

Impact of China-Africa Trade Relations: An In-Depth Case Study of Mauritius

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1. Introduction

1.1 Problem Statement

This study takes the China-Mauritius scoping study as a starting point to analyze in greater detail the impact of China's trade on the Mauritian economy.

Two-way trade flows between Africa and China have increased rapidly and in a sustained manner between 2001 and 2006, with exports increasing by more than 40 percent and imports by about 35 percent. Resource-abundant countries have benefited due to increased demand by China for raw materials and commodities, compounded by attendant terms-of trade gains. Mauritius is scarce in natural resources; yet, it has not been a stranger to the 'China phenomenon'.

Chinese exports to Mauritius have more than doubled between 2000 and 2008, propelling China into the ranks of Mauritius' major trading partners. China is the third largest supplier to the Mauritian market but, at current trends, it will soon be competing for first place with the EU and India. Cheap Chinese products – such as food products, toys, building materials, electronic appliances, motor vehicles, textiles and clothing, and miscellaneous manufactured goods – can be commonly found in retail outlets all over the island. While these products can be any consumer's delight, they cannot compete on quality against imports from industrial countries.

Some Chinese goods, like toys and certain food items targeted to children have recently been projected into the limelight following life-threatening incidents, leading to the withdrawal of those products from the market. As a result, Chinese products that could represent health hazards are constantly monitored by the Consumer Protection Unit of the Ministry of Commerce and Industry.

Exports to China, on the other hand, have remained marginal. In 2007, China took in a negligible 0.2 percent of Mauritius' exports, which consisted mainly of fish and fish preparations, textile yarn, and miscellaneous manufactured products, including tobacco. Potential explanations for the low export penetration include lack of trade complementarity between Mauritius and China, lack of export competitiveness, and market access constraints, including commercial practices and trade policy measures that may not encourage exports into China. The relative significance of these barriers needs yet assessed.

The combination of dwindling exports, on the one hand, and shooting imports, on the other, has resulted in a very large trade deficit with China, which has grown bigger over the years. In 2005, China alone directly accounted for 30 percent of the overall trade deficit of Mauritius, and this figure is likely to increase further if nothing is done to tackle the asymmetric trade between Mauritius and China.

Perhaps the impact of China's economic rise has been most significant for Mauritian exports into third-country markets. The end of apparel quotas and the consequent surge in garment exports from China has competed out a number of African countries from developed-country

markets, especially the USA. In Mauritius, a number of clothing firms closed in the run-up to January 1, 2005, leading to mass layoffs and a sharp dip in exports. Between 2004 and 2005, the value of apparel exports declined 27 percent even though the loss of exports between 2001 and 2005 was milder at 14 percent.¹

However, the Mauritian case study suggests that clothing exports have bounced back, suggesting that the local apparel industry has resisted the increased competition in third markets that Chinese apparel has entailed. Since China's dominance did not falter after 2005, the renewed dynamism in the Mauritian clothing industry suggests that China could not have been responsible for its decline in the preceding years. We consider potential explanations for the resurgence of exports in the post-MFA era, and examine whether Mauritius can compete with China in the clothing sector.

China's trade impacts have produced gainers and losers. Consumers are the biggest gainers from cheap Chinese imports. However, these gains are likely to be smaller after adjusting for the generally poorer quality and greater riskiness of Chinese products. On the other hand, import-competing producers, many of which are SMEs vying to establish a presence in the local market, have been most adversely affected by Chinese import competition. It is important to assess the nature and extent of the injury caused, and examine policy options for addressing these negative impacts.

The current financial crisis will certainly affect Mauritius' exports relative to China's in ways unknown at this stage. As the economic crisis deepens during 2009, the global demand for up-market apparel products, as for most income-elastic goods, is likely to suffer a set-back. Major buyers will likely substitute away from higher-priced products, and to the extent that Chinese goods are cheaper, this may inflict a consequential loss of market for high-end Mauritian clothing over and above what could be attributed to China's dominance alone. The potential effects of the economic crisis on Mauritius-China trade relations deserve to be fully investigated and actions for strategy distilled there from.

1.2 Objectives

The above account of the potential impacts of China's spectacular rise on the Mauritian economy through the trade channel raises important questions and begs for further analysis. In particular, the following questions stand out:

- (1) To what extent has the sweeping influx of cheap Chinese goods benefited Mauritian consumers? What are the concerns raised by the low quality of Chinese goods, and how are these being addressed?
- (2) How much injury has Chinese imports caused to domestic import-competing industries? How many jobs have been lost as a result of this? What has been the policy response, if any?

¹ While it would be instructive to see the changes in export volumes, these figures are not readily available for the main SITC division concerned, namely SITC 84: Articles of apparel and clothing accessories.

- (3) Why have exports to China stayed at such low levels over the years? What are the underlying causes of low export penetration into the Chinese market? Is China's import regime restrictive? Are Mauritian products not competitive enough? Are there any potential products that Mauritius can export to China? If so, which ones?
- (4) What role is there for commercial diplomacy to help tackle the growing bilateral trade deficit? Mauritius is in the process of negotiating trade agreements with India and Pakistan. Should and can China be next?
- (5) What accounts for the resilience of the Mauritian clothing industry against the onslaught of China in export markets? Are Mauritius and China competing in different market segments, and so are not direct competitors? How does Mauritius measure up to China in terms of product competitiveness? What are the other aspects of competitiveness (for example, exchange rate policy, trade facilitation, and government support) that are more favourable to China than to Mauritius? How much do they weigh in the final analysis?
- (6) What has been Government's policy response to the China phenomenon? What actions have been taken on the ground to minimize the extent of the injury that cheap Chinese products could cause to import-competing producers and to consumers at large?
- (7) How will the current financial crisis affect Mauritius' exports relative to China's? What strategies could Mauritian firms adopt to minimize the loss of exports in the high-end market as the economic crisis unfolds and buyers switch cheaper sources?

Specifically, this study will:

- (1) Analyze Mauritius' economic structure and performance, paying particular attention to the role of trade with China;
- (2) Analyze Mauritius' export growth, by sector and export destination, paying specific attention to the contribution of China in terms of export volume, export prices and export earnings;
- (3) Analyze Mauritius' relative gains and losses generated by exports to China, paying particular attention to their sources (in terms of volume and price changes) and their sectoral distribution;
- (4) Identify and analyze the key export stakeholders, classified by key sectors, relative gains and losses, gainers and losers, and sources of their gains and losses;
- (5) Analyze Mauritius' import structure and performance, by key sectors and import sources, with specific focus on the contribution of China in terms of import volume, and import prices;
- (6) Analyze Mauritius' relative gains and losses generated by imports from China, paying particular attention to the sources (i.e. volume and price changes) and the sectoral distribution of these losses and gains;
- (7) Identify and analyze the key import stakeholders classified by key sectors, relative gains and losses, gainers and losers, and sources of their gains and losses;
- (8) Analyze the evolution of China's trade regime and trade policy, focusing on the key sectors of Chinese imports from and exports to Mauritius, and with particular reference to the market access conditions of Mauritius' exports to China;

- (9) Analyze the evolution of Mauritius' trade regime and trade policy focusing on the key sectors of its imports from and exports to China, and with particular reference to the market access conditions of Chinese imports into the country;
- (10) Analyze any bilateral and/or regional trade agreements and/or special trade arrangements between Mauritius and China, with particular focus on their implications for the net gains/loses emanating from the trade relationships between China and Mauritius;
- (11) Identify and analyze the opportunities that can be derived by Mauritius from its trading relationship with China;
- (12) Articulate and analyze the policy responses that can enable Mauritius maximize the benefits derivable from its trading relationship with China;
- (13) Identify and analyze the challenges facing Mauritius from its trading relationship with China;
- (14) Articulate and analyze the policy responses that Mauritius would need to minimize the net losses arising from its trading relationship with China;
- (15) Articulate and analyze the policy responses necessary to optimize trade relations with China if and when China acquires the attributes of an advanced industrialized economy and the associated changes in the features and pattern of its trade relations with Mauritius.

1.3 Organisation of the Report

This report is organized around six major themes, conforming broadly to the Terms of Reference. Section 2 presents a background of the Mauritian economy in terms of structure and performance, emphasizing the need for export as a core strategy for long-term growth. It also looks at the structure, evolution and direction of Mauritius' exports, pointing to the very low levels of exports to China. It examines the trade policies and trade regimes of both economies and the institutional development strategies which have been implemented to boost the Mauritian external sector. In Section 3, we review the existing theoretical and empirical literature on China's impact on Africa, with particular emphasis on the trade channel. Section 4 sets out the methodology adopted in this study. In section 5, we present and analyze our findings. We conclude in Section 6 with a summary of the main results and a discussion of policy options to address the threat that China's rise poses, or might pose, to the Mauritian economy.

2. Background

2.1 Structural Analysis of the Economy

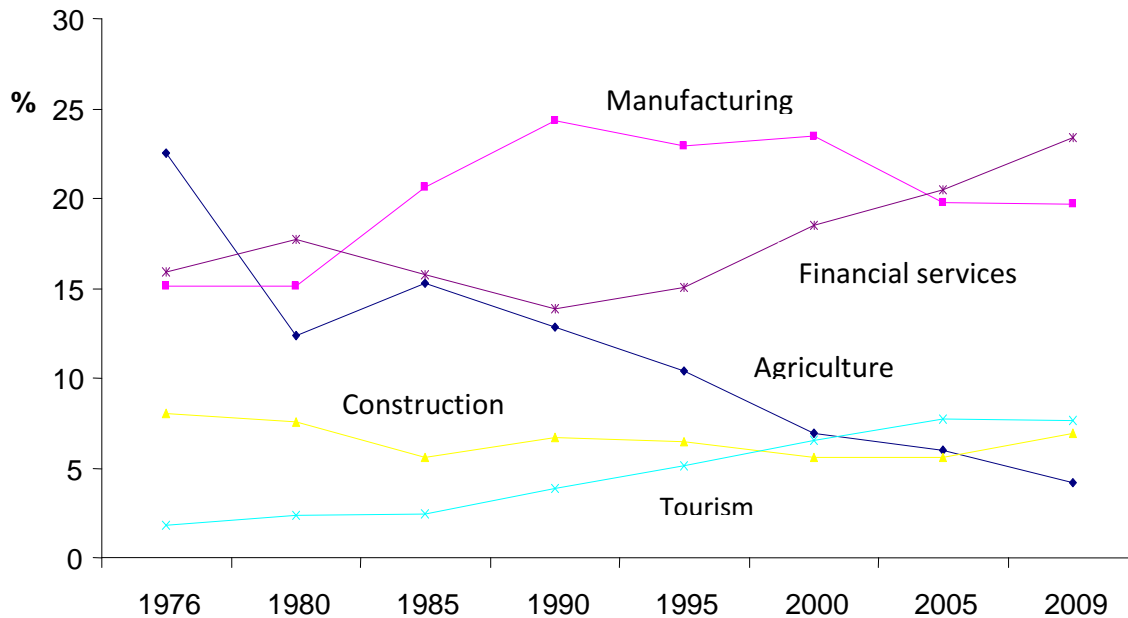
Mauritius is a small island economy with an estimated multi-ethnic population of 1.2 million in 2007. Being a former colony of France and Great Britain, Mauritius exhibits clear features of its colonial heritage in its laws, languages, business ownership and trade structure, among others. Mauritius is a Westminster-type democracy; elections have regularly been held at 5-year, if not shorter, intervals. Its laws are a combination of British law and the French Code Napoleon. English is the official language although French is widely spoken and dominates the written press.

At the time of independence in 1969, Mauritius inherited an economic structure fashioned by its colonial past. The island was primarily a sugar plantation, with much of the acreage owned by the Franco-Mauritians, a very small but economically powerful community. This landed aristocracy has judiciously utilized its proceeds from sugar exports, and opportunistically taken advantage of economic incentives, to diversify into textiles, tourism and financial services. In this, Mauritian exporters have benefited most from the market access privileges under the ACP-EU Lomé Convention. On the downside, however, these preferences have hindered both product and market diversification, with exports dominated by sugar and clothing, and the bulk of these exports still being absorbed by the EU.

The contemporary Mauritian economy rests on three traditional pillars – sugar, textiles, and tourism. Financial services are an emerging sector, with considerable potential to contribute to economic growth. However, the relative significance of these sectors has changed over the years (Figure 1). Sugar, once the backbone of the economy, has declined to a mere symbolic industry – it contributed less than 3 percent to GDP in 2007 – even though one may argue that its multifunctional role is much larger. The clothing industry, which thrived under EPZ incentives and preferential market access, suffered a major setback in the run up to the fateful January 1, 2005, which signalled the end of apparel quotas and the inauguration of a new era of global competition in clothing exports, featuring formidable players like China, India and others. However, export data for recent years give an altogether different reading: the clothing industry has bounced back, with exports in 2007 reaching an all-time peak before the financial crisis took its toll.

Tourism is perhaps the only sector that has been left unscathed by the treacheries of globalization. This sector has posted robust growth since 2000 and has contributed significantly to jobs and foreign exchange earnings. Financial services accounted for some 10 percent of GDP in 2007. Domestic banks have long dominated financial intermediation in Mauritius although efforts have recently focused on promoting offshore banking activities by emphasizing the country's reputation as a safe financial haven. However, offshore banking has yet to prove its potential as a driver of growth.

Figure 1: Sectoral Contribution to GDP, 1976-2009 (%)



Current government strategy is to reorient the economy's traditional sectors in light of preference erosion while promoting new growth avenues. Thus, for example, emphasis is shifting away from the sugar industry toward a *sugar cane* industry, which would produce a variety of by-products – such as ethanol, spirits, and electricity from cane waste – as well as specialty sugars. In the textiles sector, efforts are being directed to building a vertically integrated clothing industry encompassing spinning, weaving and dyeing operations, which call for heavy investments in machinery. Being a high-cost country, Mauritius' survival strategy rests on moving into the higher end of the market, where competition is less keen. In tourism, the objective is to attract 2 million tourists by the year 2015, a more than two-fold increase over the current figure of 800,000. In parallel, several schemes have been launched to attract high net-worth individuals to Mauritius by offering them the possibility of owning luxury villas in a sanctuary-type setting. In the services sector, IT-enabled services are emerging rapidly, fed by the availability of a pool of computer-literate and bilingual labor, and by the country's past investments in telecommunications. Finally, new industries (for example, the seafood hub) are actively being sought out and promoted to diversify the economy's industrial and export structures.

Mauritius is arguably an outlier among SSA countries. The country was ranked first in SSA on the basis of the Human Development Index in 2008, reflecting notable achievements in education, health and income. Mauritius has the second highest GDP per capita in the region. The composition of GDP is atypical of SSA countries: services make up about 64 percent of GDP, and manufacturing some 20 percent (2008 figures). As a small island economy, with no natural resources, Mauritius understands that its economic survival rests crucially on an openness

strategy pushed to its limits. As a result of sustained trade reforms dating back to the early 1980s, the country boasts a very liberal trade regime, and is on course to becoming a duty-free island. Total trade as a percentage of GDP amounted to 133 percent in 2006 compared to an SSA average of 69 percent (Table 1).

Table 1: Mauritius: Selected Economic Indicators

	Unit	1990	2000	2008
Population	000s	1056	1195	1253.0
GDP per capita	US \$	2608	3610	5807.0
Annual real growth rate of GDP	%	7.3	9.7	5.6
Inflation rate	%	13.5	4.2	9.7
Budget deficit to GDP ratio	%			-4.1
Unemployment rate	%	2.8	8.8	7.2
Investment rate	%	30.6	22.9	24.6
GDP at market prices	US\$	2382.9	4469.3	8651.1
GDP shares by industry group				
Agriculture	%	12.9	7.0	4.4
Of which: sugar	%	8.0	3.6	1.9
Manufacturing	%	24.4	23.5	20.1
Of which: EPZ	%	...	12.0	5.4
Services	%	47.8	59.2	64.0
Of which: Financial and business services	%	4.9	9.7	10.9
Government services	%	15.0	17.5	18.1
Exports of goods and services	US\$ (million)	1721.9	2622.4	4943.8
Share of GDP		64.0	63.0	62.0
Imports of goods and services	US\$ (million)	1915.8	2706.9	6319.8
Share of GDP	%	71.0	65.0	70.0
Current balance as % of GDP	%	-5.0	-1.0	-11.0

Source: CSO

2.2 Analysis of Mauritian Trade

2.2.1 Analysis of Mauritian Exports

2.2.1.1 Export Development

Starting off on rather unfavourable conditions in the 1960s, Mauritius has defied its critics by achieving a rapid and sustainable transformation of its industrial structure from one that rested predominantly on sugar in the 1960s to a well-diversified export base in the late 2000s as a result of various strategies adopted at different points in time: the EPZ strategy in 1970, and, recently, policies aimed at diversifying out of sugar, promoting the seafood hub and, more

generally, supporting SME development in various sectors. In the process, the economy has shed the protectionist regime of the 1960s and has espoused the philosophy that only unfaltering trade liberalization and the continuous search for products in which a competitive advantage can be nurtured can enable the country maintain its place in global markets. This drive for efficiency and greater competitiveness permeates all sectors of economic activity and is supported through a number of government policies towards export-oriented enterprises and SMEs.

With advances in information technology in the late 1990s, Mauritius took advantage of its skilled, flexible and IT-literate labour force to diversify its services exports into a range of IT-enabled services including back-office operations and call centres initially, and recently into higher value-added sectors such as software development and multimedia.

Figure 2: Exports of goods and services as share of GDP, 1980-2007

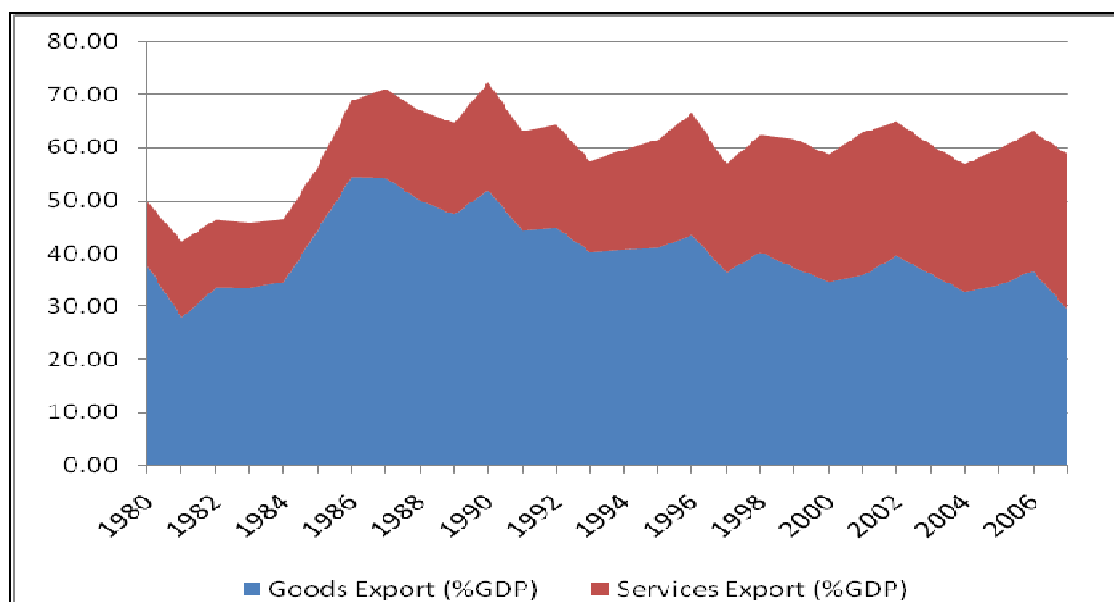


Figure 2 shows the shares of exports of goods and of services in GDP over the period 1980-2007. Merchandise exports had fallen below 30 percent of GDP in 1981 amidst an economic crisis that necessitated drastic structural adjustment measures. The combination of successful stabilization and a major paradigm shift in economic decision-making, with the coming to power of a new government, gave a significant boost to industrial production. Merchandise exports increased sharply between 1981 and 1986 thanks largely to EPZ exports, which had begun to pick up due to greater economic dynamism locally and improved external market conditions.

However, the share of merchandise exports in GDP had taken a downward path after 1986. This could partly be due to economic diversification, which shows up as an increase in the share of services exports after 1986. On the whole, exports' share of GDP has oscillated around an average of 63 percent since the mid-1980s, a laudable performance by African standards.

Table 2: Exports by main product categories, 1995-2007 (US\$ millions)

	Product	1995	2000	2001	2002	2003	2004	2005	2006	2007
S3-0	Food and live animals	442.82	273.09	375.91	459.58	464.93	533.70	568.83	635.53	621.63
S3-1	Beverages and tobacco	1.90	1.49	4.46	4.81	11.04	5.76	6.93	9.14	15.03
S3-2	Crude materials, inedible, except fuels	13.16	10.77	10.99	11.55	12.37	16.32	15.61	27.08	27.45
S3-3	Mineral fuels, lubricants and related materials	0.11	0.12	0.08	0.71	0.79	1.70	1.69	2.19	2.94
S3-4	Animal and vegetable oils, fats and waxes	0.41	0.50	0.77	3.10	1.61	1.12	1.06	0.93	1.65
S3-5	Chemicals and related products, n.e.s.	12.48	13.67	12.67	23.25	32.81	34.10	29.09	27.30	42.01
S3-6	Manufactured goods classified chiefly by material	117.36	134.85	144.17	130.76	148.92	167.32	169.62	174.15	182.33
S3-7	Machinery and transport equipment	35.24	19.19	26.51	72.39	80.97	90.56	324.18	380.09	129.06
S3-8	Miscellaneous manufactured articles	914.20	1035.93	945.42	1048.04	1108.33	1073.76	877.65	914.65	1025.35
S3-9	Commodities and transactions not classified elsewhere in the SITC	0.59	0.35	0.38	0.73	0.28	0.95	9.68	2.77	6.63
	<i>All Commodities</i>	<i>1538.28</i>	<i>1489.96</i>	<i>1521.35</i>	<i>1754.90</i>	<i>1862.06</i>	<i>1925.29</i>	<i>2004.35</i>	<i>2173.84</i>	<i>2054.08</i>

Source: UN COMTRADE TRAINS database

2.2.1.2 Structure of Exports

Table 2 shows the value of exports at the one-digit SITC level for the years 1995 to 2007. In absolute terms, exports are high by African standards, and have constantly increased over the period before registering a small down turn in 2007. This decline is attributed primarily to lower exports of machinery and transport equipment, the reasons for which are not clear.

Figure 3 gives a static picture of the structure of exports in 1977 and in 2007.² It presents a more even distribution of exports across sectors in 2007 than in 1977. Exports in 1977 were concentrated in essentially one product, namely raw sugar, which constituted almost 70 percent of total merchandise exports. In 2007, sugar's share of exports had declined to less than 14 percent. In the meantime, new sectors have emerged. Wearing apparel is readily identified as the leading export sector by virtue of its share in exports, which increased from 13.4 percent in 1997 to 39.7 percent in 2007, a 3-fold increase over a period of 3 decades. Fish

² The 10 sectors represented in Figure 3 are not exhaustive. We have chosen to focus on the main export industries.

and fish preparations have also seen a remarkable increase both in absolute value terms and as a share of merchandise exports, which went up from 1.6 percent to 11.7 percent during the period under analysis. Other sectors post far smaller export shares; however, they represent significant export potential. These include textile yarn and fabrics, pearls and precious stones, and jewellery.

Manufactured goods made up 65.2 percent of merchandise exports in 2007. Table 3 shows the export shares of manufactured products at the 2-digit SITC level. Exports are significant in only a few sectors, including clothing, textile yarn and fabrics, telecommunication and sound equipment, photographic apparatus, optical goods, and watches and clocks. Our analysis suggests that export diversification in Mauritius has been achieved in relative terms, that is, away from sugar and into manufacturing. But within this sector, the export structure remains heavily concentrated in a few manufactured products.

Figure 3: Structure of merchandise exports, 1977 and 2007

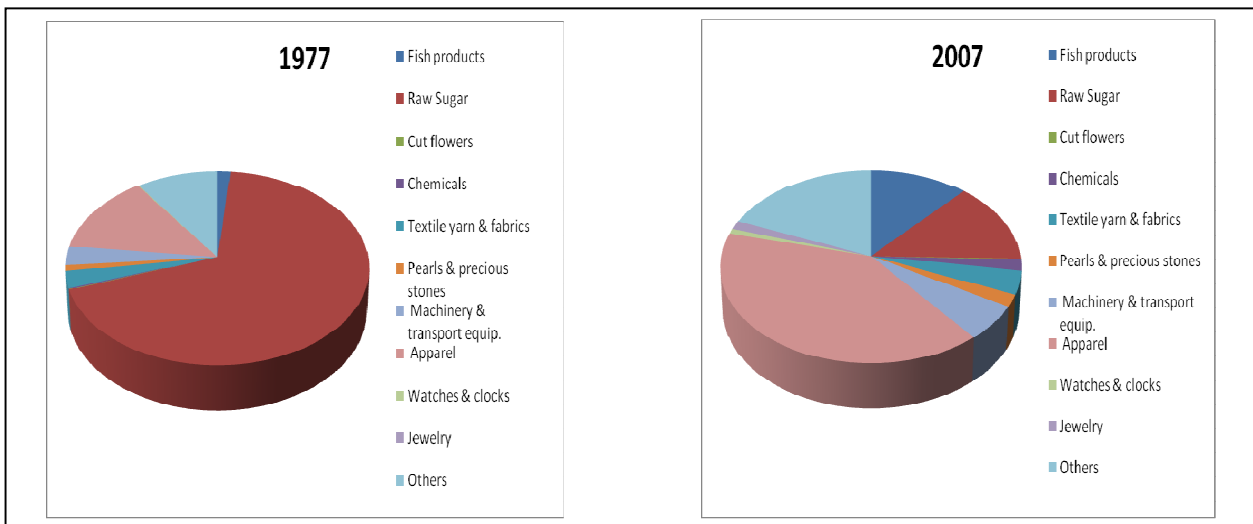


Table 3: Main manufactured export products as shares of total merchandise exports, 2007

SITC Product Classification	(% of Total Exports)
6 - Manufactured goods classified chiefly by material	8.88
61 - Leather, leather manufactures, n.e.s., and dressed furskins	0.03
62 - Rubber manufactures, n.e.s.	0.05
63 - Cork and wood manufactures (excluding furniture)	0.08
64 - Paper, paperboard and articles of paper pulp, of paper or of paperboard	0.50
65 - Textile yarn, fabrics, made-up articles, n.e.s., and related products	4.28
66 - Non-metallic mineral manufactures, n.e.s.	2.92
67 - Iron and steel	0.42
68 - Non-ferrous metals	0.03
69 - Manufactures of metals, n.e.s.	0.58
7 - Machinery and transport equipment	6.34
71 - Power-generating machinery and equipment	0.08
72 - Machinery specialized for particular industries	0.35
73 - Metalworking machinery	0.01
74 - General industrial machinery and equipment, n.e.s., and machine parts, n.e.s.	0.26
75 - Office machines and automatic data-processing machines	0.15
76 - Telecommunications and sound-recording and reproducing apparatus and equipment	4.33
77 - Electrical machinery, apparatus and appliances, n.e.s., and electrical parts thereof	0.48
78 - Road vehicles (including air-cushion vehicles)	0.10
79 - Other transport equipment	0.58
8 - Miscellaneous manufactured articles	50.03
81 - Prefabricated buildings; sanitary, plumbing, heating and lighting fixtures and fittings	0.02
82 - Furniture, and parts thereof; bedding, mattresses, stuffed furnishings	0.15
83 - Travel goods, handbags and similar containers	0.41
84 - Articles of apparel and clothing accessories	43.18
85 - Footwear	0.03
87 - Professional, scientific and controlling instruments and apparatus, n.e.s.	0.48
88 - Photographic apparatus, equipment and supplies, optical goods, watches and clocks	1.23
89 - Miscellaneous manufactured articles, n.e.s.	4.53

Source: Author's calculations using UN COMTRADE data

2.2.1.3 Direction of Exports

Mauritius has taken full advantage of its ACP status to export to the European Union under the market access privileges accorded by Lomé, subsequently Cotonou, and now the Economic Partnership Agreement. Not surprisingly then, Europe has traditionally been Mauritius' main export market, accounting for as much as 80 percent of exports in the 1970s. While the share of exports absorbed by the EU has declined over the years – due to the emergence of regional

markets such as Madagascar and South Africa –, Mauritius has fallen short of achieving the degree of export market diversification that both the government and the export community had desired as a strategy of strengthening economic resilience.

Figure 4 shows the major destinations of Mauritius' exports in 2007. The significance of Europe is evident from the chart: the EU took in a whopping 69 percent of exports. Within the EU, the UK and France are the biggest markets, representing 33.8 percent and 16.8 percent, respectively, of total exports and about 74 percent of EU exports between them. In second place, far behind the EU, comes the US. The US market took in 20.4 percent of exports in 2000 but this share has drastically declined to 7.5 percent in 2007. Much of this change is attributed to the phasing out of the apparel quotas in 2005, which provoked an exodus of foreign-owned firms, serving primarily the US market, from the Mauritian EPZ.

China barely appears on the chart. Exports to China have not only been very small, they have also decreased continuously since reaching a peak in 2002. Mauritius' export to China amounted to a mere US\$ 4.2 million in 2007, representing less than a quarter of one percent of total exports. Table 4 shows the main exports to China over the period 1995-2007. Exports are significant in only a few products, notably fish and fish preparations, tobacco, and TV and radio transmitters.

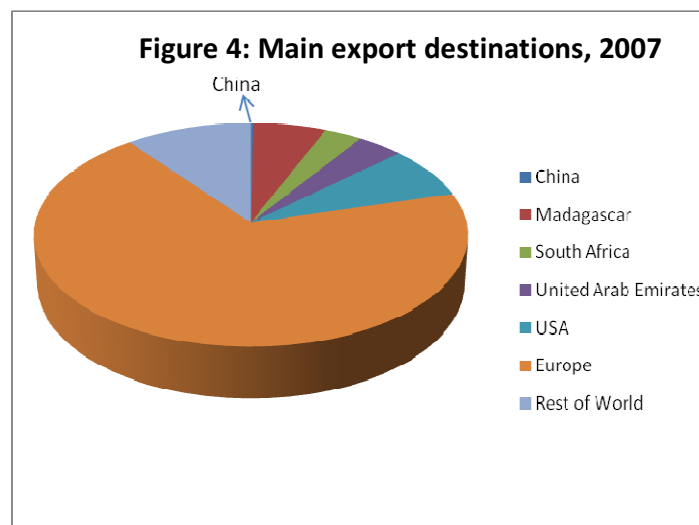


Table 4: Mauritius' main exports to China, 1995-2007 (US\$ millions)

	Product category	1995	2000	2001	2002	2003	2004	2005	2006	2007
S3-0	Food and live animals	...	0.012	3.343	6.674	4.651	3.621	2.754	2.701	1.816
S3-034	<i>Fish, fresh, chilled or frozen</i>	...	...	...	6.674	4.650	3.615	2.705	2.681	1.788
S3-12	Tobacco and tobacco product	...	...	...	...	...	...	1.167	0.289	0.559
S3-2	Crude materials	0.037	0.018	0.006	0.093	0.139	0.033	0.004	0.382	0.187
S3-54	Medicinal and pharmaceutical products	...	...	...	...	0.010	0.001	0.136	0.072	0.009
S3-651	Textile yarn	0.039	0.019	0.145	0.331	0.566	0.121	0.416	1.396	0.731
S3-652	Cotton fabrics, woven	0.015	0.690	0.968	0.594	0.358	0.031	0.014	0.053	0.133
S3-653	Fabrics, man-made	0.001	0.014	0.209	0.403	0.448	0.180	0.234	0.002	0.054
S3-72	Specialized industrial machinery	0.005	0.058	0.002	0.780	0.839	1.643	0.215	0.050	0.013
S3-724	<i>Textile and leather machines</i>	0.005	0.057	0.002	0.779	0.802	1.589	0.215	0.026	0.013
S3-76	Telecommunication and sound equipment	0.089	0.019	0.005	0.005	0.005	0.004	0.668	0.155	0.404
S3-7643	<i>TV, radio transmitters, etc.</i>	...	...	...	...	...	...	0.622	0.109	0.292
S3-84	Clothing and accessories	0.043	0.013	0.036	0.122	0.093	0.127	0.073	0.036	0.092
S3-8973	Gold, silver and jewellery	...	0.065	0.137	0.103	0.196	0.274	0.129	...	0.000
	TOTAL	0.386	1.156	1.543	9.448	7.498	6.433	6.323	5.228	4.208

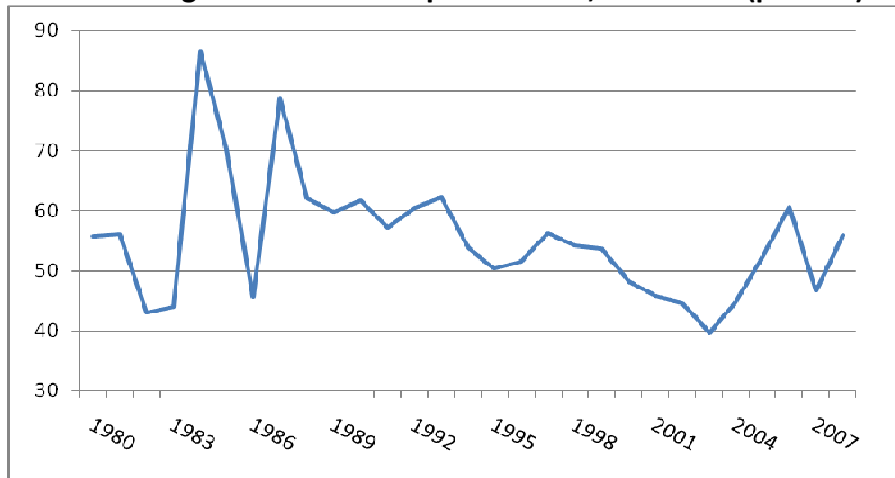
Source: UN COMTRADE TRAINS database

2.2.2 Analysis of Mauritian Imports

2.2.2.1 Import development

As a resource-scarce, small island economy, Mauritius is heavily dependent on imports for both consumption (food products) and production (raw materials, capital goods and other inputs) purposes. Sustained trade liberalization has resulted in an open import regime. However, this has not been reflected in a constant rise in the import-GDP ratio. As Figure 5 shows, the share of imports in GDP exhibited high volatility in the 1980s but trended steadily downwards from 1987 to 2004, after which it showed a tendency to rise. These changes are potentially due to exchange rate movements: the fluctuations in the import share in the early 1980s can be attributed to the devaluations of 1979 and 1981 while the upward trend since 2004 may be due to the pronounced depreciation of the rupee in recent years.

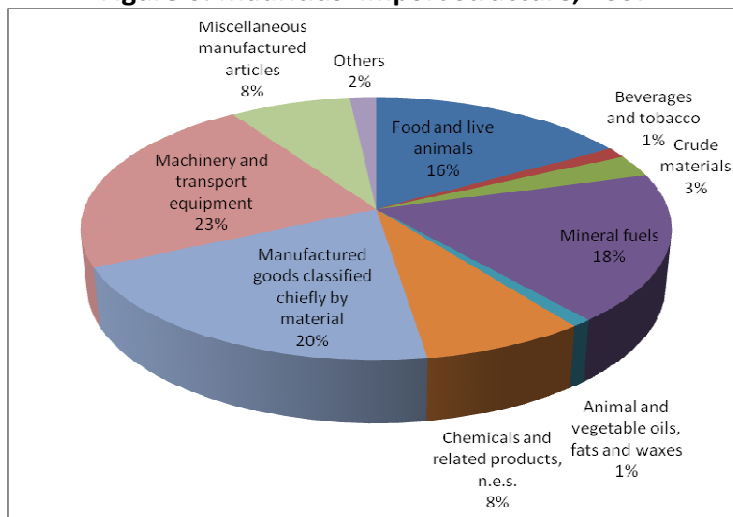
Figure 5: Share of imports in GDP, 1980-2008 (percent)



2.2.2.2 Structure of imports

Figure 6 shows Mauritius’ main imports in 2007, giving a visual appreciation of the significance of each product group in total merchandise imports. Mauritius imported about US\$ 4 billion of goods in 2007. These goods are rather evenly distributed across the entire SITC range. The four most important import products are machinery and transport equipment, manufactured goods classified by raw materials (including wearing apparel, footwear, plastic and leather products), mineral fuels (mainly oil) and food products.

Figure 6: Mauritius’ import structure, 2007



2.2.2.3 Sources of imports

Europe has traditionally been Mauritius' main import partner, accounting for 26% of total imports in 2007 as shown by Figure 7 below. Within Europe, France (10.6 %) is the most important supplier. However, country-wise, India (21%) is Mauritius' dominant source of imports, followed by China (11%) and South Africa (7%).

Figure 7: Main sources of imports, 2007

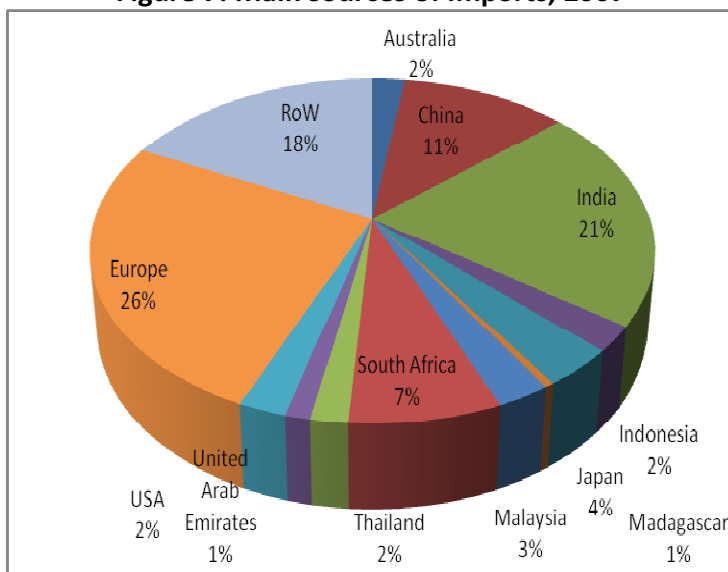


Figure 8 shows the rapid emergence of China as one of Mauritius' key import partners over the period 1995-2007. Casual inspection of the graph indicates a turning point in 2001, with imports growing more rapidly than before. Indeed, between 2001 and 2007, imports from China increased more than 3-fold, placing the country into a comfortable second position, ahead of South Africa, which has been a traditional source of imports at the regional level. At current trends, China will soon be competing for first place with India.

Figure 8: Imports from China, 1995-2007 (US\$ millions)

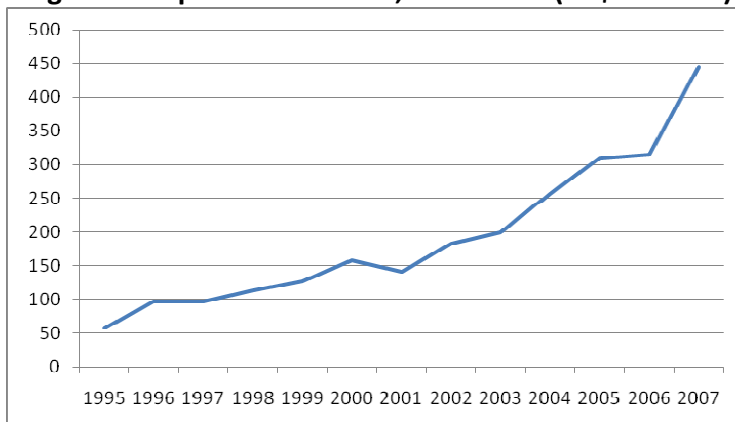


Table 5 shows Mauritius' imports from China by commodity groups for the years 2000 and 2007. Imports of textiles (SITC 6), of machinery and transport equipment (SITC 7) and of miscellaneous manufactured goods (SITC 8) have made up over 90 percent of total imports from China since 2000. Altogether, China is at the present the biggest supplier of manufactured products (SITC 6 + 8) to Mauritius.

Wearing apparel represented less than 4 percent of imports from China in 2007; yet this product category has posted the highest growth in percentage terms, increasing 5-fold between 2001 and 2007. Thus, Mauritius has been no exception to the global invasion of Chinese clothing. In the textiles sub-sector, however, Mauritius has reduced its dependence on Chinese yarn and textiles as it undertook massive investments in local spinning capacity. Consequently, textile imports from China have fallen from a peak of US\$ 100 million (representing 54.6 percent of Mauritius' imports from China) in 2002 to US\$ 72 million (equivalent to 19 percent of total imports) in 2008. In 2005, imports of machinery and transport equipment displaced textile imports as the singular most important import category from China.

Table 5: Mauritius' imports from China (value and shares) by commodity groups, 2000 and 2007

Section	Description	2000			2007		
		China (US\$ Mn)	Total (US\$ Mn)	China's share of total imports (%)	China (US\$ Mn)	Total (US\$ Mn)	China's share of total imports (%)
0	Food and live animals	12	264	4.55	12	645	1.86
1	Beverages and tobacco	0.06	14	0.43	4	49	8.16
2	Crude materials except fuels	2	63	3.17	6	108	5.56
3	Mineral fuels, lubricants and related materials	0.22	245	0.09	0.12	716	0.02
4	Animal/vegetable oil/fat/wax	0.05	17	0.29	0.04	37	0.11
5	Chemical and related products	5	158	3.16	20	297	6.73
6	Manufactured goods classified chiefly by material	106	668	15.87	195.5	798	24.50
7	Machinery and transport equipment	13	465	2.80	113	881	12.83
8	Miscellaneous manufactured articles	20	185	10.81	79	306	25.82
9	Commodities not elsewhere classified	-	0.18	-	14	49	28.57
	Total imports	158.33	2079.18	7.61	443.66	3886	11.42

Source: Author's computation using UN COMTRADE data

2.3 Trade Policies of Mauritius and China

2.3.1 Trade Policy of Mauritius

2.3.1.1 Import regime

Trade policy in Mauritius has, to a significant degree, shaped the country's path of industrial development, contributing to over two decades of steady growth and propelling the country into the ranks of the upper middle-income economies. Being a small island economy, with limited endogenous natural resources, Mauritius has consistently sought to maintain an

outward-oriented trade strategy – centred on the EPZ concept – since independence in 1969. This strategy permeates the local industrial landscape. It has guided trade policy in Mauritius and motivated the on-going process of trade reform that started in the 1980s.

The industrial impetus in Mauritius started off in 1964 with the Development Certificate (DC) scheme – a strategy that aimed at fostering import-substituting manufacturing activities. This strategy opened the gates to protectionism, which became a constant feature of the domestic economy for years to come. However, import substitution had limited success in terms of its contribution to employment and growth. Moreover, it entailed large efficiency losses (Milner and McKay, 1996) and a severe anti-export bias (Greenaway and Milner, 1986). These considerations led to the search for an alternative development paradigm.

The post-independence (1969) policy thrust thus began with the establishment of an export-processing zone (EPZ). The EPZ Act of 1970 created a special regime for firms catering exclusively to the export market. The original intent was to woo foreign direct investment into the zone by offering incentives such as duty-free imports of machinery, raw materials and other inputs, substantial tax holidays, subsidized power rates and factory space, free and unlimited repatriation of profits and dividends, and access to concessional credit.

Starting in 1978 and through the early 1980s, the government implemented a structural adjustment programme, which, among other measures, entailed a devaluation of the rupee in 1979 and subsequently in 1981. Trade reform started in 1984 and continues to date in a gradual and sequential manner that has ensured the sustainability of the process. Government signalled its firm commitment to free trade by announcing – in the 2005-06 Budget – an ambitious project to make of Mauritius a “duty-free island”. To that effect, and as a starting point, import duties were reduced or abolished on a wide range of imported goods, and the maximum *ad valorem* tariff rate was reduced from 80 percent to 65 percent.

As a result of sustained trade liberalization over the past years, Mauritius currently boasts the most liberal trade regime in Sub-Saharan Africa. The simple average MFN tariff rate (including *ad valorem* equivalents – AVEs) was 6.6 percent in 2007, down from 19.9 percent in 2001 and 60.3 percent in 1989. The top *ad valorem* tariff rate has been brought down to 30 percent and the number of bands has been progressively reduced to 4 (0, 10%, 15% and 30%). About 80 percent of all tariff lines were duty free in 2007 and less than 5 percent of tariff lines attracted AVE rates in excess of 30 percent. Tariff peaks still exist in sensitive sectors (for example, textile products and footwear) but these are likely to fade out as Mauritius readies for the programmed duty-free island. Tariff escalation persists, albeit in reduced magnitude, and is most visible in textiles and apparel, wood products, chemicals, and plastics. Mauritius applies no tariff rate quotas on imports.

Progressive tariff cuts and the elimination of the differential regime for EPZ and non-EPZ enterprises following the Business Facilitation Act mean that all firms, whether domestic- or export-oriented, face the same incentives and, as such, the anti-export bias that characterized the trade regime until the 1980s has largely been removed. In fact, given the current policy of encouraging even import-competing firms to explore export possibilities, and to regard SMEs

producing for the local market as potential exporters, one may be inclined to conclude that the prevailing trade regime entails a *pro-export bias*.

At the regional level, Mauritius is a member of several RTAs in Africa, including the Southern African Development Community (SADC), the Common Market for Eastern and Southern Africa (COMESA) and the Indian Ocean Commission (IOC). It views its membership in regional groupings as a means to leverage its negotiating position in international trade forums in addition to promoting trade and cooperation.

2.3.1.2 Export regime

Mauritius boasts a permissive export regime. Exporting is relatively easy, and recent policy changes have made it even easier. Registration requirements are the same as for importers: exporters must be registered with the relevant authorities, must electronically file a customs declaration and must provide supporting documents. There are no taxes, levies or charges on exports. Export permits are required only for a narrow set of products considered “strategic” or “sensitive” to the economy and goods that receive preferential treatment in importing countries (such as sugar in the EU, and textiles and clothing in USA and Canada). With the notable exception of chilled fish, export quotas are virtually inexistent.

Major reforms have been brought to export incentives schemes with a view to simplifying the export regime and improving its efficacy as well as to comply with WTO regulations. The Export Enterprise Scheme, Freeport Scheme, Export Promotion Scheme, and Pioneer Enterprise Scheme were notified to WTO as containing export subsidies. However, these and several other incentive schemes were repealed by the Finance Act 2006. Only the Freeport scheme remains in force.

The Export Enterprise Scheme (better known as the Export-Processing Zone (EPZ) scheme) has been the single most important scheme in Mauritius since 1970. It may be credited as being the catalyst of the industrial development that the country has witnessed since independence. However, the Finance Act 2006 entailed an abrogation of the Industrial Expansion Act 1994, which incorporated the EPZ scheme after amendments. Henceforth, all export-oriented firms, including SMEs, as well as enterprises producing for the local market but with some potential to export to the region, will be treated at par.

The institutional landscape in Mauritius is rich with organizations dedicated to promoting industrial activity, exports and FDI. These organizations have, over the years, undergone significant transformations with a view to making them more specialized and efficient. Enterprise Mauritius (EM) was established in 2005 as a partnership between the government and the private sector, taking over functions of the former Mauritius Export Development and Investment Authority (MEDIA) and the Export Processing Zone Development Authority (EPZDA). It offers an integrated range of services, including technical and management consultancy, market research and marketing assistance, counselling and networking, to existing exporters or firms that wish to export regionally or internationally. EM houses the Textile and Apparel Development Centre which provides expert advice on technology upgrading and training to

firms and workers in the textile industry. Following the Finance Act 2006, Enterprise Mauritius has been mandated to work with both EPZ and non-EPZ firms, and with exporters of goods as well as of services. EM also operates several specialized funds, including the Enterprise Development Fund (EDF) – designed to assist businesses to access external resources and expertise not readily available to them – and the Textile and Apparel SME Package – designed to provide business development assistance to SMEs operating in the sector.

The Small Enterprises and Handicraft Development Authority (SEHDA) is a relatively new organization, born out of the fusion of the Small and Medium Industries Development Organization (SMIDO) and the National Handicraft Promotion Agency (NHPA). SEHDA offers business counselling and facilitation, skills development, information and marketing services to SMEs. While most of these firms are locally oriented, SEHDA's aim is to encourage them to explore export opportunities once they have established a firm reputation domestically.

2.3.2 China's trade policy

2.3.2.1 Import regime

Trade policy reforms in China started in the 1990s as an integral part of the process of economic reform, and much like the latter, the reforms were complex and gradualist but steadfast. They were motivated partly by the recognition that trade could be a potent engine of growth and partly by the process of China's accession to the WTO.

The pre-reform trade regime was dominated by some 16 foreign trade corporations (FTCs), which effectively operated as monopolies in the import and export of specified products. Little use was made of traditional trade policy instruments such as tariffs, quotas and licenses since import levels could be controlled tightly through the FTCs.

The reform process rested on four pillars: (a) increasing the number and type of enterprises, other than the FTCs, eligible to engage in trade; (b) developing the trade policy instruments to control trade as state-owned monopolies waned; (c) removing exchange rate distortions; and (d) reforming prices (Ianchovichina and Martin, 2001).

The number of companies with trading rights has expanded into thousands and they operate much along commercial lines. However, trade is still tightly restricted for two broad groups of commodities. The first group is subject to state trading, and the second group to "designated trading" (whereby trading rights are restricted to a small number of firms, which in turn have geographically restricted trading rights).³ A two-tier system was introduced as a transitional device to reduce the distortions in both commodity prices and exchange rates. The system was abolished in 1994, with the exchange rate unified.

Significant tariff liberalization, especially in the 1990s, has brought the simple average MFN tariff rate across all products down from 42.9 percent in 1992 to 9.7 percent in 2005. The year

³ Key products in the first group include grain, sugar, oil, fertilizers, cotton and silk, among others. The second group comprises of products such as rubber, timber, wool, acrylics and steel.

1994 was a turning point in the process, and in 1997, the mean tariff rate fell, for the first time, below the 20-percent cap. In recent years, however, tariff liberalization has slowed down, with tariff rates remaining constant between 2005 and 2007. During the negotiations for WTO accession, China committed to bind all agricultural and industrial tariffs – a commitment that it carried through. However, it had also committed to reducing MFN tariffs below the current levels. For example, average MFN tariff on manufactures was to be reduced to 6.95 percent (USTR, 1999). Yet, eight years on, the mean applied tariff rate for industrial products has stabilized at 8.8 percent, with little indication that it would fall in the near future.

On the other hand, non-tariff barriers have continued to decline. By some estimates, the number of product lines subject to quotas and licensing decreased from 1247 in 1992 to 261 in 1999 (Ianchovichina and Martin, 2001). The protective impact of the NTBs was estimated at 9.3 percent in the mid-1990s (World Bank, 1997). Although no recent estimates are available, it is clear – both by the extent of dismantling of NTBs and by China’s commitment not to introduce new NTBs during the accession process – that the non-tariff protection has declined sharply, and continue to do so. Quantitative restrictions were eliminated on January 1, 2005, and controlled products were shifted to a system of automatic import licensing. The number of HS8-digit tariff lines fully subject to import licensing fell from 90 in 2004 to 10 in 2007 (covering less than 0.1% of tariff lines).

China’s trade regime is far from being qualified as open. There is a rather wide dispersion of tariff rates, with 2.6 percent of tariff lines in 2007 posting tariff peaks and 15.6 percent bearing tariffs in excess of 15 percent while 8.6 percent of tariff lines were duty-free. Tariff quotas are applied on 0.6 percent of tariff lines. While this may be qualified as inconsequential, it is worth pointing out that the TRQs apply to some very sensitive products like wheat, maize, rice, sugar, wool and wool tops, cotton, and chemical fertilizers. Hence, the effective rate of protection yielded by the TRQs may be significantly larger.

China offers preferential tariffs to a number of trading partners under its regional or bilateral agreements. China is a member of the Asia-Pacific Trade Agreement (APTA) and of ASEAN, and offers preferential tariffs to Hong Kong and Macao under the Closer Economic Partnership Agreements (CEPAs). China has also signed bilateral trade agreements with Pakistan and Chile. However, the preferential or ‘agreement’ tariffs are not considerably lower than the MFN rates, suggesting that trade liberalization in the context of regional trade agreements has not been deep. In 2007, for example, the average preferential tariff under APTA was 9.1 percent, and ranged from 6 to 9 percent for ASEAN members. These rates are close to the MFN average of 9.7 percent. The same is true of the unilateral tariff preferences that China presents to 37 LDCs, including 28 from SSA under the Special Preferential Tariff Treatment (SPTT).

2.3.2.2 Export regime

China’s export regime has become increasingly restrictive in recent years. A complex web of measures, including export taxes, VAT concessions and rebates, export prohibitions, restrictions and licensing, state trading and various export incentives, are used to restrict exports of a growing number of products. While some of these export restraints are applied to meet China’s

international obligations⁴, many are implemented either to reduce exports of products that are highly energy-consuming and polluting (such as mineral products, metals, chemicals, and iron and steel) or to ensure adequate domestic supply or to reduce China's huge trade surplus with a view to reducing trade friction.

China is often blamed for using unfair means to give a competitive edge to its exporting firms. However, our reading of the literature does not provide any indication that this is the case. Indeed, as shown above, China has used a variety of measures to restrict, rather than promote, exports. Nevertheless, China does provide support to exporting firms as part of its national export promotion strategy. Exporters enjoy tax concessions, export finance through the EXIM Bank, export credit insurance through the China Export & Credit Insurance Corporation (SINOSURE), and sponsored participation in export fairs through various institutions and funds.

2.3.3 Trade policy between Mauritius and China

In January 2005, the Chinese government launched the SPTT, a scheme that removes tariffs on some 190 products exported by 25 African LDCs to China. The number of items exempted from tariff under the SPTT was increased to 440 in November 2006. Available evidence, albeit preliminary (see Wang, 2007, for example), suggests that the SPTT has proved effective in boosting African exports to China. China is currently negotiating a free trade area with the Southern African Customs Union (SACU).

There is no special trade agreement between Mauritius and China at the time of writing. However, such an agreement is in the offing, motivated probably by the large trade deficits in China's favour and the growing economic ties between the two countries. Information obtained from the Ministry of Foreign Affairs suggests that the Mauritian government has submitted to the Chinese authorities a request to open discussions on a possible trade agreement. No further information is available but it transpires that negotiations on a trade agreement between Mauritius and China are not high on the Chinese government's agenda.

2.4 Non-trade relations between Mauritius and China: A brief discussion

Mauritius has a well diversified economy, and the government has led the way in seeking out new activities in which the country could potentially cultivate a competitive advantage. The strategy is to harness Mauritius' strengths – educated labour force, rich endowment of marine resources, experience in the tourism sector, and the island's strategic location as a bridge between Asia and southern Africa – to develop the country as a multi-sector hub in seafood, medical tourism, and higher education and training. The structural changes in the economy have helped reduce vulnerability to external shocks, and future developments are likely to contribute further to enhancing the country's economic resilience. For example, Mauritius, while adversely hit by the financial crisis, has effectively weathered the storm as evidenced by

⁴ These obligations include restrictions on exports of textiles and automobiles until end-2008 under separate agreements with the EU, USA and South Africa, and restrictions on pollution-intensive products, drugs and chemical weapons under various international treaties.

the 5.6 percent real GDP growth recorded in 2008. In 2009, economic growth will be slower but will remain comfortably in the positive territory.

It is perhaps this resilience that has allowed Mauritius to face up to China. In the scoping study, we argued that China's negative impacts on the Mauritian economy have been minimal but that China can offer opportunities for investment, job creation, and export growth and diversification as the Chinese government strategically uses Mauritius as a gateway to Africa. This development is the result of a long friendship between Mauritius and China, aided by the cultural affinity between the two countries and by Mauritius' overt support for the 'One China' policy since 1972.

China's influence on the Mauritian economy is broad and significant. Mauritius has benefited from Chinese technical assistance in the field of agriculture and infrastructure. The two countries signed an Investment Promotion and Protection Agreement in 1996. Investment from China is rather limited at the time of writing, but China's presence is notable in the textile industry with two large firms engaged in cotton spinning and knitting. However, Chinese investment will get a massive boost with the setting up of a Trade and Economic Zone near the Mauritius port. The total cost of the so-called Jin Fei project is estimated at US\$ 530 million and is expected to attract Chinese investors in a wide range of sectors, including textile and apparel, light engineering, manufacturing, fish processing, and high-tech operations. Another Chinese company plans to invest Rs 200 million (about US\$ 7 million) in a paper recycling project for the production of toilet and photocopy paper. These projects, once operational, will have a significant impact on Mauritius' exports since the objective of the Chinese firms is to cater to the regional market, taking advantage of Mauritius' privileged market access.

Mauritius sees China as a partner in development but is also aware of the challenges that it represents. These challenges become more visible when the investment and aid channels of China's economic involvement are omitted, leaving only the trade vector to focus on. We show that these impacts have been both direct – through imports – and indirect – through competition on export markets, and in both cases, the effects have been largely negative. While, in theory, there is scope for Mauritius to tap the huge export potential that the Chinese market offers, in practice, exports to China have remained negligible through the years. However, it will be unfair to say that China's dominance in trade has been only deleterious to the Mauritian economy.

3 Literature Review

3.1 Theoretical Literature

Sino-African trade relations may be well explained by the classical theory of comparative advantage. Africa exports to China are predominantly natural resources and, on the other side, Chinese exports to Africa consist of low-cost manufacturing and machinery. The effects of these trade relationships for the manufacturing sector are very complex and we need to consider some of the founding principles of the 'new trade theories' such as the fragmentation of production and the presence of increasing returns to scale. In this regard, having in mind the case of Africa, Collier and Venables (2007) affirm that fragmentation, that is the splitting of the production process along the various stages of the value chain, means that comparative advantages reside in more narrowly defined tasks and that the same competitive advantage "...is, in part, acquired rather than fundamental" (Collier and Venables, 2007, p. 1330) because of, for example, the positive externalities arising from learning when production occurs in spatial agglomerations (clusters) of specialized firms.

There are a variety of different channels through which individual countries interact with other economies, in their regions and elsewhere. Clearly, these channels are contingent – they change over time, and vary in importance depending on factors such as location, resource endowment, trade links, and geo-strategic significance. China will affect other countries in a number of ways. Countries producing goods highly demanded by China (e.g., oil and minerals) may see significant growth in their exports; those exporting products in competition with Chinese output (such as clothing) will see exports fall, while countries importing those goods will gain from lower prices. If the importers also have domestic industries that are in competition in the local market with Chinese exports, there will be distributional effects (between producers and consumers) and possible knock-on effects on the feasibility of the country's industrial policy. This leads to the rather paradoxical conclusion that the outlook for primary commodity exports is brighter than it has been in the past, while that for manufactured exports is much darker.

It is important to be systematic in assessing the impact of China on SSA, particularly in the context of uneven data availability. To obtain a unified perspective on China's impact on the African continent, we need to integrate the various transmission channels. There are three main channels through which China is affecting SSA, namely (1) trade flows, (2) FDI flows, technology transfer and integration in global value chains, and (3) aid flows (Kaplinsky, McCormick and Morris, 2008). However, these are not the only channels through which a given country or region may have an impact on another country or region (IDS, 2006). For example, there may be impacts transmitted through the environment, through financial flows, or through participation in institutions of regional and global governance. The three most-exploited channels, that is, trade, investment and foreign aid, appear to be particularly pertinent for investigating China's impacts on Africa at the present. These impacts have been classified as direct or indirect and complementary or competitive.

Firstly, the main direct impact channel can be discussed in terms of growth of African exports to, and imports from, China. The first impact has generally been positive for resource-abundant countries, which have seen their exports oil and minerals to China increase rapidly. On the downside, however, China has forced these countries to concentrate in commodity exports, delaying the much needed diversification into manufactures. Consumers have largely benefited from cheap Chinese imports, even though the increase in consumer welfare needs to be adjusted for the poor quality, and sometimes hazardous nature, of Chinese products. On the other hand, local industries have been exposed to greater import competition, many of which have not survived it. Similarly, the direct effects of Chinese FDI can be complementary or competitive. While Chinese investments in infrastructure and in productive sectors have been most welcome, FDI in the extractive industries have only had the effect of quenching China's thirst for natural resources while exposing the host economies to the disruptive effects of a Dutch disease-induced real currency appreciation.

The indirect effects, especially through the trade channel, have been particularly adverse for countries competing directly with China in third markets. This is the case, for example, of apparel exports from Lesotho, Madagascar, Kenya, Mauritius and South Africa. Moreover, China can exert an indirect impact on a country by pushing up the prices of primary commodities regardless of whether that country exports to China. This impact will be positive for major commodity exporters; however, net commodity importers will find their terms-of-trade deteriorate. While the direct impacts are easier to measure, the indirect impacts are less obvious and require more disaggregated data (Jenkins and Edwards, 2005).

A simple model of a small open economy developed by Corden and Neary (1983) can be used to examine China's impact on African economies and to assess the potential Dutch disease implications (Zafar, 2007). The model divides up the economy into three sectors: a nontraded good sector (which includes services), a booming tradables sector (usually the extraction of oil or metals), and a lagging tradables sector (including other manufacturing and agriculture). Under this framework, a natural resource windfall (for example, due to a China-induced increase in world prices) will have two major consequences. First, a resource movement effect will result from the increased demand for labor and capital in the booming tradables sector (extractive industries) and away from the lagging nontradables sector. Second, a spending effect will occur as the booming export sector increases the demand for and prices of services in the nontradables sector, generating upward pressure on the real effective exchange rate and further weakening the lagging sector. In the Dutch disease scenario, the natural resources boom will lead to an increase in national income, but will paradoxically lead to deindustrialization (or "deagriculturalization") and have an adverse effect on the competitiveness of the country's other exports. As a consequence, natural resource economies will tend to have larger service sectors and smaller manufacturing sectors than resource-poor economies.

The model's longer-run predictions about the impact of China on SSA economies depend on each country's factor endowment and comparative advantage. After a commodity boom, resource-abundant countries will tend to become more intensive in resource-based exports and

less intensive in lower-end, labor-intensive manufactures. Moreover, resource-rich countries will tend to finance inefficient economic policies by selling their resources on the market. However, following Sachs and Warner (1999), there is either a possible “big push” potential of commodity booms if the nontradables sector generates increasing returns or a risk of further deindustrialization if the tradables sector is the one that generates increasing returns. By contrast, in the case of resource-poor economies (which have only one tradables sector and one nontradables sector), a China-induced negative terms-of-trade shock will cause a contraction of the tradables sector along with an adverse effect on the nontradables sector. In sum, the impact of China on Sub-Saharan economies will depend critically on the country’s factor endowments.

A second potential channel of Chinese influence on Africa is through China’s effects on global prices, interest rates, and commodity prices. First, China has helped to maintain low interest rates and bond yields through its financing of the U.S. deficit. Second, by contrast, supply-side factors in China are creating downward price pressures in a number of industrial sectors globally, including light manufactures like textiles and clothing, and high-technology products (IMF, 2003) resulting in major terms-of-trade effects. China has become a key driver of price dynamics in the metals market (IMF 2006). It is the world’s largest consumer of steel, copper, coal, platinum, and cement. Offsetting its downward impact on prices of global manufactures, rising prices for steel, soybeans, copper, oil, and platinum due to China’s large appetite are affecting exporting countries’ terms of trade.

China has had asymmetric effects on Sub-Saharan African economies and has contributed to widening the differential in the terms-of-trade indices of resource-rich and resource-poor economies. The impact of China on a country’s terms of trade is a direct function of five key variables: the commodity composition of the country’s trade (especially the percentage of oil or metals in its export basket), the importance of textiles in its overall trade, the relationship between world supply and world demand for the commodity, the dependence on imported oil, and the percentage of the increase in world demand for the commodity that is accounted for by China. China’s effect on commodity prices has influenced macroeconomic performance and growth in these countries (Zafar, 2007).

In addition, China’s large dollar reserves could result in a fall in the dollar that would erode the price competitiveness for many African economies, whose currencies are not pegged to the dollar. The economies that would be most affected by a plummeting dollar would be the 14 Francophone economies of the CFA Franc zone, which are currently pegged to the euro and which would see a deterioration in their trade balances. Already since 2000, the strong euro has had an adverse effect on the real effective exchange rates of the two CFA zones and has hurt their competitiveness (Zafar, 2005). The oil-exporting countries of Africa—Angola, Gabon, Nigeria—and most commodity producers on the continent could be negatively affected, because their export revenues are priced in dollars, and the cost of imports, mostly of European origin, are euro-denominated. Central bankers in many African economies, particularly in the rand zone, will have to make exchange rate adjustments in the case of a fall in the value of the dollar.

China has been providing aid and debt relief to many African countries. China provides ODA in the form of grants, interest-free or low-interest loans (i.e., preferential loans that have an interest subsidy) and repayment is rescheduled if necessary. China's aid program also includes technical assistance, with an emphasis on agricultural technology and training in Chinese institutions. China's ODA has focused on social and humanitarian projects, such as hospitals, schools, low-cost housing, sport venues, and library and government buildings, and often is delivered in kind. ODA has also been used for infrastructure construction and agricultural development. Aside from intergovernmental loans, there are other debt-creating financial flows from China to Africa, mainly trade credits, some of which are medium- and long-term.

China also exerts an indirect effect on economic management in Africa through the effects of its financial and trade policies on the international macroeconomic environment. As a global price-setter, its actions have major repercussions on world interest rates, output, and inflation. The Chinese have directly contributed to macroeconomic management in Sub-Saharan Africa by helping create the large commodity booms that have resulted in the inflows of capital into the continent (Zafar, 2007).

Rather than analysing the direct and indirect impacts of China on SSA, Kaplinsky, McCormick and Morris (2008) set out a coherent framework which analyses China-SSA relations to be either complementary or competitive (or indeed both). This distinction between complementarity and competitiveness is more apparent than the distinction between the direct and indirect impacts and its significance is also less widely known. In the case of the trade channel, for example, China may provide SSA with appropriate capital goods and cheap consumer goods, and SSA may supply China with the commodities it requires to fuel its continued economic expansion. The relationship is complementary because both countries gain from it. On the other hand, China's export of consumer goods to SSA may displace local producers, leading to competitive impacts on workers and entrepreneurs in these sectors. Both complementary and competitive impacts occur as a result of direct bilateral relations between China and SSA. These impacts can be measured by charting the direct trade flows between China and SSA, and breaking these down by sectors and countries and over time. The indirect impacts occur as a result of China's relations with third countries, working their way indirectly through to SSA. China's demand for commodities may raise their prices at a global level, and even though a country like Ethiopia does not export animal feed to China (a direct relationship), it sells animal feeds into a global market in which prices have been raised by China's growing imports (indirect impact). It may happen that the indirect impacts of China on SSA are sometimes much more substantial than the direct impacts. However, almost all of the analysis of the impact of China on SSA focuses on direct, bilateral relations, and hence tends to miss some important issues.

Table 6 integrates these three sets of factors – channels, complementary-competitive impacts, and direct-indirect impacts – into a synthetic framework which can be used to assess the overall impact of China on SSA.

Table 6: A Synthetic Framework for Assessing the Impact of China on SSA

Channel	Impact	
Trade	Nature of Impact	Description
	Complementary	Imports of cheap consumer goods from China; Exports of commodities to China
	Competitive	Imports from China displace local producers Exports on third markets affected by the presence of China in these markets
FDI	Complementary	Inflows of FDI from China
	Competitive	Competition for US/EU FDI from Asian Drivers
Aid	Complementary	Loans from China to governments and private sector
	Competitive	Low-cost finance from China displaces local financial intermediaries
Global Governance	Complementary	Support for Development Round from China in WTO
	Competitive	China side with EU in WTO
Migration	Complementary	China's migrants intermediate complementary trade with home countries
	Competitive	China's migrants displace local entrepreneurs
Environment	Complementary	China cooperate in regional water projects
	Competitive	China as significant motors of global climate change

3.2 Empirical Literature

Measuring Direct Impact

Using the "Trade Complementarity Index", the World Bank (2004a) concludes that, on the basis of existing economic specialization, the potential for future bilateral trade growth with China is not strong, but can become so if China's growing demand for commodities is to be sustained. This evidence on the direct trade links between China and SSA, suggests that on the export side SSA gains from China's demand for commodities, and on the import side, it gains cheap and appropriate consumer and capital goods. Outside of textiles, timber and cotton, there seems to be little trade between China and SSA in intermediate goods and little incorporation of China and SSA into coordinated global value chains.

Jenkins and Edwards (2005) analyze the impact of growing relations between Africa and the two Asian giants, China and India on poverty in 21 Sub-Saharan African countries. Their results reveal that the African exports to China does not have a significant impact on poverty in Africa since their exports are mainly concentrated in products like minerals, oil and wood. China is, however, a threat for SSA countries in terms of competition on third markets essentially in manufactured goods. In terms of imports, countries such as Ghana, Uganda and Tanzania, which import a relatively high proportion of basic consumer goods from China and India, are likely to experience a significant rise of the real income of the poor because of cheaper imports. It also seems that, except for Ethiopia and Nigeria, most of the imports coming from China have

replaced imports coming from outside the region. This has led to a low negative effect on employment and local activity.

Further, Kaplinsky and Morris (2007) emphasize that the presence of China in Sub-Saharan Africa is mainly motivated by the search for raw materials (oil and other commodities) necessary to support the development of its manufacturing industry and its investments in infrastructures. Whilst Chinese presence has given a positive impetus to some exporting sub-Saharan economies in primary goods, its impacts on the manufacturing industry (whether it is intended for the domestic market or export) have been unfavourable. Even some of the advantages linked to the boom of the prices of commodities are ambiguous because they are often associated with a rise of foreign exchange rates, corruption and violent conflicts. When examining the indirect impact of Chinese growth on the textile sector of SSA, they observe that following the removal of the Multi Fibre Agreement, clothing exports of Africa are losing competitiveness in the face of Chinese supply. In particular, exports of textile products bound for the United States are dropping for African countries which are beneficiaries of AGOA whereas there is a rise for exports from China between 2004 and 2006.

Egziabher (2007) assess the impact of China on the economy of Ethiopia and also the adaptation strategies adopted by local enterprises to face foreign competition from the Asian giant. They use data for small and medium enterprises of the shoe manufacturing sector. Their findings reveal that the arrival of Chinese products impacts significantly on the sector and threatens the competitiveness of local enterprises on the domestic market. Indeed, Chinese shoes are superior in design and have a higher quality-price ratio than those produced locally. The impacts of Chinese imports on the sector vary from a drop of activity to collapse, loss of ownership or switching to the informal sector. The results also show that enterprises which have implemented adaptation strategies can resist the Chinese competition by improving design and quality, lowering prices and profit margins or mixing different policies. These adaptation strategies differ in relation to the size of enterprises.

Kaplinsky and Morris (2008) report that domestically produced clothing and furniture manufactures in both Ghana and South Africa are being displaced by imports from China. Similar anecdotal evidence can be found with regard to clothing and footwear manufacture in many SSA economies. For example, in Zambia the trade unions assert that imports of Chinese clothes have undermined the clothing and electrical sector, and in Nigeria trade unions blame Chinese imports for the loss of 350,000 jobs. In Ethiopia, although competition from Chinese shoe imports has led to an upgrading of processes and design by many domestic firms, it has simultaneously had a negative impact on employment and domestic output. A study of 96 micro, small and medium domestic producers reported that as a consequence of Chinese competition, 28 percent were forced into bankruptcy, and 32 percent downsized activity. The average size of micro enterprises fell from 7 to 4.8 employees, and of SMEs, from 41 to 17 (Tegegne 2007)

Kaplinsky and Morris (2008) further examine the impacts of the rapid economic expansion of China and India on the export industries of Sub-Saharan African countries. They show that the

entry of China (and to a lesser extent, India) as a large exporter of manufactured goods in the world economy raises serious problems for the growth of the export industry in SSA. From their analysis, they argue that without a sustained policy with relation to the Asian producers, Sub-Saharan Africa's textile and clothing industries will be excluded from the world markets and will face serious threats on the domestic market. This can further have a generalised impact on other sectors, especially on low income producers.

Measuring the Indirect Impact

A number of attempts have been made to assess the impact of indirect trade links. They have focused on their effects on product prices (Kaplinsky and Santos-Paulino 2006), the similarity (or lack of it) between SSA's and China's exports (Jenkins and Edwards 2006), and the identification of winners and losers from trade with China (Stevens and Kennan 2006).

Jenkins and Edwards (2006) for instance, argue that most of these imports into SSA have substituted for imports from outside of SSA, with the possible exception of Ethiopia and Nigeria, suggesting little displacement of domestic production and few negative impacts on employment and local production. The analyze of Jenkins and Edwards is, however, conducted on 3-digit SITC trade data which involves important aggregate trends and hides some important specific impacts which only show up with different, firm-level methodologies.

Stevens and Kennan (2006) use much more disaggregated trade data (6-digit HS classifications) to investigate the impacts of trade relations with China on small economies. Trade complementarity indices were used to analyze the direct and indirect effects of most traded products on between China and Sub Saharan Africa. Seven imported products (animal feeds, chemicals and five other primary products) and eight products exported by China (ferrous metals, aluminium and six manufactured goods) were selected. Then, they determine for each product the principal importing or exporting countries in Sub-Saharan Africa. Those countries which are most likely to benefit are those which export the products that China imports (an opportunity for extension of the market) and those that import goods exported by the Chinese (prices drop). The losing countries are those which export products exported by China (competition of exports and lower prices) or those which import products imported by China (increase in prices). Their results show that more countries in SSA win rather than lose from the China-Africa trade link. Most of the gains come from the imports of goods that China exports whilst some countries are also winners as they export products which meet the import needs of China. Some countries faced Chinese competition on the export market and not all countries lose by importing the same products as China.

Each of these studies has provided useful insights into the indirect effects of China's trade on Africa, but the fact that most of the analyses are at fairly high levels of trade aggregation tends to mask the severity of China's indirect impact on SSA manufactured exports. The actual impacts are better seen by examining particular sectors and products.

4 Theoretical Framework and Methodology

The study employs a variety of methodological tools, each adapted to the question at hand. More generally, our proposed methodology uses both macro-level and micro-level data and analysis.

4.1 Macro Level Analysis

We draw extensively on secondary data to explain the low export penetration of Mauritian goods on Chinese markets and to examine the impact of Chinese dominance of the global apparel market on Mauritius' clothing exports to third markets.

- (a) We first consider several potential explanations for Mauritius' low levels of exports to China, which are as follows:
- Mauritius' exports are not competitive enough to penetrate the Chinese market;
 - China does not need to import from Mauritius since it produces all that Mauritius exports; and
 - The Chinese market is relatively closed to Mauritian exports due to high tariffs and other non-tariff barriers

We investigate each of the above hypotheses using secondary data from UN COMTRADE. We compute a set of revealed comparative advantage (RCA) indices for Mauritius and China, and show how they have evolved over time. Given the inherent shortcoming of the RCA measure, we provide a complementary assessment based on an analysis of cost competitiveness factors. The Export Similarity Index and the Trade Complementarity Index have also been computed to test the above hypotheses.

- (b) We examine China's impact on Mauritius' apparel exports to third markets using both primary and secondary data. Using disaggregated data on clothing exports from UN COMTRADE, we analyze the product categories where Chinese competition has been most acute.

4.2 Micro Level Analysis

Our micro-level analysis relies on survey methods to extract primary data that shed light on several questions of interest. We survey exporting firms, SMEs catering to the domestic market, and consumers. We also interview key informants in several export-support institutions.

- (a) We support our macroeconomic analysis on China's impact on Mauritius' apparel exports using findings from a survey of export enterprises potentially competing with China on Mauritius' traditional markets, the EU and, to a lesser extent, the US.
- (b) We have so far proposed three hypotheses – not necessarily mutually exclusive – to explain Mauritius' marginal exports to China. A fourth hypothesis is that Mauritian firms

are not interested in exporting to China because the Chinese market is not as lucrative as existing markets, in particular in Europe and the United States. We do this through interviews with key informants in the export sector, including export-support institutions such as Enterprise Mauritius (EM) and the Mauritius Exports Association (MEXA). Mauritian exporters do not see China as a lucrative market or that they perceive exporting to China as cumbersome by virtue of lack of information, cultural differences and the hassle cost of doing business with the Chinese, if any.

- (c) We undertake a consumer survey that seeks to gauge consumers' appreciation of Chinese products in terms of price, quality, reliability and safety, among others. The survey also sheds light on how consumers view locally produced goods relative to competing Chinese imports. The survey covers some 385 consumers. Our sampling strategy involves consumers of different age groups in various occupations. The sample was designed in such a way as to allow for age, gender and occupation of the respondent. A questionnaire was designed to cover the following issues:
- The purchase and use of various types of Made-in-China products by a sample of the Mauritian population over the last five years;
 - Consumer's opinion on the quality and price of Chinese products relative to local goods sold on the domestic market; and
 - Consumers' views on the potential hazardous effects of Chinese goods.
- (d) We study the impact of Chinese imports on the domestic import-competing sector by means of a survey of enterprises, with a focus on SMEs, where the impact has arguably been more severe. We consider a sample of 30 small and medium enterprises from the main sectors where China competitive pressure is significant. Our instrument addressed the following issues:
- The extent of the impact of China on the local firm in terms of employment, domestic sales and exports ;
 - The characteristics of Chinese products that are considered as competitive pressures on the firm; and
 - The main sources of cost competitiveness of Chinese firms relative to the firm.

5 Empirical Analysis

5.1 Macro Level Findings

This section addresses two issues about China's impact on Mauritius' exports. First, we use quantitative analysis based on secondary data and on various computed trade indices to explain the negligible level of Mauritius' exports to China. Three hypotheses are investigated:

- (a) Mauritian goods are not competitive enough;
- (b) China produces (or can produce) all that Mauritius exports, and so need not import; and
- (c) Prevailing trade barriers to Chinese imports make China a less attractive export destination for than other markets.

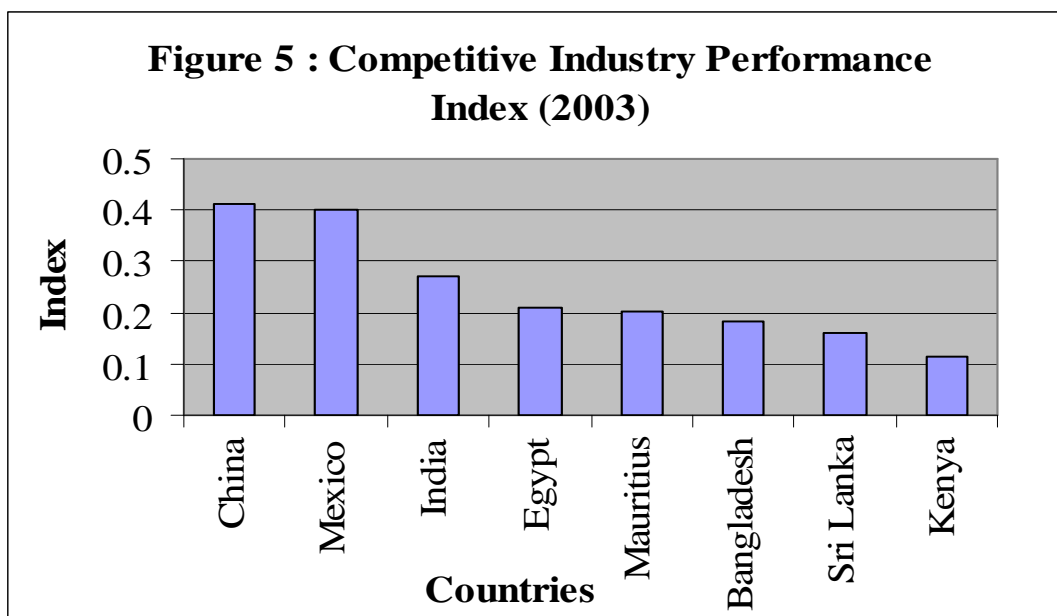
Secondly, we focus on Mauritius' main export product, namely wearing apparel, and consider whether China has competed out Mauritian exporters in third markets, mainly EU and USA. We do this by looking closely at trends in clothing exports by market against the backdrop of changes in the preference regime applicable to Mauritius. Finally, using indices of revealed comparative advantage, we examine whether the local clothing industry is competitive enough to stand up to China.

5.1.1 Explaining the low and declining levels of Mauritius' exports to China

5.1.1.1 How Competitive are Mauritius' Exports to the Chinese Market?

Careful analysis of the cost competitiveness of Mauritius' exports to China requires detailed, firm-level, product-specific data, which is quite beyond the scope of the present study. We therefore approach this question using aggregate, readily available data on the competitiveness position of Mauritius relative to China. Figure 9 shows the industrial competitiveness ranking of Mauritius against select competitors. While Mauritius fares better than some of its competitors, including Bangladesh and Sri Lanka, on this score, it is far behind China, which boasts a score twice as high as that of Mauritius. This confirms the undisputable supremacy of China as a competitive producer and exporter of a range of products.

Table 7 shows the RCA indices for Mauritius and China for select manufactured goods. It is evident that China has revealed comparative advantages in a broader range of products than Mauritius does. Moreover, there were only two products in 2007 – pearls and precious stones, and gold and silver ware and jewellery – for which Mauritius exhibited a RCA while China did not. These two products represent a tiny fraction of total exports – 3.4 percent altogether in 2007 – which implies that Mauritius has very little scope for making an important dent on the Chinese market.



Source: ILO Industrial Development Scoreboard (2007)

Table 7: RCA in selected products for China and Mauritius, 2000 and 2007

SITC level	Product	2000		2007	
		<i>China</i>	<i>Mauritius</i>	<i>China</i>	<i>Mauritius</i>
S3-61	Leather and leather goods	1.091	0.215	0.817	0.122
S3-62	Rubber manufactures	0.829	0.045	1.011	0.058
S3-65	Textile yarn, fabric, etc.	2.436	2.041	2.465	2.293
S3-667	Pearls, precious stones	0.290	2.830	0.229	2.838
S3-7	Machinery and transport equipment	0.790	0.031	1.237	0.164
S3-75	<i>Office machines</i>	<i>1.231</i>	<i>0.011</i>	<i>3.165</i>	<i>0.036</i>
S3-76	<i>Telecom. and sound equipment</i>	<i>1.623</i>	<i>0.009</i>	<i>2.667</i>	<i>0.951</i>
S3-78	<i>Road vehicles</i>	<i>0.298</i>	<i>0.008</i>	<i>0.366</i>	<i>0.012</i>
S3-84	Clothing and accessories	4.591	20.170	3.546	16.182
S3-871	Optical instruments, etc.	2.000	0.003	3.161	0.003
S3-884	Watches and clocks	1.180	1.490	1.294	0.946
S3-897	Gold and silver ware, jewellery	1.994	4.596	0.726	3.656

Source: Author's calculation using UN COMTRADE data

5.1.1.2 Is the Level of Trade Complementarity Between Mauritius and China High Enough to Induce Exports?

For trade to exist between a pair of countries, it must be that one country's exports match the other country's import needs. Moreover, if both countries produce and export the same set of products, it is unlikely that they will export to each other. We gauge these affinities to engage in trade by calculating the export similarity index (where both China and Mauritius are exporters) and the trade complementarity index (where Mauritius is the exporter and China the importer). Table 8 displays the results.

The results are telling. On the one hand, the export similarity indices are relatively high, exceeding 50 percent in several years. On the other hand, the trade complementarity indices are on the low side. These findings, taken together, mean that Mauritius' potential to export to China is limited – both by the fact that the two countries export similar products and that there is a poor match between what Mauritius exports and what China imports.

Table 8: Export similarity and trade complementarity indices between Mauritius and China, 2000-2007

Year	Export Similarity Index	Trade Complementarity Index
2000	51.58	19.89
2001	50.68	21.26
2002	49.50	22.43
2003	47.86	24.48
2004	45.92	26.87
2005	55.79	38.07
2006	55.17	38.67
2007	45.26	29.51

Source: Author's calculations

5.1.1.3 Is the Chinese Market Relatively Closed to Mauritian Exports Due to Prevailing High Trade Barriers?

Chinese MFN tariffs applicable to exports from Mauritius are much higher than those prevailing in Mauritius' traditional markets. As noted earlier, exports to the EU are duty-free and will remain so with the coming into effect of the EPA. Moreover, Mauritius' exports face zero tariffs in the US market under AGOA, which has a limited and uncertain duration. In emerging markets, such as South Africa, trade is subject to FTA preferential tariffs.

We examined the extent to which China's import policy could restrict access to Mauritian exports. We noted from Table 3 that Mauritius is already exporting – albeit in small amounts –

fish, tobacco, textile yarn, and telecommunication equipment. Furthermore, we observed from Table 6 that Mauritius boasts an important revealed comparative advantage in pearls and precious stones, and in gold and silver ware and jewellery. These products or the product groups they belong to are highlighted in Table 9, which shows China's MFN applied tariffs for the year 2007. We note that the tariffs are rather high – averaging 10 percent or more in most of the products. These tariffs, when set against the duty-free status for made-in-Mauritius products in industrial-country markets, provide a potent explanation for Mauritius' marginal exports to China.

There are few non-tariff barriers to Chinese imports. One that could potentially affect Mauritius' exports is tariff-rate quotas on certain sensitive agricultural products, including sugar. However, the impact of these TRQs on actual exports is likely to be insignificant.

Table 9: China's MFN applied duty rates, 2007

<i>Product group</i>	MFN Applied Duty	
	<i>Average (%)</i>	<i>Maximum Allowed (%)</i>
Animal products	14.8	25
Dairy products	12.2	20
Fruit and vegetables	14.9	30
Coffee, tea	14.9	32
Cereals and preparations	24.5	65
Oilseeds, fats and oils	11.2	30
Sugars and confectionery	27.4	50
Beverages and tobacco	23.0	65
Cotton	22.0	40
Other agricultural goods	11.7	38
<i>Fish and fish products</i>	10.9	23
Minerals and metals	7.9	50
Petroleum	5.1	9
Chemicals	6.9	47
Wood, paper, etc.	4.6	20
<i>Textiles</i>	9.7	38
Clothing	16.0	25
Leather and footwear	13.5	25
Non-electrical machinery	8.3	35
Electrical machinery	9.0	35
Transport equipment	11.5	45
Manufactures, n.e.s.	12.2	35

Source: WTO

5.1.2 China's Impact on Mauritius' Exports in Third Markets: A Focus on Apparel Exports

China's main impact has arguably been on Mauritius' exports of competing manufactured products into third markets. Nowhere has competition from China been more acute and disrupting than in the clothing sub-sector. Wearing apparel, which represents over two-thirds of Mauritius' total manufactured exports, is primarily destined for the EU and the US markets. Invariably, the clothing firms are housed within the EPZ and account for the bulk of EPZ exports.⁵

Table 10 shows the main clothing products exported to Europe and US in 2007 (last column). Both markets are heavily concentrated in a narrow range of products. T-shirts are, by far, the single most important item of clothing export, and practically all of it is absorbed by the EU. In 2007, T-shirts made up about one-half of apparel exports. Non-knitted shirts come in second place, far behind T-shirts, followed by knitted shirts and trousers.

Table 10: Main clothing products exported to EU and US, 2000-2007 (US\$ million)

SITC CODE	Product	2000		2005		2007	
		USA	Europe	USA	Europe	USA	Europe
8414	Trousers, bib and brace overalls	71.69	74.80	17.99	22.56	11.81	45.49
8415	Shirts, not knitted	86.96	64.80	66.36	39.84	68.88	43.70
8426	Trousers, bib and brace overalls, breeches and shorts	60.93	16.47	10.07	3.83	8.37	9.05
8427	Blouses, shirts and shirt blouses	6.53	6.21	0.05	5.68	0.92	14.50
8437	Shirts, knitted	3.74	17.49	10.70	16.35	12.28	50.32
8442	Suits, ensembles, jackets, blazers	2.62	12.96	2.82	11.23	0.31	18.75
8448	Nightwear	0.24	0.82	0.67	1.17	1.22	10.40
8453	Jerseys, pullovers and similar articles, knitted or crocheted	13.86	111.68	9.01	67.66	1.88	55.36
8454	T-shirts, singlets and other vests, knitted or crocheted	14.04	272.37	29.57	336.86	8.05	371.23
8455	Female underwear	...	8.26	0.04	8.97	1.07	9.30
84	Total Apparel	283.08	628.17	160.92	543.32	117.19	671.55

Source: Compiled from UN COMTRADE

The clothing industry witnessed a number of closures – mainly of foreign-owned firms – in the run-up to the fateful January 1, 2005, marking the end of apparel quotas. In the scoping paper, we discussed at length the employment impact of this development and explained that the expiry of the MFA is directly responsible for the current socioeconomic plight of apparel workers, mainly female, in Mauritius. In this study, we focus exclusively on the impact on exports.

⁵ Note that, with the harmonization of incentives across sectors brought about by Business Facilitation Act 2006 and the consequent abrogation of the Industrial Expansion Act (1994), the EPZ concept has become officially redundant. We refer to the EPZ in this study for pedagogic purposes only.

Impact on exports

A number of studies had predicted that the end of the apparel quotas would lead to the invasion of industrial country (mainly US) markets by cheap Chinese clothing, leaving little hope for small, less efficient producers to maintain their foothold. A US International Trade Commission (USITC, 2004) study of global competitiveness in the textiles and clothing industry concluded that China is “expected to become the ‘supplier of choice’ for most U.S. importers (the large apparel companies and retailers) because of its ability to make almost any type of textile and apparel product at any quality level at a competitive price”. Mattoo, Roy and Subramanian (2002) predicted that Africa’s apparel exports would fall by over 30 percent following the dismantling of the MFA. Naumann (2006) argued that even the tariff preference that AGOA beneficiaries enjoyed for clothing exports into the US would offer them little protection against the onslaught of Chinese exports.

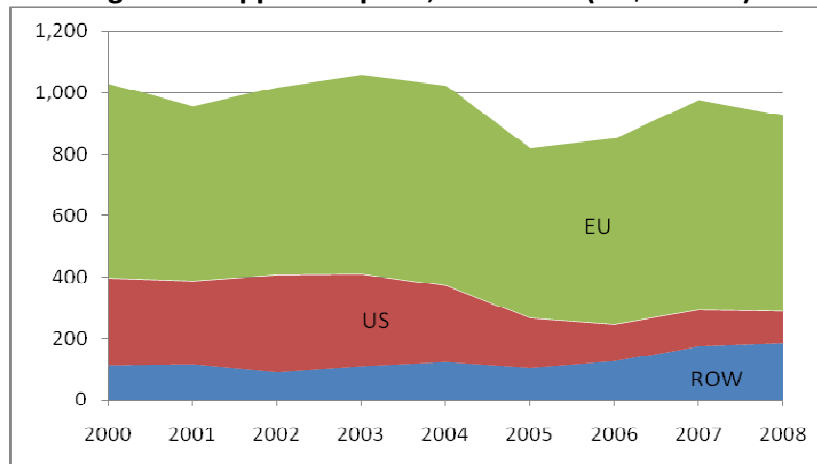
In practice, however, the impact on apparel exports from SSA (and elsewhere) has been milder than was actually feared (Kaplinsky and Morris, 2006). Two potential explanations have been suggested for this mitigated impact. First, the safeguards imposed by the US (and EU) on Chinese clothing might have given some breathing space to African exporters. Second, referring to the Kenyan case, Brenton and Hoppe (2006) have argued that shifts in apparel product categories have helped avert a further decline in exports to the US market.

Neither of the above explanations applies to Mauritius’ clothing exports to the US. In Mauritius, total clothing exports declined by 22.4 percent between 2003 and 2005. However, the decline was steeper in the US market (-46.2%) than on the EU market (-14.5%). Thus, it appears that Mauritius has borne the brunt of shock, and that the safeguards offered little relief. Moreover, we observe from Table 9 that exports to US have declined across the entire range of products, although the decline was steepest in trousers. Exports of T-shirts doubled between 2000 and 2005, but have fallen below their 2000 level by 2007.

While the end of the apparel quotas and the phenomenal rise of China on the global scale have generally been blamed for the plight of the Mauritian clothing industry, a careful reading of the situation suggests that the real culprit has been the failure of Mauritius to qualify for the AGOA yarn forward rule. In fact, a number of foreign (mainly from Hong Kong) apparel exporters exited the Mauritian EPZ *en masse* during 2003-2005 when Mauritius failed to qualify for the much-anticipated third-country fabric derogation beyond September 2005 (Darga, 2007).⁶ This reason singularly accounts for the rebound of clothing exports after 2005, and this until 2007, after which point the clothing industry suffered the effects of the unfolding financial crisis (Figure 10).

⁶ After intense diplomatic efforts, Mauritius finally qualified for the third-country fabric derogation in November 2008. This derogation will last 4 years. The impact of this development on clothing exports to the US and on employment and FDI in the clothing industry is yet to be determined.

Figure 10: Apparel exports, 2000-2008 (US\$ million)



Can Mauritius Compete with China in the Global Apparel Market?

A key feature of the EU market is the duty-free status accorded to exports originating from ACP countries under the Cotonou Agreement (now EPA), which have continued to provide some degree of protection against cheaper Asian exports. It is debatable whether Mauritius could have measured up to China in the absence of such tariff preferences given China's cost advantage over Mauritius. EIU (2004) shows that the hourly wage in the Mauritian clothing industry is over twice that in China. This, combined with lower labour productivity in Mauritius (Tagg, 2002), means that the unit labour cost of producing a garment in Mauritius is very high, placing the country at a significant cost disadvantage vis-à-vis China.

However, if cost were the only consideration, Mauritius, notwithstanding the 14-percent average preference margin in the EU market, would not have survived as an apparel exporter beyond 2005. The point is that clothing is a differentiated product and, so, firms need not compete only on price. A number of non-price factors, including lead times, service and quality, reliability and flexibility, knowledge of specific markets and cultures, social compliance and environmental standards also determine the competitive advantage of firms.

Table 11 presents product-specific revealed comparative advantage (RCA) indices for Mauritius and China for the years 2000 and 2007 for Mauritius' top 10 apparel categories at the 4-digit SITC level.⁷ Product-wise comparisons between Mauritius and China over the two years serve

⁷ The RCA is defined as the ratio of the share of a country's exports of product *i* in its total clothing exports to the world's share. Ratios greater than 1 indicate a RCA in the product; ratios less than 1 indicate a revealed comparative disadvantage.

to identify the areas in which competition from China has been particularly severe. The following observations can be made from Table 11.

1. Mauritius' biggest comparative advantage is in knitted T-shirts (SITC 8454) and non-knitted shirts (8415), and between 2000 and 2007, this advantage has been consolidated. Up till now, China has not presented a direct threat to Mauritius in these products. In fact, in the case of blouses and shirt blouses (SITC 8427), Mauritius seems to have out-competed China. However, the sharp increase in China' RCA, especially in knitted shirts (SITC 8437), does not augur well for Mauritian clothing exports.
2. Chinese competition has been acute in jerseys, pullovers, suits and jackets (SITC 8453) and in trousers (SITC 8426). Mauritius has generally witnessed a decline in RCA in these products; while China's comparative advantage has increased.
3. There appears to be certain products, such as ladies' undergarments (SITC 8455), in which Mauritius has recently carved a comparative advantage and has successfully competed with China. These emerging products are promising for the local clothing industry and need to be further exploited.

Table 11: Revealed Comparative Advantage Index for the 10 Main Exports of Mauritius

RANK	SITC CODE	DESCRIPTION	MAURITIUS		CHINA	
			2000	2007	2000	2007
1	8454	T-shirts, singlets and other vests, knitted or crocheted	67.99	86.20	2.81	3.06
2	8415	Shirts, not knitted	60.55	76.15	3.33	3.06
3	8414	Trousers, bib and brace overalls	31.01	20.85	2.84	2.54
4	8437	Shirts, knitted	17.95	69.53	0.43	2.55
5	8453	Jerseys, pullovers and similar articles, knitted or crocheted	20.22	11.22	3.80	4.40
6	8442	Suits, ensembles, jackets, blazers, skirts, divided skirts, trousers	8.54	7.47	4.66	6.35
7	8426	Trousers, bib and brace overalls, breeches and shorts	21.17	5.74	2.32	3.16
8	8427	Blouses, shirts and shirt blouses	7.11	11.68	2.95	2.21
9	8448	Nightwear	0.73	9.67	3.57	4.50
10	8455	Ladies' undergarments	6.32	9.71	2.29	2.62

Source: Author's computation using UN COMTRADE data

The Mauritian T&C industry has used its 35 years of experience to strategically position itself as a reliable supplier of quality clothing. Over the years, Mauritian apparel companies have moved up-market where the competition is less ruthless. Those that failed to make this transition, including the many Asian firms that produced basic articles of apparel, clinging to the tariff

preferences offered by AGOA or to the market access opportunities available under the MFA, have closed down in the run up to January 1, 2005. However, more than 200 textile and clothing companies, the majority of which locally owned, have (so far) survived the end of quotas and the rise of China. Several of these companies have moved their low-end production to Madagascar to take advantage of its cheap labour – as much as one-third of wage levels in Mauritius – while they concentrated the more sophisticated, higher value-added and shorter-lead-time activities locally (Gibbon, 2008).

Clothing retailers prefer sourcing from countries that can supply a critical mass and a wide range of products in a timely manner. This view is supported by the USITC (2004) study, which estimates that the number of countries from which US buyers will source major items will fall to 25 percent of current levels by 2010. Mauritius, despite its physical smallness, boasts a large, vertically integrated textile and clothing industry that spans all the stages of the value chain – from product design through to the final product, including additional services such as design assistance and logistical solutions (Darga, 2007). Thus, Mauritian exporters are well placed to benefit from the changing configuration of buyer behaviour.

However, a few threats hang over the future of the clothing industry in Mauritius. First, the tariff preference that Mauritian exporters enjoy in the EU market will be eroded by the Non-agricultural Market Access (NAMA) proposals, which call for a reduction to 6 percent (from the current 12-14 percent) of the tariff applied to articles of wearing apparel. It is not clear whether the ongoing Economic Partnership Agreement (EPA) negotiations will further enhance market access for textile and clothing products from ACP countries.

Moreover, the observation that apparel exports picked up in 2006-2007 even though employment has continued to decline suggests that the textile and clothing sector in Mauritius is consolidating itself through investment in capital-intensive spinning (and weaving) activities aimed at better integration of the supply chain, this with a view to improving response to clients. In this regard, the proposed shift to a “single transformation” rule for clothing under the current EPA negotiations could be detrimental for the local, vertically integrated T&C industry.

To conclude, while it is tempting to attribute the decline of the Mauritian apparel industry between 2003 and 2005 to the phasing out of the MFA and the explosive rise of China, our analysis suggests that this was not the case in Mauritius. The real causes are the non-renewal of the AGOA third-country fabric derogation that induced an exodus of firms of Asian origin that had set up in the EPZ in the mid-1980s to take advantage of Mauritius’ unexploited opportunities to export to the US market. We also argue that China, despite its mighty competitiveness, does not present formidable challenges to the Mauritian apparel industry since the latter operates at the higher end of the market where competition is less keen. Moreover, Mauritius retains strong revealed comparative advantages in a wide range of clothing products, and there are opportunities to exploit emerging advantages in new products. For these reasons and also because of other strategies to maintain competitiveness – notably through vertical integration, investment in state-of-the-art technology and processes,

delocalization and use of foreign labour – the Mauritian clothing industry is likely to withstand China’s onslaught in the future.

5.2 Micro Level Findings

This section uses survey methods to investigate China’s impacts through the trade vector on exporting firms, SMEs serving the domestic market and on consumers. We also interview experts from key export-support institutions in Mauritius to gauge the reasons for Mauritius’ dismal exports to China.

5.2.1 *How Have Mauritian Apparel Exporters Coped with China? Evidence from a Light Survey of Export-Oriented Apparel Firms*

We draw on Ancharaz’s (2009) study of export capacity constraints in Mauritius to provide some evidence on China’s impact on Mauritian apparel exporters. Although that study was not specifically meant to address this question, it does shed light on how well clothing firms have coped with China’s dominance on the world market.

The findings are based on a light survey of 16 apparel exporters. The firms export, on average, over 90 percent of their output – mainly to Europe and USA, with a few exporting to regional markets (South Africa, Madagascar and Reunion, France). The range of products exported is wide and includes denim and jeanswear; knitted pullovers, T-shirts and polos; ladies’, men’s and children’s wear with value added; shirts and ladies’ blouses; and trousers. About 50 percent of the firms’ output is regarded as high-end; the middle range makes up 35 percent of output, with the remaining 15 percent falling in the basic category. Twelve of the firms are locally owned, with 1 foreign firm and 3 joint ventures.

The firms have typically invested in technology upgrading and process re-engineering, which they consider as crucial to maintaining their competitiveness. However, although they recognize China as a keen competitor in export markets, there is no evidence that they invested for fear of China. Indeed, for most of the firms surveyed, the most important investments occurred in recent years, well after the end of apparel quotas, which signalled the rise of China.

More significantly, the larger firms report that they invested to *improve* their competitive edge – by shortening lead times and enhancing factory-level productivity – but that they would be competitive even if they had not invested. There is also little evidence that the firms producing primarily at the low-end, where competition with China is potentially more acute, have been bothered by China’s invasion of the global apparel market.

On the other hand, several firms say that their relationship with China is complementary rather than competitive. By supplying low-cost cotton yarn to apparel producers in Mauritius, China, in fact, plays a key role in maintaining the export competitiveness of these firms in the very markets where China is reported to have outcompeted Mauritian exports. This, together with the earlier finding that China is not directly responsible for the fate of the Mauritian clothing

industry in the post-MFA era, suggests that China is an important ally of the local apparel industry.

5.2.2 *Is the Chinese market attractive enough to Mauritian exporters relative to traditional markets? Evidence from interviews with key informants*

The bulk of Mauritius' exports have traditionally been absorbed by Europe and, to a much smaller extent, the USA. Although, in recent years, regional markets (for example, Madagascar and South Africa) have become significant destinations, exports to China have remained marginal. We considered above several hypotheses based on macro-level analysis to shed light on this glaring asymmetry in Mauritius-China trade relations. Here, we rely on interviews with key informants in export-support institutions to explore an alternative hypothesis, namely that China is a relatively unattractive market for Mauritian goods.

This explanation is almost logical given that market concentration tends to perpetuate itself and that it is always more difficult to explore new markets than to try to expand in existing ones. In the case of China, this difficulty is accentuated by a fear of dealing with the Chinese, who produce virtually everything and produce it cheaper than Mauritius. This fear factor came up quite significantly in discussions with the experts, who believe that at least part of it is irrational and can be overcome by providing better market intelligence to potential exporters. Nevertheless, Enterprise Mauritius believes that Mauritius can carve niche markets in China for such products as rum and spirits, pearls, precious stones and jewellery, and fish preparations. The problem is to get the exporters to turn attention to China as a prospective market away from Europe, the US and some regional markets, which have locked in exports through trade preferences.

In the case of exports to Europe, the effect of preferential market access for certain products (e.g., sugar) has been two-fold: exporters have secured both a quota and a guaranteed price, which has historically exceeded the world price. While this is not the case with the other products destined for these markets, many exporters believe that developed-country markets offer both a better price and the desired volume of exports, agreed through long relationships with clients. The question of volume was evoked by EM, but in the opposite way. The problem is not that Mauritian exporters will likely face orders too small to make exporting profitable. Rather, Mauritian exporters, especially the SMEs that EM specifically targets, lack the capacity to deal with the large orders that China can entail!

The Mauritius Chamber of Commerce and Industry's (MCCI) view that product competitiveness is the key constraint to exporting to China supports our earlier argument that Mauritius ranks low in cost competitiveness relative to China (see Section 5.1.1.1). However, the MCCI, much like EM, argues that some sectors (including jewellery) offer the possibility of making a dent on the Chinese market but that this is unlikely to happen in the absence of a formal trade agreement between the two countries.

5.2.3 *How has Chinese imports affected local industry? A survey of Small and Medium Enterprises (SMEs)*

China's main adverse impact on African economies is arguably through its cheap imports. Local import-competing firms, unable to face up to Chinese competition, will decline, resulting in job losses and a decline in domestic value added. This effect could be so dramatic that it has raised fears about de-industrialization in Africa. But, because local industry in Africa is generally underdeveloped, these fears have applied to export-oriented manufacturing and, in particular, to the clothing industry, in countries like Kenya, Lesotho and Swaziland although they have not necessarily been justified (Kaplinsky and Morris, 2007). The present survey of firms across a broader range of sectors, comprising firms of different sizes and different market orientation, purports to shed light on the extent to which Chinese competition has caused injury to local industry in Mauritius. Although the focus is on import-competing firms, we include export-oriented enterprises in the sample as a control group with a view to determining whether the two types of firms have been affected differentially.

The survey was administered to firms in 4 sectors, namely garment and related products (e.g. linen, bedding), footwear, furniture and printing. Thirty responses were received, as summarized in Table 12.

Table 12: Firms' Characteristics

<i>Sector</i>	<i>Number of firms</i>	<i>Average Employment (2008)</i>	<i>Average Employment (2005)</i>	<i>Number of firms exporting (% of output exported)</i>
Garment and related products	15	145	173	13 (75-100%)
Footwear	7	5.8	8.4	2 (10-20%)
Furniture	5	5.4	4.6	1 (45%)

Source: Author's Computation

Over half of the firms were in the garment sub-sector, reflecting the importance of this sector in the economy; 7 firms were in footwear; 5 in furniture and 3 in printing. However, due to the very small number of responses received in the printing sector, we shall omit this sector in our analysis.

The garment sector is the largest in terms of employment. The average number of workers employed by the firms in this sector was 145 in 2008. The largest firm employed 713 workers, and the smallest 9. While the majority of the garment makers were export-oriented, typically exporting between 75 percent to 100 percent of their output, few firms in the other sectors actually exported. In the footwear sector, only 2 of the 7 firms reported exporting a small percentage of their output. In the furniture sector, only one firm exported – about half of its output – to regional markets.

Employment has fallen in the garment and footwear sectors but has marginally increased in the furniture sector between 2005 and 2008. This may be due to the local market orientation of this sector, which could have offered a buffer against the financial crisis that adversely affected exports across the spectrum.

All but 3 firms reported that China has had a negative impact on their operations. This impact has been rated as moderate to major, with some firms reporting a severe impact in terms of declines in employment, domestic sales, and exports. Of the 7 firms that reported a decrease in employment as the main effect, 5 are in the footwear and furniture sectors. These firms have also suffered a decline in domestic sales, ranging from 10 percent to 60 percent. Two-thirds of the apparel producers registered a decrease in exports in the range of 5 to 50 percent between 2005 and 2008. It appears that the smaller firms have been more adversely affected.

Indeed, 2 of the 3 firms that said that China has not affected their business are in the apparel sector and are relatively large firms. These firms claim that they do not see China as a threat since they have a distinct competitive advantage over China: they produce higher value-added and better-quality products, respect delivery deadlines and maintain a long-term relationship with their buyers. On the other hand, the firms see China as an important player in their value chain since China is a low-cost supplier of inputs (fabrics and accessories) to them.

Competitive Pressures on Mauritian Firms

A whole section of the questionnaire was devoted to querying firms on what they believed to be the main competitive pressures wielded by Chinese products on the local market. The responses, on a 5-point Likert scale of increasing importance, are summarized in Table 13.

The lower price of Chinese products is considered to be the main factor but firms generally agree that the price is proportional to product quality. Greater product variety is also identified as a competitive challenge. These results confirm our earlier observation that some firms were not concerned about Chinese competition on export markets because they believed they offered a better product.

Table 13: Main Factors Explaining Competitive Pressures on Local Firms

Factor	Mean	Std. Dev.
Lower price	4.2	1.3
Better quality	2.7	1.4
Greater variety	3.2	1.4
Good price-quality ratio	4.1	1.1

Main Sources of Cost Competitiveness

A number of factors have been put forward to explain the general competitiveness of Chinese products on the global market. We have attempted to shed light on the importance of each of

these factors by asking the respondents to rate a list of possible sources of China’s cost competitiveness. Table 14 presents the descriptive statistics.

The findings, while generally confirming certain beliefs, also yield a few surprises. Most firms agree that the competitive advantage of Chinese firms is due to systemic factors, such as cheap labour and local access to low-cost raw materials and inputs. Government support to enterprises is also acknowledged through the policy of subsidizing utilities and of regulating the banking sector to ensure low-cost credit to businesses. However, few firms really believe that Chinese firms benefit from other forms government assistance, e.g., an undervalued currency.

Table 14: Main Factors Explaining Competitive Pressures on Local Firms

Factor	Mean	Std. Dev.
Cheap labour	4.6	0.8
Access to low-cost materials and inputs	4.3	1.2
Cheap/subsidized utility rates	3.8	1.3
Access to low-cost finance	3.6	1.3
Government assistance to export enterprises	3.1	1.5
Manipulated currency	2.8	1.4

In conclusion, the survey findings indicate that China, through its cheap exports to Mauritius and elsewhere, has had a significant impact on Mauritian firms selling on the local market or abroad. The impact seems to be milder on exporters, and among them, for the larger firms, which, in fact, view China as a complementary force in that it is a cheap supplier of inputs to the local firms, thereby contributing to their international competitiveness. These firms also expressed little concern about the China threat since they believe they produce a better product and offer a better service to their buyers than Chinese firms do. This suggests that Mauritian firms may not be competing in the same market segment as Chinese firms, a finding that confirms our claim above. Firms in the footwear and furniture sectors have been particularly hit by China’s dominance. These firms have seen employment levels contract and domestic sales decline as they have been out-competed by cheaper Chinese goods.

A good price-quality ratio – low price and low quality – is believed to be the main reason why Chinese goods are so appreciated by consumers. Cheap, local labor and access to low-cost inputs are the key competitive advantages that Chinese firms enjoy. Government support beyond subsidizing utility rates and credit are not believed to be significant factors underscoring China’s cost competitiveness.

5.2.4 *How have Chinese imports affected Mauritian consumers? Evidence from a Consumer Survey*

5.2.4.1 Background

The 'Made in China' brand has been flooding markets in both the developed and developing world. Often lower purchase prices make Chinese goods an attractive option for consumers; however, little is known about the quality of these products. While China remains today's global manufacturing powerhouse, consumers internationally, including Asian consumers, are increasingly worried about the safety of Chinese goods. This fear has been amplified by headline-grabbing, worldwide recalls of Chinese goods, including millions of toys and a long list of drugs, clothes, foods, children's jewellery and even pet foods. China's willingness to cut corners in manufacturing processes, thus producing sub-standard and dangerous products, has alarmed consumers worldwide.

Our study presents results of an investigation of consumer awareness, willingness to pay, and consumer perceptions of the quality of Chinese manufactured goods when compared to goods manufactured locally and in other countries. To analyse consumer attitudes and perceptions towards Chinese products sold on the Mauritian domestic market, a consumer survey was undertaken. The survey covers 294 consumers in different parts of the island. Our sampling strategy involves consumers of diverse age groups in various occupations. The sample was designed in such a way as to allow for age, gender and occupation of the respondent as variables of interest in the decision to buy.

The questionnaire covers the following issues:

- The purchase and use of various types of Made-in-China commodities by a sample of the Mauritian population;
- Their opinion on the quality and price of Chinese products relative to local goods; and
- Their views on the potential hazardous effects of Chinese goods.

5.2.4.2 Data Analysis

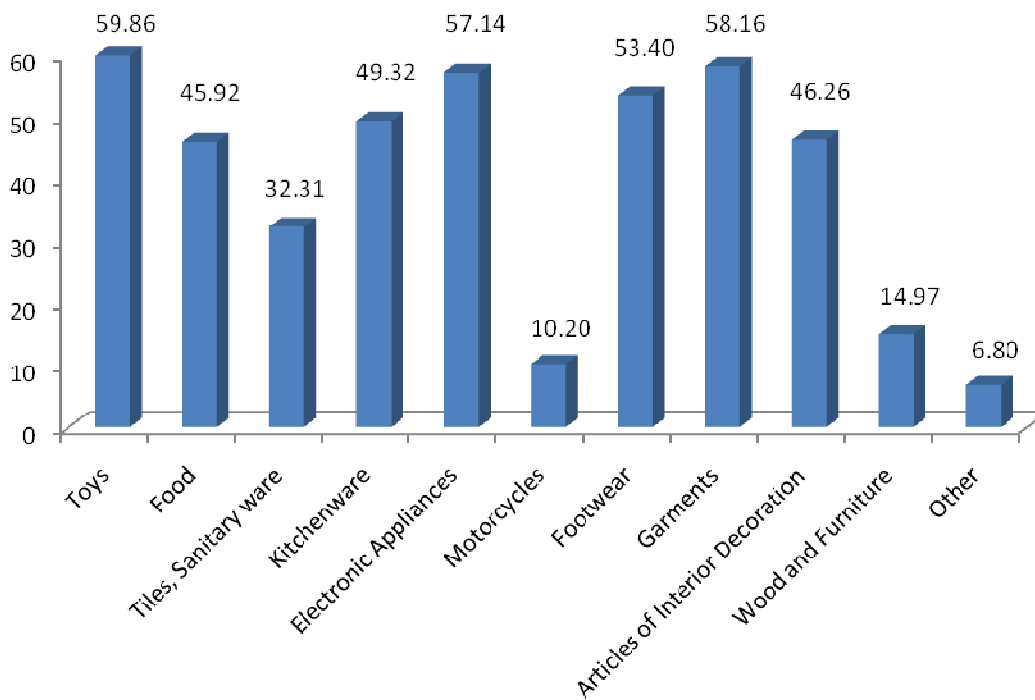
The sample of 294 consumers is representative of the Mauritian population and the survey was conducted in such a way as to cover the different segments of the population with distinct characteristics. For instance, 51.4 percent of consumers are women (broadly reflecting their population proportion) and the majority of respondents are aged between 19 and 30 (55% of the sample) while 35 percent are in the range 31 - 50 years and 10 percent are over 50 years.

- **Purchase of Made in China Products**

We observe that 98 percent of the consumers have been using Made-in-China products over the last five years. Goods made in China are very popular in Mauritius essentially because of their lower price, which makes them more affordable for the middle- and low-income groups. Chinese products have actually a very wide spread on the local market whether in terms of foodstuffs, toys, footwear or electrical appliances.

Subsequently consumers were asked about the type of product they have purchased. Our findings are shown in Figure 11 below. It can be observed that most of the consumers have bought toys (59.86%), garments (58.16%) and electrical appliances (57.14%). Note that these product shares are not necessarily reflected in the value of Mauritius' imports from China since the products in question are generally of low value (compared, say, to motorcycles). Nevertheless, the proportions reveal the popularity of Chinese products among Mauritian consumers. This situation is common to almost every African market, which is continuously being flooded by every product one could imagine.

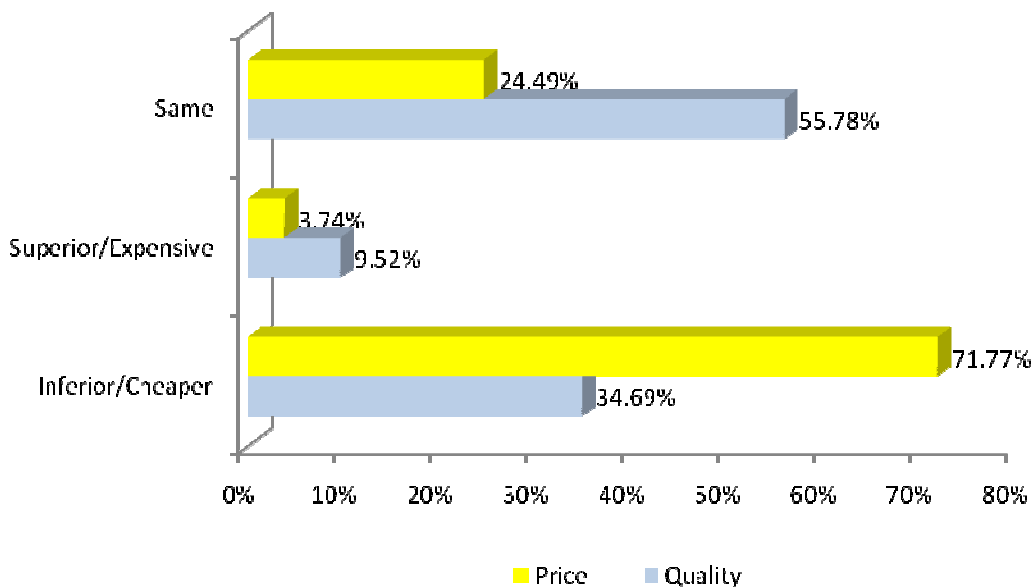
Figure 11: Types of Made-in-China Products Consumed



- **Quality and Price of Made in China Products**

Our findings further reveal that 42 percent of consumers believe that the Chinese goods are not inferior. However, 40 percent of the respondents claim that footwear, electronic appliances and kitchenware, in particular, are of poor quality due to their short lifespan. When comparing the quality and price of Chinese products with local goods sold on the Mauritian domestic market, it can be observed that 72 percent of consumers consider Made-in-China products to be cheaper relative to local goods while 25 percent say that prices do not differ much. In terms of quality, around 56 percent of consumers consider that Chinese commodities are almost of the same quality as local goods whilst 35 percent argue that they are inferior. We also note that 3.7 percent of the respondents see the quality of Chinese products to be superior to domestic goods (Figure 12).

Figure 12: Quality and Price of Made-in-China Products Consumed



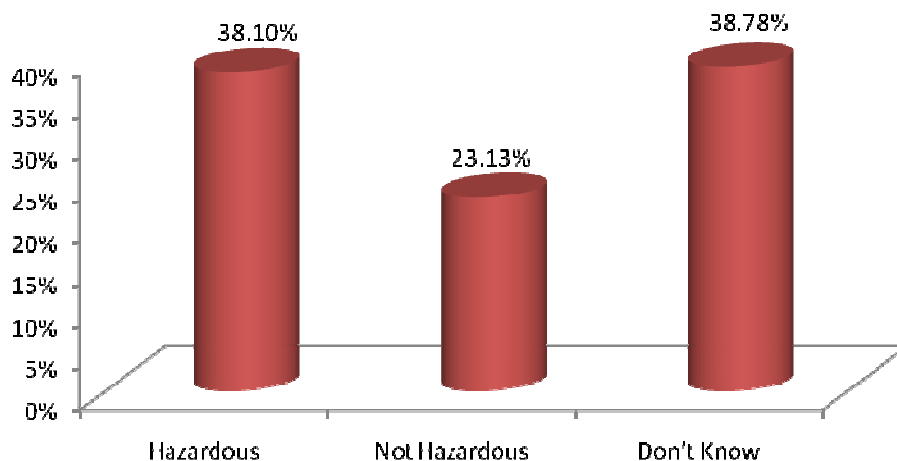
The growing preference for Chinese products is thus explained in terms of its lower price which is mainly attributed to factors that influence competitiveness, such as the cost of labour, technology, and above all, the scale of production in a country like China.

- **Value for Money**

About 50 percent of the consumers view Chinese products as being value for money. Price is an important factor in determining the consumption pattern of the Mauritian people and a low

price is seen as a significant variable in influencing their purchase. However, the consumers were also asked about the potential hazardous effect of Made-in-China goods. From Figure 13, we note that 38.1 percent of the respondents think that Chinese products are hazardous while an equally large proportion could not form an opinion, presumably because of a dearth of information.

Figure 13: Hazardous Nature of Made-in-China Products



The hazardous nature of Chinese commodities has been discussed in a number of countries recently. The recent spate of product recalls - melamine-tainted pet food, toothpaste laced with anti-freeze and Mattel-branded toys made with lead paint, to cite but a few examples - were all products made in Southern China's low-cost manufacturing hub. Various high-profile incidents involving dangerous goods imported from China have increased the awareness of consumers on the dangers of cheap products originating from a country notorious for poor respect of safety regulations. In fact, Chinese state controls are inconsistent. The government sets limits on lead content in toys but not in jewellery for children or adults, for instance. Quantities of e-waste, such as disused computers, end up back in China, and re-crafted into cheap accessories with hazardous lead content, 70 percent of which is export-bound. It is high time that Chinese producers pay more attention to quality, brand development, governance and transparency to prevent further harm to the 'Made in China' brand. Although Chinese products are observed to be hazardous and represent a threat to consumers, we note from our survey that 53 percent of consumers will continue to buy Made-in-China products in the future against only 11 percent who said they would not buy. Those who choose to buy Chinese goods do so essentially because of their lower prices.

5.3 Schematic Analysis of the Potential Losses and Gains on the Mauritian Economy

The gains and losses to the Mauritian economy arising from China's commercial relations with Mauritius can be examined in terms of direct and indirect effects.

In much of Africa, the main direct effect of China's economic rise has been the increasing trade in raw materials. Zafar (2007) argues that the resource-rich and oil-exporting countries of SSA will be the biggest winners; on the other hand, oil-importing countries that happen to be in direct export competition with China in the textile and clothing sector will lose significantly.

The case of Mauritius is arguably different from that of the typical resource-based SSA economy. On the one hand, Mauritius has no natural resource endowments, and it exports no primary commodities. On the other hand, as a major exporter of manufactured goods, mainly textiles and clothing, to industrial countries, it faces acute competition from China on third markets. This assessment suggests that Mauritius is deprived of one potential channel of direct gain but is exposed to indirect losses due to stiffer competition from Chinese products on Mauritius' traditional export markets.

However, a more nuanced view of these effects is in order. While, resource-rich and oil-exporting countries have surely seen their exports to China flourish, they have also, as an undesirable by-product, been subject to the effects of Dutch disease. Induced real currency appreciation can hurt export competitiveness of other goods while perpetuating economic dependence on primary commodities and delaying export diversification. Mauritius has been sheltered from these deleterious effects.

Direct effects

Table 15 summarizes the gains and losses arising from China's trade relations with Mauritius. The only direct gain is the rise in consumer welfare due to cheaper Chinese imports. While it is difficult to quantify this gain, our survey provides sufficient evidence that it does exist and that it might be large. However, consumers are wary of the poor quality and hazardous nature of certain Chinese products. Poor product quality represents a loss that needs to be subtracted from the welfare gain that lower prices entail.

The direct losses go beyond mere quality-related qualms. Probably, the biggest loss to the Mauritian economy due to cheap Chinese imports is the injury they have caused to local industry. Our survey results show that while export-oriented firms have weathered the storm, import-competing producers in the furniture and footwear sectors have been hit hard by cheap Chinese imports. These firms have seen a decline in employment and sales.

Finally, the phenomenal increase in imports from China, along with the low and stagnating exports to China, has led to exploding trade deficits, amounting to US\$439.5 million in 2007. Mauritius' trade relations with China are the main contributor to the country's growing imbalance in merchandise trade, accounting for about one-quarter of the trade deficit in 2007.

To the extent that unsustainable external balances can be a source of macroeconomic instability, China contributes a significant share to Mauritius' economic vulnerability.

Indirect effects

The main indirect effects of China's economic dominance have been on Mauritius' external trade relations, that is, its exports to third markets where Chinese competition has been particularly acute. Mauritius is arguably the one country from the entire African continent that stood to lose the most from China's sweeping exports since 2005. This is due to a confluence of factors. First, China and Mauritius export to the same industrial-country markets, namely the EU and the US. Second, Mauritius' exports are concentrated in a product group in which China is known to be particularly competitive, namely clothing. Our analysis shows that, in the three years preceding the phasing out of the MFA, the Mauritian apparel industry shed a large number of jobs due to the exodus of a number of Hong Kong-based firms that had relocated to Mauritius in the mid-1980s to take advantage of the country's unexploited quota for clothing exports to the US market. Clothing exports to the US consequently declined by 46.2 percent between 2003 and 2005. China has readily been blamed for the plight of the Mauritian garment industry. However, our analysis gives a different reading of the actual facts, suggesting that the real reason for the decline in apparel exports was the non-renewal of the third-country fabric derogation under AGOA, not Chinese competition. Indeed, the fact that clothing exports picked up after 2005 (and this until 2008 when the financial crisis started to yield its effects) confirms that China could not have been held responsible for the earlier decline of the clothing industry since China's economic dominance did not diminish after 2005.

Moreover, while China ranks higher in cost competitiveness than Mauritius, we provide evidence that Mauritius nevertheless boasts a comparative advantage in a broad range of clothing products. Hence, while we report export losses to the local clothing industry as an indirect consequence of Chinese aggressive export push, we rush to point out that such losses are small and that they are stated in Table 15 only because some of the exporting firms surveyed – the small ones – said that China was competing them out. On the other hand, the same survey reveals that most of the clothing firms, especially the relatively large ones, view China more as a friend than a foe. This is because China is a cheap source of fabrics, which contributes to the international competitiveness of the Mauritian clothing industry.

The investment-induced effects have not been addressed in this Report, and so deserve further elaboration. Chinese investment in Mauritius has been small and erratic. However, one investment project that needs mention here in so far as it impacts trade, is the case of Tianli Spinning (Mauritius) Ltd., a wholly-owned Chinese firm, specializing in yarn spinning. This singular spurt of Chinese investment in 2003 has allowed Mauritius to reduce its imports of cotton yarn while contributing to building a vertically-integrated clothing industry capable of satisfying rules of origin under both Cotonou and AGOA.

In a parallel study, we have investigated the impacts of China's investment relations with Mauritius, focusing on the special economic zone that Mauritius will be hosting in the coming years. Investments in the construction of the industrial zone have started pouring in since 2008.

It is estimated that the project will necessitate investments of the order of US\$ 1 billion, and will create some 40,000 jobs directly and indirectly. Since China's aim is to use Mauritius as a gateway to southern Africa and beyond, it is expected that the SEZ will generate sizeable exports from Mauritius. Even if the bulk of the jobs go to the Chinese and export proceeds are repatriated, the project will still benefit the local economy through income growth, generation of jobs and foreign exchange and knowledge spillovers since there is room in the SEZ to accommodate local enterprises.

On the downside, the project has already had important social impacts: part of the 362 hectares of land devoted to the construction of the industrial zone was occupied by leasehold farmers, who had to be relocated much against their will. It is conceivable that the project will continue to have important environmental impacts by virtue of its sheer scale. It will consume massive amounts of water and electricity, will generate tons of CO₂ emissions, and will raise the country's import bill, partly because a large share of the inputs to be used by the industrial zone will be sourced from China. Moreover, the FDI inflows, by virtue of their sheer size, raise the risk of a real appreciation of the rupee that could erode Mauritius' export competitiveness.

Table 15: Matrix of gains and losses generated by China's increasing influence on the Mauritian economy

	Gains	Losses
Direct	<ul style="list-style-type: none"> Consumers gain from lower prices of imported Chinese goods 	<ul style="list-style-type: none"> Injury to local import-competing producers/retailers due to influx of cheap Chinese products Losses sustained by consumers due to poor-quality and potential hazardous Chinese products Growing trade deficit due to rising imports from China, stagnating exports to China, and declining exports in traditional markets
Indirect	<ul style="list-style-type: none"> Local garment producers sourcing fabrics and other inputs from China 	<ul style="list-style-type: none"> Mauritian firms exporting to third markets being displaced by Chinese products
Investment-induced	<ul style="list-style-type: none"> Tianli investment in spinning has reduced Mauritius' need to import cotton yarn Proposed setting of Jin Fei economic cooperation zone (ECZ) will generate exports to regional markets 	<ul style="list-style-type: none"> Likely high import content of exports Possible real appreciation of the Mauritian rupee in the coming years due to unprecedented inflows of FDI. Negative environmental impacts

6. Conclusion

This Report aimed to provide an in-depth analysis of China-Mauritius trade relations and their impacts on the Mauritian economy. To do so, we adopted a variety of methodological approaches, each suited to the question at hand. We used desk research and secondary data as well as surveys and interviews with experts to shed light on China's effects on various economic variables. Ultimately, we seek to identify the nature and extent of the gains and losses arising to Mauritius through its trade relations with China. The findings are sometimes surprising. But they help dissipate the erroneous views – usually reported by the press and held by some people who do not care to check the data and the facts – about China's true impacts.

6.1 Summary of key findings

We summarize the key findings in terms of direct and indirect impacts.

Direct impacts: Imports

Mauritius has witnessed a phenomenal growth in imports from China, a three-fold increase between 2000 and 2008, which has placed China into the enviable position of Mauritius' second largest source of imports behind India. The bulk of imports have been in SITC categories 6, 7 and 8, more precisely in textile yarn and fabrics, machinery and transport equipment (motorcycles), and miscellaneous manufactured goods such as garments and toys. Cheap imports have certainly benefited consumers. But the poor quality or hazardous nature of Chinese products constitutes a potential loss to consumers.

A more significant loss arises from the injury that Chinese import competition has caused to the local industry in Mauritius. Our survey findings suggest that small firms and those selling on the domestic market in such sectors as garments, footwear and furniture have experienced a loss of market and have consequently downsized. These firms cite lower prices and a favourable price-quality ratio as the key competitive pressures exerted by Chinese imports and attribute China's superior cost competitiveness to cheap labour and easy access to low-cost materials and inputs. Contrary to common belief, they indicate that manipulated currency is the least likely source of China's external competitiveness.

Direct impacts: Exports

Mauritius has traditionally exported to the EU and the US. The EU absorbed over 70 percent of Mauritius' exports in 2008. The US market, which attracted over 20 percent of exports in 2000, has seen this share decline to 7.5 percent in 2008 in favour of the EU and regional markets. China absorbed less than a quarter of 1 percent of Mauritius' exports in 2008. Exports have been virtually inexistent in all but a few products, including fish and fish preparations, tobacco and TV and radio transmitters.

We consider various potential explanations for this timid penetration of Mauritian goods in the Chinese market, and we do this using both macro-level analysis and discussion with experts. The first is that Mauritius' exports are not sufficiently competitive. Mauritius ranks low on the

competitiveness scale as measured by the ILO's Competitive Industry Performance Index. Moreover, China exhibits revealed comparative advantages in a much broader range of products than Mauritius does. There are only two products – pearls and precious stones, and jewellery – in which Mauritius boasts a significant comparative advantage. Nevertheless, the scope to export these products to China is limited by the rather underdeveloped capacity-to-export of these sectors.

The second hypothesis we investigate is that low bilateral trade complementarity inhibits Mauritius' exports to China. The evidence in support of this hypothesis is compelling. Our calculations reveal, on the one hand, a relatively high degree of export similarity and low levels of trade complementarity, on the other. Together, these indices imply that Mauritius' prospects to export to China are rather dim both because the two countries tend to export rather similar goods to third markets and because China's import needs and Mauritius' exports offer a poor match.

Next, we consider whether high trade barriers in China could be responsible for the marginal state of exports from Mauritius. We find that average tariffs on products of export interest to Mauritius are rather high, and, by all means, higher than in Mauritius' traditional markets (the EU), which offer duty-free access to made-in-Mauritius products. This finding constitutes a singular potent explanation for the lack of exporters' zeal to venture into the often-dreaded Chinese market. Interviews with key informants from the export sector echo such fears. The experts further argue that Mauritian exporters lack the competitiveness that the Chinese market demands. While some scope to export exists in such products as rum and spirits, pearls, precious stones and jewellery, and fish and fish preparations, a dearth of market intelligence, a systemic skewed orientation towards industrial-country markets and an unhealthy sense of scepticism among prospective exporters make exporting to China unlikely in the short term. Ironically, according to one informant, SMEs do not even entertain the idea of exporting to China since they lack the capacity to satisfy orders of the scale that the Chinese market may entail.

In conclusion, the whole body of evidence presented in this study points to bleak prospects for Mauritian exporters to enter the Chinese market in a significant manner. Worse, because most of the causes of this low export penetration are due to systemic factors – such as a lack of trade complementarity, poor export competitiveness, export market bias and an irrational fear of doing business in China – the current situation is unlikely to improve in the future in the absence of bold policy measures.

Indirect impacts: Exports

China's indirect impacts, that is, impacts on exports to third-country markets, have been much dreaded in Mauritius and elsewhere, prompting concerns about de-industrialization in Africa. In Mauritius, these fears have taken added significance by virtue of the economic importance of the clothing industry and the fact that China is reputed to be a mighty competitor in wearing apparel. Moreover, Mauritius exports to the same markets – Europe and the US – in which Chinese competition is known to be most acute.

Perhaps not surprisingly, then, China has been blamed for the decline of the Mauritian clothing industry between 2003 and 2005. Since this period coincided with the end of apparel quotas, which signalled the sweeping rise of China, it is easy to pin the fate of the Mauritian clothing industry on China's economic dominance. However, our analysis suggests that the real cause of the rapid decline in clothing exports was the mass exit of Hong Kong-based enterprises on learning that Mauritius had failed to obtain renewal of the third-country fabric derogation in September 2003. The fact that exports bounced back after 2005 to attain a historic peak in 2007 confirms that China could not be held responsible for the earlier setback. Our survey results provide further support for this hypothesis. The larger firms in the clothing industry claim that China has hardly bothered them. In fact, these firms view China's economic emergence as a boon since they source their yarn and fabrics from China.

Indirect impacts: Investment-induced

Some of the impacts of Chinese economic dominance through the trade channel have their roots in Chinese investments in Mauritius. For example, Chinese investments in yarn spinning have helped Mauritius reduce its import bills. In the same logic, the massive inflows of FDI towards the setting up of a Chinese special economic zone in Mauritius will generate significant exports to regional markets and beyond. However, the environmental impacts of the project and the risk of a Dutch disease-induced real appreciation of the rupee that could prove detrimental to Mauritius' fledging exports, should be watched.

6.2 Policy implications

China's net direct and indirect impacts via the trade channel on the Mauritian economy are generally mild. Nevertheless, our findings point to a number of areas where policy intervention can improve the impacts, both by minimizing the adverse effects and by maximizing the gains. We consider these policy implications in the same way as we discussed the impacts above.

Imports

Cheap imports from China, while benefiting consumers, have raised concerns over quality and potential health risks. There is wide agreement among consumers that Chinese products are generally of poorer quality. Yet they buy them because of the favourable price-quality trade-off that they offer. Consumers' complaints about quality should usually not call for any policy intervention in that quality is a means of product differentiation that is reflected in the product's price. However, where poor quality and lack of respect of norms threaten human life and welfare, urgent corrective measures are required. In Mauritius, these problems have come to the surface following a few, isolated life-threatening incidents involving toys and candy. In both cases, the products were withdrawn from the market and, subsequently, directives were issued to importers to ensure that such products conform to certain norms. But these measures have served only as short-term palliatives. Import-competing producers have protested that the stringent norms and standards they have to comply with do not necessarily apply to imported products, and that these products are not subjected to any quality controls upon arrival in Mauritius. The policy implication is clear: protection of consumer health requires that norms and standards be enforced on imported products as they are on locally produced ones.

Several firms claim to have been adversely affected by the dramatic influx of cheap Chinese goods. These are mainly the small, import-competing firms in the garment, footwear, and furniture industries. However, while both the data and the survey suggest that these effects have been mild, the Federation of SMEs in Mauritius claims that small firms have been hit hard by fiercer import competition.

However, it appears that the policy of trade liberalization rather than Chinese competition as such is the main cause of the current plight of the SMEs. In the move towards the 'duty-free island' concept, tariffs have been progressively reduced in a broad cross-section of industries, exposing such industries, and especially the small and vulnerable enterprises within them, to 'unfair' competition from cheap imports. For example, the applied MFN average tariff on furniture has gone down from 75.4 percent in 2001 to 14.3 percent in 2007. On wearing apparel and footwear, the tariff cut appears less drastic – from about 80 percent each to 35 percent and 51.2 percent, respectively – but this is only because some specific duties were re-instated on these products amid protests by local producers following the 2005 wave of tariff liberalization.

The government is well aware of the potential of SMEs to create jobs and generate wealth. In fact, this sector is regarded as the locomotive of growth in the next phase of industrialization. As such, the government has always been sympathetic to the concerns of SMEs and has proposed a number of policy measures in recent years to assist the sector, sometimes negating on its own previous policy commitments like in 2005. In the wake of the financial crisis in 2008, the government proposed a Manufacturing Adjustment and SME Development Fund to assist SMEs to restructure and modernize with a view to improving their competitiveness and ensuring their long-term survival. Subsequently, the fund was transformed into the Saving Jobs and Recovery (SJR) Fund with a wider coverage of sectors and a significantly stepped up budgetary endowment. A larger range of services are proposed by the SJR Fund. For example, SMEs could benefit from consultancy services to help them prepare and submit financial restructuring plans to enable them to benefit from the Mechanism for Transitional Support. Moreover, the Mauritius Business Growth Scheme was set up to provide financing to SMEs to support their business growth on a cost-sharing basis. These schemes and the services they offer are in addition to the SME Partnership Fund, set up in 2006 to provide equity capital to promising SMEs and other funds and programmes, including the National Endowment Foundation. By strengthening the capacity of SMEs to maintain a foothold on the local market, and facilitate their evolution into dynamic exporters to regional markets, these funds help local enterprises to tackle China since Chinese competition presents the biggest challenge to the local industry.

However, local SMEs vehemently criticize the management of the various funds, which, they argue, have not benefited them. They argue that the conditions for acceding to the funds are too stringent, which crowd them out to the benefit of larger firms. Moreover, they believe that the allocation of funds is not done in a fair, impartial and transparent manner. The Federation

itself is more in favour of trade-related policy measures, such as quantitative restrictions, protective duties and control of norms.

The use of quotas is prohibited by the WTO but can be permitted as a temporary safeguard measure if the applicant could provide evidence of injury sustained by local industry as a result of excessive imports. Alternatively, the importing country can use countervailing duties in an attempt to offset the price advantage of the exporting country. However, Mauritius has never given recourse to these measures, probably because their use entails costly legal battles at the WTO. Nevertheless, Mauritius disposes of significant tariff waters in most products, which means that it can raise import duties in affected sectors without violating any WTO regulation. And indeed, protective duties were raised in 2006, and have been maintained since.

While putting up higher tariff barriers in the face of stiffer import competition is an easy and tempting option, it should be avoided at all costs in Mauritius. The country has embarked on a policy of openness pushed to its limits. Trade liberalization has been a long and ongoing process, and it has proved sustainable over the years. Reversals of trade liberalization have occurred only once (in 2006) since the government is aware that backtracking will send the wrong signals to the international community. We are inclined to support the government's position. Inefficient firms should not be tolerated. Instead, we are in favour of control of product quality to ensure that Chinese imports conform to basic norms of health and safety. This requirement will raise the product's price, bringing it closer to the prices of locally produced goods, giving SME some breathing space.

The extent of damage to local industry due to competition from China is, at the present, relatively small. However, at the current pace of growth of Chinese imports, it is foreseeable that local firms will be exposed to even fiercer competition from China. Perhaps, once the threat to local SMEs reaches a critical level, the government could call on Beijing to consider voluntary restraints on its exports to Mauritius much along the lines of South Africa's recent move. The advantage of VERs is that they can be negotiated diplomatically, and provide mutual gains to both the exporter and the importing country. China would pocket the rents arising from the export quota while Mauritian firms would enjoy protection from the disruptive effects of cheap imports. On the downside, consumers in Mauritius would lose big, but, in the logic of Olson's collective action, they are unlikely to put up resistance to the VER.

Exports

Mauritius' exports to China have remained marginal over the years and have been concentrated in a few products, such as telecommunication equipment, tobacco and fish. This situation is due to various systemic causes, including a lack of trade complementarity and poor export competitiveness. Fear of the Chinese market, often accentuated by a dearth of market intelligence and an exclusive focus on traditional, industrial-country markets, also prevents prospective exporters from exploring China. The government can do little to address the systemic causes of low export penetration. However, policy intervention in other areas can help, considering that there exist a number of products in which Mauritian exporters can carve a niche in the Chinese market.

First, there is a need to shift focus away from traditional markets. The recent financial crisis clearly illustrated the dangers of dependence on a few markets. Moreover, the erosion of preferences in the European market and the emergence of some regional markets mean that Mauritius some degree of export diversification is already under way. The government should jump on the bandwagon and invest more significantly in market development. Funding participation in trade fairs in China, providing links with prospective buyers for value added products like rum and spirits, jewellery and fashion clothing and, more generally, promoting China as a potential market for Mauritian products can go a long way towards breaking the ice.

Second, it is high time that Mauritius considers a bilateral trade agreement with China. As mentioned earlier, such an agreement is in the offing, and Mauritius will surely push for it. However, China is unlikely to heed a trade treaty with Mauritius since it is clearly not in its economic interests. Mauritius should use its diplomatic arsenal to impress on the Chinese the need to rectify the huge trade surpluses in favour of China by opening up their market to Mauritian products. A trade agreement, with preferential market access, appears as the best strategy to offer Mauritian SMEs a chance to get a foothold in the Chinese market. Mauritian negotiators can use several potent arguments to justify the trade agreement: cultural (strong historical ties with China), political (Mauritius' support of the One China policy) and economic (the need to reduce bilateral trade deficits, the upcoming Chinese SEZ in Mauritius, existing agreements on investment and double taxation). A trade agreement with China will have the blessing of a broad cross-section of economic agents in Mauritius, including firms importing consumer goods, raw materials and inputs as well as prospective exporters to China. Import-competing firms in Mauritius have little more to lose since MFN tariffs are already low, and, in any case, Mauritius may opt to exclude certain sensitive sectors.

Concerning China's impacts on Mauritius exports to third markets, we have noted that China was not the cause of the temporary decline of clothing exporters during 2003-2005. Most of the large apparel exporters can compete effectively with China on these markets since they produce in the high end of the market, where competition is less ruthless, have solid comparative advantages in specific products and have a reputation as reliable suppliers offering a full-package delivery. The government, through the various funds and facilities it has put to the disposal of the business community, should see to it that Mauritian firms remain competitive as cost pressures keep up. Ultimately, the firms themselves are the best defenders of their interest; the government is merely a facilitator. Barring a few exceptions, the Mauritian government has fully lived up to this role.

References

- Ancharaz, V.D. (2008), "David V. Goliath: Mauritius Facing Up to China", *Paper No. SSC_07*, AERC.
- Brenton, P. and M. Hoppe (2006), "Life after Quotas? Early Signs of the New Era in Trade of Textiles and Clothing" in *Trade, Doha and Development*, ed. R. Newfarmer, Washington, D.C.: The World Bank.
- Collier, Paul and Venables, Anthony J. (2007), "Rethinking Trade Preferences: How Africa Can Diversify its Exports", *CEPR Discussion Papers 6262*, C.E.P.R. Discussion Papers.
- Corden, M. and P. Neary (1983), "Booming Sector and De-Industrialisation in a Small Open Economy", *Economic Journal*, 92(368):825–48.
- Darga, L.A. (2007), "The Rebound of the Mauritian Textiles Industry", *Bridges*, 5 (Aug 2007): 19-20.
- Egziabher (2007), "Impacts of Chinese imports and coping strategies of local producers: the case of small-scale footwear enterprises in Ethiopia", *The Journal of Modern African Studies*, 45:647-679
- Gibbon, P. (2008), "Governance, Entry Barriers, Upgrading: A Re-Interpretation of Some GVC Concepts from the Experience of African Clothing Exports", *Competition and Change*, 12 (1): 29–48.
- Ianchovichina, E. and W. Martin (2001), "Trade Liberalization in China's Accession to the WTO", mimeo, World Bank.
- IDS Asian Drivers Team (2006), "The Impact of the Asian Drivers on the Developing World", in R. Kaplinsky (ed.), *Asian Drivers: Opportunity and Threat*, Special Issue of IDS Bulletin.
- IMF (International Monetary Fund) (2003), "Deflation: Determinants, Risks, and Policy Options—Findings of an Interdepartmental Task Force", Washington, D.C.: IMF.
- . (2006), "World Economic Outlook: Financial Systems and Economic Cycles", Washington, D.C.: IMF
- Jenkins, R., and C. Edwards (2005), "The Effect of China and India's Growth and Trade liberalisation on Poverty in Africa", London: Institute for Development Studies.
- Kaplinsky, R., and Morris, M. (2008), "Do the Asian drivers undermine export-oriented industrialization in SSA", *World Development*, 36(2): 254–273

Kaplinsky, R. and Morris, M. (2006a), "Dangling by a Thread: How Sharp Are the Chinese Scissors?" Mimeo, Brighton: Institute of Development Studies.

Kaplinsky, R. and Morris, M. (2006b), "The Asian Drivers and SSA; MFA quota removal and the portents for African industrialisation?" Paper prepared for Asian and Other Drivers of Change Workshop, St. Petersburg, mimeo, Brighton: Institute of Development Studies.

Kaplinsky, R. and Santos-Paulino, A.U. (2006), "A disaggregated analysis of EU imports: Implications for the study of patterns of trade and technology", *Cambridge Journal of Economics*, 30 (4): 587-612

Mattoo, A., D. Roy and Subramaniam, A. (2002), "The Africa Growth and Opportunity Act and Its Rules of Origin: Generosity Undermined?" *Policy Research Working Paper 2908*, Washington, D.C.: World Bank.

Naumann, E. (2006), "The Multifibre Agreement / WTO Agreement on Textiles and Clothing" *Tralac Working Paper No 2/2006*, Stellenbosch.

Sachs, J., and A. Warner (1999), "The Big Push, Natural Resource Booms, and Growth", *Journal of Development Economics*, 59(1):43-76.

Stevens, C. and J. Kennan (2006), "How to identify the trade impact of China on small countries", in Kaplinsky (ed) *Asian Drivers: Opportunity and Threat*, Special Issue of IDS Bulletin.

UNIDO (2007), *Industrial Development Scoreboard*, United Nations.

USTR 1999. Statement of Ambassador Charlene Barshevsy regarding broad market access gains resulting from China WTO negotiations, US Trade Representative, Washington DC, April 8.

Wang J.-Y. (2007), "What drives China's growing role in Africa?" *IMF Working Paper WP/07/211*. Washington, D.C.: IMF

World Bank (2004a), "Patterns of Africa-Asia Trade and Investment, Potential for Ownership and Partnership", *Africa Region Private Sector Group*, 1, 2, Washington: World Bank.

World Bank 1997. *China Engaged: Integration with the World Economy*. Washington, D.C.: World Bank.

Zafar, A. (2005), "The Impact of the Strong Euro on the Real Effective Exchange Rates of the Two Francophone African CFA Zones", *Policy Research Working Paper 3751*. Washington, D.C.: World Bank.

Zafar, A. (2007), "The Growing Relationship between China and Sub-Saharan Africa: Macroeconomic, Trade, Investment, and Aid Links", *World Bank Research Observer*, 22(1):103-130.