

# Are State Business Relations important to Economic Growth? Evidence from Mauritius

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## ABSTRACT

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This paper examines the role of an effective 'State Business Relations' (SBR) in promoting economic performance for the case of Mauritius. Rigorous dynamic time series analysis, a so called VAR framework, is used to address the dynamic and endogeneity issue normally present in growth modelling. The results show that SBRs have a positive and significant effect on output in Mauritius in the long run with an implied elasticity of 0.18. Private capital is the most important factor for growth followed by openness and the quality of labour. These results also apply to the short run. Moreover we suggest it is important to include a dynamic specification in growth modelling. Interestingly SBRs also appear to have an indirect effect on output in the short-run via 'the private capital channel'. As such SBR can also promote further openness of the country.

# CONTENTS

<ol> <li>Introduction</li> <li>Background</li> <li>Measuring SBR</li> <li>Institutions that cuts across the board         <ol> <li>Institutions that cuts across the board</li> </ol> </li> <li>Institutions that cuts across the board</li> <li>Institutions that cuts across the board</li> <li>Institutions the board of Investment (BOI)</li> <li>Institutions The National Productivity and Competitiveness Council (NPCC)</li> <li>Institutions The National Productivity and Competitiveness Council (NPCC)</li> <li>Institutions The State Investment Corporation (SIC)</li> <li>Institutions Council (Institutions</li> <li>Institutions accessing a constraint of the main framework of</li></ol>	5 8 15 16 16 16 16 16 16 17 17 17 17 17 17 17 17 17 17 17 20 20 21 21 21 23 26 35 36 37
6.1 Analysis of Business Associations	36

References	40
Appendix 1	42

Page

### **1** INTRODUCTION

Effective state-business relations (SBRs) or public-private sector dialogues have been identified as an important ingredient of economic growth at the macro-level (OECD, 2006; Te Velde, 2006). At the macro level, SBRs are important because there are both market and state failures. It is also often argued that joint action promotes collective efficiency. There is a role for the state because of the presence of market and co-ordination failures in allocating resources efficiently (e.g. firms under invest in general worker skills due to a failure to appropriate the benefits, see Te Velde and Morrissey (2005). Similarly, market failures may exist in technological development as uncertainty and externalities about the application of a new technology, while acquiring information, is costly to obtain and appropriate for individual firms. Government and institutional failures may also exist alongside market failures: this could be because governments often do not have the capacity to intervene and transform an economy or because they lack perfect information and perfect foresight, which is needed to identify and overcome market failures. For example, technology institutions in developing countries are often de-linked from what the private sector actually wants.

Government intervention can also suffer from moral hazard problems in that the private sector may not act once the government has provided an incentive (Hausman and Rodrik, 2002). Further, government intervention carries the risk of misallocation and rent-seeking behaviour, especially in countries with high levels of corruption. Khan (2002) posits government and institutional failures are also prevalent, for instance technology institutions in developing countries are often delinked from what the private sector actually wants, and states often do not have the capacity to intervene and transform an economy. Hence, appropriate government capacity and policy is necessary to support the private sector, which can be enabled by good state-business relations, for instance by matching and coordinating supply and demand in the market for skills. Moreover, effective SBRs lead to a more optimal allocation of resources in the economy, including an increased effectiveness of government involvement in supporting private sector activities, removing unnecessary obstacles and provide checks and balances on government intervention (te Velde, 2006). As such SBRs can also help in stimulating and sustaining innovation, which is growth enhancing if the government takes the lead and encourages the private sector, research institutions and universities to invest in research and development by providing incentives, venture capital for new initiatives, and protection of property rights and hence create the conditions for innovation which affects the productivity of firms

Schumpeter (1942). At the micro level Qureshi and Te Velde (2007) suggested that a durable state-business relationship based on transparency, reciprocity, credibility and trust can influence firm productivity through efficient policies and institutions, improved quality and relevance of government expenditure and reduced policy uncertainty.

Regular sharing of information between the state and businesses ensures that private sector objectives are met with public action and that local level issues are fed into higher-level policy processes (OECD, 2006). The private sector can identify constraints, opportunities, and possible policy options for creating incentives, lowering investment risks, and reducing the cost of doing business and enhance productivity. Hisahiro (2005) argues that various forms of information and resources, which are dispersed among entities in the public and private sector, need to be integrated in a more sophisticated way to jointly coordinate policies and provide better public services. The author argued that SBRs can help to address the above and that the flexibility of policy interventions is important in securing a positive outcome.

Harriss (2006) suggests that good SBRs are based on benign collaboration between business and the state with positive mechanisms that enable *transparency*, that is, the accurate and reliable information flow between business and government; ensure the likelihood of *reciprocity* (as, for example, when state actors have the capacity and the autonomy to secure improved performance in return for subsidies); increase *credibility* of the state among the capitalists, and establish high levels of *trust* between public and private agents. They provide a transparent way of sharing information, lead to a more appropriate allocation of resources, remove unnecessary obstacles to doing business, and provide checks and balances on government intervention. A more transparent way of sharing information will also increase the level of trust between the public and private sector.

As it stands, there is little evidence on the economic importance of SBR and even then the overwhelming majority of the literature has been concentrated to Asian countries such as Korea, Japan, Malaysia, Bangladesh and Thailand. The role of state-business relations in economic development of Africa states has remained relatively under-researched until recently (see te Velde, 2006; Sen and te Velde, 2007; Qureshi and te Velde, 2007). These few studies have documented the effects of SBR. This paper examines whether an effective (SBR) promotes economic performance in the case of Mauritius. The country provides a good case study as it is one of the best performers of the African continent with a very stable democracy<sup>1</sup>. Although the governing philosophy, vision and strategy of different governments in Mauritius have been different, there has always been cooperation between the state and the market sector through a two-way flow of relevant information and trusts (te Velde, 2007 calls this 'good SBRs'). Such effective 'synergy between state action and market functioning' is very important for sustained poverty-reducing growth. Recently, this remarkable relationship was seen during the attempt to restructure the sugar sector (through EU accompanying measures), following the fall in guaranteed sugar price exported to the EU. The private sector firms, as a group, laid their foundation a very long time in 1850 with the founding of the Chamber of Commerce and Industry (Mauritius Chamber of Commerce and Industry since 1965). Mauritius has benefited from a privileged public-private sector partnership<sup>2</sup> as well as from an active network of trade support institutions (TSIs) which have all attempted to focus on specific sets of services ranging from capacity building, business facilitation, research, through to offshore market development.

Given the dynamic and endogeneity issue in growth modeling, an element often ignored by researches, the quantitative analysis section of this paper adopts a rigorous dynamic time series analysis, a VAR framework, to examine the relationship between SBRs and growth for the period 1970-2005. This research thus supplements the literature by bringing additional evidence from an African perspective using an innovative framework.

Section 2 provides the background.

<sup>&</sup>lt;sup>1</sup> Mauritius, known as the African tiger, is reputed not only for its economic success but also for stability and racial harmony among its mixed population of Asians, Europeans and Africans (TIPS, 2007). The country enjoys a stable political system based on a multiparty democratic republic. Legislative power is vested in the National Assembly, which comprises 62 elected and up to 8 designated representatives. The four main current political parties in Mauritius are: The Labour Party (PTR), The Movement Mauricien Militant (MMM), the Mauritius Socialist Militant (MSM) and Parti Mauricien Xavier Duval (PMXD). In the general elections of September 2000, a coalition of the Movement Militant Mauricien (MMM) and Mouvement Socialiste Militant (MSM) won. This was the first time that Mauritius experienced a sharing of power at Prime Minister's level between two parties in one mandate, thus demonstrating the stability of Mauritius' democracy. In 2005, the Labor Party, the PMXD and few other small parties made a coalition and won the election.

<sup>&</sup>lt;sup>2</sup> Defining Moments in Mauritian SBR's since the 1970s • Pre-1970: MCCI (originally 1850/1965) and MEPZA (1967) founded • 1970: JEC founded • 2001: BOI founded • 2003: Competition Bill passed.

## 2 BACKGROUND

Mauritius is one of the few countries where effective State-Business relationships (SBRs) have prevailed, even prior to independence. The effective 'synergy between state action and market functioning' can be traced back to the time even before Mauritius became independent (1968). One has to consider the history of Mauritius to understand the reasons behind successful SBRs. Successful SBRs over the years can be explained by the willingness of both parties - State and Business - to cohabitate for the mutual benefit of both parties even though the relationship between the parties has not always been very cordial. However, both parties have always believed in dialogue and sharing of ideas for effective SBRs. The essence of the cooperation between the state and the market sector through a two-way flow of relevant information and trust is reflected in the fact that Mauritius has a settlertype colonisation. Mauritius has had a quasi-national bourgeoisie (private sector) implying that they have reinvested their money in the country as they came here with the intention of settling. Consequently they have adopted a rent-seeking approach and as such were highly dependent on the state in terms of, for example, tax, land infrastructure, measures etc. Both elites (economic and social) needed each other (the state needed the economic elites to build up the economic power of the country).

In an attempt to compare the SBRs of Mauritius with other African countries, one has to note that at the time of independence, while Mauritius had a quasi-national bourgeoisie, other African countries, (except South Africa and Zimbabwe), at the time of their independence did not have a national bourgeoisie – the Whites were investing in the African countries with a view to repatriate their profit and ultimately their capital back to their own countries. While Mauritius had indigenous people at the time of independence, South Africa and Zimbabwe faced the problem of institutional racism and in the case of Zimbabwe accommodation between the state and the private sector was forced under the Lancaster Agreement. Both Mauritius and Zimbabwe had a settler colonial situation, but whereas the Mauritius settler class developed in virtual isolation that of Zimbabwe developed in a sub-regional context dominated by a large foreign colonial corporate presence (Darga 1998).

Mauritius was first discovered by the Arab and Malay sailors in 975 AD. The Portuguese sailors visited the island between 1507 and 1513. In 1598, the Dutch landed on this island and Van Warwyck, the commander of the fleet named the island "Mauritius" after Prince Maurice Van Nassau. In May 1638, the first

permanent Dutch settlement was set up in Mauritius with a population of around 25 colonists who planned to exploit the island's resources of fine ebony and ambergris, rearing cattle and growing tobacco. Although the Dutch called occasionally for shelter, food and fresh water, they made no attempt to develop the island. Mauritius was populated over the next few centuries by waves of traders, planters and their slaves, indentured labourers, merchants, and artisans. A hundred slaves were imported from Madagascar and convicts sent over from Batavia (Java). The convicts were employed in cutting ebony. Because of several factors like food shortages, inefficient administration and attacks by pirate ships, the Dutch abandoned the colony in 1710, leaving a batch of runaway slaves bent on vengeance for their ill treatment.

In 1715, The French took over Mauritius, renamed it Isle de France and used the island as a naval and privateer base during the Napoleonic wars. The first colonists landed in 1722. For the first 14 years, the French colony followed the dismal experience of the Dutch. Only the most desperate and toughest of the settlers survived. Their appallingly treated slaves also escaped and lived in the forests and sabotaged the plantations. The aristocratic sea captain Mahe de Labourdonnais brought about several transformations on the island; the development of the port (Port Louis, which became an important centre for trade, privateering, and naval operations against the British), construction of roads, setting up the ship building industry, starting an agricultural programme for food, setting up the sugar industry (the first sugar factory was opened in 1744; slaves from Africa were brought to work in the sugar industry), as well as improvements in the living conditions of the slaves - the construction of houses and hospitals - and importing ox-carts to help slaves in their tasks.

The period 1756 to 1763 was marked by the continued battle between France and England. The objective of this battle was to take control of the Indian Ocean and the French East India Company enlisted privateers. The Company lost the wars in India and this lead to the official handling over of Mauritius to the French Crown which governed the island as from 1767. At that time, there was a population of 18,773, which included 3,163 Europeans and 587 free blacks. The rest were slaves. The island was then developed further. Varieties of plants from South America, including pepper were introduced on the island and in order to promote cultivation, tax incentives to planters were introduced. Harbour facilities and the accommodation for both colonists and slaves were further improved. In the last quarter of the 18<sup>th</sup> century, following the winding up of the French East India Company, the monopoly situation no longer exist and private enterprise suddenly

but not surprisingly started mushrooming on the island – entrepreneurs were guided by profits. In 1796, the rulers of Mauritius were informed that slavery was abolished. The British, on the other hand, continued expanding their influence in the Indian Ocean.

In 1810, the British captured Mauritius. Soldiers were to be treated as civilians, not as prisoners of war and were allowed to leave the island. The first English governor, Robert Farquhar, announced that civil and judicial administration would be unchanged. At that time, the British had already secured public administration and they were well placed to rule. However, the British had two choices concerning the French operating on the Island: either to let the French continue to operate in the private sector or to pressurise the people on the island to leave. Given that the French already had a well-established economic base, it was wise for the British not to push the French out of the country and start development anew. In fact, the island's only source of foreign income (exchange) was through sugar exports, an industry developed by the French (around 1744 as mentioned above). Therefore, when the British colonised the island, it already had a mature settler group entrenched in business activities and had already built themselves into economic and social power. The British administration therefore decided that they would let the French continue to stay on the island whilst settlers who did not want to stay under a British administrator were permitted to return to France with all their possessions. The Treaty of Paris confirmed the British possession of the island 4 years later. French institutions, including the Napoleonic code of law, were maintained, customs, language, religion and property were preserved, and sugar production was increased. On the other hand, the French also needed the British so that their self-sustenance as a settler group was reinforced.

This episode of the British taking over Mauritius and cohabitating with the existing French on the island was in fact very important for the future development of state-business relationship in Mauritius. It explains the first instance of working together between the public administration and the private administration which has benefited both sectors.

The first bank on the island was established in 1838 by the private sector, following a move from a group of traders of the capital. This is another example to show that the private sector had a very strong economic base. All the main sugar producers were involved in the setting up of the bank - 'La Banque Commerciale de Maurice'. In 1839, Her Majesty Queen Victoria granted a Royal Charter to the newly established bank for a period of twenty years under the name of the 'The Mauritius Commercial Bank'<sup>3</sup>.

With the increase in the island's volume of trade during the first decades of British administration, the Mauritian business community felt the need for a more formal framework to foster the interests of the trading community and to settle disputes and conflicts arising in trade-related activities. The establishment of an institution representing the private sector in Mauritius – The Mauritius Chamber of Commerce and Industry (MCCI), marked the year 1850<sup>4</sup>. Thus, the members of the private sector regrouped themselves as early as 1850, more than a century before Mauritius gained independence from the British. It is important to highlight that the British-based public administrator and the French-based private sector have coexisted and worked together for the benefit of both parties for more than a century.

The second quarter of the 19<sup>th</sup> century was marked with the arrival of thousands of Indian immigrants in Mauritius as labourers to work in sugar estates. They were paid very little, subjected to harsh treatment and forced to work long hours (all these, in breach of their contracts). Immigration from India to Mauritius ceased in 1907. In the same year, a Royal Commission made recommendations for social political reform. At that time, many Indians had settled permanently in Mauritius and indeed formed the majority of the population. Their living standards started to become better and better. Until 1907, the indentured labourers had no say in politics and no civil rights. In 1936, the Labour Party was formed and persuaded the Indians/Indo-Mauritians to take politician action and campaign for better working conditions.

The composition of the population of Mauritius therefore could be divided into three dominant groups – Mauritian Creoles, Indo-Mauritians and Franco-Mauritians. Creoles (African) were brought into Mauritius as slaves to works for owners of sugar cane fields; Indians (from Madras, Bombay etc included Muslims also) came to Mauritius as indentured labourers after slavery was abolished in 1835; French who preferred to remain on Mauritius even after the British took over in 1810 to look after their large sugar estates and their business, including Banking.

<sup>&</sup>lt;sup>3</sup> The charter was renewed every twenty years until 18th August 1955 when the Bank became a limited liability company.

<sup>&</sup>lt;sup>4</sup> The original name was Chamber of Commerce. The institution took the name of Mauritius Chamber of Commerce and Industry in 1965

A new constitution, which was a move towards self-rule, was set up in 1948. In 1961, the British agreed to permit additional self-government and eventual independence. In the election in 1967, the Labour Party - the Party of the Indo-Mauritians - in coalition with the Muslim Committee of Action and the Independent Forward Bloc (a traditionalist Hindu party), defeated the Franco-Mauritian and Creole supporters' party - the Mauritian Social Democratic Party. Mauritius became independent in 1968. Mauritius independence was not gained without opposition and violence. Tensions were particularly marked between the Creole and Indian communities, which clashed often at election time, with the rising fortunes of the latter at the expense of the former. Independence was preceded by a period of communal strife, brought under control with assistance from British troops. Postindependence, the economic elites (which, by that time, also consisted of some Hindu bourgeoisie), and the Administration (led by Seewsagur Ramgoolam, later Sir and later to be known as the Father of Nation) have worked in collaboration for the prosperity of the country and its citizens.

Although there had been some tensions between the French (Franco-Mauritian by then) and the Hindu community during the few years of pre-independence and post-independence, these tensions did not develop into a major ethnic conflict for a very long time. After gaining independence from the UK in 1968, the Hindu majority did not expropriate the property of the minority French landowners, who owned the majority of the sugar farms. The government, i.e. public administrators, quickly found out that their role should be geared towards improving the welfare state, whereas the development of the economy should be left in the hands of the private sector and to provide the private sector with support for infrastructure, logistics and incentives. Since sugar production was the main economic activity at that time in Mauritius and sugar exports the only source of foreign exchange, by the end of 1960s and early 1970s, the public administration and the private sector joined forces and used the cultural links with France in order to establish a privileged relationship with the European Common Market (at that time the European Common Market was not yet formed) and thereby secured continued preferential market for sugar in the European market which was first granted in 1825 by Britain. Since the state and the private sector both plucked favorable sugar export contracts from the Europeans, for the benefit of the sugar industry owners, the state imposed an export tax on sugar so as to raise revenue to fulfill its role as a welfare provider and to 'curb over-production'<sup>5</sup>. The sugar producers were very unhappy about this tax, principally because the rate was very high. This

<sup>&</sup>lt;sup>5</sup> The idea of export tax on sugar was first suggested by James Meade in his report on Mauritius – The Economic and Social Structure of Mauritius – 1968. The sugar tax was abolished in 1994

sugar export tax became a major source of government revenue and means of financing the welfare state and the infrastructure for the diversification of the economy (Dommen & Dommen 2000). All this is to say that although the sugar barons had enormous economic influence and could express their opinions loudly on the government's agenda, the state was concerned about the welfare of the citizens and could take bold decisions.

Two important aspects, on state-business relationship in Mauritius, have emerged:

- I. This relationship is not necessarily based on shared ideologies between these two sectors. In fact very rarely have there been debates and discussion between these two parties on ideologies<sup>6</sup>. The relationship has rather been of the accommodating type.
- II. Although some personalities such as Seewsagar Ramgoolam and Gaetan Duval (later Sir) did play important roles in bringing the private sector and the Administration closer together, they did not per se influence State-Business Relationships. This relationship has been the result of common interests of these two sectors.

The same principle has continued to exist until today. While economic development is left in the hands of the private sector, the state plays a major role of welfare state and development-led investment facilitation. In fact, over the years, this relationship has been further strengthened so much so that consultation between the public and the private sector, on issues that affect development, is an on-going process. While the public sector continues to maintain high-level dialogue with the private sector on relaxing barriers to doing business, the private sector on their side plays an important role towards improving the livelihood of citizens through their activities in relation to their corporate social responsibility.

The relatively excellent relationship<sup>7</sup> that prevails between the state and the business community is mapped through the formal organisational and institutional players in both public (e.g. Enterprise Mauritius (EM); Board of Investment (BOI))

<sup>&</sup>lt;sup>6</sup> The only political party that had ideologies different from the ruling government of 1968 was the Movement Militant Mauricien (MMM), which was a leftist group under the leadership of Paul Berenger. However, when the party came into power in 1995, their administration was not based on their ideologies.

<sup>&</sup>lt;sup>7</sup> It should be noted that that there are episodes where this private-public sector dialogue were note always that harmonious and in some instances led to the complete breakdown of negotiations and talks. Vivid examples are those of the conflicts in 1974 and 1996 where the private sector claimed their disapprovals and showed their unhappiness following budget proposals of finance ministers Ringadoo and Bheenick respectively. As such disagreements on issues such as interest rate and exchange rate policies, tax on sugar export, on agricultural land reallocation, small planters report among others did feature in this state business relationship and it should be mentioned that in these cases there has been some accommodating stands taken, rather that fully consensus ones.

and private sectors (e.g. Joint Economic Council (JEC); Mauritius Chamber of Commerce and Industry (MCCI); Association of Hotels and Restaurants in Mauritius (AHRIM); Mauritius Exports Association (MEXA); Mauritius Industry Development Authority (MIDA))<sup>8</sup>. The Directors and Chairmen of these institutions, through their approach to members of the other sector and their capacity to understand the boundaries within which the other institutions operate, also shape this relationship. Interestingly, in Mauritius, there exists a number of such Directors and Chairmen who have worked both in the public and the private sector at very high levels (current examples are Amedee Darga – formerly Minister, now Chairman of Enterprise Mauritius (a public sector institution) and Director of StraConslut (a private sector organisation) - and Raj Makoond – formerly a high cadre in the public sector and now the Director of Joint Economic Council).

Since the creation of MCCI in 1850, a number of other institutions, some which are associated only to specific sectors, has been put in place both in the private and public sectors which increased the frequency and effectiveness of communication between these two sectors. Beyond the national boundaries, whenever there are issues concerning the national interest, both the public and private sectors work together. For instance, the team that represents Mauritius at the WTO negotiations consists of government officials as well as private sector representatives. Major decisions about Mauritius' negotiating position and trade policy formulation are made in consultation with other Ministries and their agencies, as well as the private The latter is consulted on a regular basis, even though no formal sector. framework for consultations exists. The private sector is represented in the WTO Standing Coordinating Committee, which deals with the implementation, follow-up and coordination of trade policy issues covered by the WTO Agreements. The Committee is chaired by the Minister of Foreign Affairs, International Trade and Cooperation, and comprises representatives from the public and private sectors. The Government holds meetings on broad economic policies with the Joint Economic Council (JEC). Periodic meetings on sectoral issues are held between the private sector and the relevant Ministries. The Mauritius Chamber of Commerce and Industry is the main institution representing the interest of the private sector with regard to trade and industrial issues.

The financial-led economic crisis of 2008/09 has further strengthened the relationship between the state and the private sector. Both parties joined forces together to resist to the negative effects of the crisis on the Mauritius economy. At the beginning of the crisis, the JEC and Government representatives, including

<sup>&</sup>lt;sup>8</sup> More details on the institutions are given in the following sections.

Ministers, met on several occasions to debate on the correct approach to improve resilience of the economy towards the crisis. A Mechanism for Transitional Support programme (MTSP), co funded by the Government, the commercial banks and the firms themselves, has been set up as part of a stimulus package to help the manufacturing sector. The firms that are temporarily in distress and seek additional financing, will participate with an equity of 20%, commercial banks will assist with loans of 40%, at a concessionary interest rate, not exceeding the savings rate, and the remaining 40% will be contributed by the Government. The committee set up to screen applicants who could make use of the MTSP is co-chaired – by public and private sector representatives. This is just one example. There are a number of such committees.

# **3** MEASURING SBR

Public-Private dialogue in Mauritius is enhanced through organised institutions in both the public and private sector.

Institutions in the public sector may be divided into two categories – those that provide services across all sectors and those that are sector-specific. These institutions together play an important role in mobilising and channeling investment (both domestic and foreign) and production in all the sectors of the economy. Chart 1 illustrates the institutions in place in the public sector, both at the sectoral level and at the national level. The roles of these institutions are briefly described below.





## 3.1 Institutions that cuts across the board

## 3.1.1 The Board of Investment (BOI)

Under the authority of the Minister in charge of finance, the BOI aims to promote Mauritius as an international investment, business, and service centre. BOI's activities include: counselling on investment opportunities in Mauritius; providing tailor-made information for the setting up of a business; organising customised meetings and visits; and identifying joint-venture partners. It also acts as a single interface with all investors and liaises with the relevant authorities for occupation, residence, and other relevant permits.

## 3.1.2 The Development Bank of Mauritius Ltd. (DBM)

The Development Bank of Mauritius Ltd. provides concessionary finance to operators of various sectors of activities, including manufacturing, tourism and agriculture. SICOM Ltd, a state-owned insurance company, has recently launched the "Export Credit Insurance Policy" for the benefit of small and needy exporters.

## 3.1.3 The National Productivity and Competitiveness Council (NPCC)

The National Productivity and Competitiveness Council (NPCC), grouping representatives of the Government, employers, and trade unions, has been operational since May 2000. It provides, among other things, a forum for dialogue and consensus-building on matters relating to productivity, quality and competitiveness; advises the Government on the formulation of national policies and strategies; and monitors and coordinates related programmes and activities.

### 3.1.4 The State Investment Corporation (SIC)

The State Investment Corporation (SIC), founded in 1984, is the investment arm of the Government.<sup>9</sup> Its main objective is to provide funds, mainly equity, for the realisation of high-growth entrepreneurial ventures and to assist businesses to develop leadership position.

### 3.1.5 Human Resource Development Council (HRDC)

The Council of the HRDC, which comprises 27 members representing the different sectors of the economy, started meeting in Nov 2003. The Council has also set up an executive committee, which meets on a fortnightly basis and looks after the broad policy issues in line with the objectives of the Council. The latter has also established 8 Sectoral Committees involving private sector members, which meet regularly in order to make recommendations to the Council on HRD issues related to their respective sectors. The Sectoral Committees which, have been meeting

<sup>&</sup>lt;sup>9</sup> State Investment Corporation online information. Viewed at: <u>http://www.stateinvestment.com/</u>

regularly serve as a liaison between the Council and the Sector concerned and they advise the council on existing and emerging economic trends and on relevant education and training needs to enhance employability and formulate strategies to eliminate mismatch between demand and supply of human resource in the sector. The Sectoral Committees have played a major role in the development of the Medium Term Strategic Plan of the HRDC.

## **3.2 Sector Specific Public Institutions**

### 3.2.1 Agricultural sector: Mauritius Sugar Industry Research Inst. (MSIRI)

MSIRI is a statutory not-for-profit research body. It is governed by a board comprising seven representatives of the sugar industry, including both millers and planters, and three representatives of the Government. The various research departments are grouped into four sectors: Agronomy, Biology, Resource Management, and Engineering.

#### 3.2.2 Manufacturing

The success of the Export Processing Zones (EPZ) initiative which was introduced in the early 1970s to cope with the problems of high unemployment, low levels of foreign exchange reserves and high dependency on a mono-crop economy, is partly due to the presence of a well established network of Government and private sector institutions. Such a network is responsible for the elaboration of policies, for negotiations at international level, for the laying-out of export promotion programmes and for the implementation of agreements and decisions. Three parastatal institutions operating under the aegis of the Ministry of Industry, Commerce and International Trade, are directly involved in the support of industrial and trade activities. These institutions are MIDA, EPZDA and SMIDO.

#### 3.2.2.1 The Mauritius Industrial Development Authority (MIDA)

The MIDA holds regular consultative meetings with exporters on a sectoral basis to better understand their needs and discuss the authority's strategic plan and activities. At a micro level, besides organising offshore promotion missions and conducting market development activities such as market surveys, MIDA assists in the capacity-building process of potential exporters especially SMEs.

#### 3.2.2.2 The Export Processing Zone Development Association (EPZDA)

The mission of the Export Processing Zone Development Authority is to act as a facilitator and catalyst in forging the competitive edge of all export-oriented activities. It provides training programmes, consultancy services, and assessment of export performance amongst others. Through its Clothing Technology Centre

(CTC), the EPZDA assists garment manufacturers in improving the design and quality of their products as well as in the acquisition of technology. Furthermore, the CTC runs technical training programmes, and it has recently set up a model factory with a view to give hands-on training to those joining the textile/apparel industry. The EPZDA has recently set up a "Mauritius-industry" website aimed at being the e-marketplace of the Mauritian textile and apparel industry.

3.2.2.3 Small Enterprises & Handicraft Development Authority (SEHDA) The Small Enterprises and Handicraft Development Authority (SEHDA), created under the SEHDA Act 2005, provides support to potential and existing small entrepreneurs to enable them to start new enterprises or to improve their existing businesses.<sup>10</sup> SEHDA provides services in areas such as business counselling and facilitation, skills development, business forums, marketing assistance and design services.

The private sector has a prominent role in Mauritius. It is through the entrepreneurial culture in Mauritius that the textile sector became, and still is, a success story, prompting the confidence of other investors and attracting additional investment. Mauritius has deep private sector roots, dating back to 1850 with the founding of the Chamber of Commerce. The Chamber of Commerce re-established itself as the Mauritius Chamber of Commerce and Industry (MCCI) in 1965, and in 1967, the Mauritius Export Processing Zone Association (MEPZA) was formed within the private sector.

Currently, the private sector owns and manages at least 60% of the investment in the Export Processing Zone. The private sector is present in all sectors of the economy, ranging from the sugar industry to trade, banking and finance. The primary Porte-parole of the private sector in discussion and debating with the government on national policies is the Joint Economic Council (JEC). The JEC regroups a number of sector-related organisations (see below). There are however, other organisations that are not members of the JEC and these organisations discuss with the government on their own, on issues of their interest. These other organisations are mainly ethnic-based chambers of commerce (e.g. Chinese Chamber of Commerce and Hindu Chamber of Commerce). The reason for the existence of these ethnic-based Chambers of commerce is that they feel that their interest are not well voiced-out by the Mauritius Chamber of Commerce and Industry and they believe that they may have a better leeway in negotiating with the Administration on specific issues important to them.

<sup>&</sup>lt;sup>10</sup> SEHDA online information. Viewed at: <u>http://www.sehda.org</u>



Chart 2: Organisational set-up of Mauritius Private Sector

Source: JEC Website

# 3.3 The Joint Economic Council (JEC)

The primary private institution for state-business relations in Mauritius is the Joint Economic Council (JEC, 1970). The JEC meets with the prime minister on a regular basis and participates in budget proposals. The JEC of Mauritius is funded entirely by its members, which include: Mauritius Chamber of Commerce and Industry; Mauritius Chamber of Agriculture; Mauritius Employers' Federation; Mauritius Sugar Producers' Association; Mauritius Exports Association; Mauritius Bankers' Association; Mauritius Insurers' Association; Asociation des Hôteliers et Restaurateurs de l'île Maurice; Association of Mauritian Manufacturers. The Joint Economic Council is managed by a Council of 18 members, with a Chairman who rotates every two years and a full-time Director. As of 1999, the JEC's top goals are to ensure a stable macro economic environment, foster greater fiscal discipline, restore financial health, and integrate all sectors of the economy in order to reduce distortions and improve efficiency of investment.

# 3.3.1 Mechanism of Interaction Between JEC and Public Sector

The mechanism of interactions since the creation of JEC, both formal and informal between the Government and the Private Sector (represented by JEC) may be summarised as follows:

Table 1: Interaction channels between the Public and the Private sector

## FORMAL

- Government/JEC meetings (chaired by the Prime Minister)
- Tripartite wage negotiations
- Proposals for the National Budget
- Representation in a number of committees

## INFORMAL

- Regular meetings between Private Sector organisations and relevant Ministries on sectoral issues
- Joint promotional activities
- AD-HOC Committees

The government holds regular meetings, usually twice a year, on broad economic policies with the JEC. These meetings are chaired by the Prime Minister and are attended by senior Ministers as well. This represents quite an advanced stage in the development of SBRs (Chingaipe and Leftwich, 2007). Structured consultations are also held between the Private Sector represented by JEC and other members and the Minister of Finance on the National Budget every year.

### 3.4 Mauritius Chamber of Commerce and Industry

The Mauritius Chamber of Commerce and Industry (MCCI) – since 1965- was established under the British Administration in 1850 and then known as the 'Chamber of Commerce', as an institution of the private sector to foster the interests of the trading community and to settle disputes and conflicts arising in trade-related. This not-for-profit making organisation has evolved from a purely representative and consultative body to a dynamic actor in the socio-economic development of the country and as such one of its main function is to maintain structured forms of dialogue with the public authorities for the benefit of the business community.

### 3.5 Mauritius Employers Federation

Founded in 1962, the Mauritius Employers' Federation (MEF) safeguards and defends the interests of its members and, by extension, promotes free enterprise in Mauritius. The MEF is the official voice of all the 913 employers that it represents vis-à-vis both the Administration in place and the trade union movements, during negotiations and disputes settlement. The MEF has a democratic organisational structure with statutory boards and committees at the sectoral, national and international levels.

## 3.6 Mauritius Chamber of Agriculture

Founded in 1893, the Chamber of Agriculture was set up with the objective to promote the welfare and progress of agriculture at the time when the economic importance of the sugar industry was increasing. The Chamber has played a major role in the development of agriculture in Mauritius and of related fields, namely agronomy, research, technology, training and commerce, among others. One of the main functions of the Chamber is to provide a high-level forum for an exchange of ideas and views and for the formulation of general policies and strategies on all major issues pertaining to the development of agriculture and agricultural industries.

# 3.7 Mauritius Bankers Association

Established in 1967 as an association of commercial banks authorised to conduct banking business in Mauritius the Mauritius Bankers Association (MBA) changed its status to that of a company in 2001. One of the main functions of the MBA is to protect, develop and represent the rights and interests of its members and the support of the interests of its members in their relations with Governmental or other public institutions.

# **3.8 State Business Relations Index<sup>11</sup>**

For the purpose of this study, it is important to quantify the relationship between the public and the private sector through the construction of an index, which would associate the proposals of the private sector and the policy changes by the Administration. The construction of the index is based on three legitimate assumptions and they are as follows:

- Given that is would be difficult to assess whether the informal demands of the private sector, through their organisations, have been fulfilled, it has been assumed that all the private sector demands are formally sent to the Government.
- Given that the JEC is the apex body in the private sector and all major associations are members of the JEC, it has been assumed that although the individual associations make proposals to the Government on possible policy changes, these proposals appear in the JEC formal proposal documents.
- 3. Although the JEC meets the Ministry of Finance and other line Ministries and the Prime Minister, it has been assumed that all their proposals for policy

<sup>&</sup>lt;sup>11</sup> See appendix 1 for a comparison of SBR indicators

changes are manifested in their document that is to the Ministry of Finance just before the Budget, each year.

The private sector institutions are so well organised and structured that proposals from the private sector on policy changes that do not appear in their pre-budget proposal document are insignificant. The index has been constructed based on the extent to which individual proposals have been taken into account by the Ministry of Finance in the immediate budget. Scores have been assigned based on our perception as to whether the proposal has been fully accepted, or partially accepted or not accepted at all. For each proposal fully implemented, a score of one has been assigned. For each proposal rejected, a score of zero has been assigned. And for each proposal partially included in the budget, a score of 0.5 has been assigned. Then the score for each year is the ratio of the summation of the scores obtained divided by the total number of proposals made during that year. For instance (table 1.1) for the year 2007-2008, out of 8 main budget proposals, 3 were fully implemented, two were partially included in the Budget and 3 were completely excluded. Thus for this year, the aggregate score is 4 (i.e. 3\*1+2\*0.5) and thus SBR ratio for this year is 0.5 (4/8). This exercise has been conducted for a period of 38 years, (i.e. 1970 to 2008).

Budget proposals of JEC (2006/2007)	Fully Implement ed	Partly Implement ed	Not Implement ed
1. The transformation of Mauritius into one seamless and integrated business platform;		х	
2. The adoption of transparent, simple and minimum procedures to start and operate businesses;	х		
3. The establishment of a competitive air access policy;		Х	
4. The introduction of competitive pricing policies for international bandwidth;	Х		
5. The establishment of an open policy to import high skills;			Х
6. Operationalising of the Public Private Partnership (PPP) legislation; and the mainstreaming			X (initiated in 2008/2009

Table 1.1: Implementation of Budget proposals by the JEC

of SMEs in the new economic model;		budget)
7. Transforming the labour environment into a more flexible one;	x	
8. Establishing the right balance between legislative control and "space" for investment.		X

# 4 METHODOLOGY AND RESEARCH QUESTIONS

The economic model used in this study is close to Sen and te Velde (2007) and follows Mankiw, Romer and Weil (1992) and Khadaroo and Seetanah (2008) in applying an extended Solow growth model. However, the focus is largely on state business relations since public-private sector dialogue could be an important determinant of economic growth at the macro-level, as postulated by Te Velde (2006).

The main explanatory variables for economic growth usually identified in the growth literature include economic and political stability, investment both in capital and human, and trade liberalisation, both tariffs and non-tariffs. OECD (2003) reveals that disparities in the growth rates between countries may be broadly due to differences in policies, institutional framework, labour utilisation and trade policies<sup>12</sup>. Stability is associated with lower level of uncertainties and promotes business optimism. International trade, through greater liberalisation, promotes growth through larger scale production, and exploring new markets, amongst others. While physical investment, through improved technology embodied in new machines increases productive capacity to positively affect growth; investment in human capital increases capacity for innovation and creativity and potential for further research and development to positively affect growth as well. Institutions like banks, by economising on the costs of acquiring and processing information about the firms and managers, influence resource allocation to increase growth rates. In this study the model is extended with alternative proxies to measure state business relations and we also control for institutional constraints.

State-business relations affect growth through a number of routes. First they can help to solve information related market and co-ordination failures in areas such as

<sup>&</sup>lt;sup>12</sup> The Sources of Economic Growth in OECD Countries, 2003

skill development or infrastructure provision. Secondly, SBRs provide a check and balance function on government policies and tax and expenditure plans; thus SBRs may help to ensure that the provision of infrastructure is appropriate and of good quality. SBRs can also influence the investment climate and hence the output of firms in a number of ways. According to Kerr (2000) a quagmire of regulation imposes high costs on business arising from compliance, resource-misallocation and a lack of competition and hence deters productive investment and even restricts firm activity as fewer firms opt to register (de Soto, 2002). With SBRs, the private sector can easily identify constraints, opportunities and possible policy options for creating incentives thereby lowering investment risks, and reducing the cost of doing business.

Effective state-business relations can also play an important role in stimulating and sustaining innovation. Innovation is one of the main forces behind firm dynamics and economic growth (Schumpeter, 1942). It has the power to destroy well-established companies and let new entrants carve a niche in the market through improved efficiency and quality, lower costs and the introduction of differentiated products. Some of the most successful regions or clusters of innovation, such as the Silicon Valley in the US, were outcomes of collaboration between the public and private sectors (Warner, 2006). The government may take the lead and encourage the private sector, research institutions and universities to invest in research and development by providing incentives, venture capital for new initiatives, and protection of property rights. These steps create conditions for innovation which affects the productivity of firms directly and may also affect firm performance by altering the competitive environment of the firm.

An extended theoretical growth model is as follows.

Y = f(PRI, PUB, OPEN, EDU, SBR, IC)(1)

Y denotes the economy's output and is measured as the real Gross Domestic Product. *PRI* is the private capital stock, *PUB* is public capital stock and both stocks of capital have been generated by the Perpetual Inventory Method. *OPEN* is the proxy for openness and *EDU* is the secondary enrolment ratio and accounts for the quality of labour. We use the sum of exports and imports divided by GDP as a measure of OPEN. EDU is the secondary enrolment ratio and proxies for the quality of human capital. The dependent variable, Y, is real Gross Domestic Product. These data series were available from the Central Statistical Office (CSO) and from the Bi-annual Digest of Statistics over the period 1970 –2005.

Since capital stock figures for Mauritius were unavailable, they were constructed using the Perpetual Inventory Method (PIM). This method, recommended by OECD (2001) and the US Bureau of Economic Analysis (1999), has been widely used in the literature.<sup>13</sup> Construction of the capital stocks required both public and private investment data series and these were obtained from the Central Statistical Office.

The variable of interest to us, *SBR*, is measured using three alternative proxies<sup>14</sup> namely the average indicator proposed by Sen and te Velde  $(2007)^{15}$  which is based on the presence and length of existence of the umbrella organisations linking businesses and associations together *(SBR1)*. We also used the number of firms which are members of the umbrella organisation as a ratio to the total number of firms *(SBR2)*, the membership figures being obtained from the JEC and total number of firms from the parent ministry and CSO. Thirdly, as we discussed in section 3, we constructed an index which relates to the percentage of budget proposals of the umbrella organisation which has been fully or partly implemented in the national budget *(SBR3)*.

We also control for institutional quality using the extent of institutionalised constraints on the decision making powers of chief executives (IC) as this is the only available measure for an adequate time series analysis (Available since 1970)<sup>16</sup>. Higher values imply greater institutional quality, that is, greater constraints on the executive. Data on institutionalised constraints (IC) is obtained from the on-line database of the Polity IV project hosted by the Centre for International Development and Conflict Management in the University of Maryland.

In the first instance we shall investigate the time series properties of our data series (1970-2005) with respect to stationarity and cointegration after which the appropriate methodology will be used in a dynamic framework since economic growth is essentially a dynamic phenomenon. To account for the possibility of

<sup>&</sup>lt;sup>13</sup>See Munnell (1990), Sturm and de Haan (1995), Lighhart (2000), Canning and Bennathan (2000) and Kamps (2003) among others.

<sup>&</sup>lt;sup>14</sup> Discuss of the results is provided only the first and third proxies while results of the second proxy is only reported.

<sup>&</sup>lt;sup>15</sup> Sen and te Velde (2007) index of SBRs measures the cooperation of the public and private sector and include the following element namely i) open to all and autonomous of government intervention as is the case with a formal existing body ii) an informal 'suggestive' body with no entrenched power iii) how the state interacts with business is based on the format, frequency, and existence of state-business relations and iv) on the presence and length of existence of laws protecting business practices and competition measures the mechanisms to avoid collusive behaviour.

<sup>&</sup>lt;sup>16</sup> The rule of law bureaucratic quality index, the corruption in government index was also used by Sen and te Velde (2007) they will not be included due to a limited number of observation available.

dynamic feedbacks among variables, a Vector Autoregressive (VAR) model is used in the analysis. This model is not new in the modelling economic growth, in the literature. It has been used in numerous studies, including King and Levine (1993), Levine and Zervos (1998), Pereira and Roca Sagales (2003), Khadaroo and Seetanah (2007). The VAR framework is used because SBR affects a country's output not only directly but also indirectly, via private capital and public capital accumulation or even through more exports. Moreover the income level of a country can also translate into the creation of more public capital.<sup>17</sup>

For the econometric analysis, equation (1) is expressed as a log-linear regression, where lowercase variables are the natural log of the respective uppercase variables:

$$y = \alpha + \beta_1 pri + \beta_2 pub + \beta_3 open + \beta_4 edu + \beta_5 sbr + \beta_6 ic + \varepsilon$$
(2)

Before considering the appropriate specification for the VAR, it is important to investigate the univariate properties of the data series and to determine their order of integration. This is conducted in the data testing section of the study.

# **5** RESULTS

We employed the Augmented Dickey-Fuller (ADF) (1979) and Phillips-Perron (PP) (1988) unit-root tests to investigate the univariate properties of the data series and to determine the order of integration. The results are summarised in Tables 1 and 2 below.

<u>Variable</u>	<u>Laq</u> <u>select</u> ion	Aug. Dicke ¥ Fuller	<u>Philli</u> ps Perro n	<u>Critic</u> <u>al</u> Value	<u>Varia</u> <u>ble</u> <u>Type</u>	<u>Auq</u> <u>Dickey</u> <u>Fuller</u> (time trend (t)	<u>Critic</u> <u>al</u> Value	<u>Varia</u> <u>ble</u> <u>Type</u>
у	1	+1.45	+1.59	-2.92	I(1)	-2.1	-3.5	I(1)

Table 1: Unit Root Tests in level form: ADF and PP Tests

<sup>&</sup>lt;sup>17</sup>See Pereira and De Fructos (1999) and Lighthart (2000) for a complete treatment of feedback effects.

pri	1	+1.65	+2.18	-2.92	I(1)	-1.43	-3.5	I(1)
pub	1	-1.34	-1.83	-2.92	I(1)	-2.24	-3.5	I(1)
open	1	-1.22	-1.56	-2.92	I(1)	-1.79	-3.5	I(1)
edu	1	-0.64	-0.35	-2.92	I(1)	-0.63	-3.5	I(1)
sbr1	1	-1.21	-0.87	-2.92	I(1)	-1.43	-3.5	I(1)
sbr2	1	-0.65	-0.55	-2.92	I(1)	-1.12	-3.5	I(1)
sbr3	0	-1.31	-1.78	-2.92	I(1)	-0.96	-3.5	I(1)
ic	1	-2.11	-1.94	-2.92	I(1)	-2.35	-3.5	I(1)

Table 2: Unit Root Tests in first difference: ADF and PP Tests

<u>Variable</u>	<u>Lag</u> <u>select</u> ion	Aug. Dicke Y Fuller	<u>Philli</u> <u>ps</u> <u>Perro</u> <u>n</u>	<u>Critic</u> <u>al</u> Value	<u>Varia</u> <u>ble</u> Type	Aug Dickey Fuller( with time trend(t )	<u>Critic</u> <u>al</u> Value	<u>Varia</u> <u>ble</u> <u>Type</u>
Δy	0	-8.23	-8.12	-2.93	I(0)	-8.45	-3.5	I(0)
Δpri	0	-8.43	-5.15	-2.93	I(0)	-8.34	-3.5	I(0)
Δpub	0	-5.53	-3.56	-2.93	I(0)	-5.45	-3.5	I(0)
∆open	0	-4.12	-2.92	-2.93	I(0)	-5.34	-3.5	I(0)
Δedu	1	-3.64	-4.34	-2.93	I(0)	-3.54	-3.5	I(0)
$\Delta sbr1$	0	-3.76	-4.12	-2.93	I(0)	-4.12	-3.5	I(0)
$\Delta sbr2$	0	-4.12	-4.00	-2.93	I(0)	-3.96	-3.5	I(0)
$\Delta sbr3$	0	-5.12	-5.91	-2.93	I(0)	-7.74	-3.5	I(0)

$\Delta ic$	0	-4.12	-5.34	-2.93	I(0)	-3.23	-3.5	I(0)
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The above results imply that our variables are all integrated of order 1 (**I(1)**) and are thus stationary in first difference. Analysis of cointegration among the six variables in Table1 was then undertaken using the Johansen Maximum Likelihood procedure. The results are reported in Table 3 below.

# Table 3: Test result from Johansen procedure

Johansen Maximum Likelihood procedure of the cointegrating regression output= (pri,pub,open,edu,sbr,ic): number of cointegrating vectors(s) using the cointegration likelihood ratio.

	Null Hypothesis	Alternative Hypothesis	Test Statistic	Critical Value 5%	Critical Value 10%
Maximal	r=0	r=1	35.83	33.64	31.02
	r<=1	r=2	24.74	27.42	24.99
matrix	r<=2	r=3	12.11	21.12	19.02
	r<=3	r=4	11.32	17.34	15.56
	r<=4	r=5	9.32	14.88	12.43
	r<=5	r=6	6.74	10.66	8.54
	r<=6	r=7	.707E-4	8.07	6.65
Trace of the	r=0	r>=1	73.3	70.49	66.23
stochastic matrix	r<=1	r>=2	39.25	48.88	45.7
	r<=2	r>=3	19.9	31.54	28.78
	r<=3	r>=4	13.31	25.67	22.65
	r<=4	r>=5	11.33	18.65	15.34
	r<=5	r>=6	6.74	15.65	12.34

r<=6	r=7	0.707E-4	8.07	5.45

Based on a VAR of order 2, suggested by the Schwarz Bayesian criterion (SBC), both the Maximum Eigenvalue test and the Trace test reveal the presence of one cointegrating vector. Engle and Granger (1987) showed that cointegration implies an error-correction mechanism (ECM). Same was found when test for cointegration while alternatively using SBR2 and SBR3. We accordingly formulated the VAR as a Vector Error Correction model (VECM) to capture short-run dynamics in addition to the long-run equilibrium. The derivation of the VECM starts from the VAR:

$$Z_{t} = \Psi_{1} Z_{t-1} + \Psi_{2} Z_{t-2} + \dots \Psi_{k} Z_{t-k} + \mu + \eta_{t}$$
(3)

Where Zt is a vector of (n x 1) dimension

 $\Psi_k$  is a matrix of (n x n) dimension

 $\eta_t$  is a vector of (n x 1) impulses  $\Box \Box$ niid(0, $\Box$ )

 $\mu$  is an intercept vector of (n x 1) dimension

n is the number of endogenous variables in the VAR

k is the dimension of the VAR

.

For the present analysis the VAR consists of 6 endogenous variables all integrated of order 1, and contained in:

$$Z_t = [y_t, pri_t, pub_t, open_t, edu_t, sbr1_t, ic_t]$$

Since the Johansen procedure indicated the existence of one cointegrating vector, we proceeded with a Vector Error Correction Model (VECM) formulation.<sup>18</sup>

$$\Delta Z_{t} = \Gamma_{1} Z_{t-1} + \Gamma_{2} \Delta Z_{t-2} \dots + \Gamma_{k-1} \Delta Z_{t-k+1} + \Pi Z_{t-1} + \mu + \eta_{t} \qquad t = 1 \dots T$$
(4)

 $\Delta Z_t$  is a vector of growth rates, the  $\Gamma$ s are estimable parameters, and  $\eta_t$  is as defined under equation (3).  $\Pi$  is the long-run parameter matrix with rank equal to r, in our case 1. Given the presence of cointegration, the matrix  $\Pi$  has non-zero but less-than-full rank and can be decomposed into  $\alpha\beta'$ , where  $\beta$  is a matrix of long-run parameters and  $\alpha$  is a matrix of short-run adjustment parameters

In the case of SBR1, the estimated cointegrating vector, normalised on output, and the estimated adjustment parameters are presented in Table 4.

Variables	β	t-ratios	α	t-ratios
У	1		-0.387**	-2.34
pri	-0.908***	-6.89	-0.267**	2.25
рив	-0.263**	-2.37	-0.156*	- 1.77
open	-0.595**	-3.89	-0.142*	-1.71
edu	-0.62***	-4.53	0.084	-1.23
sbr1	-0.18***	-2.52	-0.14	-1.01
ic	-0.13***	-2.58	-0.021	-1.42

Table 4 : Estimates of long run	parameters(a and $\beta$ vectors)
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\*significant at 10%, \*\* significant at 5%, \*\*\*significant at 1%

<sup>&</sup>lt;sup>18</sup> The VECM includes an exogenous dummy for cyclone Carole which occurred in 1960. Estimation without this dummy led to non-random residuals depicting a marked drop in the year 1960.

State Business Relations has a positive and significant effect on output in Mauritius in the long run with an implied elasticity of 0.18. Thus a one percent improvement in state business relations proxy is seen to lead to a 0.18% increase in the GDP of the country. Such positive effect is consistent with the work of de Velde for the case of a panel of Sub Saharan countries. Interestingly we should note that the coefficient is SBR is positive even after the inclusion of a measure of institutional quality, i.e. the degree of executive constraint which implies strong support for the hypothesis that effective state-business relationships remain an ingredient for economic growth in Mauritius.

Private capital, as expected, is the most productive (0.91) factor with openness (*open*) and quality of labour (*edu*) displaying sizeable importance as well. The role of government in the provision of public infrastructure is also acknowledged. These results are in line with recent study from Khadaroo and Seetanah (2008) on the determinants of economic growth.

The results of the estimated VECM show that the error-correction equations are not subject to residual autocorrelation at the 5% significance level. The Wald test indicates that the variables are not weakly exogenous at the 5% significance level. The lagged error-correction terms are significant in all the equations of the VECM. Therefore the variables in the system are all endogenous. The regression results appear in Table 5.

Variable s	Δoutput	Δpri	Δpub	∆ope n	∆edu	∆sbr	Δic
Constant	-1.34***	1.11***	0.36*	1.53*	0.655**	1.54*	1.11*
$\Delta output_{t-1}$	0.234*	0.153*	0.11	0.342 *	0.276**	0.33*	0.12*
$\Delta pri_{t-1}$	0.634**	0.832** *	0.045	0.15*	0.077	0.41*	0.043
$\Delta pub_{t-1}$	0.123**	0.099**	0.672 **	0.135 *	0.026	0.1	0.024

Table 5: Estimates of the Error-Correction Model.

$\Delta open_{i-1}$	0.331**	0.214*	0.222 *	0.662 *	0.0034	0.19*	0.09*
$\Delta e du_{t-1}$	0.212**	0.143	0.164	0.153 *	0.654**	0.13*	0.11
$\Delta sbr1_{t-1}$	0.105***	0.193**	0.156 *	0.215 *	0.078	0.87**	0.21*
$\Delta i c_{t-1}$	0.032	0.125*	0.034	0.095 *	0.0007	0.32*	0.76*
$v_{t-1}$	-0.387**	- 0.267**	- 0.156 *	- 0.142 *	-0.084	0.14	0.021
<i>R</i> <sup>2</sup>	0.76***	0.71	0.55	0.363	0.411	0.43	0.51

\*significant at 10%, \*\* significant at 5%, \*\*\*significant at 1%.

The above results (column 2) also reveal a positive significant contribution of SBR to output in the short-run. The short-run output elasticity of 0.105 is lower than its long-run counterpart, suggesting that it might take some time for these types of relationships to be fully operative in an economy. A 1 percentage-point increase in the growth rate of SBR leads to a 0.105 percentage-point increase in the growth rate of output after one year and this is an estimate of the direct effect of SBR on output in the short-run. Private and public capital, openness, institutional constraints and quality of labour are all significant in explaining the short-run variation in output, although to varying degree. Moreover, the positive and significant coefficient of the adjustment parameter points to dynamism in the growth modelling as 39% of an existing disequilibrium is corrected in the next period, implying a moderate speed of adjustment.

Interestingly a VAR framework also allows us to detect any indirect effects. From column 3, it can be observed that a 1 percentage-point increase in the growth rate of SBR leads to a 0.19 percentage-point increase in the growth rate of private capital after one year. A 1 percentage-point increase in the growth rate of private capital leads to a 0.63 percentage-point increase in the growth rate of output after

one year. The latter two pieces of information taken together imply that a 1 percentage-point increase in the growth rate of transport capital leads to a 0.19 x 0.63 percentage-point increase in the growth rate of output after two years. This is an estimate of the indirect effect of SBR on output in the short-run via 'the private capital channel'.

As such there are interesting indirect effects of SBR through the 'public capital channel'. A 1 percentage point increase in SBR is observed to increase public capital by 0.16 and given the fact that public capital has an implied growth elasticity of 0.12, it can easily be calculated that the indirect effect is around 0.16 x 0.12. SBR can also be observed to add to the openness of the country and similarly as above, interesting indirect effects can be found.

Referring to the SBR equation (column 7), estimating the determinants of SBR, it can be observed that the size of the private sector and the economy play an important role. This might be explained by the fact that the more matured are the private sector and the economy, the better is the SBR. This is also exacerbated to some extent by the level of education of the country (more educated entrepreneur more likely to realise benefit of consensus and consultation)

We alternatively used SBR3 in lieu of SBR1 and the estimated cointegrating vector, normalised on output, and the estimated adjustment parameters. These are presented in below.

Variables	β	t-ratios	α	t-ratios
у	1		- 0.322**	-2.36
pri	-0.83***	-5.34	- 0.211**	2.25
pub	-0.24**	-2.23	-0.113*	- 1.87
open	-0.53***	-3.54	-0.13*	-1.95

Table 6 :	Estimates	of lona ru	n parameters(g	and $\beta$ vectors)
rabie e i	Lotiniateo	or rong ra	n parametero(a	

edu	-0.55***	-4.64	0.034	-1.34
sbr3	-0.21**	-2.22	-0.17	-1.23
ic	-0.15**	-2.18	-0.41	-1.43

\*significant at 10%, \*\* significant at 5%, \*\*\*significant at 1%

Results from table 6 validate the positive and significant role of SBR in economic development. The coefficient of SBR3 is interestingly slightly higher as compared to SBR1. Moreover, the overall results about the other determinants of economic growth seem to tally with the ones obtained previously, with private investment remaining the major driver of growth of the country.

The estimates of the VECM were subsequently estimated and the results appear below. The variables in the system are all endogenous as the lagged errorcorrection terms are significant in all the equations of the VECM. As such the errorcorrection equations are not subject to residual autocorrelation at the 5% significance level and the variables are not weakly exogenous at the 5% significance as indicated by the Wald test.

Variables	Δoutput	Δpri	Δpub	Δopen	Δedu	∆sbr	Δic
Constant	-1.12**	1.45***	0.25**	1.34*	0.522**	1.37*	2.15*
$\Delta output_{t-1}$	0.212**	0.16*	0.16	0.315*	0.264***	0.37*	0.15*
$\Delta pri_{t-1}$	0.543**	0.85**	0.043	0.174*	0.064	0.36*	0.067
$\Delta pub_{t-1}$	0.15**	0.11**	0.754**	0.122*	0.075	0.11*	0.034
$\Delta open_{t-1}$	0.271*	0.222*	0.231*	0.764**	0.0074	0.16**	0.06*
$\Delta e du_{t-1}$	0.26**	0.146	0.123	0.132*	0.686**	0.15**	0.16

Table 7: Estimates of the Error-Correction Model.

$\Delta sbr3_{t-1}$	0.12**	0.182*	0.121*	0.193*	0.065	0.76**	0.17*
$\Delta i c_{t-1}$	0.02	0.13*	0.064	0.098*	0.0006	0.23*	0.65* *
$v_{t-1}$	-0.323**	-0.345**	- 0.234**	-0.464*	-0.06	-0.54*	0.044
$R^2$	0.72***	0.75	0.59	0.313	0.323	0.41	0.5

\*significant at 10%, \*\* significant at 5%, \*\*\*significant at 1%.

The error correction model again confirms the positive significant contribution of SBR to output even in the short-run. The relatively lower short term coefficient suggests the existence of a time lag for the economy to feel the full effect on the economy. As such the positive and significant coefficient of the adjustment parameter connotes dynamism in growth modeling.

The use of SBR3 also interestingly confirms the indirect effect of SBR on output in the short-run via 'the private capital channel', the 'public capital channel' and the openness channel as well.

It is noteworthy that the third SBR proxy, SBR2 also yielded a positive and significant coefficient of 0.16 for the long run estimate and 0.10 for the short term one. The full set of estimates is not shown here but are available upon request. The above consolidates the previous findings and suggests that they are robust.

6 FIRM LEVEL PARTICIPATION IN SBR

The JEC plays a very serious role in the relationship between the private sector and the state through continuous policy dialogue with each party sharing their views and concerns on the way forward, and over the years, this maturity level of this relationship has positively evolved. However, it is important to understand the views of the firms, which are indirectly members of the JEC through their respective sector level organisations. This study therefore surveys 40 large firms in various sectors to assess the extent to which firms are involved in the high level discussions. The study also surveys 8 of the 9 business associations to qualitatively assess the effectiveness of the business associations and JEC vis a vis the state in reducing obstacles with respect to licenses and permits, constructions and operation permits, in influencing labour regulation and also in influencing decision of the state with respect to infrastructure. The results of these surveys significantly align with the results of the econometric analysis in the previous sections.

#### 6.1 Analysis of Business Associations

Although the level of subscription to be paid by the various sector level associations as a member of the JEC is based on the member type and size, all members have equal opportunity to share their views during meetings either during the AGM which is held once a year, or during the quarterly subcommittee meetings or during special or ad-hoc meetings as and when required, for example budget and crisis time.

It is interesting to note that board decisions are taken on a consensus basis, after in-depth discussions and debates. There has, however, been a couple of very rare cases where the president of the Council had to use his power to take decisions. The communication channel between the JEC and the member associations is an open one such that major policy decisions of the Government are communicated to the members immediately and the members meet to discuss the details of those action/decisions. This point can be evidenced by the post budget deliberations by the JEC, which is done just after of hours after the budget speech.

Member association are very united at the JEC level such that they always prefer to discuss their issues at the JEC level before making any public statement or before sending representations to the Government in place. There is a very high level of trust among members, thanks to the professional commitment of the JEC to work impartially and in a democratic way for the betterment of all its members. Even tough some member associations do send their proposals to the Government (at the budget time or any other time), they discuss those proposals at the level of the JEC and their individual documents are always in line with the broad agenda of the JEC. It should be noted that in all cases of business associations, member firms are invited to give inputs and discussion either on an individual basis or sub sector basis or even though sub committees set up. At the members level, all associations contemplates the views of all their firm level members before discussion with the JEC and in case of changes at the JEC committee level, the views of the firms are sought again. It is therefore clear that the JEC eventually represent the views of the firms. Member association never make representations to any third party,

including the Administration, without prior discussions with the JEC level. This relationship within the private sector is indeed a key factor in the relationship between state and business in Mauritius, as the business community is represented by one voice and all members move in the same direction.

The member associations are satisfied to a very large extent with the performance of the JEC in resolving a number of bottlenecks that affects the business community, including import/export licensing requirements, construction and operation permits, labour regulations and logistics requirements. However, they are unanimous that the JEC still has a major role to play in further removing additional obstacles that still exists.

# 6.2 Analysis of firms

We present below some of the salient findings of a firm level survey (of 40 firms) on similar issues as those presented previously.

- All firms reported that the subscription is determined mainly by the size and category of the firms and all firms confirmed that they meet once yearly at the AGM and also on ad hoc basis as and when required and that the president is elected in democratic principles and that decisions are normally taken on a consensus basis in sub committees.
- All firms are overall satisfied with the precision/correctness, frequency and timeliness of information communicated to them by their associations.
- 90% of firms prepare a policy position, which is sent to the associations, but only 60% of firms said that the consolidated proposals from the associations are circulated before and also after consultation with the JEC. This call for some improved diffusion of information and transparency from the associations to the firm level.
- 8% of firms directly lobby the government during occasional social gatherings but they inform their association, as and when it happens.

# **7** CONCLUSION

This paper investigated the role of an effective SBR in promoting economic performance for the case of Mauritius. Given the dynamic and endogenous issue in growth modelling, an element often ignored by researches, we adopt rigorous dynamic time series analysis, namely a VAR framework, to investigate the relation for the period 1975-2005. Results from the analysis show that State Business Relations have a positive and significant effect on output in Mauritius in the long run with an implied elasticity of 0.18. Such a positive effect is consistent with the work of de Velde (2005) for the case of a panel of Sub Saharan countries. Interestingly we should note that the coefficient is SBR is positive even after the inclusion of a measure of institutional quality, i.e the degree of executive constraint and thus implies strong support for the hypothesis that effective state-business relationships remains an ingredient for economic growth in Mauritius. Private capital, as expected, is seen to be the most important factor with openness and quality of labour displaying sizeable importance as well. The role of government in the provision of public infrastructure is also acknowledged.

The results are validated based on, to a large extent, estimations for the short run. Moreover, the positive and significant coefficient of the adjustment parameter connotes dynamism in growth modelling and 39% of an existing disequilibrium is corrected in the next period, implying a moderate speed of adjustment. Interestingly there also appears to be an indirect effect of SBR on output in the short-run via 'the private capital channel'. As such SBR can also be observed to add to the openness of the country. As far as explaining SBR is concerned, the size of the private sector and the economy plays an important role. This might be explained by the fact that the more matured are the private sector and the economy, the better is the SBR.

Findings from the business association's survey consolidates the fact that decisions are usually taken on a democratic and consensus basis in all cases and also that in the majority of cases demand positions in times of budget are submitted and discussed at the level of the umbrella council (JEC). Moreover, all associations confirmed that before and after discussion with the JEC, their respective proposals are circulated to all members for further comments. Interestingly it very rarely happens that member firms bypass their associations to make direct demands to the government which implies that firms have a strong sense of solidarity. It is noteworthy that although the majority of associations are satisfied with the judiciary and legal system, their opinion on the performance and role of the ICAC and Police/Security is quite mitigated. The survey also revealed that associations are of the opinion that the APEX body is effective in reducing the obstacles with respect to imports/export license and construction and operation permits, in influencing decision of the state with respect to provision of infrastructure, but not so effective in influencing labour regulations. A similar survey based on 40 large firms validates the above results to a large extent.

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TIPS (2007) Intra-SADC Trade Performance Review – Mauritius Country Case

# **APPENDIX 1**

Figure A1:



*SBR1* - The average indicator proposed by Sen and te Velde (2007)<sup>19</sup> which is based on the presence and length of existence of the umbrella organisations linking businesses and associations together. This idea is that the longer the membership of firms in the umbrella organisation, the more the maturity and the higher the level of collaboration. However, this is an input indicator and may not be the perfect proxy for indication the maturity SBR.

*SBR2-* The number of firms which are members of the umbrella organisation as a ratio of total number of firms. It is proposed that with an increasing ratio, the positions that the umbrella organisation takes during discussions with the state will be strengthen. However two constraints can be found: first, like SBR 1, it is an input indicator and second, a mature SBR relationship is not based on confrontation but rather on dialogue and understanding of each party of the other party's position.

*SBR3* – This indicator, unlike the other two SBR indicators, is output based and by definition better than input and process based. The idea to have such an indicator is to capture the effectiveness of the umbrella organisation in its demands. This index measures the percentage of the different demands of the umbrella

<sup>&</sup>lt;sup>19</sup> Sen and te Velde (2007) index of SBRs measures the cooperation of the public and private sector and include the following element namely i) open to all and autonomous of government intervention as is the case with a formal existing body ii) an informal 'suggestive' body with no entrenched power iii) how the state interacts with business is based on the format, frequency, and existence of state-business relations and iv) on the presence and length of existence of laws protecting business practices and competition measures the mechanisms to avoid collusive behaviour.

organisation, which has been addressed, in full or partially, during the budget presentation of the Chancellor.