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# INTEGRATING INTO GLOBAL VALUE CHAINS FOR SERVICES: THE CASE OF JAMAICA'S OFFSHORE SERVICES INDUSTRY

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#### ABSTRACT

Jamaica is promoting the development of offshore services as a means of diversifying exports, creating employment, and promoting economic growth. This article presents an analytical review of Jamaica's attempt to integrate into global value chains for services. The findings suggest that Jamaica's offshore services industry remains small and underdeveloped. The limited success in integrating into global value chains for services is attributed to constraints on competitiveness, especially a shortage of high quality human capital. The article concludes that the policy measures being used to promote development of the offshore services industry are inadequate and need to be supplemented by development of human capital, upgrading of infrastructure and strengthening of weak institutions

#### INTEGRATING INTO GLOBAL VALUE CHAINS FOR SERVICES: THE CASE OF JAMAICA'S OFFSHORE SERVICES INDUSTRY

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#### 1. Introduction

The creation of global value chains (GVCs) has been a marked feature of the global economy in recent decades. Global value chains involve the dispersion of different stages of production of goods or different services activities across countries. A significant effect of the development of global value chains is the reconfiguration of global trade in both goods and services. An estimated 30 percent of the global trade in goods now consists of re-exports of intermediate imports (World Trade Organization, 2013, p. 6). Meanwhile, the categories of services trade experiencing the highest rates of growth are those which facilitate the development of global value chains <sup>1</sup> (Stephenson, 2012).

The creation of GVCs in services has been facilitated by advances in information and telecommunications technology making it possible for services to be outsourced offshore. An important factor underlying the growth of GVCs in services is the intensification of competitive pressure in the global economy. Increasing competition is driving the demand for greater efficiency. In response to the need for improved efficiency, services are being outsourced offshore to take advantage of lower costs. Efficient services are critical determinants of competitiveness throughout the global economy and are particularly important in promoting the efficiency of GVCs in goods. The fragmentation of goods production is increasing the demand for services such as transport, logistics and trade related finance required to synchronize the various links of the value chain and promote efficiency (Stephenson, 2012; Baldwin, 2012). The continuous need to increase efficiency in the global economy can be expected to lead to further increase in demand for offshore services which will give further impetus to the development of GVCs in services.

Integration into GVCs for services provides opportunities for developing countries to diversify their exports. This is particularly true for those developing countries with limited industrial capacity. Developing countries can integrate into GVCs for services by specializing in specific services tasks in which they have a competitive advantage. This will facilitate increased export earnings, employment creation, and poverty reduction. The extent to which developing countries are able to integrate into GVCs for services depends on whether the conditions for competitive production of services are satisfied. Firms seeking to outsource services to offshore locations will choose locations where transaction costs are lowest.

In the case of Jamaica, the offshore services industry has been targeted as an avenue for export diversification. This article presents an analytical review of Jamaica's attempt to integrate into global value chains for services. The remainder of the article is structured as follows: Section two presents an overview of global value chains in services. The structure of Jamaica's offshore services industry is examined in section three. Jamaica's location advantages and disadvantages are reviewed in section four. Section five presents an evaluation of the policies used to promote the development of Jamaica's offshore services industry. Finally, conclusions are presented in section six.

#### 2. Overview of Global Value Chains in Services

Gereffi and Fernandez-Stark (2010) developed a classification of the offshore services industry using the GVC framework. This classification is based on the type of human capital required for different service activities. Within this framework, the offshore services value chain includes: low value activities that require a relatively low level of human capital (high school education), middle value activities that require at least a first degree, and high value activities that require postgraduate training.

The authors divide services into horizontal activities which can be supplied to all industries and vertical activities which are specific to particular industries.<sup>2</sup> The horizontal activities are then divided into three segments: information technology outsourcing, business process outsourcing, and knowledge process outsourcing (Figure 1). As defined

by the authors, information technology outsourcing includes low value activities such as infrastructure management, middle value activities such as software applications development, and high value activities such as software research and development. Business processing outsourcing encompasses low level services such as call centers and middle level services such as finance and accounting. High value activities requiring postgraduate degrees are classified as knowledge process outsourcing. The value of the vertical services is dependent on the type of human capital employed such as is the case for the horizontal services (Gereffi and Fernandez-Stark, 2010).

Offshoring of services is largely driven by increasing global competition. As competition intensifies, firms seek to reduce costs, improve efficiency and enhance competitiveness by outsourcing services to offshore locations. The location of offshore services is therefore dependent on a number of factors that influence the overall costs and efficiency of providing the required services. Some of the important factors that have been identified include labor costs, the availability and quality of human capital, the quality of infrastructure, the quality of institutions, and the tax and investment regime (Stephenson, 2012; World Trade Organization 2005). Geographic and cultural proximity to major markets, while not necessarily offering the lowest costs, can be an advantage (Mulder et.al., 2007). This is sometimes referred to as the near shore advantage.

The availability of labor at lower cost is a key determinant of the location of offshore services, but the quality of human capital is even more important as it determines the type of service activities that will be possible in any given location. Low value services require a supply of workers with high school education and basic computer skills; however, an adequate supply of labor with tertiary education is required to integrate into the higher value segments of the services value chain. High quality infrastructure is necessary as poor infrastructure increases the costs of doing business. Given the dependence of offshore services on reliable telecommunications, high quality telecommunications services are especially important.

ITO KPO **Information Technology Knowledge Process Outsourcing** Outsourcing Legal **Business Consulting** Software R&D Services **Business Analytics** Market Intelligence BPO **Business Process Outsourcing** IT Consulting Increasing Value Added Software ERM CRM HRM **ERP Application Development** Marketing Finance & Training Accounting Sales Application Integration Desktop Management Procurement Talent logistics and Manage-Supply chain ment management Infrastructure Payroll **Applications Management** Content/ Document Recruiting Management Contact Network Management Centers and Call Centers Infrastructure Manage-

Figure 1: Offshore Services Value Chain-Horizontal Activities

Source: Gereffi and Fernandez-Stark (2010)

The quality of institutions is a critical determinant of the competitiveness of services. Strong institutions such as an efficient legal system and effective protection of property rights reduce the costs of doing business. In addition to increasing the costs of doing business, institutional deficiencies increase uncertainty and are therefore likely to increase the risks associated with the offshoring of services (World Trade Organization, 2005). Given the intense global competition for investment, an open investment regime and competitive tax policies are necessary to attract investors. Geographic location may be important as locations near major markets allow outsourcing firms to diversify the risks associated with the concentration of their operations in one region of the world. Cultural affinity can enhance the quality of some services especially call center services.

The economic benefits of integrating into GVCs for services depend on the segment of the value chain in which a country is integrated. While the lower end of the GVC provides employment for low skilled workers and foreign exchange earnings, moving up the value chain is likely to generate additional benefits such as knowledge transfers and technology spillovers (Radwan Strychacz, 2010). This view is supported by Gereffi and Fernandez-Stark (2010, p. 4) who argue that complex high value services require more interaction between clients and suppliers than the lower value commoditized services and therefore offer more opportunities for knowledge transfer.

#### 3. Structure of Jamaica's Offshore Services Industry

The development of Jamaica's offshore services industry began on a small scale in the 1980s with low value data entry operations. In 2001 the government of Jamaica took the decision to actively promote the development of the offshore services industry with emphasis on business process outsourcing (BPO) (Jamaica Promotions, 2005). Despite promotional efforts, the offshore services industry in Jamaica remains relatively small, comprising 30 companies and a total of 13,000 employees at end of July 2013.<sup>3</sup>

Foreign exchange earned by the offshore services industry in 2012 was estimated at US\$ 200 million, which was approximately 10 percent of the earnings from tourism.<sup>4</sup> This suggests that significant ex-

pansion of the offshore services industry is required if meaningful reduction in the country's dependence on tourism is to be achieved.<sup>5</sup>

The offshore services industry in Jamaica is concentrated in business process outsourcing with low value call centers being dominant. Nevertheless, there has been some movement up the value chain to middle value BPO activities. The middle value BPO activities in which firms located in Jamaica have specialized are finance and accounting and sales and marketing,

The concentration in business process outsourcing involving low and middle level activities is partly related to the shortage of human capital required for the development of high value knowledge processing activities. Another important factor is the policy emphasis on creating jobs to reduce high levels of unemployment affecting high school graduates and university graduates with a first degree. In January 2013 unemployment among 14-19 year olds was 51 percent while unemployment among the 20-24 age group was 33 percent. Providing jobs for unemployed persons is seen as a higher priority than the development of high value activities for which there is insufficient human capital. It is also important to note that despite high rates of unemployment among university graduates, the country lacks the human capital to diversify into middle value information technology outsourcing, as the supply of graduates with training in computer and information technology is very limited.

Jamaica's offshore services industry is dominated by foreign firms. Participation of domestic firms is constrained by the lack of access to capital. Given the limited availability of venture capital, domestic firms rely on bank credit, but access to credit in Jamaica is more difficult than in competing countries. *The Global Competitiveness Report* ranks Jamaica at 127 out of 144 countries for ease of access to loans, while Panama, a competing location for offshore services, is ranked at 12.9

### 4. Jamaica's Advantages and Disadvantages as a Location for Outsourcing

Jamaica's location advantages and disadvantages can be assessed with respect to the major factors that have been identified as

requirements for successful integration into global value chains for services.

#### 4. 1. Labor Costs

Jamaica's labor costs are lower than labor costs in the United States of America, which is the major market for Jamaica's offshore services industry. Jamaica Promotions estimates that Jamaica's labor costs are between 30 and 40 percent lower than labor costs in the United States of America. Moreover, given the tendency of the Jamaican dollar to lose value over time, labor costs can be expected to remain low. While Jamaica's labor costs are lower than labor costs in the United States of America, they are not competitive with India, the leading exporter of offshore services.

#### 4. 2. Human Capital

Jamaica lacks adequate supply of the high quality human capital needed to move up the services value chain. While there is a supply of high school graduates for low level activities and university graduates with first degrees are available for some middle level activities, there is a shortage of workers with postgraduate training to facilitate the development of high value knowledge process outsourcing. <sup>12</sup> Jamaica's tertiary enrolment rate is lower than that of competing countries in Latin America (Table 1). In addition, the supply of workers with postgraduate training is depleted by high rates of emigration. <sup>13</sup>

#### 4. 3. Infrastructure

Jamaica's overall infrastructure is of average quality. *The Global Competitiveness Report* ranks the quality of overall infrastructure at 76 out of 144 countries (World Economic Forum, 2012). While the telecommunications infrastructure that is vital for the offshore services industry is of fairly good quality, the supply of electricity is unreliable. A significant constraint on the expansion of the offshore services industry is inadequate office space. The unavailability of office space is a disadvantage; as potential investors have to delay start-up of operations until office spaces are constructed.<sup>14</sup>

Table 1: Selected Indicators for Jamaica and Competing Near Shore Locations

Indicator	Barba-	Costa	Domin-	Jamai-	Mexico	Pana-
(rank out	dos	Rica	ican	ca		ma
of 144			Repub-			
countries)			lic			
Tertiary	24	81	72	75	78	57
education						
enrolment						
rate						
Quality of	21	95	96	76	65	44
overall in-						
frastructure	0.4	40	100			40
Quality of	24	42	130	83	79	43
electricity						
supply Business	74	108	127	141	135	118
costs of	14	100	121	141	135	110
crime and						
violence						
Efficiency	28	73	95	79	100	47
of legal		10		10	100	
framework						
in settling						
disputes						
Protection	27	59	89	72	71	43
of property						
rights						
Intellectual	30	68	119	79	77	38
property						
protection						
Ease of ac-	79	111	90	127	82	12
cess to						
loans						
Venture	94	101	111	130	67	17
capital						
availability						

Source: World Economic Forum (2012)

#### 4. 4. Institutions

Weak institutions are a disadvantage for Jamaica. Institutions to promote security and the rule of law are particularly weak. Jamaica has a high crime rate which imposes significant costs on businesses. Jamaica is ranked at 141 out of 144 countries with respect to the business

costs of crime and violence (World Economic Forum 2012). The offshore services industry in Jamaica has been especially burdened by crime due to the operation of fraudulent lottery schemes which involve the theft of personal information of the customers of client firms by employees of the services suppliers. The stolen information is used to defraud customers of client firms. Another institutional weakness relates to the arrangements for settling disputes. Inefficient judicial processes have created a dispute settlement system which is expensive and time consuming. Mechanisms for the protection of property rights in general and intellectual property rights in particular are also deficient compared to competing countries such as Barbados, Costa Rica and Panama (Table 1).

#### 4. 5. Investment and Tax Regime

Jamaica is dependent on foreign investment due to inadequate domestic capital. In order to attract foreign investment into the offshore services industry, the government of Jamaica offers tax and investment incentives to firms exporting offshore services. The central component of the incentive regime is the offer of full exemption from income taxes, import duties and general consumption tax to firms operating in designated free zones. <sup>16</sup> Investors are also granted accelerated depreciation allowances which allow the complete write off of the cost of equipment over two years. In addition, there are no restrictions on the repatriation of profits. The tax incentives allow Jamaica to offer a tax regime that is on par with other locations such as Barbados offering similar incentives. The absence of restrictions on the repatriation of profits gives Jamaica an advantage over countries maintaining foreign exchange controls.

Given the shortage of office space for the offshore services industry, the Government of Jamaica offers reduced stamp duties and transfer taxes on real estate transactions to promote development of office space. In addition, the Development Bank of Jamaica provides loans to real estate developers and operators of services firms for construction of office space. The incentives for development of office space are intended to ameliorate one of Jamaica's main disadvantages and do not give Jamaica any advantage over countries with available office space.

Customized training programs for call center employees are provided by the National Training Agency, but fiscal constraints prevent the Government of Jamaica from offering cash grants to offset the cost of training. Hence Jamaica is at a disadvantage compared to countries that provide financial assistance for training programs.

#### 4. 6. Geographic and Cultural Proximity

Given Jamaica's location close to North America and the pervasive influence of American culture in Jamaica, the country has a near shore advantage with respect to North America, the largest market for outsourcing. This is a significant advantage for Jamaica as geographic and cultural proximity make the country attractive not only to North American firms but also to Indian firms serving the North American market.<sup>17</sup>

#### 5. Review of Policies Used to Promote Offshore Services

The main policies used by the Jamaican government to promote the offshore services industry include tax incentives, provision of office space in state owned free zones, loans to private developers to construct office space, and development of training programs.

Jamaica relies heavily on tax incentives to attract investors into the offshore services industry. Tax incentives allow Jamaica to offer a competitive tax regime but they are not sufficient to maintain competitiveness. Other critical factors required to attract offshore services firms and promote competitiveness also need to be addressed. These include increasing the supply of office space, improving the quality of infrastructure, strengthening institutions, and increasing investment in high quality human capital.

The unavailability of office space is a binding constraint on the expansion of the offshore services industry. Potential investors will have to delay start-up of operations until office spaces are constructed and are therefore likely to choose to locate in competing countries where office spaces are readily available. The policy of providing government loans for construction of office space created additional space to supplement the government owned free zones, but all existing space is now fully utilized. Fiscal constraints limit the government's ability to

provide additional loans to the private sector or to expand state owned free zones. Attraction of foreign investors is therefore necessary to rapidly increase the supply of office space for the offshore services industry.

The liberalization of Jamaica's telecommunications sector has increased competition and facilitated modernization of the telecommunications infrastructure. While high quality telecommunications infrastructure is critical for a competitive offshore services industry, the quality of other infrastructure is also important as the total cost of doing business is affected by the entire infrastructure. Jamaica's electricity supply is unreliable due to the old age of existing power plants. Moreover, electricity is expensive due to dependence on imported oil for power generation. Upgrading of the electricity infrastructure and the introduction of cheaper sources of fuel for power generation are required to reduce costs and enhance competitiveness.

The tax incentives offered to investors are unlikely to offset the comparative disadvantage created by institutional deficiencies. Implementation of measures to reduce crime, strengthen intellectual property rights protection and improve the efficiency of the judicial process is needed to enhance the competitiveness of the offshore services industry.

The training program developed by the National Training Agency is targeted at employees of low value call centers. This is consistent with the objective of creating employment for the large number of unemployed low skilled persons. Nevertheless, this policy entails the risk of encouraging specialization in low value activities that generate limited spillover effects. Maximizing the economic benefits of the offshore services industry requires movement up the value chain. This can be achieved by increasing the share of middle value activities as well as by moving into high value knowledge process outsourcing.

Successful movement up the services value chain will require development of human capital. Increasing the supply of university graduates with training in information and computer technology will facilitate diversification into middle value information technology outsourcing. Similarly, increasing the supply of workers with postgraduate qualifications in disciplines such as business, science and technology will be necessary to move into knowledge process outsourcing.

Knowledge process outsourcing activities generate high value added and constitute the fastest growing segment of the GVCs for services (Gereffi and Fernandez-Stark, 2010, p. 4). It is also important to note that moving up the ladder into knowledge process outsourcing has the potential to reduce the emigration of some categories of high skilled workers. The major challenge is acquiring the resources required to finance the development of human capital. The capacity of the state to finance education is limited by fiscal constraints while access to private education is restricted by inadequate access to student loans. Increasing the supply of human capital is therefore partly dependent on improvement in the availability of student loans to facilitate private financing of education.

#### 6. Conclusions

The offshore services industry offers an opportunity for Jamaica to diversify its exports, reduce poverty, and promote economic growth. Yet, Jamaica's efforts to integrate into global value chains for services have not been very successful. Jamaica has the advantages of relatively low labor costs and geographic and cultural proximity to the world's largest outsourcing market, but these advantages are not sufficient to facilitate significant development of the offshore services industry.

The major factors restricting Jamaica's integration into global value chains for services are inadequate human capital, infrastructural deficiencies, and weak institutions. The policy of offering tax incentives to investors cannot offset these constraints and is therefore not sufficient to promote competitiveness. Expansion of Jamaica's offshore services industry requires development of human capital, upgrading of infrastructure, and strengthening of weak institutions. The development of human capital is particularly important since it is necessary to accelerate movement up the value chain and thereby increasing the value added to the economy.

#### **ENDNOTES**

1. Stephenson (2012) notes that the category "other commercial services," which includes services such as communications, finance and computer and information services that facilitate the creation of GVCs in both goods and services, is the fastest growing category of global services trade.

2. According to Gereffi and Fernandez-Stark (2010), the industries with the highest demand for offshore vertical activities are: banking; financial services and insurance; manufacturing; telecommunications; energy; travel and transportation; health and pharmaceuticals and retail.

- 3. Information provided by Jamaica Promotions (JAMPRO)
- 4. Estimate provided by JAMPRO
- 5. Tourism accounted for 47 percent of total exports of goods and services in 2011.
- 6. Information provided by JAMPRO
- 7. Statistical Institute of Jamaica (2013)
- 8. Twenty-three of the 30 firms are owned by residents of the United States of America. The largest firm, Affiliated Computer Services (ACS), which is owned by XEROX, operates the largest call center on the island with 5600 employees.
- 9. World Economic Forum (2012).
- 10. The difference in cost varies with the type of labor.
- 11. The exchange rate depreciated from US\$1 = J\$89.70 at end of January 2010 to US\$1 = J\$102 at August 28, 2013.
- 12. An example of the effects of the shortage of human capital is the inability of Jamaica to provide 3000 engineers required by a potential investor in the KPO segment (source- JAMPRO).
- 13. One study estimated that 85 percent of Jamaica's tertiary educated labor force emigrated over the period 1985-2000 (Mishra 2006).
- 14. For example, Convergys Corporation from the United States of America planned to establish a call center in Jamaica but placed those plans on hold in November 2012 due to unavailability of office space (Jamaica Observer, December 12, 2012).
- 15. In response to the adverse impact of the Jamaican lottery scams on American citizens, The United States Government has been providing the Government of Jamaica with technical and financial assistance intended to reduce the criminal activities associated with Jamaica's offshore services industry.
- 16. There are two state-owned free zones and two privately operated free zones. Firms unable to find accommodation in existing free zones can be designated as single entity free zones.

17. The Indian firms that have established offshore services delivery centers in Jamaica are Hinduja Global Solutions and Sutherland Global Services.

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