

Dimou, Michel

Conference Paper

Industrial development in small islands economies. A comparative study of Mauritius and La Reunion growth performances

44th Congress of the European Regional Science Association: "Regions and Fiscal Federalism", 25th - 29th August 2004, Porto, Portugal

Provided in Cooperation with:

European Regional Science Association (ERSA)

Suggested Citation: Dimou, Michel (2004) : Industrial development in small islands economies. A comparative study of Mauritius and La Reunion growth performances, 44th Congress of the European Regional Science Association: "Regions and Fiscal Federalism", 25th - 29th August 2004, Porto, Portugal, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at:

<http://hdl.handle.net/10419/117032>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

Industrial development in small insular economies.

A comparative study of Mauritius and La Reunion growth performances

Michel Dimou
University Lecturer
CE.R.E.S.U.R.
University of Reunion
44, Rue des Mimosas
Saint Pierre
La Reunion
FRANCE

INTRODUCTION : A FRAMEWORK FOR ANALYSING THE GROWTH OF SMALL INSULAR ECONOMIES

The study of the growth of insular spaces – and in particular small insular economies – has been extended over the last fifteen years by researchers from France (De Miras, 1988 ; Crusol, 1988 ; Célimène and Watson, 1991 ; Poirine, 1993 and 1995 ; Célimène and Salmon, 1995 ; Hein, 1996 ; Rochoux, 1997), Australia (Connell, 1988 ; Hayes, 1991 ; Hooper, 1992 ; Hooper and Kerry, 1993 ; Lodewijks, 1993) and New Zealand (Bertram, 1986 ; Bertram and Waters, 1986), with the aim of understanding the economic developments observed in the small islands of the Caribbean, the Pacific and the Indian Ocean.

These authors have highlighted certain constraints – either natural or historical – which are specific to small insular economies:

- Distance : The distance between the small insular economies and world markets is considerable and affects both the nature of the economic exchanges and people's mobility. Unlike other peripheral regions, one of the main effects of insularity is that the physical distance is subordinate to the 'access-distance', which makes production heavily dependent on air and sea transport (Péraldi, 2002 ; Levratto, 2002). Transport costs become an important factor in the very choice of production specialisation. The enclosure of these economies, some of which are among the far peripheral regions of Europe, has therefore for a long time been considered as the major obstacle to starting-up their industrial development (Mathieu, 1994 ; Martinez, 1996).
- Size: This aspect involves a small local market, limited stocks of natural or human resources, dependence on the exterior for supplies, in short the lack of a 'critical mass' of production resources which would allow sustainable development (Peron, 1993). Further, despite the reduced size of these economies, the fact that state-owned equipment and facilities have to be maintained at a certain level to satisfy the needs of the resident population, leads to a much-criticised "wasteful infrastructure", which is nevertheless necessary to achieve European 'standards' of income per person, access to public services, and improvements in the standard of living and the level of consumption (Dommen and Leballe, 1988).

- Colonial Dependence : The history of most of these islands involves colonialism. Unlike metropolitan regions, whether in Europe or elsewhere, which were formed from the merging of national territories, the small insular economies were initially part of colonies; it was only during the second half of the 20th Century that they were either integrated into the administrative set-up of the ‘motherland’, with varying degrees of success (the French overseas departments and territories, the ‘DOM-TOM’), or else chose independence, also with varying success (Vanuatu, the Dutch and English West Indies, Mauritius and Samoa). According to historians and sociologists, the colonial past is the cause of some continuing conflicts, tension and blockages within these spaces, for example in the areas of labour organisation and land attribution (Ho, 1998).

By taking into account these features, Jean Pierre (1997) held that the origin of the stagnation or backwardness of these regions is fundamentally linked to their history, and in particular to the initial conditions which characterise the beginnings of their development. This view involves an analysis of the reduction of regional inequality in a centre-periphery type model. It is therefore accepted that, for a certain number of small insular economies, supposed to be caught in a “poverty-trap” (Meade, 1968), the measures and choices relating to economic development depend as much on external factors – from mainland France, Europe or even internationally – as on local ones (Rochoux, 1997 ; Jean Pierre, 1997).

However, this approach does not incorporate the organisational changes which take place within the production activity of each economy. Two ideas stand out:

- The first concerns the ‘divergence’ of the possible growth pathways. As several empirical studies have shown (Crusol, Hein et Vellas, 1988 ; Fairbairn, 1988 ; Poirine, 1995), far from adopting a single path converging towards a given stationary state, small insular economies follow quite different growth pathways.
- The second concerns the role played by regional development strategy, a thorny subject which well illustrates the ambiguity of the position of small economies relative to their current or previous ‘motherland’ and/or other dominant economic centres. Chosen according to local institutional decisions, the regional strategy is a tool for directing the development of the local participants and can become, in itself, a source of diverging economic performance.

To justify these two ideas one must accept the hypothesis that the sources of growth are not necessarily the same in each insular space. One can then follow Catin (1995) when he proposes a specification of the mechanisms of regional growth, by isolating three important, interconnected cumulative processes: multiplier effects, productivity effects and the effects of competitiveness. The first, inspired by Keynesian theory, describe how an exogenous push in the final demand linked to exports and/or public spending, has knock-on effects upstream or downstream and on wealth-creation. The second allow one to take into account supply dynamics which engender productivity gains connected with the implementation of investments in capacity, rationalisation and innovation. Finally, the third correspond to the effects of increased competitiveness on regional growth, through the setting up of a process of substitution for imports and/or through the promotion of exports. During a given stage of development, the combination of these three mechanisms leads to a ‘virtuous circle’ of growth which can follow differentiated industrial pathways (Catin, 1995).

This analytical approach is illustrated by a comparative study of the long-term growth pathways of the two sister islands in the Indian Ocean, Reunion and Mauritius. Of similar size, only 120 km apart but 11,000 km from Paris and London, they feature striking similarities from the demographic, ethnological or sociological points of view, which could be described as the heritage of the Mascarene Islands. However, whereas Reunion has been fully integrated into the French Republic since 1946, Mauritius, after 150 years as a British colony, became an independent republic in 1971.

After leading “parallel lives” for four centuries, thirty years of strong industrial growth produced a definitive divergence in the pathways of the two islands: Mauritius became the “tiger of the Indian Ocean” thanks to a policy of promoting exports based on improvements in competitiveness and productivity, while Reunion, as the ‘high achiever’ of the far-flung European regions, followed a growth route based on the effects of demand of the “insular rent income” for which the most tangible theoretical references are the New Zealand model MIRAB (Migrations, Remittances, Aid, Bureaucracy) and its variant ARABE (a French acronym for Aid, Administrative Allowance, State Bureaucracy), as applied in the studies on the French DOM-TOM (Bertram and Waters, 1986 ; Connell, 1988 ; Poirine, 1995 ; Rochoux, 1997).

In this paper we intend, initially, to go over the respective choices made by the two islands concerning industrialisation, and to study, using a set of macroeconomic indicators, their performance in terms of growth between 1982 and 1997. Secondly, we will attempt to

describe their long-term economic pathways and investigate the development opportunities open to both of them today.

1. THE HISTORY OF THE TWO SISTER ISLANDS IN THE INDIAN OCEAN

1.1 A shared economic and historical heritage

Reunion and Mauritius, which were only discovered and inhabited as late as the 16th Century, followed parallel destinies for nearly 400 years. After temporary occupations by the Portuguese and the Dutch, the French “East India Company” took over the islands and instigated the first specialised tropical agriculture, as from the start of the 18th Century. It was thus that coffee was developed in Reunion (then known as Bourbon Island) and sugar cane in Mauritius (then Ile de France). However, this situation was modified after 1765 as the system awarding privileges to the “Companies” was abandoned, because of competition from West Indian coffee and because of the high cost of transport. Further, whereas Mauritius, which was given privileges by its royal administrators, pursued a development based partly on sugar production and partly on its role as a trading stopover on the route to India, Reunion blossomed in its agricultural development and became the ‘granary of the Mascarenes’, with the aim of supplying its sister island in food products. This was the one – brief – period of complementary development of the two islands, giving a rare example of South-South exchange in the middle of the 18th Century (Rochoux, 1986).

The annexation of Mauritius by Great Britain following the Napoleonic wars and later the opening of the Suez canal put a stop to this integrated development dynamic and led once more to parallel pathways, this time characterised by the setting up of industrial monocultivation of sugar in both islands. During the 20th Century, companies in Mauritius and Reunion were built on this specialisation in production, which featured big landowners and colonists, large-scale immigration (“engagement”) of workers from India and China, and a strong dependence on exterior exchanges with their respective motherlands (Ho, 1998).

After the second world war, the two islands were in very similar situations, and shared some traits with other ‘small economies’, be they insular or not¹. From an economic point of view, the key factor is the mono-specialisation in sugar cane : in Mauritius, the sugar production went from 348,000 metric tons in 1947 to 638,000 metric tons in 1967, whereas in Reunion,

¹ Such as Sri Lanka, the Dominican Republic, the countries of Central America and the Caribbean.

which features more rugged terrain, it went from 38,000 metric tons in 1942 to 260,000 metric tons in 1961. In the two scenarios, sugar represented over 95% of exports, going mainly to France and Great Britain. Although the landownership system allowed both small and large concerns to exist, it was the latter which dominated the sector. Thus, as regards transformation, despite the intense growth in production, there was a considerable reduction in the number of sugar refineries: from 250 at the start of the century, by the eighties only 17 were left in Mauritius and 7 in Reunion. They belong to large Creole commercial groups, which constitute a ‘refinery oligarchy’ and local social set-up (Ramkissoon, 1994).

From the 1960s, the two islands followed an industrial strategy of import-substitution. More diversified in Mauritius, where this involved the entire manufacturing sector, in Reunion it affected principally the food-processing and building industries (Rivière, 1999). The results of these rather ineffective strategies are controversial and have in any case had little impact on a development model marked by dependence on a specialised mono-cultivation which, linked to a very high birth-rate, led to the appearance of high unemployment – about 20% of the working population in Mauritius and 19% in Reunion – at the beginning of the 1970s. The lack of natural resources, the limited local or even regional demand, the weakness of public infrastructure, the distance from markets and investors, and a pronounced brain-drain, all added to the disadvantages of the Mascarene islands, which seemed to be caught in a vicious circle of under-development.

The only notable difference between the two spaces is their institutional status. For Reunion, its *Département* status guarantees a certain level of road and transport infrastructure, water and electricity networks, as well as education and health services, thanks to the political will of the French government during the 1960s.

1.2 Overview of the industrial development in the Mascarene Islands

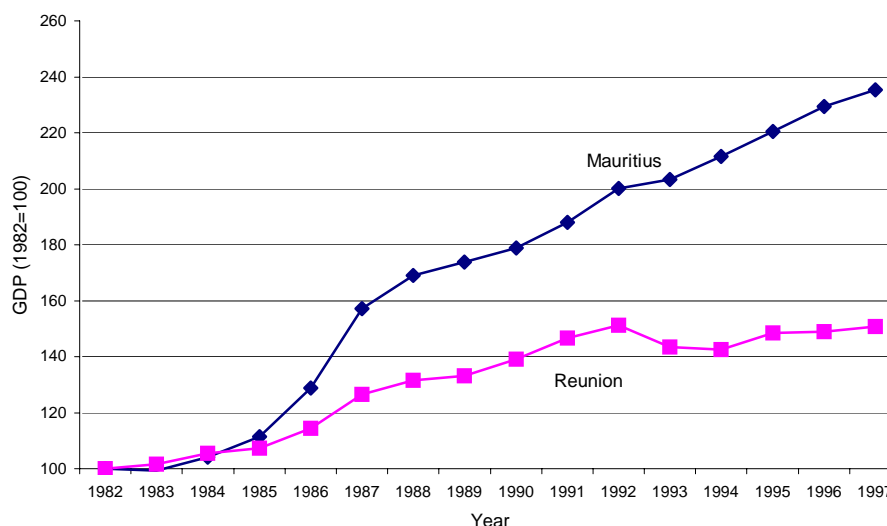
The roots of the different pathways of Reunion and Mauritius are in the choices they made concerning industrialisation, at the beginning of the 1970s. This can be deduced from studying a number of macro-economic data-sets².

Between 1982 and 1997, the average annual increase in GDP by volume was 7% in Mauritius and 4.8% in Reunion. These figures are high compared to the mainland French regions (which averaged 2%) and other European regions. It is clear, as we can see in figure 1, that the

² Relevant data can be found in the regional accounts of the INSEE in Reunion, and national accounts from the Central Statistics Office in Mauritius.

difference between the two islands had been increasing : the average annual increase in GDP per person in Mauritius, between 1982 and 1997, was 6% in Mauritius, but only 2.8% in Reunion, largely due to the greater increase in population in Reunion (1.9% compared to 1% in Mauritius)³.

Figure 1 : GDP change per person at fixed price(1982=100)



Fundamentally different situations control the growth mechanisms in Reunion and in Mauritius (see table 1).

Table 1 : Export/Import performance and economic openness in Reunion and Mauritius

PARAMETER	Reunion		Mauritius		France
	1982	1997	1982	1997	1997
Export Ratio EXPORTS/GDP *	0.06	0.04	0.47	0.63	0.25
Import Ratio IMPORTS/GDP *	0.44	0.39	0.50	0.68	0.23
Openness Ratio (EXPORTS+IMPORTS) / GDP	0.51	0.43	0.97	1.31	0.48
Ratio EXPORTS/IMPORTS	0.15	0.11	0.94	0.93	1.13

* One should note that for Reunion, as in all the overseas departments (Guadeloupe, Martinique and French Guyana), the exchange of goods and services with mainland France are included among the exports and imports.

³ From 1982 to 1997, the GDP per person at fixed prices (1982 level), went from 922 to 2169 dollars in Mauritius and from 3629 to 5473 dollars in Reunion.

In Mauritius the degree of openness is more pronounced and exports play a driving role in the economic activity of the island. Whereas in Mauritius the volume of exchanges with the exterior is greater than the GDP (the openness ratio is 1.3), with a trade balance barely in deficit, in Reunion it is less than 0.5 with a very low exports/imports ratio (between 10 and 15%). However, we must put this imbalance into context, as it represents a regional, and not a national, deficit.

2. THE DIVERGENCE OF THE INDUSTRIAL PATHWAYS IN THE MASCARENES

2.1. Growth in Mauritius : the effects of competitiveness linked to the promotion of exports

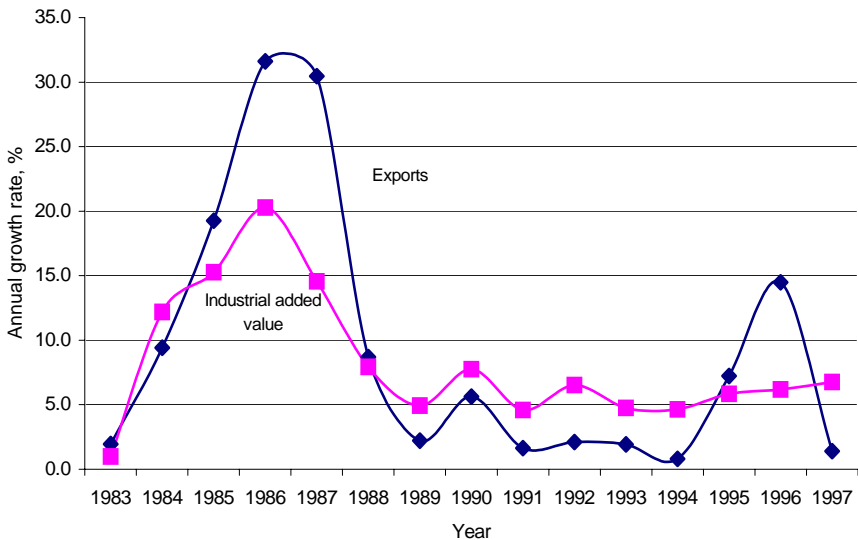
Industrialisation in Mauritius has been closely tied to an institutional framework particularly favourable to exporting. In 1970, Mauritius created a free zone, one of the first in the world (Yin et al, 1992). It gave the following advantages to the companies there: free movement of capital, tax-free importation of machines and raw materials, no tax payable during the first ten years, government-subsidized loans to aid exports, and privileged access to the communication and transport infrastructure. The first company to move to Mauritius, was an electronics company from Hong Kong, and employed 1000 people. Other foreign investors arrived subsequently, from France and the UK. At the same time, the signing of the Yaounde agreement in 1972, followed by those of Lome in 1975, opened the European market to the ACP countries, and therefore also to Mauritius. The American market remained partly open thanks to the “general system of preferences” which allowed these countries to sell their products, subject to certain conditions, without being subjected to quotas. Over 25 years, the European and American markets accounted for, respectively, 80% and 15% of Mauritian exports!

The industrialisation of Mauritius was initially financed by direct foreign investment, particularly from Hong Kong, which accounted for 24% of fixed capital, 42% of the jobs and 37% of the exports from the free zone. The links forged between the Chinese community in Mauritius and that of Hong Kong were the source of the flow of investment, which was also due to worries about the future of the Anglo-Chinese city, menaced as it was by Maoist China, and because it would be possible to penetrate the European market from a country which had signed the Lomé agreement, so avoiding the heavy import duties levied on Hong Kong’s competitors.

However, local capital quickly replaced the foreign investment, thanks to the sugar quota guaranteed to Mauritius by the Lomé agreement, which represented a significant export income. As from the beginning of the 80s, the ‘Planters’ joined forces with those from Hong Kong, through “joint ventures”, to take a share in the growth being enjoyed by the textile industry. Local capital represented 45% of the total invested in the free zone, whereas the equivalent share is only 17% in Taiwan and 1% in South Korea (Hein, 1996). This creation of home-grown investment should be seen as something positive for the industrial development of the country, even though it is still dependent of export income closely linked to international agreements.

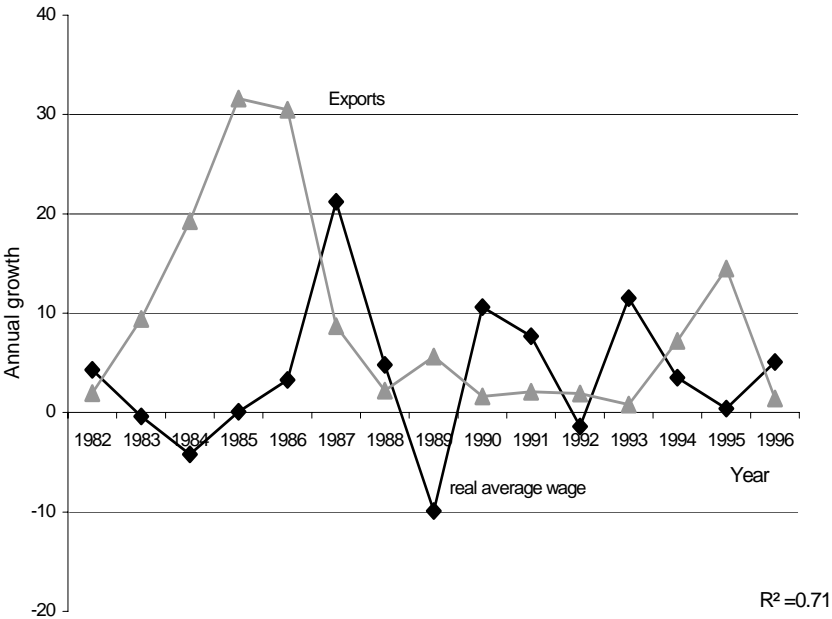
The second half of the 80s saw the Mauritian free zone take off, with annual growth above 6% and total direct foreign investment of about 1,800 million rupees. Once the electronic industry had closed down in 1986, the free zone specialised in textiles to the exclusion of other industries (with 586 companies and 90,860 jobs), reaching its zenith in 1990 when it was the third largest hosiery exporter in the world. The performance of the free zone has made it the spearhead of the island’s industrial development. Figure 2 shows the strong correlation between industrial growth and export growth in Mauritius over twenty years, up to the middle of the 1990s.

Figure 2 : Annual growth rate of industrial added value and of exports in Mauritius from 1982 to 1997



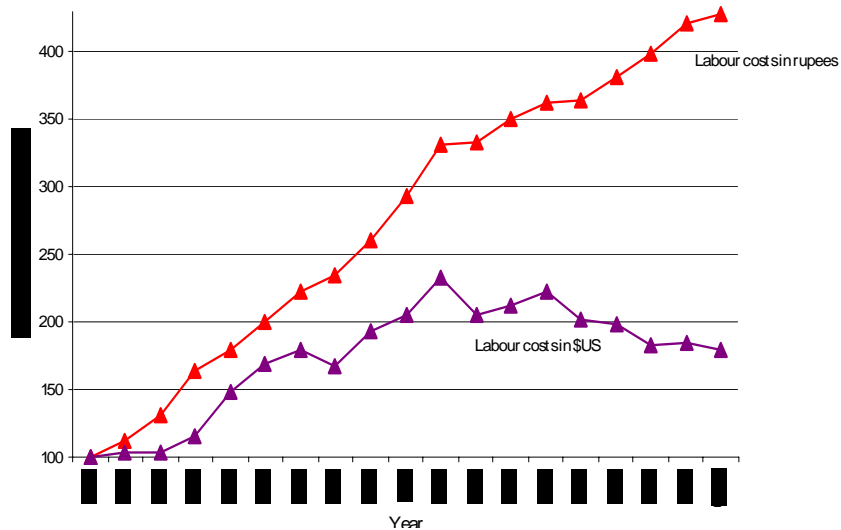
It should be noted that the textile sector’s good results, and also those of other industries in the island, were based almost entirely on the financial advantages available in Mauritius: low labour costs, access to European markets, and favourable taxation. The hourly wage in the hosiery industry has remained markedly lower than in other textile centres (Hong Kong, Singapore, Turkey, or Malaysia), thanks to the ‘dematerialisation’ of the free zone, that is the creation of workshops close to the workers’ living quarters. This has allowed the setting up of very flexible ‘rolling’ working arrangements among the women involved, without upsetting basic family structures (Paratian, 1994). Figure 3 shows that exports have varied inversely with real labour costs (based on the 1982 figure), with a one year delay corresponding to the time it takes to register changes in the performance of Mauritian companies.

Figure 3 : Annual growth of exports and real average wages (based on 1982 figures) between 1982 and 1997 - Mauritius



The economic growth therefore depended on competitive prices which were reinforced by a consistent policy of devaluing the Mauritian rupee with respect to the US dollar and European currencies. From 1982 to 1996, the rupee was devalued by 100% with respect to the US dollar, by 140% with respect to the French Franc and by 350% with respect to the South African Rand! Figure 4 show the effects of this monetary policy by comparing labour costs measured in rupees and in dollars.

Figure 4 : Comparison of the changes in labour costs in rupees and in \$US between 1982 and 1997 - Mauritius



As one can see, the competitive prices of Mauritian industry were based on extreme specialisation, which itself is based on the relatively low costs of factors of production and a favourable institutional framework. Thus, the multiplier effects of exports in the economy have remained weak, principally for two reasons (Catin, 1995) :

- The exporting companies, some of which are controlled by foreign funds, specialise in labour intensive sectors with a low degree of local integration (especially since the free zone's regulations encourage the compartmentalization of activities), which does not allow the setting up of a real industrial field. The export performance of these companies has had little tendency to lead the way for other parts of the economy.
- The squeeze on wages, which was intended to maintain the international competitiveness of Mauritian companies, has prevented the spreading of extra revenue from the exporting sector, which could have generated an increase in domestic demand potentially satisfied by local supply.

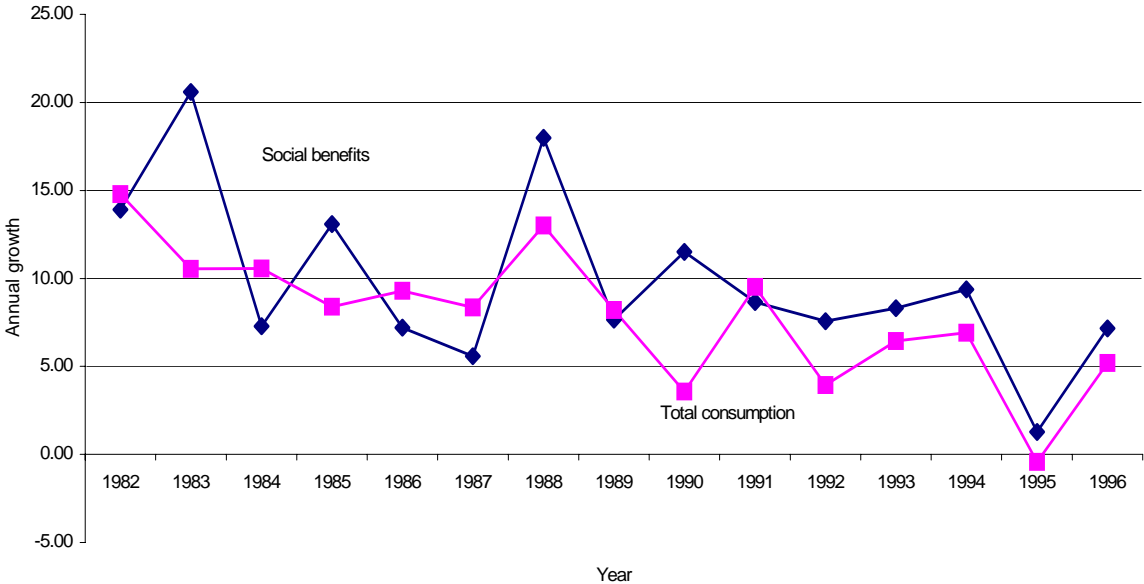
2.2 Growth in Reunion : multiplier effects linked to social benefits

The growth in Reunion has been heavily dependent on the 'administrative rent income' represented by public financial transfers of funds (Miras, 1986 ; Poirine, 1993). However, in Reunion, instead of the traditional form of public spending carried out by government workers, there has been a swelling of individual households' incomes, so increasing consumption. The increase in social payments paid to households has been consistently higher

than the increase in gross disposable income. At 11,200 million Francs in 1997, these payments represented 44% of income, compared with 4,400 million Francs and a 37% share of final consumption in 1982.

This administrative income improved the growth of Reunion’s economy by a multiplier effect on demand, in the process reducing the disparities with mainland France (Squarzoni, 1986). As Rochoux (1997) has pointed out, this particular kind of income creates an ‘ousting effect’ on exporting activities and on competitiveness because it is households’ preferences which, directly or indirectly, influence the allocation of resources (figure 5). These preferences can however, be turned towards imported products, so reinforcing the dependence on mainland France.

Figure 5 : Annual increase in final consumption and social benefits in Reunion between 1982 and 1997



By aiming to satisfy the demand within its local market, Reunion has encouraged a mentality of enclosure within its local space and its relations with the mainland. In this respect, an arsenal of legal, fiscal and financial measures, which have been implemented in the far-flung European regions, have led to the creation of an extremely protectionist economic environment. Local companies benefit from a very favourable legal system, which taxes competing imports (the *octroi de mer*), from an advantageous tax system adapted to their needs, and from European grants for setting-up businesses, concerning employment (up to 25% of the total salaries of a company) or equipment (up to 30% of total investment), as well

as from a scheme of government loans supposed to facilitate the financing of industrial activity.

The processes of industrialisation and productive diversification undertaken in Reunion are mainly in the final goods sector, in order to satisfy the growing local demand. In this set-up, the food-processing sector is very important (with 43% of total manufacturing industry) in a space in which service industries are dominant and already represent over 60% of total production. Some economists consider that the Reunion industrialisation process has been partly eclipsed by the direct change from a plantation economy to a service economy (these services are largely close-by ones for households, Lemps, 1987 ; Rochoux, 1990).

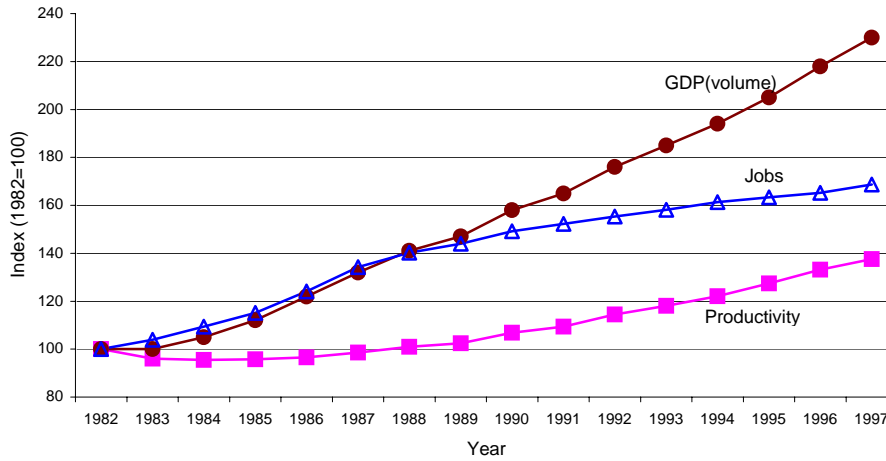
3. THE SUCCESSES AND FAILURES OF THE DEVELOPMENT MODELS IN MAURITIUS AND REUNION. WHAT ARE THE PROSPECTS?

At the dawn of the 21st Century the assessment of thirty years' industrial growth in the two islands is mixed. While recognising the well-known successes of the two pathways taken, it must be stressed that the near future seems uncertain. The pathway chosen by Mauritius is slowly fading, while that of Reunion has led to socio-economic blockages. For sure, new development prospects exist, but these run counter to the expectations of those who cling to the political and economic positions taken twenty years ago; these people feel abandoned or threatened by the current development directions.

3.1 Why is the Mauritius pathway fading ?

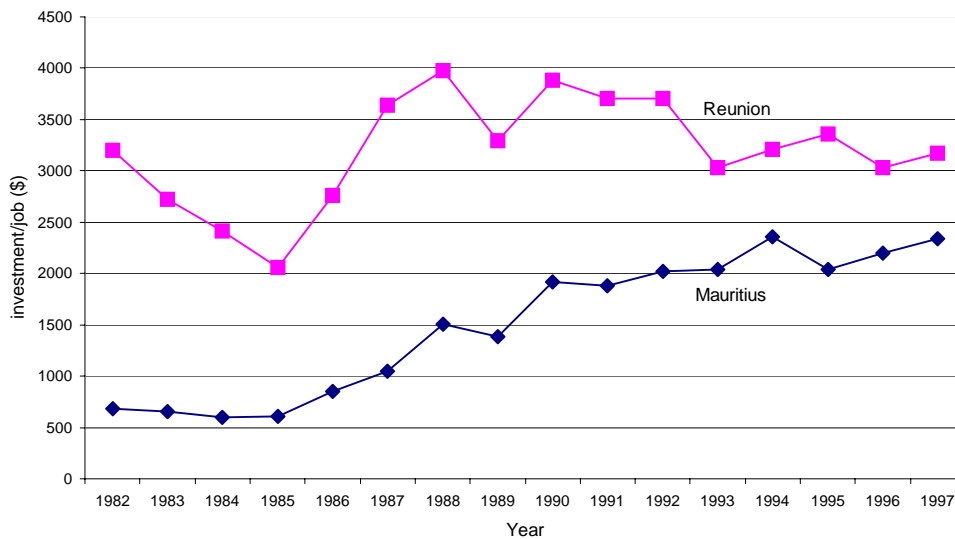
During the second half of the 80s, which was the Mauritian 'golden age', the economic growth was characterised by an industrial build-up and corresponding increase in the number of jobs, particularly in the free zone : from 1984 to 1988, the number of companies rose by 40% per year, and the number of jobs by 35%. During the 90s, this pace slowed down, but the economic growth continued thanks to the productivity gains that had already been made, once again mainly in the free zone. Mauritian industry has tried to continue its growth on this basis, instead of the previous strategy of having competitive prices (figure 6).

Figure 6 : Mauritian industrial growth from 1982 to 1997



Mauritian industry has in this way moved progressively towards an intensive accumulation regime, as we can see in figure 7.

Figure 7 : Change in investment per worker between 1982 and 1997 in Mauritius and in Reunion



This attempt to improve productivity gains was in fact a response to two kinds of problems facing the Mauritian economy throughout the 1990s (Dimou and Schaffar, 2001) :

- on the one hand, doubts over the extension of the ‘multifibers’ agreement made investors from the Far East more reluctant to invest in Mauritius, as the island risked

losing its access to European markets. These doubts were increased more recently by the signing of the Africa Bill in 1997, which lays down the conditions under which African countries can export to the US, and gives African countries an advantage over Mauritius, which does not satisfy the criteria relating to the origins of its raw-materials.

- On the other hand, the opening up of China to outside investors, in particular those in Hong Kong, which has had a considerable effect on where Asian investors choose to invest. Further, the opening up of African economies close to Mauritius, particularly Madagascar, has “re-dealt the cards” in the Indian Ocean textile sector. As a result, in 1989 the Mauritian group Floréal Knitwear was the first to relocate part of its production to Madagascar; during the next decade they were followed by other Mauritian companies hoping to benefit from the low labour costs in the larger island. In 1995, Madagascar opened a ‘dematerialised’ free export-zone, with about a hundred companies and 21,000 jobs in the clothing industry, which makes up 62% of companies and 74% of industrial jobs in the zone. Mauritian capital is responsible for 80% of direct foreign investment in textiles in Madagascar.

These circumstances led inexorably to a drop in not only direct foreign investment (DFI) but also local investment. From 1991 to 1996, DFI represented only 1.9% of total investment in Mauritius compared to 5.1% in Sri Lanka, Mauritius’ traditional competitor in textiles. In 1999, the ratio DFI/GDP was 0.9% in Mauritius compared to 10% in Singapore, 5.9% in the Philippines, 4.5% in Malaysia and 3.5% in the Dominican Republic, which well illustrates the waning appeal of Mauritius’ free zone (World Bank figures, 2000). From that time the Mauritian employment market has also shown signs of long-term recession.

The Mauritian growth pathway is fading because its economy has so far failed to find a satisfactory way of progressively moving from exports based on low added value products to ones of high added value, despite a sustained increase in productivity gains. This is connected to the fact that apart from a few very large companies which have developed a degree of vertical integration in the field, most of the textile companies have remained firmly specialised in the cutting/sewing stages of “low quality” products aimed at the mass market (in particular, cotton jerseys). Working as subcontractors for foreign orders, these companies import 73% of their raw materials from Asia and export 80% of their finished products to Europe. However, the obligation to export practically all their production, in order to benefit from the favourable free zone set-up, means there is almost no local exchange. In this respect

the Mauritian textile sector can be considered 'poor' with regard to its inter-sector relations (exchanges or cooperation) between its producers (Dimou and Schaffar, 2001).

The reluctance of companies to take on a technological strategy, the lack of an established training dynamic within the industrial workforce and a certain industrial inertia have, so far, kept the Mauritian economy relatively uncompetitive. In the circumstances, Mauritius has two possibilities, which could be combined:

- The first would continue the specialisation in textiles while promoting the introduction of technological advantages – with corresponding financial advantages – for the companies in the sector, in order to protect them from outside competition. The creation of a textiles design institute (the Clothing Technology Centre) in 1999, the setting up of a system to allow producers to share information (Electronic Data Exchange) and the quest for global quality control (Total Quality Management) according to the norms ISO 9000 all display the will to work together to share the technological costs among these textile companies, so that they can satisfy the new expectations in Europe and the US : limited editions, fast delivery, large product choice and good quality. This option will lead to stronger integration of the textile field into the national economy. It unites the quest for the benefits of higher productivity with those of non-price related competitiveness.
- The second would promote other sectors of activity. During the 1980s Mauritius developed its 'off-shore' and free port activities; the former, encouraged by the authorities, experienced a boom during the second half of the decade (5000 foreign companies were registered!), and put Mauritius on the regional development map. It achieved the status of a regional financial hub for the Indian Ocean between Bombay and Cape-Town.

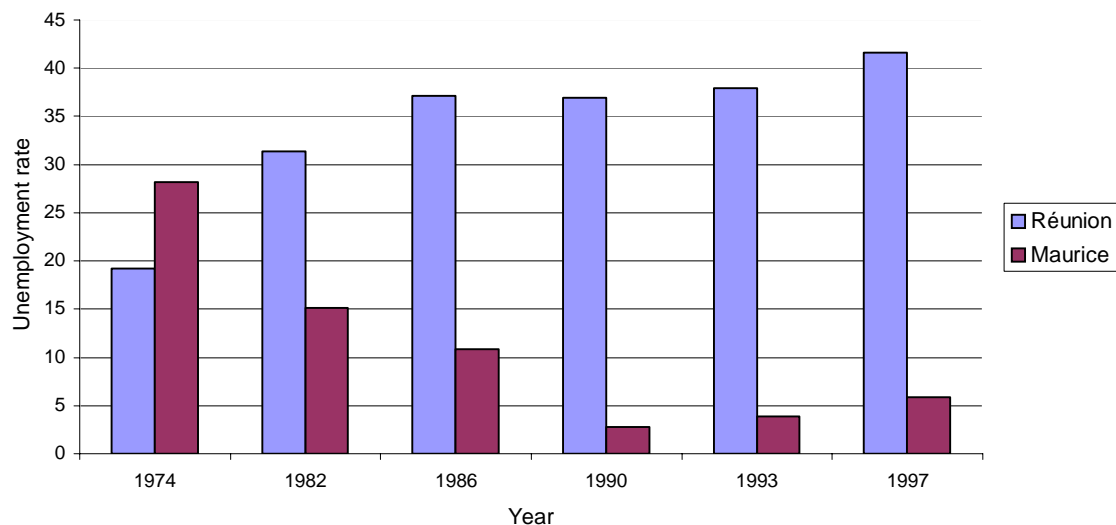
However, some choices will have to be made : the rapid accumulation of capital by the off-shore sector has been at the expense of the textile sector, and these two sectors have conflicting monetary policy needs, as the older sector prefers a weak rupee, the exact opposite preference to the off-shore sector. Whichever strategy is chosen, it will aim for growth without significant direct job creation, because the ultra-capitalistic off-shore sector has only resulted in 500 direct jobs over five years, while the more technological direction of the textiles industry is intended to improve productivity, rather than the amount of activity. Finally, we should note here that Mauritius is developing a large tourism sector, aimed

principally at the luxury end of the market. This sector, dominated by foreign investment (French, British and above all South African), has created a certain number of low-qualified jobs.

3.2 Why has the Reunion pathway become blocked ?

The Reunion paradox is that the relatively high growth in GDP has been accompanied by a steady increase in unemployment. Numerous studies have shown that demographic changes and changing social behaviour are largely responsible for this development, characterised by simultaneous increases in the size of the working population, the level of activity, number of jobs and the unemployment rate (Rochoux, 1996). However, the same demographic and social trends are present in Mauritius, and yet there they have had the opposite effect (figure 8).

Figure 8 : Change in the unemployment rate between 1974 and 1997 in Mauritius and Reunion



At the beginning of the industrialisation process, Reunion had 25,700 job-seekers, representing 19.2% of the working population. Thirty years later, the unemployment rate had gone past 100,000, or 41.6%, which is much higher than in Mauritius, and also much higher than the rates in the other French overseas *departments*. This huge unemployment has hit in particular young job-seekers (53% of the unemployed) and the poorly educated (85% of Reunion's job-seekers have at best achieved a UK GCSE level). This situation is the result of a deteriorating ratio of job offers to job-seekers: from 22.5% in 1982, it had dropped to 6% in

1997! To explain the failure of GDP growth to lead to a reduction in unemployment, one must study Reunion's development pathway.

The roots of the problem can be found in the very structure of the Supply in the region. In Reunion, the high final demand has been satisfied by a joint increase in local production and in imports from mainland France, with the local market divided between two type of operators: industrial concerns involved in import-substitution and trading companies involved in import-distribution. The former specialise in basic consumer products and to a certain extent in intermediary goods, while the latter take care of equipment/facilities. Given this situation, two connected kinds of blockages have developed :

- Firstly, the lack of any state-of-the-art industrial specialisation, the growth of which could pull up the rest the economic activity with it. Unlike in Mauritius, the productive equipment in Reunion, which is largely in the service sector (in 1999 services represented 72% of GDP), is highly dispersed with a predominance of very small companies (in 1999, taking all sectors together, 90% of companies had less than five employees). The absence of integrated productive fields and as a result the lack of intermediate demand from local companies means that the final demand is all that is driving growth in Reunion.
- Secondly, the development of an oligopoly within the existing companies, which specialise in import-distribution, has provided a fierce impediment to the introduction of new competitors into the market-place (either through legal measures specific to the overseas *Departments*, or else through 'predatory tactics' which involve fixing sale prices below the entry threshold into the market). We note in this context that if companies in Reunion are rated by turnover alone, then among the top twenty there are thirteen trading companies specialised in large-scale retailing and three banks.

However, as Ho (2001) has pointed out, the knock-on effects of retailing are felt well beyond the business world: by attracting the final demand, these companies dominate local production and have an influence on the structuring of the territory. This domination has allowed them to appropriate the administrative rent income, via final consumption. However, far from investing in productive activities which would have a positive effect on economic activity and create jobs, these companies' strategies are merely either to maximise their profits and operating surpluses, or else to invest outside Reunion (in Vietnam, Mauritius or South Africa).

This trend explains the slow deterioration in multiplier effects. Using Catin's formula (1995) to calculate the multiplier k for public spending or exports, where:

$$k = \frac{1}{1 - (1 - c - i + (c * t) + m)}^4$$

we find that $k=2.55$ for 1982, and $k=1.61$ for 1997, showing the slow deterioration of multiplier effects in Reunion, following on from the development of import-distribution.

Today, by tightening their grip in both the service and tourism sectors, these companies would seem to be an obstacle and a major source of conflict for any future local development in Reunion. The island is currently suffering from 'Dutch disease', which is a characteristic of economies which feature a rent income effect (Van Wijnbergen, 1984; Campan and Grimaud, 1989 ; Arzelier, 1999), the ousting of activities which produce exportable goods or services, price increases in a sector protected from international competition and the over-development of the service sector.

CONCLUSION

Reunion and Mauritius, throughout their history, have featured a series of demographic, social and economic similarities. However, over thirty years of industrial expansion the two sister islands took different development pathways, one opening up to the international economy, the other somewhat withdrawn as a peripheral zone of France and of Europe. Despite strong growth during the 80s and 90s, these spaces have become more fragile at the start of the 21st Century. The exhaustion of the supply dynamic in Mauritius and the blocking of the demand dynamic in Reunion mean that new regional development policies are now needed.

⁴ Where c is the **marginal** propensity to consume, i is the **marginal** propensity to invest, t is the **marginal variation** in taxation and m is the **marginal** propensity to import).

REFERENCES

- ARZELIER M-P., 1999, Exportation de ressources naturelles et évolution industrielle : une modélisation dynamique par la théorie du contrôle optimal, *Région et Développement*, n°9, pp.75-98.
- BERTRAM G., 1986, Sustainable development in Pacific micro-economies, *World Development*, vol.14, n°7, pp.809-822.
- BERTRAM G., WATERS R.F., 1985, The MIRAB economy in South Pacific Microstates, *Pacific Viewpoint*, vol.26, n°3.
- CAMPAN E., GRIMAUD A., 1989, Le syndrome hollandais, *Revue d'Economie Politique*, n°6.
- CATIN M., 1993, Performances à l'exportation, structures de production et niveaux de développement des régions, *Revue d'Economie Régionale et Urbaine*, n°4, pp.633-647.
- CATIN M., 1995, Les mécanismes et les étapes de la croissance régionale, *Région et Développement*, n°1, pp.11-28.
- CELIMENE F., SALMON J-M., 1995, Croissance à long terme et chômage structurel dans les petites économies insulaires *Région et Développement*, n°2, pp.110-135.
- .CELIMENE F., WATSON B., 1991, Economie politique caraïbienne, Economica, Paris.
- CENTRAL STATISTICAL OFFICE OF MAURITIUS, 2001, Study on productivity, Ministry of Trade, Maurice.
- CONNELL J., 1988, Sovereignty and Survival, Island Microstates in the Third World, Research Monography n°3, University of Sydney.
- CRUSOL J., 1988, Problèmes spécifiques du développement des économies insulaires de la Caraïbe, in Crusol J., Hein P., Vellas F, op.cit.
- CRUSOL J., HEIN P., VELLAS F., 1988, L'enjeu des petites économies insulaires, Economica, Paris.
- DE MIRAS C., 1986, L'économie martiniquaise : développement sans croissance, Actes du colloque Iles tropicales : insularité, insularisme, CRET, Bordeaux, 23-25 octobre 1986.
- DE MIRAS C., 1988, L'économie martiniquaise : croissance et excroissance ?, *Revue Tiers Monde*, tome XXIX, n°114.

- DIMOUM M., SCHAFFAR A., 2001, L'épuisement d'une trajectoire industrielle. Le cas de l'île Maurice, Troisième Colloque de Proximité, Nouvelles croissances et territoires, Université de Paris X et INRA, Paris, 13-14 décembre 2001.
- DOMMEN E., LEBALE N., 1988, Caractéristiques des exportations des pays insulaires, in Crusol J., Hein P., Vellas F, op.cit.
- FOWDAR, N., 1999, Industrialization in Mauritius, Conférence à Montréal, Université de Montréal, Novembre.
- HAYES G. 1991, Migration, Metascience and development policy in Island Polynesia, *The Contemporary Pacific*, volume 3, n°1, pp.1-58.
- HEIN, P., 1996, L'économie de l'île Maurice, L'Harmattan, Paris.
- HO Q., 1998, Contribution à l'histoire économique de l'île de la Réunion, L'Harmattan, Paris.
- HO Q., 2001, 38 chefs d'entreprises de la Réunion témoignent, Azalées éditions, La Réunion.
- HOOOPER A., 1992, Socio-cultural aspects of development in the South Pacific, communication au colloque The future of Asian Pacific Economies, 10-12 novembre, Brisbane, Australie.
- HOOOPER A., KERRY J., 1993, Sustainability and Pacific cultures, communication à la 4eme conférence des Pacific Islands Leaders, 24-26 juin, Tahiti.
- INSEE, 2002, Tableau économique de la Réunion, Insee de la Réunion, Saint Denis.
- JEAN PIERRE P., 1997, Dynamique d'une économie régionale en développement au sein de la Communauté Européenne, *Région et Développement*, n°5, p.93-129.
- LEMPS H.C., 1987, De la primauté des plantations à l'économie des services. Le cas de Hawaii, Actes du colloque Iles tropicales : insularité, insularisme, CRET, Bordeaux, 23-25 octobre 1986.
- LEVRATTO, N, 2002, Les problèmes et les politiques de développement en Corse, *Région et Développement*, n°15, pp.167-193.
- LODEWIJKS J., 1993, The curious case of economic anthropology, communication à la Conference of economists, University of Perth, 25-31 septembre, Australie.
- MARTINEZ P., 1996, Aperçu sur l'évolution démographique à la Réunion depuis 1945, Institut Austral de Démographie, Séminaire du 3 décembre 1996, Saint Denis.

- MATHIEU J.L., 1994, L'outre-mer français, PUF, Paris.
- MEADE J.E. et al, 1968, The economic and social structure of Mauritius, Frank Kass, London.
- PARATIAN, R., 1994, La république de l'île Maurice dans le sillage de la délocalisation, L'Harmattan, Paris.
- PERALDI X., 2002, Accessibilité des régions périphériques de l'Union européenne et politiques publiques de transport, *Région et Développement*, n°15, pp.121-144.
- PERON F., 1993, Des îles et des hommes, Editions de la Cité, Paris.
- POIRINE B., 1993, Le développement par la rente dans les petites économies insulaires, *Revue Economique*, vol.44, n°6, p.1169-1199.
- POIRINE B., 1995, Les petites économies insulaires. Théorie et stratégies de développement, L'Harmattan, Paris.
- RAMKISSOON, J., 1994, Sugar cane and other agriculture, in Lutz, W., 1994, Population, development, environment : understanding their interactions in Mauritius, Springer Verlag, Berlin.
- RIVIERE F., 1999, Les facteurs de compétitivité industrielle à l'île de la Réunion et l'île Maurice : une étude comparée, *Région et Développement*, n°10, p ; 5-37.
- ROCHOUX J-Y., 1986, Du sucre aux services ou du développement économique de la Réunion, Actes du colloque Iles tropicales : insularité, insularisme, CRET, Bordeaux, 23-25 octobre 1986.
- ROCHOUX J-Y., 1990, La simulation des comptes économiques réunionnais, *Revue d'Economie Régionale et Urbaine*, n°3, p.445-459.
- ROCHOUX J-Y., 1996, De la population au chômage : de la nécessité de calculer des nouveaux taux, Institut Austral de Démographie, Séminaire du 3 décembre 1996, Saint Denis.
- ROCHOUX J-Y., 1997, Transferts financiers publics et développement régional. Le cas d'une région d'outre mer : La Réunion, *Région et Développement*, n°5, p.5-39.
- SQUARZONI R., 1986, Quarante ans de départementalisation, L'économie de la Réunion, INSEE, n°23, p.4.
- VAN WIJBERGEN S., 1984, The dutch disease : a disease after all n0373.. pp.41-55. *Economic Journal*, Vol.94

WORLD BANK, 2000, Report on world development, Washington

YIN P. et al, 1992, L'île Maurice et sa Zone franche, T-Printers, Port Louis.

Abstract :

The economic development of small islands may follow different pathways, according to the particular combination of growth mechanisms. A comparative study of the long term growth in Mauritius and in Reunion Island, two islands with strong historical, sociological and cultural parallels, shows that they are engaged in two different processes of industrialization. Reunion has focused on its local market and a demand-oriented development related to the "administration income". Mauritius, on the other hand, has preferred a supply-oriented model, strongly exposed to international competition. Nevertheless, both economies faced structural problems in the late nineties, when the industrialization dynamics faded away in Mauritius and almost stopped in Reunion.

Résumé :

Dans les petites économies insulaires, la conjugaison des mécanismes de croissance peut conduire à des trajectoires de développement différenciées. L'étude comparée des trajectoires de la Réunion et de Maurice montre que ces deux économies, très proches sur le plan géographique, historique et sociologique, se sont engagées dans deux processus d'industrialisation différents. La première s'est renfermée sur son marché local en visant les effets de demande générés par la « rente administrative », tandis que la seconde a opté pour une très forte ouverture économique en s'appuyant sur des effets de compétitivité et des effets de productivité. La deuxième moitié des années quatre-vingt-dix montre cependant l'apparition d'un certain nombre de problèmes avec l'épuisement des dynamiques d'offre engagées à Maurice et le blocage des dynamiques de demande à la Réunion.

Key words : *Insular economies, La Reunion, Maurice, growth mechanisms, industrialization.*

Mots clés : *Economie insulaire, La Réunion, Maurice, mécanismes de croissance, industrialisation.*

Classification JEL : F14, L67, O14, P51