CBB Book Note No. BN/16/01

Publication Date: December 6, 2016

The Central Bank of Barbados Book Note Series highlights significant aspects of publications which offer useful insights and analysis on topics related to finance, economic development, and other issues relevant to small island developing economies. The views expressed are those of the author(s) and do not necessarily represent those of the Central Bank of Barbados.



BARBADOS AND GLOBAL COMPETITIVENESS: A LOOK AT RECENT TRENDS

Author: Prof. Klaus Schwab

Publisher: World Economic Forum, Geneva (2016)

ISBN 13: 978-1-944835-04-0

Book Note contributed by Laron Alleyne*

According to the 2016-2017 Global Competiveness Index (GCI) report, Barbados remains the top ranking CARICOM country amongst the Americas and continues to excel competitively in terms of the strength of its education and health systems, superior labor market efficiency and technological readiness, Figure 1. The island's strong institutional framework and infrastructure continue to lend critical support to the island's competitive advantage over its regional peers in the America's. Indeed, these core areas of competitive strength are such that Barbados has scored amongst the top 45 countries globally in terms of health, primary education and labor market efficiency; while it scored in the top 35 with respect to the quality of infrastructure and technological readiness.

1

^{*} Laron Alleyne, Research and Economic Analysis Department (READ), Central Bank of Barbados. Tel: 1 (246)227-8363. Email: laron.alleyne@centralbank.org.bb

1st pillar: Institutions 12th pillar: Innovation 2nd pillar: Infrastructure 6 5 11th pillar: Business 3rd pillar: Macroeconomic sophistication environment 4th pillar: Health and primary 10th pillar: Market size 0 education 9th pillar: Technological 5th pillar: Higher education and readiness training 8th pillar: Financial market 6th pillar: Goods market development efficiency 7th pillar: Labor market efficiency —The Americas Barbados

Figure 1: GCI Pillar Scores for the Americas 2016/2017

Source: The World Economic Forum GCI 2016-17

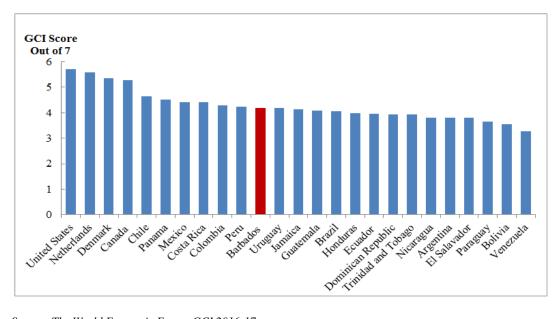


Figure 2: GCI Scores for the Americas 2016/2017

 $Source: The \ World \ Economic \ Forum \ GCI \ 2016-17$

Despite these strengths, there was some slippage in the island's position within the regional ranking, as Barbados moved from its 2014-2015 position of 8th in the America's to 11th out of 25² countries; having being surpassed by Mexico, Colombia and Peru. This decline in standing is

¹ Barbados was excluded from the GCI 2015-2016 report due to an absence of data.

² In the 2014-2015 GCI report, there were 24 countries, due to the exclusion of Ecuador.

representative of broad-based declines across most of the major pillars in the GCI index (Table 1), which warrants deeper analysis into the major building blocks of the index.

Table 1: Barbados' Detail Ranking by GCI Pillar

GCI Pillars	Barbados 2016-2017	Barbados 2014-2015
1st pillar: Institutions	4.35	4.64
2nd pillar: Infrastructure	5.13	5.32
3rd pillar: Macroeconomic environment	3.17	3.42
4th pillar: Health and primary education	6.13	6.47
5th pillar: Higher education and training	5.16	5.22
6th pillar: Goods market efficiency	4.19	4.28
7th pillar: Labor market efficiency	4.52	4.60
8th pillar: Financial market development	4.09	4.63
9th pillar: Technological readiness	5.44	4.98
10th pillar: Market size	1.56	2.07
11th pillar: Business sophistication	4.18	4.28
12th pillar: Innovation	3.43	3.56
GCI Score	4.19	4.36

Source: The World Economic Forum GCI 2016-17

In terms of institutional strength and the quality of infrastructure, the island's rank relative to the Americas has remained unchanged (7th and 5th in the Americas, respectively), despite an overall decline in the score. The decline in the institutional score was driven by challenges across a majority of the sub-indices of the 1st pillar, most notably the burden of government regulations and the efficiency of the legal framework. There have also been declines in the perceived ethical behavior of firms, strength of auditing and reporting standards and the protection of minority shareholders.

Infrastructural declines were linked to a number of areas of weakness, namely deteriorating roads and ports of entry into the island. In contrast, the strength of the island's telecommunications network is world class; using the indicator of the number of fixed-telephone lines relative to population size, Barbados boast a ranking of 6th globally and by the same measure possesses the region's most connected populace. With respect to the number of mobile-cellular telephone subscriptions relative to population size, the island has the 12th most developed mobile telephone network relative to its peers in the Americas.

The strength of the island's telecommunications network also has important implications for its technological readiness, where significant improvements are evident in the number of fixed broadband internet and mobile broadband subscriptions, relative to population size, as well as the size of the internet bandwidth per user. With regard to these three areas Barbados has made

substantial advances and enjoys the region's 2nd largest internet bandwidth, and the 5th and 10th largest fixed broadband and mobile broadband networks relative to its population's size.

In relation to its peers in the America's Barbados also continues to score well in the areas concerned with human capital development, namely the pillars of Health and Primary Education and Higher Education and Training; ranking 6th in the Americas under both pillars. The strength of the island's health care has been demonstrated by improvements in programs related to HIV, infant mortality and extended life-expectancy. Certainly, Barbados' unwavering commitment to the development and well-being of its people amongst the Americas, has resulted in the region's 13th highest level of life expectancy, following countries such as the United States, Canada, Denmark and the Netherlands, Figure 3.

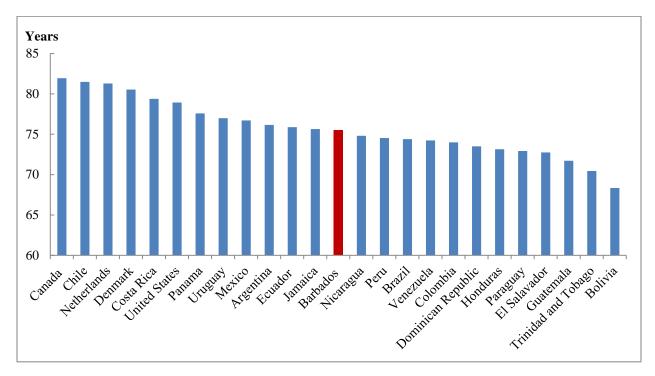


Figure 3: Life Expectancy in the Americas 2016/2017

Source: The World Economic Forum GCI 2016-17

Some ground has been lost with respect to primary and higher education systems, due to deterioration in the quality of primary school education and reduced enrollment rates from 97 percent to 91 percent, relative to 2014/15. With respect to the higher education system, while enrollment has improved, according to the GCI report 2016-2017, the quality of the education

system has declined³. Globally, in 2014 Barbados had the world's 15th best education system, since then the island's global position has fallen by 7 positions, while regionally in the America's, Barbados now ranks 5th.

Barbados' goods and labor market efficiency, has been impacted negatively by declines in the labor-employer relations, hiring and firing practices, and the country's ability to attract talent, as well as declines in the competitive environment.

While there has been no decline in the indicator, Barbados performs poorly as it relates to pay/productivity relationship, scoring 17th out of a sub-index of 25 countries in the Americas, having being out performed by countries such as Guatemala, Trinidad & Tobago and Jamaica, in addition to the developed countries of the United States, Denmark and the Netherlands, Figure 4.

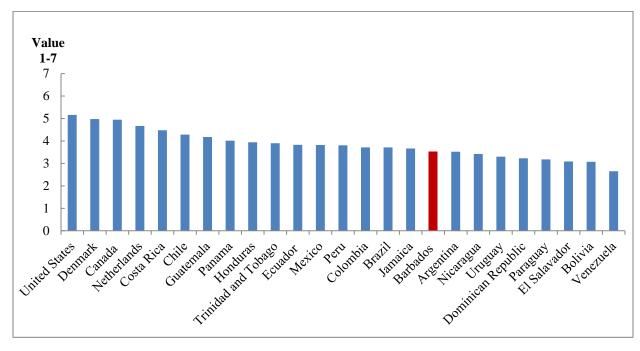


Figure 4: Pay and Productivity Relationship in the Americas 2016/2017

Source: The World Economic Forum GCI 2016-17

The perception of the financial market has also suffered, with respect to its ability to meet businesses needs and the affordability of financial services. Indeed, the island's financial market

³ The score is based on the response to the question, "In your country, how well does the education system meet the needs of a competitive economy? [1= not well at all; 7 – extremely well]."

development in terms of its role in business facilitation ranks 19th, 18th and 23rd, with respect to affordability, meeting business needs and ease of access to loans, respectively. This is representative of a dramatic deterioration of the competitiveness of the island's financial market, where previously Barbados ranked 9th in terms of affordability within the Americas and 18th, with respect to the ease of access to loans.

The GCI relies on measures such as the quantity and quality of local suppliers, cluster development, value chain breadth and the extent of marketing as indicators of business sophistication. Relative to the 2014-2015 score, Barbados has also experienced declines in business sophistication, driven primarily by perceived declines in the domestic market supply network. These declines have not impacted on the island's regional competitive position, where business sophistication is concerned, as the island continues to rank 9th in the Americas, Figure 5.

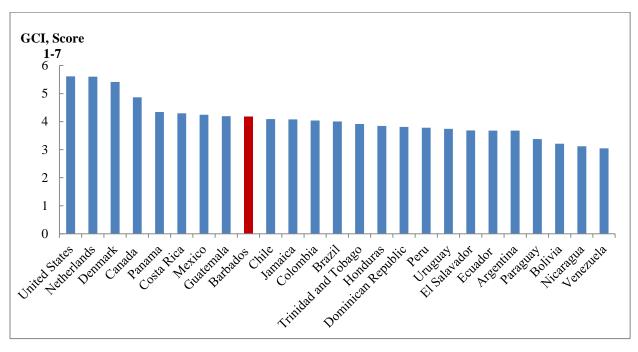


Figure 5: Business Sophistication in the Americas 2016/2017

Source: The World Economic Forum GCI 2016-17

Likewise, the island's regional ranking with respect to innovation remains unaffected by the decline in its GCI score. Although there has been an improvement in the capacity for innovation within Barbados, as well as, an increase in the number of Patent Corporation Treaty applications, the quality of scientific research institutions has fallen, the university and businesses research relationship in terms of collaborative research and development has declined. There was also a

decline in the perceived ability of the Government to foster innovation, relative to the 2014-2015 report, which has been a feature across the region. Indeed, a regional comparison of government's role in the innovative process suggest that Barbados' weakness in this area is not unique, deteriorating from an average 3.4 in the 2014-2015 report to 2.9 in the 2016-2017 edition of GCI Report (on a scale of 1-7 with 7 being the best).

While Barbados continues to retain its competitive advantage in some respects, the general decline across the 12 pillars of the GCI Index is indicative of a need to refocus our efforts in the areas of infrastructural developments, business operations and corporate practices, as well as labor market efficiency. Efforts need to continue towards improving the business facilitation processes, as they relate to issues such as the affordability of financial services and access to finance, which in turn lends itself to improvements in market efficiency.