Chapter
8

The impact of changes in the economy on existing trends in terms of employment and unemployment, income, poverty and economic growth in Emfuleni

8.1   Introduction

In this chapter, different trends in the local economy are described and projected until the year 2015. These trends (population growth, GGP growth, employment, unemployment and poverty) are firstly described for the economy of Emfuleni without the impact of possible (positive) projects or negative 'happenings' (like the collapse of the Krion Financial Services scheme and Equilibium/Futura International).

Secondly, the impact of some possible (positive) projects (such as an Inland Waterfront, the stimulating of the Manufacturing sector, the establishment of an IDZ and the upgrading of Vereeniging Airport to an international cargo airport) as well as the above-mentioned negative "happenings" on these trends until 2015 will receive attention, in order to determine the sustainability of the Emfuleni economy.

8.2   Current trends (without the impact of change)

Trends in population growth, GGP (economic) growth, employment and unemployment, as well as poverty are discussed in the context of the Emfuleni economy. The underlying assumptions for making projections towards 2015 are also discussed below

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Population

In the past, Emfuleni experienced a relatively high population growth rate (2.85% p.a.) because of high inward immigration, especially in the years after the abolition of the Group Areas Act – This lasted until 1996 and then this rate decreased towards the year 2001 to just under the national growth rate. From 1996 to 2001, the growth rate for Emfuleni was 1.95% per annum (see Section 4.2).

Assuming that immigration into the region will in the future also be discouraged by the high levels of unemployment, the annual population growth rate for Emfuleni, taking into account the impact of HIV/AIDS, is estimated at 1.95 percent per annum for the period 2000 to 2015. The estimated growth rate, without taking the impact of HIV/AIDS into account, is about 0.14% per annum higher (Stats SA 2002). The estimated population for the years 2000 to 2015 is indicated in Table 8.1 and Figure 8.1.

TABLE 8.1 POPULATION ESTIMATES, EMFULENI (2000 - 2015)

Year	Estimated population
2000	645,583
2005	711,301
2010	783,410
2015	862,831

- Source: Calculations based on the 2001 Census data, Stats SA 2003.

FIGURE 8.1 ESTIMATED POPULATION, EMFULENI (2000 - 2015)
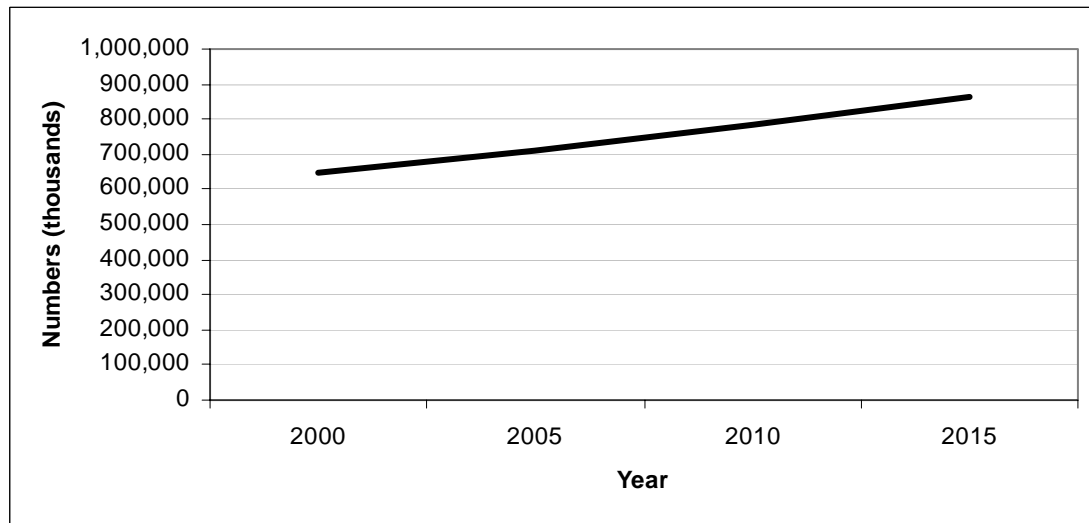
- Source: Calculations based on the 2001 Census data, Stats SA 2003.

GGP – growth

The Emfuleni economy experienced a nominal (at current prices) growth rate of 4.5% per annum from 1990 to 2000 (see Section 6.2). However, at real prices, where the effect of inflation is eliminated, the Emfuleni economy actually experienced a negative growth. Between 1996 and 2000, this amounted to an average of -3.4% per annum. From 1999 – 2000, this growth rate was estimated at -2.4% (WEFA 2001), and for the year 2000 – 2001 it was estimated at -0.2% (WEFA 2002).

The economy of the Sedibeng District Municipality (of which Emfuleni comprises the greatest part) is characterised by a considerable decline from 1996 to 1999. In the period 1999 to 2001, the economy recovered to an extent, but on the whole, not enough to recover to the 1996 levels (Sedibeng 2003:7). Sedibeng District experienced a high economic growth cycle during 1999 to 2001, but it declined sharply towards 2003 (Sedibeng, 2003: 8). As Emfuleni forms the greatest part of Sedibeng (84.3% of the labour force of Sedibeng resides in Emfuleni (Stats SA 2003a)), it is very likely that these trends also apply to Emfuleni.

It is expected that the overall economic situation in Emfuleni will become slightly better from 2005 onwards (Sedibeng 2003:8). The estimated growth rates for the Emfuleni economy (based on data from WEFA 2002), are indicated in Table 8.2.

TABLE 8.2   GGP GROWTH PROJECTIONS FOR EMFULENI (2000 – 2015) – CONSTANT PRICES

Year	Estimated average growth rate
Up to 2000	-2.40
Up to 2005	0.14
Up to 2010	1.00
Up to 2015	1.25

- Source: Calculations based on estimates from WEFA 2002.

Employment and unemployment

Not only Emfuleni, but the whole country experienced a decline in job opportunities in the period 1990 to 2002 (BER 2001:90; Stats SA 2000). Data from surveys conducted by the VRG in the townships of the Vaal showed that unemployment escalated at an increasing rate from 1991 to 1994 (Slabbert *et al.* 1994a:7). From 1994 to 1999, unemployment increased at a lower rate than in the preceding period (see Figure 4.1). This can be explained by the fact that larger numbers of people moved into Emfuleni from rural areas in the first period, adding to the numbers of the unemployed. In addition, many firms were retrenching people, due to the decline in the global demand for steel and the resulting downswing in the local economy.

The economically active population (EAP) of Emfuleni, expressed as a percentage of the whole population, increased from 41.1% in 1994 (Slabbert *et al.* 1994a:8) to 46.6% in 1999 (Slabbert & Mokoena 1999). This can be explained by the fact that more people (normally not part of the labour market) enter the labour force in more difficult times. For the year 2001, the EAP was 47.6% and for 2003, a figure of 45.8% was recorded (see Table 4.2). However, for the purpose of this thesis and taking into account that it is estimated that the economy of Emfuleni will show some growth in the future (Sedibeng 2003:8), it is assumed that the economically active population will remain at 46.6% up to 2015.

As stated above, the economy of Emfuleni had a negative real growth (GGP) for the years 1996 to 1999. It then sharply recovered in 2000 and 2001; then declined again in 2002; and it was finally showing an increase again in 2003. The overall trend in the economy shows a slight growth from 2005 onwards.

Assuming that major restructurings in the economy, coupled with retrenchments, are finalised by the year 2005, it can be expected that employment will then increase with a corresponding increase in the GGP. The expected number of employed, the expected number of unemployed and the expected unemployment rates for the years 2000 to 2015 are projected in Table 8.3 and Figure 8.2.

TABLE 8.3   ESTIMATED UNEMPLOYMENT RATE, NUMBER OF   EMPLOYED AND UNEMPLOYED, EMFULENI (2000 – 2015)

Year	Unemployment rate %	Number of unemployed	Number of employed
2000	51.3%	155,988	148,082
2005	57.1%	189,267	142,199
2010	59.1%	215,756	149,313
2015	60.6%	243,660	158,419

- Source: Projections based on the 2001 Census data, Stats SA 2003c & Slabbert 2003.

FIGURE 8.2   EMPLOYMENT AND UNEMPLOYMENT IN EMFULENI (2000 – 2015)
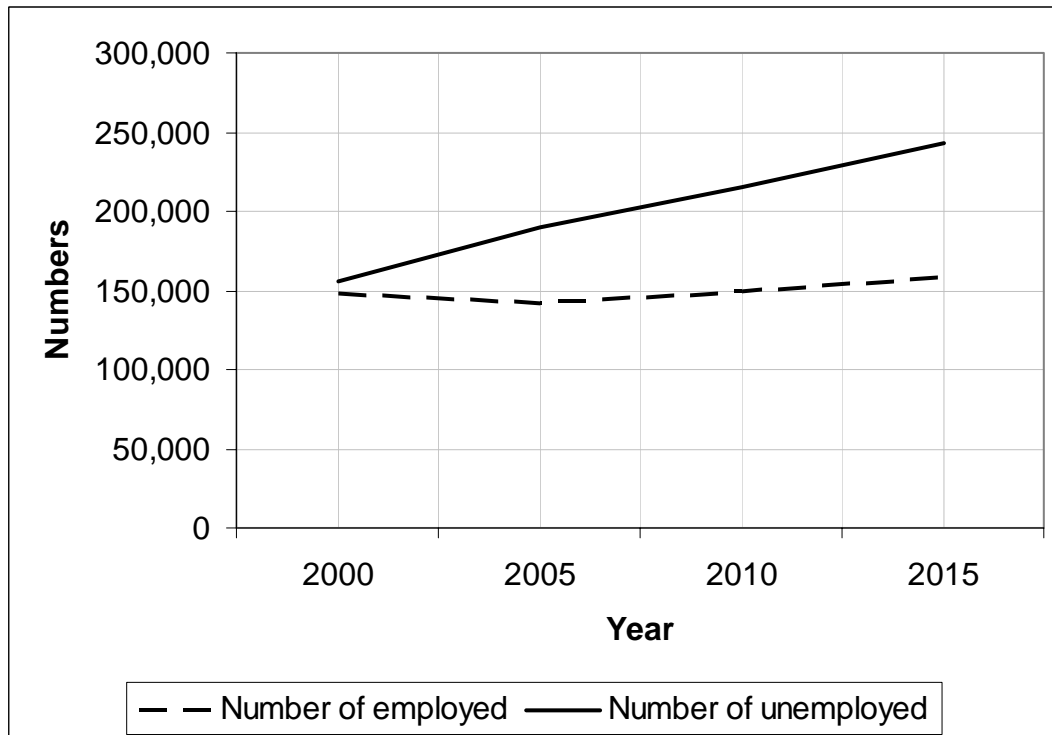
- Source: Projections based on the 2001 Census data, Stats SA 2003c & Slabbert 2003.

It should be noted that the above projections do not show the short term recovery of the economy in the years 1999 to 2001, as the projections are based on the

longer term expected performance of the economy. This explains why the 2001 Census figures for the employed population (Stats SA 2003a) are higher than the 2005 estimate (153,655 employed in 2001, versus the estimate of 142,199 in 2005 in Table 8.3).

Total formal employment in South Africa as a whole decreased with an average of 2.2% per annum in the period 1995 – 2000 (Calculated from BER 2001:90). The same trends were observed In Emfuleni. It is expected that this trend will continue till 2005, from where the formal employment will increase together with an expected positive real growth of the economy.

The estimated formal employment for Emfuleni is projected in Table 8.4 and Figure 8.3.

TABLE 8.4 ESTIMATED FORMAL, INFORMAL AND TOTAL EMPLOYMENT, WITH PERCENTAGES OF LABOUR FORCE, EMFULENI (2000 – 2015)

Year	Formal employed		Informal employed		Total	
		%		%		%
2000	106,424	35.0	41,658	13.7	148,082	48.7
2005	94,024	28.3	48,175	14.6	142,199	42.8
2010	97,108	26.6	52,205	14.4	149,313	40.9
2015	101,324	25.2	57,095	14.1	158,419	39.4

- Source : Projections based on the 2001 Census data, Stats SA 2003a; Slabbert & Mokoena 1999.

FIGURE 8.3 ESTIMATED EMPLOYMENT IN EMFULENI (2000 - 2015)
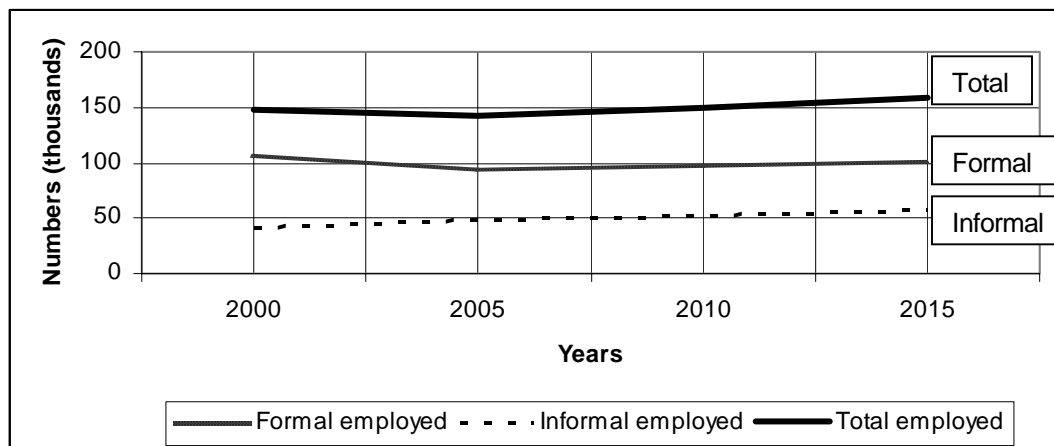
- Source: Projections based on the 2001 Census data, Stats SA 2003a; Slabbert & Mokoena 1999.

The informal and total employment is also indicated in the Table. As formal employment decreases, it is very likely that informal employment will increase. However, the income earned from informal employment on the whole is much lower than that of formal employment. Higher informal, but lower formal employment, may have a negative effect on the poverty gap ratio.

Poverty

In Table 8.5 and Figure 8.4, the poverty rate (percentage of the households which are poor), the poverty gap ratio and the unemployment rate for former black townships (FBTs), as well as for Emfuleni as a whole are estimated. For the years 1991 and 1994, only the figures for the former black townships are available, therefore these are the figures used to determine the trends in poverty and to find correlations between poverty and unemployment.

TABLE 8.5   POVERTY RATE, POVERTY GAP RATIO AND UNEMPLOYMENT RATIO FOR FORMER BLACK TOWNSHIPS AND EMFULENI (1991, 1994 AND 2000)
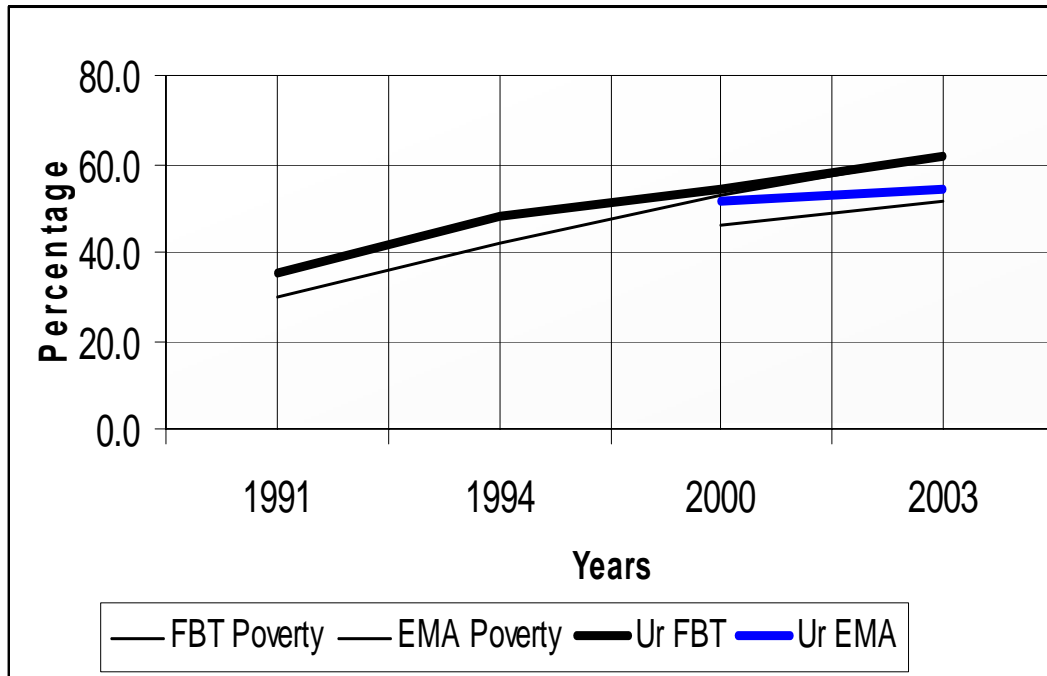
Year	Poverty rate		Poverty gap ratio		Unemployment rate	
	FBT	Total EMA	FBT	Total EMA	FBT	Total EMA
1991	30%		0.58		35.0%	
1994	42%		0.60		48.4%	
2000	53%	46.1%	0.47	0.41	54.5%	51.3%
2003	62%	51.5%	0.47	0.46	61.7%	54.2%

- Source: Slabbert 1997:54,56,75; Slabbert & Slabbert 2002b:6,18, 21.

Slabbert (1997:77) determined that there is a strong link between poverty and unemployment in the Vaal Triangle. As shown in Figure 8.4, up to 1994 the poverty rate and unemployment rate (Ur) increased at about the same rate. However, from 1994 the poverty rate increased faster than the unemployment rate. It would appear that the reason for this is that many people, formerly employed in the formal sector, were now, after the retrenchments, absorbed as 'employed' in the informal sector, leading to an increase in the percentage of people employed in the informal sector. As the take-home pay in the informal sector is usually very low (Slabbert 1997:117), this resulted in an increase in the poverty rate. In 1994, 16.8% of all the employed worked in the informal sector

(Slabbert 1997:103), while in 2000, 28% of all the employed worked in the informal sector (Slabbert & Slabbert 2002b:6).

FIGURE 8.4   POVERTY AND UNEMPLOYMENT RATES: TRENDS

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┌──────────┐
│ Ur FBT   │
│ FBT      │
│ poverty  │
└──────────┘
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                    ┌──────────┐
                    │ Ur EMA   │
                    │ EMA      │
                    │ poverty  │
                    └──────────┘
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- Source: Slabbert 1997:54, 56, 75; Slabbert & Slabbert 2002b:6,18,21.

As shown in Figure 8.4, the poverty rate was increasing more than the unemployment rate. In 2003, the poverty rate for the FBTs was more than their unemployment rate. For Emfuleni as a whole, the poverty rate also increased more than the unemployment rate. If the same trend continues, the poverty rate will be about 55.0% in 2005. From 2006 and upwards, it can be assumed that the poverty rate will stay the same as the unemployment rate for Emfuleni, as it is expected that the Emfuleni economy will show an increase in GGP growth.

**TABLE 8.6   ESTIMATED UNEMPLOYMENT AND POVERTY RATES, EMFULENI (2000 – 2015)**

Year	Poverty rate	Unemployment rate
2000	46.1	51.3
2005	55.0	57.1
2010	59.1	59.1
2015	60.6	60.6

- Source: Projections based on Slabbert 1997:54, 56, 75; Slabbert & Slabbert 2002b:6,18,21.

The percentage of the total poor population in the FBTs that were unemployed in 1994 was 26.6% (Slabbert 1994). In 2000 this figure was 28.2% for the whole of Emfuleni (Mokoena 2001b) and, in 2003, it was 31.8% for the whole of Emfuleni (Slabbert 2003).

As shown in Table 8.5, the poverty rate for Emfuleni was 46.1% in 2000 and 51.5% in 2003. It would seem that there is a correlation between the percentage of the total poor population that are unemployed, and the percentage of the population that are poor at different time periods. This confirms the finding by Slabbert (1997:77) that there is a correlation between unemployment and poverty. The percentage of the poor population that was unemployed in 2000 was 61.2% of the total poor population in 2000 (Slabbert & Mokoena 1999). In 2003, it was at 61.7% (Slabbert 2003), while in 1994 it was 63.3% for the FBTs.

FIGURE 8.5   ESTIMATED UNEMPLOYMENT AND POVERTY RATES IN EMFULENI (2000 – 2015)
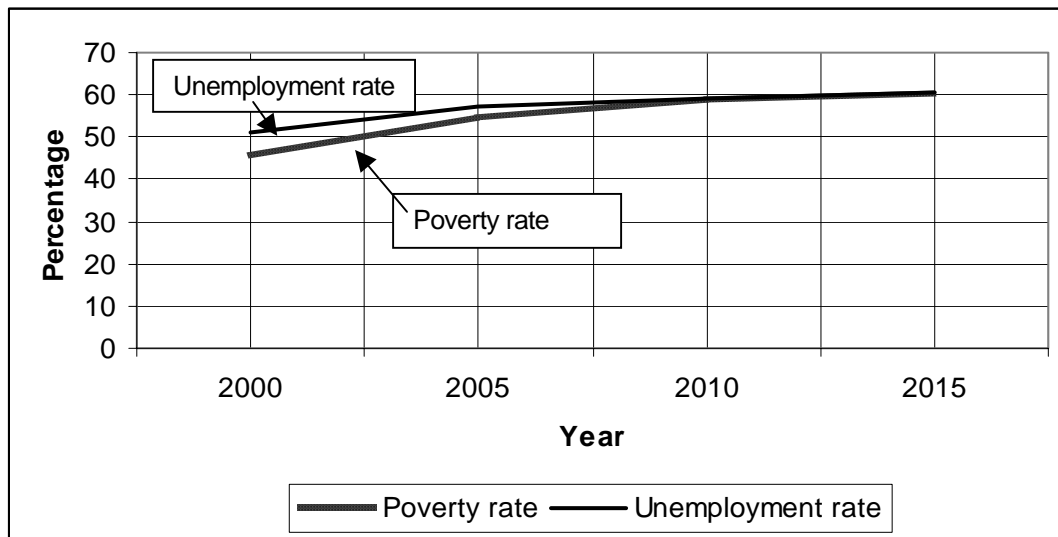
- Source: Projections based on Slabbert 1997:54, 56, 75; Slabbert & Slabbert, 2002b:6, 18, 21.

As it is expected that the Emfuleni economy will show no further decline, it is assumed for the purpose of this thesis that the percentage of the total poor population that will be unemployed will remain at 61.7% of the total estimated poor population. The estimated number of unemployed poor will then be as projected in Table 8.7.

TABLE 8.7   ESTIMATED NUMBER OF UNEMPLOYED POOR AND NON-POOR, EMFULENI (2000 – 2015)

Year	Unemployed poor	Unemployed non-poor	Total unemployed
2000	83,927	72,061	155,988

2005	132,622	56,645	189,267
2010	168,993	46,763	215,756
2015	195,556	48,104	243,660

- Source: Calculations based on data from Tables 8.1 & 8.6.

8.3   Impact of proposed projects on Emfuleni

There are several projects under investigation for the Emfuleni area. The most important of these projects were discussed in Section 6.7 of this thesis. Each of these projects will have an impact on the economy in their construction phases, but as this will only be a temporary short-term impact, this impact will not be described in this thesis. Each of the projects will also have a long-term impact on the economy of Emfuleni. Making use of the input-output model for the area (as discussed in Chapter 7 of this thesis), the expected impacts (direct and indirect) of the different projects were calculated. Table 8.8 lists the estimated impact of the three discussed projects (an Inland Waterfront, the establishment of an Industrial Development Zone and the upgrading of the Vereeniging Airport to an international cargo airport) on the Emfuleni economy, as well as the impact of a 5% increase in the total manufacturing output of Emfuleni (taking into account that Local Economic Development is high on the agenda of the Emfuleni Local Municipality (PDG 2003:4)).

Two of the proposed projects (namely the Industrial Development Zone and the upgrading of the Vereeniging Airport to an international cargo airport), as discussed in Section 6.7, are not likely to be implemented. According to Emfuleni senior municipal management, the International Airport in Vereeniging is no longer under serious consideration, especially after directives from the Gauteng Government that all provincial energies would be focused on Johannesburg International Airport. The other project, the Industrial Development Zone (IDZ), seems to be on the ice, as a decision was made at Gauteng Provincial Government level to promote an IDZ in Johannesburg (near to Johannesburg International Airport) instead. If a cargo airport would become a reality at Vereeniging, then an IDZ would become a more realistic concept also (PDG 2003:3,4). These two projects are, however, included in the impact assessment

to show the impact that projects of such a magnitude could have on the economy of Emfuleni.

Slabbert & Slabbert (2002b:94) estimated that by 2005 only 16% of the impact of the proposed projects (if implemented) would be felt in the economy. By 2010, this figure would rise to an estimated 73%. The full impact would be reached by 2015. The estimated impacts of the proposed projects on different aspects of the Emfuleni economy are shown below.

TABLE 8.8   IMPACT OF DIFFERENT PROPOSED PROJECTS ON EMFULENI

	Industrial Development Zone	Airport at Vereeniging	Inland Waterfront	Stimulating Manufac- turing by 5%
Job creation (direct and indirect)	45,244	1,210	26,838	7,551
Labour remuneration (annual) - Rmillion	R2,528.7m	R49.9m	R1,224.0m	R337.7m
Increased spending on food and cleaning materials (annual) - Rmillion	R811.7m	R16.0m	R393.0m	R108.4m
Increased spending on property rates and taxes (annual) - Rmillion	R50.6m	R1.0m	R24.5m	R6.8m
Increased spending on water/electricity (annual) - Rmillion	R154.3m	R3.0m	R74.7m	R20.6m
Increase in total output (annual) - Rmillion	R13,288.3m	R105.9m	R2,298.8m	R1,440.0m
Increase in GGP (annual) - Rmillion	R3,499.3m	R36.7m	R1,801.6m	R379.5m

Source: Calculation based on the input-output model and data from Slabbert & Slabbert 2002a:295; The Enterprise Organisation 2001; LAAC 2001.

As all the impacts presented are only estimations, the figures in Table 8.8 are only indications of what scale of impact a project of that dimension could have on the Emfuleni economy.

Impact on employment and unemployment

The estimated (direct and indirect) impact of the two projects that are considered to be more feasible, namely the Inland Waterfront and the stimulating of the Manufacturing sector by 5%, on employment, unemployment and the unemploy-ment rate, is as indicated in Table 8.9, Figures 8.6 and 8.7. As it is not likely that

the Airport and the IDZ will materialise as viable projects in the foreseeable future, the impact thereof is only estimated for the year 2015.

By the year 2015, the presumed impact of the Inland Waterfront and the stimulation of manufacturing activities will reduce the number of unemployed by 34,389 from 243,660 to 209,271. The unemployment rate will be reduced by 8.6 percentage points from 60.6% to 52.0%.
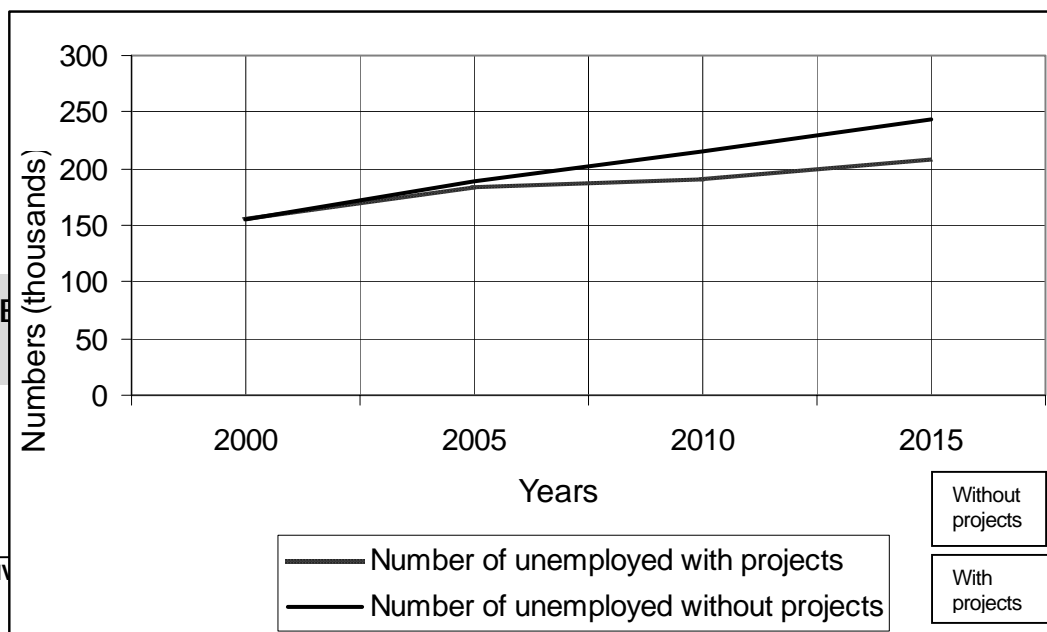
| With projects |

TABLE 8.9   ESTIMATED IMPACT OF TWO PROPOSED PROJECTS ON EMPLOYMENT AND UNEMPLOYMENT IN EMFULENI (2000 – 2015)

Year	WITH Projects: Unemployment rate %	Without Projects: Unemployment rate %	WITH Projects: Number of unemployed	WITH Projects: Number of employed	Without Projects: Number of unemployed	Without Projects: Number of employed
2000	51.3%	51.3	155,988	148,082	155,988	148,082
2005	55.4%	57.1	183,764	147,702	189,267	142,199
2010	52.2%	59.1	190,651	174,418	215,756	149,313
2015	52.0%	60.6	209,271	192,808	243,660	158,419
4 projects 2015	40.5%	60.6	162,817	239,262	243,660	158,419

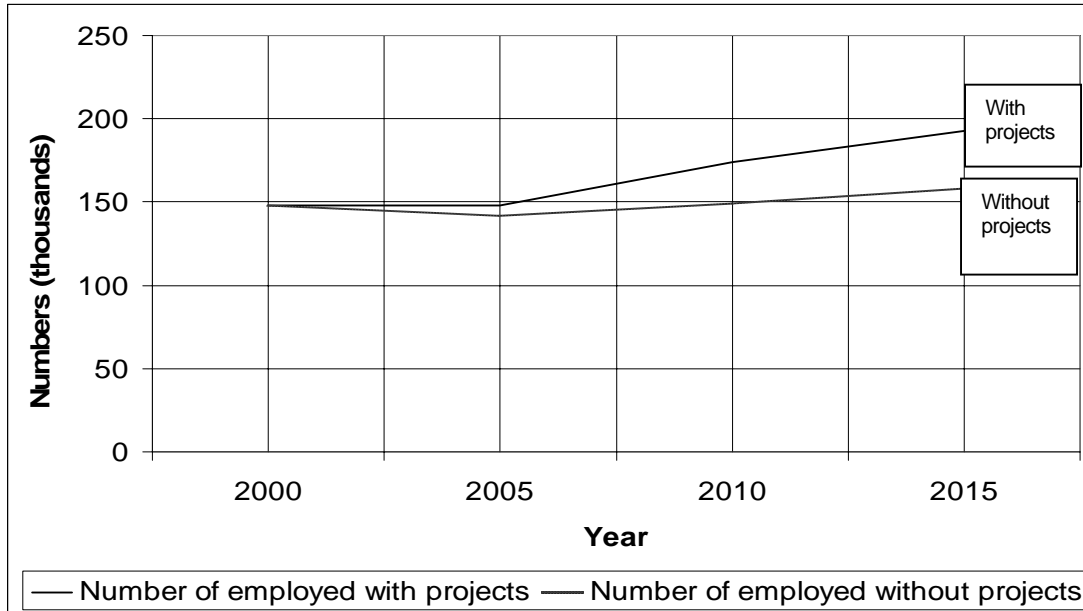- Source: Calculated from data by Slabbert & Slabbert 2002b:96, 97; Slabbert 2003.

FIGURE

| Without projects |

| With projects |

FIGURE 8.7   ESTIMATED IMPACT OF TWO PROPOSED PROJECTS ON EMPLOYMENT IN EMFULENI (2000 – 2015)

From the estimates, it is clear that the two proposed projects will only reduce unemployment with 14.1% by the year 2015. If the other two projects (IDZ and the Airport) would materialise, the combined impact would be that the unemployment rate would decrease to 40.5% in 2015.

As indicated in Table 8.7, most of the unemployed in 2015 will also be poor. The number of unemployed poor people in 2015 is estimated at 195,556 and the unemployed non-poor at 48,104 (without any projects being implemented). The unemployed poor are also amongst the lowest skilled in the region (Slabbert 2003). Emphasis should therefore be placed on skills training, as well as on labour-intensive projects that can absorb especially the low-skilled unemployed poor.

Impact on GGP

The total annual increase in GGP from the two projects (Inland Waterfront and stimulating of Manufacturing) is calculated at R2,181.1 million (constant prices) when full production is reached in 2015 (Table 8.8). The increase for the four

projects combined would be R5,717.1 million per annum. Assuming that the projects will only have a measurable effect on the GGP by the year 2005, then it is estimated that the materialisation of the projects will increase the GGP growth rate with 0.94% by 2015 for the two projects, and 2.23% if all four projects would materialise.

Impact on household income

Making use of the remuneration multiplier (previously discussed in Chapter 7), the estimated increase in household income, if the two projects (Inland Waterfront and stimulating of manufacturing activities) do materialise, will be about R1,561.7 million per annum by the year 2015 (at 2000 constant prices). If the four projects should materialise, the impact will be R4,410.3 million per year by the year 2015 (see Table 8.8). This will be a 20.4% and 54.1% increase in total household income respectively. Based on the expenditure profile **(**Figure 4.6), it is estimated that this could lead to an increase in annual spending (constant prices) on rates and taxes of R31.3 million (R82.9 million for the four projects) by the year 2015, and an increased annual spending on food and cleaning materials of R501.4 million (R1,329.1 million for the four projects).

Impact on poverty

If the Inland Waterfront and stimulation of Manufacturing are fully developed and assuming that the additional household income because of the projects would be evenly distributed over all households in Emfuleni (directly and indirectly via the multiplier process, this would mean that each household would have an additional household income of R530.93 per month by 2015 (constant prices). If this additional amount is added to the incomes of households in the 2003 sample (Slabbert 2003), the new headcount index and poverty rate (headcount index x 100) can be determined with the impact assessment model (see Section 3.4). With an additional R530.93 per month for each household, the poverty rate would decrease from 60.6% to 34.2% in 2015. In the case of the four projects, an additional income for each household of R1,408.00 can be allocated to each household in the sample and the poverty rate would decrease from 60.6% to 6.4%.

These results would be correct if all unemployed poor would get jobs because of the projects. This, however, is impossible, as the additional employment created

in the best scenario (four projects) by 2015 is only 80,843 (see Table 8.8) while the estimated number of unemployed poor is 195,556 (see Table 8.7). One should also keep in mind that it is very unlikely that two of the four projects would ever materialise,

Table 8.5 and Figure 8.4 show the correlation between the poverty rates and the unemployment rate. When the unemployment rate increases (because of a worsening economic situation and retrenchments), the poverty rate moves closer to the unemployment rate (Figure 8.4). Based on the finding by Slabbert (1997:77) that there is a good correlation between poverty and unemployment, it can be assumed that the opposite will also be true. If unemployment decreases because of a growth in the economy, the poverty rate will become less than the unemployment rate. In 1991 and 1994, this difference was 5% and 6.4% (for the FBTs of Emfuleni).

As indicated in Table 8.9, the estimated impact of the Inland Waterfront and the 5% expansion of Manufacturing will be a decrease in the unemployment rate from 60.6% to 52% by 2015. The estimated impact on the poverty rate is estimated to be a decrease from 60.6% to 45% by 2015. In the case of the four projects scenario, the impact on poverty is estimated at a decrease from 60.6% to 35.5%.

8.4   Negative impacts on the Emfuleni economy

The impact of the failure of the Krion Scheme (Krion Financial Services Ltd.) as well as the failure of Equilibrium/Futura International investment scheme is assessed in this section. Both schemes are still under police and legal investigation and were not finalised at the time of the assessment (August 2002). Although the best available data was obtained, it should be kept in mind that the data available for the impact assessment was not the final data. Figures such as the final amounts to be recovered from the directors, properties, assets, other sources and the like, had to be estimated and may differ from the final amounts involved.

Making use of the telephone numbers and postal codes of investors, the number of people from Emfuleni that invested in the Krion scheme was estimated at

4,400 (Edeling 2002). The total money drain from Emfuleni as a result of the collapsed Krion scheme (taking into account the redistribution of recovered funds) was estimated at R275 million (Edeling 2002). Assuming that the same percentage of investors from Emfuleni invested in the Equilibrium/Futura scheme as in the case of the Krion scheme and that no money can be recovered from the latter scheme, the money drain from the Emfuleni region (because of the failure of Equilibrium/Futura) was estimated at R40 million.

Making use of the input-output model for the Vaal region, the impact is portrayed in terms of the effect on the Gross Geographical Product (GGP), unemployment figures, household income and poverty in Emfuleni. The impact is estimated against the normal expected economic and demographic situation, not taking into account the impact of proposed projects for the region as described in Section 8.3 of this thesis. It was estimated that the greatest impact of the failure of the two schemes would be felt in 2002 and 2003. In 2004, the additional impact should decrease sharply and then from 2005 on, decrease slowly to almost zero around 2014.

Impact on the GGP

The estimated negative impact of the failure of the Krion Scheme and Equilibrium/Futura International on the GGP of Emfuleni is indicated in Table 8.10. It is estimated that the Krion scheme will impact on the 2002 and 2003 GGP of Emfuleni to the extent that it will lower the expected annual GGP growth rates with 0.35% in 2002 and 0.29% in 2003. The combined impact of Krion and Equilibrium/ Futura scheme will be lower than the expected annual GGP growth rates by an estimated 0.40% in 2002 and 0.34% in 2003.

TABLE 8.10   ESTIMATED IMPACT OF KRION SCHEME AND EQUILIBRIUM/ FUTURA INTERNATIONAL ON THE GGP GROWTH RATES IN EMFULENI (2002 – 2015) - PERCENTAGE DECREASE OF GGP

Year	Krion and Equilibrium/Futura International
2002	- 0.40%
2005	- 0.09%
2010	- 0.05%
2015	0%

- Source: Slabbert & Slabbert 2002b:101.

The annual negative impact of Krion scheme on the GGP for the years 2004 to 2015 will slowly decrease from 0.083% in 2004 to 0% in 2015. The combined detrimental effect of the two schemes is estimated at 0.095% in 2004, decreasing to 0% in 2015. For the years 2002 and 2003, the impact of the two schemes pushed the already low GGP growth rates of -0.2% down to -0.6% (2002) and from 0.3% to -0.04% (2003). From 2005 on, it is expected that the GGP growth rate will increase, and that the effect of the two schemes will be much lower than in the first two years, so that the final impact of the two schemes on the GGP growth rate in these years will be very small (Slabbert & Slabbert 2002b:100).

Impact on unemployment

The estimated impact of the failure of the Krion scheme and Equilibrium/Futura International on unemployment is shown in Table 8.11. The unemployment figures indicated in the table mean either a direct loss of employment (where people who have a job, lose it), or it means that people who otherwise would have got jobs (without the collapse of the two schemes), do not get those jobs. As the two schemes were investment schemes and provided therefore almost no employment opportunities, the loss in employment is an induced loss. Many of the people who invested in the schemes wanted to use the interest paid as a monthly income. Many pensioners or retrenched steel workers, for instance, invested their money in the schemes and used the monthly paid-out interest to live on. As a result of the failure of the two schemes, people had less money to their disposal. This resulted in less money spent on food and other trade articles, and finally, to a loss of employment opportunities in the trade sector and other sectors linked to the trade sector.

TABLE 8.11   ESTIMATED IMPACT OF KRION SCHEME AND EQUILIBRIUM/FUTURA INTERNATIONAL ON UNEMPLOYMENT IN EMFULENI (2002 – 2015)

Year	Unemployment (cumulative) Krion & Equilibrium	Percentage increase in unemployment (both schemes)	Unemployment rate	
			Old (without projects or negative impacts)	New (with negative impacts, but without projects)
2002	1,113	0.45	53.7	54.0
2005	2,563	0.91	57.1	57.7
2010	3,479	1.09	59.1	59.7

| 2015 | 3,805 | 1.05 | 60.6 | 61.2 |

- Source: Slabbert & Slabbert 2002b:102 (adapted).

It should be kept in mind that the unemployment figures are cumulative. It is clear that the greatest impact will be experienced in the first two years, where a loss of 2,054 job opportunities is expected. The total loss in job opportunities is estimated at 3,805 towards 2015. In 2005, it will have the impact that the unemployment rate will be increased by 0.6% to 57.7%, and in 2015 it is estimated that the unemployment rate will be increased by 0.6% to 61.2%.

Impact on household income

The estimated annual impact of the two schemes on total household income in Emfuleni is indicated in Table 8.12.

The impact of the failure of the two schemes on household income is the greatest in the first two years. The impact will be an estimated loss of 1.4% of total household income in 2002, 1.15% in 2003 and thereafter a diminishing impact up till 2015.

TABLE 8.12   ESTIMATED IMPACT OF KRION SCHEME AND EQUILIBRIUM/FUTURA INTERNATIONAL ON HOUSEHOLD INCOME IN EMFULENI (2002 – 2015)

Year	Loss of household income (Krion & Equilibrium/F) R-million
2002	120.8
2005	32.1
2010	18.7
2015	-

- Source: Slabbert & Slabbert 2002b:102.

Impact on poverty

The collapse of the two schemes affected many pensioners who invested all their pension money in the schemes, which had a direct impact on the poverty rate. The greatest impact was felt in 2002 and 2003. As the collapse of the two schemes also has the effect of a loss in employment opportunities and household income, it will also have an indirect impact on poverty. (Less earners in Emfuleni resulted in less spending, less buying, less production, less hiring of

labourers (gardeners, cleaners etc) by former earners, resulting in less income trickling down to the lowest income earners.)

The estimated impact on the poverty rate for the years 2002 and 2015 is indicated in Table 8.13. The greatest impact was actually in 2002 and 2003, whereafter the additional annual impact decreased sharply. However, the cumulative result is an increase in the poverty rate towards 2015. It is estimated that the poverty rate will increase by 0.4% in 2002, and an additional 0.3% in 2003. By 2012, the total cumulative impact will be 1.5% and by 2015 a 1.6% increase in the poverty rate.

TABLE 8.13   ESTIMATED IMPACT OF KRION SCHEME AND EQUILIBRIUM/ FUTURA INTERNATIONAL ON POVERTY IN EMFULENI (2002, 2015)

Year	Poverty rate with collapsed schemes	Poverty rate without collapsed schemes
2002	50.1	49.7
2015	62.2	60.6

- Source: Slabbert & Slabbert 2002b:103 (adapted).

The total effect of the Krion Scheme and Equilibrium/Futura International for the years 2002 to 2015 is indicated in Table 8.14.

TABLE 8.14   ESTIMATED IMPACT OF KRION SCHEME AND EQUILIBRIUM/FUTURA INTERNATIONAL, EMFULENI (2002, 2015)

Year	% decrease in GGP growth	% increase in unemployment	% loss in annual household income	% increase in poverty rate
2002	0.40%	0.45%	1.4%	0.4%
2015	0.0%	1.05%	0.0%	1.6%

- Source: Slabbert & Slabbert 2002b:10.

The estimated impact of the collapse of the two schemes was the greatest in 2002 and 2003. The impact could be expected to decrease sharply in 2004 and then to have a lesser and lesser effect until 2014. The final cumulative impact is estimated at a 1.05% increase in unemployment and 1.6% increase in the poverty rate by the year 2015.

8.5　　　Summary and conclusion

The impact of change in the level of employment and household income is measured in Emfuleni by making use of the input-output model for the Vaal economy. The poverty impact model was used to measure the impact of a change in household income on the level of poverty (headcount index) and the depth of poverty (poverty gap). Projections of the population growth, GGP growth, growth in employment and unemployment and poverty were made until 2015.

The effect of the proposed Inland Waterfront in Emfuleni, as well as the effect of a 5% increase in Manufacturing activities, balanced by the negative impact of the failure of Krion Financial Services and Equilibrium/Futura International Investment schemes were calculated and projected until the year 2015. As the proposed International Cargo Airport and Industrial Development Zone are not likely to materialise, partly because the Emfuleni Local Municipality (ELM) believes that the provincial government will not support them, the impact of these projects are only calculated for the year 2015.

In the years 2002 and 2003, the years in which the greatest impact of the failed financial schemes were felt, none of the proposed projects were implemented. It is assumed that the proposed development projects will be implemented and reach their full capacity by the year 2015. The cumulative effect of the failure of the two financial schemes will be a 1.05% increase in the unemployment rate, while the impact of the two projects will be a decrease in the unemployment rate of 8.6 percentage points from 60.6% to 52.0% in 2015. Adding the negative impact of the two failed financial schemes, the unemployment rate will be 53.1% in the year 2015. The final impact is portrayed in Table 8.15. With the impact of the proposed positive projects and the impact of the negative influences, which have already taken place, the unemployment rate will decrease from 56.3% in 2005 to 53.1% in 2015 in the case of the two projects and to 42.0% in the case of the four projects.

Although the unemployment rate will decrease considerably in the case of the four projects (which are very unlikely to occur), the number of unemployed persons will increase from 2000 to 2015. This means that even if the four

projects would occur, the economy will not be able to create enough employment opportunities for the growing labour force.

TABLE 8.15   ESTIMATED IMPACT OF TWO PROPOSED PROJECTS AND THE FAILURE OF THE FINANCIAL SCHEMES ON EMPLOYMENT AND UNEMPLOYMENT IN EMFULENI (2000 – 2015)

Year	Unemploy-ment rate: with projects & failure of financial schemes	Unemploy-ment rate: without projects	With projects and failure of financial schemes:		Without projects and failure of financial schemes:	
			Number of unem-ployed	Number of em-ployed	Number of unem-ployed	Number of employed
2000	51.3%	51.3%	155,988	148,082	155,988	148,082
2005	56.3%	57.1%	186,615	144,851	189,267	142,199
2010	53.3%	59.1%	194,582	170,487	215,756	149,313
2015	53.1%	60.6%	213,504	188,575	243,660	158,419
4 projects 2015	42.0%	60.6%	166,622	235,457	243,660	158,419

- Source: Calculated from Tables 8.9 & Table 8.11.

The total effect of the failure of the two mentioned financial schemes on the poverty rate (percentage of households below their poverty lines) will be a 1.6% increase, while the impact of the two proposed projects on the poverty rate is estimated at a decrease of 15.6 percentage points from 60.6 % to 45.0% in 2015 (Combined effect: 45.0% + 1.6% = 46.6%). The impact of the proposed positive projects and the impact of the negative influences on the poverty rate will be that it will increase from 46.1% in 2000 to 46.6% in 2015 in the case of the two projects. In the case of the four projects it will decrease from 46.1% in 2000 to 37.1% in 2015. The final impact on the poverty rate and the number of poor households is portrayed in Table 8.16.

TABLE 8.16   ESTIMATED IMPACT OF TWO PROPOSED PROJECTS AND THE FAILURE OF THE FINANCIAL SCHEMES ON POOR HOUSEHOLDS IN EMFULENI (2000 – 2015)

Year	Poverty rates	Number of poor households

	Without impacts	With negative impacts only	With negative and positive impacts	Without impacts	With negative impacts only	With negative and positive impacts
2000	46.1	46.1	46.1	84,549	82,549	84,549
2005	55.0	---	---	111,141	---	---
2010	59.1	---	---	131533	---	---
2015	60.6	62.2	46.6	148,544	152,466	114,227
4 projects 2015	60.6	62.2	37.1	148,544	152,466	90,940

- Source: Calculated from Tables 8.6 & 8.11.

Sustainability in this thesis was defined as *the ability of a local economy to provide employment and income generating opportunities for the local population to such a degree that the extent of poverty is reduced over a period of time.* Taking into account the state of the Emfuleni economy, trends in the economy, and the impact of negative factors and proposed (positive) projects, the Emfuleni economy will still not be sustainable by 2015. Although the poverty rate will increase only slightly by 0.5 percentage points from 46.1% to 46.6% (if the Inland Waterfront project and the 5% increase in Manufacturing activities materialise), the *number* of poor households will increase from 84,549 in 2000 to 114,227 in 2015. (The number of unemployed persons will increase from 155,988 to 213,504).

Even in the case of all four initiatives being implemented (which is very unlikely) the number of poor households will *increase* from 84,549 in 2000 to 90,940 in 2015, although the poverty rate will decrease from 46.1% to 37.1%. The hypothesis that poverty and unemployment will still be on the increase is therefore confirmed by the analysis. More serious intervention measures will be required to reach a state of sustainability in the Emfuleni economy.

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