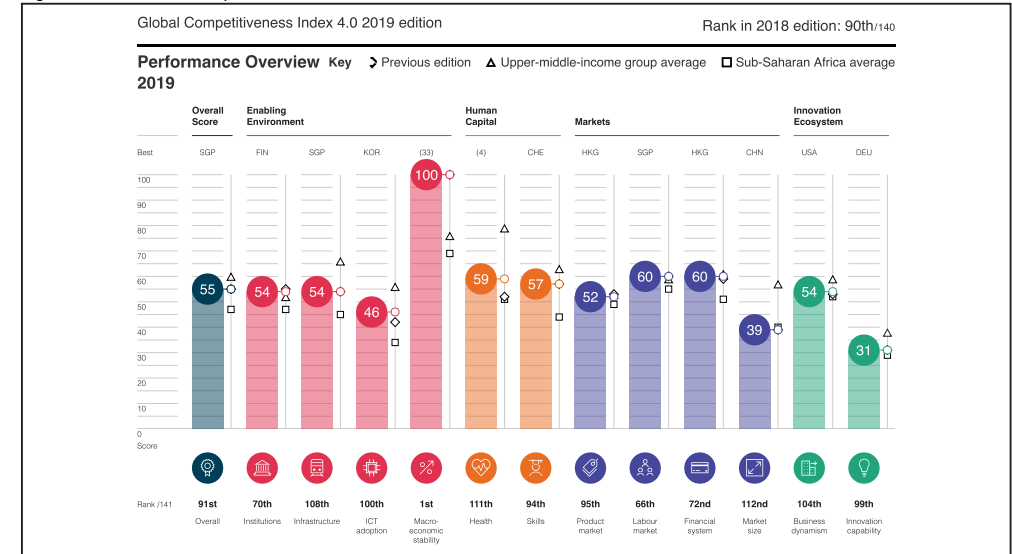


Botswana's Productivity and Competitiveness Dashboard: 2020/21

Botswana's Productivity and Competitiveness Dashboard: 2020/21

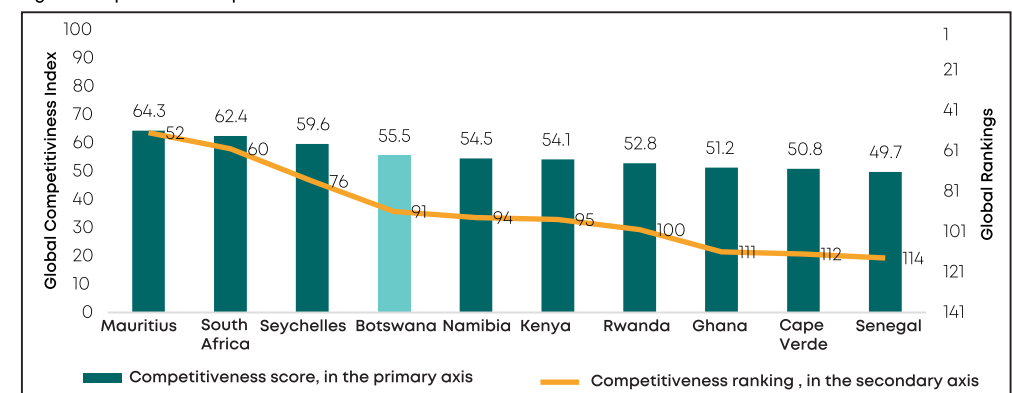
In 2019 WEF produced a full report which provided global ranking and GCI for 141 countries. It is also expected that in 2021 WEF will produce the GCI report with ranking and score for 141 countries. Figure 10 below shows that in 2019 Botswana scored 55 and was ranked number 91 out of the 141 countries included in the report. Botswana performed well for the microeconomic stability indicator while for the innovation capacity indicator the country scored the lowest at 31/100.

Figure 10: Botswana Competitiveness Performance in 2019



Source: World Economic Forum GCR 2019

Figure 11: Top 10 most Competitive Sub-Saharan African Countries in 2019



Source: World Economic Forum GCR 2019

In comparison with other African countries included in the 2019 GCR, Botswana can be ranked 4th behind Mauritius, South Africa, and Seychelles as shown in figure 11 above.

4. BOTSWANA'S ECONOMIC INDICATORS

This section provide data for some of Botswana key indicators for growth, which are considered for development, competitiveness, and productivity. The data was collected from several publications but mainly from the Statistics Botswana data reports.

Table 2: Some of Botswana's key Economic Indicators

YEAR	GDP per capita	No. of Health Facilities	No. of Government Schools	Electric Power Consumption	Length of Butten Roads	Trade openness	Real Interest Rate	Unemployment Rate	Internet Subscriber
2000	4954.77	589	738	1098.74	5,662	91.92	1.15	15.9	46,583
2001	4891.91	582	750	1169.27	5,804	87.53	6.87	18.6	57,653
2002	5115.9	616	762	1220.82	5,954	91.84	14.84	21.1	56,588
2003	5280.22	628	770	1309.62	6,116	85.83	12.73	23.8	56,662
2004	5349	634	776	1428.39	6,116	91	5.15	21.8	56,474
2005	5512.81	637	783	1419.83	6,367	88.51	0.23	19.8	56,312
2006	5883.9	643	782	1455.76	6,367	86.33	8.36	17.8	74,627
2007	6270.47	645	784	1503.85	6,396	95.1	10.76	17.0	92,751
2008	6552.78	661	790	1518.23	6,506	96.72	11.28	16.3	111,014
2009	5948.85	664	803	1716.77	6,750	86.69	6.85	16.2	110,600
2010	6346.16	682	805	1539.56	6,780	94.9	2.33	17.9	254,649
2011	6610.33	674	810	1477.08	6,689	101.36	-4.65	17.8	254,649
2012	6779.39	674	812	1714.44	6,689	108.65	11.12	17.9	788,643
2013	7409.42	685	810	2060.6	6,925	122.95	9.69	17.9	1,472,026
2014	7574.28	697	936	1748.62	6,925	114.77	-2.59	17.8	2,524,013
2015	7308.76	700	993	1748.62	6,925	105.69	5.97	17.8	1,420,991
2016	7243.87	739	*	*	6,925	96.76	-4.16	17.7	1,451,107
2017	7893.23	739	*	*	6,955	75.6	4.15	17.5	1,581,855
2018	8279.6	738	*	*	6,955	79.51	5.27	17.4	1,804,449
2019	7961.33	739	*	*	6,955	74.11	5.72	18.2	2,027,515
2020	*	739	*	*	*	*	*	18.7	2,144,247

Source: Several Reports from Statistics Botswana and Bank of Botswana

Botswana's Productivity and Competitiveness Dashboard: 2020/21

Table 3: Considerations to improve Botswana's Productivity and Competitiveness post COVID-19 Pandemic

Reviving and transforming the innovation ecosystem	"tomorrow", especially in areas that require public-private collaboration.	Facilitate the creation of "markets of"	Reviving and transforming human capital	Reviving and Enabling environment	Reviving and Enabling environment
Entrepreneurial culture has strengthened in the post-crisis but has not realized fully in the creation of new firms. There is a lack of sustained credit or collateral for innovation. It has not been widely successful at delivering solutions to increasing energy meeting the demand for inclusive social services.	Market concentration has been on an increasing trend in advanced economies. Markets between the top companies and all others in each sector. Trade openness and been on a declining trend since the financial crisis.	Financial systems fragility, including fintech products that risk and equity markets.	Health services, infrastructure and talent have lagged behind	Talent shortages, outdated education skills of the new economy	Talent shortages, outdated education skills of the new economy
Expand public investments in R&D and incentivize venture capital, R&D in private sector and the diffusion of existing technologies that support the creation of new markets of tomorrow.	Lay the foundations for better economic growth by enhancing the international movement of goods and people with local presence or strategic local resilience in supply chains.	Improve the financial system and financial system and support access and inclusion. Create financial incentives for inclusive products and investments.	Expand health system capacity to respond to current and future healthcare needs.	Prepare support measures for highly skilled and talent for future public debt strategies.	Prepare support measures for highly skilled and talent for future public debt strategies.
Incentivize and expand public investments in creating new "markets of tomorrow", incentivize firms to enhance diversity, equity and inclusion to enhance creativity.	Rethink competition and anti-trust frameworks ensuring market access, both locally and internationally, facilitate the creation of "markets of tomorrow", especially in areas that require public-private collaboration.	Increase incentives to attract financial resources from emerging markets, strengthen supply chain and inclusion.	Expand education, childcare and healthcare benefit of people and the economy.	Update education curricula and expand investment in the skills needed for jobs and markets of tomorrow.	Update education curricula and expand investment in the skills needed for jobs and markets of tomorrow.
			Expand education, childcare and healthcare benefit of people and the economy.	Upgrade infrastructure to accelerate the energy/and ICT.	Upgrade infrastructure to accelerate the energy/and ICT.
			Expand education, childcare and healthcare benefit of people and the economy.	Upgrade infrastructure to accelerate the energy/and ICT.	Upgrade infrastructure to accelerate the energy/and ICT.

BNPC STRATEGIC FOUNDATIONS AND QUALITY POLICY

Mission Statement
We provide innovative and high impact solutions that enhance national productivity and competitiveness.

Vision
Leader in driving national productivity.

Intent Statement
To drive productivity in national prioritized sectors through innovation, technology and indigenous knowledge by 2023.

Values
Collaboration
We continuously exhibit teamwork and build each other up as we create value for Botswana. This goes beyond the confines of the Centre, therefore we extend the same to all our stakeholders and partners as we form part of the economic transformation value chain.

Innovation
At BNPC, every challenge is an opportunity to create human centered solutions through the use of indigenous knowledge and technology. We embrace our rich Botswana culture and intend to leverage and infuse its uniqueness into all that we do-creating a distinct BNPC mark.

Passion
We are zealous about creating value for Botswana, as we deliver our mission with pride and purpose. We passionately inspire and equip others to constantly strive towards meaningful economic and societal contribution.

Agility
We thrive under pressure and in uncomfortable circumstances with agility. We create opportunities where there appears to be none and remain resilient in the process.

Integrity
Our posture is rooted in doing what is right at all times. Each member of our team reflects resolute integrity by displaying transparency and accountability in all the internal and external engagements.



Botswana Productivity and Competitiveness Dashboard 2020/2021



1. INTRODUCTION

In order to achieve Botswana's Vision of becoming a high-income country by 2036, (as indicated in Vision 2036) national improvement in the productivity and competitiveness are at core of ensuring attainment of this vision. This document therefore creates a One-Stop-Shop document for the latest data and information on Productivity and competitiveness in Botswana, in view to weigh how the country is performing. Key indicators are:

National Productivity - captures the economy's ability to harness its physical and human resources to generate output and income. Thus Productivity growth then, refers to an increase in the value of outputs produced for a given level of inputs, over a given period of time. This document summarises the data from the Botswana Productivity Statistics Report of 2019. Productivity Statistics reports the productivity indicators trends and performance over the years. The Productivity Statistics Report is the only comprehensive publication in the country thus far, used to provide guidance on the various productivity measures. Further information can be found from the BNPC website at <https://www.bnpc.bw/publications/>

National Competitiveness - measured by a set of factors, policies, and institutions that determine a country's level of productivity. It approximates a country's ability to grow and to compete with other countries for human capital, investments, and other resources. The Botswana National Productivity Centre (BNPC) since 2007 partnered with the World Economic Forum (WEF) in producing competitiveness measures like the Global Competitiveness Index, Network Readiness Index, Travel & Tourism Competitiveness Index, etc, based on a comprehensive framework that measures the microeconomic and macroeconomic foundations of national competitiveness. This document will use the Global Competitiveness Reports to sum Botswana's National Competitiveness performance. More information can be found from the WEF website at <https://www.weforum.org/>

Economic Indicators are a portion of economic data, usually of macroeconomic scale, that is used for the analysis of economic performance and predictions of future performance. There are several measures used to measure the economic performance. This document gathers indicators from the statistics Botswana Reports such as the Gross Domestic Product, health and education infrastructure, financial indicators among others. Extensive data can be found from the Statistics Botswana website at <https://www.statsbots.org/bw/>

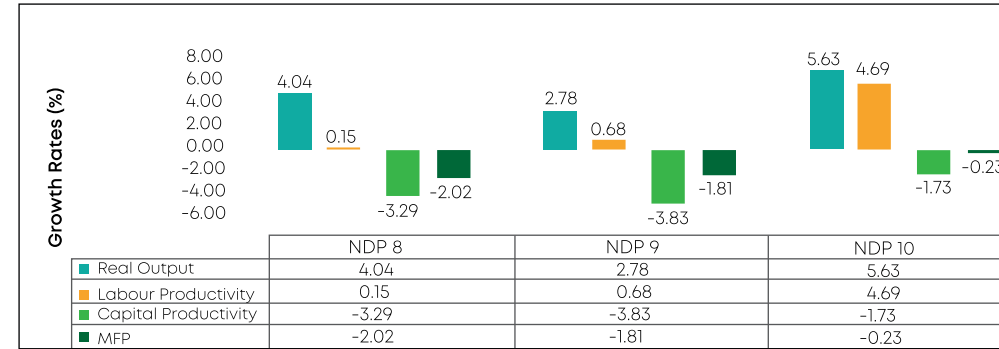


Botswana's Productivity and Competitiveness Dashboard: 2020/21

2. BOTSWANA'S PRODUCTIVITY PERFORMANCE

This section provides a summary of productivity characteristics for Labour, capital and Multifactor Productivity along side the inputs and outputs used. The latest productivity statistics Report was published in 2019, using the latest data for the year 2018.

Figure 1: Productivity Indicators and the National Development Plans – Growth Rates

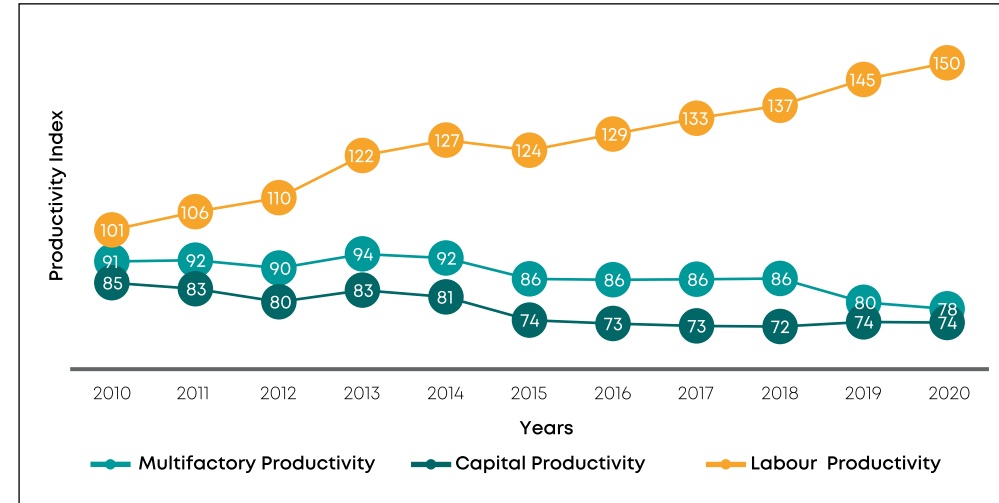


Source: Productivity Statistics Report 2019, BNPC

2.1 Productivity Trends

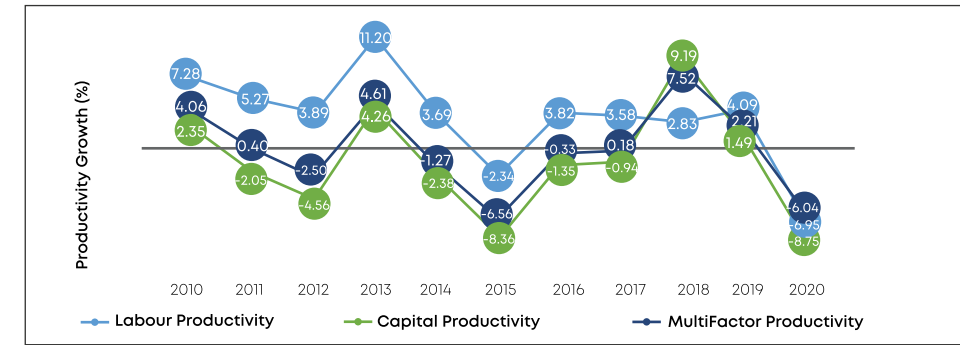
Productivity trends for the last decade, between 2010 and 2020, are shown in the figure 1, figure 2 and figure 3. We note that since 2008, Botswana's Multifactor productivity, Capital Productivity and Unit Labour Cost ratio has marginally declined in this period. The national Labour productivity and Capital-Labour ratio has however, slightly increased during this period.

Figure 2: Botswana's Productivity Indicators Indices Trend 2010 -2020



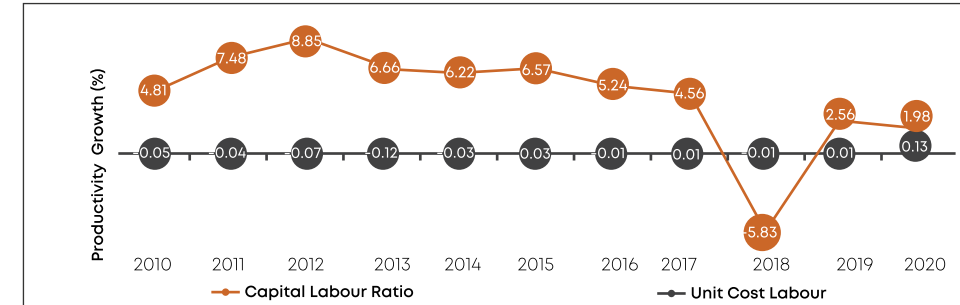
Source: Author's computations. 2019 & 2020 figures are estimates.

Figure 3: Botswana's productivity Indicators Growth Trend 2010 - 2020



Source: Author's computations. 2019 & 2020 figures are estimates.

Figure 4: Botswana's Capital-Labour Ratio and Unit Labour Cost Growth Trend 2010 - 2020

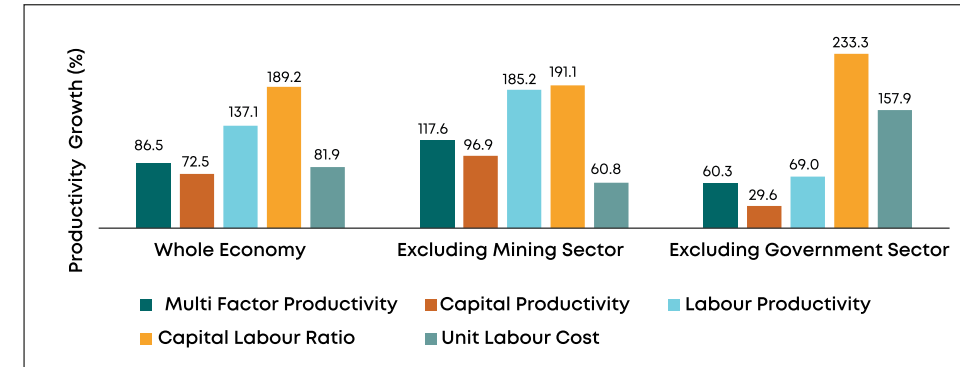


Source: Author's computations. 2019 & 2020 figures are estimates.

2.2 Latest Productivity Performance

The latest productivity indices were produced for the year 2018. This sub-section therefore sums the productivity performance for the year 2018.

Figure 5: Botswana's Productivity Indicators in 2018

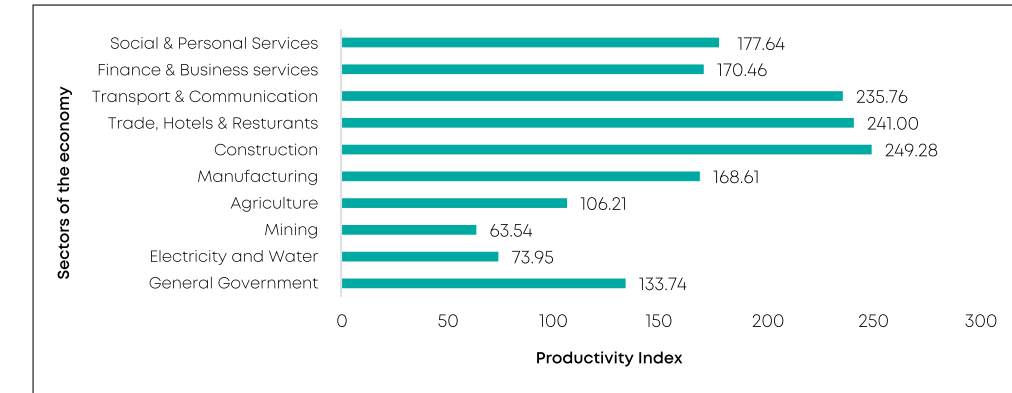


Source: Author's computations based on the 2019 Productivity Statistics Report

Figure 5 shows performance of Botswana's whole economy for the 5 productivity indicators, the figure further disaggregates the economy and excludes the mining and government sectors respectively to show performance of the 5 productivity indicators.

Botswana's Productivity and Competitiveness Dashboard: 2020/21

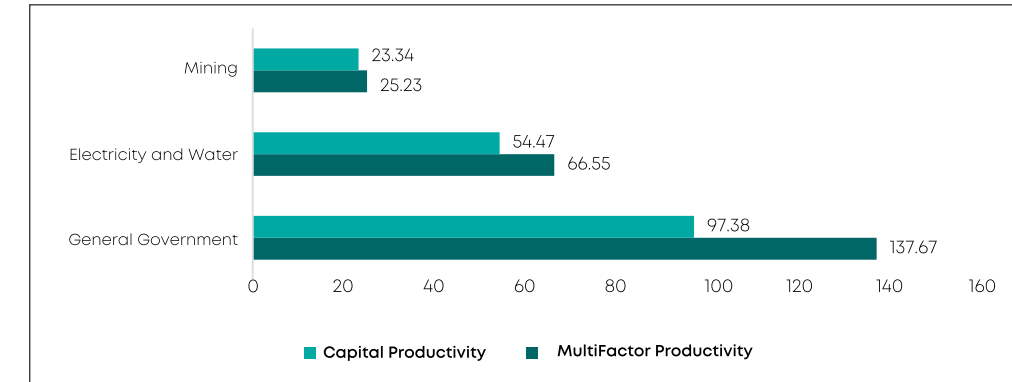
Figure 6: Botswana's sectorial Labour Productivity Indicators in 2018



Source: Author's computations based on the 2019 Productivity Statistics Report

Figure 6 shows that the construction sector in 2018 had the highest labour productivity index while the Mining sector had the lowest labour productivity index.

Figure 7: Botswana's Sectorial Productivity in 2018



Source: Author's computations based on the 2019 Productivity Statistics Report

Figure 7 shows the sectorial productivity performance in 2018 for the sectors: Mining, Electricity & Water, and General Government only. This is because for other sectors disaggregated data on capital stock was not available during the production of Productivity Statistics report 2019. The calculation of Capital Productivity and Multifactor Productivity was then impossible for the other sectors in the economy in this period. The national Labour productivity and Capital-Labour ratio have however, slightly increased during this period.

Botswana's Productivity and Competitiveness Dashboard: 2020/21

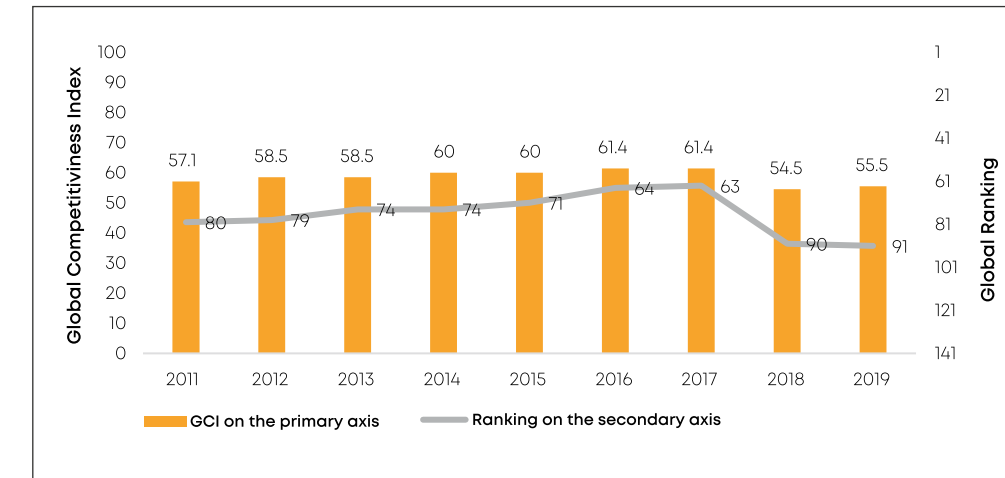
3. BOTSWANA'S COMPETITIVENESS PERFORMANCE

This section provides a summary of competitiveness performance for Botswana. The section utilises information from several Global Competitiveness reports published by World Economic Forum.

3.1 Competitiveness Trends

Figure 8 shows Botswana's competitiveness ranking and scores for the past 9 years. In 2018 the World Economic Forum introduced a new methodology called the Global Competitiveness Index 4.0 (GCI 4.0) necessitated by the gathering pace of the Fourth Industrial Revolution. Scores in the GCI 4.0 are expressed on a 0 to 100 scale (instead of the 1 - 7 score from previous reports) and are interpreted as "progress scores", indicating how close a country is to the ideal state. Figure 7 has adjusted the score for the years 2011 to 2017, to align them to the GCI 4.0 Scale. For example, in 2011 Botswana scored 4.0 using the old methodology. In figure 8 the GCI 4.0 have been adjusted to the scale of 0-100.

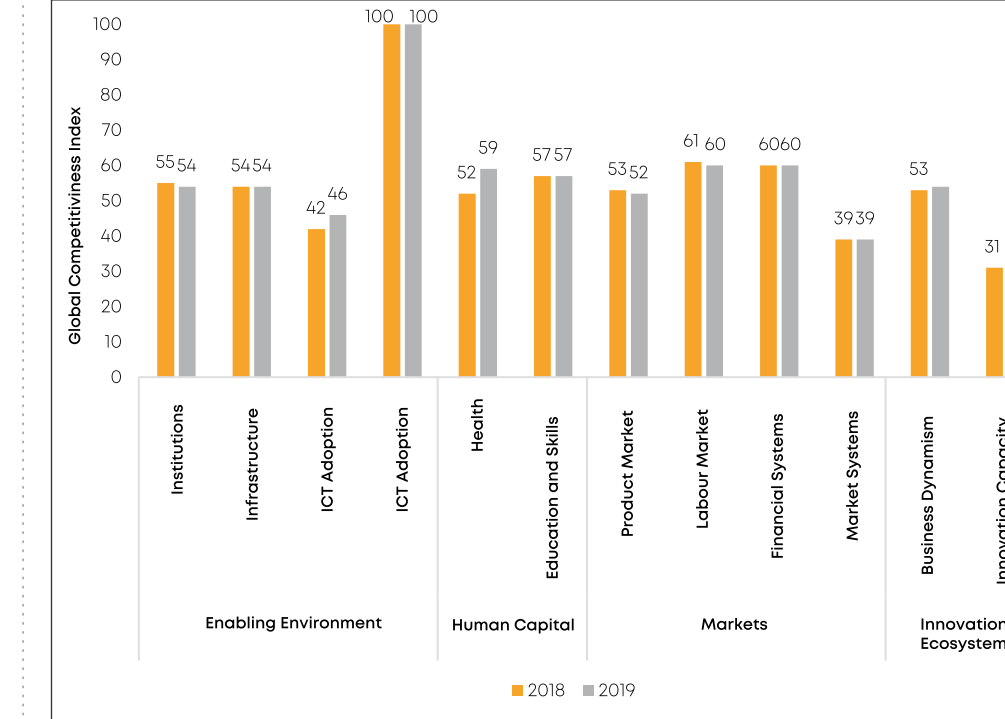
Figure 8: Past Botswana Competitiveness Rankings and Global Competitiveness Index



Source: World Economic Forum GCR 2019

Botswana's Productivity and Competitiveness Dashboard: 2020/21

Figure 9: Botswana Competitiveness 12 Pillar's Performance



Source: World Economic Forum GCR 2019

Figure 9 above, provides a deeper competitiveness insight by disaggregating Botswana's competitiveness score by the 12 pillars for the years 2018, and 2019. Unlike in the case of figure 8, the Author did not adjust the pillar performance score for the years 2011 to 2017, hence why the figure has been limited to only 2018 and 2019.

3.2 Latest Competitiveness Performance

In 2020 WEF Published a special edition of the Global Competitiveness Report. The 2020 report did not provide rankings or competitiveness score for individual countries but rather the report provided insight on how countries are performing on their road to recovery during/post the COVID-19 Pandemic. The special report laid foundations for setting a new direction with a view to include a more comprehensive assessment of countries' socio-economic performance, balancing prosperity, people, planet, and institutional outcomes. Irrespective in 2020 the WEF conducted the Enterprises Opinion Survey (EOS) which for Botswana the results are summarised in Table 1 below. Note, these results are perceptions and do not form a complete competitiveness analysis for the country. Note that Pillar 3: ICT Adoption, Pillar 4: Macroeconomic stability, Pillar 5: Health and Pillar 10: market Size are not covered in the EOS and, hence, their omission in table 1 below.

Botswana's Productivity and Competitiveness Dashboard: 2020/21

Table 1: The 2016-2020 EOS index results for Botswana

Indicator	2016	2017	2018	2019	2020
Organised crime	69.5	68.3	67.3	58.3	54.6
Efficiency of legal framework in challenging regulations	56.5	64.9	47.3	48.4	44.2
Efficiency of legal framework in settling disputes	61.1	59.2	56.8	56.2	51.3
Burden of government regulation	41.4	43.0	41.4	41.5	45.9
Property rights	67.1	68.1	68.0	65.2	62.1
Intellectual property protection	55.0	53.3	52.1	51.5	49.7
Reliability of police services	64.0	60.6	60.7	63.0	57.9
Strength of auditing and accounting standards	63.2	62.4	60.3	58.5	52.8
Judicial independence	61.1	53.4	55.5	58.7	53.1
Government ensuring policy stability	63.3	61.2	58.6	60.4	56.7
Government's responsiveness to change	-	44.3	44.6	44.5	42.8
Government long term vision	-	65.4	67.6	70.7	67.3
Quality of road infrastructure	52.1	47.1	44.0	46.5	45.1
Efficiency of train services	38.6	39.6	41.7	43.5	42.1
Efficiency of air transport services	51.9	48.2	46.1	46.0	42.9
Efficiency of seaport services	36.7	34.1	34.0	36.3	35.6
Reliability of water supply	34.9	42.6	49.1	49.0	46.6
Extent of staff training	53.1	51.1	48.5	50.1	49.7
Ease of finding skilled employees	46.9	48.6	47.5	49.7	52.4
Quality of vocational training	49.5	50.2	47.2	46.8	43.2
Skillset of secondary-education graduates	37.5	37.1	34.7	35.0	35.9
Skillset of university graduates	55.3	49.9	46.0	48.4	43.2
Critical thinking in teaching	41.9	38.9	35.9	37.9	38.7
Digital skills amongst active population	-	45.4	44.5	44.9	46.3
Distortive effect of taxes and subsidies on competition	51.4	52.2	52.9	52.2	49.1
Prevalence of non-tariff barriers	60.3	56.4	54.4	53.2	47.7
Extent of market dominance	37.0	36.5	33.2	31.0	32.8
Competition in professional services	68.4	63.5	60.4	61.2	57.8
Competition in retail services	74.4	69.1	66.3	66.4	62.0
Competition in network services	58.0	52.3	51.4	53.7	52.6
Reliance on professional management	60.7	59.8	59.0	59.1	59.1
Hiring and firing practices	47.6	47.8	47.9	46.6	49.1
Cooperation in labour -employer relations	56.1	56.6	54.4	55.8	58.5
Flexibility of wage determination	65.8	65.0	62.1	57.6	56.7
Pay and productivity	43.5	41.0	41.8	42.0	40.4
Ease of hiring foreign labour	37.2	36.2	33.6	38.9	41.3
Active labour market policies	37.5	34.4	31.3	31.6	29.4
Internal labour mobility	58.2	54.7	52.9	56.9	57.1
Soundness of banks	64.1	65.7	65.3	64.0	60.8
Venture capital availability	30.3	31.0	25.5	28.0	28.6
Financing of SMEs	48.6	49.1	44.2	43.8	44.1
Attitudes towards entrepreneurial risk	43.9	44.0	43.3	45.1	44.0
Growth of innovative companies	43.8	41.6	40.8	42.5	42.0
Companies embracing disruptive ideas	39.9	40.6	35.8	37.0	41.9
Willingness to delegate authority	58.2	57.6	56.2	58.2	58.2
University-industry collaboration in R&D	40.2	38.0	34.7	36.9	40.0
Buyer sophistication	38.8	38.6	32.4	32.6	35.1
State cluster development	40.6	39.1	34.5	36.3	39.1
Collaboration within a company	53.5	48.7	43.4	50.1	55.5
Collaboration between companies	40.6	37.3	31.2	33.7	38.7
Diversity of workforce	-	59.0	58.4	60.7	57.6

Source: World Economic Forum Special GCR 2020