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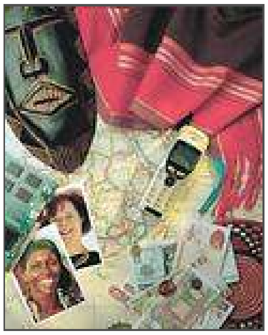

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Mauritius and the IMF

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Mauritius: A Case Study

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"And they (the political parties in Mauritius) seem to recognize that, at the end of the day, they will be left with what they started with: an agricultural colony, created by empire in an empty island and always meant to be part of something larger, now given a thing called independence and set adrift, an abandoned imperial barracoon, incapable of economic or cultural autonomy."
"They (the Mauritians) have such confidence in their rights, their votes, the power of their opinions."

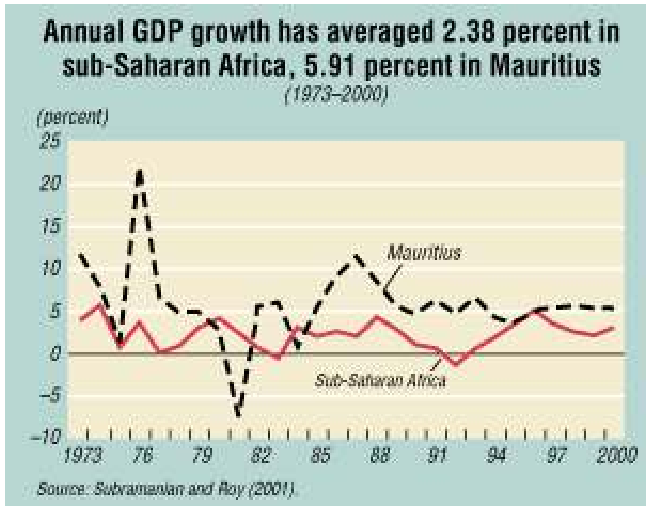
—V.S. Naipaul,
The Overcrowded Barracoon

Few sub-saharan African countries have achieved high standards of living. A notable exception has been Mauritius. Yet we had it on the highest possible authority—the economist and Nobel Prize winner James Meade, who prophesied in the early 1960s that Mauritius's development prospects were poor—that Mauritius was a strong candidate for failure, with its heavy economic dependence on one crop (sugar), vulnerability to terms of trade shocks, rapid population growth, and potential for ethnic tensions. History—or, rather, Mauritius—proved Meade's dire prognostication famously wrong.

Are Mauritius's achievements due to favorable initial conditions, good policies —especially openness to trade and foreign investment—sound domestic institutions, or other factors?

Achievements

Between 1973 and 1999, real GDP in Mauritius grew 5.9 percent a year, on average, compared with 2.4 percent for sub-Saharan Africa as a whole (see chart). Through the magic of compounding, the income of the average Mauritian more than tripled over a 40-year period, while that of the average African increased by only 32 percent.



Improvements in human development indicators have been equally impressive. Life expectancy at birth increased from 61 years in 1965 to 71 years in 1996; primary school enrollment increased from 93 to 107 per 100 children of school age between 1980 and 1996, while it decreased from 78 to 75 in the rest of Africa. (Enrollment rates may be higher than 100 percent because of repeaters, adults who are enrolled even though they are not in the age group being measured, and other discrepancies.) The income gap between the richest and the poorest Mauritians has narrowed considerably: the Gini coefficient (a measure of income inequality, with 0.0 representing total equality and 1.0 representing total inequality) declined from 0.5 in 1962 to 0.37 in 1986-87.

High growth rates have been achieved in a stable macroeconomic environment. Between 1973 and 2000, annual consumer price inflation averaged 7.8 percent in Mauritius, compared with more than 25 percent for sub-Saharan Africa as a whole. The unemployment rate declined from nearly 20 percent in 1983 to 3 percent in the late 1980s, although it has since edged up above 7 percent.

Social protection in Mauritius is similar to that seen in the industrial countries: a large and active presence for trade unions, which are able to engage in centralized wage bargaining, and generous social security benefits, particularly for the elderly and civil servants. Social protection is also afforded through price controls, especially on a number of socially sensitive items. In contrast with the member countries of the Organization for Economic Cooperation and Development, however, generous social programs in Mauritius have thus far not necessitated high taxes, reflecting both strong growth and favorable demographics, a large proportion of the population being of working age.

Initial conditions

Did Mauritius grow fast because its inheritance was favorable? A retrospective answer can be provided based on the indicators that have been identified as important for long-term growth. Table 1 shows how Mauritius scores on these indicators, compared with other countries. On the one hand, a number of factors—especially the initial level of income, geography, and commodity dependence—have exerted a drag on long-term growth. For example, Mauritius is disadvantaged by being at least 25-30 percent more distant from world markets than the average African country. On the other hand, favorable demographic developments and very high initial levels of human capital have boosted growth. Formal analysis shows that on balance, however, the disadvantages outweigh the advantages: initial conditions have slowed growth by about 1 percentage point a year relative to the average African country and by nearly 2 percentage points relative to the fast-growing developing economies of East Asia.

Table 1
Were initial conditions in Mauritius better than those in other developing countries?

	Mauritius	Africa	Fast-growing developing economies[1]	Other developing economies
GDP catch-up[2]	8.72	7.29	7.90	7.85
Life expectancy in years (1970)	60.40	41.60	57.10	51.90
Ethno-linguistic fractionalization[3]	0.58	0.64	0.42	0.32
Population growth[4]	0.97	-0.09	0.82	0.33
Primary commodities as fraction of total exports	0.29	0.18	0.09	0.12
Fraction of area in tropical climate	1	0.89	0.69	0.59
Landlocked[5]	0	0.33	0	0.11
Remoteness from world economic center (kilometers)[6]	11,249	9,183	9,464	8,633

Sources: Jeffrey D. Sachs and Andrew M. Warner, 1997, "Sources of Slow Growth in African Economies," *Journal of African Economies,* Vol. 6, pp. 335-76; and author's calculations.
[1]China, Hong Kong (SAR), Indonesia, Malaysia, Singapore, and Thailand.
[2]Log of real GDP per economically active population in 1965.
[3]Probability (in 1960) that two randomly selected people from a country did not belong to the same ethnic or linguistic group.
[4]Growth of working-age population minus growth of total population between 1965 and 1990.
[5]0 if not landlocked. For groups, figure depicts the percentage of countries landlocked.
[6]Average distance to export partners, weighted by exporters' GDP share in the world.

Globalization strategy

Perhaps the most interesting aspect of Mauritius's development has been its trade and development strategy. At one level, Mauritius can be seen as a case study proving that openness and an embrace of globalization are unambiguously beneficial. Since the mid-1980s, the volume of goods imported and exported by Mauritius has grown rapidly, at annual rates of 8.7 percent and 5.4 percent, respectively. Its openness ratio (the ratio of trade-in-goods to GDP) has increased from about 70 percent to 100 percent, while Africa's openness ratio has stagnated at around 45 percent. Particularly strong was the growth in manufacturing exports originating predominantly in Mauritius's export-processing zone.

There are three possible explanations for the impressive growth of trade: first, liberal trade policies; second, trade policies that, although interventionist, did not distort incentives in favor of the import-competing sector; third, openness to foreign direct investment.

The first explanation does not fit the facts. During the 1970s and 1980s, protection in Mauritius was high and dispersed throughout the economy. In 1980, the average tariff exceeded 100 percent, and it was still very high—65 percent—at the end of the 1980s. Moreover, until the 1980s, there were extensive quantitative restrictions in the form of import licensing, which covered nearly 60 percent of imports.

Clearly, by the usual measures, Mauritius had a highly restrictive import regime. But why did this not translate into an export tax and, hence, a tax on all trade? Not only was an effective institutional mechanism—the export-processing zone—in place but Mauritius's own domestic policies and the policies of its trading partners ensured very high returns to the export sector, effectively segmenting it from the rest of the economy and discouraging the diversion of domestic resources to the country's inefficient import-competing sector. First, all imported inputs entered the country duty free, ensuring that the export sector's competitiveness on world markets was not undermined by costly inputs. Second, a variety of tax incentives were provided to firms operating in the export-processing zone, which had the effect of subsidizing exports. Third, until the mid-to-late 1980s, labor market conditions in the export sector were different from those in the rest of the economy (in the import-competing sector, in particular): employers in the export-processing zone had greater flexibility to discharge workers, and the conditions of overtime work were more flexible. Most important, although the legal minimum wage was the same in the export-processing zone as in the rest of the economy, the minimum wage for women was lower than that for men. Because the export-processing zone employed a disproportionate number of women, their lower wages also implicitly subsidized exports, encouraging producers to concentrate on the export, rather than on the import-competing, sector.

However, these interventionist policies did not, on their own, fully offset the anti-export bias created by restrictive import policies. Preferential access provided by Mauritius's trading partners in the sugar, textile, and clothing sectors, which together accounted for about 90 percent of Mauritius's total exports, also implicitly subsidized the export sector and was responsible, to a large degree, for overcoming the anti-export bias of the import regime (Table 2).

Table 2

Import tax and offsetting export subsidies

(percent)

		Export subsidies						
	Import	From domestic policy[2]		From preferential access			**Total**	
	tax[1]	Case A	Case B	Sugar	Apparel	Total	**Case A**	**Case B**
1980s	127	32	39	108	15	52	**84**	**91**
1990s	65	7	20	98	28	47	**54**	**66**

Source: Author's calculations.

[1]To capture the resource allocation effects, import protection is measured in effective rather than nominal terms.

[2]Subsidy from domestic policy refers to the difference between wages in export-processing zone (EPZ) and those in manufacturing (Case A) and in the economy (Case B).

Since it gained its independence in 1968, Mauritius has been guaranteed a certain volume of sugar exports to the European Union (EU) at a price that was, on average, about 90 percent above the market price between 1977 and 2000. The resulting rents to Mauritius have amounted to a hefty 5.4 percent of GDP, on average, each year and as much as 13 percent in some years. From a macroeconomic perspective, these rents have played a crucial role in sustaining high levels of investment and explain why domestic, rather than foreign, savings have financed domestic investment during Mauritius's growth boom.

The preferential access given to textile and clothing exports from Mauritius has been equally important. The international regime known as the Multifiber Arrangement (MFA) was established by the United States and the European Union to limit imports of textiles and clothing by awarding country-specific quotas. As a result, imports were redistributed among the countries that produced these goods, to Mauritius's benefit.

The third explanation ascribes Mauritius's success to its openness to foreign direct investment, facilitated by the creation of the export-processing zone. The latter, a resounding success, has transformed the Mauritian economy. Since 1982, output has grown by 19 percent a year, on average, employment by 24 percent, and exports by 11 percent. The export-processing zone accounts for 26 percent of GDP, 36 percent of employment, 19 percent of capital stock, and 66 percent of exports. Moreover, a growth-accounting analysis demonstrates the exceptional productivity of the zone. During 1983-99, total factor productivity growth in the export-processing zone averaged about 3.5 percent a year, compared with 1.4 percent in the economy as a whole. In the 1990s, productivity growth in the export-processing zone was remarkable, averaging 5.4 percent a year.

But these explanations, although plausible, do not really get at the underlying causes of Mauritius's trade and growth performance. Other developing countries had similar preferential trade opportunities and also created export-processing zones. But many of them failed where Mauritius succeeded. Clearly, there were deeper reasons for Mauritius's success.

Institutions

To a considerable extent, strong domestic institutions have contributed to Mauritius's success (Table 3). Two examples illustrate the role played by domestic institutions. Mauritius successfully overcame its macroeconomic imbalances in the early 1980s. Macroeconomic adjustment was, in fact, implemented by three different governments of divergent ideological persuasions: this presupposed consultation and a recognition of the need to develop a national consensus in favor of adjustment. Further, a culture of transparency and participatory politics ensured that early warning signals and feedback mechanisms were in place, allowing emerging economic problems to be tackled at an early stage. Second, the export-processing zones established by other African countries may have provided the same incentives for investors but, unlike the zone in Mauritius, they have been plagued by rent seeking, abuses, and leakages deriving from weak administration.

Table 3
Quality of institutions in Mauritius and other countries

	Mauritius	Africa	Fast-growing developing economies	Other developing economies
ICRGE[1]	7.23	4.54	6.86	4.29
Protection against expropriation[2]	8.06	5.75	8.54	6.47
Democracy[3]	0.75	0.25	0.47	0.51

Participation index[3]	0.8	0.30	0.49	0.44

Sources: International Country Risk Guide index, the PRS Group; Keith Jaggers and Ted Robert Gurr, 1995, *Polity III: Regime Type and Political Authority, 1800-1994* [computer file] (Boulder, Colorado: Keith Jaggers/College Park, Maryland: Ted Robert Gurr); Inter-university Consortium for Political and Social Research, distributor, 1996 (Ann Arbor, Michigan).

[1]ICRGE (International Country Risk Guide) index is a measure of the quality of government institutions that affect property rights or the ability to conduct business. It is published by a private firm that provides consulting services to international investors.

[2]For ICRGE index and index of protection against the risk of expropriation, Mauritius has fitted values. The scale is from 0 to 10, with higher values indicating better institutional quality.

[3]The participation index measures the extent to which non-elites are able to access institutional structures for political expression. This index, like the one for democracy, ranges from 0 to 1, with higher values denoting better quality.

Special factors

Formal analysis of Mauritius's growth performance shows, however, that even after accounting for the positive role played by institutions, there is a sizable unexplained component. It is plausible that some factors specific to Mauritius may also have played an important role. Foremost among these was the country's ethnic diversity and how it was managed.

First, some ethnic communities had important links with the rest of the world. The Chinese community, for example, attracted investment by Hong Kong entrepreneurs who sought overseas locations for their textile operations in an attempt to circumvent the textile quotas imposed on Hong Kong. Second, diversity, particularly the separation of economic and political power, helped ensure balance and prevented excessive taxation (by the politically powerful) of the sugar sector (owned by the economic elite), the country's cash cow. Third, diversity played an important role in the development of participatory institutions. Assuaging the misgivings of a large minority that had reservations about independence and were concerned about the possibility of domination by the majority made participatory politics in the post-independence era a necessity. These institutions ensured, in turn, the rule of law and respect for property rights that have made Mauritius attractive to investors. Perhaps, instilling confidence in the Mauritians in "their rights, their votes, the power of their opinions"—a major political achievement—was the key to Mauritius's economic success.

For further details, see Arvind Subramanian and Devesh Roy, 2001, "Who Can Explain the Mauritian Miracle: Meade, Romer, Sachs, or Rodrik?" IMF Working Paper 01/116 (Washington: International Monetary Fund), as well as their chapter in a forthcoming book, Analytical Development Narratives, *ed. by Dani Rodrik, to be published by Princeton University Press. The challenges facing Mauritius in the period ahead are discussed in the IMF staff report for Mauritius's 2001 Article IV consultation(IMF Country Report No. 01/77).*

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Case study: Mauritius. Introduction Mauritius has been a leader in Africa in terms of requirements for tobacco packaging and labelling. As a country with a population of 1.3 million, Mauritius has demonstrated how a relatively small nation can be successful in adopting advanced tobacco control legislation on packaging and labelling.Â Case study: Mauritius. The Regulations prohibit tobacco companies from displaying tar, nicotine and carbon monoxide numbers on packages. Though such a provision is recommended by the Article 11 Guidelines given the misleading nature of such numbers, relatively few Parties to date have implemented such a provision.