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Abstract

This paper draws on the examples of two well-performing small island developing states (SIDS), Mauritius and Singapore, to provide lessons for vulnerable SIDS on strategies that can help overcome their inherent vulnerabilities and promote economic development. The paper concludes that building human and institutional capacities, boosting exports and infrastructure development, and promoting foreign direct investment and industrialization under a strong public-private sector institutional partnership are key to fostering economic resilience and achieving sustainable development.

1. Introduction

The recognition of Small Island Developing States (SIDS)[1] as a group of islands with peculiar characteristics and challenges by the United Nations in the early 1990s highlights the importance of taking into account the group's distinct needs in global development policy discourses. Despite the considerable progress of most of these islands on growth and socio-economic development, the sustainability of the progress is threatened by their inherent economic and environmental vulnerabilities that are linked to their insularity, small size and remoteness (UN-OHRLLS, 2008). SIDS are often identified by a number of characteristics such as: narrow resource base; small domestic markets and heavy dependence on few external and remote markets; high costs for energy, infrastructure, transportation, communication and servicing; long distances from export markets and import resources; low and irregular international traffic volumes; little resilience to natural disasters; growing populations; high volatility of economic growth; limited opportunities for the private sector and a proportionately large reliance of their economies on their public sector; and fragile natural environments (ibid.).

Notwithstanding these similarities, there is substantial diversity among SIDS. For example, they differ with respect to geographical location (e.g., the extent of isolation and climatic conditions), their population size (Tuvalu has a population of almost 11,000 while that of Haiti is about 11,000,000), their resource endowment (Papua New Guinea, Timor-Leste and Trinidad and Tobago, for example, are resource-rich countries[2]), the extent of ethnic diversity (Samoa, Solomon Island and Tonga have quite homogenous societies compared to Singapore, Mauritius and Seychelles).

Moreover, while certain states are high-income countries with significant levels of human development, others rank among the poorest countries globally. Indeed, the composition of the independent SIDS in terms of income groups is as follows: (a) seven high-income countries – *Antigua and Barbuda, Bahamas, Barbados, Saint Kitts and Vincent, Seychelles, Singapore, and Trinidad and Tobago*; (b) eighteen are upper middle-income countries – *Belize, Dominica, Dominican Republic, Fiji, Grenada, Guyana, Jamaica, Maldives, Marshall Islands, Mauritius, Nauru, Palau, Saint Vincent and the Grenadines, Suriname, Saint Lucia, Samoa, Tonga, Tuvalu*; (c) eight are lower-middle income countries – *Cape Verde, Kiribati, Micronesia, Papua New Guinea, Sao Tome and Principe, Solomon Islands, Timor-Leste, Vanuatu*; and (d) three are low-income countries – *Comoros, Guinea-Bissau, Haiti* [3]. Furthermore, about 15% of independent SIDS are classified as Least Developed Countries (LDCs)[4]. These countries are: *Comoros, Guinea-Bissau, Haiti, Kiribati, Sao Tome and Principe, Solomon Islands, Timor-Leste, Tuvalu and Vanuatu*.

LDCs are characterized by higher structural economic vulnerabilities compared to non-LDCs. An illustration of this point is provided in Figure 1, which presents data on the economic vulnerability index (EVI). EVI reflects the structural exposure to shocks as well as the level of environmental and trade shocks that countries face in a given year. The index ranges from 0 to 100; the higher the index the greater the level of economic vulnerability. As observed in Figure 1, the level of vulnerability in SIDS LDCs has been about 14 points higher than SIDS non-LDCs, on average. Nevertheless, the gap between the two groups has been narrowing since 2006, mainly due to the reduction in EVI for SIDS LDCs. Furthermore, Figure 2.2 compares the average annual growth rate of per capita GDP of SIDS LDCs to that of SIDS non-LDCs over the period early-1980s to present, and shows that on average, growth of per capita GDP is lower and more volatile in SIDS LDCs compared with SIDS non-LDCs.

(Insert Figure 2.1 about here)

(Insert Figure 2.2 about here)

Considerable differences also exist across SIDS with respect to their development outcomes. To provide a picture of such heterogeneity, Table 2.1a presents the latest estimates of per capita GNI, human development index (HDI), access to improved water source, under-5 mortality rate, life expectancy, primary school enrolment and headcount poverty rate for each country. Moreover, the data reported in Table 2.1a are ranked by quintile in Table 2.1b, with the highest quintile rank (fifth) representing the worst performer and the lowest quintile rank (first) assigned to the best performer on a given indicator. As shown in Table 2.1a, on average SIDS LDCs have lower level of development compared to SIDS non-LDCs.

On per capita GNI, HDI, and all the development indicators, Singapore topped all SIDS. The country's per capita income is more than twice that of Trinidad and Tobago which has the second highest income in the group, and about 55 times that of Guinea Bissau and Comoros. Singapore ranks fifth globally on HDI, its entire population has access to potable water and under-5 mortality rate is at 3 deaths per 1000 live birth. The classification by quintile rank based on HDI is as follows:

• *1st Quintile*: Antigua and Barbuda, Bahamas, Barbados, Mauritius, Palau, Seychelles and Singapore

• *2nd Quintile*: Cuba, Fiji, Grenada, Jamaica, Saint Kitts and Nevis, Saint Lucia, Trinidad and Tobago.

• *Median Quintile*: Dominica, Dominican Republic, Saint Vincent and the Grenadines, Suriname, Tonga.

• *4th Quintile*: Cape Verde, Guyana, Micronesia, Samoa, Timor-Leste, Tonga, Vanuatu.

• *5th Quintile*: Comoros, Guinea-Bissau, Haiti, Kiribati, Papua New Guinea, Sao Tome and Principe, Solomon Islands.

Overall, countries with relatively high incomes also attained high levels of human development, including access to potable water, infant mortality, life expectancy, education and poverty. However, Trinidad and Tobago ranks poorly (fourth quintile) among SIDS in terms of life expectancy, while Antigua and Barbuda, and St. Kitts and Nevis fall below the SIDS mean with respect to primary school enrolment.

(Insert Table 2.1a about here)

(Insert Table 2.1b about here)

All SIDS LDCs rank in the bottom quintiles on HDI and most of the other indicators. Comoros, Guinea-Bissau, Haiti and Solomon Islands in particular belong to the lowest quintiles on all seven development indicators. For instance, Guinea-Bissau has the lowest level of HDI, life expectancy and school enrolment at the primary level as well as the highest poverty rate (67 percent) in SIDS. Among SIDS LDCs, Tuvalu has the highest level of income and ranks relatively well on access to potable water, infant mortality, and poverty. Moreover, access to potable water not only in Tuvalu but also in Sao Tome is comparable to that of Antigua and Barbuda and better than Trinidad and Tobago. There are also non-LDCs like Cape Verde, Guyana, Micronesia, Samoa, Papua New Guinea and Tonga that exhibit relatively low level of human development. Particularly Micronesia and Papua New Guinea that rank at the bottom quintile on all indicators.

Furthermore, amidst all the challenges faced by SIDS as a result of their unfavourable initial conditions (insularity, geographical location, small population size and remoteness), some of these islands have experienced considerable economic growth over the years and achieved a level of development that defies a number of economic predictions. Mauritius and Singapore are two interesting examples in that respect.

These SIDS are often cited as examples for other developing countries, on the basis of policies that led them on the path of development against all odds (Subramanian and Roy, 2001; Frankel, 2014; Subramanian, 2013).

Given the uniqueness of each state, a 'one-coat-fit-all' type of strategy might be ineffective in building the resilience and economic development in vulnerable SIDS. Nevertheless, these countries may learn from the success stories from their SIDS counterparts, and presumably others, in adopting well-suited development policies to address their needs. The model of development pursued by Singapore and Mauritius and some of their development strategies may provide lessons for SIDS, especially SIDS LDCs, in the formulation of country-specific policies for socio-economic gains as well as resilience to external fluctuations. Thus, the present paper draws on key similarities in the development strategies of Mauritius and Singapore, two SIDS successful economies, to provide lessons for relatively vulnerable SIDS. The aim is not to propose a 'one-coat-fit-all' policy for vulnerable SIDS, but rather to give useful insights and examples of strategies that have been pursued elsewhere.

The rest of the chapter examines key features of the development strategies, based on selected themes discussed in Fosu (2013a, 2013b). The structure of the study is as follows. Section 2 discusses trade openness and diversification strategies, while section 3 focusses on the role of foreign direct investment. Sections 4 and 5 examine the importance of capabilities and private-public partnership, respectively. Section 6 provides policy recommendations and conclusions.

2. Trade openness and export diversification

Since the eighties, scholars and international organizations have largely advocated for outward-oriented rather than inward-looking economic policies for industrialization and development. The overall skepticism about the possible benefits of protectionism and the resulting shift in economic policies from inward-looking to outward-oriented strategies emerged from the failure of import-substitution (IS) policies in many developing countries, including a number SIDS. Instead of boosting domestic production and industrialization, these IS policies led to the collapse of export sectors, substantial macroeconomic imbalances and the deterioration of economic growth. Nevertheless, protectionist policies, in the form of import restrictions, underlined the early stages of development in a number of East Asian economic successes. These countries however managed to substantially minimize the negative impact of such policies on exports in order to derive substantial positive outcomes with regards to industrialization and growth (Fosu, 2013a).

The benefits of openness for growth, competitiveness and development have been increasingly emphasized in economic discourses[5]. Trade openness offers an opportunity for commerce and investment. It deepens countries' access to the global market, both for imports and exports, with significant implications for balance of trade, domestic prices and production, efficiency and competitiveness. Openness also leads to specialization based on comparative advantage (Armstrong and Read, 1998) and is important in fostering foreign direct investment inflows that may result in substantial transfer of technology and innovations for productivity gains (Briguglio, 1995).

Furthermore, openness to trade improves countries' resilience to domestic shocks, especially environment related shocks. However, the higher the level of openness, the greater is the exposure to shocks from the global market. This vulnerability is even more profound in economies that have a small

export base and are heavily dependent on imports, in which case economic diversification may represent a buffer against swings in international prices or exports demand (Haddad et al., 2013).

Historical evidence shows that many economic success stories have entailed export-led-growth strategies, but at different degrees of openness. Singapore for instance has a history of high economic integration into the world market. Trade restrictions in the form of tariffs are almost non-existent and are largely applicable for safety reasons, related to health and environment (World Trade Organization, 2000). Since the late 1960s, at a time where policies in most developing countries were inward-looking, Singapore adopted an outward-oriented approach, by positioning itself as a city of trade, i.e., the middleman in the region, with global trading partners. Thus, the country was able to industrialize significantly based on its free-trade strategy and also as a result of substantial foreign direct investment inflows (Ravi, 2015). Owing to its unique geographical location, Singapore has become over the years a city of trade starting from the service sectors in the eighties and later expanding to the manufacturing sector. Its trade to GDP ratio has been consistently above 300 percent since the late 1980s (World Bank, 2018). Furthermore, Singapore has greatly diversified its economy since the seventies, from low-skill manufacturing to trading and financial services, and then to high-technology industries.

Similar to Singapore, but to a lesser extent, Mauritius has followed the path of diversification and its economy has evolved from a low-productivity agriculture, mainly based on the sugar sector, to manufacturing industries, and the country is now developing its service sector, especially financial and IT sectors (Frankel, 2014). With respect to its trade strategy, Mauritius is however substantially different from Singapore. Rodrik (1999), Subramanian and Roy (2001) and Subramanian (2013) argue that trade policy in Mauritius has not been liberal, but rather restrictive, with government interventions. The country's trade strategy included the use of substantial trade restrictions on imports, especially from the beginning of the industrialization process until trade liberalization in the late-1990s under the structural adjustment programme. However, unlike in many developing countries, the negative consequences of protectionist policies on the export sectors have been avoided owing to the success of its Export Processing Zone (EPZ) policy that partially dampened the negative impact of its heterodox import policies on exports. The EPZ Act, adopted in 1970, mainly includes the removal of all duties on inputs, tax incentives or indirect subsidies to exporting firms as well as measures that ensured labour market flexibility within the zone. Hence, similar to Vietnam and other Asian successes, Mauritius pursued what can be seen as partial and strategic openness which entails the use of import restrictions to nurture local industries, while minimizing the negative impact of such protectionist import policies on exports in order to derive substantial positive outcomes with regards to industrialization and growth.

SIDS are generally open economies, with high trade-to-GDP ratios. The countries' reliance on external trade can be explained by factors such as the small size of their domestic market, the presence of diseconomies of scale, and their narrow resource base that make the cost of autarky and import-substitution relatively higher compared to bigger states (Armstrong and Read, 1998). Furthermore, smallness and limited resource base may themselves constitute a barrier to export diversification and expansion of domestic activities (Armstrong and Read, 1998). Hence, minimizing vulnerability requires the implementation of appropriate openness and export strategies to harness the benefits of trade and simultaneously strengthen resilience, which is crucial for long-term growth in SIDS, particularly in LDCs.

Nevertheless, the success of trade strategies rests significantly on existing institutional environments, and on other complementary policies (Fosu, 2013a). For instance, although Haiti has a long history of free-trade policies, it failed to experience sufficient growth and development. Thus, the effectiveness of openness strategies on growth depends substantially on accompanying monetary, fiscal and exchange rate

policies, investment policies, physical as well as institutional capabilities (Frankel and Romer, 1999; Baldwin, 2004; Srinivasan and Bhagwati, 2001).

3. Foreign direct investment

Foreign direct investment (FDI) is important for improvements in productivity, employment, competitiveness and growth (Borensztein et al., 1998; Hansen and Rand, 2006). In addition to increasing capital formation, there is a transfer of skills and technology from the rest of the world to the host countries that leads to an increase in total factor productivity through positive spillover effects. Furthermore, FDI may represent a route to domestic economic diversification in developing countries, particularly in SIDS.

Many researchers argue that in order to attract and gain sufficient benefits from foreign direct investment, the host economies must create the necessary incentives and enhance its absorptive capacity, in terms of human capital, financial development, and physical infrastructure, macroeconomic stability, trade openness and institutions (Borensztein et al., 1998; Iamsiraroj and Ulubaşoğlu, 2015). In the context of SIDS, a number of factors have been identified as important in determining countries' attractiveness to FDI. These factors are geographical location, especially proximity to large and developed markets, trade openness, and income level (Read, 2008).

Additionally, barriers to business entry, excessive bureaucracy and rigid regulation may hinder the attractiveness of SIDS to FDI. For instance, in the case of Solomon Islands, World Bank (2010) emphasized that unfriendly business environment, high cost of utilities and investors' perception of risks are factors that discourage investment in the tourism sector in spite of its potential for economic growth. To provide more insight on the conduciveness of the regulatory environment for business entry and operation across SIDS, Table 2.2 provides the ease of doing business (EDB) index for all SIDS with quintile ranks (1st quintile the best) as well as the countries rank at the global level.

(Insert Table 2.2 about here)

Singapore is the most business-friendly economy among SIDS and the second most business-friendly economy worldwide. Singapore is followed by Mauritius, which is ranked 25th out of 190 countries. Other countries with relatively conducive regulatory environment are: Jamaica, Samoa, Tonga, Vanuatu, Seychelles and Saint Lucia (first quintile). Globally, these countries rank 70, 87, 90, 95 and 91, respectively. With the exception of Vanuatu, all SIDS LDCs perform poorly on EDB . Haiti has the lowest EDB score among SIDS and ranks 181 out of 190 countries. Considerable barriers exist in: Comoros, Guinea-Bissau, Haiti, Micronesia, Sao Tome and Principe, Suriname and Timor-Leste (fifth quintile), Kiribati (fourth quintile) and Solomon Islands (third quintile). Hence, improving the business environment in these countries may potentially encourage FDI, with implications for economic diversification.

Foreign direct investment has been crucial to Singapore's development (Huff, 1995; Abshire, 2011). Right after independence, the country pursued considerable reforms as well as investment liberalization programmes in order to attract foreign capital. Since 1961, the Economic Development Board of Singapore has encouraged and facilitated the entry of multinational companies and individual investors and entrepreneurship into various sectors, especially services and manufacturing. A number of the policies implemented were aimed at providing the necessary incentives, including educated labour force, adequate physical infrastructures in the form of factory spaces, warehouses and parks for businesses, easy access to

finance, tax incentives (exemptions and low tax rates) and legal support (World Bank, 2008; Teck-Wong and Tan, 1993). Between 1960 and early-1990s, Singapore's investment ratio has more than doubled (Huff, 1995). Comparing Singapore to the other Asian tigers, i.e., South Korea, Hong Kong and Taiwan, Huff (1995) noted that the impact of the investment by multinational on capital accumulation and growth was the greatest in Singapore. Similarly, the Mauritius government has provided a conducive environment for both domestic and foreign direct investment, especially in the clothing and textiles industries and promoted manufacturing exports. Through its EPZs, the country offers tax incentives, productive labour and business-friendly institutional systems.

4. Institutional capabilities and social cohesion

The importance of good institutions in fostering a country's development has been extensively documented over the recent years. New institutional economics emphasizes the importance of economic institutions in the form of property rights, rule of law, control of corruption as well as political institutions, i.e., democracy and constraints on executives, for efficiency gains, long-term growth and development. These institutions contribute to an effective and efficient allocation of resources, promote transparency in public administration and good governance, foster a business-friendly environment for domestic and foreign companies, support industrialization and reduce the risk of political instabilities and conflicts that significantly disrupt growth and development (Acemoglu et al., 2001, 2005). In a cross-country study, Rodrik et al. (2004) argued that institutions are much more important for development than trade and geographical location. More importantly, institutions play an important role in vulnerable economies, by strengthening a nation's resilience against both internal and external shocks (Rodrik, 1999). In small islands that are faced with recurrent shocks in particular, coping with these shocks and building a resilient economy may require good governance to ensure stability.

SIDS are quite diverse with respect to their political systems. Some SIDS are republics (Comoros, Kiribati, Mauritius, Singapore, Samoa, Suriname, Timor-Leste, Vanuatu, etc.), while others are commonwealth (Antigua and Barbuda, Bahamas, Barbados, Belize, Grenada, Jamaica, Papua New Guinea, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Solomon Islands, Tuvalu), kingdom (Tonga), or communistic (Cuba). While this heterogeneity implies different political institutions, there is little evidence at the global level supporting the hypothesis that political systems per se – i.e. democracy or autocracy for example – significantly explains a country's economic growth (Brunetti, 1997; Minier, 1998; Doucouliagos and Ulubaşoğlu, 2008; Fosu, 2008). What is rather evident is the relatively better economic performance of countries where the rules of the political game ensure checks and balances by putting constraints on executives and enforcement mechanisms are well-developed and political stability is sustained (Acemoglu et al., 2005).

The ability to adapt to world fluctuations and changes has been crucial in Singapore and Mauritius. For instance, in Mauritius, good institutions were important for good governance that led to macroeconomic stability, supported the successful implementation of the EPZ policy, and encouraged investment in export sectors (Subramanian, 2013). Furthermore, as a result of high institutional quality which translates into effective policy making and implementation, Mauritius has shown growing resilience to external shocks, owing to effective policy responses and adaptation strategies (Frankel, 2014).

To shed some light on the state of institutional quality (IQ) in SIDS, Table 2.3a presents recent data on the quality of institutions as measured by the World Bank indicators, namely, control of corruption,

government effectiveness, political stability, regulatory quality, rule of law, and voice and accountability. These measures are perception scores that are computed for all countries globally. They range from -2.5 to +2.5, with -2.5 assigned to the country with the lowest level of IQ, +2.5 the highest, and zero value as the global mean. The data is then ranked by quintiles and reported in Table 2.3b.

(Insert Table 2.3a about here)

(Insert Table 2.3b about here)

Mauritius, Barbados, Dominica, Samoa and Saint Vincent and the Grenadines rank in the top quintiles on all IQ measures. Singapore is also known for its strong institutions and as such the country is the best performer on all the institutions variables, except on voice and accountability. Despite the country's economic success, there are concerns expressed by the international community on a number of restrictions on civil and press liberties.

SIDS LDCs performed poorly relative to SIDS non-LDCs IQ measures. Comoros, Guinea-Bissau, Haiti, Sao Tome and Principe, Solomon Islands and Timor-Leste rank in the bottom quintiles on most IQ indicators. Other LDCs like Kiribati enjoy relatively high control of corruption and accountability, while Tuvalu ranks in the top quintiles on political stability as well as voice and accountability among SIDS but performs poorly on government effectiveness and regulatory quality. Some non-LDCs also exhibit weak institutions. These countries include: Belize, Maldives and Papua New Guinea. Building institutional capacity is crucial for growth and development, particularly in LDCs.

Literature on SIDS generally suggests that smallness offers opportunities for a sense of togetherness and solidarity among citizens that potentially favours social cohesion and contributes to a pursuit of equity. Furthermore, social capital may lead to effective distribution of public goods as well as domestic revenue mobilization, by building a culture of trust and informal institutions that complement formal institutions for collective socio-economic gains (North, 1990; Casson et al., 2010; Fafchamps et al., 2004). Yet, a higher risk of polarisation and inequities may exist, especially in countries with diverse ethnic groups. These inequities could ensue from biases in the allocation of public goods by the state, since smallness may cause higher proximity between the state and the citizens, thereby creating very little separation between the state and the rest of society, which can hamper the rule of law and limit control of corruption. These are likely to create tensions and instability with adverse consequences for growth.

Both Singapore and Mauritius have, however, been able to maintain social cohesion despite the ethnolinguistic heterogeneity. In the case of Mauritius, Subramanian (2013) maintains that diversity and ethnic fragmentation rather play a significant role in the development of strong institutions that explain to a large extent the country's achievement. He argued that through social networks that existed between Mauritius' diverse ethnic groups and the rest of the world, foreign direct investment and trade were facilitated. In the case of Singapore, UNDP (2014, pg. 14) states:

> Nation-building efforts were a key pillar of the national strategy after independence in 1965, with the government adopting measures to promote a shared sense of national identity and a harmonious society that was collectively working to achieve prosperity for Singapore as a whole. As the past was wrought with ethnic tensions and corruption, Singapore's founding fathers (there were no women in top posts) elevated the concepts of a multi-racial, multi- lingual, multi-religious society governed through meritocracy as the key founding principles essential for Singapore's economic success and remain important pillars of the Singaporean identity today.

5. Physical and human capabilities

Human capital and infrastructural development are important for economic development (Fosu, 2013b). Specially, ensuring and improving the quality of education, health care and sanitation, transportation and communication systems, and access to reliable electricity supply are essential to attract foreign direct investment, boost productivity and facilitate industrialization in developing countries.

In SIDS, adequate and reliable physical infrastructure may limit the negative consequences of remoteness on investment and trade by lowering freight and transaction costs, thereby reducing the cost of doing-business and boosting exports and competitiveness of domestic industries (Brun et al., 2005). Additionally, the effectiveness of public service delivery, especially on archipelagos such as Comoros, Kiribati, Maldives, Solomon Islands, Tuvalu, Vanuatu, Samoa as well as post-conflict SIDS like Timor-Leste, considerably depends the state of existing transport infrastructures. Hence, poor infrastructure may lead to spatial inequities and hamper economic development. Likewise, human capital is essential throughout the process of industrialization, for investment, effective transfer of technology as well as technological updating and upgrading. An educated and skilled labour force is important to maintain a competitive environment and attract foreign investment.

Education has been a major priority of the Singaporean government for long-term economic gains in terms of growth and improvements in well-being. The country has been successful in linking and adapting its training and education policies to the skill demands of industries. In terms of human capital development, Singapore through its educational system has strived to give its population the necessary and up-to-date skills and knowledge to meet the demands of foreign investors, with a particular emphasis on quality education from the basic to technical and tertiary education, while investing massively undertaking infrastructure development to reduce communication and transportation cost. With respect to physical infrastructure, Huff (1995, pg. 746) writes:

> Infrastructure provided under government auspices was the most modern and efficient possible, including port, airport, telecommunications, roads and a mass rapid transit system. The effect was to provide a subsidy for business in Singapore, which reduced expenses both in operating within the Republic and in reaching world markets, so-called 'distance costs' (Helleiner, 1973).

In the case of Mauritius, Zafar (2011) emphasized that the level of physical infrastructure development as well as the availability of skilled labour force in Mauritius have contributed tremendously to export expansion, growth and the success of the EPZ policy.

Nevertheless, the existence of scale diseconomies and fixed-cost indivisibility makes the cost of provision of public infrastructure and social services relatively high in SIDS. Thus, infrastructural development in these countries may be constrained by high per unit cost and may require governments' effective partnership with the private sector in financing and maintenance. Furthermore, migration of labour has long been a characteristic of small states (Armstrong and Read, 1998). Many SIDS have increasingly benefited from the inflows of both skilled and unskilled labour from less developed neighbouring countries to compensate for the shortage of domestic labour, while the outflow of labour generates remittances. However, skilled out-migration may also result a reduction in labor supply with adverse effects on growth, particularly in countries with deficient educational systems and limited training capacity (Read, 2004). For example, according to International Labour Organization (2018), the

emigration of educated workforce aggravated the shortage of skilled labour in Timor-Leste. Thus, appropriate policies are needed to maintain adequate labour supply for domestic production.

6. Private – public sector partnership

Finding the right balance between a strict interventionist society and a pure market-based economy has been key in almost all successful economies (Fosu, 2013b). Economists have often encouraged governments to allow the market to operate and limit interventions to situations of market failures with the aim of minimizing the risk of government failure. However, the recent growth successes in East Asia, in particular, has significantly altered economic thinking such that researchers now preconize an appropriate combination of market and state to promote growth and development (Stiglitz, 2016).

In addition to building state capacity and strong institutions, in the form of effective legal systems, property rights enforcement, limited corruption and stability, government may acquire information on the type of incentives needed to boost investors' trust and reduce risks and barriers to doing business. Hence, effective private-public relations in which government implements appropriate policies to ensure a conducive environment for the private sector to thrive is important for higher efficiency in the allocation of resources and growth. Furthermore, strong government and private sector partnerships in investment and capital mobilization for technological development and infrastructure projects may be crucial for improvements in domestic infrastructures in SIDS.

Singapore is a good example of a state where market and government partnership has tremendously contributed to increasing competitiveness and efficiency, placing the country among the top most competitive countries, globally. The country has been successful in pursuing a capitalist model under government effective planning, by creating a system in which public-private cooperation work effectively. From infrastructure development, education and technical training, to housing and health care systems, Singapore has strategically guided industrialization through market-driven interventions and the provision of appropriate incentives and support for private investment. In addition, the Singaporean government has allowed the market to operate in the provision of public services such as education, health care services, housing programmes and social security (Thomas, 2001). Until the wind of privatization in the mid-eighties, there had been a great involvement of government in key targeted sectors that had potential for economic growth and employment such as manufacturing and trade (Huff, 1995). Indeed, the Singaporean government has invested in a number of state-initiated profit-oriented enterprises that functioned efficiently and were highly competitive. These companies were then handed over to private investors or owned jointly with the private sector, mainly foreign corporations.

Mauritius, similarly, has long recognized that the private sector can only thrive in a conducive economic and political environment. Government in Mauritius has not only focused on building strong institutions but also thrive to reduce potential bottlenecks to investment and ensure an adequate supply of skilled workforce by encouraging research, innovation and the development of adequate skills to meet the demands of investors. Hence, Mauritius's success story is to large extent linked to an excellent state-business partnership.

7. Policy recommendations and conclusion

Like many other SIDS, Mauritius and Singapore faced harsh initial conditions at independence. However, in recent years, both countries are cited as examples of development success. As part of their development strategies, the two countries pursued reasonably sound trade policies, foreign direct investment promotion, good institutional reforms, human capital and infrastructure development, as well as excellent government and private sector relations. Given the substantial differences that exist across countries, replicating the exact policies that were successful in Mauritius and Singapore may not be appropriate. However, vulnerable SIDS, especially LDCs, may emulate particularly these two countries in shaping domestic policies to tackle institutional deficiencies, build capabilities and resilience, and promote exports, foreign direct investment and industrialization.

The Barbados Programme of Action adopted in 1994 and the Mauritius Strategy for Implementation of the Programme of Action for the Sustainable Development of SIDS in 2005, as well as the Samoa Pathway in 2014 emphasized the importance of international cooperation and partnership for sustainable development in SIDS. The need for better economic integration among SIDS, and with the rest of the world, has often been highlighted. Gaining access to larger exports markets, not only in advanced economies but also in other developing countries, offers SIDS opportunities for market expansion, foreign direct investment in export sectors, diversification, and economic advancement (Armstrong and Read, 1998).

Regional, multilateral and bilateral trade agreements represent key aspects of global partnership. Thus, the important role of external partnership agreement and development assistance cannot be dismissed. Partnership with more advanced economies as well as south-south partnerships are also needed to strengthen institutions, enhance human capital and infrastructural development in vulnerable SIDS-LDCs. Support from development partners in training, transfer of skills, capacity building and technical support might give the necessary boost to limit these key aspects of their vulnerabilities. Capacity building in the area of public administration, management of public funds and domestic revenue mobilization is also of particular importance for effective public service delivery in education, health care and other social services.

Greater integration of SIDS in the global market also means greater vulnerability to global crises and policy changes of their major trading partners (Armstrong and Read, 1998). It is therefore essential to build resilience as sustainability would depend on how well the country is able to adapt and adjust to external shocks and the changing global environment. Taking the example of Mauritius that has substantially benefited from special arrangements with more advanced economies, Subramanian (2013) observed that the success of the EPZ policy and the export sector in Mauritius is also partly due to preferential and favourable trade agreements under the sugar protocol in 1975 with the European Commission and the Multi-Fibre Agreement (MFA) with Europe and the US. In recent years, however, these preferential trade agreements have been phased out, threatening growth and employment in Mauritius. Nevertheless, the 2000 African Growth and Opportunity Act (AGOA) with preferential access to the US market holds opportunities for cushioning the negative impacts of the dismantling of MFA. Other non-African SIDS may well benefit from such arrangements as well, at least in the short run, as these countries strengthen their capabilities to be able to better compete in the global arena.

It is also essential that current trade policies take into account the changing international trade environment as well as the GATT/WTO rules. The possibilities of using quantitative trade restrictions to boost domestic production are currently very limited. Also coupled with trade shocks are the environmental shocks that have been a growing challenge of the recent years. Climate change, global

warming and sea-level rise continue to threaten the islands' fragile ecosystems and bio-diversity, their economy and the very existence of some SIDS (UN-OHRLLS, 2011). Adequate actions to address these pressing issues need to be taken not only at the national level but also through international cooperation in order to achieve better mitigation and adaptation measures (UN-OHRLLS, 2011).

Notes

[1] A total of fifty-seven (57) states are categorized as SIDS according to the UN classification. Out of these 57 states, thirty-seven (37) are independent states and UN members, while twenty (20) are dependencies and thus non-UN members or associate members of regional commissions. The list of countries is provided in Appendix Table A2.1. Three countries on the list however are not islands but are included mainly because they possess the key characteristics of the group. These countries are Belize, Guyana and Suriname. In the present study, we focus on the 37 independent states.

[2] Papua New Guinea exports gold, copper, oil and natural gas, Timor-Leste and Trinidad and Tobago are producers of oil and gas.

[3] This classification is based on the World Bank categorization of countries by income using the 2016 per capital GNI data (Atlas method and PPP), e.g. see World Bank (2016). No data is available for Cuba.

[4] see Appendix Table A2.1.

[5] The findings of many cross-country studies suggest that openness has a positive effect on growth (Edwards, 1993; Sachs et al., 1995; Srinivan, 2001; Dollar and Kraay, 2004; Wacziarg and Welch, 2008), though their results have been challenged in the light of possible measurement and methodological issues and the lack of strong theoretical foundation (Rodriguez and Rodrik, 2000; Rodríguez, 2007).

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Figure 2.1 Economic vulnerability index (EVI), SIDS NON-LDCs vs. SIDS LDCs (1990-2013)

ECONOMIC VULNERABILITY INDEX (EVI)
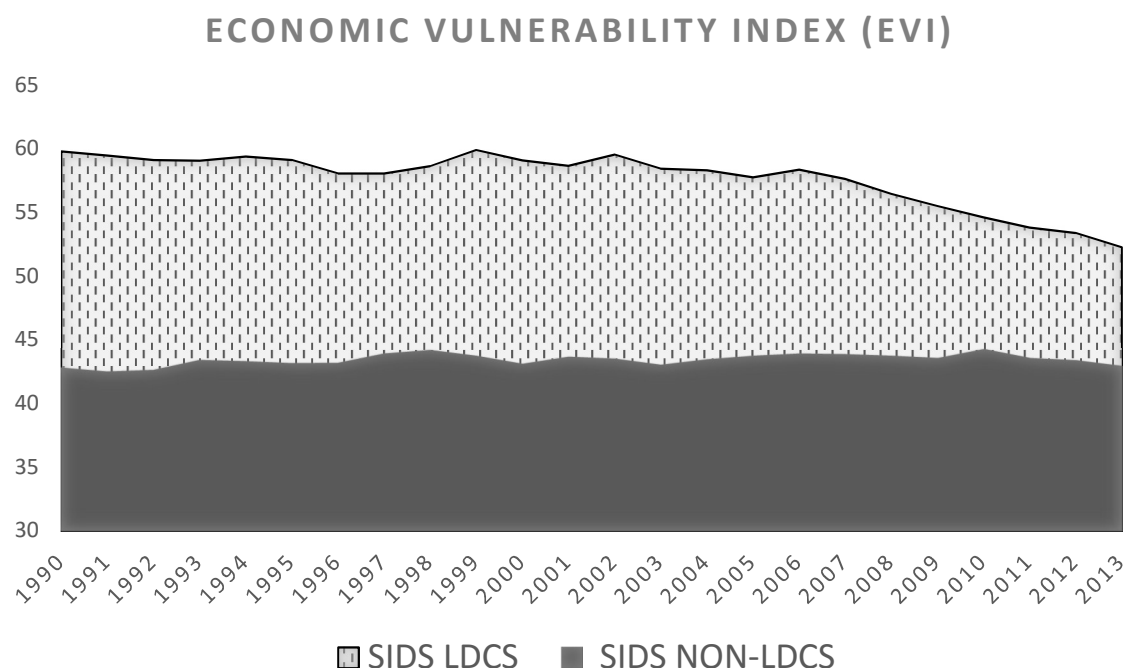
Notes: EVI is the obtained by taking the arithmetic mean of two components, namely, exposure index and sock index. The former is based on 5 components: population size (25%), remoteness from world markets (25%), exports concentration (12.5%), share of agriculture, forestry and fishery in GDP (12.5%) and the share of population living in low elevated coastal zone (25%). And the shock index is computed using 3 components: the victims of natural disasters (25%), the instability in agricultural production (25%), and the instability in exports of goods and services (50%).

Data on economic vulnerability index (EVI) are obtained from Feindouno and Goujon (2016), online at http://www.ferdi.fr/en/indicator/retrospective-economic-vulnerability-index

Figure 2.2 Economic growth: SIDS LDCs vs. SIDS NON-LDCs, 1983-2016

Per Capita GDP Growth (%)

SIDS LDCs ———●——— SIDS NON-LDCs ———
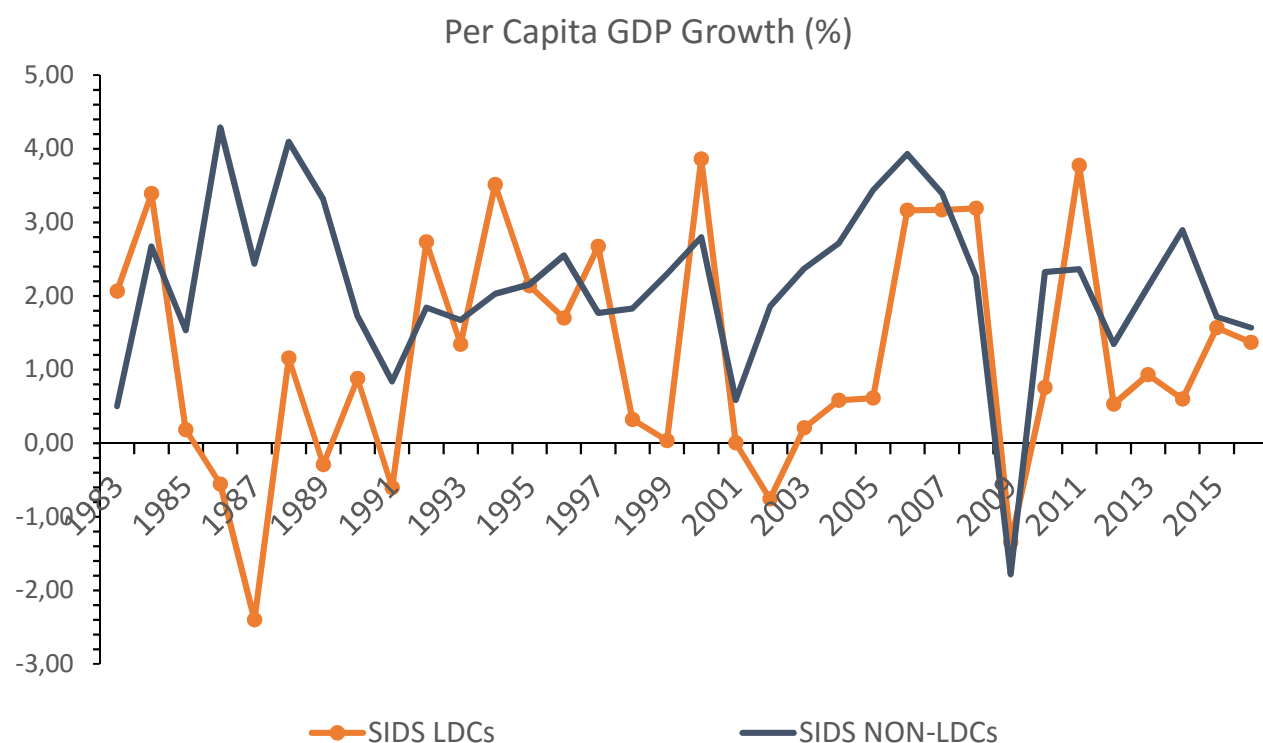
Data source: World Development Indicators (WDI), World Bank (2018a)

Notes: In the computation of the average growth rate for SIDS LDCs, the graduation of Cape Verde (2007), Maldives (2011), and Samoa (2014) were taken into account, such that at every point in time the list of LDCs is consistent with the UN classification for that year (see, https://www.un.org/development/desa/dpad/least-developed-country-category/ldc-graduation.html).

Table 2.1a Development outcomes in SIDS: GNI per capita, human development indicators and vulnerability index, by country – Latest year available

Country	GNI per capita, PPP (constant 2011 international $)*	Human Development Index (HDI)**	Improved water source (% of population with access)***	Mortality rate, under-5 (per 1,000 live births)**	Life expectancy at birth, total (years)+	School enrollment, primary (% net)++	Poverty Headcount (%, poverty line of US$ 1.9 a day), Latest year+++
SIDS LDCs							
Comoros	1435.06	0.50	90.10	73.30	63.46	79.46	17.67
Guinea-Bissau	1430.69	0.42	79.30	88.10	56.95	68.23	67.08
Haiti	1663.19	0.49	57.70	67.00	63.01	n/a	24.90
Kiribati	2344.33	0.59	66.90	54.30	66.05	95.21	12.87
Sao Tome and Principe	2704.89	0.57	97.10	33.80	66.42	94.91	32.28
Solomon Islands	1493.84	0.51	80.80	25.80	70.48	70.55	25.14
Timor-Leste	3940.60	0.61	71.90	49.70	68.58	95.59	43.47
Tuvalu	4745.65	n/a	97.70	25.30	n/a	84.40	3.26
Vanuatu	2893.45	0.60	94.50	27.60	71.98	85.81	13.14
SIDS NON-LDCs							
Antigua and Barbuda	17962.28	0.79	97.90	8.50	76.08	87.05	n/a
Bahamas	20007.09	0.79	98.40	10.60	75.37	97.52	n/a
Barbados	15411.32	0.79	99.70	12.30	75.64	91.02	n/a
Belize	7606.77	0.71	99.50	14.90	70.31	96.14	13.92
Cape Verde	5754.27	0.65	91.70	21.40	72.44	97.12	8.07
Cuba	n/a	0.77	94.90	5.50	79.54	92.15	n/a
Dominica	9921.90	0.73	94.40	34.00	n/a	92.95	n/a
Dominican Republic	13405.46	0.72	84.70	30.70	73.70	86.89	1.94
Fiji	7262.47	0.74	95.70	22.00	70.22	97.64	1.46
Grenada	10762.96	0.75	96.60	16.00	73.50	95.73	n/a
Guyana	6108.73	0.64	98.30	32.40	66.54	68.23	14.00
Jamaica	7831.63	0.73	93.80	15.30	75.81	92.45	1.70
Maldives	14084.57	0.70	98.60	8.50	77.12	94.80	7.26
Marshall Islands	4279.86	n/a	94.60	35.40	n/a	77.33	n/a
Mauritius	19470.84	0.78	99.90	13.70	74.35	96.15	0.53
Micronesia	3517.92	0.64	89.00	33.30	69.05	84.00	15.26
Nauru	8161.66	n/a	96.50	34.60	n/a	86.43	n/a
Palau	13566.65	0.79	95.30	15.90	n/a	80.01	n/a
Papua New Guinea	3058.32	0.52	40.00	54.30	65.39	86.01	38.03
Samoa	5461.54	0.70	99.00	17.30	74.84	95.95	0.62
Seychelles	20991.06	0.78	95.70	14.30	73.23	94.90	1.06
Singapore	78929.23	0.92	100.00	2.80	82.60	n/a	n/a

St. Kitts and Nevis	20954.16	0.77	98.30	9.30	n/a	78.35	n/a
St. Lucia	11945.18	0.74	96.30	13.30	75.28	93.04	35.83
St. Vincent and the Grenadines	9682.69	0.72	95.10	16.60	73.06	93.93	n/a
Suriname	14005.56	0.72	94.80	20.00	71.29	93.31	23.38
Tonga	5246.36	0.72	99.60	16.40	72.84	88.23	1.11
Trinidad and Tobago	30649.24	0.78	95.10	18.50	70.59	95.24	3.41
SIDS							
Mean	11352.54	0.69	91.06	26.83	71.47	88.76	16.30
Median	7719.20	0.72	95.30	20.00	72.44	92.45	13.14
Max	78929.23	0.92	100.00	88.10	82.60	97.64	67.08
	(Singapore)	(Singapore)	(Singapore)	(Guinea Bissau)	(Singapore)	(Fiji)	(Guinea Bissau)
Min	1430.69	0.42	40.00	2.80	56.95	68.23	0.53
	(Guinea Bissau)	(Guinea Bissau)	(Papua New Guinea)	(Singapore)	(Guinea Bissau)	(Guinea Bissau)	(Mauritius)
SIDS LDCs							
Mean	2516.85	0.54	81.78	49.43	65.87	84.27	26.65
Median	2344.33	0.54	80.80	49.70	66.23	85.11	24.90
Max	4745.65	0.61	97.70	88.10	71.98	95.59	67.08
	(Tuvalu)	(Timor-Leste)	(Tuvalu)	(Guinea-Bissau)	(Vanuatu)	(Timor-Leste)	(Guinea-Bissau)
Min	1430.69	0.42	57.70	25.30	56.95	68.23	3.26
	(Guinea-Bissau)	(Guinea-Bissau)	(Haiti)	(Tuvalu)	(Guinea-Bissau)	(Guinea-Bissau)	(Tuvalu)
SIDS NON-LDCs							
Mean	14297.77	0.73	94.05	19.56	73.43	90.10	10.47
Median	10762.96	0.73	96.00	16.20	73.50	92.95	5.34
Max	78929.23	0.92	100.00	54.30	82.60	97.64	38.03
	(Singapore)	(Singapore)	(Singapore)	(Papua New Guinea)	(Singapore)	(Fiji)	(Papua New Guinea)
Min	3058.32	0.52	40.00	2.80	65.39	68.23	0.53
	(Papua New Guinea)	(Papua New Guinea)	(Papua New Guinea)	(Singapore)	(Papua New Guinea)	(Guyana)	(Mauritius)

Notes: The categorization of SIDS LDCs is based on the UN LDCs list as at June 2017. The data is reported for the latest year available, between 2000 and present. Data on GNI per capita, assess to improved water source, under-5 mortality rate, life expectancy at birth, poverty headcount ratio (US 1.90 a day) are from the World Bank, World Development Indicators (2018, online), World Bank (2018a). Human development index (HDI) is from UNDP (2018).

(*) The latest year is 2016 for Bahamas, Dominican Republic, Guinea Bissau, Haiti, Jamaica, Mauritius, Palau and Singapore; 2013 for Cape Verde, 2014 for Comoros, and 2011 for the other SIDS.

(**) The latest year is 2015 for all the countries.

(***) The latest year is 2007 for Dominica, 2011 for Palau, and 2015 for the other SIDS.

(+) The latest year is 2015 for all countries.

(++) The latest year is: 2004 for Jamaica; 2007 for St. Lucia; 2009 for Dominica; 2010 for Bahamas, Guinea Bissau, and Trinidad and Tobago; 2012 for Guyana and Papua New Guinea; 2014 for Barbados, Comoros, Nauru, Tonga; 2016 for Maldives and Palau; and 2015 for the other countries.

(+++) The latest year is as follows: 1992 for Trinidad and Tobago; 1995 for St. Lucia; 1998 for Guyana; 1999 for Belize and Suriname; 2002 for Maldives; 2004 for Jamaica; 2006 for Kiribati; 2007 for Cape Verde and Timor-Leste; 2009 for Papua New Guinea and Tonga; 2010 for Guinea Bissau, Sao Tome, Tuvalu and Vanuatu; 2012 for Haiti and Mauritius; 2013 for Comoros, Fiji, Micronesia, Seychelles and Solomon Islands; and 2015 for Dominican Republic.

Table 2.1b Development outcomes in SIDS by quintiles: GNI per capita, human development indicators and vulnerability index, by country

Country	GNI per capita, PPP (constant 2011 international $)	Human Development Index (HDI)	Improved water source (% of population with access)	Mortality rate, under-5 (per 1,000 live births)	Life expectancy at birth, total (years)	School enrollment, primary (% net)	Poverty Headcount (%, poverty line of US$ 1.9 a day)
SIDS LDCs							
Comoros	5	5	4	5	5	5	4
Guinea-Bissau	5	5	5	5	5	5	5
Haiti	5	5	5	5	5	n/a	4
Kiribati	5	5	5	5	5	2	3
Sao Tome and Principe	5	5	2	4	5	2	5
Solomon Islands	5	5	5	4	4	5	4
Timor-Leste	4	4	5	5	4	2	5
Tuvalu	4	n/a	2	3	n/a	4	2
Vanuatu	5	4	4	4	3	4	3
SIDS NON-LDCs							
Antigua and Barbuda	1	1	2	1	1	4	n/a
Bahamas	1	1	1	1	2	1	n/a
Barbados	2	1	1	1	1	3	n/a
Belize	3	3	1	2	4	1	3
Cape Verde	4	4	4	3	3	1	3
Cuba	n/a	2	3	1	1	3	n/a
Dominica	3	3	4	4	n/a	3	n/a
Dominican Republic	2	3	5	4	2	4	2
Fiji	3	2	3	3	4	1	1
Grenada	2	2	2	2	2	1	n/a
Guyana	3	4	2	4	5	5	3
Jamaica	3	2	4	2	1	3	2
Maldives	2	4	1	1	1	2	2
Marshall Islands	4	n/a	4	5	n/a	5	n/a
Mauritius	1	1	1	2	2	1	1
Micronesia	4	4	5	4	4	4	4
Nauru	3	n/a	2	5	n/a	4	n/a
Palau	2	1	3	2	n/a	5	n/a
Papua New Guinea	5	5	5	5	5	4	5
Samoa	4	4	1	3	2	1	1

Seychelles	1	1	3	2	3	2	1
Singapore	1	1	1	1	1	n/a	n/a
St. Kitts and Nevis	1	2	2	1	n/a	5	n/a
St. Lucia	2	2	3	1	2	3	5
St. Vincent and the Grenadines	3	3	3	3	3	2	n/a
Suriname	2	3	4	3	3	3	4
Tonga	4	3	1	2	3	3	1
Trinidad and Tobago	1	2	3	3	4	2	2

Notes: The ranking is based on the data provided in Table 2.1a (see notes under Table 2.1a for details on each indicator). For all the variables, a rank of 1 means 'best performer' and 5 is 'worst performer'.

Table 2.2 Ease of doing business in SIDS, 2017

Country	Ease of doing business indicator -- Distance to frontier score (0=lowest performance to 100=frontier)	Quintile Rank (Distance to frontier score)	Ease of doing business index (1 to 190, 1=most business-friendly regulations) -- Rank Global
SIDS LDCs			
Comoros	48.05	5	158
Guinea-Bissau	41.22	5	176
Haiti	38.23	5	181
Kiribati	49.05	4	157
Sao Tome and Príncipe	44.45	5	169
Solomon Islands	58.14	3	116
Timor-Leste	40.69	5	178
Tuvalu	n/a	n/a	n/a
Vanuatu	63.06	1	90
SIDS NON-LDCs			
Antigua and Barbuda	58.65	2	107
Bahamas	56.65	3	119
Barbados	55.29	4	132
Belize	57.08	3	121
Cape Verde	55.82	3	127
Cuba	n/a	n/a	n/a
Dominica	60.62	2	98
Dominican Republic	58.41	2	99
Fiji	60.7	2	101
Grenada	53.05	4	142
Guyana	55.89	3	126
Jamaica	66.7	1	70
Maldives	53.78	4	136
Marshall Islands	51.42	4	149
Mauritius	75.45	1	25
Micronesia	48.98	5	155
Nauru	n/a	n/a	n/a
Palau	55.12	4	130
Papua New Guinea	58.87	2	109
Samoa	61.83	1	87
Seychelles	60.4	2	95
Singapore	84.53	1	2
St. Kitts and Nevis	54.34	4	134
St. Lucia	62.87	1	91
St. Vincent and the Grenadines	55.71	3	129
Suriname	46.76	5	165
Tonga	62.93	1	89
Trinidad and Tobago	60.87	2	102

Notes: The data on the distance to frontier score is obtained from the World Bank Doing Business project (http://www.doingbusiness.org/ ,World Bank, 2018). The ease of doing business index ranks from 1 to 190 (where 1 is the best rank and 190 the lowest) and is the simple average of each country's percentile rankings on the 10

components indicators (Starting a Business, Dealing with Construction Permits, Getting Electricity, Registering Property, Getting Credit, Protecting Minority Investors, Paying Taxes, Trading across Borders, Enforcing Contracts, Resolving Insolvency). The quintile ranks are computed using the distance to frontier score provided in the second column of the table.

Table 2.3a Institutional Quality in SIDS, 2016

Country	Control of Corruption	Government Effectiveness	Political Stability and Absence of Violence/Terrorism	Regulatory Quality	Rule of Law	Voice and Accountability
SIDS, LDCs						
Comoros	-0.64	-1.54	-0.02	-1.05	-1.13	-0.18
Guinea-Bissau	-1.56	-1.64	-0.50	-1.24	-1.49	-0.70
Haiti	-1.35	-2.06	-0.67	-1.24	-1.00	-0.73
Kiribati	0.25	-0.45	0.87	-0.84	0.21	1.03
Sao Tome and Principe	-0.06	-0.68	0.23	-0.81	-0.69	0.45
Solomon Islands	-0.34	-0.99	0.51	-0.96	-0.34	0.49
Timor-Leste	-0.51	-1.03	-0.08	-0.98	-1.20	0.24
Tuvalu	0.03	-0.93	1.40	-0.59	0.46	1.09
Vanuatu	-0.10	-0.88	0.51	-0.29	0.32	0.69
SIDS, NON-LDCs						
Antigua and Barbuda	0.69	0.27	1.01	0.34	0.51	0.65
Bahamas	1.13	0.72	0.90	0.26	0.23	0.94
Barbados	1.24	1.08	0.96	0.48	0.78	1.10
Belize	-0.24	-0.68	0.06	-0.51	-0.86	0.67
Cape Verde	0.88	0.10	0.88	-0.30	0.35	1.02
Cuba	0.05	-0.13	0.62	-1.34	-0.41	-1.63
Dominica	0.63	0.05	1.13	0.20	0.61	0.99
Dominican Republic	-0.78	-0.25	0.29	-0.07	-0.29	0.19
Fiji	0.13	-0.26	0.83	-0.38	-0.29	-0.03
Grenada	0.57	-0.18	1.01	0.08	0.57	0.86
Guyana	-0.32	-0.30	-0.03	-0.42	-0.31	0.30
Jamaica	-0.16	0.41	0.24	0.16	-0.25	0.69
Maldives	-0.67	-0.33	0.41	-0.46	-0.41	-0.74
Marshall Islands	-0.06	-1.56	0.93	-0.98	-0.10	1.20
Mauritius	0.32	0.96	1.05	1.03	0.80	0.86
Micronesia	0.65	-0.35	1.05	-0.97	-0.06	1.16
Nauru	-0.47	-0.69	0.55	-0.38	-0.80	0.52
Palau	-0.47	-0.41	0.93	-0.18	0.32	1.23
Papua New Guinea	-0.92	-0.73	-0.50	-0.56	-0.75	0.19
Samoa	0.28	0.54	1.19	-0.10	0.76	0.76
Seychelles	0.79	0.36	0.72	-0.26	0.13	0.16
Singapore	2.07	2.21	1.53	2.18	1.83	-0.28

St. Kitts and Nevis	0.52	0.14	0.62	0.37	0.51	1.07
St. Lucia	0.63	0.01	0.86	0.29	0.51	1.09
St. Vincent and the Grenadines	0.68	0.21	1.01	0.28	0.41	1.04
Suriname	-0.32	-0.34	0.27	-0.63	-0.12	0.46
Tonga	-0.44	-0.29	0.91	-0.41	0.24	0.67
Trinidad and Tobago	-0.26	0.22	0.28	0.09	-0.16	0.60
SIDS						
Mean	0.05	-0.25	0.59	-0.27	-0.03	0.49
Median	-0.06	-0.29	0.72	-0.38	-0.06	0.67
Max	2.07	2.21	1.53	2.18	1.83	1.23
	(Singapore)	**(Singapore)**	**(Singapore)**	**(Singapore)**	**(Singapore)**	**(Palau)**
Min	-1.56	-2.06	-0.67	-1.34	-1.49	-1.63
	(Guinea Bissau)	**(Haiti)**	**(Haiti)**	**(Cuba)**	**(Guinea Bissau)**	**(Cuba)**
SIDS LDCs						
Mean	-0.48	-1.13	0.25	-0.89	-0.54	0.27
Median	-0.34	-0.99	0.23	-0.96	-0.69	0.45
Max	0.25	-0.45	1.40	-0.29	0.46	1.09
	(Kiribati)	**(Kiribati)**	**(Tuvalu)**	**(Vanuatu)**	**(Tuvalu)**	**(Tuvalu)**
Min	-1.56	-2.06	-0.67	-1.24	-1.49	-0.73
	(Guinea Bissau)	**(Haiti)**	**(Haiti)**	**(Guinea B & Haiti)**	**(Guinea Bissau)**	**(Haiti)**
SIDS NON-LDCs						
Mean	0.22	0.03	0.70	-0.08	0.13	0.56
Median	0.21	-0.06	0.87	-0.14	0.18	0.68
Max	2.07	2.21	1.53	2.18	1.83	1.23
	(Singapore)	**(Singapore)**	**(Singapore)**	**(Singapore)**	**(Singapore)**	**(Palau)**
Min	-0.92	-1.56	-0.50	-1.34	-0.86	-1.63
	(Papua New Guinea)	**(Marshall Islands)**	**(Papua New Guinea)**	**(Cuba)**	**(Belize)**	**(Cuba)**

Notes: The data is obtained from the World Governance Indicators (WGI), World Bank (2018b). For all the variables, the data ranges approximately from -2.5 to 2.5, where -2.5 is the lowest and 2.5 is the highest score.

Table 2.3b State of institutional quality in SIDS, by quintiles

Country	Control of Corruption	Government Effectiveness	Political Stability and Absence of Violence/Terrorism	Regulatory Quality	Rule of Law	Voice and Accountability
SIDS LDCs						
Comoros	5	5	5	5	5	5
Guinea-Bissau	5	5	5	5	5	5
Haiti	5	5	5	5	5	5
Kiribati	2	4	3	4	3	2
Sao Tome and Principe	3	4	5	4	5	4
Solomon Islands	4	5	4	5	4	4
Timor-Leste	5	5	5	5	5	4
Tuvalu	3	5	1	4	2	1
Vanuatu	3	5	4	3	2	3
SIDS NON-LDCs						
Antigua and Barbuda	1	1	2	1	1	3
Bahamas	1	1	2	1	3	2
Barbados	1	1	2	1	1	1
Belize	4	4	5	4	5	3
Cape Verde	1	2	2	3	2	2
Cuba	3	2	3	5	4	5
Dominica	2	2	1	2	1	2
Dominican Republic	5	3	4	2	4	4
Fiji	3	3	3	3	4	5
Grenada	2	3	2	2	1	2
Guyana	4	3	5	3	4	4
Jamaica	3	1	4	2	4	3
Maldives	5	3	4	4	4	5
Marshall Islands	3	5	2	5	3	1
Mauritius	2	1	1	1	1	2
Micronesia	1	3	1	5	3	1
Nauru	5	4	3	3	5	3
Palau	5	4	2	2	2	1
Papua New Guinea	5	4	5	4	5	4
Samoa	2	1	1	2	1	2
Seychelles	1	1	3	3	3	5
Singapore	1	1	1	1	1	5
St. Kitts and Nevis	2	2	3	1	2	1
St. Lucia	2	2	3	1	1	1
St. Vincent and the Grenadines	1	2	2	1	2	1
Suriname	4	3	4	4	3	4
Tonga	4	3	2	3	2	3

| Trinidad and Tobago | 4 | 2 | 4 | 2 | 3 | 3 |

Notes: The classification is done based on the data provided in Table 2.3a. The first quintile represents the best performance and the 5th quintile the worst performance.

Appendix

Table A2.1 List of SIDS

No	Country	No	Country
	UN MEMBERS, SIDS LDCS (11)	29	Papua New Guinea
1	Comoros	30	Saint Kitts and Nevis
2	Guinea-Bissau	31	Saint Lucia
3	Maldives	32	Saint Vincent and the Grenadines
4	Sao Tome and Principe	33	Seychelles
5	Haiti	34	Singapore
6	Kiribati	35	Suriname
7	Samoa	36	Tonga
8	Solomon Islands	37	Trinidad and Tobago
9	Timor-Leste		***SIDS NON-UN MEMBERS (20)***
10	Tuvalu	38	American Samoa
11	Vanuatu	39	Anguilla
	UN MEMBERS, SIDS NON-LDCS (26)	40	Aruba
12	Antigua and Barbuda	41	Bermuda
13	Bahamas	42	British Virgin Islands
14	Barbados	43	Cayman Islands
15	Belize	44	Commonwealth of Northern Marianas
16	Cape Verde	45	Cook Islands
17	Cuba	46	Curacao
18	Dominica	47	French Polynesia
19	Dominican Republic	48	Guadeloupe
20	Fiji	49	Guam
21	Grenada	50	Martinique
22	Guyana	51	Montserrat
23	Jamaica	52	New Caledonia
24	Marshall Islands	53	Niue
25	Mauritius	54	Puerto Rico
26	Micronesia (Federated States of)	55	Saint Maarten
27	Nauru	56	Turks and Caicos Islands
28	Palau	57	U.S. Virgin Islands