

When upstream comes downstream

By Warren Lovely & Matthieu Arseneau

Putting a less-crude spin on an old plumbing adage: 'inflation relief runs downhill'. Or at least it has tended to in the past, subject to something of a lag. That makes the major relief in upstream industrial and raw material product price inflation a potentially noteworthy/encouraging development, even if IPPI/RMPI releases often fly a bit under the radar. We must acknowledge the enormous base effects at play here. A year ago, raw material prices were surging ~40% higher year-over-year, as Russia's invasion of Ukraine saw many prices skyrocket. Industrial product price inflation was 17% this time last year. Fast forward to today's release and the drop out of huge prior-year gains leaves raw material and industrial product inflation negative. That's true not only for headline prices but for less volatile/underlying measures too.

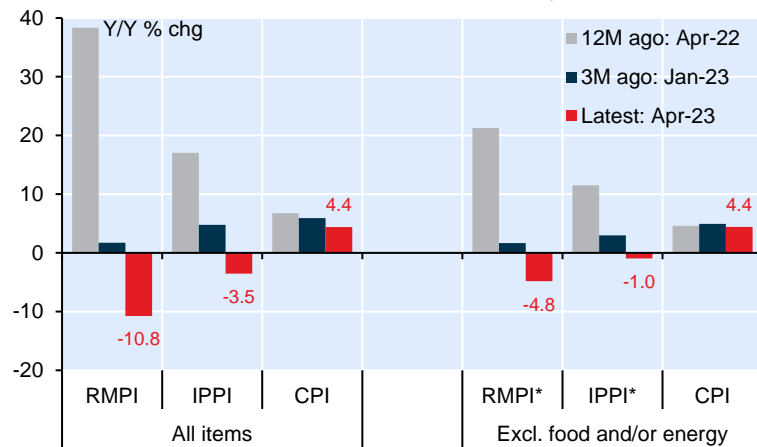
So upstream prices are easing, yet consumer price inflation remains stubbornly high. Indeed, last week's CPI release included a rather discouraging pick-up in headline price inflation. But perhaps patience is key? Consider the lead/lag between upstream inflation (for raw material and industrial products) vs. fully downstream (i.e., consumer) inflation. Looking at Chart 3, you might get the sense that headline inflation rates are somewhat contemporaneous. But strip out ultra-choppy food and/or energy prices and the picture is more telling. Historically, underlying consumer price inflation has tended to be most closely correlated with where 'core' industrial and/or raw material inflation was 6-10 months prior (Chart 4). That's another of saying it takes time for upstream price relief to work its way downstream.

As an aside, the easing of upstream prices we're highlighting here will likely pressure operating margins, with reduced profitability in turn leading to less-rabid hiring. In this way, more benign/weaker upstream pricing dynamics can further contribute to downstream/consumer price relief to the extent marginal labour market slack defuses a wage threat. (Note: We put a U.S.-spin on the profit margin-hiring dynamic [recently](#).) In other words, 'wait for it'. To us, we don't see a need for additional BoC rate tightening in order to secure a legitimate inflation victory in Canada.

*Note: Our May 2023 issue of **Monthly Economic Monitor** is out. Consistent with the topic of this note, our base case forecast sees Canadian headline CPI inflation ending 2023 at less than 2½% before easing further to 2% by the end of 2024. Complete details are available here: [link](#).*

Chart 1: Radical shift in upstream inflation vs. year ago

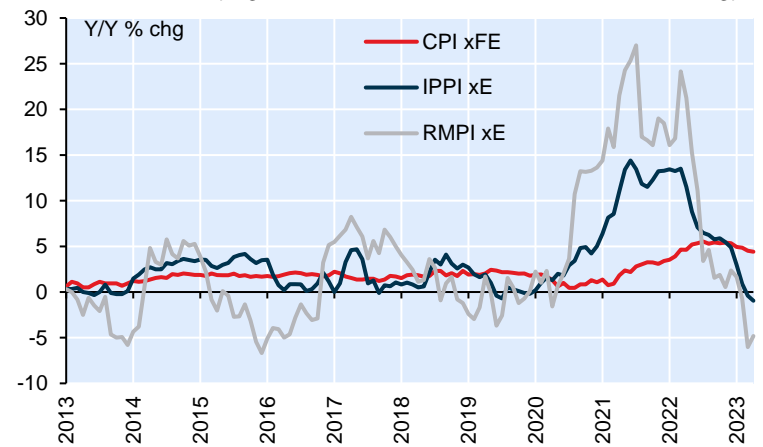
Y/Y inflation in Cdn consumer, industrial & raw material prices



Source: NBF, StatCan | Note: RMPI* excl. crude energy; IPPI* excl. energy & petrol

Chart 2: Can consumer price inflation follow IPPI/RMPI lower?

Y/Y inflation in underlying Cdn CPI, IPPI, RMPI (i.e., excl. food and/or energy)



Source: NBF, StatCan

Chart 3: Contemporaneous inflation? Really!?

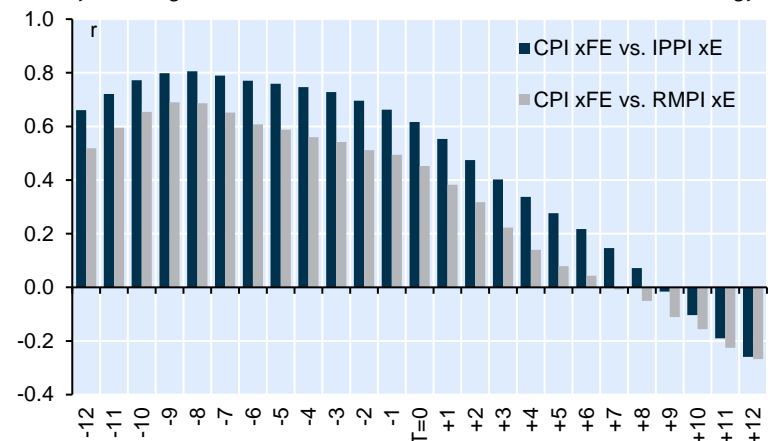
Monthly lead/lag between Cdn IPPI/RMPI and CPI: All items



Source: NBF, StatCan | Note: Test of Y/Y inflation; based on 10 yrs of monthly data to Apr-22; horizontal axis refers to months; lead/lag is with respect to headline IPPI/RMPI

Chart 4: More evidence of IPPI & RMPI leading CPI in 'core'

Monthly lead/lag between Cdn IPPI/RMPI and CPI: Excl. food and/or energy



Source: NBF, StatCan | Note: Test of Y/Y inflation; based on 10 yrs of monthly data to Apr-22; horizontal axis refers to months; lead/lag is with respect to underlying IPPI/RMPI



Economics and Strategy

Montreal Office

514-879-2529

Stéfane Marion

Chief Economist and Strategist
stefane.marion@nbc.ca

Kyle Dahms

Economist
kyle.dahms@nbc.ca

Alexandra Ducharme

Economist
alexandra.ducharme@nbc.ca

Matthieu Arseneau

Deputy Chief Economist
matthieu.arseneau@nbc.ca

Daren King, CFA

Economist
daren.king@nbc.ca

Angelo Katsoras

Geopolitical Analyst
angelo.katsoras@nbc.ca

Jocelyn Paquet

Economist
jocelyn.paquet@nbc.ca

Toronto Office

416-869-8598

Warren Lovely

Chief Rates and Public Sector Strategist
warren.lovely@nbc.ca

Taylor Schleich

Rates Strategist
taylor.schleich@nbc.ca

General

This Report was prepared by National Bank Financial, Inc. (NBF), (a Canadian investment dealer, member of IIROC), an indirect wholly owned subsidiary of National Bank of Canada. National Bank of Canada is a public company listed on the Toronto Stock Exchange.

The particulars contained herein were obtained from sources which we believe to be reliable but are not guaranteed by us and may be incomplete and may be subject to change without notice. The information is current as of the date of this document. Neither the author nor NBF assumes any obligation to update the information or advise on further developments relating to the topics or securities discussed. The opinions expressed are based upon the author(s) analysis and interpretation of these particulars and are not to be construed as a solicitation or offer to buy or sell the securities mentioned herein, and nothing in this Report constitutes a representation that any investment strategy or recommendation contained herein is suitable or appropriate to a recipient's individual circumstances. In all cases, investors should conduct their own investigation and analysis of such information before taking or omitting to take any action in relation to securities or markets that are analyzed in this Report. The Report alone is not intended to form the basis for an investment decision, or to replace any due diligence or analytical work required by you in making an investment decision.

This Report is for distribution only under such circumstances as may be permitted by applicable law. This Report is not directed at you if NBF or any affiliate distributing this Report is prohibited or restricted by any legislation or regulation in any jurisdiction from making it available to you. You should satisfy yourself before reading it that NBF is permitted to provide this Report to you under relevant legislation and regulations.

National Bank of Canada Financial Markets is a trade name used by National Bank Financial and National Bank of Canada Financial Inc.

Canadian Residents

NBF or its affiliates may engage in any trading strategies described herein for their own account or on a discretionary basis on behalf of certain clients and as market conditions change, may amend or change investment strategy including full and complete divestment. The trading interests of NBF and its affiliates may also be contrary to any opinions expressed in this Report.

NBF or its affiliates often act as financial advisor, agent or underwriter for certain issuers mentioned herein and may receive remuneration for its services. As well NBF and its affiliates and/or their officers, directors, representatives, associates, may have a position in the securities mentioned herein and may make purchases and/or sales of these securities from time to time in the open market or otherwise. NBF and its affiliates may make a market in securities mentioned in this Report. This Report may not be independent of the proprietary interests of NBF and its affiliates.

This Report is not considered a research product under Canadian law and regulation, and consequently is not governed by Canadian rules applicable to the publication and distribution of research Reports, including relevant restrictions or disclosures required to be included in research Reports.

UK Residents

This Report is a marketing document. This Report has not been prepared in accordance with EU legal requirements designed to promote the independence of investment research and it is not subject to any prohibition on dealing ahead of the dissemination of investment research. In respect of the distribution of this Report to UK residents, NBF has approved the contents (including, where necessary, for the purposes of Section 21(1) of the Financial Services and Markets Act 2000). This Report is for information purposes only and does not constitute a personal recommendation, or investment, legal or tax advice. NBF and/or its parent and/or any companies within or affiliates of the National Bank of Canada group and/or any of their directors, officers and employees may have or may have had interests or long or short positions in, and may at any time make purchases and/or sales as principal or agent, or may act or may have acted as market maker in the relevant investments or related investments discussed in this Report, or may act or have acted as investment and/or commercial banker with respect hereto. The value of investments, and the income derived from them, can go down as well as up and you may not get back the amount invested. Past performance is not a guide to future performance. If an investment is denominated in a foreign currency, rates of exchange may have an adverse effect on the value of the investment. Investments which are illiquid may be difficult to sell or realise; it may also be difficult to obtain reliable information about their value or the extent of the risks to which they are exposed. Certain transactions, including those involving futures, swaps, and other derivatives, give rise to substantial risk and are not suitable for all investors. The investments contained in this Report are not available to retail customers and this Report is not for distribution to retail clients (within the meaning of the rules of the Financial Conduct Authority). Persons who are retail clients should not act or rely upon the information in this Report. This Report does not constitute or form part of any offer for sale or subscription of or solicitation of any offer to buy or subscribe for the securities described herein nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever.

This information is only for distribution to Eligible Counterparties and Professional Clients in the United Kingdom within the meaning of the rules of the Financial Conduct Authority. NBF is authorised and regulated by the Financial Conduct Authority and has its registered office at 70 St. Mary Axe, London, EC3A 8BE.

NBF is not authorised by the Prudential Regulation Authority and the Financial Conduct Authority to accept deposits in the United Kingdom.

US Residents

With respect to the distribution of this report in the United States of America, National Bank of Canada Financial Inc. ("NBCFI") which is regulated by the Financial Industry Regulatory Authority (FINRA) and a member of the Securities Investor Protection Corporation (SIPC), an affiliate of NBF, accepts responsibility for its contents, subject to any terms set out above. To make further inquiry related to this report, or to effect any transaction, United States residents should contact their NBCFI registered representative.

This report is not a research report and is intended for Major US Institutional Investors only.

This report is not subject to US independence and disclosure standards applicable to research reports.

HK Residents

With respect to the distribution of this report in Hong Kong by NBC Financial Markets Asia Limited ("NBCFMA") which is licensed by the Securities and Futures Commission ("SFC") to conduct Type 1 (dealing in securities) and Type 3 (leveraged foreign exchange trading) regulated activities, the contents of this report are solely for informational purposes. It has not been approved by, reviewed by, verified by or filed with any regulator in Hong Kong. Nothing herein is a recommendation, advice, offer or solicitation to buy or sell a product or service, nor an official confirmation of any transaction. None of the products issuers, NBCFMA or its affiliates or other persons or entities named herein are obliged to notify you of changes to any information and none of the foregoing assume any loss suffered by you in reliance of such information.

The content of this report may contain information about investment products which are not authorized by SFC for offering to the public in Hong Kong and such information will only be available to, those persons who are Professional Investors (as defined in the Securities and Futures Ordinance of Hong Kong ("SFO")). If you are in any doubt as to your status you should consult a financial adviser or contact us. This material is not meant to be marketing materials and is not intended for public distribution. Please note that neither this material nor the product referred to is authorized for sale by SFC. Please refer to product prospectus for full details.

There may be conflicts of interest relating to NBCFMA or its affiliates' businesses. These activities and interests include potential multiple advisory, transactional and financial and other interests in securities and instruments that may be purchased or sold by NBCFMA or its affiliates, or in other investment vehicles which are managed by NBCFMA or its affiliates that may purchase or sell such securities and instruments.

No other entity within the National Bank of Canada group, including National Bank of Canada and National Bank Financial Inc, is licensed or registered with the SFC. Accordingly, such entities and their employees are not permitted and do not intend to: (i) carry on a business in any regulated activity in Hong Kong; (ii) hold themselves out as carrying on a business in any regulated activity in Hong Kong; or (iii) actively market their services to the Hong Kong public.

Copyright

This Report may not be reproduced in whole or in part, or further distributed or published or referred to in any manner whatsoever, nor may the information, opinions or conclusions contained in it be referred to without in each case the prior express written consent of NBF.