Will Powell and Poloz Modify Policy Frameworks?

Michael Gregory, CFA, Deputy Chief Economist • michael.gregory@bmo.com • 416-359-4747

Last November, the Federal Reserve announced that it will review the *"strategies, tools, and communication practices it uses to pursue its congressionally-assigned mandate of maximum employment and price stability."* The review will include *"outreach to a broad range of interested stakeholders"*, with public events to occur throughout this year. The Fed officially adopted inflation targeting in January 2012, and this will be its first formal review.

The Bank of Canada has been following an inflation-targeting policy framework since February 1991. Eyeing the 2021 renewal of the latest (five-year) agreement with the Government of Canada on the joint commitment to the inflation target, the Bank is, again, engaged in reviewing the framework for potential improvement, as it has done ahead of previous renewals. While the 2% target for the 12-month change in the CPI has not changed for the past 28 years, other aspects of the framework have been tweaked as part of these reviews. For example, in 2001, the BoC changed its guiding core inflation rate from the total CPI excluding food, energy and indirect taxes to the total excluding the eight most volatile components along with indirect taxes. The preferred core inflation rate was changed again in 2016 to the set of three metrics: CPI-common, CPI-median and CPI-trim.

These separate reviews are occurring amid two common major developments that are prodding some serious thinking about (and research on) modifying policy frameworks. First, since the recession, inflation has underperformed persistently relative to the target. Second, estimates of the neutral policy rate have fallen materially.

The Fed targets the 12-month change in the PCE price index, with guidance provided by the core measure (the total excluding food and energy). In December, headline inflation was 1.7% y/y, with the core rate at 1.9% (*Chart 1*), once again a bit below the 2% target on both fronts. Indeed, looking at the period beginning one year after the end of the recession (to allow some time for lingering recession-related disinflationary pressures to subside), there have been no core inflation readings above 2.1%, while more than three-quarters of the outcomes have been below 1.9% with nearly 60% under 1.7% (*Table 1*). The average core inflation rate has been 1.6% (the same as the median), with the average headline inflation rate at 1.5% (also the same as the median).

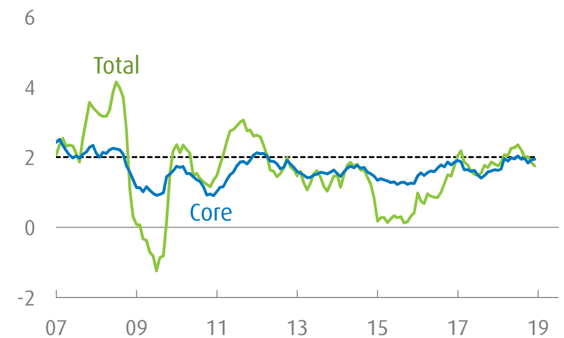
Canada's performance has not been much better. In January, headline CPI inflation was 1.4% y/y (*Chart 2*), with the average of the three preferred core rates at 1.9% (which we'll refer to as the "core"). Identical to the U.S. situation, there have been no core

Chart 1

Fed Having Hard Time Hitting Target

United States (y/y % chng)

PCE Price Index



Sources: BMO Economics, Haver Analytics

Table 1

Asymmetric Outcomes

U.S. PCE Inflation — June 2010 - December 2018

Frequency of Outcomes (% among 103 observations)

	Range around 2%			
	±0.0 ppts	±0.1 ppts	±0.2 ppts	±0.3 ppts
Total				
Above	19	17	15	13
Within	5	11	22	29
Below	76	73	63	58
Core				
Above	4	0	0	0
Within	6	23	30	42
Below	90	77	70	58

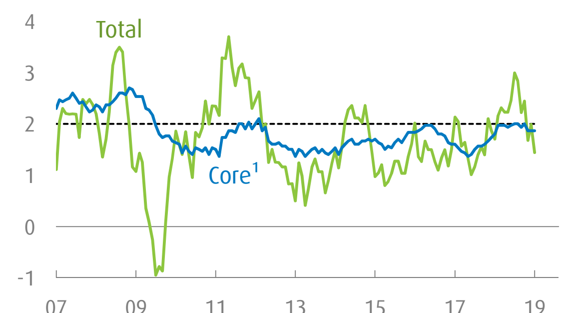
Figures might not add to 100% owing to rounding.
Sources: BMO Economics, Haver Analytics

Chart 2

BoC Having Hard Time Hitting Target, Too

Canada (y/y % chng)

Consumer Price Index



[1] average of the 3 BoC-preferred core inflation measures
Sources: BMO Economics, Haver Analytics

inflation readings above 2.1% since June 2010 (*Table 2*). Meanwhile, more than 70% of the outcomes have been below 1.9% with more than half under 1.7%. The average core inflation rate has been 1.6%, the same as in the U.S. but with a slightly higher median (1.7%). The average headline inflation rate has been 1.5%, also the same as in the U.S. but, again, with a slightly higher median (1.7%).

There are common explanations for inflation's underperformance such as residual economic slack, aging populations and technology-enabled disruption. Although these are credible explanations, the fact that neither country is able to post 2% (or higher) headline or core inflation after approaching a decade of economic expansion—with a legacy of chronic inflation underperformance in tow—is starting to erode confidence in the policy frameworks. Just ask the bond market, which seems to be betting on inflation underperformance persisting indefinitely.

Table 2
Asymmetric Outcomes — Part 2

Canada CPI Inflation — June 2010 – January 2019
Frequency of Outcomes (% among 104 observations)

	Range around 2%			
	±0.0 ppts	±0.1 ppts	±0.2 ppts	±0.3 ppts
Total				
Above	31	27	22	18
Within	8	14	20	28
Below	62	59	58	54
Core (average of the 3 BoC-preferred measures)				
Above	1	0	0	0
Within	13	28	36	49
Below	86	72	64	51

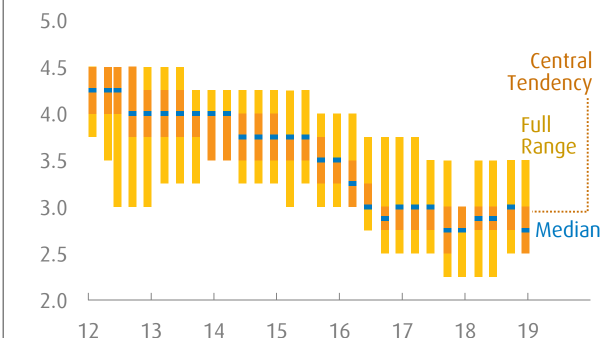
Figures might not add to 100% owing to rounding.
Sources: BMO Economics, Haver Analytics

The Fed and BoC reviews are asking the question: Is the current framework of always aiming for 2% inflation over the medium term—regardless of what happened in the past (bygones are bygones)—becoming inadequate to attain 2% outcomes and risking re-anchoring inflation expectations at sub-2% levels? The question becomes more pertinent given the emergence of low neutral policy rates.

Chart 3
Low for the Long Run

FOMC (percent)

Long-run Projections for Fed Funds Target Rate



Sources: BMO Economics, Haver Analytics

The FOMC's range of projections for the longer-run, or neutral, fed funds target rate has fallen considerably since first published in 2012 (*Chart 3*). From a 3.75%-to-4.50% range with a 4.25% median, it has dropped to 2.50%-to-3.50% with a 2.75% median. The longer-run median projection has fallen 150 bps in just seven years. The Bank of Canada estimates the neutral rate also runs in a 2.50%-to-3.50% range, which is nearly 200 bps below what was estimated in the early 2000s. The issue surrounding low neutral rates is that during economic downturns and central bank easing cycles, you are more likely to hit the effective lower bound (ELB) for policy rates (which now seems to be a small negative rate rather than zero) and, potentially, not provide sufficient monetary accommodation to readily return inflation to target, even allowing for less-precise unconventional tools such as quantitative easing. This could result in chronic inflation underperformance —which smacks of the current situation.

There are frameworks that address this issue, such as "average-inflation targeting" or "price-level targeting". In them, any persistent undershoot of the 2% target caused by policy rates being constrained by the ELB or secular disinflationary forces would be made up by promoting a controlled overshoot of the target in future years. Bygones would no longer be bygones. The Bank of Canada studied these frameworks leading up to the 2011 renewal and concluded that they would, theoretically, make monetary policy more effective, but it would be hard to build credibility (convincing individuals that a controlled overshoot would never become uncontrolled). But that was a decade ago, and the BoC will be studying these history-dependent frameworks again, as will the Fed, as part of their current reviews. Stay tuned.

General Disclosure

"BMO Capital Markets" is a trade name used by the BMO Financial Group for the wholesale banking businesses of Bank of Montreal and its subsidiaries BMO Nesbitt Burns Inc., BMO Capital Markets Limited in the U.K. and BMO Capital Markets Corp. in the U.S. BMO Nesbitt Burns Inc., BMO Capital Markets Limited and BMO Capital Markets Corp are affiliates. This document is issued and distributed in Hong Kong by Bank of Montreal ("BMO"). BMO is an authorized institution under the Banking Ordinance (Chapter 155 of the Laws of Hong Kong) and a registered institution with the Securities and Futures Commission (CE No. AAK809) under the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong). BMO does not represent that this document may be lawfully distributed, or that any financial products may be lawfully offered or dealt with, in compliance with any regulatory requirements in other jurisdictions, or pursuant to an exemption available thereunder. This document is directed only at entities or persons in jurisdictions or countries where access to and use of the information is not contrary to local laws or regulations. Their contents have not been reviewed by any regulatory authority. Bank of Montreal or its subsidiaries ("BMO Financial Group") has lending arrangements with, or provide other remunerated services to, many issuers covered by BMO Capital Markets. The opinions, estimates and projections contained in this report are those of BMO Capital Markets as of the date of this report and are subject to change without notice. BMO Capital Markets endeavours to ensure that the contents have been compiled or derived from sources that we believe are reliable and contain information and opinions that are accurate and complete. However, BMO Capital Markets makes no representation or warranty, express or implied, in respect thereof, takes no responsibility for any errors and omissions contained herein and accepts no liability whatsoever for any loss arising from any use of, or reliance on, this report or its contents. Information may be available to BMO Capital Markets or its affiliates that is not reflected in this report. The information in this report is not intended to be used as the primary basis of investment decisions, and because of individual client objectives, should not be construed as advice designed to meet the particular investment needs of any investor. This document is not to be construed as an offer to sell, a solicitation for or an offer to buy, any products or services referenced herein (including, without limitation, any commodities, securities or other financial instruments), nor shall such Information be considered as investment advice or as a recommendation to enter into any transaction. Each investor should consider obtaining independent advice before making any financial decisions. This document is provided for general information only and does not take into account any investor's particular needs, financial status or investment objectives. BMO Capital Markets or its affiliates will buy from or sell to customers the securities of issuers mentioned in this report on a principal basis. BMO Capital Markets or its affiliates, officers, directors or employees have a long or short position in many of the securities discussed herein, related securities or in options, futures or other derivative instruments based thereon. The reader should assume that BMO Capital Markets or its affiliates may have a conflict of interest and should not rely solely on this report in evaluating whether or not to buy or sell securities of issuers discussed herein.

Dissemination of Research

Our publications are disseminated via email and may also be available via our web site http://economics.bmocapitalmarkets.com. Please contact your BMO Financial Group Representative for more information.

Conflict Statement

A general description of how BMO Financial Group identifies and manages conflicts of interest is contained in our public facing policy for managing conflicts of interest in connection with investment research which is available at http://researchglobal.bmocapitalmarkets.com/Public/Conflict_Statement_Public.aspx.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST

BMO Financial Group (NYSE, TSX: BMO) is an integrated financial services provider offering a range of retail banking, wealth management, and investment and corporate banking products. BMO serves Canadian retail clients through BMO Bank of Montreal and BMO Nesbitt Burns. In the United States, personal and commercial banking clients are served by BMO Harris Bank N.A., Member FDIC. Investment and corporate banking services are provided in Canada and the US through BMO Capital Markets. BMO Capital Markets is a trade name used by BMO Financial Group for the wholesale banking businesses of Bank of Montreal, BMO Harris Bank N.A, BMO Ireland Plc, and Bank of Montreal (China) Co. Ltd. and the institutional broker dealer businesses of BMO Capital Markets Corp. (Member SIPC), BMO Nesbitt Burns Securities Limited (Member SIPC) in the U.S., BMO Nesbitt Burns Inc. (Member Canadian Investor Protection Fund) in Canada, Europe and Asia, BMO Capital Markets Limited in Europe, Asia and Australia and BMO Advisors Private Limited in India.

"Nesbitt Burns" is a registered trademark of BMO Nesbitt Burns Inc., used under license. "BMO Capital Markets" is a trademark of Bank of Montreal, used under license. "BMO (M-Bar roundel symbol)" is a registered trademark of Bank of Montreal, used under license.

® Registered trademark of Bank of Montreal in the United States, Canada and elsewhere.

™ Trademark Bank of Montreal in the United States and Canada.

© COPYRIGHT 2019 BMO CAPITAL MARKETS CORP.

A member of BMO Financial Group