CHAPTER 6
THE UNEMPLOYMENT INSURANCE FUND AS AN AUTOMATIC FISCAL STABILISER IN SOUTH AFRICA

6.1 INTRODUCTION

Theoretically, unemployment insurance (UI) contributions and benefits act in tandem to serve as counterbalances to the direction of the economy. This chapter investigates whether the South African Unemployment Insurance Fund (UIF), through its payroll taxes and benefits scheme, contributed towards stabilising the South African business cycle during the period 1970 to 2000. The main features of the South African Unemployment Insurance Fund are firstly documented.

6.2 THE SOUTH AFRICAN UNEMPLOYMENT INSURANCE FUND

Information on the historical background of the South African Unemployment Insurance Fund can be found from the Unemployment Insurance Fund's website. A Cabinet Committee appointed by Government in 1932 recommended the introduction of legislation (the Unemployment Benefit Act) to protect victims of unemployment following the Great Depression in the 1930s. The Act came into operation in 1937 and in 1945 benefit payments was extended to women who ceased work and lost their earnings due to pregnancy. The Act provided for the establishment of separate funds for individual industries. By the end of 1946, twelve funds were in place with 225 000 contributors and a total investment of about R6 million. The scope of coverage was extended over a number of years. In 1952 benefits were extended to contributors who were unemployed due to illness and in 1957 payment was extended to cater for dependents of deceased contributors. The Unemployment Insurance Act of 1946 was repealed and the South African UIF was established in terms of Section 6 of the Unemployment Insurance Act, Act 30 of 1966 that came into operation in 1967.

Initially the UIF benefited only contributors who were registered as unemployed. In addition such contributors had to be capable and available for work and actively seeking employment. From 1 January 1988 payments in terms of the Act was extended to cover women who legally adopted children under the age of two years. The new Unemployment Insurance Contributions Act, 2001 and Unemployment Insurance Act, 2002 came into effect on 1 April 2002. The new legislation gives beneficiaries enhanced benefits, improves contribution collection and optimises the efficiency of the Fund. The new law is having the desired effect of eradicating some of the systemic problems that caused the Fund to experience financial difficulties in the past. Shortcomings of the previous legislation included the following:

- Exclusion of high-income earners with a low probability of unemployment.
- Coverage of low-income contributors, which results in a low-income base while the risk of unemployment is high.
- Litigation procedures imposing scant fines on employers who fail to make their unemployment insurance contributions, while the process of taking a defaulting employer to Court entails high cost.
- The use of contributors' record cards as the only means of determining benefits payable to contributors, exposed the Fund to potential abuse by both employers and workers.
- The Act discriminated against women and certain other categories of contributors and potential beneficiaries.

The new Act has created a larger pool of contributors (widened the contributor base) from which the UIF is able to provide significantly improved benefits to all beneficiaries. Contributors at the lower end of the earnings threshold are compensated at income levels that are more equitable. The creation of an electronic contributor database eliminated the potential for fraudulent claims. The transfer of revenue collection to the South African Revenue Service (SARS) enabled the UIF to benefit from the current "tough" compliance regime of SARS. All employers that are currently registered with SARS must pay their

contributions to SARS, while those employers that are not liable to register for tax purposes must continue to pay their contributions to the UIF.

The employer and employee each contribute one per cent of the latter's total earnings (commission excluded) on a monthly basis. The government is the underwriter of the Fund and is expected to provide assistance to the Fund during times of high unemployment. Benefits are paid for a maximum of 238 days or for the number of day credits that the person has accrued during a 4-year period preceding the date of application. The credits are earned as follows: for every 6 days that a worker contributes, he/she receives 1 day's credit. To qualify for the full 238 days credits the worker must work at least 4 years. The rate at which benefits are paid range from 38% for the highly paid workers to 58% for the lowest paid workers. Unemployment benefits are calculated from the date of unemployment, but are paid from the date of application. Application for benefits must be made within 6 months of unemployment. Benefits are paid only if unemployment is for more than 14 days and if the employer terminated the services of the contributor. If the worker resigns, no benefits are payable, unless the resignation can be deemed to be constructive dismissal. If the company becomes insolvent, benefits are payable. The contributor must be registered as a job seeker in terms of the Skills Development Act, 1998, to qualify for unemployment benefits. The contributor must also be capable of and available for work. Furthermore, the contributor must report at times and places determined by the claims officer for the purpose of signing the unemployment register. From 1 April 2003 domestic workers were also able to benefit from the Unemployment Insurance Fund.

The operational policy of the Unemployment Insurance Fund is determined mainly by the Director-General of Labour and the Unemployment Insurance Commissioner, in consultation with the Unemployment Insurance Board. The vision of the South African UIF is to contribute to the alleviation of poverty by providing effective short-term unemployment insurance to all workers who qualify for it and assisting them in their re-employment. The UIF endeavours to establish effective measures to insure contributors against loss of income resulting from unemployment, illness, pregnancy or the adoption

of children, and to provide for lump-sum payment to the dependants of deceased contributors.

Economic stabilisation is not an explicit objective of the South African UIF. However, international evidence shows that unemployment insurance benefits usually serve as the principal source of automatic stabilisation through its impact on public expenditure (OECD 1993:38 and European Commission 2001:159). The next section evaluates the importance and potential of the South African UIF as an automatic fiscal stabiliser.

6.3 EMPIRICAL INVESTIGATION INTO THE CYCLICAL BEHAVIOUR OF THE SOUTH AFRICAN UNEMPLOYMENT INSURANCE FUND

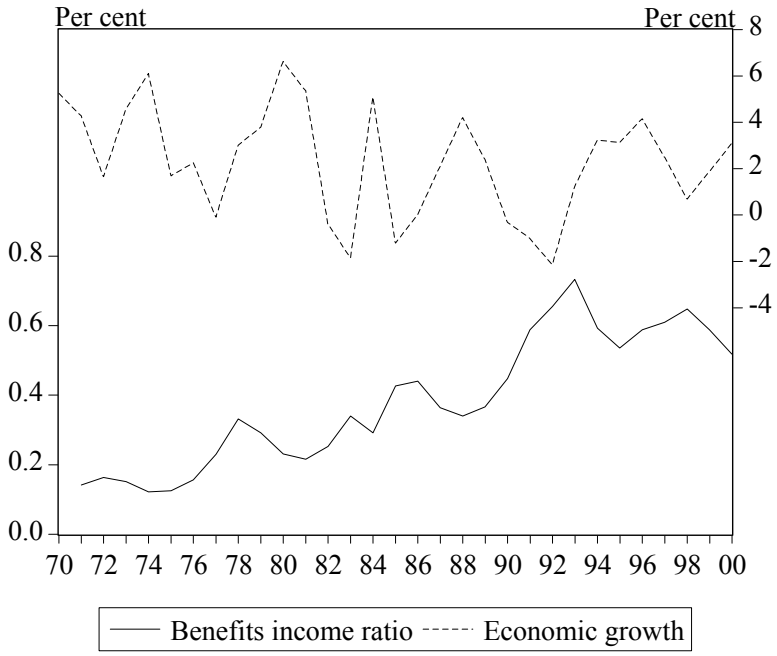
Following the methodology of Dungan and Murphy (1995), aggregate data on the South African UI system were firstly used to determine its effectiveness to act as an automatic fiscal stabiliser. By using UI-account data, Dungan and Murphy (1995:7) examined the role of UI benefits in determining Canadians' personal income, given the level of UI premiums collected, in order to determine whether these trends helped to offset recessionary and inflationary trends.

The authors state that if the UI system is working effectively as an automatic fiscal stabiliser, one would expect UI benefits to constitute a greater proportion of total personal income during downturns in the economy and that this proportion would decline as the economy improves. Conversely, the ratio of UI premiums collected, as a ratio of GDP, is expected to fall in downturns and to increase as the economy improves.

Figure 6.1 shows how well the ratio of UI benefits to household disposable income in South Africa responded to changes in the economy. In 1980, when the highest economic growth rate was recorded, UI benefits represented 0,2 per cent of household disposable income. By 1992 this ratio increased to 0,7 per cent, when the lowest economic growth rate was recorded. Over the sample period, the average ratio of UI benefits to disposable income was 0,4 per cent. The countercyclical cushioning impact of UI benefits in South

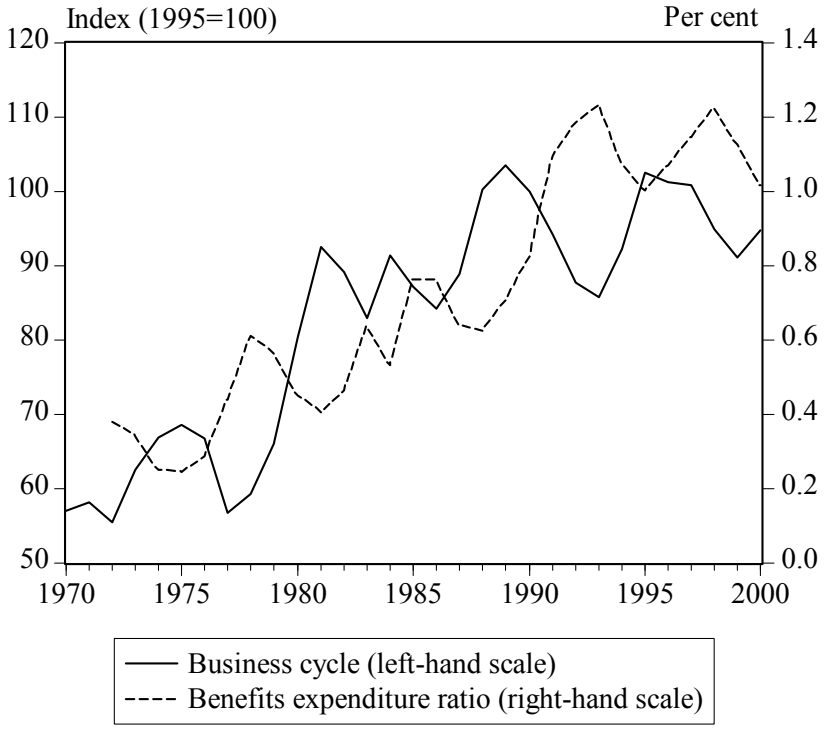
Africa is also illustrated in Figure 6.2, which portrays the inverse relationship between UI benefits as a ratio of total general government expenditure and the coincident business cycle indicator.

Figure 6.1 Unemployment insurance benefits as a ratio of household disposable income against economic growth



Source: Department of Labour and South African Reserve Bank

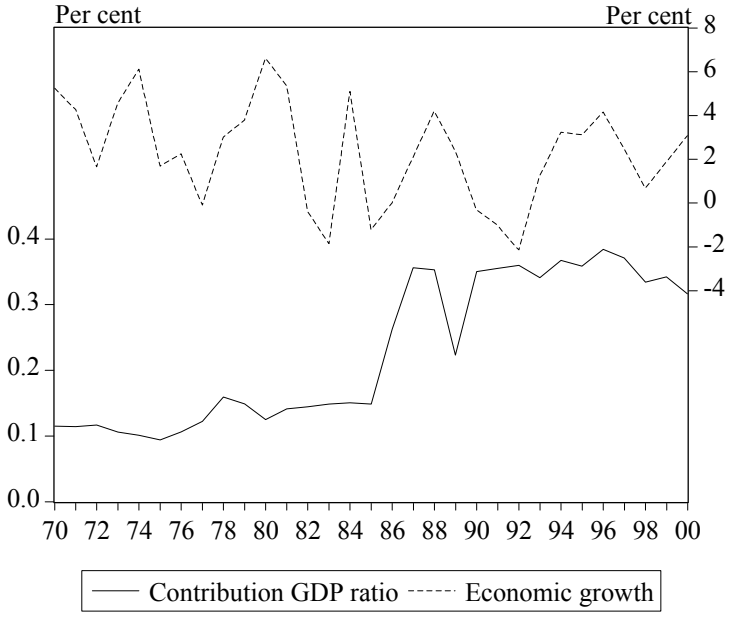
Figure 6.2 Unemployment insurance benefits as a ratio of total expenditure against the business cycle



Source: Department of Labour and South African Reserve Bank

Figure 6.3 indicates that the ratio of UI contributions to GDP did not respond as well to changes in economic growth as in the case of UI benefits. With an economic growth rate of 6,6 per cent in 1980, the ratio of UI contributions to GDP was 0,1 per cent. While the ratio was supposed to be lower in 1992 when the lowest economic growth rate of –2,1 per cent was recorded, the ratio in fact increased to 0,4 per cent. The weak automatic stabilising response of UI contributions is also highlighted by Figure 6.4, which shows UI contributions as a ratio of total revenue against the business cycle. UI contributions only dampened fluctuations in the level of economic activity for about a third of the time period used in the analysis.

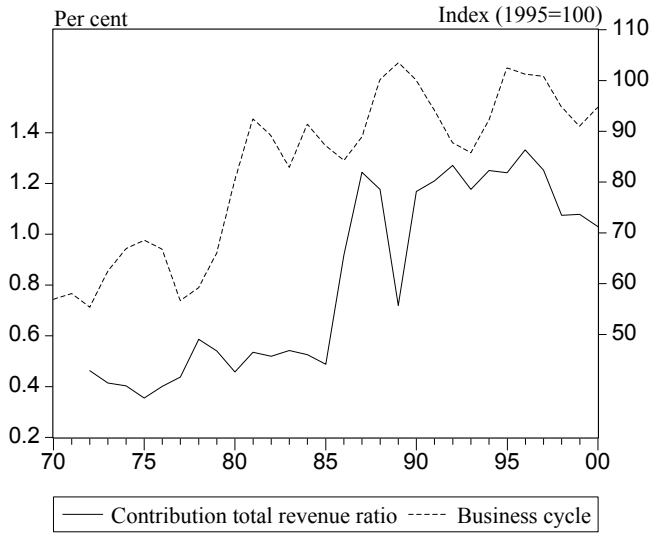
Figure 6.3 Unemployment insurance contributions as a ratio of GDP against economic growth



Source: Department of Labour and South African Reserve Bank

An alternative measure of the UIF's response to the direction of the economy is illustrated in Table 6.1, which shows UI benefit payments, UI contributions, UI balances and the various peaks and troughs of the business cycle for the period 1970 to 2000. During the height of an expansion (peak), UI benefit payments should be less than the benefits paid in the related trough year that follows the peak year in order for it to exhibit the countercyclical responses that characterise an automatic stabiliser. UI contributions, on the other hand, should be higher in peak years than in the related trough years. In total, the corresponding UI deficit should be larger during the trough year or the year immediately following the trough.

Figure 6.4 Unemployment insurance contributions as a ratio of total revenue against the business cycle



Source: Department of Labour and South African Reserve Bank

Table 6.1 Unemployment insurance and business cycle peaks and troughs[19]

YEAR	PEAK/TROUGH	UI BENEFITS		UI CONTRIBUTIONS		UI BALANCE	
		Nominal	Constant	Nominal	Constant	Nominal	Constant
1971	**PEAK**	14.0	241.0	16.2	278.6	2.2	37.7
1972	**TROUGH**	18.0	295.7	18.6	305.4	0.6	9.7
1975	**PEAK**	21.1	248.1	25.7	302.9	4.7	54.8
1977	**TROUGH**	50.7	483.2	41.9	399.0	-8.8	-84.1
1981	**PEAK**	88.2	513.0	102.7	596.9	14.4	83.8
1983	**TROUGH**	188.4	848.5	140.2	631.7	-48.1	-216.8
1984	**PEAK**	196.0	790.2	166.8	672.7	-29.1	-117.5
1986	**TROUGH**	386.5	1143.4	392.2	1160.3	5.7	16.9
1989	**PEAK**	563.0	1097.4	562.2	1095.9	-0.7	-1.4
1993	**TROUGH**	2021.3	2392.0	1454.4	1721.2	-566.8	-670.8
1997	**PEAK**	2670.5	2288.4	2538.7	2175.4	-131.8	-113.0
1999	**TROUGH**	2984.8	2273.3	2722.6	2073.6	-262.2	-199.7

Source: Department of Labour and South African Reserve Bank

[19] Variables were converted into constant prices using the consumer price index.

From Table 6.1 it is clear that UI benefits were almost always higher in the trough years that followed the related peak years. However, it is clear from Table 6.1 that UI contributions have a limited effect as automatic stabiliser. With the exception of the peak of June 1984 and the following trough of March 1986, the UI balance was also always lower in the trough years that followed the related peak years.

In total, the average amount of benefits (in constant 1995 prices) during trough years amounted to R376,4 million more than in peak years, which was sufficient to offset the R194,8 million destabilising effect originating from UI contributions. Thus, on average, the UI deficit in trough years exceeded the deficit in peak years by R181,6 million. This is illustrated in Figure 6.5, which shows that (with the exception of the peak of 1984 and the trough of 1986) the UI balance has always been lower in trough years than in peak years.

The largest difference in the UI balance (in constant 1995 prices) between subsequent peak and trough years (R669,4 million) was recorded between the peak of 1989 and the trough of 1993. This comes as no surprise, as the largest negative economic growth rate and output gap was recorded in the early 1990s during one of the worst recessions since the Great Depression. Thus, based upon the timing of the UI balance, it can be regarded as an automatic fiscal stabiliser. Figure 6.6 highlights the cyclical movements demonstrated by the real UI balance and real UI benefits.

Figure 6.5 Real unemployment insurance balance and business cycle peaks and troughs

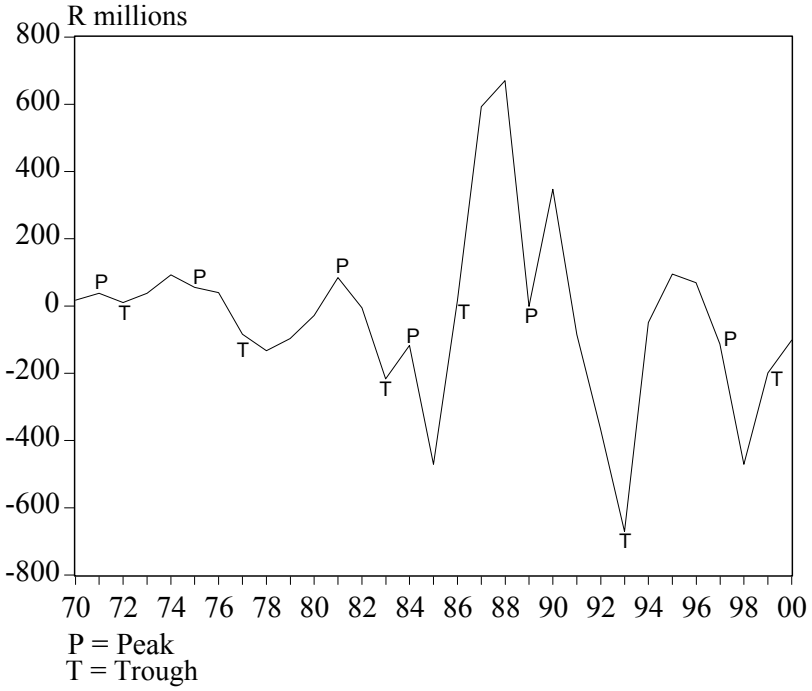


Figure 6.6 Real unemployment insurance benefits, real unemployment insurance balance and the business cycle

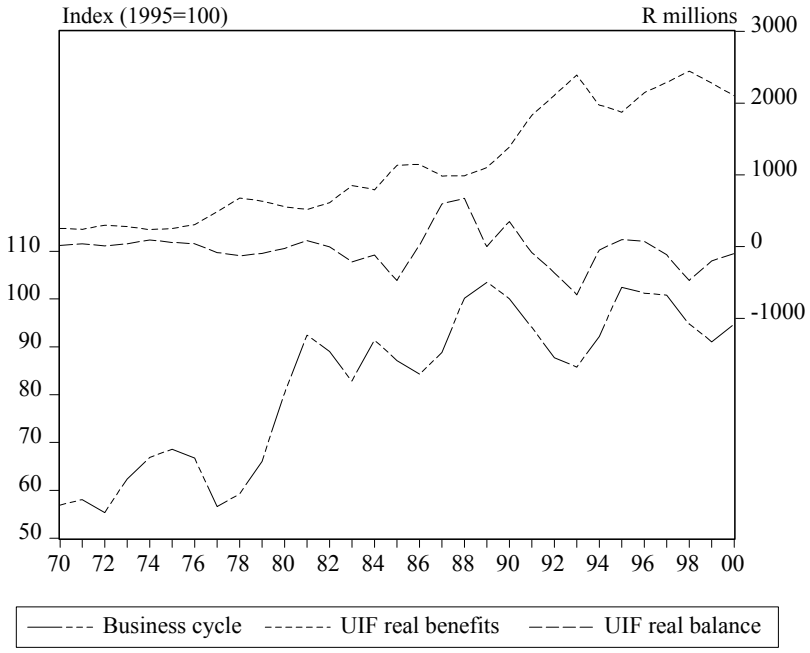


Table 6.2 Correlation coefficients and elasticities of expenditure components

Correlation coefficient between the cyclical components of government expenditure and output[20]				
	UI benefits	**Total expenditure**	**Current expenditure**	**Current primary expenditure**
Nominal	-0.15	0.35	0.43	0.36
Real	-0.73	-0.16	-0.07	-0.1
Elasticity of expenditure components with respect to output growth[21]				
	UI benefits	**Total expenditure**	**Current expenditure**	**Current primary expenditure**
Nominal	-1.21	0.77**	0.18	0.38
Real	-5.0**	0.43	0.26	0.42

** denotes significance at the 1 per cent level

Although unemployment insurance benefits convey stabilising properties, the same cannot be said with confidence about other components of general government expenditure. Table 6.2 shows correlation coefficients between the cyclical components of output and government expenditure. In nominal terms, only unemployment insurance benefit payments show countercyclical characteristics. All real expenditure components are countercyclical as measured by the correlation coefficients, with the coefficient of unemployment benefits much stronger compared to the other components of expenditure. The elasticity of nominal (real) unemployment insurance benefits with respect to output growth is –1,21 (-5,0) per cent, indicating that a 1 per cent decrease in nominal (real) output growth leads to a 1,21 (5,0) per cent increase in nominal (real) unemployment insurance benefits. The rest of the expenditure components act in a procyclical manner.

[20] Estimates are based on Hodrick-Prescott filtered data.
[21] OLS estimation of $d(\log(EXP_{it})) = \alpha_i + \beta_{EXPi} * d(\log(Y_{it})) + \varepsilon_{it}$ with AR(1) correction.

Table 6.3 A comparison of correlation coefficients and elasticities, 1972 to 2000

	Total expenditure	Current expenditure	Current primary expenditure
Correlation coefficient between the cyclical components of government expenditure and output[22]			
South Africa	0.43	0.6	0.54
Chile	0.56	0.45	0.45
Indonesia	0.92	0.87	0.79
India	0.76	0.64	0.66
Romania	1.0	1.0	1.0
Mexico	0.94	0.93	0.92
Mauritius	0.72	0.69	0.73
	Total expenditure	**Current expenditure**	**Current primary expenditure**
Elasticity of expenditure components with respect to output growth[23]			
South Africa	0.68*	0.62*	0.69*
Chile	1.06**	1.09**	1.06**
Indonesia	1.21**	0.89**	0.92**
India	0.08	-0.03	-0.07
Romania	0.97**	0.93**	0.89**
Mexico	1.0**	1.0**	0.74**
Mauritius	0.86**	-0.18	0.95**

** (*) denotes significance at the 1 (5) per cent level

Table 6.3 shows correlation coefficients between the cyclical components of nominal GDP and nominal central government expenditure for seven developing countries as well as the elasticities of their expenditure components with respect to output growth. It is clear from Table 6.3 that the same conclusion of procyclicality of government expenditure can be made with respect to the six other selected developing countries (Chile, Indonesia, India, Romania, Mexico and Mauritius) as was found in the case of South Africa. This finding is consistent with the findings of Talvi and Vegh (2000) and Braun (2001).

[22] Estimates are based on Hodrick-Prescott filtered data.

[23] OLS estimation of $d(\log(EXP_{it})) = \alpha_i + \beta_{EXPi} * d(\log(Y_{it})) + \varepsilon_{it}$ with AR(1) correction where EXPi represents the respective country's expenditure component and Y_i the respective GDP.

The largest value of UI benefits and the UI balance might serve as a rough measure of the program's importance. The UI benefits and the UI balance as a ratio of GDP (in constant terms) reached maximum values of only 0,46 and –0,13, respectively, in the trough of 1993. A further exercise showed, for example, that an output elasticity of unemployment-related expenditure of –10 per cent is needed to generate an output elasticity of current primary expenditure of –0,1 per cent, which results in a maximum automatic fiscal stabilising effect of only 0,09 per cent of potential output[24]. Thus, although the UIF operates as an automatic fiscal stabiliser, its impact is insignificant due to its small share in the total public finances.

6.4 IMPACT OF THE NEW UNEMPLOYMENT INSURANCE LEGISLATION

As pointed out earlier, the new UI legislation has widened the contributor base from which the South African UIF is able to provide significantly improved benefits for all beneficiaries. This section aims to measure the impact of these developments on the stabilising role of the UIF by adjusting historical data to reflect these changes.

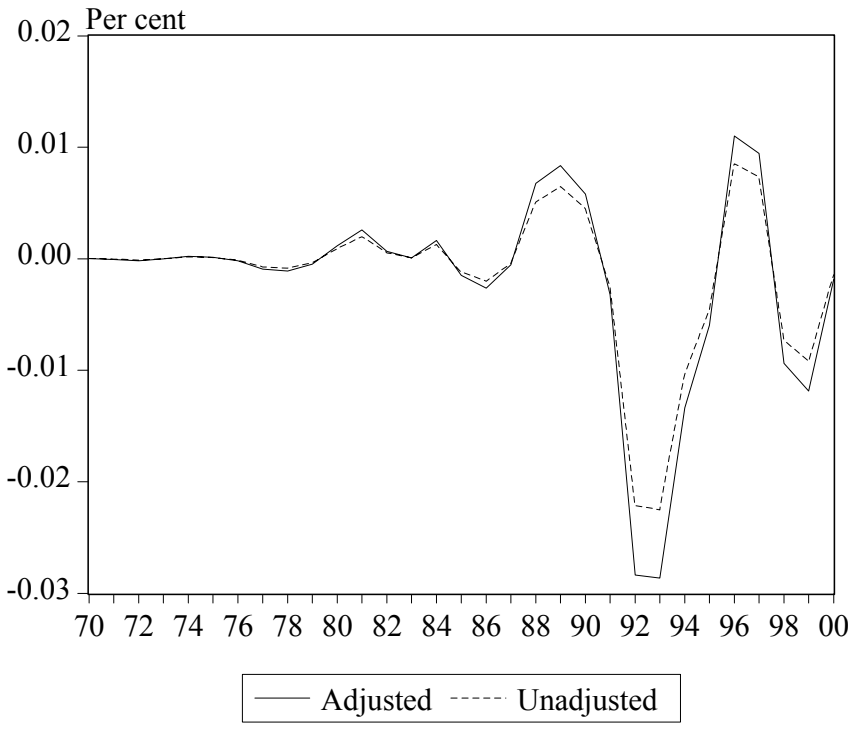
Table 17.11 of the 2003 *Estimates of National Expenditure* provides summary information of revenue and expenditure for the UIF for the period fiscal 1999/2000 to fiscal 2005/2006. Allowing for a 6,0 per cent growth rate for fiscal 2002/2003 and fiscal 2003/2004[25], it can be assumed that the new legislation will have the effect that tax revenue will increase by approximately 50 per cent and transfer payments and subsidies by approximately 20 per cent.

Figure 6.7 illustrates the cyclical component of the UI balance with and without an increase in UI contributions and benefit payments of 50 per cent and 20 per cent respectively. The maximum difference of 0,006 per cent of potential output was recorded in fiscal 1992/1993. The impact of the UIF as an automatic fiscal stabiliser in the South

[24] The output elasticity of current primary expenditure was defined as the output elasticity of unemployment-related expenditure times the share of unemployment related expenditure in total current primary expenditure.
[25] The growth rate for fiscal 2004/05 and fiscal 2005/06.

African economy can therefore be expected to be larger with the new UI legislation, but the overall impact will still be much smaller compared to the role of tax revenue in general.

Figure 6.7 The impact of the new UI legislation on the cyclical component of the UI balance



6.5 SYNOPSIS

The primary role of the South African UIF is to provide a social safety net for the unemployed. However, this study explained how the UI system's contributions and benefits act in tandem to serve as counterbalances to the direction of the business cycle. The main aim of this chapter was therefore to investigate whether the South African UI system responds to economic downturns and economic recoveries in ways that would stabilise the economy.

Absolute measures derived from analysing only the characteristics of the UI system over time showed that the UI system, through its benefit payments to the unemployed, acted in a countercyclical manner to moderate economic recessions and temper expansions. UI contributions, however, demonstrated a weak automatic stabilising response to the direction of the economy. In fact, UI contributions destabilised economic activity most of the time. Nevertheless, the net stabilising effect of UI benefits was sufficient to offset the destabilising effects of UI contributions to the extent that the UI balance acted as an automatic fiscal stabiliser during the period 1970 to 2000.

Although unemployment insurance benefits display stabilising properties, the same cannot be said with confidence about other components of general government expenditure. Correlation coefficients show that only unemployment insurance benefits show countercyclical characteristics in nominal terms. In real terms, all the selected expenditure components are countercyclical, but the coefficient of unemployment insurance benefits is much stronger compared to other categories of expenditure. Furthermore, the stabilising effect of the South African Unemployment Insurance Fund can be expected to be relatively insignificant due to its small share in the total public finances. Results showed that the impact of the UIF as an automatic fiscal stabiliser could be expected to be larger with the new UI legislation, but that the overall impact would still be much smaller compared to the role of tax revenue in general. However, the possible psychological benefits of the UI system and the evidence provided in this chapter emphasise the potential of the Unemployment Insurance Fund as an effective automatic fiscal stabiliser, also in South Africa.