

OFFICE OF THE MINISTER OF FINANCE AND THE PUBLIC SERVICE

April 16, 2021

Mr. Richard Byles Governor and Chairman of the Monetary Policy Committee Bank of Jamaica Nethersole Place Kingston

Dear Governor Byles,

Remit for the Monetary Policy Committee

As you are aware, under Section 34 FF of the Bank of Jamaica (Amendment) 2020 Act, the inflation target for Jamaica is set by the Minister of Finance and the Public Service, after consultation with the Governor of the Bank of Jamaica.

Having reviewed the recommendation in your letter dated 31 March 2021, I hereby confirm that the inflation target for Jamaica, calculated as the 12-month point-to-point percentage change in the Consumer Price Index, as measured by the Statistical Institute of Jamaica (STATIN), is 4.0 per cent to 6.0 per cent. The midpoint of this range of 5.0 per cent will be the operational target for the Monetary Policy Committee ("MPC"). This target is effective as at April 2021 and will be in effect for the next three years. The target will apply continuously, that is, for each month over the period. I will again review the inflation target at the end of this three-year period.

Whenever inflation deviates from the target (i.e. inflation is above 6.0 per cent or below 4.0 per cent), the Bank will be required to provide, within 60 days of the publication of the outturn by STATIN, an explanation for missing the target. I note your explanation of the risks to the MPC successfully delivering on its mandate and will seek to galvanize support in other areas of Government towards mitigating these risks.

This target is consistent with the Government's macroeconomic framework and its confirmation comes at critical juncture for Jamaica. The country over the last fiscal year has been grappling with the crisis occasioned by the COVID-19 pandemic. The pandemic resulted in a steep contraction in economic activity which translated into a temporary reversal in the downward trajectory of the public debt.

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The overarching economic policy priorities remain the maintenance of stability in the economy, a restoration of vibrancy to economic activity and a reduction in public sector indebtedness. I note the description of the factors that led to your recommendation of the target, inclusive of the fact that a lower target would immediately lead to monetary tightening and a significant upward adjustment of interest rates. In addition, I would add that setting a higher target would have a potentially destabilizing effect on the economy and the financial sector.

The recommended target therefore complements the Government's objectives without destabilizing our hard-won macroeconomic stability.

I welcome the support of the Bank of Jamaica and the MPC in delivering a better future for the people of Jamaica.

Yours sincerely,

Nigel Clarke, DPhil, MP

Minister of Finance and the Public Service



Bank of Jamaica Nethersole Place Kingston, Jamaica, W.I.

29 March 2021

Hon Dr Nigel Clarke, MP Minister of Finance and the Public Service Ministry of Finance and the Public Service 30 National Heroes Circle Kingston 4

Dear Minister Clarke,

Proposed Inflation Target for Fiscal Years 2021/22 to 2023/24

The recent Bank of Jamaica (Amendment) 2020 Act ("Act") which, *inter alia*, formally introduces Jamaica's inflation targeting regime, requires that an inflation target be set for a period of time not less than thirty-six months. The Act also establishes the Monetary Policy Committee (MPC), which shall have the responsibility of making monetary policy decisions to achieve the Government of Jamaica's inflation target.

As such, you would be required to formally advise the MPC of its remit, i.e. the inflation target, once the Act is effected. The Bank recommends that this be done on or soon after the appointed date for the Act. I am therefore enclosing for your endorsement a draft letter to the MPC outlining the target.

I am recommending that the target for the 12-month point-to-point inflation rate, as measured by the percentage change in the Consumer Price Index, remains at 4.0 per cent to 6.0 per cent for the next three fiscal years. This target, which is consistent with the Government's macroeconomic framework as set out in the recently tabled Fiscal Policy Paper, is proposed against the background of an expected acceleration in economic growth over the period and a continued reduction of public sector debt. Targeting a lower rate of inflation is not advisable as achieving this lower rate will require tighter monetary policy, which will restrain the anticipated recovery in the Jamaican economy and impair the Government's debt reduction strategy.

A paper supporting this recommendation is enclosed. The paper outlines Jamaica's recent inflation experience, the Bank's inflation forecast and an assessment of the optimal inflation target consistent with Jamaica's growth potential and debt dynamics. It also discusses the considerations underlying the recommended width of the inflation target range.

The Act requires that your letter be tabled in Parliament and be published on the website of the Ministry of Finance and the Public Service.

We stand ready to provide any clarification on this matter.

Yours sincerely,

Richard Byles

enclosure:



Recommendation for Inflation Target FY2021/22 – FY2023/24

Overview

- 1. Bank of Jamaica was first tasked by the Minister of Finance and the Public Service in FY2017/18 to achieve a target range of 4.0% to 6.0% for the twelve-month point-to-point inflation over the medium term. This inflation target was deemed optimal to support Jamaica's long run growth and was also consistent with the programmed reduction in public debt. Bank of Jamaica was broadly successful in maintaining inflation in the target range during the period January 2018 to January 2021. In particular, annual inflation over the period fell within the target range 59.5 per cent of the time and below 6.0 per cent (the upper bound of the target) 95 per cent of the time. Inflation is projected to close FY2020/21 at 6.3 per cent and to remain close to the centre of the target over the medium term.
- 2. Bank of Jamaica recommends that the inflation target range remains at 5.0% ±1.0 pps (or 4.0% to 6.0%). An assessment of the costs associated with targeting lower inflation (i.e. 3.0%), relative to the current trajectory, indicates that such a reduction will necessitate an upfront and strong adjustment of close to 200 bps in interest rates. Along with the ensuing reduction in inflation, this adjustment in interest rates will lead to reductions in both real and nominal GDP, which in turn results in a worsening of the medium-term trajectory for the debt of the public sector.
- 3. Bank of Jamaica also recommends that the current width of the target range of ±1.0 pp be maintained. In order to establish the width of the inflation target range, this paper reviews the historical volatility of inflation, given the economy's susceptibility to weather-related, exchange rate, terms of trade and others shocks. This assessment suggests an inflation volatility of ±1.2 percentage points, which is broadly consistent with the recommended range. We expect future volatility to nonetheless fall further as Jamaica's efforts to mitigate the effects of climate change on agricultural food prices and initiatives to diversify Jamaica's fuel mix contribute to lower inflation volatility.
- 4. The remainder of this paper (1) describes the most recent inflation performance for Jamaica, (2) establishes an unconditional forecast for inflation (3) discusses the theory and antecedents in setting inflation targets and finally (4) provides an assessment of inflation volatility in Jamaica to propose a width for the inflation target range.

¹ Inflation went above target on two occasions due to temporary increases in agricultural prices arising from either droughts or floods. On the flip side, inflation fell below the lower end of the target on 13 occasions over the period, again mainly due to volatility in agricultural prices as well as declines in international oil prices.

Inflation Performance to Date

Bank of Jamaica successfully reduced inflation to single digits in FY1996/97 from an average of 28.0% over the previous four years. Inflation has largely remained below 10% since then, except for the impact of, inter-alia, adverse weather, increases in crude oil prices and revenue measures implemented by the central government (see Figure 1).

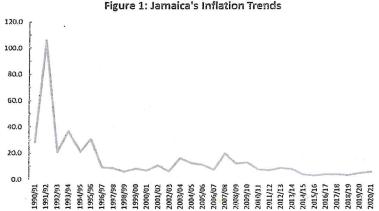


Figure 1: Jamaica's Inflation Trends

- 6. In FY2017/18, Bank of Jamaica was tasked by the Minister of Finance and the Public Service to achieve a target range of 4.0% to 6.0% for twelve-month point-to-point inflation over the medium term. This inflation target was deemed optimal to support Jamaica's long run growth and was also consistent with the programmed reduction in public debt. In the context of this inflation targeting lite regime, favourable developments in oil prices and fiscal consolidation, Bank of Jamaica successfully maintained inflation in the target range. In particular, between January 2018 to January 2021, annual inflation fell within the target range 59.5 per cent of the time and below 6.0 per cent (the upper bound of the target) 95 per cent of the time.
- 7. During FY2020/21, the Jamaican economy was affected by significant uncertainties emanating from the impact of the COVID-19 pandemic. Real GDP for FY2020/21 is estimated to have contracted in the range of 10%-12% due to a temporary shut-down of the tourism industry, the spill-over effects of this to other sectors of the economy and the general impact on the economy of Covid-19 containment measures. In the context of higher energy and transport related costs, inflation is projected to close FY2020/21 at 6.3 per cent but there are downside risks to this projection.

The Current Projection

8. In the context of the projected recovery in GDP growth following the adverse impact of the COVID-19 pandemic and a recovery in global commodity prices, inflation is projected to remain generally stable around 5.0% over the medium term (See Table 1 below). The Bank projects that a partial rebound of at least 4% in economic activity will

commence in FY2021/22, and could possibly be as high as 8% if there is a strong recovery in tourism.

TABLE 1: MEDIU	JM TER	MINI	FLATIC	ON FOR	RECAS	T & M	IAIN	A) (-1) (1) (1) (1)
	A	SSUM	PTION	S				
	Actual			Projection				
	2013/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
	percentage change							
INFLATION	3.4	4.8	6.3	<i>5.1</i>	5.0	5.0	5.0	5.0
Private Sector Inflation Expectations*	4.5	6.1	7.2**					
Imported Inflation								
US INFLATION	1.9	1.5	2.2	2.5	2.4	2.4	2.4	2.4
CRUDE OIL (WTI) (% Change)	16.9	-12.6	-31.0	20.5	16.8	5.7	0.7	0.7
GRAINS INDEX	4.9	-3.5	2.7	4.2	0.1	0.1	0.1	0.1
o.w. CORN	6.5	2.9	-6.6	5.5	0.1	0.1	0.1	0.1
o.w. WHEAT	16.3	-0.9	-0.7	0.8	0.1	0.1	0.1	0.1
Real GDP Growth	1.9	-0.1	-11.6	5.2	6.2	3.1	2.0	2.0
Global Growth**	3.6	2.9	-3.8	4.2	3.6	3.2	3.2	3.2

^{* 12} month ahead inflation expectations based on BOJ Survey of Businesses' Inflation Expectations.

** As at December 2020

- 9. For FY2021/22 in particular, the main drivers of inflation are improved domestic demand, inflation expectations and imported inflation. Weak domestic demand is expected to be less of a drag on inflation for the fiscal year given the projection for domestic GDP growth. A survey-based measure reflected average inflation expectations of approximately 6.7% in 2020, largely due to the uncertainty surrounding the COVID-19 pandemic. However, influenced by BOJ's efforts at educating the public, inflation expectations are expected to fall back over time, closer to the mid-point of the inflation target range. Imported inflation is projected to accelerate in FY2021/22 as global demand picks up. In this context, oil prices are projected to increase to an average of US\$52.87 per barrel for FY2021/22 from an average of US\$40.60 in FY2020/21 and fluctuate between \$55.00 \$65.00 per barrel over the medium- term.²
- 10. The risks to the inflation forecast are skewed to the downside. On the upside, higher inflation could result from greater than anticipated exchange rate depreciation and pass-through, worse than anticipated weather conditions, stronger than anticipated demand conditions in a context of a successful local Covid-19 vaccination campaign and higher than anticipated international grain and oil prices. The main downside risks relate to lower than projected international commodity prices, stronger than anticipated impact of the recent investments in irrigation and large-scale farms on domestic agriculture supply, sharper

² The outlook for oil prices is underpinned by lower projected global inventory levels as OPEC and allied nations maintain voluntary supply reductions. This is expected to be further supported by higher global consumption amid positive reports surrounding the development and deployment of a Covid-19 vaccine.

reversals in agricultural food prices over the near term, the non-occurrence of administered price adjustments as well as weaker than anticipated demand conditions.

Optimal Inflation Rate

11. The optimal level of inflation for a country depends on its economic structure and stage of economic development. Optimal inflation for emerging market economies is usually higher in the context of real wage convergence (Balassa-Samuelson effect). In this context, emerging market economies usually set higher inflation targets than developed economies as the former set of countries usually lacks diversity and reflect low economies of scale and low flexibility in product and factor markets. Figure 2 shows the inverse relationship between per capita GDP and inflation targets for 61 economies that pursue explicit or implicit inflation targeting.³ Figure 3 on the other hand shows inflation targets for selected inflation targeting economies. Advanced economies usually target inflation at 2%, while central banks in emerging economies set higher targets.

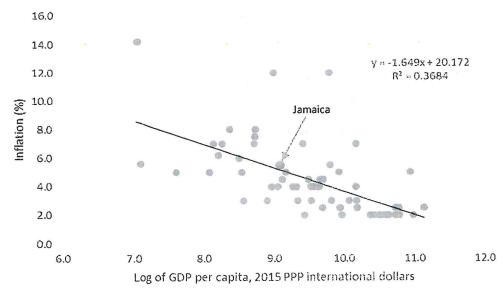


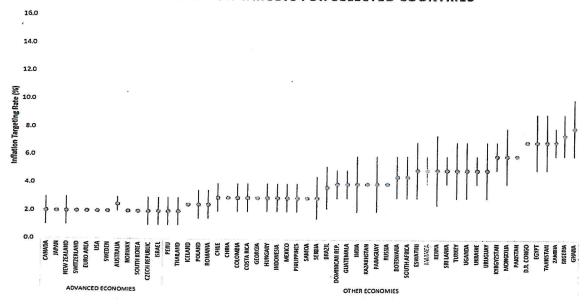
Figure 2: GDP per capita and Inflation Targets in Selected Economies

Source: IMF and http://www.centralbanknews.info/p/inflation-targets.html

³ The graph suggests that the optimal inflation rate for Jamaica lies between 4% and 6%.

Figure 3:

2021 INFLATION TARGETS FOR SELECTED COUNTRIES



Source: http://www.centralbanknews.info/p/inflation-targets.html

- 12. The authorities in high inflation countries also may not want to immediately try to attain a long-term inflation target as disinflation has output costs. Tight monetary policy in pursuit of lower inflation has an impact on the real economy through two channels. First, increases in interest rates reduce domestic demand and, second, increases in interest rates cause real exchange rate appreciation, which leads to decreased net exports. Policy credibility and central bank independence plays important roles in this disinflationary process, both of which are most times weak in emerging market economies. If the central bank is able to influence the usually high inflation expectations, then the associated cost can be substantially decreased.
- 13. The appropriate strategy therefore seems to be for emerging market economies to reduce their inflation target gradually towards the long-term target. The Central Bank of Chile had its target reduced from 20.0% to 3.5% over a decade while the Czech National Bank had its target reduced from 6% to 2% over 12 years. The recent discussion by and experiences of advanced economies, however, show that an inflation target of 2.0% may be too low because of the zero lower bound problem. Nevertheless, it is debated that, if fiscal policy has room to manoeuvre, this problem can be circumvented.

⁴ In monetary policy, reference to a zero-lower bound (ZLB) on interest rates means that the central bank can no longer reduce the interest rate to encourage economic growth. Therefore the ZLB acts as a constraint on central bankers trying to stimulate the economy. In essence, with an inflation target of 2.0%, real interest rates are not sufficiently low to stabilize the output gap, resulting in longer recessionary forces.

⁵ With interest rates at zero, and with the main risk being that inflation is too low, fiscal policy must be active and contribute to cyclical stabilisation. In this case, fiscal policy must lead with an expansionary stance and monetary

14. In the context of the foregoing, it is reasonable for Jamaica to commit to a long-term inflation target in the range of 2.0% to 4.0% and gradually approach this longer-term objective. In the short-term, as the policy makers prioritize accommodating a nascent acceleration of GDP growth and a reduction in public sector indebtedness to sustainable levels, it is appropriate to maintain a target of 5.0%.

Impact of Targeting a Lower Inflation Rate

- 15. This section evaluates the impact on selected macroeconomic variables (including the fiscal accounts) of Bank of Jamaica targeting a lower annual inflation rate of 3.0% for FY2021/22 and beyond, relative to the proposed target of 5.0%.
- 16. The Bank assesses that, relative to the baseline forecast, the targeting of 3.0% inflation will require an upward adjustment of 166 bps in interest rates over two years, driven by a tightening of monetary policy. This tightening will cause real GDP growth rate to deviate from the baseline by 0.3 pp on average over the next four years (reflecting reductions of 0.5 pp and 0.6 pp for the first two years) and the nominal exchange rate to depreciate at a slower annual rate over the same period. The tables with the baseline macroeconomic projections and the lower inflation scenarios are shown in Appendix 1.
- 17. With regard to the fiscal accounts, the monetary policy adjustment results in a deterioration of 0.06 pp, on average, in the annual fiscal balance over the forecast horizon (see Figure 4). This translates to a cumulative fiscal cost of 0.5% of GDP over the period. In the context of the deteriorated fiscal position and the lower nominal GDP, the debt-to-GDP ratio deteriorates, relative to the baseline path, by 3.4 pps at end FY2027/28. This means that, to achieve the lower inflation path, the size of compensatory adjustments in fiscal measures over the period would have to be equivalent to 3.4% of GDP (or approximately J\$116.5 billion) (see Figure 5).
- 18. It may be possible to achieve lower inflation without any significant change in the Bank's monetary policy stance if inflation expectations were lowered by other factors such as improvements in the credibility of monetary policy. Lower inflation is also possible in the context of the removal of structural constraints to growth, which would expand the productive capacity of the economy.

policy must explicitly cooperate by guaranteeing low interest rates for as long as needed. Ubide (2019) 'Fiscal Policy at the Zero Lower Bound'

⁶ See Appendix 2 for a detailed review of the monetary transmission mechanism for Jamaica which forms the basis of the assessment of the cost of targeting lower inflation.

Figure 4

Difference in Fiscal Balance from Baseline in Response to Lower Inflation Target

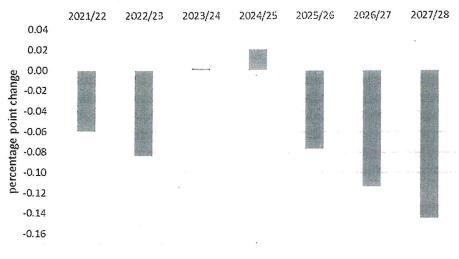
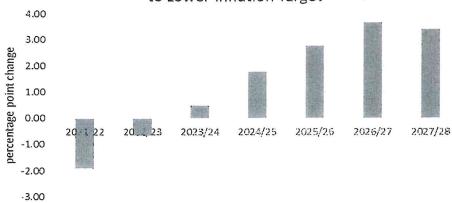


Figure 5:

Difference in Debt Ratio from Baseline in Response to Lower Inflation Target



Width of Jamaica's Inflation Target Range

- 19. Bank of Jamaica recommends that the existing ±1.0 pp permissible range for the deviation of inflation around its target is maintained. In addition to falling inflation volatility, the recommendation is premised on the Bank's aim of reducing inflation expectations over time, complemented by reductions in the speed of exchange rate pass-through and efforts to mitigate the impact of climate change and terms of trade shocks.
- 20. An inflation target range defines the extent to which inflation can vary without triggering a change to monetary policy. Countries announce specific inflation targets to help anchor inflation expectations and to raise the level of monetary policy credibility. Targets provide a yardstick against which the central bank's success can be measured, allowing the monetary authority to establish a reputation as an inflation fighter. Bank of Jamaica has traditionally operated with a ±1.0 pp target range.
- 21. To inform the determination of the target range, an assessment of inflation volatility over time was conducted. The rolling standard deviation for annual inflation over various intervals or "windows" covering the period December 1994 to September 2020 supports the view that inflation volatility falls with lower inflation (see Figure 6). The 5-year rolling window estimate of volatility suggests that, over the last year, inflation volatility has been relatively low, ranging between $\pm 1.1\%$ and $\pm 1.2\%$. Similarly, with narrower windows of three and two years, inflation volatility has declined to between $\pm 0.9\%$ and $\pm 1.1\%$ and between $\pm 0.9\%$ and $\pm 1.2\%$, respectively.

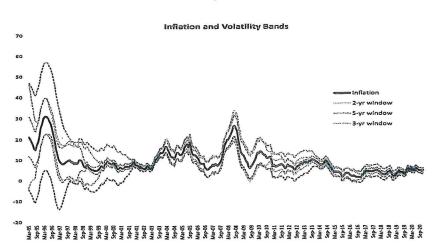


Figure 6

⁷ The target range over the past eight years has been set at 8.5%-10.5% for FY2013/14, 7.0%-9.0% for FY2014/15, 5.5%-7.5% for FY2015/16, 4.5%-6.5% for FY2016/17 and 4.0% - 6.0% since FY2017/18.

⁸ This assessment was done by calculating the standard deviation as at each month for the past 'x' years where x represents the time period or the window over which the assessment is done. This is done for the following months for the same time period which would have shifted (and hence rolling). The standard deviation is then used to create bands around the inflation (inflation ± standard deviation) which is graphed as shown in Figure 6.

22. An assessment of various shocks was also done which shows that, outside of the impact of adverse weather, these shocks have resulted in inflation volatility in the range ±1.0%. The immediate impact of the selected shocks on inflation was determined by comparing the outturns for inflation (which included the shocks) with the baseline inflation forecast. For example, the deviation of inflation caused by adverse weather (which produces above seasonal increases in the agricultural prices) is estimated by comparing the baseline forecast for the Food and Drink Division of the CPI with the actual data. From table 2 below, weather-related shocks resulted in inflation deviations of up to 1.4 pp.

Table 2: Shock Assessment

Nature of Shock	Period and % change	Immediate Impact on CPI		
Energy rates	Electricity rates increased year over year by 11.3% in February 2020	0.9 pp higher		
Water rates	Water rates declined by 21% in September 2020	0.3 pp lower		
School fees due to Covid-19	Declined by 22% in May 2020	0.4 pp lower		
Drought impact	Raw food prices increased year over year by as much 34% in June 2020	1.4 pp higher		
Raw food prices increased year over year by as much as 20% in December 2020.		1.3 pp higher		

23. Inflation volatility is likely to fall further as macroeconomic stability becomes entrenched and the resilience of the economy improves in the context of structural reform programmes. Among these programmes are efforts to reduce the agricultural sector's susceptibility to weather-related shocks. The recent move by the private sector to create large scale farms will also potentially increase the capacity of the sector to cope with weather-related shocks. Additionally, the country has made significant investments in LNG and renewable energy sources which should, over time, reduce its susceptibility to energy-price related shocks.

Bank of Jamaica 04 March 2021

⁹ The baseline forecast was generated by incorporating the standard seasonal patterns for selected divisions in the CPI