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The Coronavirus Disease (COVID-19) Implications for the Global Economy

Summary

The coronavirus disease 2019 (COVID-19) has affected over 170 countries in the world due to its highly contagious nature, the length of time it takes before symptoms are seen and the fact that not all infected persons are symptomatic which increases the likelihood of its spread. The number of confirmed cases around the world has risen to approximately 240,000 and the death toll is rising concurrently. Governments and businesses around the world, including in Jamaica, have been using fiscal, monetary and health care and other measures to curtail the spread of the virus and limit the severity of the impact on the economy. Some of these measures include travel restrictions, social distancing measures and work from home plans and quarantine zones. The cruise ship industry has halted its services and airline traffic has been significantly reduced. This reduction in travel is putting a strain on the world's largest revenue-generating industry. Tourism, which accounts for ~9% of Jamaica's GDP is expected to be severely disrupted and could see the sector shedding up to 200,000 jobs. Restaurants and companies in the entertainment industry will also be significantly affected due to restrictions on mass gatherings and social distancing measures. Additionally, as supply chains globally are being disrupted, companies in the manufacturing sector that rely on imports for production inputs are likely to suffer the longer the epidemic continues.

As fears intensify and businesses continue to get affected, the local and international markets are responding negatively. The US market and similarly the local market indexes have fallen significantly. In the local markets however the stock prices have been falling on relatively small volumes. We surmise that the initial fall was related to investors taking gains and liquidating some portfolios in preparation for taxes and to generate liquidity to invest in the TransJamaican Highway IPO. However, as the spread of the coronavirus continues to intensify, the sell-off in equities accelerated locally as investors see value in holding cash to meet their short term needs.

Our recommendation at this time is for investors to assess their investment strategy, objective and time horizon and remember the golden rule of investing, which is to buy low and sell high. The investment strategy should be geared towards investing in companies that are fundamentally strong or have a compelling growth story. While we will see even solid companies reporting weak results over the short-term, these companies will likely return to profitability when the virus threat subsides.

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The History of Coronavirus Disease and the Impact on the Global Economy

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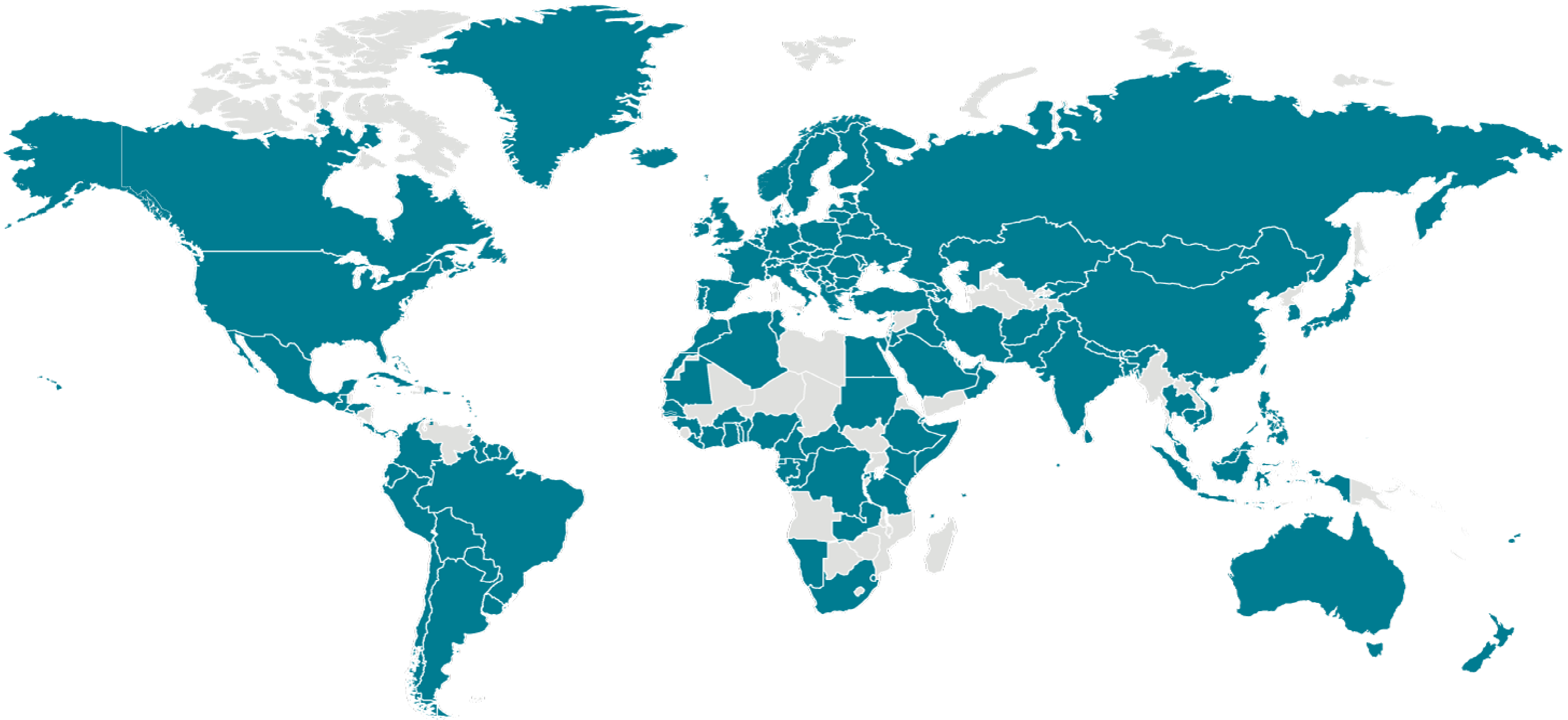
Locations with Confirmed COVID-19 Cases Global Map



Locations with Confirmed COVID-19 Cases Global Map as of 12:00 p.m. ET March 19, 2020 – Source Centers for Disease Control and Prevention

Coronavirus Disease –COVID-19 Timeline December 31- March 6, 2020

The number of coronavirus disease cases outside of China has spread to approximately 80 countries and has led to increasing market fears which has resulted in investors moving to safe-haven assets such as treasuries and gold.

VIRUS ORIGINATED

Notable Highs and Lows due to the Fears Surrounding the Coronavirus disease

Week ending Feb 21
- China cut rates by 10 bps
- BOJ held rates at 0.50%

Week ending Feb 28
- VIX up 135% to 40.11
- DOW & S&P ↓ 12% +
- GOLD SURPASSED $1,650

Week ending March 6
- 10 Yr. T-Bill 0.76% new low
- DOW Jones ↓ 1.79%
- WTI CRUDE OIL ↓ 7.13%
- US cut rates by 50 bps
- Canada cut rates by 50 bps

Dec. 31 – China alerts WHO of several pneumonia cases in Wuhan

Jan 7 – WHO announced that they had identified a new virus belonging to the coronavirus family, which includes SARS and the common cold.

Jan 11 – China announces first death

Jan 13 – WHO reports case in Thailand, the first outside China

Jan 27 – China State Council announced that the Lunar New Year would be extended to Feb 2, 2020
- Travel plans disrupted
- Factory Closures
- Holiday Week was originally from Jan 24 to 30

Jan 30 – WHO declares the outbreak a global health emergency

Feb 2 – First death outside of China recorded in the Philippines

Feb 7 – Chinese doctor & whistleblower Li Wenliang dies

Feb 11 – WHO names virus COVID-19, Coronavirus disease 2019

Feb 14 – Egypt confirms Africa's first case

Feb 26 – Global death toll near 2,800 with a total of about 80,000 confirmed infections reported globally

Mar 1 – Dominica Republic reported its first confirmed case. This is first confirmed case in the Caribbean

Mar 3 – Italy announced the death toll in the country reached 77

Mar 6 – More than 100,000 people have been diagnosed with the disease globally. Death Rate in China at least 3,015 and 267 in other parts of the globe

Coronavirus Disease –COVID-19 Timeline March 9 – March 16, 2020

Mar. 11

First Case Confirmed - March 10, 2020

Notable Highs and Lows due to the Fears Surrounding the Coronavirus disease

Week ending Mar 13, 2020	
Bank of England cut rates 50 bps	
Bank of Canada cut rates 50 bps	
WTI Oil Prices	↓ 23.13%
DOW Jones	↓ 10.47%
S&P 500	↓ 8.8%
Gold	↓ 8.60%

Mar 16, 2020 (Day over Day)	
US Fed cut rates 100 bps	
Saudi Arabia cut rates 75 bps	
WTI Oil Prices	↓ 7.15%
DOW Jones	↓ 12.94%
S&P 500	↓ 11.98%
VIX up 30.69 % to close at 82.69	

Mar 9

Iran released about 70,000 prisoners because of the coronavirus disease outbreak in the country

Germany reported its first two deaths, with at least 1,100 confirmed cases in the country.

Mar. 10

Jamaica reported its first confirmed case

Mar 11

WHO announces COVID19 outbreak as Pandemic

GOJ announced emergency fund of $2B to counter the spread of the virus and later on indicated an additional $7B to be allocated to the contingency fund for COVID-19

Mar 12

Global death toll surpassed 4,600 with infections exceeding 126,100 cases

Mar 13

US declares National Emergency which frees up billions of federal dollars to use for the coronavirus disease

Jamaica confirmed cases increase to 8

Jamaica GOVT quarantine – Seven Miles and Eight Miles Community Bull Bay

Mar 16

Jamaica confirmed cases increased to 12 persons

New York Mayor Bill de Blasio ordered the city's bars, theatres and cinemas to close down, as the number of cases keeps rising in the US

Globally, the virus has now infected more than 168,000 people and killed at least 6,610

Mar 17

Jamaica confirmed cases increased to 13 persons

What is the coronavirus disease ?

Coronavirus (CoV) are a large family of viruses that cause illnesses ranging from a common cold to more severe respiratory illnesses. Some serious respiratory illnesses from the coronavirus family happening in the last 20 years include:

SARS - CoV

2002

Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV)

SARS-CoV is a species of coronavirus disease that infects humans, bats and certain other mammals, and first infected humans in the Guangdong province of southern China in 2002. Symptoms are influenza-like and include fever, malaise, myalgia, headache, diarrhoea, and shivering (rigours). The SARS-CoV had spread to 30 countries and there were 8,437 confirmed cases and 813 deaths.

MERS-CoV

2012

Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

MERS-CoV is a viral respiratory illness that was first reported in Saudi Arabia, in 2012. Symptoms are those of a severe acute respiratory illness, similar to pneumonia. MERS-CoV had spread to 27 countries and there were 2,494 confirmed cases and 858 deaths.

new 2020

COVID -19

A novel coronavirus disease (2019-Cov) was identified on January 7, 2020, and the infection originated from the Wuhan seafood market in China. It was caused by a member of the coronavirus family that has never been encountered before, and like other coronaviruses, it too came from animals. Many of those initially infected either worked or frequently shopped in the seafood wholesale market in the centre of the Chinese city.

2019-nCOV pandemic December 31, 2019

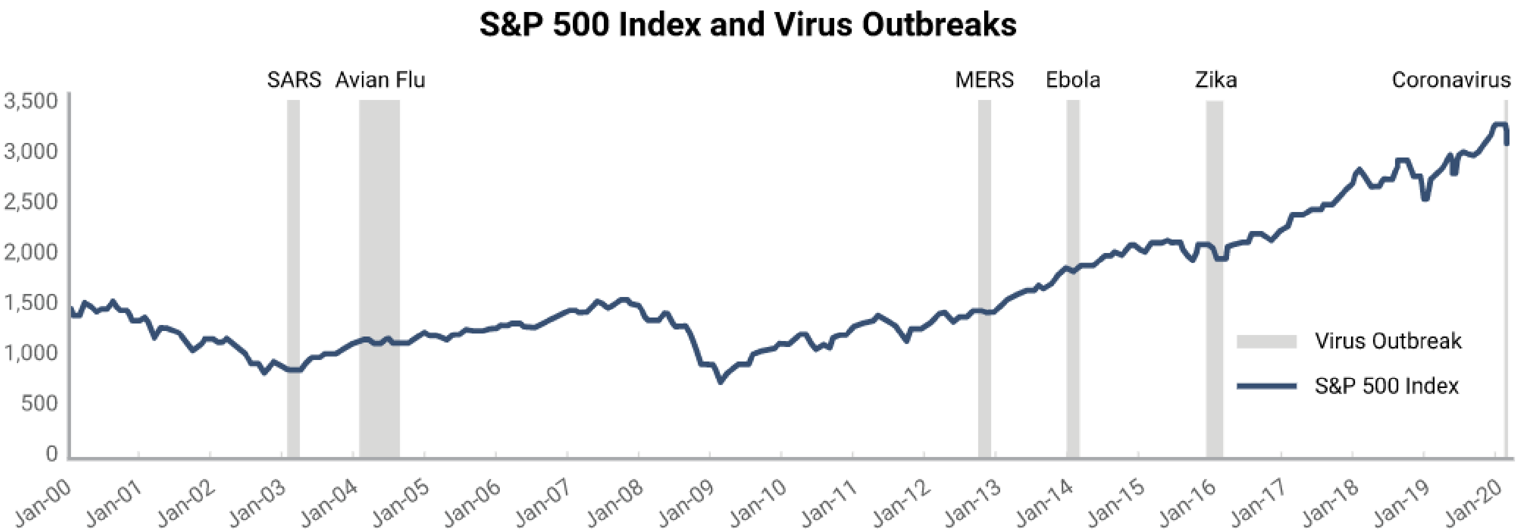
Symptoms

- Fever
- Difficult breathing
- Impaired liver and kidney function
- Kidney failure
- Severe cough
- Pneumonia
- Unknown incubation period

How have markets reacted to virus pandemics in the past?

The chart and table on the right highlight how the S&P 500 performed during similar virus pandemics over the last twenty years. We see a negative impact in the onset, however, the duration of the drawdown has been inconsistent and the long-term impact was limited. In all past scenarios, the markets were higher 12-months after the virus was identified.

We believe that a similar situation of a rebound is likely to be the outcome from the COVID-19, which is enhanced by the high levels of market sophistication, technological advancements and informationally efficient markets.



Source: CI Investments Limited

Virus	Start Date	End Date	Trading Days	S&P 500 Return	12-month Return
SARS	Jan-03	Mar-03	38	-12.8%	32.2%
Avian Flu	Jan-04	Aug-04	141	-6.9%	4.4%
MERS	Sep-12	Nov-12	43	-1.3%	16.7%
Ebola	Dec-13	Feb-14	23	-5.8%	16.7%
Zika	Nov-15	Feb-16	66	-12.9%	5.7%
Coronavirus	Jan-20	Present	28	-10.3%	N/A

Source: Bloomberg Finance L.P., CitiResearch, FactSet. As at February 27, 2020. The starting date for the 12-month return is the month each virus was identified.

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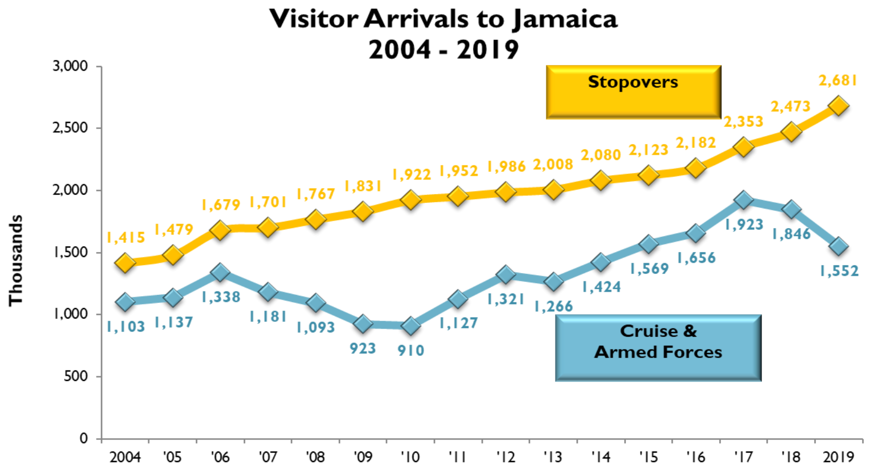
Tourism

Key Highlights

1. Global travel advisories issued to curb the coronavirus spread
2. Huge losses are estimated for the industry.
3. Suspended cruises
4. Reduced air traffic
5. Gathering restrictions affecting the entertainment industry
6. Job losses estimated at 200k in the local tourism industry
7. Possible bailout for the industry is being assessed by the GOJ



COVID -19

Travel advisories such as avoiding all cruise ship travel, exercise increased caution, do not travel and reconsider travel notices are a few that some countries have introduced in light of the coronavirus disease pandemic. These measures have been put in place with the hopes of helping to reduce the spread of the virus. As a result, companies in the tourism sector are likely to face major losses during this period. Cruise liners and airlines have already started to feel the negative effects as customers have been cancelling travel plans in an attempt to stay safe. Major cruise lines have also suspended their services.

Jamaica is closely monitoring the coronavirus disease pandemic and has advised nationals to avoid unnecessary travels to affected areas or countries. Jamaica has also placed travel restrictions on all persons who have been in China, South Korea, Iran, Singapore, Italy and the United Kingdom in the 14 days prior to arriving in Jamaica. As at March 16, 2020, the number of confirmed cases in the country was 13, and there are over 40 persons in isolation and more than 100 persons quarantined. With the number of cases growing both locally and overseas, it is expected that the local tourism sector will be affected negatively.

Calendar Year	Visitor Arrivals (Mns)	% Change	% Δ Between Initial and Revised Projections
2017	4.28	11%	
2018	4.32	1%	
2019 Est.	4.23	-2%	
2020 Initial Proj.	4.60	9%	
2020 Revised Proj.	4.30	2%	-7%

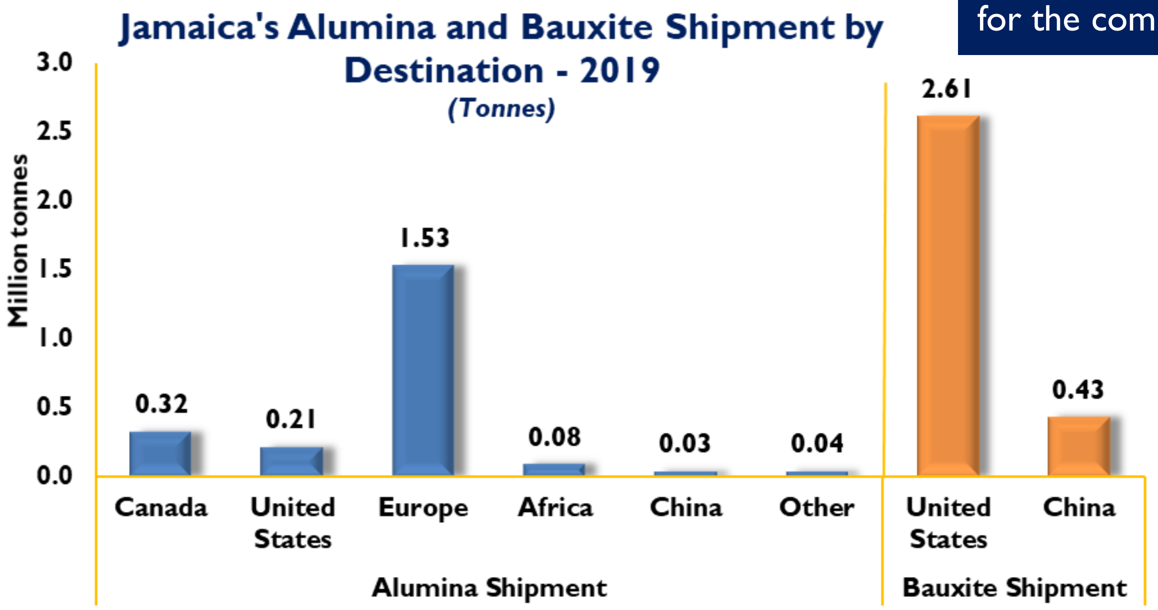
For some context, a total of 4.2 million foreigners visited Jamaica in 2019, which includes stopovers and cruise and armed forces. This 4.2 million visitors represents just under 0.5% of the total number of arrivals worldwide, which as a percentage of Jamaica's GDP, represents over 9% of all the income generated by the country. This means that a fall-off in tourism is likely to affect GDP growth and jobs in the country. The Minister of Tourism, Edmund Bartlett, recently announced that tourism revenues could be reduced by approximately 13.2% or J$76 billion for the fiscal year and approximately 200,000 jobs could be lost in light of the pandemic. To cushion the fallout in the industry, the government is assessing a possible bailout for the sector.

Mining and Quarrying

Key Highlights

1. Low demand for bauxite and alumina globally due to reduced manufacturing activities
2. No shutdown for alumina smelting plants in China due to high costs to do so which led to an oversupply
3. Prices falling due to oversupply
4. Increase shutdown expected in Europe and US Jamaica's main markets for the commodities
5. Reduced profitability expected for the local mining sector

Since the onset of the coronavirus outbreak and the restrictions in manufacturing activity in China to limit the spread, the demand for Alumina has fallen and prices have declined. The price for the commodity moved from US$1,807 per tonne in mid-January to US$1,662.50 in mid-February 2020. During this period manufacturing facilities that use aluminium were closed while the aluminium smelting plants had to be left in production given the high costs associated with closure. At the start of March 2020, at least 60% of general production in all sectors of China had been restored. As the world's largest producer and consumer of primary aluminium, followed by Europe, the oversupply in China due the lockdown period led to a fall in prices which could remain low if manufacturing activity, globally, goes through a prolonged period of low to no activity. In the short term to medium term, this would lead to lower revenues from Jamaica's export of the product. Additionally, most of Jamaica's Alumna and Bauxite are shipped to Europe and the US and currently, these regions are likely to increase the closure of their manufacturing facilities to curb the spread of the virus. As a result, demand is likely to be weak for the commodities over short to medium term.



Jamaica's Alumina and Crude Bauxite

	Production			Sales		
Year	**Alumina**	**Crude Bauxite**	**Total**	**Alumina**	**Crude Bauxite**	**Total**
2016	1,865,278	3,596,915	8,540,130	1,833,890	3,455,402	8,315,813
2017	1,782,373	3,375,572	8,244,628	1,743,063	3,340,449	8,118,641
2018	2,483,572	3,366,543	10,058,228	2,571,038	3,339,221	10,272,268
2019	2,172,972	3,080,086	9,022,286	2,211,956	3,035,758	9,091,796

Manufacturing and Retailing

<u>Key Highlights</u>

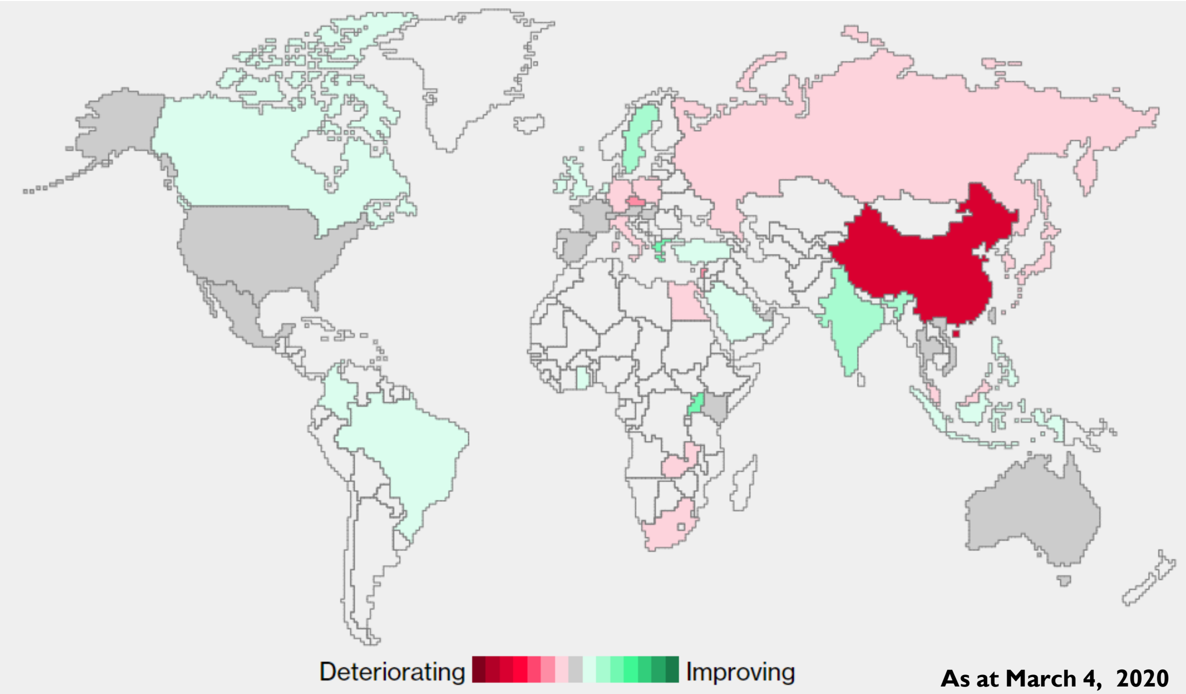
1. A slowdown in the sector due to business closures and lockdowns
2. Supply chain disruption
3. Short-run inventories likely to be adequate
4. Expected price increases in the long run if the pandemic intensifies and inventories are depleted
5. Lower profits

Production and sales of manufacturing and distribution companies around the world have been impacted by the reduced and in some cases halted activities in China as a result of the coronavirus disease pandemic. China contributes to approximately 17% of global growth and is one of the largest contributors to global supply chains, production and consumption. It is for this reason that manufacturers around the world have been feeling the pass-through effect of the coronavirus disease on their production and sales.

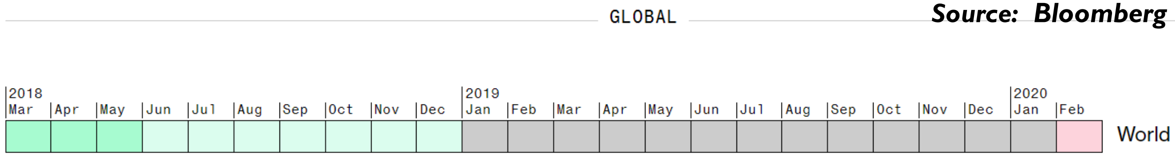
Additionally, companies have over the years increasingly set up facilities in China due to cheap labour costs and proximity to raw materials. The profitability of these countries was therefore minimized during China's lockdown as a measure by the government to contain the virus. However, with the number of new cases on a declining trend, China has lifted some bans and some workers have resumed working.

From this slowdown, we are likely to see companies posting lower profits in the next two quarters with a gradual pick up towards the end of the year if the spread is controlled. However, the slowdown in manufacturing and retailing may be prolonged if the measures being implemented by authorities are found to be inadequate and ineffective.

Global Purchasing Managers Outlook – Current Business Conditions



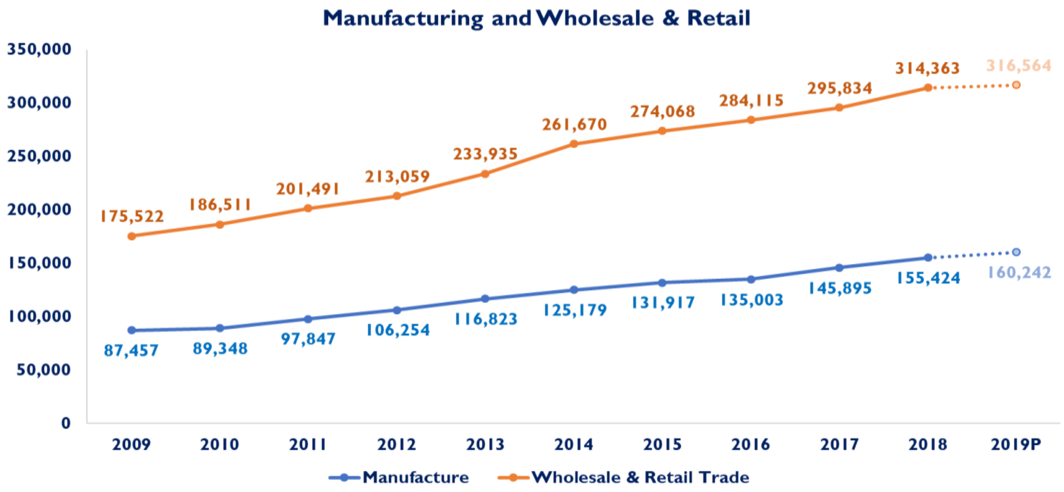
As at March 4, 2020
Source: Bloomberg



Purchasing Managers decisions are about making spending and hiring which can swiftly affect global growth. The heat map highlights what purchasing managers are saying about the outlook—positive or negative.

Key Highlights

1. Supply chain disruptions affecting local businesses
2. Local businesses looking to other markets to fill transitory shortages
3. New markets may be cost-inefficient and help to inflate prices
4. A prolonged pandemic may severely impact the profitability of the companies in the industry



Locally, manufacturing and retail activity has trended upwards over the past years and is evident in the income generated in the sector. The Manufacturing industry is estimated to have generated J$316.6 Billion in revenues in 2019. The Retail industry is estimated to have generated J$160.2 Billion in revenues in 2019. However, profits of manufacturing and retail companies in Jamaica which are highly susceptible to the changing dynamics in China are likely to be negatively affected by the general slowdown in the Chinese economy. Large companies with built-up inventory levels are likely to withstand the transitory impact the coronavirus disease is having on China. Smaller companies with fewer reserves may have to source their products from other markets. If China's turnaround time back to normality is delayed, even large companies in the sector will have to find an alternative source. Jamaica is a small open economy with a high level of dependence on many other countries for raw materials and inputs. As the pandemic intensifies and disrupts global supply chains and business activities around the world, local businesses may likely face increased costs and limited access to materials which may affect their bottom-line earnings.

The Jamaica Manufacturing Industry's president in a release in February noted that the manufacturing industry has started to encounter supply shortages and are currently looking to other markets to fill the transitory shortage as China clears their backlog.

These alternative channels may prove to be less cost-efficient and could help to inflate prices as companies share the cost burden with consumers. Companies with strong balance sheets with the ability to keep prices relatively low may be able to withstand the shocks in the short term. However, if the virus continues to put a strain on global supply chains, the local industry may be significantly impacted.

Macroeconomic Indicators

Key Highlights

1. G7 finance ministers plot joint coronavirus response
2. Stimulus package
3. Policy rate reductions
4. IMF sets aside US$50B emergency fund for low to middle-income countries
5. Low growth

The coronavirus pandemic has been affecting global supply chains and productivity in many countries, including some of the largest economies such as China, Japan, US and Canada. This has caused heads of governments including G7 finance ministers to plot joint coronavirus disease response. Efforts by governments include creating emergency funding packages for diagnostics, treatment, and vaccines if so needed, increased travel restrictions and better testing at airports and country borders to limit and reduce the spread of the virus globally. The US has already programmed approximately US$8 billion in its budget for coronavirus disease support.

Central bankers have also been utilizing monetary stimulus based on the forecasted tightness in the economy to boost investor confidence and stimulate consumer demand.

CENTRAL BANKS	Country/ Region	Current Rate	Direction	Previous Rate	Last Change
BANK OF ENGLAND	**United Kingdom**	0.10%	↓	0.25%	March 19, 2020
RESERVE BANK OF AUSTRALIA	**Australia**	0.25%	↓	0.50%	March 19, 2020
US FEDERAL RESERVE	**United States**	0.25%	↓	1.25%	March 15, 2020
BANK OF CANADA	**Canada**	0.75%	↓	1.25%	March 13, 2020
BANK OF ENGLAND	**United Kingdom**	0.25%	↓	0.75%	March 11, 2020
BANK OF CANADA	**Canada**	1.25%	↓	1.75%	March 4, 2020
US FEDERAL RESERVE	**United States**	1.25%	↓	1.75 %	March 3, 2020
RESERVE BANK OF AUSTRALIA	**Australia**	0.50%	↓	0.75%	March 3, 2020
BANK OF CHINA	**China**	4.05%	↓	4.15 %	Feb. 20, 2020

The International Monetary Fund (IMF) has announced that they have set aside US$50B emergency funding to aid low to middle-income countries combat the pandemic. The Fund also recommends that government officials try to be mindful of the impact that the virus could have on small to middle-sized companies and proposes that if possible, there could be postponement on the repayments of credits as well as ways to help Small and Medium-Sized Enterprises (SMEs) with the health costs for workers if the need arises.

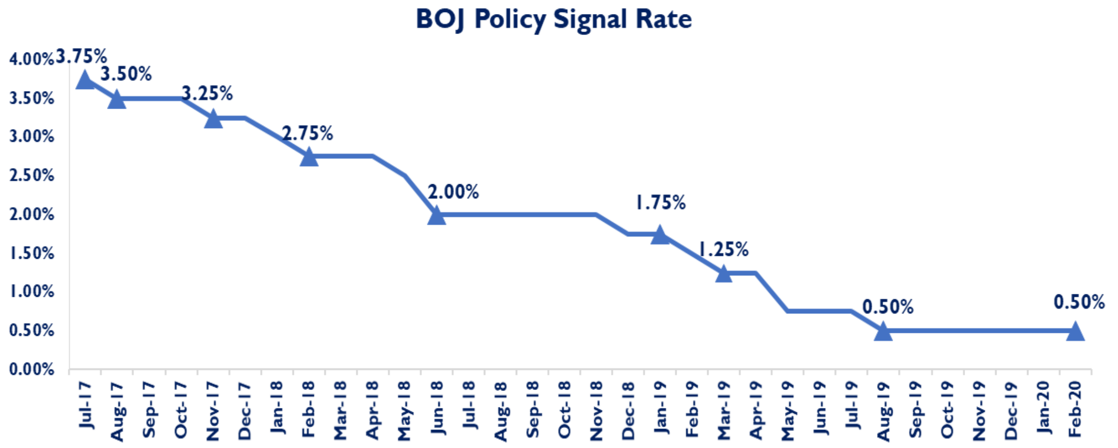
IMF Expects Global Growth 2020 to fall below the 2.9% recorded for 2019

Macroeconomic Indicators

Key Highlights

1. Government announces $7B coronavirus contingency fund
2. Tax cuts for FY 2020/21 geared towards MSMEs and consumers
3. Finance institutions have opted to defer the asset tax rate cut by one year
4. Jamaica can drawdown on IMF's US$40B emergency fund apportioned to middle-income countries during the crisis
5. Low economic growth expected for 2020

CENTRAL BANK	Country/ Region	Current Rate	Direction	Previous Rate	Last Change
Bank Of Jamaica	**Jamaica**	0.50%	**HOLD**	0.50%	August 27, 2019



In response to the pandemic, the Government of Jamaica has allocated $2B to the Ministry of Health from a total of $7B that has been apportioned as contingency funding towards tackling the virus, with the possibility to upsize. At the end of the FY 2020/21 budget speech, the government announced that the asset tax rate for financial institutions would decline from 0.25% to 0.125% a loss of $3 billion to the government. However, in light of the coronavirus disease pandemic and the spread in the country, financial institutions have opted to defer this benefit until next year to allow the government additional funding to tackle the virus. The Minister of Finance also noted that the country's net international reserves, which nearly doubles the 12 weeks benchmark and currently stands at US$3.16B may act as a cushion if needed to address a possible pandemic. Additionally, the country may be able to benefit from the IMF's emergency fund of US$40 billion that has been made available to middle-income countries that may be significantly affected by the pandemic.

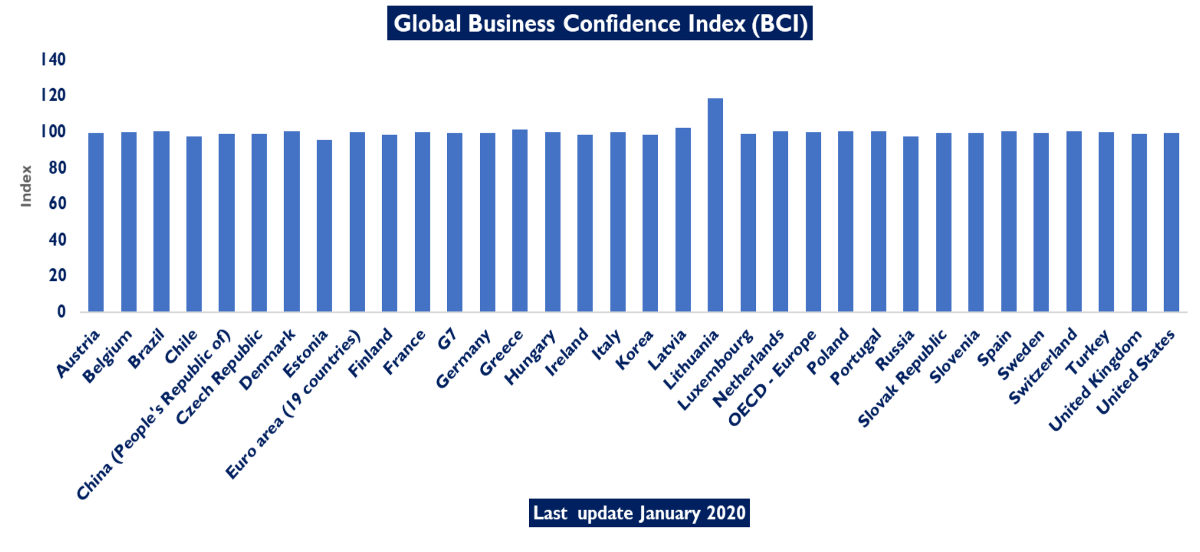
The Governor of the Bank of Jamaica announced in a speech made in February that the country's rate of growth is likely to be in the range of 0.5% to 1.5% for 2020. However, as global productivity is reduced, small island nations like Jamaica are likely to grow at even slower rates. It is for this reason, we can expect growth to be closer to the lower end of the Central Bank's target band. Since the onset of the virus in Jamaica, the Bank of Jamaica has made no mention of monetary policy stimulus. However, we believe that the policy rate at 0.5% remains accommodative as liquidity levels remain adequate to support consumer demand. The central bank may also use other monetary policy tools such as a reduction in the reserve requirements and or an increase in the overnight standby liquidity for the banking system.

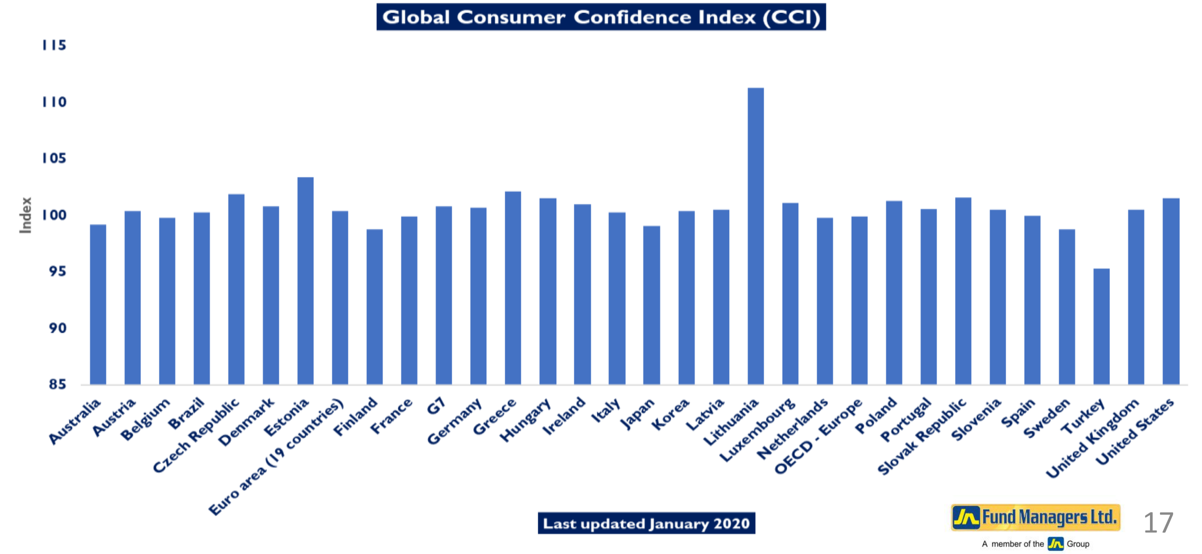
Global Business and Consumer Confidence

Key Highlights

1. Consumer and business confidence indicating pessimism setting in as early as January
2. Disrupted business activities
3. Profitability concerns
4. Inflation concerns
5. Job losses and business closures
6. Confidence levels expected to remain low

Global business and consumer confidence are likely to have below 100 readings for the next couple of months as the coronavirus disease pandemic continues to affect global supply chains and workforce productivity. In January 2020, global business confidence had a reading of 99.7, marking the onset of the pessimism about future business performance, while global consumer confidence had a reading of 100.5 which was slightly above the 100 thresholds. The business and consumer confidence charts below depict the confidence levels for countries as of January 2020. Business confidence for most countries straddled just below 100 with Lithuania being the only country with a strong reading above 100. Confidence levels, on the other hand, had mixed readings with the strongest levels of confidence coming from the Czech Republic, Estonia and Lithuania. Since the last update in January, the coronavirus disease virus has been found in over 50 countries and the number of cases is close to two hundred thousand and the death toll is above seven thousand. For this reason, we believe that confidence will be low and may not return to prior levels until some normalcy is returned in the market. Additionally, the pandemic has led to disrupted business and production activities and reduced shipment of goods and services all over the world. Companies are therefore expected to post weaker profits for the quarter. Following this, if businesses were to experience additional strain going into the second quarter of the year, prices are likely to go up (inflation) and there could be job losses and business closures in advanced cases, and this could further exacerbate the declines in the confidence indexes.





Jamaica's Business and Consumer Confidence

Key Highlights

1. Jamaica's consumer and business confidence have been strong up to December 2019
2. Companies are highly likely to experience reduced profitability in 2020
3. Investor confidence is low
4. Job losses and business closures expected
5. Confidence levels low

Consumer confidence in Jamaica has been relatively healthy over the years, moving from an index of 155.6 in 2016 to 180.1 by the end of 2019.

Business confidence has also remained healthy, above the 100 thresholds. The index has largely appreciated over the years with the highest reading of 151.3 happening in Q1 2019 before falling in the 3rd and 4th quarter of 2019 to end the year at 131.3.

Notwithstanding the improving macroeconomic landscape in Jamaica, the coronavirus pandemic is likely to affect companies bottom-line earnings. For this reason, we expect business and consumer confidence to be lower in the first to the second quarter of 2020. The reduced confidence levels are already evident in the local stock market indexes that have fallen off by over 25% year to date as investors increasingly sell down their positions as a result of profitability concerns for companies. To stay afloat businesses may have to lay off workers or close their businesses.

Jamaica's Consumer Confidence 2016 -2019

Indices (2001:2 = 100)	2^{nd} 2016	3^{rd} 2016	4^{th} 2016	1^{st} 2017	2^{nd} 2017	3^{rd} 2017	4^{th} 2017	$1st^{h}$ 2018	2^{nd} 2018	3^{rd} 2018	4^{th} 2018	1^{st} 2019	2^{nd} 2019	3^{rd} 2019	4^{th} 2019
Index of Consumer Confidence	155.6	151.6	151.6	138.7	149.3	151.1	148.0	156.4	159.1	172.6	175.5	177.5	183.4	179.9	180.1
Current Economic Conditions	153.0	147.9	148.9	146.6	159.2	161.4	158.5	170.8	179.5	206.5	209.7	208.3	222.8	220.8	222.9
Index of Consumer Expectations	156.5	152.8	152.5	136.1	146.1	147.7	144.5	151.5	152.2	161.2	164.2	167.2	170.3	166.3	165.8
Index Components (%Better - %Worse + 100)															
Current Business Conditions	97	90	97	92	92	94	92	96	99	106	110	110	112	108	111
Current Job Prospects	23	26	20	23	33	33	33	39	42	55	55	54	63	65	65
Expected Business Conditions	118	112	115	101	105	106	104	108	111	121	125	128	127	125	120
Expected Job Prospects	113	108	104	90	99	104	101	107	111	119	123	122	127	120	123
Expected Change in Income	138	140	141	130	140	138	136	142	137	140	139	142	148	146	147

Jamaica's Business Confidence 2016 -2019

Indices (2001:2 = 100)	2^{nd} 2016	3^{rd} 2016	4^{th} 2016	1^{st} 2017	2^{nd} 2017	3^{rd} 2017	4^{th} 2017	1st 2018	2^{nd} 2018	3^{rd} 2018	4^{th} 2018	1^{st} 2019	2^{nd} 2019	3^{rd} 2019	4^{th} 2019
Index of Business Confidence	141.6	139.2	142.0	139.3	137.1	135.2	142.6	136.5	140.4	140.2	147.5	151.3	150.7	141.2	131.3
Current Business Conditions	160.0	161.3	173.0	165.4	164.8	154.7	161.8	163.6	161.8	162.2	170.2	184.4	167.9	170.3	149.1
Index of Business Expectations	134.4	130.5	129.8	129.0	126.1	127.5	135.0	125.8	132.0	131.5	138.6	138.2	143.9	129.8	124.3
Index Components (%Better - %Worse + 100)															
Current Return on Investments	85	87	101	103	97	88	96	89	90	91	86	101	94	98	75
Investment/Expansion Climate	140	139	141	129	134	128	131	140	137	136	151	159	142	142	134
Expected Change in Economy	151	133	130	141	137	134	145	131	153	133	155	157	172	139	132
Expected Change Firm's Finances	160	169	166	157	158	160	166	162	160	174	171	169	175	165	160
Expected Change in Profitability	166	161	165	160	153	158	168	153	156	161	165	163	165	157	149

Source: Jamaica Chamber of Commerce/ Market Research Services Limited

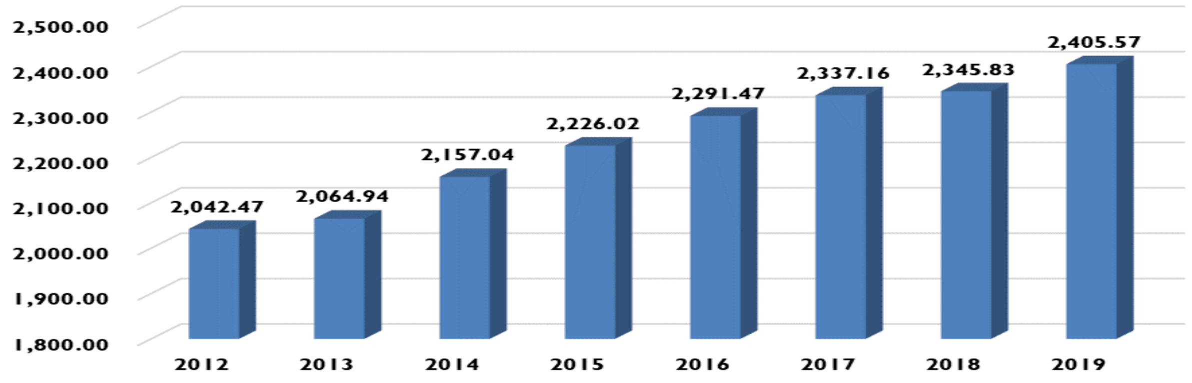
Key Highlights

1. Jamaican diaspora highly concentrated in the United States, United Kingdom, Canada and Cayman Islands
2. Inbound remittances of US$2.41B is equivalent to 15% of GDP
3. Remittances threatened by reduced profitability for companies, expected job losses, and inflation that will reduce net income for persons in the diaspora.

INBOUND REMITTANCES TO JAMAICA
USD Equivalent of all Transfers (US$Mn)

Year	United States	United Kingdom	Canada	Cayman Islands	Other Remittances	Total Remittances
2012	1,035.67	292.35	201.85	109.83	402.77	2,042.47
2013	1,051.54	276.66	205.89	104.99	425.86	2,064.94
2014	1,109.24	297.99	214.14	107.05	428.62	2,157.04
2015	1,213.63	287.38	198.22	106.26	420.53	2,226.02
2016	1,271.36	262.11	199.16	118.99	439.86	2,291.47
2017	1,277.08	246.64	207.77	126.74	478.94	2,337.16
2018	1,269.57	247.05	207.30	134.11	487.81	2,345.83
2019	1,300.74	236.58	205.29	142.40	520.55	2,405.57

Total Inbound Remittances



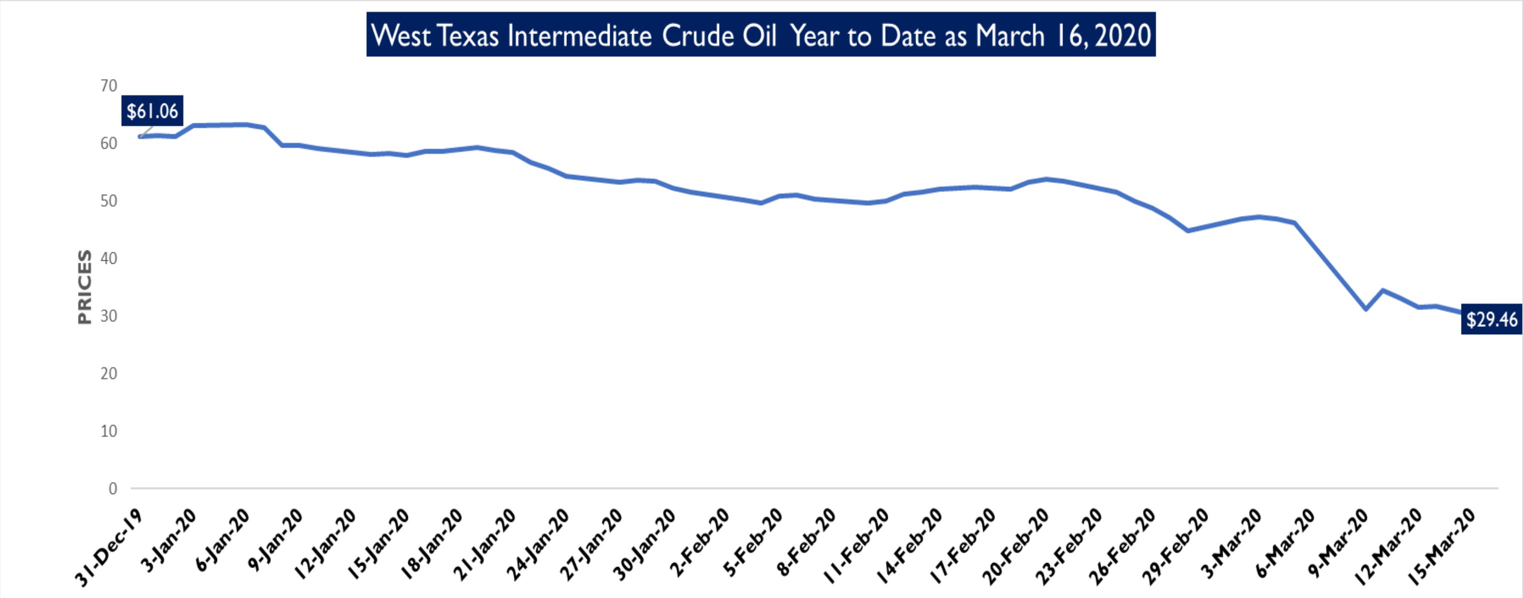
The Jamaican diaspora can be found all over the world with a higher concentration of Jamaicans in the United States, United Kingdom, Canada and the Cayman Islands. The size of the diaspora in these countries is highly correlated with the remittances collected yearly. Inbound remittance collections have grown by a compounded annual growth rate of 2.37% over the last eight years. Remittances from the United States make up over 50% of the total remitted to Jamaica, followed by the United Kingdom, Canada and the Cayman Islands. In 2019, remittance of US$2.41B accounted for over 15% of GDP and is 2.55% higher than the 2018 amount of US$2.35B. The money sent home by Jamaicans not only reduces pressure on the government to create employment in the country, but it also helps families meet their consumption expenses. It is also the single-largest source of foreign exchange required to finance the import of essential goods and services in Jamaica.

However, with the coronavirus pandemic affecting global economic activities, businesses, workflows and threatening the profitability of companies all over the world, it is expected that remittance flows to Jamaica are likely to fall off significantly for 2020 as Jamaicans working in these countries are likely to be included in those being laid off as businesses are shuttered. As these workers lose their jobs this will impact the amount of money they can send home to Jamaica. A pick up in remittances going forward is highly dependent on how long the pandemic is prolonged and the impact it has on inflation and employment in the countries.

Commodities

Key Highlights

1. Slow down in the manufacturing, cruise and airline industries has led to reduced demand for oil
2. Attempt to reduce supply declined by Russia
3. Saudi Arabia instigate price war
4. Oil prices are at historic lows
5. Companies and consumers to benefit from lower oil prices
6. Small companies will be unable to withstand price pressures and remain profitable



To preempt the economic impact of the coronavirus disease, the Organization of the Petroleum Exporting Countries (OPEC) tentatively agreed in a preliminary meeting to cut oil production by an additional 1.5M barrels per day (bpd) to extend the existing cuts of 2.1M bpd, until June 2020. This agreement would have marked the largest cut since the 2008 financial crisis, however, the agreement was rejected by non-OPEC country, Russia, one of the world's largest oil exporter. Following the failed agreement, both Saudi-Arabia and Russia have entered a price war. This announcement triggered a market downturn as both the Brent Crude Oil and U.S. West Texas Intermediate (WTI) fell by 23.72% and 25.02% respectively, their lowest point since February 12, 2016. As a result, market volatility jumped by 29.85% to close at 54.46 on March 9. Following the news, investors increasingly moved to safe-haven assets resulting in all maturities along the US Treasury curve falling significantly, including the 10-year yield which fell below 0.4%.

Since the start of the year, oil prices have fallen by over 40%. We believe the price war between Russia and Saudi Arabia is likely to result in the price of oil remaining at low levels over the short to medium term. However, some oil producers could be forced to exit the market at these low prices as at these levels, they may be unable to generate a profit. As suppliers exit the market, this may lead to less competition, lower supply and more cooperation from the remaining producers. As a result, the major players may find it easier to set prices at potentially higher levels in the long term.

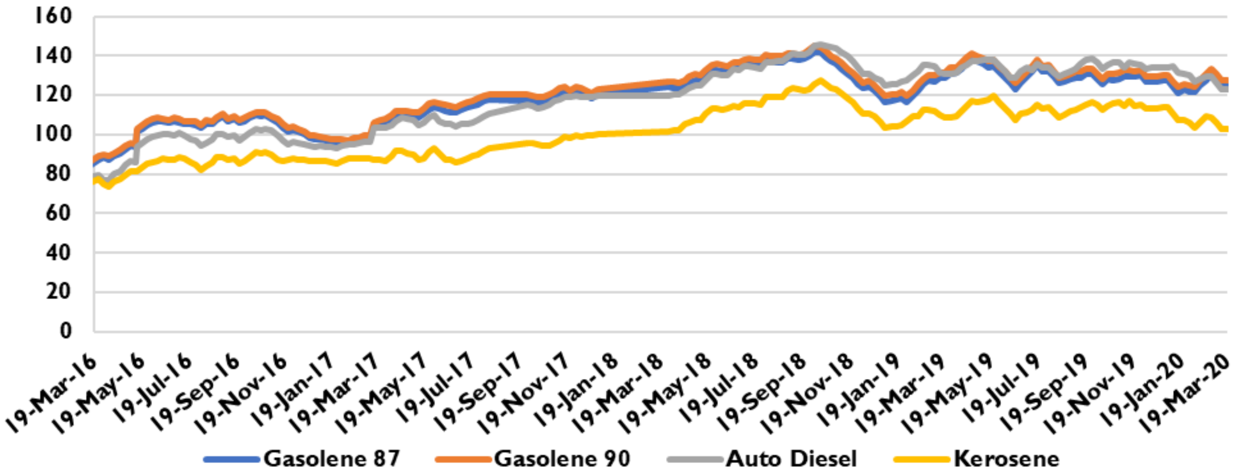
While the price wars may hurt the oil industry's profitability in the short run, businesses that depend on oil for production or regular business activities will benefit from lower prices and may be able to pass these benefits to customers through lower prices.

Commodities

Key Highlights

1. Companies and consumers to benefit from lower oil and petrol prices in short run.
2. Consumers may see a reduction in electricity bills
3. Oil prices likely to be further depressed as demand continues to fall
4. Smaller producers of oil to be affected
5. Large players may collude in the long run and raise prices

Petrojam Limited Price Index Week Over Week



On the local side, oil reserves are adequate for the short term and given the supply influx, Jamaica should encounter no difficulty to import oil. At the start of 2016, petroleum product prices spanned between US$80 and US$100 per litre, and these prices have trended upwards over the period and are currently within a band of US$100 and US130 per litre.

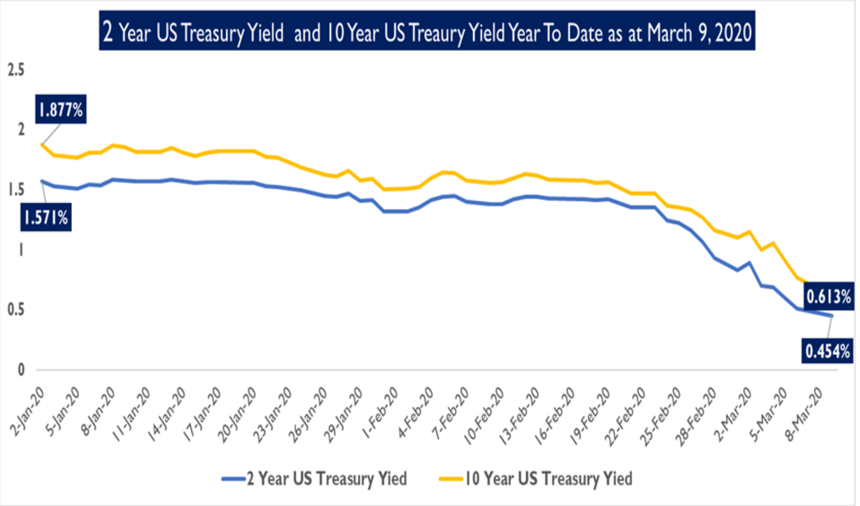
Over the last two week, however, prices have fallen sharply due to the price wars between Saudi Arabia and Russia. As a result of this, manufacturers should see reduced costs related to oil in the short term, which is expected to help reduce the impact of other supply constraints.

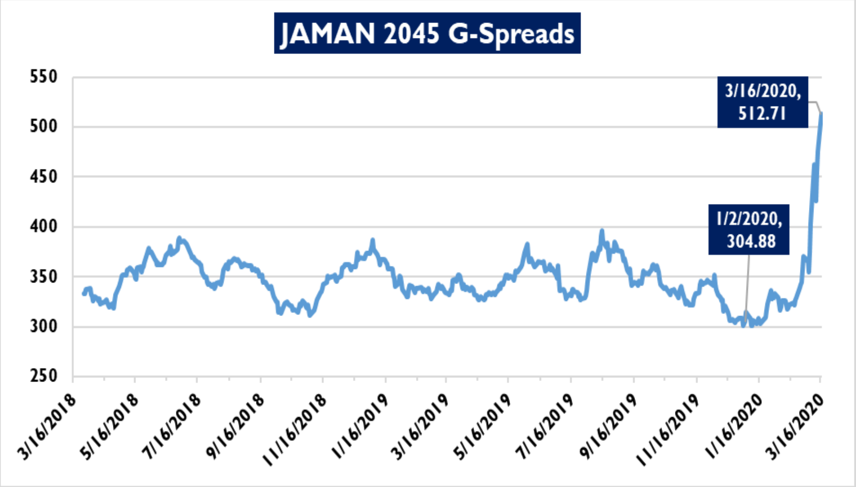
Consumers may also see their electricity bills being reduced during the period as JPS benefits from lower oil prices. Additionally, if production continues to slow globally and cruise ships and airlines continue to see less passenger traffic, oil prices may be further depressed. It is expected that despite the short term price declines, in the long term when the effects of the coronavirus disease subside and some oil producers exit the market, prices may trend higher as the larger remaining players may find it easier to collude in less competitive environments

Short-term Instruments and Bond Market

<u>Key Highlights</u>

1. Investors flocking safe-haven assets
2. The 2-year yield is currently below 1% and the 10-year yield slightly above 1%
3. Local bonds less sensitive to market news
4. GOJ global bonds exposed to international markets
5. Widening credit spreads





The coronavirus pandemic has sent investors flocking to safe-haven assets such as short term instruments and government bonds and away from riskier instruments in companies that are susceptible to the possible global economic slowdown. US Treasuries are considered safe assets given the guarantee by the government to pay the face value of the investment as long as it is held to the maturity date. The US two year treasury yield is currently below 1% and the ten-year yield is slightly above 1.0% as investors continue to sell out their equity and corporate bond positions which have contributed to the widening credit spread.

Locally issued bonds are less sensitive to the global indicators given the low level of trading activity in the local market. GOJ global bonds, on the other hand, are at the highest risk given the significant exposure to foreign markets. Since the market started responding to the coronavirus disease outbreak, we saw prices tumbling right along the curve for GOJ global bonds, despite a reduction in the benchmark treasury yields. This has led to a widening of credit spreads between the GOJ global bonds and the treasury. The JAMAN/GOJ 2045s G-Spread graph above shows the spread between the JAMAN 2045 and the 2045 US treasury note. On January 2, 2020, the spread between the two notes was 304.88. The rising fears surrounding the virus since this time has caused investors to shift away from the JAMAN bond, leading to a widening of the credit spread to 512.71 as at March 16, 2020, the highest spread recorded since the bond was issued.

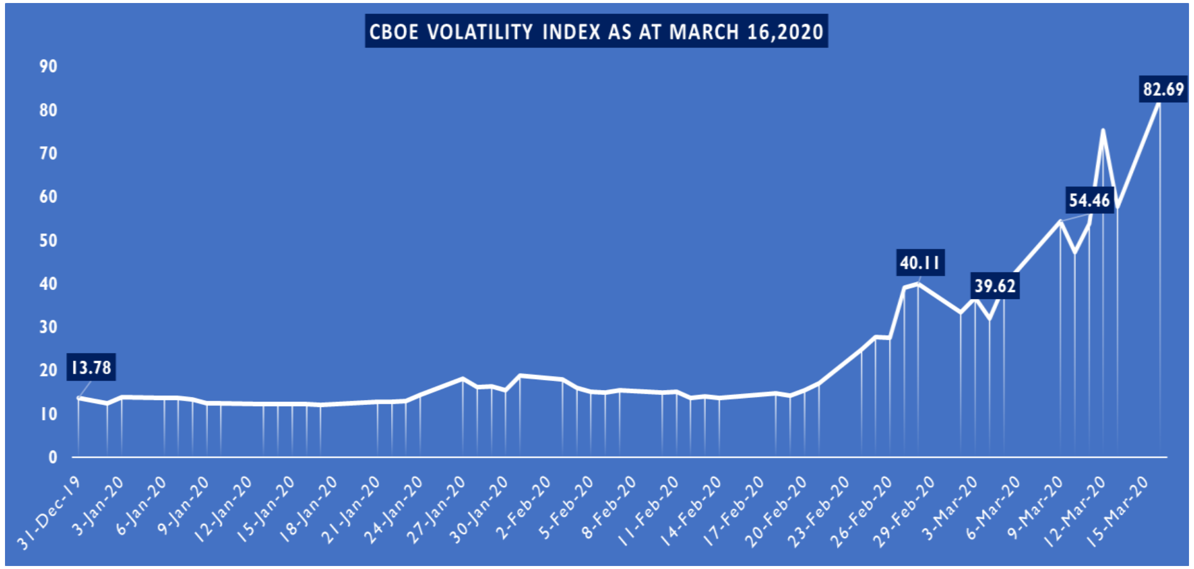
International Markets

Key Highlights

1. Global stock markets have plunged
2. S&P down 26.14% YTD as at March 16, 2020
3. Dow Jones down 29.26% YTD as at March 16, 2020
4. CBOE Volatility Index at record highs
5. CBOE trading floors closed to combat coronavirus disease spread

International Equity Markets

Index	16-Mar	DoD % Δ	WoW% Δ	YTD% Δ	YoY% Δ
S&P 500	2,386.13	-11.98%	-13.12%	-26.14%	-15.46%
Dow Jones	20,188.52	-12.93%	-15.36%	-29.26%	-21.90%
FTSE All Share	2,848.87	-4.86%	-14.57%	-32.11%	-28.21%
Euro Stoxx 50	2,450.37	-5.25%	-17.19%	-34.57%	-27.63%
Nikkei 225	17,002.04	-2.46%	-13.69%	-28.13%	-20.74%
MSCI World Index	409.88	-9.14%	-14.34%	-27.49%	-19.43%



Globally, stock markets have taken a hit as a result of the coronavirus pandemic. The S&P 500 and Dow Jones Industrial Index have had consecutive declines over the past weeks as market fears continue.

The CBOE VIX, the markets fear gauge, has trended to its highest point since the first quarter of 2009 during the financial crisis. On March 16, 2020, the CBOE VIX was at 82.69, which is 40.78 points higher than the 41.94 reading on March 6, 2020.

The Chicago Board Options Exchange (CBOE) global markets Volatility Index (VIX) is one of the most recognized measures of volatility -- widely reported by financial media and closely followed by a variety of market participants as a daily market indicator. The CBOE global markets have temporarily closed their floors to combat the coronavirus disease. However, trading will be continued on electronic platforms.

Local Markets

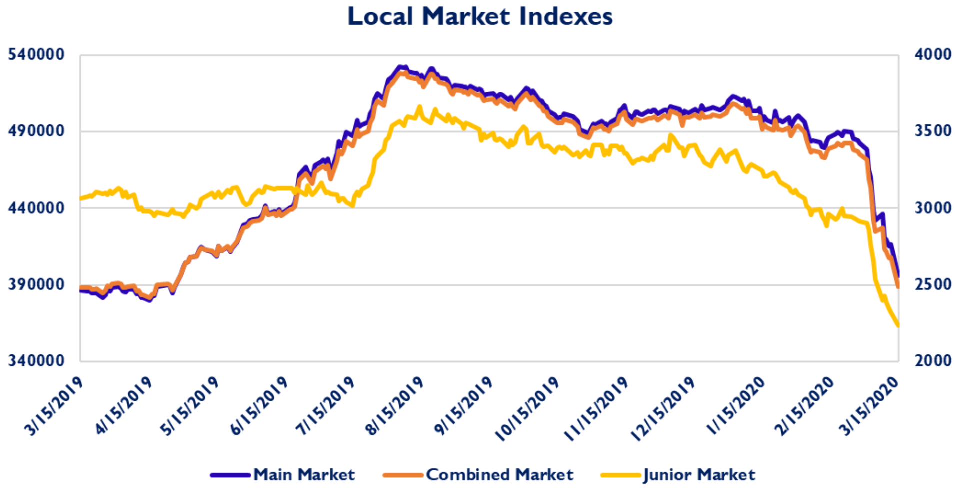
Key Highlights

1. Local market indexes have fallen by over 20% YTD
2. Investors sell off to take gains, enter IPOs/APOs, for tax purposes and some as a result of coronavirus fears
3. Trade volumes contributing to the decline in prices are relatively low
4. The main market index has retraced by over 8%

Jamaica Stock Exchange (JSE) Indices

	16-Mar	DOD	WOW	YTD	YOY
JSE Main Index	396,228.13	-4.81%	-9.21%	-22.30%	2.57%
Junior Market Index	2,233.23	-3.65%	-6.83%	-33.32%	-27.08%
JSE Combined Index	388,558.45	-4.74%	-9.07%	-23.10%	0.02%

As at March 16, 2020



The Jamaica Stock Exchange Indexes has significantly fallen off since the start of the year and have seen an accelerated decline since the start of March 2020 as investors continuously sell out their positions to take gains, enter in additional offerings and in some cases a sell-off related to coronavirus disease fears.

The combined JSE Index which had generally fluctuated with a declining trend since the start of 2020 recorded a sizable week over week fall off -3.2% in the week ending February 7, 2020. We surmise that this sell-off was related to persons taking gains and repositioning their portfolios for the TransJamaican IPO that was published on February 4, 2020, as well as investors liquidating in preparation for taxes due March 15, 2020. The market advanced for two consecutive weeks following this sharp decline before falling by a combined 1.55% in the week ending February 21 which we believe was the seeping panic of the coronavirus disease that started to set into the market. For the week of March 9 to March 13, the market declined by ~14.67% week over week. This is likely related to accelerated fears surrounding the coronavirus disease. The trades that have been moving the market are on relatively small volumes by retail clients who may not understand the investment cycles.

Notably, since the start of the year, the main market index has retraced by over 8%, the steepest retracement recorded since the index was listed. A retracement is a temporary reversal in the direction of a stock's price or an index that goes against the prevailing trend.

POTENTIAL IMPACT OF THE COVID-19 ON JAMAICA SECTORS

The Food and Beverages industry – Due to its links to the hospitality sector, the players in the food and beverage industry are particularly susceptible to the impact of the coronavirus pandemic. As a result of this, tourism worldwide is expected to undergo major slowdowns in the quarter and companies with revenues tied directly to the hospitality and travel industry will likely see declines in profitability.

Manufacturing and Retail sectors – Companies in this sector may see a transitory shortage in terms of sourcing supplies, as large companies with the majority of the market share are likely to have ample reserves to meet demand. If however, the pandemic is prolonged, supplies may get tight and inventories may be depleted leading to increased prices as a natural determinant of supply and demand forces.

Leisure industries – These industries' are expected to be hardest hit by the virus outbreak. With the widespread restriction on travel, and a limit on social gathering the industry is expected to come to a standstill. As persons practice limiting unnecessary interactions to protect themselves and their families, we expect companies in this category to have lower revenues in the next couple quarters given the current recommendation of limited social interactions.

The Services industry – This industry houses among other things, companies in the cinema, logistics and shipment business. These companies are expected to see some initial fall off in revenues due to disrupted services from reduced consumer traffic and on the logistics and shipment end, reduced importation of goods and supply chain challenges. However, as the number of new cases decline and persons' practice safe hygiene, the impact may prove to be only transitory.

Health Care and Services – This industry, housing private hospitals and pharmacies and distribution centres may be positively impacted by the pandemic in the interim due to an uptick in sales of hygienic and medical supplies. However, as inventories are depleted and restocking becomes difficult due to global shortages, we expect these sectors profitability to normalize and in some cases fall if other supplies are not able to support business continuity.

Finance – As the banker to both businesses and consumers, the pass-through of funds through the banking system may be less during this period as businesses institute closures, work from home and self-quarantining procedures and consumers try to minimize their commute to limit the incidence of community spread. Fee generation from over the counter and point of sale transactions will be less as profitability is reduced for companies. There may also be increased default rates during this period as loans to small and medium-sized businesses find it increasingly hard to service their loans. The volatility in asset prices may also negatively affect income from the trading of securities.

COMPANIES THAT MIGHT BE AFFECTED BY THE CORONAVIRUS DISEASE

Food and Beverages Industry

- Express Catering Ltd
- Everything Fresh

Manufacturing and Retail Industry

- Lumber Depot Limited
- Kingston Wharves Ltd
- Cargo Handlers Ltd
- Lasco Manufacturing Limited
- Lasco Distribution Limited
- GraceKennedy Limited
- Salada Foods Limited
- Berger Paints Jamaica Limited
- Caribbean Cream Limited
- Wisynco Ltd
- Caribbean Producers Jamaica
- Jetcon Corporation Limited
- Paramount Trading Jamaica Limited
- Seprod Limited
- Jamaica Broilers Limited

Leisure Industry

- Dolphin Cove Ltd
- Main Event Entertainment Ltd
- Palace Amusement Co Ltd
- KLE Group Ltd

Services Industry

- Knutsford Express Ltd
- iCreate Limited
- Kingston Wharves Limited
- Mailpac Group Limited
- Cargo Handlers Ltd

Finance Industry

- Sagicor Group Jamaica
- NCB Group
- JMMB Group
- Barita Investments Limited
- Sterling Investments Limited
- Lasco Financial Services Limited
- ISP Financial Services Limited
- Scotia Group Jamaica Limited
- Mayberry Investments Limited
- PROVEN Jamaica Limited
- Victoria Mutual Investments Limited
- Access Financial Services Limited

Health Care and Services

- Indies Pharma Jamaica Limited
- Fontana Limited
- Medical Disposables & Supplies

Given the likelihood of profitability falling for many of the companies in Jamaica from the coronavirus disease pandemic, investors will have to be astute in their selection process and remember the golden rule of investing, which is to buy low and sell high. The recommendation is to look at companies with strong fundamentals, diversified revenue streams and or a compelling growth story and stick to them. This choice must also fit the investor's investment objective and investment time horizon. Investors with a long-term horizon will likely be able to withstand volatility in the short to medium term. While profitability is expected to decline over the short term, we expect that the solid local companies to bounce back to increased profitability over the medium term providing that the outbreak is not prolonged and the general improvement in the macro-economy is not derailed.

CONCLUSION

CONCLUSION

The coronavirus outbreak which started in China has swiftly spread across the globe and is having a profound impact on business activity and productivity due to the drastic measures various governments have had to implement to limit its spread. Despite the measures implemented by various countries, the rate of new infections has increased with the total infections now standing at over 360,000 and over 15,000 deaths recorded. Jamaica has also introduced strict measures to limit the spread of the virus including travel restrictions, designated virus quarantine areas and monies set aside to deal with a pandemic.

Notwithstanding these measures, as with any other global emergency, the market reacts to new information as investors assess the appropriateness of these measures in controlling the crisis. Currently, this new information has led to global decline equity prices with major indexes declining by rates close to those recorded in the 2008/09 financial crisis. However, investors must note that historically, there is evidence to show that after all major virus outbreak in the last 10 years, equities market have bounced back to higher levels within 12 months after the virus was identified. It is for this reason that we believe that markets could return to normalcy within the next 12 months providing that the measures being implemented turn out to be effective. Therefore, investors are encouraged to make their assessment and position their portfolios to be able to capitalize on the opportunities the pullback has presented.

At present, high yielding global bonds such as the GOJ global bonds have suffered in the international markets and may continue to undergo distress, as investors move to safer assets such a US Treasury security and higher quality credits. On the local side, however, local bonds and other short term instruments remain liquid. The local stock market, on the other hand, has taken a hit as the main and junior market indices have declined by 15% and 21% week over week up to March 15, respectively, the highest decline in over 52 weeks. We gauge that some of this sell-off is related to investors acting on fears surrounding the coronavirus disease. However, it is to be noted that there is no real shortage in the market from local suppliers and most of our companies' demands are generated locally. Large companies are also likely to have adequate inventory to meet short term demand. Companies at high risk are those in the tourism, food and accommodation sectors, which are likely to see some contraction over the next few quarters. Investors are to assess their investment strategy, investment objective and investment time horizon and remember the golden rule of investing, buy low and sell high. Investors should invest in companies that are fundamentally strong or have a compelling growth story. Investors with a long-term horizon will likely be able to withstand volatility in the short to medium term.

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