 15 and 34 years of age. In turn, while non-youth employed are between 35 and 65 years of age, non-youth claimants are between 35 and 75 years of age. We included 65-75 year olds in the non-youth category for claimants since they account for a significant proportion of the claimant sample. The annual claimant data used for the representation ratio is a summation of quarterly claimant data for each of the covariates. In turn, the annual formal employment data used for the representation ratio is as follows: For the 2008 to 2011 period, the average of quarterly employment data from the QLFS was used for each covariate. In turn, for 2005, 2006 and 2007, employment data from the September round of the LFS was used for each covariate.

by 2.66 broadly unemployed youth. By 2011Q1, this ratio had not improved considerably, standing at 2.5.<sup>16</sup> Thus, though the rising representation ratio is heartening, we note that the ratio needs to improve in order to provide better relief to unemployed youth.

The data in Figure 7 shows that, relative to those with a completed grade 12 education, those with incomplete schooling are underrepresented in the claimant sam-

ple compared to the UIF contributor sample. Though the representation ratio for this cohort increased from 0.49 to 0.57 between 2006 and 2011, the ratio of 0.57 for 2011 indicates that this cohort is still severely underrepresented within the UIF claimant sample. This underrepresentation may be due to less stable employment and shorter past work histories for those with low levels of education. Figure 7 also shows that contributors with tertiary education rarely access the UIF system. While the proportion of UIF contributors with tertiary education to grade 12 stood at 0.54 in 2011, the proportion of claimants with tertiary education to grade 12 stood at a mere 0.05 in the same year. As a result, the representation ratio stood at just 0.09. Second, the representation ratio for this cohort has been fairly stable, staying between 0.08 and 0.12 throughout the period. The fact that tertiary-educated individuals feature very weakly in the UIF claimant database when compared to their representation among UIF contributors is unsurprising since one of the characteristics of the South African labor market is a severe shortage of skilled workers (Bhorat & Leibbrandt, 2001).



Sources: UIF 2012 and LFS/QLFS 2005-2011, own calculations.

Note: Grade 12 refers to those with grade 12/certificates. The incomplete schooling to grade 12 representation ratio is the ratio of claimants with incomplete schooling to grade 12 over the ratio of UIF contributors with incomplete schooling to grade 12 over the ratio of Claimants with incomplete schooling to grade 12 over the ratio of claimants with incomplete schooling to grade 12 representation ratio is the ratio of claimants with tertiary education to grade 12 education over the ratio of UIF contributors with tertiary education to grade 12 education. The annual claimant data used for the representation ratio is a summation of quarterly claimant data for each of the covariates. In turn, the annual formal employment data used for the representation ratio is as follows: For the 2008 to 2011 period, the average of quarterly employment data from the QLFS was used for each covariate. In turn, for 2005, 2006 and 2007, employment data from the LFS was used for each covariate.

Figure 8 shows that almost half (46 percent) of all claims in 2005 originated from contract employment. However, the share of these claims declined in the period from 46 percent in 2005 to 37 percent in 2011. In turn, claims from dismissals increased by almost 10 percentage points from 19 percent in 2005 to 27 percent in 2011, while retrenchment claims increased from a low of 20 percent in 2007 to 25 percent in 2009 and 23 percent in 2010/2011. In turn, the share of claims due to businesses closing, constructive dismissal, insolvency, retirement or voluntary severance ("other" in Figure 8) was low, though rose during the period.

Of interest is the period between the 2008Q2 and 2009Q4 when the impact of the recession was most severely felt in the South African labor market. During this period, retrenchment claims increased most notably, from 19 percent to 26 percent of total claims. In absolute numbers, the number of retrenchment claims more than doubled, from 17,942 to 41,050. The UIF's claim data thus provides a chilling picture of the scale of retrenchments during the recession. Keeping in mind that this data excludes those who are not eligible to claim from the UIF as well as the fact that the recession affected the informal sector more severely



#### Source: UIF, 2012; own calculations.

Note: Annual claim data for the figure is a summation of quarterly claim data. "Contract" refers to termination of employment as a result of the contract expiring. "Dismissed" refers to dismissals. "Retrenched" refers to those who have been retrenched. The "other" category includes those claiming because of business closures, constructive dismissal, insolvency, retirement or voluntary severance. than the formal sector (DPRU, 2010), we note that the impact of the recession was in fact much more severe than the UIF data indicates.

As explained above, contributors accumulate a day of credit for every six days of employment. Those with more accumulated credits are therefore those who were in more stable and long-term employment in the four-year period prior to claiming. Figure 9 shows the evolution of claims by credit quintiles. If the UIF system mostly serves the most vulnerable, we expect the majority of claims to be from the lowest credit quintiles where we presume employment to be more short-term and unstable. As expected, the earliest data shows that more than half (55 percent) of all claims were from the first two credit quintiles in 2005, thus highlighting the importance of the unemployment insurance system for those in vulnerable employment. Over time though, the proportion of claims from these quintiles declined very rapidly, to the extent that they only accounted for 25 percent of total claims in 2011.



Note: Annual claim data for the figure is a summation of quarterly claim data. The credit quintiles represent the following number of credits: first quintile: 1-42 credits, second quintile: 43-94 credits, third quintile: 95-175 credits, fourth quintile: 176-232 credits, fifth quintile: 233-238 credits. In turn, claims from higher credit quintiles, and most notably those in the fourth and fifth credit quintiles increased their share considerably in the period from 14 and 13 percent to 27 and 26 percent, respectively. In essence, this data indicates that the UIF system increasingly has begun to serve those who are able to find more stable employment. Alternatively, the data may indicate that the period between 2005 and 2011 may have been marked by an increase in unemployment of those with more stable jobs, with the result that claims by these labor market participants increased rapidly. Given the recession of 2008/2009, this is a possible explanation for the findings above. Either way, we find that while the UIF system was predominantly used by those with little previous employment in the early years of its existence, by 2011 those in the lowest quintile of accumulated credits accounted for a mere 6 percent of total claims.

Finally, we consider how the use of the UIF system has changed over time through a consideration of claims by poorer claimants relative to their wealthier counter-



Source: UIF, 2012; own calculations.

Note: Annual claim data for the figure is a summation of quarterly claim data. The credit quintiles represent the following number of credits: first quintile: 1-42 credits, second quintile: 43-94 credits, third quintile: 95-175 credits, fourth quintile: 176-232 credits, fifth quintile: 233-238 credits. The real salary quintiles represent the following salaries: first quintile: R0 to R1,064, second quintile: R1,064 to R1,546, third quintile: R1,546 to R2,207, fourth quintile: R2,207 to R3,626, fifth quintile: R3,626 to R76,860. parts. More specifically, Figure 10 shows the evolution of first to fifth salary quintile claims between 2005 and 2011. In order to control for previous working history, we show the data by credit quintiles with the lowest credit quintile representing shortest previous work history and the highest credit quintile representing longest previous work history. The figure shows two interesting results: First, the ratio of first to fifth salary quintile claimants is higher for those in lower credit quintiles than those in higher credit quintiles. Put differently, poorer claimants dominate over richer claimants, particularly where previous work histories are low. This observation is unsurprising since we expect that claimants with shorter work histories are also more likely to earn lower salaries, since work history may be a proxy for employability. While the proportion of first to fifth salary quintile claimants stood at 5.6 in 2005 for those with the lowest potential claim days (credit quintile 1), it stood at 0.5 for those with the highest potential claim days (credit quintile 5) in the same year. Thus, among those with shorter previous work histories in particular, claims from poorer contributors dominate.

Second, though, for each of the credit quintiles, the proportion of first to fifth salary quintile claimants declines over time, though the declines for those with shorter previous work histories (credit quintiles 1 and 2) are much more severe than for those with longer work histories. More specifically, while the proportion of first to fifth salary quintile claimants stood at 5.6 and 0.5 for those in credit quintiles 1 and 5 in 2005, respectively, by 2011 these proportions had declined to 4.0 and 0.2. In essence, these results show the changing use of the UIF system in the period, with a relatively faster growth for wealthier claimants relative to their poorer counterparts, particularly among those with shorter previous work histories. Importantly, however, we note that the data here excludes those who do not claim unemployment insurance at all, and these may

include vulnerable contributors with very few potential claim days as well as wealthier claimants who may rely on other sources of income and networks during periods of unemployment.

## 3.4 Access to Credit Days, Claimant Behavior and Average Incentives

In this section, we turn to a more in-depth analysis of claims, including: i) how the potential to claim (or credit accumulation) differs between various covariates; ii) an analysis of the subsects of claimants that are most likely to exhaust their credits; and iii) average replacement rates or the average rates at which different categories of claimants are compensated through the unemployment insurance system. The data for credit accumulation and average replacement rates are presented over incidences of claims. While the majority of claims in the data set are first-time claims, around 11 percent of total claims are from claimants who have claimed unemployment insurance previously.

A contributor may claim unemployment insurance between different episodes of employment when he or she is out of work. However, unemployment insurance may not be claimed for every episode of unemployment, that is, some contributors may claim unemployment insurance in some periods of unemployment but not in others. The claim data used for the analysis in this paper does not allow us to observe workers who do not claim insurance even though they are eligible for it. Thus, there may be contributors in the data that claim unemployment insurance for their first episode of unemployment and then again for their third episode of unemployment, but these claims will present in the data as first- and second-time claims. Finally, the subset of claimants that claim more than once may be different from the subset that claims just once. For instance, it may be that contributors with large amounts of credits are able to rely on unemployment insurance during times when they are looking for suitable employment. However, it might also be that claimants who are more vulnerable are forced to claim unemployment insurance repeatedly between stints of piecemeal employment. We expect the discussion below to shed more light on these and other issues. We note though that since first-time claims dominate all subsequent instances of claims across all covariates, we concentrate mainly on the results for the first incidence of claiming.

# 3.4.1 Access to the UIF System: An Analysis of Potential Claim Days

The unemployment insurance system in South Africa is designed so that contributing workers generate one day of credit for every six days of employment, and these credits can then be claimed as unemployment insurance should the need arise. However, as noted above, a maximum of 238 days of credits can be accumulated in the four-year period immediately preceding a claim, even if the contributor works for longer than four years continuously. Contributors that become unemployed and are eligible for unemployment insurance are not obliged to claim it. Accumulated credits can thus be thought of as "potential insurance" since they reflect the amount of days of credits a contributor can potentially claim should they find themselves involuntarily unemployed. Accumulated credits are also an indicator of continuous or stable employment since those with longer periods of continuous employment would accumulate more credits. In the analysis below, we consider the days of benefits generated by the system for different covariates of contributors. In effect

then, we are examining how the design of the system impacts contributors' potential access to the system, where potential access refers to the number of days of credits to which contributors are entitled.

In Figure 11, we consider potential access to the system by gender between 2005 and 2011. The figure shows some interesting results. First, irrespective of the incidence of claiming, males could potentially access unemployment insurance for longer than females. If we consider first-time claims specifically, the data shows that in the period between 2005 and 2011, men could claim for an average of 144 days while women could claim for an average of 138 days. Since a maximum of 238 days of claims can be accumulated, we can deduce that males claiming for the first time were, on average, employed for 60.7 percent of the time in the four years prior to the first instance of claiming while women were employed for 57.8 percent.

Second, the figure shows that with each subsequent claim episode the potential to access unemployment insurance decreased for both males and females. For instance, while males claiming for the first time could (on average) potentially claim unemployment insurance for 144 days, those claiming for the second, third and fourth time could claim for 84, 60 and 46 days respectively. Declining accumulated credits over incidences of claiming imply that the average duration of employment episodes decreases as the number of times claimants claimed increases, thus highlighting the increasing vulnerability of those who claim repeatedly. We note once more though that almost 90 percent of claims were first-time claims (see Appendix 1). Again, we note that we do not observe those who have repeated unemployment episodes but do not claim unemployment insurance after the first claim episode even though they are eligible for it.



In terms of age groups, Figure 12 shows that access to unemployment insurance in terms of claim days is inversely proportional to the age group. Thus, for first-time claims, those in the 55-65 year age bracket could, on average, potentially claim 183 days of unemployment insurance, those in the 45-54 year age group could potentially claim 158 days, and those in the 35-44 year age group could potentially claim 145 days. Youth in the 15-24 year age bracket had the lowest potential claim days, standing at only 70 days. When considering claim days then, access to UIF benefits is better for older first-time claimants than younger claimants. The potential claim days also give an indication of how far from "full employment" first-time claimants from different age groups were. Those in the 55-65 year age group were employed for almost 77 percent of the time in the four years prior to claiming for the first time, while the corresponding results for 45-54 year olds and 35-44 year olds stand at 66.5 percent and 60.8 percent respectively. The results for youth are much more sobering. Claimants in the 25-34 year age group were employed for just under half the time (47.6 percent) in the four-year period prior to claiming for the first time, while those in the youngest group (15-24 year olds) were employed for only 29.5 percent of the time.



	First	Second	Third	Fourth	5+ time
15-24	29.5%	21.1%	16.5%	14.5%	11.7%
25-34	47.6%	30.4%	21.1%	17.0%	14.4%
35-44	60.8%	33.6%	21.6%	17.9%	14.8%
45-54	66.5%	34.6%	21.5%	17.5%	14.4%
55-65	76.8%	38.3%	22.3%	17.5%	15.5%
65-max	85.9%	52.1%	30.4%	21.3%	12.4%

The inverse proportionality between age and potential to claim unemployment insurance is, on the one hand, unsurprising, since employment duration is usually shorter for youth—they are likely in the labor market for a shorter period of time. On the other hand, it is not clear that there is reason to expect, for instance, that employment time in the four years prior to claiming for the first time may be higher for those in the 55-65 year age bracket compared to those in the 45-54 and 35-44 year age brackets. In fact, Figure 12 shows that, of the subset of people who claim unemployment insurance, older first-time claimants were more fully employed in the four years prior to claiming than their younger counterparts. As expected, the data here also shows that the potential to claim unemployment insurance declined as the incidence of claiming rose, but also that the dispersion in accumulated credits between older and younger claimants declined as instances of claiming increased. While this trend may imply that age becomes less important as the episodes of unemployment increase, we note that the majority of claims are first-time claims: Appendix 1 shows that 92 percent of claims by 15-24 year olds were first-time claims, while more than 87 percent of claims from claimants in the other age groups were also first-time claims.

We expect education levels to be correlated with the ability to find stable and long-term employment; thus, claimants with higher levels of education are expected to have better access to the UIF system in terms of potential claim days should they become unemployed. In fact, we find that the discrepancy in the potential to claim unemployment insurance between those with more education and those with less education is very small (see Appendix 2). For first-time claimants, those with tertiary education had, on average, the highest number of potential claim days (147) for the period between 2005 and 2011, while those with grade 10-11 education had the lowest number of potential claim days (137 days). The difference in the average potential to claim between these two groups is thus small, standing at just 10 days. We find a similar result when considering second-, third- and fourth-time claims, though for all education categories, the potential to claim unemployment insurance declines as the incidence of claiming rises.

The salary data in Figure 13 indicates that access to unemployment insurance in terms of potential claim days was higher for those with better salaries compared to their poorer counterparts. For instance, first-time claimants in the highest salary quintile accumulated an average of 187 claim days while those in the lowest salary quintile accumulated an average of just 101 days of claims. Thus, not only are claimants with lower salaries eligible for lower absolute benefit amounts, they can also potentially claim for a shorter period of time in comparison to their wealthier counterparts. This important result highlights how the design of the system appears to provide better benefits for claimants with more stable jobs.

In fact, the results imply that those in the highest salary quintile worked for almost 80 percent of the time in the four years prior to claiming for the first time, while those in the lowest salary quintile worked for only around 43 percent of the time in the period prior to claiming for the first time. As expected, for all salary quintiles the number of potential claim days declined as episodes of claiming increased, but the data also shows that the dispersion in claim days between those in higher and lower salary quintiles declined as instances of claiming increased. This result implies that as the episodes of claiming increase, salaries matter less and less for potential benefit days.

Finally, we dwell on available credits by reason for termination of employment (Figure 14). Once again, there is a wide dispersion in the results here. While first-time claimants who retired were eligible for around 218 days of potential benefits, those whose contracts had expired were only eligible for around 91 days of potential benefits. Access to the UIF system in terms of potential credits is thus most restrictive for those in contract employment. In turn, retirees receive the highest amount of potential benefit days for any covariate analyzed thus far, and, on average, are employed for more than 90 percent of the time prior to claiming for the first time. First-time claims due to business closures, dismissals, insolvencies and retrenchments were all eligible for similar amounts of benefits ranging from 164 to 184 days.



Figure 13: Available Credits over Incidence of Claiming, by Real Salary Quintiles, 2005-2011

Implied Percent of Time Employed in 4-year Period Prior to Claiming							
Salary Quintile	First	Second	Third	Fourth	5+ times		
1	42.4%	22.4%	15.6%	14.1%	13.1%		
2	51.0%	29.1%	20.0%	16.6%	14.3%		
3	58.1%	34.0%	23.3%	18.7%	15.8%		
4	67.2%	38.0%	25.9%	20.9%	15.4%		
5	78.8%	43.3%	27.0%	20.0%	14.5%		

Source: UIF, 2012; own calculations.

Note:The real salary quintiles represent the following salaries: first quintile: R0 to R1,064, second quintile: R1,064 to R1,546, third quintile: R1,546 to R2,207, fourth quintile: R2,207 to R3,626, fifth quintile: R3,626 to R76,860.

For each of the categories, 90 percent or more of claims were first-time claims with the exception of contract claims, where first-time claims accounted for 80 percent of claims and second-time claims accounted for 15 percent of claims (see Appendix 1). This is the highest proportion of second-time claims for any of the covariates analyzed. Overall, the results for contract employees highlight the vulnerability of those who are employed on fixed-term contracts. While their employment prior to claiming for the first time was low (they were employed for only about 38 percent of the total time they could be employed in the four years prior



# Figure 14: Available Credits over Incidence of Claiming, by Reason for Termination of

to claiming unemployment insurance), their potential to claim unemployment insurance was also the lowest. The data also appears to indicate that contract workers who become unemployed are more likely than other workers to claim unemployment benefits more than once.

## 3.4.2 Claimant Behavior: Who Exhausts their Benefits?

The credit exhaustion rates provided in this section show the proportion of claimants within each group that exhausted their credits in the period between 2005 and 2011. Rates are expected to be high when claim-

Table 1: Credit Exhaustion Rates (%), by Working History, 2005-2011										
	0 - 8 months	9 - 19 months	19 - 35 months	35 - 46 months	47 - 48 months					
Gender										
Fomalo	94.88	84.39	74.53	69.46	72.89					
remale	[94.79;94.96]	[84.24;84.55]	[74.35;74.72]	[69.27;69.66]	[72.69;73.09]					
Malo	94.14	82.89	71.31	64.88	68.13					
	[94.06;94.22]	[82.77;83.01]	[71.17;71.46]	[64.73;65.03]	[67.99;68.28]					
Age Group										
15-24	94.81	80.59	63.4	44.11	36.62					
	[94.62;95.01]	[80.21;80.98]	[62.77;64.02]	[42.84;45.38]	[33.87;39.37]					
25-34	94.1	82.39	70.44	59.31	57.07					
20 04	[94.01;94.20]	[82.24;82.54]	[70.26;70.63]	[59.06;59.56]	[56.71;57.43]					
35-44	94.45	83.89	72.71	65.77	65.37					
	[94.34;94.56]	[83.72;84.07]	[72.51;72.92]	[65.56;65.98]	[65.14;65.61]					
45-54	94.93	85.14	74.92	69.6	71.22					
40 04	[94.80;95.07]	[84.91;85.37]	[74.65;75.18]	[69.35;69.86]	[70.99;71.45]					
55-65	94.97	86.26	77.57	72.91	74.78					
	[94.75;95.19]	[85.92;86.60]	[77.20;77.94]	[72.61;73.21]	[74.55;75.01]					
		Edu	cation	[	1					
Below Grade 8	94.2	82.88	72.19	68.73	73.71					
	[94.04;94.36]	[82.60;83.16]	[71.84;72.54]	[68.36;69.10]	[73.40;74.02]					
Grade 8-9	94.68	83.43	73.1	68.68	71.91					
	[94.52;94.84]	[83.14;83.73]	[72.73;73.47]	[68.29;69.06]	[71.56;72.27]					
Grade 10-11	94.45	83.15	72.24	65.96	68.8					
	[94.34;94.57]	[82.95;83.34]	[72.00;72.48]	[65.69;66.22]	[68.54;69.06]					
Grade 12/	94.47	83.7	72.57	66.21	68.89					
Certificate	[94.39;94.56]	[83.57;83.83]	[72.42;72.73]	[66.05;66.37]	[68.73;69.05]					
Tertiary	94.27	83.49	69.73	62.48	63.52					
	[93.85;94.69]	[82.88;84.11]	[69.01;70.45]	[61.76;63.20]	[62.72;64.32]					
		Real Sala	ary Quintile							
1st	94.2	82.27	71.88	68.01	69.67					
	[94.1;94.3]	[82.07;82.46]	[71.61;72.15]	[67.67;68.35]	[69.28;70.07]					
2nd	94.36	84.01	73.76	67.09	69.06					
2110	[94.24;94.48]	[83.82;84.2]	[73.53;73.99]	[66.81;67.38]	[68.73;69.4]					
2rd	94.75	84.39	73.47	66.68	69.41					
Sru	[94.62;94.87]	[84.2;84.59]	[73.23;73.71]	[66.41;66.96]	[69.12;69.71]					
	94.91	83.77	73.23	68.04	71.98					
4th	[94.76;95.05]	[83.54;84]	[72.98;73.48]	[67.8;68.29]	[71.75;72.21]					
54b	94.26	82.39	68.89	64.24	68.48					
ອເຫ	[94.04;94.47]	[82.09;82.68]	[68.6;69.18]	[64.01;64.46]	[68.28;68.67]					

#### Source: UIF, 2012; own calculations.

Note: The working history categories are derived from the credit quintiles. The minimum and maximum values for each working history category are calculated as follows: (min/max of the credit quintile \*6)/30. In turn, the five credit quintiles represent the following number of credits: first quintile: 1-42 credits, second quintile: 43-94 credits, third quintile: 95-175 credits, fourth quintile: 176-232 credits, fifth quintile: 233-238 credits. The real salary quintiles represent the following salaries: first quintile: R0 to R1,064, second quintile: R1,064 to R1,546, third quintile: R1,546 to R2,207, fourth quintile: R2,207 to R3,626, fifth quintile: R3,626 to R76,860. The lower and upper bounds (95 percent confidence interval) of the credit exhaustion rates are presented in square brackets below the mean estimates.

ants are struggling to find employment. However, high rates could also be a sign of moral hazard effects, that is, too generous benefits may result in workers choosing to exhaust their benefits rather than exit the system for employment. However, given that South Africa's unemployment insurance system appears to be fairly stringent, we expect credit exhaustion rates to be high for vulnerable subsects of claimants. Table 1 shows credit exhaustion rates by working history, pooling data between 2005 and 2011. We note that work history may be a proxy for employability since those employed for longer periods prior to claiming unemployment insurance might be expected to find employment relatively more quickly. We thus expect credit exhaustion rates to fall with an increase in prior work history.

Table 1 shows that credit exhaustion rates were marginally higher for females than males and, furthermore, that the gap between exhaustion rates for men and women increases as previous work history increases. This data thus appears to show that female claimants are more reliant on unemployment benefits than their male counterparts since they take longer to find employment. Alternatively, it perhaps signals that a larger proportion of female, rather than male, claimants choose to utilize the full period of replacement income during periods of unemployment perhaps, for instance, because women bear a greater portion of household responsibility.

While 94.1 percent of male and 94.9 percent of female claimants with a previous work history of 0-8 months exhausted their credits, 68.1 percent of male and 72.9 percent of female claimants with 47-48 months of work history exhausted their benefits. Overall, as expected, exhaustion rates decline with an increase in previous work history, which could be an indication of the absence of moral hazard effects in the UIF system in South Africa. We note though that exhaustion rates for both males and females claimants increase sig-

nificantly by almost 4 percentage points from the fourth to fifth credit quintile. This result may allude to some marginal moral hazard effects. However, this will have to be more rigorously investigated through a formal survival analysis.

Table 1 shows that exhaustion rates were similar for all age categories when considering those with the shortest previous work history. More specifically, exhaustion rates were in excess of 94 percent for all claimants, regardless of age group, in the first credit guintile, which is unsurprising since these claimants possessed the lowest potential claim days. Exhaustion rates decline for each of the age groups with an increase in potential claim days, though the decline is inversely proportional to the age group. Thus, while exhaustion rates for 15-24 year olds decline from 95 percent for those with the shortest work history to 37 percent for those with the longest work history, the corresponding decline for 55-65 year olds is from 95 percent to 75 percent. Thus, at higher credit quintiles, the likelihood of a person exhausting their credits increases with age, while young claimants appear to be most eager to return to the labor market.

Once more, for those with the lowest potential claim days, the data shows exhaustion rates in excess of 94 percent, regardless of education level. As expected, declines in exhaustion rates with an increase in the potential claim days are higher for those with better levels of education. Thus, while 74 percent of those with below grade 8 education in the fifth credit quintile exhausted their credits, 64 percent with tertiary education in the fifth credit quintile exhausted their benefits. Claimants with lower levels of education are thus more reliant on unemployment insurance than those with higher levels of education, which is particularly evident among those with longer potential claim periods. We expect credit exhaustion rates to be higher for those in lower salary quintiles, since salary quintiles may proxy for employability. In fact though, exhaustion rates among those with few potential credit days are very high and very similar regardless of salary category. As with gender, age and education, exhaustion rates decrease with an increase in work histories and exhaustion rates across salary quintiles are similar for those with the longest work histories: Among those with the longest previous work histories, 68 percent of claimants in the fifth salary quintile exhausted their credits, while 70 percent in the first salary quintile exhausted their credits.

In sum, credit exhaustion rates among those with few potential claim days were high in the period between 2005 and 2011, and in excess of 94 percent, regardless of the subsect of claimants analyzed. The data does, however, show declining exhaustion rates with increasing potential claim days, possibly pointing to the lack of moral hazard effects in the unemployment insurance system in South Africa. By covariates, among fifth credit quintile claimants exhaustion rates were higher for females compared to males; higher for older claimants compared to younger ones; and higher for those with relatively lower levels of education compared to their more educated counterparts.

### 3.4.3 System Incentives: An Analysis of Average Income Replacement Rates

This section of the report analyzes the proportion of income received as replacement income by different subsects of claimants. In essence, we consider average incentives generated by the system for its different users. Replacement rates are inversely proportional to income earned, with lower salaries (prior to unemployment) being eligible for higher replacement rates or better relative benefits, and vice versa. Figure 15 shows average replacement rates by claim incidences for male and female claimants for the period 2005Q1 to 2011Q3. First, it is clear that average replacement rates, regardless of incidence of claims, are higher for females than for males.

For first-instance claims, the average IRR for females stands at 50 percent while the corresponding replacement rate for males stands at 48 percent. At a benefit transition income level of R12,478 per month, this implies an average monthly salary of around R2,311 for first-time claims for females and an average monthly salary of around R3,082 for first-time claims for males.<sup>17</sup> In effect, women that claimed unemployment insurance in this period on average earned lower previous salaries than their male counterparts. This observation is unsurprising given the well-documented gender wage gaps in the South African labor market.

Higher average IRRs for women compared to men imply that women get a bigger proportion of their previous employment salaries as benefits and are therefore relatively better compensated by the unemployment insurance system (Figure 15). In absolute terms though, these replacement rates imply average benefits of around R1,161 per month for first-time female claimants and R1,487 per month for males. Thus, the design of the UIF system in South Africa allows for better relative benefits for female claimants compared to their male counterparts, though in absolute terms, males receive better benefits. For both females and males, average replacement rates increase over incidences of claims, that is, the salaries of claimants are lower as the instances of claims increase but relative benefits are better. This finding may point to the fact that those with lower salaries are more likely to claim more than once.



Figure 16 shows that, for first-instance claims, replacement rates by age group fall within a band ranging from 50 percent for those in the 15-24 year age bracket and then declining as we move up the age brackets to 46.8 percent for the oldest of the officially employed (55-65 year age bracket). At a benefit transition income level of R12,478, this trend implies previous income salaries of around R2,311 for those in the 15-24 year age bracket and R3,082-R4,622 for those in the 55-65 year age bracket. Unsurprisingly then, older labor market claimants earned better salaries than their younger counterparts prior to claiming for the first time. Younger claimants are however subject to better relative benefits, with an average implied benefit of R1,161 per month for 15-24 year olds who claim for the first time and between R1,500 and R2,000 for 55-65 year olds who claim for the first time.

Claimants' income replacement rates increase from the first to five or more incidences of claiming for all age groups, showing that, irrespective of age group, the poorer previously employed are more likely to claim repeatedly. Age matters less for relative benefits as the incidences of claiming increases: By five or more claims, income replacement rates by age group are quite similar, ranging from 51.6 percent for those in the 15-24 year age bracket to 50.4 percent for those in the 55-65 year age bracket. In sum, the UIF system



Figure 16: Average Income Replacement Rate over Incidence of Claiming, by Age Group, 2005-2011

generates better relative benefits for young claimants compared to their older counterparts, though in absolute terms older claimants fare better.

For education categories, we expect to find an inverse relationship between the IRR and education level, and the data bears this expectation out (Figure 17). The average IRR for those with below grade 8 education for first-instance claims stands at 49.9 percent while tertiary-educated individuals faced an average IRR of 45.7 percent. This IRR for tertiary educated first-time claimants is the lowest IRR for all covariates so far,

and highlights the relatively good position of tertiary educated claimants among all claimants. As with the gender and age data, Figure 18 shows that replacement rates of claimants increase as the incidences of claiming increase and this is true across all education categories. Interestingly though, for five or more claims, replacement rates are bunched quite closely together, at 51.5 percent for those with below grade 8 education and 49.6 percent for those with tertiary education. An implication of this trend may be that education levels seem to have less impact on salary for those



labor market participants who find themselves claiming repeatedly.

Figure 18 shows average income replacement rates by credit quintiles. In essence, the figure shows replacement incentives generated by the UIF system for claimants with varying access to UIF in terms of potential benefit days. The data shows an inverse relationship between potential benefit days and average IRR. Put differently, claimants with lower potential benefit days were eligible for higher average replacement benefits since their pre-claim salaries were lower. For instance, the figure shows that first-time claimants in the first credit quintile claimed benefits at an average income replacement rate of 51.3 percent, while those in the fifth credit quintile claimed benefits at an average income replacement rate of 46.4 percent.

At a benefit transition income level of R12,478, this implies benefits of R811-R1,161 per month for those in the first credit quintile and R1,487-R2,089 per month for those in fifth credit quintile. In effect, the design of the system is such that not only did first-time claimants in credit quintile 1 have a lower potential to claim unemployment insurance in terms of the number of days of benefits, they were also subject to lower absolute benefit amounts compared to the fifth credit quintile claimants.



Figure 18: Average Income Replacement Rate over Incidence of Claiming, by Credit Quintile, 2005-2011

Average replacement rates in Figure 19 give an indication of where on the salary scale claimants feature. The figure shows an IRR of 54.5 percent for the poorest first-time claimants—the highest IRR analyzed and this implies an average previous employment salary of around R1,100 per month. In turn, the average replacement rate of 41.1 percent for the wealthiest first-time claimants implies an average previous employment salary of around R7,950 per month. On average, the fifth salary quintile, first-time claimants were around seven times wealthier than the poorest counterparts.

When we compare the salaries of claimants with potential contributors in Appendix 4 though, it is clear from the table that claimants represent a vulnerable subsect of contributors in 2007.<sup>18</sup> Thus, while around 53 percent of potential UIF contributors in 2007 earned R3,000 or less, the proportion of claimants in this category stands at 74 percent—21 percentage points higher. This result is driven, in particular, by those in the R1,000-R3,000 a month salary category: While 35 percent of potential UIF contributors earned in this category in 2007, a much larger 55 percent of claimants earned this much. In turn also, while 16 percent of potential UIF contributors in 2007 earned R15,000 or more, only 1 percent of claimants earned this amount. Thus, claimants, even wealthier ones, represent the vulnerable among those who can potentially contribute to and claim unemployment insurance from the UIF system.



## **4. CONCLUSION**

South Africa suffers from an extraordinary unemployment problem, displaying an official unemployment rate of around 25 percent in 2011. In the context of this problem, the unemployment insurance system provides much needed relief to those who find themselves out of work. It does not, however, serve the most vulnerable among the unemployed, namely those who have never worked before and those in the informal sector. Furthermore, the system is designed so that the benefit amount and the potential days of benefit are dependent on claimants' previous employment. In terms of potential benefit days, the system appears to favor claimants in more stable previous employment relative to their counterparts with shorter previous work histories, since the days of benefits are determined by the amount of time worked in the four years prior to claiming. In mitigation though, poorer claimants are able to claim a larger proportion of their benefits as replacement income, thus rendering the system progressive with regard to income. However, the data appears to indicate that claimants with fewer potential claim days are more likely to be poorer as well. In fact, under labor market conditions such as ours, the design of the UIF system appears to favor better off claimants, both in terms of potential days of benefits and absolute benefit amounts.

The underrepresentation of various groups such as youth, women and those with incomplete schooling in the UIF claimant data compared to their representation among potential UIF contributors might be an indication of the vulnerability of these groups in the labor market. More specifically, since contributors accumulate credit days by working, these groups may be underrepresented in the claim data due to shorter prior work histories, which results in less potential benefits days. In fact, the data on access to the UIF system appears to corroborate this idea, showing that women, youth, poorer claimants and contract employees face the lowest potential claim days from all the groups analyzed. In fact, claimants in lower salary categories are not only eligible for lower absolute benefit amounts but they can also potentially claim for a shorter period of time in comparison to their wealthier counterparts. In turn, contract employees, in particular, can claim unemployment benefits, on average, for the shortest period of time of all groups analyzed and appear also to be the most likely to claim unemployment benefits more than once.

Our analysis shows the changing use of the UIF system in the period, with relatively faster growth in wealthier claimants relative to their poorer counterparts, particularly among those with shorter previous work histories. In turn, of all first-time claimants, access to the UIF system in terms of potential claim days was high for older claimants (retirees-218 days; 55-65 year olds-182 days) and fifth salary quintile claimants (185 days). Interestingly, the data shows the vulnerability of those who claim repeatedly: With an increase in incidence of claiming, the potential days of benefits decreases, illustrating that those who claim repeatedly are more likely to be in more vulnerable employment. On the whole though, first-time claims overwhelming dominate the sample, accounting for almost 90 percent of all claims.

Potential moral hazard problems with the unemployment insurance system may be evident in the credit exhaustion data. The data shows very high exhaustion rates—in excess of 94 percent—for all sub-groups of claimants in the first credit quintile, though this is unsurprising since claimants in this group also possess the shortest potential claim days. With an increase in the potential to claim though, exhaustion rates drop for all sub-groups of claimants, with 15-24 year olds (36.6 percent), 25-34 year olds (57.1 percent), tertiary-educated individuals (63.5 percent), 35-44 year olds (65.4 percent) and the fifth salary quintile (68.4 percent) showing the lowest exhaustion rates among those with the largest potential claim days. On the whole then, the UIF system in South Africa does not appear to show moral hazard effects, though this claim would have to be investigated more formally through a survival analysis.

In considering relative benefits generated by the system, we found that in the period between 2005 and 2011 notably large replacement rates for first-time claims were enjoyed by first and second salary quintile claimants (average 54.1 and 52.1 percent), the first credit quintile claimants (51.2 percent) and 15-24 year olds (50.3 percent). Replacement rates were generally higher for females than males, and inversely proportional to age and credit quintiles. Thus, females, younger claimants and claimants with less potential benefit days enjoyed better relative benefits compared to males, older claimants and claimants with more potential benefit days. When considering the nominal claim amounts, we found—using 2007 data—that claimants (even wealthier ones) represent the vulnerable among potential UIF contributors, and, in this context, the UIF system is an invaluable tool for providing replacement income for the unemployed in formal private sector employment. Notably, our analysis also shows the value of the system during harsh economic times: Retrenchment claims increased considerably during 2009 and 2010, highlighting the role of the UIF system during periods like the recent recession.

In sum, the design of the UIF system in South Africa is key to understanding both potential access to the UIF system in terms of days of benefits and the replacement income for which claimants are eligible. While the data appears to indicate that, through its design, the South African UIF system may be serving less vulnerable claimants better, the income comparison between claimants and potential contributors in Appendix 4 highlights the fact that claimants, for the most part, originate from vulnerable formal private sector employment. Finally, our analysis of exhaustion rates does not appear to show any moral hazard effects, though a follow-up to this paper intends to investigate this issue more fully.

### REFERENCES

- Banerjee et. al. (2008) Why Has Unemployment Risen in the New South Africa?. *The Economics of Transition*, 16(4): 715-740.
- Bhorat, H. & Leibbrandt, M. (2001) "Modelling Vulnerability and Low Earnings in the South African Labour Market." In Fighting Poverty. Labour Markets and Inequality in South Africa, edited by Bhorat, H., Leibbrandt, M., Maziya, M., Van der Berg, S. and Woolard, I. Cape Town: UCT Press.
- Cooper, C. (1984) South Africa's Unemployment Fund: An Inadequate Cover for the Unemployed. Cape Town: Southern Africa Labour and Development Research Unit (SALDRU).
- Department of Labour. (2010) Annual Report of the Unemployment Insurance Fund for the year ended 31 March 2010.
- Development Policy Research Unit (DPRU). (2011) An overview of the South African labour market from Quarter 3 of 2010 to Quarter 3 of 2011. Development Policy Research Unit Fact Sheet. Available [online]: http://www.dpru.uct.ac.za/.
- Development Policy Research Unit (DPRU). (2010) The South African Economy Pre-and Post-Recession and Fiscal Responses to the Recession. Development Policy Research Unit Research Paper, University of Cape Town.

- Hartley, G. et al. (2010) Incentive Effects of Unemployment Insurance Savings Accounts: Evidence from Chile. IZA Discussion Paper No. 4681.
- National Treasury. (2011) National Treasury Annual Report 2010/11.
- Oswald, A.J. (1997) Happiness and Economic Performance. *Economic Journal* 107(445): 1815-31.

Skills Development Act, No. 97 of 1998 (South Africa)

- Statistics South Africa (2012) Labour Force Surveys 2005-2007 and Quarterly Labour Force surveys 2008Q1-2011Q3, Pretoria, South Africa.
- Unemployment Insurance Amendment Act, No 32 of 2003 (South Africa).
- Unemployment Insurance Act, No. 63 of 2001 (South Africa).
- Unemployment Insurance Act, No. 30 of 1966 (South Africa).
- Unemployment Insurance Fund (UIF). (2012) Unemployment Insurance Fund Database, Department of Labour, Pretoria, South Africa.
- van Ours, J.C. & Vodopivec, M. (2008) Does Reducing Unemployment Insurance Generosity Reduce Job Match Quality?. *Journal of Public Economics* 92(3-4): 684-695.

## ENDNOTES

- In doing so however, the literature points to possible moral hazard effects. More specifically, there is a trade-off between providing unemployment insurance (thus helping claimants with their job search) and the possibility that the the benefits might be generous enough to result in claimants staying within the system rather than finding work. Though this paper does not specifically test whether there are moral hazard effects associated with the unemployment insurance system in South Africa, it does dwell on this issue where appropriate.
- With the introduction of the amended act, the original Unemployment Insurance Act (Act No. 30 of 1966) was repealed with some transitional arrangements.
- The completed days of employment are calculated from the day the contributor commenced employment up to and including the day on which employment was terminated. It also includes the notice period within which the employee was paid remuneration.
- WD is divided by six in the formula above since contributors are eligible for one day of benefit for every six days worked.
- 5. The daily wage is calculated as follows. If a contributor was paid weekly, daily wage is the weekly rate divided by seven. If a contributor was paid fortnightly, daily wage is the fortnightly pay divided by 14. If the contributor was paid monthly, daily wage is the monthly rate of pay multiplied by 12 and then divided by 365.
- The Act states that if a contributor's remuneration fluctuates significantly from one period to the next, the calculations must be based on the average remuneration of that contributor over the previous six months.
- 7. These raw rates exclude any specific conditions related to the claiming period.

- In this paper, grade 12 refers to those with grade 12/certificates. In South Africa, grade 12 is also referred to as "matric."
- A contributor is entitled to one day of unemployment benefits (also referred to as credits) for every six days of employment. The credit quintiles represent the following number of credits: first quintile: 1-42 credits, second quintile: 43-94 credits, third quintile: 95-175 credits, fourth quintile: 176-232 credits, fifth quintile: 233-238 credits.
- The claiming rate is shown annually—not quarterly—since quarterly employment data is not available for 2005, 2006 and 2007. See footnote 11 regarding employment data in post-apartheid South Africa.
- 11. It is important to note the following regarding employment data in South Africa: Between 2000 and 2007, labor market data in South Africa was collected through nationally representative Labour Force Surveys (LFSs) which were conducted biannually in March and September each year. In 2008, the LFS was "re-engineered" and replaced by the Quarterly Labour Force Survey (QLFS), which is released on a guarterly basis. Importantly, there were substantial changes to the definitions of employment and unemployment between the two surveys, thus creating a break in the series. In addition, there are comparability issues between the LFS and QLFS regarding the definition of the informal sector. The informal sector variable in the LFS is self-reported, i.e., respondents need to identify themselves as informal sector workers. In contrast, in the QLFS, the informal sector variable is derived from a series of questions.
- 12. The UIF system only excludes national and provincial government workers; therefore, ideally we should have included local government workers in our sample of potential UIF contributors. However, in the changeover from the LFS to the QLFS, the question on the type of workplace which initially separated national, provincial and local govern-

ment workers in the LFS now lumps these workers together in the QLFS. More specifically, the question in the LFS used to read as follows: "Is the business or enterprise/branch where ... works: 1) national government; 2) provincial government; 3) local government; 4) a government enterprise; 5) a club, community organization, welfare organization, NGO, or church; 6) a co-operative selfhelp association, labour union, professional association, or business league; 7) a private business or private household; 8) self-employed; 9) don't know" (LFS, 2007:2). The same question in the QLFS now reads as follows: "Is your place of work: 1) national / provincial / local government; 2) government controlled business; 3) private enterprise; 4) non-profit organization; 5) a private household; 6) don't know" (QLFS, 2008Q1). We therefore chose to exclude national, provincial and local government workers from our sample of UIF contributors for all years.

13. We note that the claimant data used for the claiming rate is a summation of quarterly claimant data. In turn, for 2008 to 2011, the employment data for the claiming rate is an average of quarterly employment data from the QLFS, while for 2005, 2006 and 2007 employment data from the September round of the LFS was used.

- 14. Data on claimants from the fourth quarter of 2011 was not available at the time of writing this report. We therefore do not show the claiming rate for 2011 in Figure 4. We note however that we show the data for 2011 in the remainder of the section, but it is worth remembering that claimant data for 2011 is from three of the four quarters of 2011.
- The UIF contributor sample refers to potential UIF contributors and is thus (as explained above) essentially all those in formal nongovernment employment.
- Broad unemployment estimates in South Africa include discouraged work seekers among the unemployed, while official estimates of unemployment do not.
- 17. See Appendix 3 for IRRs and benefit amounts for different hypothetical monthly salary levels, based on a benefit transition income level of R8,099 and R12,478 per month. All reported salary levels and benefit amounts in this section are based on the transition income level of R12,478 for demonstrative purposes.
- We consider data from 2007 since wage data from the nationally representative household surveys is only available through 2007.

## APPENDIX

Appendix 1: Summary of Claim Data in the UIF Data Set, 2005-2011									
	Incidence of Claim						Clai	ims	
	First	Second	Third	Fourth	5+	Total	Number	Share	
Total	88.60%	9.10%	1.70%	0.50%	0.20%	100%	2,973,434	100.00%	
Gender									
Female	87.80%	8.70%	2.30%	0.90%	0.40%	100%	1,087,269	36.60%	
Male	89.10%	9.30%	1.30%	0.30%	0.10%	100%	1,886,165	63.40%	
			Age G	roup		(	,		
15-24	91.70%	7.00%	1.00%	0.20%	0.00%	100%	119,146	4.00%	
25-34	87.00%	10.50%	1.90%	0.50%	0.20%	100%	945,847	31.80%	
35-44	87.10%	10.10%	2.00%	0.60%	0.20%	100%	861,470	29.00%	
45-54	88.50%	8.90%	1.80%	0.60%	0.30%	100%	565,617	19.00%	
55-65	92.90%	5.70%	1.00%	0.30%	0.10%	100%	346,912	11.70%	
65-74	96.70%	3.00%	0.20%	0.00%	0.00%	100%	134,442	4.50%	
Polow Grada 9	97 500/	0.10%			0.200/	100%	254 056	11 000/	
Grado 8 9	07.30% 85.80%	9.10%	2.30%	0.00%	0.30%	100%	307.846	10.40%	
Grade 10-11	87 20%	10.00%	2.40%	0.00%	0.30%	100%	661 510	22 30%	
Grade 12/Certificate	89.90%	8 40%	1 30%	0.00%	0.20%	100%	1 577 406	53 10%	
Tertiary	90.50%	8 10%	1.00%	0.00%	0.10%	100%	72 607	2 40%	
lordaly	00.0070	0.1070	Credit Q	uintile	0.1070	10070	12,001	2.1070	
1st	75.20%	17.90%	4.80%	1.50%	0.60%	100%	600.901	20.20%	
2nd	83.90%	12.90%	2.30%	0.70%	0.20%	100%	591.185	19.90%	
3rd	89.40%	9.50%	1.00%	0.20%	0.00%	100%	597,989	20.10%	
4th	96.00%	3.80%	0.20%	0.00%	0.00%	100%	600,837	20.20%	
5th	98.90%	1.10%	0.00%	0.00%	0.00%		582,521	19.60%	
			Real Salary	, Quintile			,		
1st	85.20%	10.74%	2.83%	0.90%	0.33%	100%	594,683	20.00%	
2nd	88.85%	8.95%	1.55%	0.46%	0.20%	100%	594,685	20.00%	
3rd	87.74%	10.05%	1.62%	0.43%	0.16%	100%	594,691	20.00%	
4th	88.85%	9.14%	1.47%	0.39%	0.16%	100%	594,673	20.00%	
5th	92.47%	6.43%	0.86%	0.18%	0.05%	100%	594,683	20.00%	
			Provi	nce					
Gauteng	92.20%	7.00%	0.70%	0.10%	0.00%	100%	739,080	24.90%	
Mpumalang	88.10%	9.60%	1.70%	0.50%	0.20%	100%	394,868	13.30%	
Limpopo	85.00%	10.60%	3.00%	1.00%	0.40%	100%	108,821	3.70%	
North Wes	92.70%	6.60%	0.60%	0.10%	0.00%	100%	78,329	2.60%	
KZN	88.00%	9.90%	1.60%	0.40%	0.10%	100%	582,454	19.60%	
E. Cape	85.20%	10.60%	2.80%	1.00%	0.40%	100%	267,431	9.00%	
W. Cape	85.20%	10.70%	2.70%	1.00%	0.40%	100%	485,533	16.30%	
N. Cape	83.90%	12.50%	2.70%	0.70%	0.30%	100%	98,810	3.30%	
Free State	90.70%	8.10%	1.00%	0.20%	0.10%	100%	153,748	5.20%	

Reason for Termination of Employment								
Business Closed	95.50%	4.10%	0.30%	0.10%	0.00%	100%	90,683	3.10%
Contract	80.20%	14.90%	3.50%	1.10%	0.40%	100%	1,241,597	41.80%
Dismissed	93.50%	5.90%	0.50%	0.00%	0.00%	100%	718,860	24.20%
Insolvent	95.40%	4.40%	0.20%	0.00%	0.00%	100%	51,469	1.70%
Retired	98.80%	1.20%	0.00%	0.00%	0.00%	100%	168,378	5.70%
Retrenched	94.70%	5.00%	0.30%	0.00%	0.00%	100%	686,942	23.10%
Other	97.40%	2.50%	0.10%	0.00%	0.00%	100%	15,505	0.50%

Source: UIF, 2012; own calculations.

Note: The credit quintiles represent the following number of credits: first quintile: 1-42 credits, second quintile: 43-94 credits, third quintile: 95-175 credits, fourth quintile: 176-232 credits, fifth quintile: 233-238 credits. The real salary quintiles represent the following salaries: first quintile: R0 to R1,064, second quintile: R1,064 to R1,546, third quintile: R1,546 to R2,207, fourth quintile: R2,207 to R3,626, fifth quintile: R3,626 to R76,860.



Appendix 3: Indicative Income, IRR and UI Benefit Based on the Transition Income Levels of R8,099 and R12,478 per month							
Monthly Salary		IDD	Implied Benefit				
R8,099	R12,478	IKK	R8,099	R12,478			
150	230.57	58.64	87.96	135.21			
300	462.12	57.39	172.17	265.21			
500	770.76	55.88	279.41	430.7			
700	1077.85	54.53	381.69	587.75			
1 000	1539.34	52.74	527.35	811.85			
1 500	2311.84	50.25	753.79	1161.7			
2 000	3082.8	48.24	964.87	1487.14			
3 000	4622.87	45.19	1355.74	2089.07			
3 075	4738.48	45	1384.01	2132.32			
4 000	6164.75	42.98	1719.3	2649.61			
5 000	7703.18	41.31	2065.49	3182.18			
6 000	9242.96	40	2399.95	3697.19			
7 410	11415.31	38.57	2857.99	4402.88			
8 099	12478	38	3077.62	4741.64			

Sources: Unemployment Insurance Act, 2001 and various government gazettes/notices; own calculations.

Appendix 4: Wage Categories, Claimants versus Potential UIF Contributors							
	Claimant	ts (2007 )	UIF Contributor	r Sample (2007)			
	No	No Share		Share			
0-1000	50,283	19%	1,669,857	18%			
1001-3000	147,909	55%	3,163,554	35%			
3001-5000	38,485	14%	1,284,056	14%			
5001-10000	21,181	8%	1,209,475	13%			
10001-15000	6,499	2%	296,100	3%			
>15000	3,884	1%	1,455,520	16%			
Total	268,241	100%	9,078,563	100%			

Source: UIF, 2012 and LFS, 2007; own calculations. Note: The UIF contributor sample includes all those in formal sector nongovernment employment.

The views expressed in this working paper do not necessarily reflect the official position of Brookings, its board or the advisory council members.

© 2013 The Brookings Institution

ISSN: 2166-5184 (online) | 2166-5176 (print)

Cover photos courtesy of (left to right): Trevor Samson / World Bank, Hansjoerg Richter, John Hogg / World Bank, Andrew Martin Green, Lorenzo Codacci, Eric Miller / World Bank, Ami Vitale / World Bank

## BROOKINGS

1775 Massachusetts Avenue, NW Washington, DC 20036 202-797-6000 www.brookings.edu/global

