



**RECENT EVOLUTION OF THE ANTWERP
ECONOMY:**

structural changes and urban policy

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Abstract

This paper focuses on the recent development of the Antwerp urban area. It deals with a number of important demographic, social and economic changes that have taken place over the recent period 1974-1984, and it evaluates the effects of the observed shifts on the development of the inner city and the urban region as a whole.

Considerable attention is paid to the impact of recent changes in population and industrial structure on employment opportunities in the Antwerp urban area. The analysis further clearly indicates that the recent evolution has contributed to problems of urban decline, such as high unemployment rates in the inner city, deterioration of the physical quality of the housing stock and the budgetary problems of the local authorities. Policies that have been proposed to combat urban decline are identified and briefly discussed. They are found to be too limited in scope to tackle the major problems of the urban economy.

Despite the symptoms of urban decline in the inner-city area, it is concluded that Antwerp's local economy will continue to play a crucial role in the future economic development of an extended region.

INTRODUCTION

Increasing problems of urban decline in many European cities have raised serious doubts about the economic viability of large urban areas. Symptoms of urban decline include the physical decay of specific parts of inner-city areas, the deconcentration of population and especially employment opportunities, the decline of the urban industrial sector, the social commotion in downtown areas and the local authorities' budgetary crises. The purpose of this paper is to examine the extent to which processes of urban decline have been operating in the Antwerp urban area over the recent period 1974-1984. We will pay substantial attention to a number of demographic, social and economic shifts within the urban area and their impact on the development of both the inner city and the suburban region. In addition, we will discuss the policies that have been implemented in order to combat the problems of urban decline, and we briefly evaluate their potential effectiveness. Careful analysis of the recent changes in the Antwerp urban area will allow us to investigate Antwerp's role as the engine of the national economy.

The structure of our paper is as follows. As we are convinced that the economic situation of a city cannot be explained in isolation from its regional and national environment, we begin with a brief sketch of the national and regional context (Section 1). The demographic evolution of the Antwerp urban area over the period 1974-1984 is treated in Section 2. We further describe Antwerp's industrial policy and the resulting industrial structure, and we analyse the recent changes in the urban economy in terms of the sectoral employment structure. These issues are dealt with in Section 3. The most pressing actual problems that have evolved from the recent developments are discussed in Section 4. They include the structural mismatch between the inner-city labour force and the corresponding employment opportunities, the physical decay of the housing stock in some parts of the city and the budgetary problems of the local government. Section 5 deals with the policy measures that have been implemented by the national, regional and local authorities in order to counteract some of these symptoms of urban decline. In a concluding section (Section 6), we finally summarize - based on the lessons that can be drawn from the analysis in this paper - in what sense Antwerp has been acting as the engine of national economic activity, and under what conditions it may continue to do so in the future.

1. THE NATIONAL AND REGIONAL CONTEXT

Belgium has an exceptionally open economy, being more dependent on exports and imports than most other developed countries. National prosperity has therefore always been extremely susceptible to changes in international economic conditions. As a consequence, it is not surprising that Belgium was severely affected by the economic recession which developed after the oil price shock of 1973-1974. Since Gross National Product (GNP), salaries and private consumption in real terms continued to increase it is clear that up to the early 1980's the brunt of the recession was borne by a rapidly growing number of people out of work, and by the business sector which saw its profits squeezed. The strong rise in unemployment put pressure on public sector finance, and by 1981 the total public sector deficit amounted to 16 per cent of GNP. In addition, the country was running a substantial external current account deficit (see Figure 1).

The center-right coalition government that came into power in December 1981 (and was returned to power after elections in October 1985) committed itself to improving a rapidly declining economic situation. Three priorities were determined : first, to restore the international competitiveness of Belgian business; second, to reduce the public sector deficit to 7 per cent of GNP by 1987; and third, to create new jobs so as to reduce unemployment.

Some progress has been made with respect to the first two priorities. The international competitiveness of industry has been improved by a number of policy measures, including pay-rise restrictions, tax cuts for industry and the devaluation of the Belgian Franc in 1982. The rise in the public sector deficit has been curbed, mainly at the cost of public expenditure cuts and higher social security contributions. The subsequent marked decline in private consumption, estimated at approximately 15 per cent between 1980 and 1984, contributed to the slow disappearance of the deficit on the external current-account balance (see Figure 1).

With respect to the third main objective the government seems to have been far less successful. Efforts to reduce unemployment, both by expanding existing employment schemes and by introducing new ones, have foundered on

the effects of the 1981 recession. As Figure 2 indicates total employment continued to fall and unemployment further increased. By mid 1984 total unemployment stood at 650 000 or over 14 per cent of the labour force¹. In that sense it is clear that the present economic crisis is above anything else an employment crisis.

The spectacular rise in unemployment since 1974 was induced by both demand and supply factors. On the supply side there has been a considerable expansion in the labour force which is due to demographic (low birth rates between 1914 and 1918; the baby-boom of the 1950's) and socio-cultural (the increase in female participation rates) factors. At the same time there has been a serious contraction in the demand for labour. Between 1974 and 1984 total employment, including the self-employed but excluding government re-employment schemes, decreased by 7.7 per cent. However, there has been a considerable difference in the employment evolution in the secondary and the tertiary sectors. Whereas approximately 31 per cent of total 1974 employment was lost in the secondary and construction industries, employment in the tertiary sector expanded by 14 per cent in the same period. It must be realized though, that this growth in tertiary sector employment was to a large extent due to the public sector, which expanded by 172 000 jobs between 1974 and 1984. Nearly 66 000 of these are temporary jobs created under various re-employment schemes. When these are excluded, tertiary sector employment growth is less impressive.

A final evolution to be noted at the national level is that the tertiarisation process has resulted in a marked shift in the types of labor employed. Indeed, there has been a strong shift from manual to nonmanual work, a shift which has been accompanied by an increasing trend towards feminisation of the labour force. Moreover, the number of part-time workers more than doubled between 1974 and 1984.

¹The official unemployment figures do not take into account various groups of people that do not receive unemployment benefits but are nevertheless willing to work. It has been estimated that including them would potentially raise the 1984 unemployment figure to approximately 900 000 people (see G. De Brabander (1985)).

At the regional level, we should mention the important institutional changes that have led to a partial decentralisation of political power. In the 1970 constitutional revision the official establishment of three Regions within the country was decided upon. The law of August 1974 determined the geographical delineation of the Regions Flanders, Wallonia and Brussels, and described the authority of the Regional Governments. Initially the Regional autonomy was limited and mainly related to aspects of spatial- and town-planning, regional economic expansion and employment, housing, public health, etc.¹ Later other domains of regional policy were added to this list, redefining the power of the Regional Governments. Although since 1982 a system of 'tax sharing on origin basis' has been introduced, the budgetary autonomy of the Regions remains somewhat limited. By far the largest share of their budgetary receipts is derived from the national government through a system of grants.

For the purpose of this paper, the important point to note is that the Regions hold the administrative control on the budgets, annual accounts and staffing of the municipalities and cities. As the Regions can develop quite different policies with respect to local authorities, it seems useful to keep in mind that the City of Antwerp belongs to the Flemish Region.

There is also another reason for specifically considering Antwerp as part of Flanders. Indeed, one of the major issues to be noted with respect to the recent changes in the regional distribution of economic activity and employment is the imbalance between Flanders and Wallonia. Up to the Second World War, Wallonia, and more in particular the industrial axis running from Mons to Verviers, dominated the national economy. During the fifties and sixties, however, Flanders started to catch up. Its more maritime location, lower wage levels and the abundant supply of a relatively docile labour force proved to be crucial assets. The North was able to land the lion's share of foreign investment, a factor which has greatly contributed to the industrialisation and modernisation of the regional economy. In Wallonia the industrial inheritance of the past proved to be a major handicap. Industrial production stagnated and by the early seventies the economic center of gravity had decisively shifted to the North (see Figure 3).

¹For more details on the Regionalisation and its implications, see, e.g., Preudhomme (1976), Amerijckx (1981) or Vanneste (1986).

The recent recession seems to have accelerated this process of divergent regional development. The employment evolution between 1974 and 1984 has been markedly more negative in Wallonia than in Flanders. Whereas in Flanders employment decreased by 3.1 per cent the corresponding decline for Wallonia amounted to 10.9 per cent. Employment changes in Flanders were less unfavourable for both the secondary and the tertiary sector : secondary sector employment decreased by 24.5 and 38.4 per cent in Flanders and Wallonia, respectively; tertiary sector employment increased by 21.2 and 16.8 per cent, respectively.

2. THE ANTWERP URBAN AREA

2.1. Defining the Antwerp urban area

Most studies concerning the economic development of Antwerp treat the Antwerp urban region as one homogeneous spatial unit, defining it either as the Province or the District (Arrondissement) of Antwerp. Neither is very satisfactory, and this for two main reasons. First, these administrative boundaries do not correspond with present-day economic reality. More importantly, an analysis carried out on an arrondissemental or provincial level would fail to illuminate a number of intra-regional processes (e.g. suburbanisation of population and economic activity, residential segregation, etc.), processes which are crucial to the understanding of the problems facing large urban areas.

Recently, several studies proposed a more satisfactory delineation of the Antwerp urban area (see, e.g., Van der Haegen and Pattyn (1979), or De Winter and Kesteloot (1983)). Unfortunately, they are based on the definition of municipalities prior to the 1976 and 1982 Local Government Reform. The Reform implied a sharp reduction in the number of administratively autonomous municipalities as of 1-1-1977. Due to the complexity of the operation the new administrative boundaries of the City of Antwerp only became effective on 1-1-1983. The newly defined City of Antwerp encloses several previously autonomous municipalities. As for the latter very recent data are no longer available (that is, data with respect to the situation after the Reform), the proposed delineations were not maintained in this paper.

We decided to delineate the Antwerp urban area on the basis of the municipalities as constituted since 1-1-1983 using a well-known and fairly standard definition, the Standard Metropolitan Labour Area (SMLA). This concept was used i.a. by P. Hall (1971) in his study of the spatial structure of England and Wales. As defined by Hall, the SMLA consists of

- (1) "A SMLA-core, consisting of an administrative area or a number of contiguous areas with a density of 12.5 workers and over per hectare, or a single administrative area with 20 000 workers;"

- (2) "A SMLA-ring, consisting of administrative areas sending 15 per cent or more of their resident employed populations to the core, and forming a group contiguous with that core. To be regarded as a SMLA, the whole group should have an enumerated population of 70 000 or more."¹

It should be clear that the SMLA concept is, just as any other definition of an urban area, to some extent arbitrary. Whichever definition of the Antwerp urban area one is willing to use, it is obvious that many economic activities and cultural developments outside the boundaries of the delineated area are due to, or at least closely related to, the presence of the city and the infrastructure it provides. Despite the obvious failure of any definition of an urban area to fully capture the regional impact of a city, the SMLA concept does have some distinct advantages, however. It can be used to highlight some of the important intra-regional processes previously mentioned. Moreover, it is an intrinsically dynamic concept that facilitates tracing the evolution of an urban area over time. It finally allows easy comparison of cities in different countries. Such comparisons would not be straightforward on the basis of administrative boundaries only.

The analysis was carried out using the most 'recent' census data on Journey to Work movements². Only two municipalities (Antwerp and Mortsel) satisfied one or both SMLA-core criteria. Twenty-three municipalities had 15 per cent or more of their resident workforce working in Antwerp and are therefore considered to form the SMLA-ring. The two areas are shown on Figure 4. As one can see, the Antwerp SMLA differs in a number of respects from the area delineated by the Arrondissemental boundaries (see Figure 5). A number of municipalities on the Eastern and Southern edge of the arrondissement are excluded. More to the West, on the other hand, the Antwerp SMLA includes several municipalities which are part of the Province of Eastern Flanders.

¹See P. Hall (1971, p. 107).

²Unfortunately, as the 1981 census data on commuting patterns are not yet available, the analysis had to be based on the 1970 census.

2.2. Recent demographic changes

Recent population changes are summarized in Table 1 and Figure 6. One observes that for the last 14 years, the total population of the Antwerp SMLA has remained fairly stable at just under 900 000. After substantial increases during the fifties and the sixties, growth slowed down in the early seventies. From 1976 onwards, demographic decline set in as slight natural increases were more than offset by relatively substantial migration losses.

The figures in Table 1 also show that the total number of people living in the inner SMLA declined by 64 000 between 1970 and 1985, a loss of 11.1 per cent. This decline was partly due to natural causes, but the main reason was the drift of inner city residents to more suburban locations in the outer SMLA. This process of suburbanisation is also the main factor behind the rapid expansion in the outer SMLA population.

An interesting finding is that the rate of decline of the inner SMLA population has only marginally decreased in recent years, and this despite the intensification of the economic crisis (which is generally believed to have slowed down the process of suburbanisation) and the efforts made to improve living conditions in inner-city areas¹.

This process of suburbanisation has had a significant impact on the social structure in both the inner and outer SMLA population. It is generally believed that it is, to a large extent, the relatively well-off middle class that has moved out of the city, leading to a concentration of economically vulnerable groups (pensioners, unemployed, unskilled, etc.) in the inner city area. Although data on the 1981 socio-economic characteristics of the population are still lacking, some idea of the impact of suburbanisation on the social fabric can be derived from Table 2. There we show the percen-

¹In a study of the suburbanisation phenomenon over a much longer time-period —using a different definition of urban areas and an alternative method of analysis— it was found that the rate of suburbanisation did substantially decline in the seventies as compared to the sixties. The decline could relatively well be explained by the evolution of income and transport costs, see De Borger (1979).

tage share in total population of two groups which are generally considered to be among the more vulnerable in society, viz. the elderly and residents with foreign nationality¹. It is clear that the percentage share of both groups was considerably higher in the inner-city area than in the outer SMLA (also see Figures 7 and 8). Moreover, the differences between the two areas have increased markedly between 1970 and 1981. The social polarisation between the inner-city and the suburban ring is also reflected in the evolution of average per capita income between 1971 and 1982 (see Table 2, Figure 9). At the same time, though, the relatively high level of per capita income in the inner SMLA (215 100 Belgian francs in 1982, as compared to 190 900 Belgian francs for Flanders as a whole) suggests that the inner-city problem has not reached the alarming proportions it has reached e.g. in Brussels. There per capita income levels in some inner-city municipalities are 30 per cent or more under the national average.

An estimate of the impact of the demographic changes on the geographical distribution of the labour force is presented in Table 3.

As could be expected the size of the inner-city labour force has declined between 1971 and 1981, be it at a slower rate than total population. The decline in the inner-city population (and in the male activity rates) was partly offset by a sharp rise in female labour force participation. In the outer SMLA, the increase in female participation combined with the growth in total population to produce rapid expansion of both the male and the female workforce.

¹See Koning Boudewijnstichting (1983, p. 46-48).

3. RECENT EVOLUTION OF THE ANTWERP ECONOMY

3.1. Industrial policy and the structure of the Antwerp economy

The Antwerp SMLA is the second most important economic centre of the country. In 1984, more than 370 000 people were employed in the Antwerp area, which is approximately 20 per cent of total employment in Flanders and 11 per cent of the corresponding employment figure for Belgium as a whole. The importance of the Antwerp economy is even more obvious if we consider its Gross Regional Product (GRP). In 1977 it was estimated that the Antwerp GRP accounted for almost 25 per cent of the Flemish GRP and 13.9 per cent of Belgian Gross National Product.¹

Rather than attracting industry and business to Antwerp by massive direct subsidy schemes, the local authorities' policy has always focused on stimulating employment by creating the appropriate environment for industrial and commercial activities. For the downtown area a clear example of this indirect policy of encouraging business development in the past has been the permission to construct high-rise buildings in a generally low-rise area in order to accommodate the diamond trade in the city. A more recent example is the imposition of traffic restrictions and the execution of small-scale urban renewal projects to improve downtown shopping areas.

One of the major limitations for industrial development is the availability of land. With the exception of the port area, there is a severe scarcity of land suited to industrial purposes in the inner SMLA, a factor which has impeded the development of some craft industries that could potentially be located in urban areas. Given the importance of good industrial land, it is not surprising that Antwerp's industrial policy has to a large extent been concentrating on the port. Here again has the underlying philosophy of creating the proper environment for industrial development been obvious. The local authorities, with substantial financial support from the central government, have followed a policy of continuous and heavy investment in

¹ See GOM-Antwerpen (1981). The GRP-figures mentioned are estimates for the District (Arrondissement) of Antwerp.

the improvement and expansion of the port infrastructure¹. In order for this to act as a magnet for private investors and to enable industries to take full advantage of the presence of the port, the local authorities also embarked on a policy of providing (mainly through expropriations) and equipping land for industrial use on vast estates next to the new infrastructure².

The industrialisation of the port area is a relatively recent phenomenon. The substantial extension of the infrastructure in the fifties and sixties generated an impressive stream of private investment projects, mainly in the petrochemical and metal manufacturing industries. This process reinforced itself as it attracted industrial corporations with strong technical linkages with the established plants.

It is not surprising to find that the port has left a strong mark on the development and the structure of the regional economy. In Table 4 we compare the production structure of the Antwerp economy with that of the Flemish region and the country as a whole. One observes that in 1977 the chemical industry, the metal manufacturing industry (mainly car-assembling and to a lesser extent shipbuilding) and transport and communication - three industries that are strongly related to, and highly dependent on, the port - accounted for 40.6 per cent of the Antwerp GRP. These same industries only contributed 25.1 and 21.6 per cent to output in the Flemish and national economies, respectively.

The industries mentioned above are in many cases highly capital-intensive. Therefore, their share in total employment is somewhat less impressive.

¹ Within the limits of the different plans made up by the spatial planning authorities ('Gewestplannen', 'Plannen van Aanleg') it is basically the local government that decides on infrastructural port investments. In almost all cases is the largest share of the investment cost borne by the national authorities (through the Ministry of Public Works). The local authority is responsible for the exploitation of the port. For more information, see F. Suykens (1982).

² In most cases land is not sold to industrial corporations but granted on a leasehold basis.

They account for slightly less than one-third of total employment in the Antwerp urban area. Obviously, the jobs in these industrial sectors are largely concentrated in the port area itself, where total employment in 1979 was estimated to be approximately at 75.000¹. Indeed, the transport sector was responsible for 40.000 jobs, whereas the largest fraction of the remaining 35.000 jobs were to be found in the petrochemical and chemical industries, and in car-assembling and shipbuilding.

As can be seen in Table 4, other important sectors of the Antwerp economy are 'other manufacturing' (which includes, e.g., the food industry, the diamond industry, furniture, and the paper and printing industries), 'commerce' (which includes trade, banking, insurance, etc.) and 'other services'. What is not obvious from these aggregate figures is Antwerp's well-known position as a leading diamond-trade center and its role as a touristic attraction pole.

A final general characteristic of the Antwerp economy is its high export-dependence, a factor for which the presence of the port is again largely responsible. The export-orientation, as measured by the percentage of total output exported abroad, is illustrated in Table 5. It clearly follows from this information that the urban economy is substantially more export-oriented than the national economy, and that this dependence has increased during the seventies. In 1979 Antwerp accounted for 26 % of national exports. It is beyond any doubt that in the past Antwerp and its port acted as the engine behind regional and even national economic development and prosperity by attracting massive investment in export-oriented sectors.

3.2. Recent changes in the Antwerp urban economy

Its export-orientation and the large share of the Antwerp region in the national investment volume resulted in impressive growth rates in GRP during

¹See GOM-Antwerpen (1981b, p. 222-223). These estimates only include direct employment in the port area. They exclude port-related activities outside the port area (e.g., shipping insurance, transportation businesses, etc.).

the sixties and early seventies. However, even in the first half of the seventies growth in GRP was already below the corresponding figure for Flanders. This evolution was not totally surprising. It was mainly due to the relatively fast expansion of previously less developed regions outside the Antwerp SMLA, such as the arrondissement of Turnhout and the province of Limburg. The recession further implied a slowdown of regional growth and the further decrease of the contribution of Antwerp GRP to total output in Flanders. The latter evolution was also partly due to the fact that several Flemish areas with a lag increasingly benefited from the presence of Antwerp as an industrial and transportation center.

As the Belgian National Institute of Statistics has decided to discontinue the publication of the Regional Accounts in 1979 we focus in the rest of this section on the sectoral employment evolution within the Antwerp economy in order to get a clear picture of the recent developments. The relevant information is provided in Table 6. Considering these figures, the impact of the recession is clear. Between 1974 and 1984 approximately 15.600 jobs were lost in the SMLA, which is 4.6 per cent of total 1974 employment. The decline was especially severe in the manufacturing and construction industries, which lost over 20 per cent of the number of 1974 jobs over a ten year period. For the sectors commerce and transportation the employment loss was less dramatic, a decrease of 3.7 per cent. Only in banking and insurance and other (mainly government) services a substantial increase in employment was realized.

An interesting finding is that, despite the fact that the decrease in employment in Antwerp was above that in Flanders as a whole (- 2.1 per cent), it remained substantially below the national average of - 7 per cent. The figures in Table 6 indicate that the relatively favorable performance of the Antwerp economy is largely due to the evolution of its secondary sector, where the employment decline, albeit quite substantial in absolute terms, was much below the national figure. This remarkable finding can be explained by at least two factors. A first one is related to the industrial structure of the Antwerp SMLA, viz. the specialisation of its secondary sector in branches which have not been declining as rapidly as most other secondary industries. Clear examples are the chemical and car-manufacturing

industries. On the other hand there is an under-representation, and in some cases an almost complete absence, of industries which have suffered particularly hard from the recession. Examples include mining, textiles, clothing and the steel industry. A second factor has undoubtedly been the presence of the port : the cost advantages of a maritime location provided firms and plants with a competitive advantage over firms and plants located inland, which is an important factor, especially in industries facing thorough restructuring and rationalisation. Moreover, in the past the major extension of the Antwerp port on the right-bank of the Scheldt and to the North has been accompanied by lavish provision of industrial land on estates next to new docks. Although the firms which have located there are very capital-intensive (mainly petrochemical industry) the jobs they created compensated to some extent the heavy losses in manufacturing jobs incurred elsewhere. Data from the Port Authorities ('Algemene Directie van het Havenbedrijf', Stad Antwerpen) indicate that secondary employment in the large industrial concerns in the port area increased by slightly more than 1.000 jobs between 1973 and 1985, an increase of some 3.2 per cent. As a consequence, the share of the port in total secondary employment in the Antwerp SMLA increased from 25.6 to 32.6 per cent.

The figures in Table 6 also suggest that there has been some relative de-concentration of secondary activities over the last decade. With the exception of the chemical industry the absolute decline in the number of jobs has been larger in the inner SMLA. Also note that there have been substantial employment decreases in the chemical and manufacturing industries located in the outer SMLA. These have occurred despite the fact that a large fraction of the very recent extensions of the port infrastructure has been realized on the left bank of the Scheldt, that is, on the territory of the municipality of Beveren. As a consequence, employment generated by these investments belongs to the outer SMLA.

Contrary to the situation in the secondary sector, Table 6 shows that Antwerp's performance in the tertiary sector has been less favorable than is the case for Flanders or Belgium as a whole. This was true for commerce, banking and insurance, transportation and other services. In ten years time, tertiary employment in the Antwerp SMLA increased by only 8 per cent, as

compared to 14.1 per cent for Flanders. This evolution was mainly due to the relatively poor performance of the service sector in the inner SMLA. In the suburban ring the growth rate in tertiary employment was much higher than in the inner-city, and almost twice the national average. Of the four subsectors just mentioned only banking and insurance continued to centralise. This can probably partly be attributed to the growing importance of Antwerp as the financial center of the Flemish region, a development which may have been stimulated by the process of devolution of political power in Belgium during the 1970's.

The relatively slow growth of tertiary employment in the Antwerp urban area and the marked inner-outer SMLA differences were to some extent caused by the spatial diffusion of service activities in recent years. This process of filtering-down was reinforced by the suburbanisation of population and purchasing power. This is certainly the case for commerce and, to a lesser degree, for government services.

The substantial decline in employment in the transport sector in the inner SMLA (- 7.3 per cent) is largely attributable to two factors. First, increased automation of cargo-handling facilities and containerisation in the shipping business have led to a decrease in the number of dockers of over 3.000 units between 1974 and 1984, a decline of 24 per cent. Second, for a variety of reasons a number of firms have deplaced some of their activities to inland locations. This in turn at least partially explains the expansion of the transport sector in the outer SMLA.

One other factor which, certainly in most recent years, helps to explain the poor employment record of the inner SMLA service sector is the austerity programme which central government has forced upon the Antwerp Local Authority in order to reduce the city's massive budget deficit (see below). The programme included a reduction in the local government workforce and a severe cut in the Local Authority's capital expenditure. Sectors affected by these measures are Transportation and Communication (the Port Authority, public transport), Other Services (local government administration, education, health, etc.) and, indirectly (through the cuts in investment) the construction industry.

The combination of all factors previously mentioned has produced a substantial employment loss in the Antwerp SMLA, which can be decomposed into a loss of slightly more than 20.000 jobs in the inner SMLA and a gain of somewhat more than 5.000 jobs in the suburban ring. It clearly follows from the figures in Table 6 that the employment crisis in Antwerp most severely affects male manual workers, an observation which is consistent with the tertiarisation process. The expansion of the service industries on the other hand yielded important employment opportunities for (mainly female) nonmanual workers.

The evolution of employment on the one hand and the labour force on the other hand has led to quite serious unemployment problems. The male unemployment rate in the inner SMLA has risen and is considerably higher than that in the outer ring. (8.4 compared to 4.4 per cent of the total labour force). However, due to the rapid expansion in the female labour force in the outer SMLA, female unemployment rates there are slightly higher than in the inner SMLA (16.7 per cent in the outer SMLA compared to 14 per cent in the inner-city). The spatial distribution of unemployment rates in the Antwerp SMLA is illustrated on Figures 10 and 11.

4. PRESENT PROBLEMS OF THE ANTWERP URBAN AREA

4.1. The overall economic position of the Antwerp SMLA

The previous discussion shows that Antwerp has been seriously affected by the process of economic restructuring and decline of the last decade. Compared to the rest of the country, though, its position as a leading economic centre has not come under any serious threat. On the contrary even, in a number of key industries, Antwerp has succeeded in strengthening its already strong position viz-à-viz the rest of the country. Obvious examples are the car industry, the petro-chemical industry and financial services and insurance. We stressed that the presence of the port has played a positive role in maintaining Antwerp's leadership.

This achievement has, however, also a darker side. Antwerp has only been able to maintain its position by investing heavily in the extension of its port and the modernisation of the maritime infrastructure. The cost to public (local and central government) finances has been extremely high. The recent extension has also been extremely costly in terms of good agricultural land lost. Finally, the industries which have located on the new estates are highly capital intensive, provide very little employment and often pose serious threats to the environment (petrochemical firms, the nuclear power plant, etc.).

4.2. Inner City problems

In our view, the most pressing social problem facing the Antwerp urban area is the mismatch between the inner-city labour force and population on the one hand, and inner-city employment opportunities on the other hand. The problem has arisen due to the unequal growth patterns of population and employment in the inner-city area and its suburban ring. Moreover, recent changes in the structure of the Antwerp economy have also had a serious impact on the occurrence of this phenomenon.

Earlier in this paper we highlighted a number of factors which have contributed to this undesirable development. Suburbanisation of population and

the social selectivity of the intra-urban migration flows involved have left the inner-city with a growing proportion of economically very vulnerable people, such as unskilled workers, pensioners, immigrants, one-parent households, etc. Moreover, the tertiarisation process, rationalisation in the manufacturing sector and a process of deconcentration of services and, to a lesser extent, of industry have seriously affected the number and types of inner-city employment opportunities.

Most seriously affected were male manual workers. Over the last decade the decrease in male employment on average exceeded the inner-city decline of the male labour force. The compensating increases in nonmanual jobs in the inner SMLA (remember Table 6) were only to a very small extent benefitting the low-skilled residents of this area. The result of these developments has been a substantial increase in male unemployment rates in the inner SMLA.

Female employment in the inner-city increased at a faster rate than the corresponding labour force. However, a large fraction of the additional jobs were again for nonmanual workers and were taken up by suburban residents.

The combination of all previous trends has resulted not only in a marginalisation of the inner-city population, but also in the socio-economic polarisation between the inner-city and its suburban ring. Although this development also poses a number of problems in the suburban areas (development pressure, increased commuting, etc.) its effects on the inner-city area is far more worrying as it touches on the social and economic viability of an area, which in the end is crucial to a proper-functioning of the urban area as a whole.

The mismatch between the inner-city labour force and employment structure has, through its effect on the inner SMLA's population composition, produced several equally significant side-effects. One is the unfavourable income evolution in the city. After correcting for inflation, total taxable income in the Antwerp inner SMLA has increased by only 21.4 per cent between 1971 and 1982; this compares to a 78.6 per cent rise in the outer SMLA over the same period (NIS, Financiële Statistieken). This relative loss in pur-

chasing power must have had a negative impact on consumer-oriented activities. Moreover, it is one of the important factors that have produced the financial problems of Antwerp City, see below.

Finally, the relative income loss and the associated concentration of economically vulnerable groups have played a major role in the deterioration in the quality of the inner-city housing stock. The presence of substandard housing is clearly indicated by the results of the recent housing inspection, executed by the national housing authorities ('Nationaal Instituut voor de Huisvesting') between 1978 and 1981. About 62 per cent of the total housing stock in the City of Antwerp refers to units constructed before 1946. Within this group an incredibly high 73.9 per cent were reported to have serious deficiencies. In the six municipalities of the suburban ring included in the study only 46 per cent of the housing units were built prior to 1946. The quality of this housing was on average better than in the City of Antwerp : 'only' 58.2 per cent of the units were reported to be seriously deficient¹.

The relation between the concentration of economically weaker groups and the increase in the stock of substandard housing is clear. These groups have insufficient incentives and financial means to meet the costs of repairing and maintaining - let alone improving - their accomodation. Unchecked speculative development has probably also contributed to the actual state of the housing stock in some parts of the inner-city.

4.3. The budgetary problems of the City Government

The financial problems that became very apparent towards the end of the 1970's were due to a variety of factors. Both the substantial decreases in the local authorities' budget receipts and the exorbitant rise in expenditures contributed to the financial crisis..

¹The results of this study may be biased somewhat, due to the fact that only municipalities that had positively reacted to an invitation by the national housing authorities were included.

Two major sources out of which the City Government finances its operating expenses are taxes and the block grant received from the national government. As suggested in the previous section, budget receipts have been depressed by the erosion of the tax base, due to the deconcentration of population and economic activity and to the slow rise in average income. Moreover, until recently local income tax rates were limited to 6 per cent of the national income taxes.

Equally important, however, has been the relative decline in the central government's block grant paid to the local authority. As of 1-1-1977 the allocation of the grant to local governments is operated through a newly established Municipality Fund ('Het Gemeentefonds'). The allocation mechanism, strictly applied since 1981, was designed to take account of the Regionalisation, the Reorganisation of Local Government and, of course, the budgetary problems of the national authorities. The theoretical amount to be allocated to the Fund in any given year was determined at 7.65 per cent of total tax receipts of the central government two years before, excluding customs duties and other contributions to the E.E.C. The total amount of the grant is divided between the Regions Flanders, Wallonia and Brussels according to their share in total population, area, and receipts of personal taxes. Of the regional grant so determined, five per cent is subtracted and transferred to a special fund devoted to public assistance. As far as Flanders is concerned, municipalities are further divided into six groups on the basis of population. One group just consists of the two largest cities, Antwerp and Ghent. The Flemish portion of the national grant is distributed over the six groups in proportion to total municipality expenditures in each group over a three-year period. However, upward corrections are applied for the larger cities (+ 10 per cent for groups five and six) and an additional correction is implemented for Antwerp and Ghent. Finally, the amount resulting for group six after the previous step is divided between Antwerp and Ghent according to population (a 50 per cent weight), intensity of port traffic (a 25 per cent weight), area (a 10 per cent weight), etc.¹

¹For more detailed information on the allocation mechanism, see Vanneste (1986).

The share of Antwerp in the grant obtained through the Municipal Fund is quite large, mainly due to its population size and its port activities. In 1983 the share allocated to Flanders was approximately 52 per cent. Close to 40 per cent of the total grant for Flanders went to Antwerp and Ghent. Of this amount, Antwerp received some 70 per cent, which was more than 9 billion Belgian francs.

The allocation mechanism also implies that the share of Antwerp in the total grant to the Flemish Region is quite stable. As a consequence, the evolution of the grant for Antwerp closely follows the trend implicit in the amount allocated to all municipalities taken together. Unfortunately, since 1979 the national authorities have distributed only part of the theoretically determined amount to the local governments, in order to shift part of the burden of their budgetary problems to the municipalities. Between 1977 and 1984 the actual amount decreased from 7.65 per cent of central government tax receipts two years before - the theoretically fixed amount - to 5.57 per cent. In 1984, 22 per cent of the theoretical grant was not allocated to the municipalities.

Needless to say, the relative decline in the block grant has seriously affected Antwerp's financial autonomy, and this precisely in a period of crisis and important structural changes in the local economy. It is not surprising, then, that the City of Antwerp's total receipts, even in absolute terms, have only increased at a very slow rate (see Stad Antwerpen (1986)).

More important than the slow rise in Local Authority income has been the enormous increase in its expenditure. To some extent this was due to factors totally beyond the Local Authority's control. These include the rapid rise in interest rates, wages and energy prices, and also a number of central government decisions imposing additional financial obligations. The most significant of these were the decisions which obliged local governments to finance the deficits of local hospitals, and to contribute 50 per cent to the expenditure on the "guaranteed minimum income" payments to the poor. Needless to say that with the intensification of the economic crisis welfare expenditure has risen dramatically, particularly in inner-city areas with their concentrations of people on low incomes.

Expenditures have also increased due to internal factors, mainly related to poor management and planning in the past. During the sixties and seventies the city government started a large number of infrastructural projects in the cultural and recreational sector. As a large fraction of the initial investment cost was subsidized by the central government, insufficient thought was given to the costs of maintaining and running these facilities, cost which were to be carried by the local authorities over an extended period of time. Moreover, in the six-year period during which the reorganisation of the City of Antwerp was prepared (1976-1982), many previously autonomous municipalities that would be enclosed in the newly constituted City also heavily invested. Obviously, after 1982 the capital and operating costs associated with these investments were imposed on the City of Antwerp.

5. URBAN DECLINE AND URBAN POLICY

In the previous sections we discussed how a variety of social and economic factors have resulted in the development of a multitude of urban problems. The purpose of the present section is to give a brief and informal overview of some of the initiatives developed at the national, regional or local level intended to combat problems of urban decline and the associated budget deficit of the local authority.

It is fair to say that there does not exist a consistent national policy designed to counteract problems of urban decline. In a very recent survey Cheshire, Hay and Carbonaro (1985, p. 231) write that

"There does not exist in Belgium at either the national or regional level any real policy designed to combat urban decline as it affects the whole central city. There have been some pilot studies undertaken relating to urban decline with ad hoc finance provided by the national government. These coincided with some political interest but since then there have been no serious programmes introduced".

The authors actually argue that in many cases transport and housing policies have been 'anti-urban'. Substantial subsidies to private and public transport modes (particularly for travel to work trips), lack of planning restrictions and massive programs of social housing construction in suburban areas have greatly facilitated residential decentralisation. This in turn has accelerated urban decline.

Planning policies and implementation machinery to fight or prevent urban decline are not very well developed. Cheshire, Hay and Carbonaro (p. 232) note that until the administrative reform in 1976 "there were no local authorities representing or reflecting 20th century urban development". Not surprisingly, this has prevented the establishment of effective local or regional planning bodies.

Despite these unfavourable circumstances there does exist a set of recent, and in some cases ad hoc, initiatives designed to revitalise Antwerp City. In order to combat the physical decay in some parts of the inner-city area a variety of policy measures have been introduced. The local government has made substantial efforts to improve the quality of the housing stock in distressed areas of the city, with the financial support of the regional

and national authorities. The local authorities have worked out a policy of urban renewal, the cost of which is subsidized by the Flemish Region up to sixty per cent. A system of subsidies to individuals has been implemented under which part of the costs of renovation is reimbursed. Moreover, the City of Antwerp recently decided to implement a tax on slum housing which is intended to encourage owners to upgrade the physical quality of their units. In addition to these measures, both large and small-scale public housing projects have been completed by local public housing associations, with the financial support of the national housing authorities.

Apart from the initiatives taken in order to improve the quality of the housing stock, the local authorities have made some efforts to improve the attractiveness of the downtown shopping area and the local hotel and catering business. This was accomplished through a set of traffic and parking regulations in the corresponding areas. It should also be noted that the City of Antwerp, in collaboration with the University of Antwerp, is working on an elaborate Structure Plan for the city.

Following up on the urban renewal policies the Flemish Regional Government in 1983 introduced another, new scheme aimed at the improvement of living conditions in declining urban residential (but also rural) areas. Local authorities were invited to delineate such areas and to work out a program for their rehabilitation. It was suggested that the areas ('Urban Renewal Areas') to be chosen were to be located in sectors characterised by high vacancy levels of housing units, a poor quality of the housing stock, the presence of derelict land, and a lack of primary services, playgrounds and parks.

Antwerp has responded positively to this initiative and at present 12 such areas have been delineated. Practical criteria that have been used included the physical quality of the front of the housing units, concentration of vacant business premises, concentration of garages, etc. For each area a Steering Committee has been established which consists of representatives of the local population, city officials, policy-makers and the local public housing associations. In these committees the main problems and bottlenecks in the respective Urban Renewal Areas are discussed and a series of very concrete and specific projects are proposed. These are to be concentrated

on the public domain (roads, footpaths, squares, community centers, playgrounds, etc.), on the renovation of old, substandard housing and on the construction of new public units. In order to encourage residents of the area to improve their dwellings the Regional Government also offers subsidies to individuals. These grants can only be used for residential buildings. They are limited to a maximum of 60 per cent of the cost of the improvements.

The steering committee finally submits a complete set of proposals to the City Government and, after approval, to the Flemish Regional Government. At present, 10 out of 12 delineated revaluation areas have been approved by the regional authority. The total cost has been estimated to amount to 7.6 billion Belgium francs, to be spread out over a period of ten years. Of this amount, almost 6.8 billion will be paid by the Flemish Region.

Although it is too early to evaluate the initiatives previously discussed, it is clear that they represent an important step in the right direction, that is, towards revitalisation of the Antwerp urban area. In order for this goal to be achieved it is absolutely essential, however, that the different policies be integrated into one consistent urban policy. Moreover, the continuity of the policy must be guaranteed by successive national and regional governments.

Although measures that should ultimately lead to the revitalisation of urban areas deserve considerable attention in the political process, policy-makers also realized that, if the large cities were to remain the engines behind economic development, the budgetary crisis had to be solved. A healthy financial situation of the local government seemed to be considered a prerequisite for the viability of urban areas and the revival of the local economy.

In Antwerp, the authorities had increasingly issued additional loans in order to finance the interest payments on its growing outstanding debt, which by 1980 amounted to 42 billion Belgian francs and still continued to increase. In that year, the consortium of banks refused to provide fresh loans to Antwerp and other Belgian cities facing similar problems. It was finally decided to establish a national Consolidation Fund, intended to reduce the short-term financial pressure caused by large local budget deficits. This

was in turn considered as a first step necessary to cure the cities' financial situation. In order to be allowed to call on the Fund each individual city had to negotiate with the authorities on the exact contents of a Plan for Financial Reform ('Saneringsplan')¹. In 1982, Antwerp reached an agreement on such a plan.

The agreement included the consolidation of most of the city's outstanding short-term debt, which was taken over by the Consolidation Fund. Antwerp's short-term debts to the banks were turned into long-term debts to the Fund. Total repayment was scheduled over a period of 25 years. The annuities started at a relatively low level to increase gradually to approximately 8 billion Belgian francs by 1990. They would then remain at that level for another 18 years.

The agreement further included a commitment by the local authorities to balance their budgets. In order to succeed in this enormous task it was necessary to take a number of measures intended to reduce expenditures and to increase income.

Turning to the income side first, it was decided to increase local income taxes by 50 per cent, i.e., from 6 to 9 per cent of the total central government income tax. Moreover, property tax rates were to be gradually augmented, starting in 1983, to a maximum level in 1988. In addition, charges on services, such as refuse collection, were drastically increased.

On the expenditure side, substantial reductions in administrative and operating costs of all major departments were decided upon. The most severe decision was to reduce the local authorities' total workforce by 15 per cent of 1983 employment over a five-year period. The reduction of the number of staff members was even more drastic than the average decrease by 15 per cent, amounting to as much as 25 per cent. The workforce reduction was accomplished by not replacing retiring workers and by encouraging workers to accept early retirement, offering them a large fraction of their salary after retirement. Although there have been no formal discharges, the targets with respect to the labour force were achieved as early as 1985.

¹It may be interesting to note that the ultimate responsibility for the financial reform of the major urban centers lies with the respective Regional authorities.

Another drastic measure to reduce expenditures and to limit further increases in outstanding debt has been to place a maximum restriction on the amount of capital investment allowed. It was agreed to limit the total annual investment bill of the local authority to 1 billion Belgian francs, inclusive of central government subsidies. For the Port Authority itself a maximum target was set at 0.5 billion, exclusive of government subsidies. For purposes of comparison, it may be noted that in preceding years the local government's investment bill had averaged between 2.5 and 3.5 billion Belgian francs.

The purpose of the agreement has clearly been to relieve the local government, at least to some extent, from short-term financial pressure by consolidating short-term debt, and at the same time to give the City of Antwerp the proper incentives to improve a dramatically worsening financial situation. The introduction of all the drastic measures previously discussed seems to have led to positive intermediate results. Although it is too early to draw any definite conclusions with respect to the success of the Financial Reform Plan, it may be noted that at this moment the local authority's budget is already in balance. In 1985 the Port Authority generated a surplus of 0.4 billion Belgian francs, whereas the surplus for the City of Antwerp as a whole amounted to 1 billion Belgian francs. Of course, further efforts will have to be made in order to produce the large surpluses needed to pay off the increasing annuities in the future. Local officials feel confident, however, that if the prescriptions of the Reform Plan are followed in a realistic way, they will succeed in restoring Antwerp to financial health.

The previous discussion reveals that both with respect to the revitalisation of the inner city's business and residential areas and with respect to the improvement in local public finances important initiatives have been taken. However, it must be emphasized that they are only the first hesitant steps towards a systematic and integrated urban policy. One might therefore have doubts as to whether they will suffice to curb the process of urban decline. One shortcoming is that the initiatives focus on the symptoms of urban decline rather than on the real causes of the process.

Policies have concentrated on improving the physical environment and the financial situation of the local authorities. The structural disequilibrium between the composition of the inner-city labour force and employment opportunities is hardly touched upon. Insufficient concrete policies exist that are directed towards the recent shifts in the local labour market and towards the most vulnerable victims of these structural changes. In addition, policy has a chance of being effective only if it is based on a global perspective concerning the desired evolution of the urban area and the appropriate role of the inner city in this development. The absence of such a global view leads to a fragmented and inconsistent approach. As an example, it is conceivable that urban renewal projects are partially counteracted by an anti-urban transport and housing policy, and by a particularly indolent spatial policy in suburban areas. A prerequisite for the long-run beneficial impact of policy on an urban region is the coordination of policy at the sectoral level (transport, housing; industry, recreation) and at the different levels of government (local, regional, national). In the absence of such an integrated set of policies, the initiatives that have been taken will undoubtedly contribute to the revitalisation and the viability of the urban area, but they are likely to be too limited in scope so as to provide a lasting solution to the existing urban problems.

6. ANTWERP, THE ENGINE BEHIND ECONOMIC ACTIVITY : THE PAST AND THE FUTURE

Antwerp has fully exploited its potential position as one of the leading ports in the world, focusing its industrial policy to a large extent on the port area. Land was equipped for industrial use and the necessary port infrastructure for large-scale industrial development was provided. Abundant labour was available at exactly the right time.

Antwerp has one of the most centrally located ports in Europe. This locational advantage initially attracted industrial establishments that strongly relied on the proximity of deep water. The technical interrelationships between plants in different sectors soon generated a stream of additional establishments. Their decision to locate in Antwerp was due to the presence of the already existing production capacity rather than to the locational factors that had been decisive for the initial group of industrial settlements. This process has been a crucial element in shaping the petroleum and chemical industries. Not surprisingly, the industrial expansion also attracted a number of supply industries and generated a variety of transport-related activities, the demand for which is derived from other sectors.

The technical and economic interdependencies between industrial plants have produced a growth pole effect in the past. On the basis of an input-output analysis, a recent study showed that the Antwerp economy is characterized by a high representation of sectors for which a substantial part of the inputs in the production process is provided by the outputs of other sectors (GOM-Antwerpen (1981)). The same study concluded that the Antwerp economy exerts more influence on the regional and national economy than vice versa. This finding, together with the analysis of the present paper, clearly indicates that, certainly in the past, Antwerp has been acting as the engine behind national economic activity and growth.

The presence of the port, its central location in the Western European transport network, the availability of industrial land in the port area, and the favourable industrial structure that evolved in the fifties and sixties, they all proved to be factors which have continued to favour the Antwerp regional economy in the difficult years that followed. To a large extent they

probably explain the resilience the Antwerp secondary sector has shown in the face of international and national economic decline between 1974 and 1984. The manufacturing industries located on the industrial estates in the port came out of the recession nearly unscathed, and in a number of key manufacturing sectors, the region has succeeded in strengthening its already strong position viz-à-viz the rest of the country. Only in the service industries did the local economy perform significantly weaker than the rest of the country. And even there, despite relatively strong tendencies of spatial deconcentration, Antwerp's role as the leading Flemish centre in crucial services such as transportation, banking and insurance, didn't come under any serious threat.

This being said, though, it is clear that the evolution of the Antwerp economy has not been without problems. Certainly in absolute terms, the recession has seriously affected the region : more than 15 000 jobs were lost and unemployment has risen to unprecedented levels. Even more worrying from the point of view of the region's future role, is the recent deterioration of the economic performance of the Antwerp SMLA compared to that of the rest of Flanders. This development is illustrated in Table 7 which shows average annual employment changes for three sub-periods since 1974 : whereas in the first sub-period (1974-1978) the employment performance of the Antwerp SMLA was still relatively favourable compared to that of the Flemish Region (resp. - 0.2 and - 2.4 per thousand), this situation gradually changed, and by 1982-1984 a reversed pattern had emerged, with continuing decline in the city region (- 6.3 per thousand) and a timid employment recovery in the rest of the Flemish Region (+ 0.8 per thousand).

A closer examination of these figures indicates that the recent deterioration in the Antwerp economic performance as compared to that of the Flemish Region is mainly due to the development in the SMLA-core, where employment continued to decline rapidly, even in the years after 1982. Given the rapid and continuing decline in inner-city employment one might have serious doubts about the future dynamism of the Antwerp urban economy. This seems to be a premature and unsubstantiated conclusion. As has been mentioned earlier, Antwerp has kept a dominant position in a number of key industries. Moreover, the employment growth in the SMLA-ring and even in areas and towns beyond

the SMLA-boundaries is often closely related to the proximity of the urban core and its infrastructure and the wide range of specialist services it has available. Recent investments on the left-bank of the Scheldt, on the territory of suburban municipalities and the expansion of medium-sized towns in the areas adjacent to the SMLA (viz. Sint-Niklaas, Geel, Herentals) offer clear examples. The process of spatial employment deconcentration is caused by a number of factors (e.g. inner-city congestion, shortages of "dry" industrial estates, etc.), and made possible by recent improvements in transportation and communication. In the case of Antwerp, the rather moderate decline in inner-city employment is not necessarily due to a lack of economic dynamism in the urban region. On the contrary even, the process of spatial deconcentration seems to indicate that the urban economy is still expanding in spatial terms and that new, previously semi-peripheral territories are being integrated in - or colonized by - a growing metropolitan economy.

Earlier in this paper we pointed out the consequences of the process of deconcentration of population and economic activity for the Antwerp inner city. The economic crisis together with a process of rationalisation and restructuring has implied the employment decline in the urbanised SMLA-core. At the same time new or relocated employment has been shifting towards less congested and easily accessible suburban areas. These factors combined with the social selectivity of the population flows and the tertiarisation of employment have produced a structural mismatch between employment opportunities in the inner city and the corresponding labour force. The problem remains an important one, even if there are indications that the rate of suburbanisation is on its way back in recent years. The policy issue at stake is not just how to create employment in the inner city, but rather how to provide employment that is suited to the inner-city labour force. Large scale employment provision for the low-skilled workers in inner-city areas is extremely difficult. It is very unlikely that the experience of the fifties and sixties, when the city succeeded in attracting large scale investment projects, providing hundreds or even thousands of jobs, can be or will be repeated. If a short run solution to the problem at hand does exist at all, it will have to come through the encouragement of small scale projects, many of them in the craft industries and in the service sector.

One of the most distressing aspects of the current situation is the waste of so many human resources in the face of so many unsatisfied needs (e.g. the high number of unemployed construction workers in a city where large parts of the built environment are in dire need of repair).

The developments that have taken place over the last decade have obviously diminished the importance of inner cities as centres of industrial production and employment. There appears to be a clear need to redefine the role of inner-city locations, giving higher priorities to their residential and tertiary function. By further improving the attractiveness of its residential areas and local infrastructure and by strengthening and broadening the variety of consumer- and producer-services available, the Antwerp inner city will be able to play a crucial role in the future development of an extended metropolitan region. In this sense the City will continue to act as the engine behind economic recovery.

Several factors may hinder the Antwerp area in fulfilling its future role, however. The first one is the implementation of the austerity program imposed upon the local authorities. It might correctly be argued that the financial reform plan, previously discussed in this paper, was necessary to restore the local budget to health and that, at least for the city, the plan seems to lead to the desired result. However, the very strong restrictions on investment outlays may prevent the city from executing the investment in urban renewal and both port and urban infrastructure that are required to achieve several goals : first, to remain competitive as a world-port; second, to improve the attractiveness of the inner-city area so as to adjust to the slowly changing functions of the city; third, to secure the cultural patrimony and at the same time to accommodate the downtown area to a potentially expanding tourist industry.

A second and even more important factor that may hinder the future desired development of the urban area is the absence of a coherent urban and regional

policy in Belgium. Cities obviously do not exist in isolation but are an integrated part of their regional and national environment. Therefore, local problems cannot be solved without considering the regional and national background. It is clear then, that a set of coordinated measures in the area of land policy, transportation, housing and urban renewal and industrial and business policy at the different levels of government is more than ever needed.

Figure 1 : Public Sector Deficit and External Current Account Balance
 Source : The Economist (22/02/1986)

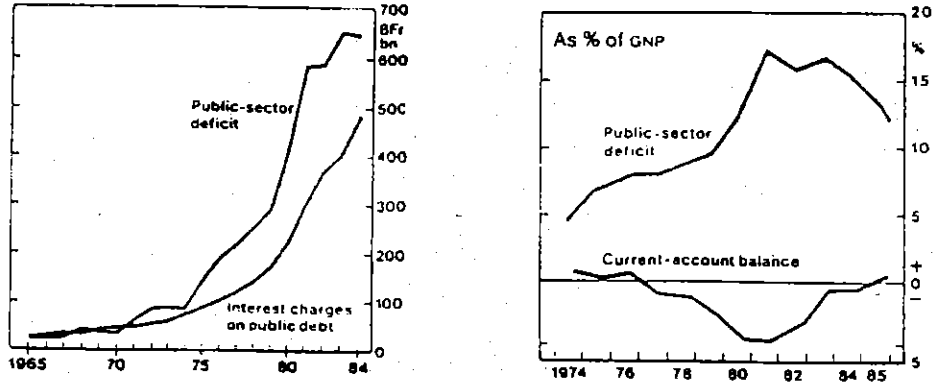


Figure 2 : Labour Force, Employment, Unemployment (1970-1984)
 Source : Ministerie van Tewerkstelling en Arbeid

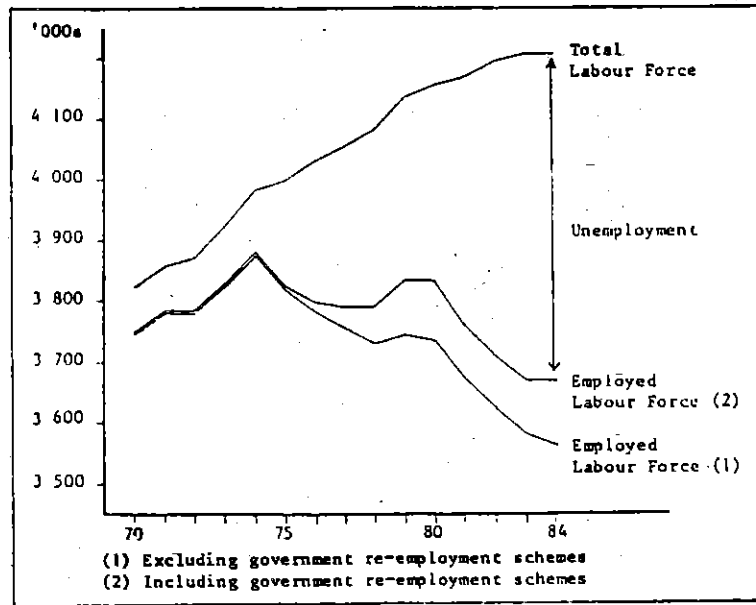
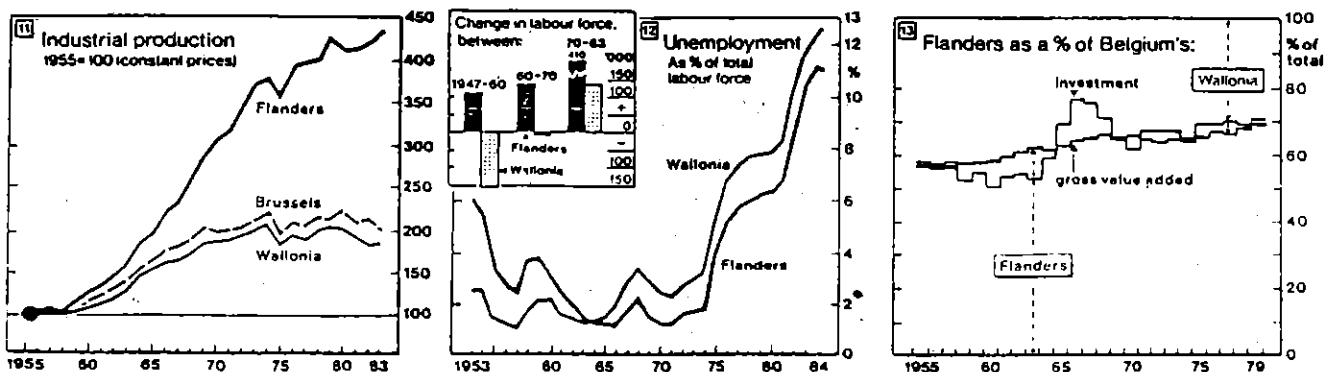
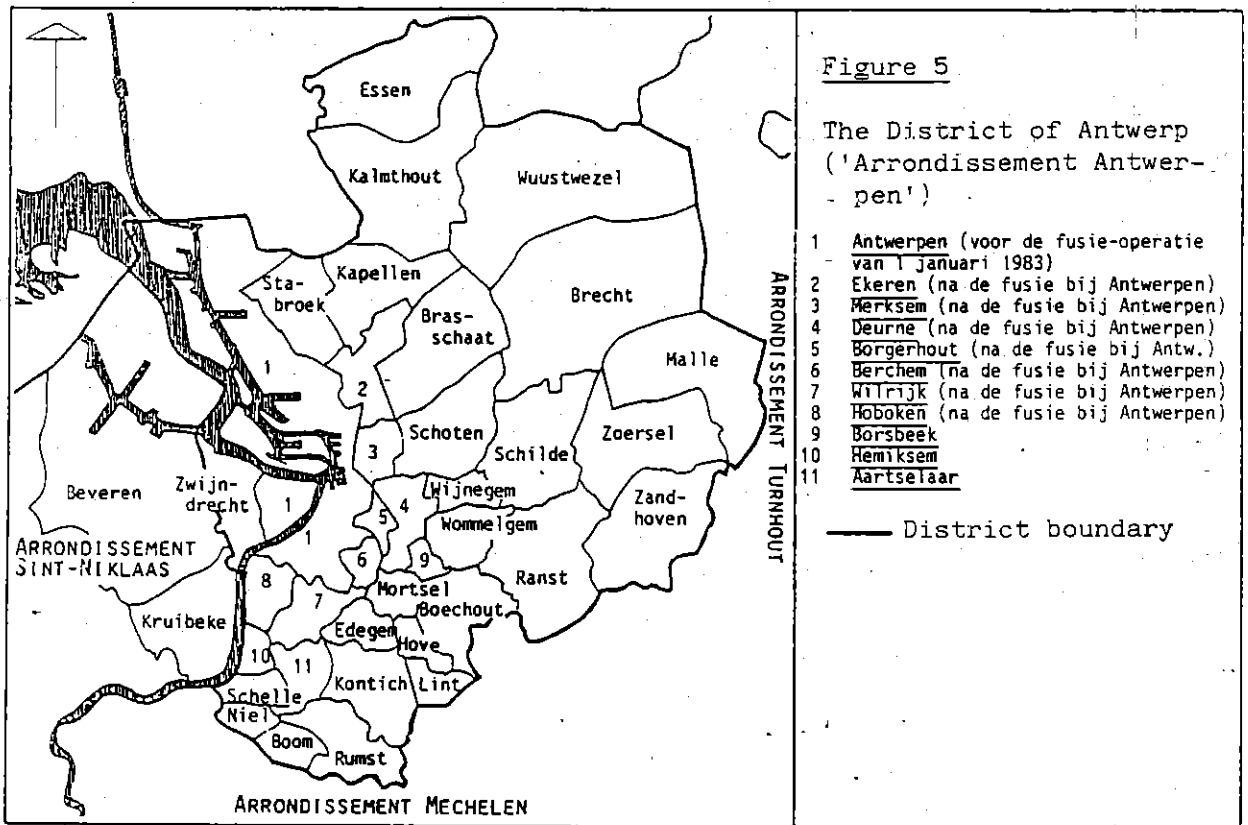
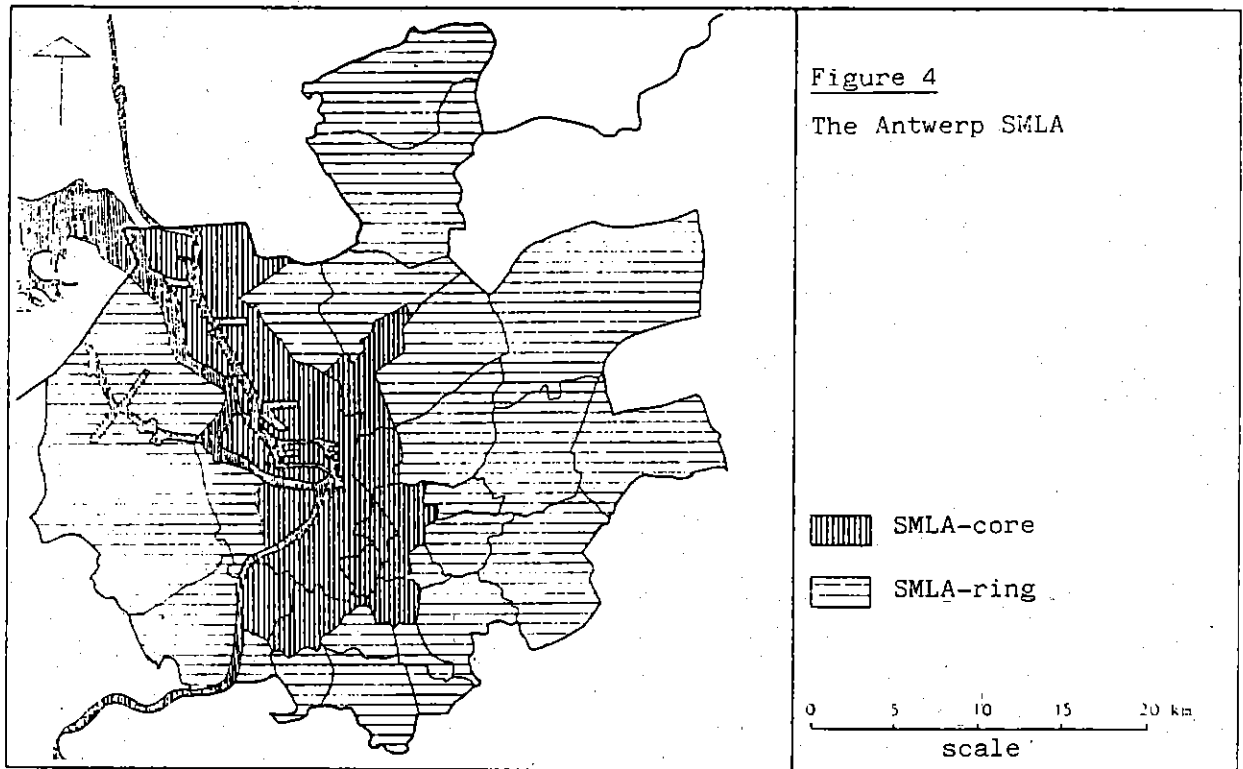
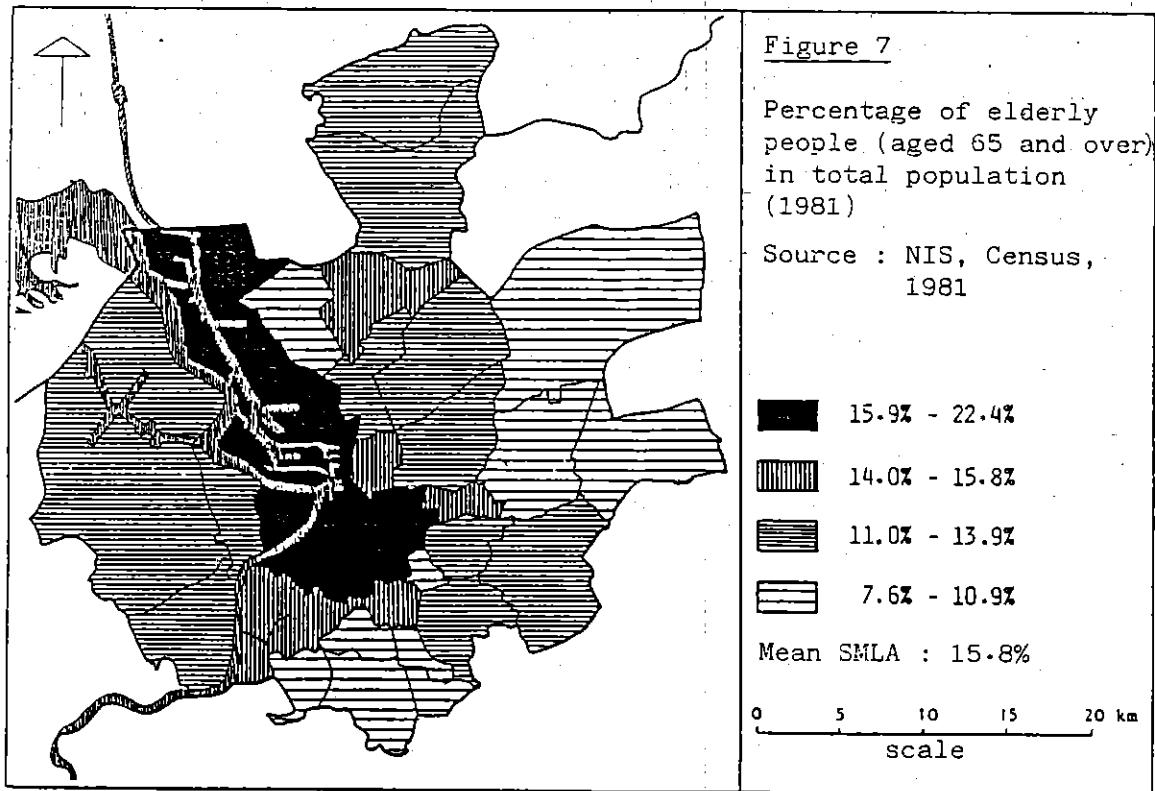
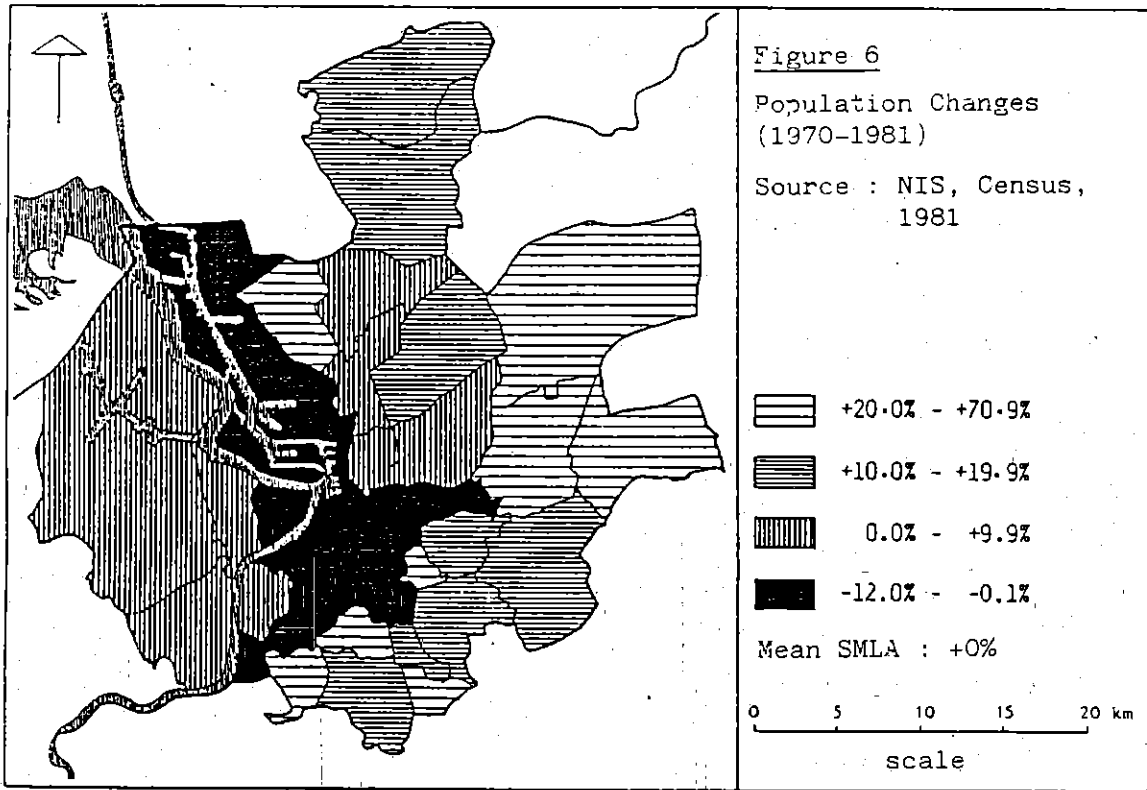
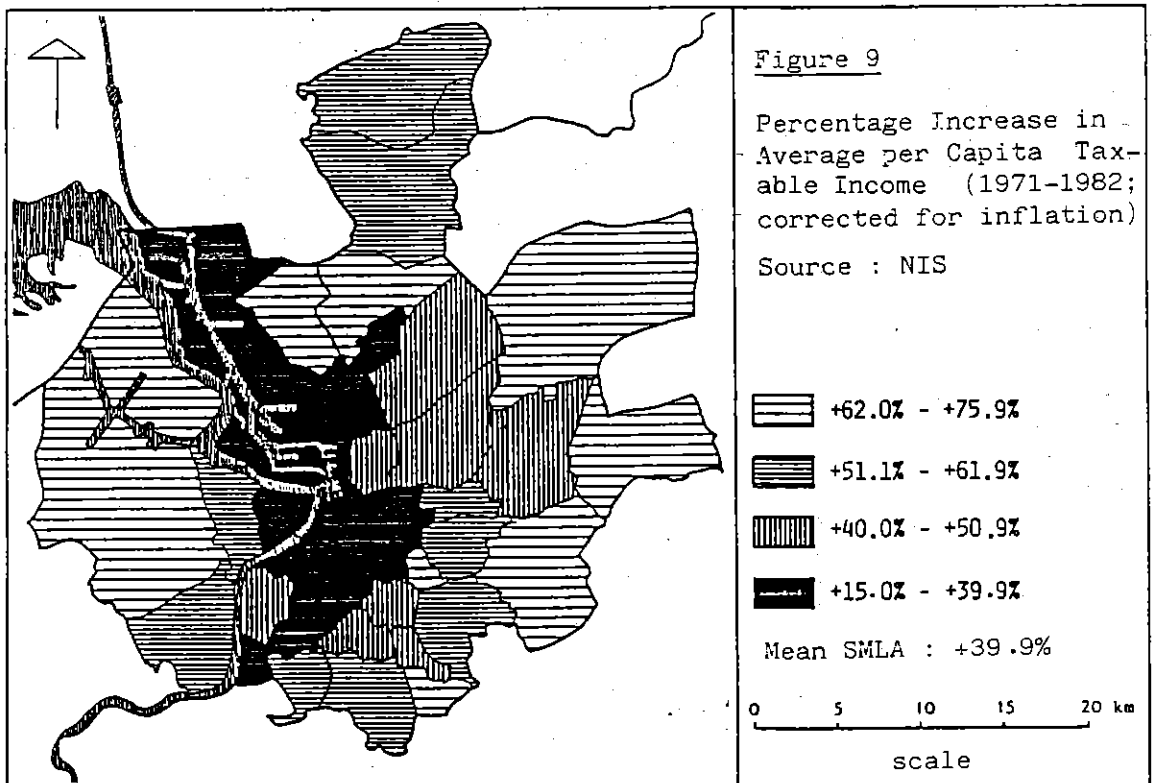
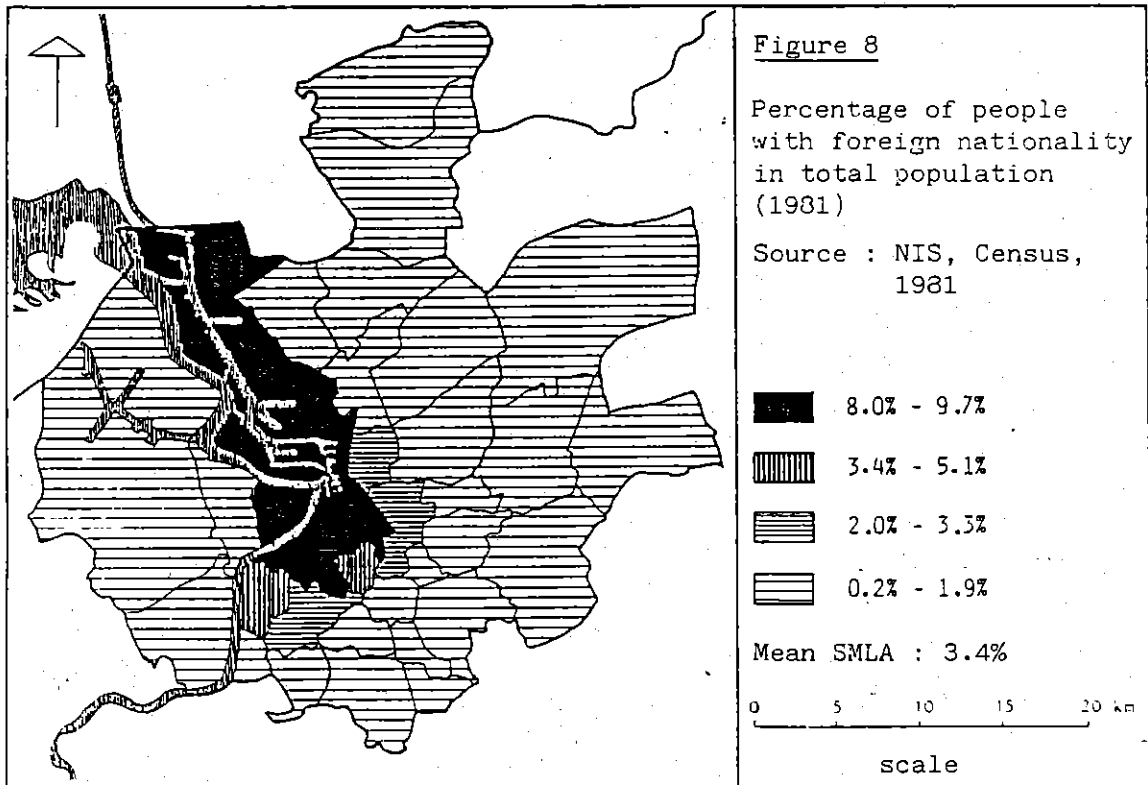


Figure 3 :
 Source : The Economist, 22/02/1986









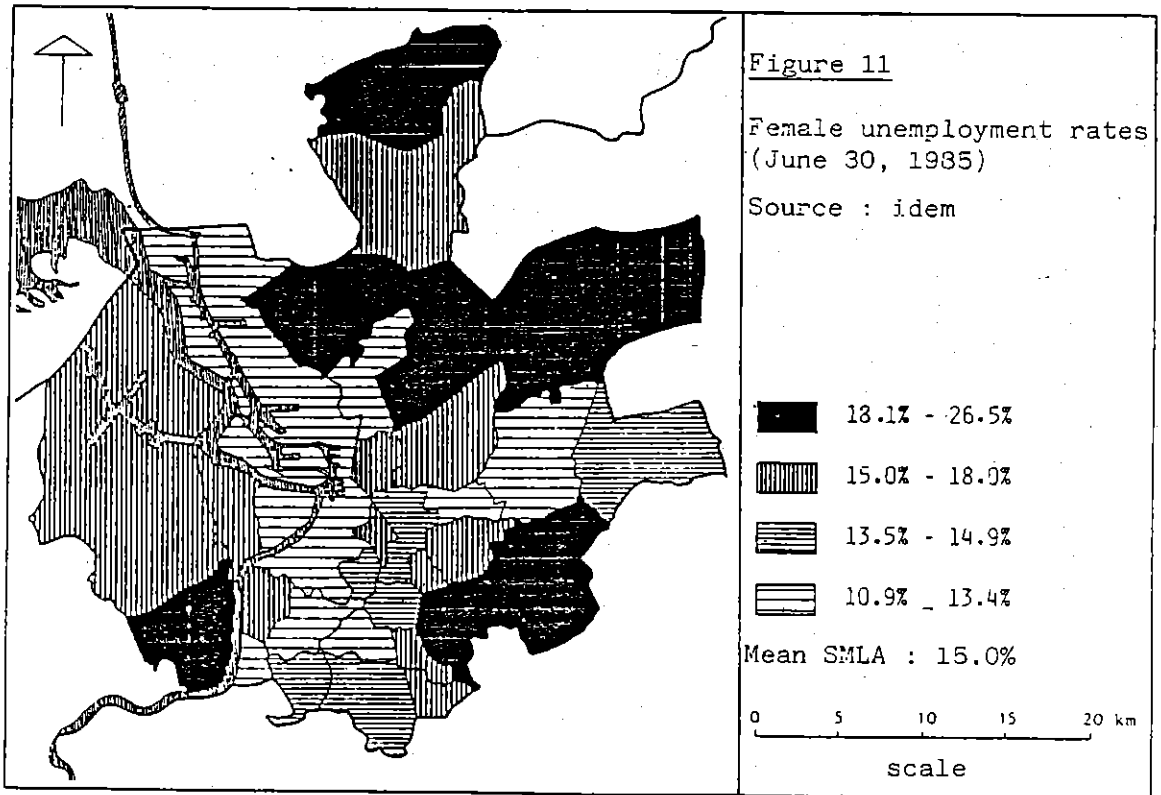
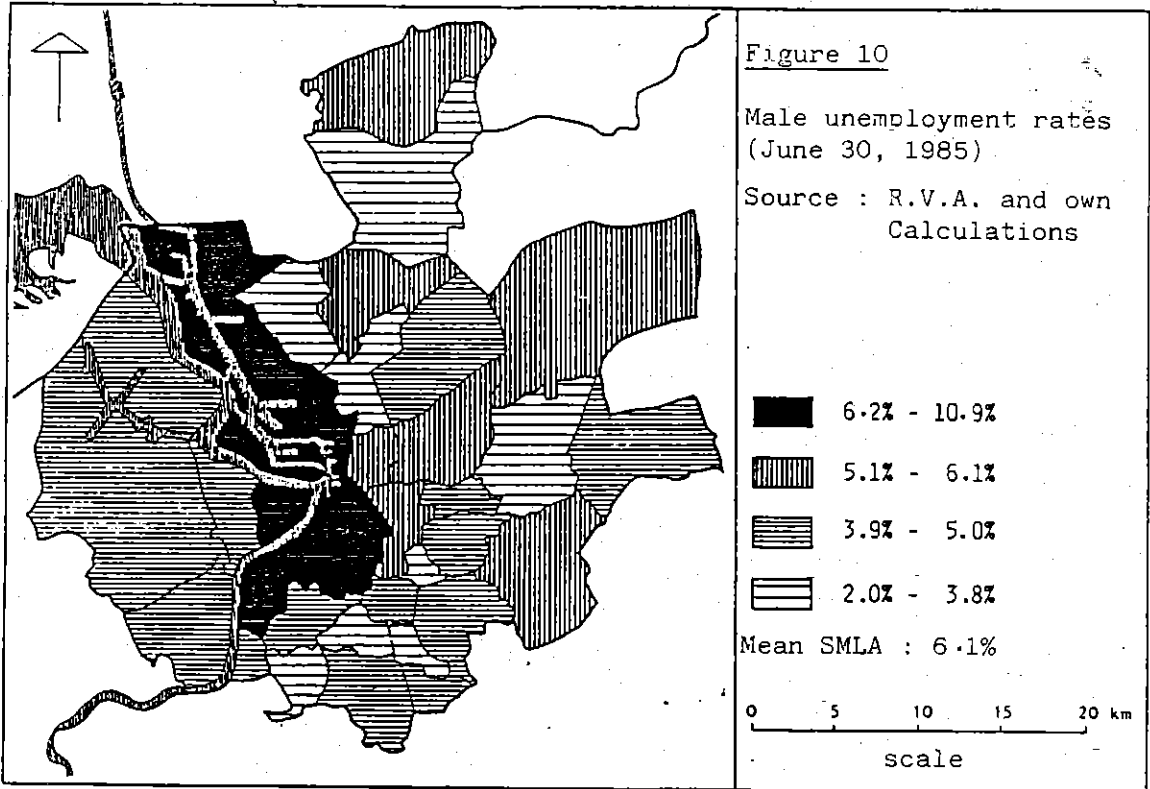


Table 1 : Demographic Changes within the Antwerp SMLA (1970-1984)
 Source : NIS, Census 1970, 1981
 : NIS, Bevolkingsstatistieken

	Population		Annual Population Change			
	31/12/'70	1/1/'85	'70-'81	'81-'85	'70-'81	'81-'85
Inner SMLA	577 158	512 977	- 4 795	- 4 008	- 0.83 %	- 0.76 %
Outer SMLA	319 640	384 826	+ 4 796	+ 4 275	+ 1.50 %	+ 1.16 %
Antwerp SMLA	896 798	897 803	0	+ 267	0.00 %	+ 0.03 %
Flanders	5 416 583	5 669 879	+ 20 834	+ 10 600	+ 0.38 %	+ 0.19 %

Table 2 : Social Indicators for the Antwerp SMLA
 Source : NIS, census, 1970, 1981
 : NIS, Financiële Statistieken

	Elderly*		Foreigners*		Average Income (p.c.)*		
	1971	1981	1971	1981	1971	1982	'71-'82
Antwerp city	16.9	22.4	8.0	12.0	75.0	213.0	+ 184 %
Inner SMLA	15.1	18.7	5.6	8.2	71.7	215.1	+ 200 %
Outer SMLA	10.9	11.7	2.9	3.5	61.0	215.2	+ 253 %
Antwerp SMLA	13.5	15.8	4.6	6.3	67.9	215.1	+ 217 %
Flanders	12.2	14.1	3.0	4.1	54.7	190.9	+ 247 %

*Elderly : percentage of total Belgian population aged 65 and over.
 Foreigners : percentage of total population with foreign nationalities
 Average Income (per capita) : in 1000 BF.

Table 3 : The Antwerp Labour Force (1970-1981)
 Source : NIS, 1970 and 1981 census

	Total Labour Force (1981)*			1970-1981 Change		
	Male	Female	Total	Male	Female	Total
Inner SMLA	145 806	68 926	214 732	- 9.8 %	+ 5.4 %	- 5.4 %
Outer SMLA	103 334	38 107	141 441	+ 17.1 %	+ 41.6 %	+ 22.8 %
Antwerp SMLA	249 140	107 033	356 173	- 0.3 %	+ 15.9 %	+ 4.1 %

* Estimates based on the 1981 age structure and 1977 activity rates.

Table 4 : Sectoral structure of Gross Regional Product (1977) in the District of Antwerp; comparison with Flemish and national output.

Source : GOM-Antwerpen (1981)

	Sectoral Structure			Antwerp as a percentage of :	
	District of Antwerp	Flanders	Belgium	Flanders	Belgium
Agriculture etc.	0.9%	3.9%	3.3%	5.1%	3.4%
Mining	0.1%	0.7%	0.8%	1.5%	0.8%
Manufacturing Ind.	37.7%	37.4%	33.5%	23.4%	14.7%
<i>Chemical Industry</i>	12.4%	5.4%	4.0%	53.2%	40.9%
<i>Metal Manufacturing</i>	12.7%	11.5%	10.5%	25.7%	15.8%
<i>Others</i>	12.6%	20.5%	19.0%	-	-
Construction	5.4%	6.6%	6.7%	20.3%	10.5%
Utilities	2.7%	3.4%	3.4%	19.0%	10.2%
Commerce	19.9%	18.8%	21.4%	18.3%	12.2%
Transportation & Communication	15.5%	8.2%	7.0%	44.0%	29.0%
Other services	19.3%	22.7%	25.6%	19.8%	9.8%
Statistical correction	-1.3%	-1.7%	-1.7%	-	-
Total	100.0%	100.0%	100.0%	23.4%	13.1%

Table 5 : Export-orientation of the Antwerp economy (1971,1979)

Source : GOM-Antwerp (1981b)

	All Industries		Secondary Sector	
	Antwerp	Belgium	Antwerp	Belgium
1971	49.4%	33.0%	53.0%	47.0%
1975	50.1%	34.2%	-	-
1979	57.9%	38.2	63.0%	55.0%

Table 6 : Sectoral employment structure in the Antwerp SMLA

Source : RSZ, RSVZ

	Total employment						Percentage change (1974-1984)					
	SMLA-core		SMLA-ring		Antwerp SMLA		SMLA-core	SMLA-ring	Antwerp SMLA	Flan-ders	Bel-gium	
	1974	1984	1974	1984	1974	1984						
Agriculture	90	215	489	604	579	819	+138.9	+23.5	+41.4	+6.4	-3.9	
Mining and Utilities	6 463	5 590	637	1 292	7 100	6 882	-13.5	+102.8	-3.1	+0.6	-22.9	
Chemical Industry	19 581	18 737	8.939	6 909	28 520	25 646	-4.3	-22.7	-10.1	-19.8	-31.0	
Metal Manufacturing	43 771	34 872	7.479	5 589	51 250	40 461	-20.3	-25.3	-21.0	-21.1	-26.4	
Other Manufacturing	24 682	16 035	9.801	9 343	34 483	25 378	-35.0	-4.7	-26.4	-29.6	-33.6	
Construction	15 485	8 737	8.509	7 035	23 994	15 772	-43.6	-17.3	-34.3	-28.8	-36.6	
Commerce	38 642	33 280	10.868	14 644	49 510	47 924	-13.9	+34.7	-3.2	+15.4	-0.3	
Transport and Communic.	40 604	37 655	2.438	3 513	43 042	41 168	-7.3	+44.1	-4.3	+4.3	-0.9	
Bank & Insurance	23 135	25 951	2.384	2 393	25 518	28 344	+12.2	+0.4	+11.1	+38.3	+17.6	
Other Services	57 124	67 910	15.934	21 167	73 061	89 077	+18.9	+32.8	+21.9	+31.2	+23.9	
Total	269 577	248 982	67.478	72 489	337 055	321 471	-7.6	+7.4	-4.6	-2.1	-7.0	
Secondary Sector	94 497	75 234	26.856	23 133	121 353	98 367	-20.4	-13.9	-18.1	-23.7	-29.7	
Tertiary Sector	159 505	164 796	31.624	41 717	191 129	206 513	+3.3	+31.9	+8.0	+23.7	+14.1	
Manual Workers : Male	106 948	81 783	31.485	27 529	138 433	109 312	-23.5	-12.6	-21.0	-18.7	-26.0	
Female	24 961	20 543	7.928	7 877	32 889	28 420	-17.7	-0.6	-13.6	-18.4	-21.2	
Total	131 909	102 326	39.413	35 406	171 322	137 732	-22.4	-10.2	-19.6	-18.5	-24.7	
Non-Manual W. : Male	90 113	88 845	17 103	20 718	107 215	109 563	-1.4	+21.1	+2.2	+11.7	+3.8	
Female	47 555	57 811	10 962	16 365	58 518	74 176	+21.6	+49.3	+26.7	+38.2	+27.0	
Total	137 668	146 656	28 065	37 083	165 733	183 739	+6.5	+32.1	+10.9	+18.7	+12.6	

Table 7 : Annual Employment Changes (1974-1984)

Source : RSZ

	Average Annual Employment Change*			
	'74-'78	'78-'82	'82-'84	'74-'84
SMLA-core	-4.2	-10.1	-10.5	-7.6
SMLA-ring	+15.7	-1.8	+8.9	+7.4
Antwerp SMLA	-0.2	-8.4	-6.3	-4.6
Flemish Region	-2.4	-5.7	+0.8	-2.1

*Expressed as average annual change per thousand employees in 1974.

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