Economics and Strategy



June 24, 2024 - (Vol. VIII, No. 47)

Holding pattern [of Canadian debt securities]

By Warren Lovely & Taylor Schleich

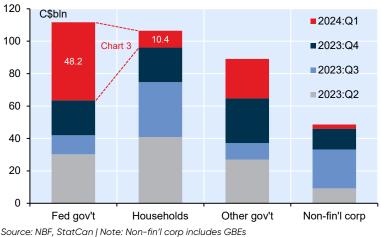
Ask a frequent flyer and they're apt to tell you a 'holding pattern' is a period of little to no progress; the equivalent of going in circles or flying nowhere fast. But there's another 'holding pattern' we tend to key on, related to the ownership (or holding) of Canadian debt. And here, the recent trend (or pattern) has been anything but static.

Leveraging a collection of recent data (i.e., economic accounts, national balance sheet/financial flows, international transactions/investment positions, government finance statistics, BoC assets and liabilities) this *Market View* puts the stock and flow of Canadian debt context. We isolate where fresh debt is coming from and how/where/by whom related securities are being absorbed. There's a particular focus on the one sector/issuer demanding more funding than any other of late: the Government of Canada (GoC).

A collection of domestic investors are increasing their holdings of GoC debt, helping to balance a well-supplied market. We're thinking of our banks, trusteed pension funds, insurers, and mutual funds,

Chart 1: Feds outborrow other sectors, incl. households...

Net demand for funds: Cdn non-financial sectors (latest 4Q)



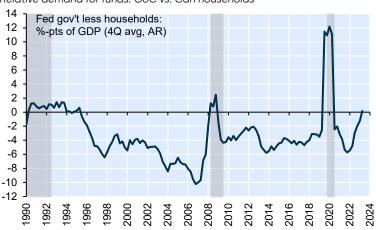
amongst others. Some of these domestic sectors still look to have some 'dry powder', which is somewhat comforting given that Ottawa's net financing needs remain non-trivial (and objectively larger than what underlying economic conditions argue for).

Without minimizing domestic investor support/subscription, when it comes to GoC debt absorption, we could perhaps assign the primary assist to non-residents. Whether domiciled in the U.S., Europe, the Middle East, Asia or elsewhere, foreign investors have collectively swallowed \$75 billion of GoC bonds and T-bills in the latest 12 months alone (to April). That's almost double the amount of cash required to finance the federal government's annual deficit.

Deep and broad international demand has eased the adjustment to ongoing BoC QT, even if a more pronounced non-resident footprint creates its own source of potential risk (should foreign attitudes really break against us and/or related leverage get seriously reined in).

Chart 2: ... which is pretty rare outside of recessions

Relative demand for funds: GoC vs. Cdn households



Source: NBF, StatCan | Note: Difference in net demand for funds (all sources)

Propelled by some special factors, the federal government borrowed an outsized \$48 billion in 2024:Q1 alone. On an annualized basis, that's equivalent to 61/2% of GDP. Over the latest 4-quarter period, Ottawa actually outborrowed the Canadian household sector, which is a distinctly rare 'feat' for a non-recessionary period.

Chart 3: Feds borrow more than normal (households the opposite)
Net demand for funds: GoC & Can households (2024:Q1 vs. long-term trend)

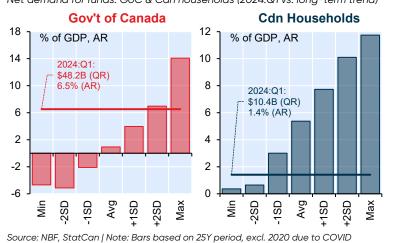
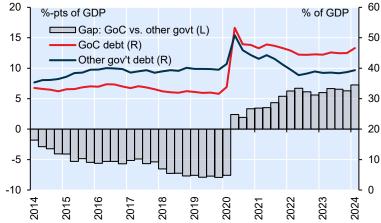


Chart 4: Ottawa takes on more debt than other Cdn gov'ts

Relative debt burden: GoC vs. other levels of Cdn gov't



Source: NBF, StatCan | Note: Based on quarterly book value of debt securities o/s

The feds have been borrowing more than 'normal', deficit financing, partial CMB consolidation and other special factors at play. Meanwhile, households have (understandably) opted for a more cautious stance. With a larger structural shortfall, the feds are also accumulating debt faster than the other levels of government.

Economics and Strategy



Chart 5: The net supply of GoC debt has stepped up...

GoC net borrowing (all sources)

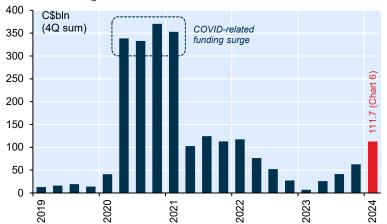
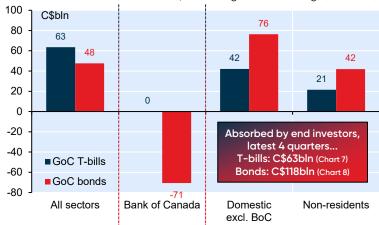


Chart 6: ... even more so after controlling for BoC QT

Net issuance of GoC T-bills & bonds, incl. change in BoC holdings (latest 4Q)



Source: NBF, StatCan | Note: Based on quarterly net financial market summary

Source: NBF, StatCan | Note: Based on market value of net financial flows to 2024:Q1

Incorporating Q1's big lift, Ottawa's net demand for funds surpassed \$110 billion in the latest 4-quarter period. While far below the COVID-related peak, reported net borrowing understates how much GoC product end investors are really being asked to absorb given that the BoC continues to run assets off its balance sheet (via QT).

Chart 7: Who has absorbed the extra GoC T-bills?

Net investment in GoC T-bills by major sector/investor type (latest 4Q)

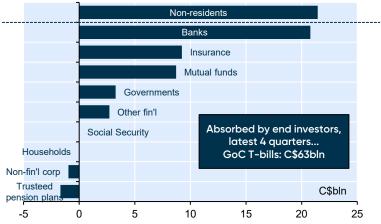
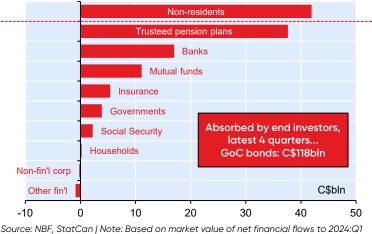


Chart 8: No shortage of GoC bonds available to end investors

Net investment in <u>GoC bonds</u> by major sector/investor type (latest 4Q)



Source: NBF, StatCan | Note: Based on market value of net financial flows to 2024:Q1 Source: NBF, StatCan | Note: Based on market value of net

Domestically, a few usual suspects absorbed much of the extra GoC debt, notably banks, pension funds, insurers and mutual funds. Meantime, a diverse collection of non-resident investors combined to take down almost half of the extra GoC debt (T-bills + bonds) created in the past year—an increasingly vital sleeve of demand.

Chart 9: Breaking down ownership of larger GoC T-bill stock

Snapshot of GoC T-bill ownership by major investor type (2024:Q1)

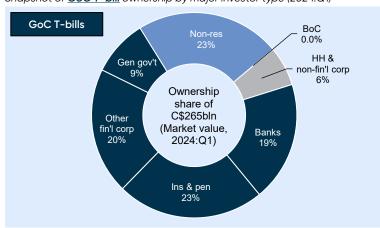
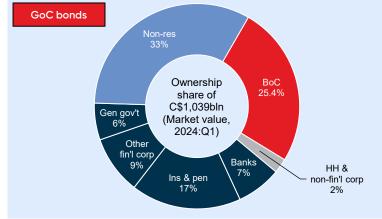


Chart 10: Holding pattern of Canadas will continue to evolve

Snapshot of GoC bond ownership by major investor type (2024:Q1)



Source: NBF, StatCan | Note: Based on market value of assets by NBS sector(s)

Source: NBF, StatCan | Note: Based on market value of assets by NBS sector(s)

Ownership snapshots mask the fact that neither T-bills nor bonds are in a 'steady state'. T-bills have been more plentiful, with a new 1M maturity part of Canada's reference rate transition. As for bonds, BoC QT necessitates greater participation from domestic and foreign investors alike. And we're not done, BoC runoff continuing.

Economics and Strategy



Chart 11: Balance sheet evolution at Canadian banks

Select financial assets of Cdn chartered banks

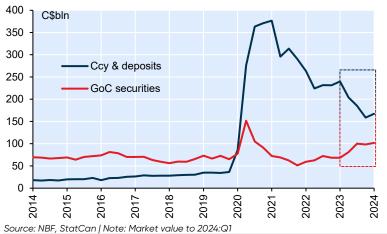
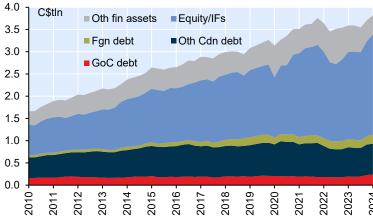


Chart 12: Assets of Canadian pension funds expand(ing)

Composition of financial assets of Cdn trusteed pension funds*



Source: NBF, StatCan | Note: Market value to 2024:Q1; separate from social security

The extra GoC debt held by our banks coincides with a reduction in excess financial system liquidity, although we've yet to hit a 'choke point'. Meanwhile, the marginal GoC paper taken on by trusteed pension funds is part of a broader asset growth narrative, with the net assets of the social security system likewise expanding briskly.

Chart 13: Non-residents build up positions in GoC debt

Non-resident holdings of GoC debt (CAD-denominated issues only)

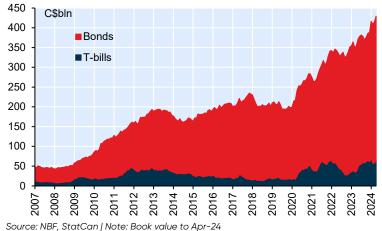
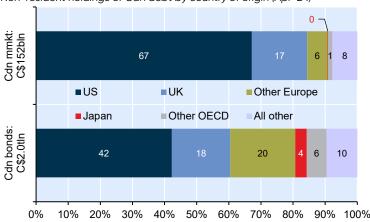


Chart 14: Deep and broad foreign investor participation

Non-resident holdings of Cdn debt by country of origin (Apr-24)



Source: NBF, StatCan | Note: Book value as at Apr-24; refers to all sectors & currencies

Collectively, non-residents held \$430 billion of GoC debt as of April, the book value of these holdings more than double the level that prevailed pre-COVID. We can't perfectly isolate for country of origin, but based on all sector/all currency trends, it seems more investors from more corners of the globe are involved in the GoC market.

Chart 15: BoC QT requires others to step up

Distribution of holdings of GoC bonds by major investor type

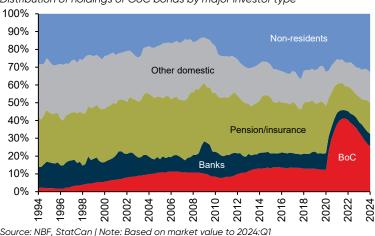
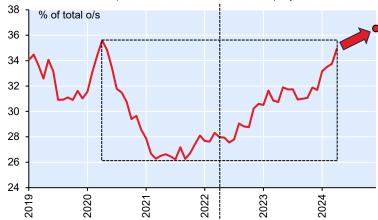


Chart 16: The growing foreign footprint in GoC bond market

Non-resident ownership share of GoC bonds, incl. NBF projection to Dec-24



Source: NBF, StatCan, BoC | Note: Based on book value to Apr-24 plus NBF simulation

On the one hand, non-resident investor interest is welcome news for a GoC market being served up net supply, particularly in bonds as BoC asset runoff remains a focus. Non-residents owned 35% of all GoC bonds as of April, the record foreign ownership share of 39% increasingly in focus. A heavy reliance on international investors is not without risk mind you, should this interest abruptly fade and/or leveraged positions get exited quickly—this latter worry recently flagged by the BoC (here).

Economics and Strategy



Table: Detailing the ownership of C\$5.33 trillion of Canadian debt securities

Market value & share of total holdings: Canadian debt securities by type of paper & holdings by detailed NBS sector (as at 2024:Q1)

· · · · · · · · · · · · · · · · · · ·	
	Cdn debt
Holdings (C\$bln, market value)	securities
Total all sectors	5,331.1
Domestically held (incl. monetary authority)	3,284.7
Households & non-profit institutions	97.9
Corporations	2,810.7
Non-financial corporations	110.7
Financial corporations	2,700.1
Bank of Canada	279.7
Chartered banks & quasi-banks	551.7
Insurance & pension funds	932.6
Life insurance business	220.1
Segregated funds of lifecos	29.8
Trusteed pension plans	581.7
Property & casualty insurance	101.0
Total other private financial institutions	662.3
Financial gov't business enterprises	273.8
General governments	376.1
Federal general government	16.6
Other levels of general government	254.9
Provincial & territorial governments	206.5
Local governments	48.4
Social security funds	104.6
Non-residents	2,046.4

Canadia	Canadian short-term paper			
All Cdn	Go√t of	Other		
ST paper	Canada	sectors		
716.3	265.1	451.2		
532.2	204.9	327.3		
8.5	1.2	7.4		
430.9	180.2	250.7		
69.1	15.5	53.6		
361.8	164.7	197.1		
0.0	0.0	0.0		
91.8	50.1	41.7		
109.0	61.7	47.4		
16.8	10.9	5.9		
4.2	0.9	3.2		
74.6	41.7	33.0		
13.5	8.2	5.3		
150.9	46.1	104.8		
10.0	6.8	3.1		
92.8	23.6	69.2		
0.4	0.0	0.3		
72.9	23.5	49.3		
62.0	23.4	38.6		
10.9	0.1	10.8		
19.6	0.0	19.6		
184.2	60.3	123.9		

et	tailed NBS sector (as at 2024:Q1)				
	Canadian bonds				
	All Cdn	Gov't of	Provincial	Local	Other
	bonds	Canada	gov'ts	gov'ts	sectors*
	4,614.7	1,038.9	932.2	64.7	2,578.9
	2,752.5	697.7	711.9	55.7	1,287.2
	89.3	15.7	19.3	14.7	39.6
	2,379.8	621.8	591.6	34.8	1,131.7
	41.6	8.3	3.1	0.0	30.1
	2,338.3	613.5	588.5	34.8	1,101.6
	279.7	263.8	9.2	0.0	6.7
	459.9	73.7	150.0	7.0	229.2
	823.6	180.3	319.2	22.7	301.4
	203.3	17.3	58.6	14.9	112.5
	25.6	5.9	8.2	0.0	11.5
	507.1	126.9	227.2	7.8	145.1
	87.6	30.2	25.1	0.0	32.2
	511.4	83.2	106.1	5.0	317.0
	263.8	12.5	4.0	0.0	247.3
	283.3	60.2	101.1	6.2	115.9
	16.3	7.8	0.2	0.0	8.2
	182.0	36.1	60.6	5.3	80.1
	144.5	32.0	49.6	0.3	62.6
	37.5	4.1	11.0	4.9	17.5
	85.1	16.3	40.3	0.9	27.5
	1.862.2	341.2	220.3	9.0	1.291.7

	Cdn
	debt
Distribution of holdings by security type (%)	securities
Total all sectors	100%
Domestically held (incl. monetary authority)	62%
Households & non-profit institutions	2%
Corporations	53%
Non-financial corporations	2%
Financial corporations	51%
Bank of Canada	5.2%
Chartered banks & quasi-banks	10%
Insurance & pension funds	17%
Life insurance business	4%
Segregated funds of lifecos	1%
Trusteed pension plans	11%
Property & casualty insurance	2%
Total other private financial institutions	12%
Financial gov't business enterprises	5%
General governments	7%
Federal general government	0%
Other levels of general government	5%
Provincial & territorial governments	4%
Local governments	1%
Social security funds	2%
Non-residents	38%

Canadian snort-term paper			
All Cdn	Go√t of	Other	
ST paper	Canada	sectors	
100%	100%	100%	
74%	77%	73%	
1%	0%	2%	
60%	68%	56%	
10%	6%	12%	
51%	62%	44%	
0.0%	0.0%	0.0%	
13%	19%	9%	
15%	23%	10%	
2%	4%	1%	
1%	0%	1%	
10%	16%	7%	
2%	3%	1%	
21%	17%	23%	
1%	3%	1%	
13%	9%	15%	
0%	0%	0%	
10%	9%	11%	
9%	9%	9%	
2%	0%	2%	
3%	0%	4%	
26%	23%	27%	

	Ca	anadian bond	ds	
All Cdn	Gov't of	Provincial	Local	Other
bonds	Canada	gov'ts	gov'ts	sectors*
100%	100%	100%	100%	100%
60%	67%	76%	86%	50%
2%	2%	2%	23%	2%
52%	60%	63%	54%	44%
1%	1%	0%	0%	1%
51%	59%	63%	54%	43%
6.1%	25.4%	1.0%	0.0%	0.3%
10%	7%	16%	11%	9%
18%	17%	34%	35%	12%
4%	2%	6%	23%	4%
1%	1%	1%	0%	0%
11%	12%	24%	12%	6%
2%	3%	3%	0%	1%
11%	8%	11%	8%	12%
6%	1%	0%	0%	10%
6%	6%	11%	10%	4%
0%	1%	0%	0%	0%
4%	3%	6%	8%	3%
3%	3%	5%	1%	2%
1%	0%	1%	8%	1%
2%	2%	4%	1%	1%
40%	33%	24%	14%	50%

Source: NBF, StatCan | Note: Canadian debt securities include issues denominated in CAD as well as securities denominated in foreign currencies; other Canadian bond sectors includes corporates, CMB, GBEs, other public sector, etc.

Economics and Strategy



Economics and Strategy

Montre a 1 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

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 CIRO), an indirect wholly owned subsidiary of National Bank of Canada. National Bank of Canada is a public company listed on the Toronto Stock Exchange.

Jocelyn Paquet

jocelyn.paquet@nbc.ca

Economist

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 diliaence 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.

Economics and Strategy



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 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 does not constitute or for

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.

IIS 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.