

# A Vale of Tiers

Not all bank debt is the same what investors need to know

BY JAMES HYMAS

In the past year a great deal of criticism has been raised against structured finance. Problems in the U.S. subprime marketplace, in which most individual mortgages were first collected into trusts, then split into tranches of differing safety, have focused attention on structured finance – structure being used to denote anything that isn't plain vanilla.

The implosion of the Canadian Asset Backed Commercial Paper (ABCP) market, another example of structured finance, has given the subject another black eye. Many investors, influenced by the headlines, have retreated quickly from anything too complex, preferring plain vanilla investments, such as bank debt.

Unfortunately, bank debt is highly structured. Every layer has a different degree of credit risk from the others, a fact that is often forgotten when investing in paper issued by a familiar name.

In order to better appreciate the types and complexity of bank debt, we first need to differentiate between the various levels of bank debt. These vehicles are, in order of increasing risk but not necessarily increasing return:

- Deposit Notes
- Bankers Acceptances
- Subordinated Debt (Tier 2B)
- Subordinated Debt (Tier 2A)
- Innovative Tier 1 Capital (Tier 1)
- Preferred Shares

## NEED FOR STRUCTURE

Protection of depositors is considered a social good in many countries, as it enables small retail investors to “put their tuppence safely in the bank,” whence it may be invested, directly or indirectly, in a variety of productive schemes. If these depositors were to lose faith regarding the safety of their deposits, the stability of the system would be compromised. For example, during New York's Panic of 1907 substantial sums were withdrawn from banks considered to be at risk and held as currency in safe deposit boxes; all of this at great cost to the economy.

As a result, modern banks have accepted a trade-off. They have direct access to the central bank's liquidity provision services and can assure their depositors that (within explicit limits) their deposits are safe; in return the banks submit to supervision and regulation of their finances that has the intent of minimizing the possibility that recourse for lost revenue will be required.

This supervision is quite important. Consider the fact that the U.S. Federal Deposit Insurance Corporation has only about 1.2% of the value of insured balances in its reserve fund. In Canada, the Canadian Deposit Insurance Corporation's holdings represent only 0.34% of insured deposits; while the British Financial Services Compensation Scheme has a nega-

tive net worth (it's able to keep the lights on only with the help of a bank overdraft). There's something quintessentially English about the bank insurer of last resort having to maintain a bank overdraft!

Deposits must be protected and the best protection is the banks' own money, but equity capital is very expensive for a bank. Any form of investment is accepted by regulators as protecting deposits if it takes any losses due to insolvency prior to these losses harming depositors, subject to rules that require the common-share-holding decision-makers to bear a significant portion of the risk of loss. Differing investors, however, have differing views on what risk they are prepared to take and what differing buffers should be between themselves and any such losses. A full spectrum of investment possibilities is available; an increased risk, then, should imply an expectation of increased return.

## DEPOSIT NOTES

Deposit Notes (DNs) may be issued by a bank for any term, although the CDIC will insure such notes only if the initial term to maturity is less than five years. These instruments may also be known as “Guaranteed Investment Certificates” (GICs), or “Term Deposits.” DNs are an important part of the money market; the Bank of Canada accepted DNs with a remaining term not exceed-

ing 180 days as collateral for its December market intervention.

## BANKERS ACCEPTANCES

Bankers Acceptances (BAs) are loans from the purchaser to an unspecified company that has a facility with the bank. Repayment of this loan is guaranteed (“accepted”) by the bank, which charges the borrower a “stamping fee” for this service. BAs are not insured by the CDIC – as far as the bank is concerned, they are “off balance sheet” instruments – but, as with DNs, are an integral part of the money market and were accepted as collateral in the Bank of Canada's December intervention.

## SUB DEBT (TIER 2B)

This is the debt that is the last line of protection for depositors and other creditors such as BA holders. Most bank debt labelled “Sub Debt” is Tier 2B; OSFI insists that such debt have an initial term to maturity of at least five years and only allows a bank to include a fraction of the debt's book value as part of its Tier 2 capital if the remaining term is less than this figure.

**An increased risk should imply an expectation of increased return.**

These two conditions lead to a certain amount of game-playing between the banks and OSFI, causing a certain amount of confusion among investors. For example, debt of this nature is often issued with a 10-year term and is callable in five years – that is, the bank wants the ability (subject to authorization from OSFI) to redeem such debt when the remaining term is five years; if they allowed it to remain outstanding, the bank would be paying interest reflecting the risk of such debt without being able to use the full amount for its regulatory capital.

If, however, the debt was callable in a standard manner, this would also cost more; investors would demand a higher initial yield to reflect the risk that the debt will be called at an inopportune time (or not be called at an even more inopportune time!).

The banks usually seek to cut this Gordian knot via a “step-up” provision: the bond pays a fixed rate until the call date, after which the rate increases to an amount that, investors suppose, make it uneconomic for the bank to leave the debt outstanding. However, OSFI wishes to ensure, if they have been giving the instrument

full status as subordinated debt, that it be possible for the issue to remain outstanding for its full term without being economically crippling for the bank. The compromise that has been reached is that step-ups are allowed, but not for more than 100 basis points over a well-defined index if the instrument is to retain full status – a typical stepped-up yield on such instruments is three-month BAs plus 100bp.

Investors tend to trade sub-debt as if it will definitely mature on their step-up date – dealer quotations will often reflect a spread to a Canada bond maturing on the step-up date. However, while one may count on them being called, as expected in good times, this will not necessarily be the case in times of trouble. In times of trouble, three-month BAs + 100bp might look awfully skimpy! Investors should tread very carefully when purchasing debt of this nature.

## SUB DEBT (TIER 2A)

In order to qualify as Tier 2A capital, even more stringent requirements must be met – such investments are not only subordinated to deposits but they must be:

- Able to absorb losses of the bank without triggering a cessation of ongoing operations or the start of insolvency proceedings, and
- Allow deferrals of interest or dividends if the bank doesn't have the money.

Two examples of Tier 2A capital are cumulative perpetual preferred shares and some 99-year debentures; this type of investment is relatively scarce (it exists mainly as “General Allowances” book-keeping entries) but TD Bank, for instance, issued over \$4-billion in Tier 2A capital in 2007.

## INNOVATIVE TIER 1 INSTRUMENTS

Put simply, an “Innovative Tier 1 Instrument” is a perpetual preferred share dressed up as a bond to seduce the unwary. OSFI has stated that the following conditions must be met if a particular instrument is to be accepted as Tier 1 Capital for regulatory purposes:

- intended to be permanent
- must enable the bank to absorb losses without triggering the cessation of ongoing operations or the start of insolvency proceedings
- subordinated to depositors and other (non-subordinated) creditors
- must allow the bank to have full discretion over the amount and

Table 1 helps illustrate types of bank debt and shows the return available on a variety of Royal Bank instruments against the degree of subordination for these instruments. “Subordination,” as defined here, is book value of the capital structure subordinated to the instrument of interest divided by Risk Weighted Assets (all figures from the 2007 Annual Report).

TABLE 1:

## SPECTRUM OF ROYAL BANK INVESTMENT VEHICLE

Instrument	Subordination*	Yield	Notes
GIC	Infinite	3.00%	5-Year Term, less than \$100,000, full CDIC insurance assumed for subordination figure
4.5-Year Deposit Note	11.54%	4.52%	Subordination assumes this deposit is uninsured
Sub-Debt (Call 5.5 Years)	9.76%	4.84%	Assuming call in 5.5 Years
Innovation Tier 1 (call 8 Years)	9.76%	4.84%	Assuming call in 8 Years
Perpetual Preferred Share (RY.PR.F)	7.09%	7.32%	Assuming Current Yield of 5.23% and interest equivalency factor of 1.4x
Common Equity	0%	11.20%	Assuming total return of 8% and interest equivalency factor of 1.4x

\*“Subordination” is the degree of protection against losses that may be experienced by the bank without affecting an investor in the instrument, expressed as a percentage of Risk Weighted Assets (RWA) as of October 31, 2007. RWA includes provisions for off-balance-sheet commitments and other risks; the total is far less than the dollar value of the assets. For example, RBC had over \$178-billion of securities on its balance sheet, which gave rise to under \$10-billion at risk after weighting, while \$81.7-billion of conventional mortgages became \$32.9-billion of RWA.

Note: These figures are presented solely to assist the reader in conceptualizing the spectrum of investment possibilities. There are obviously huge differences between, for instance, a five-year, fully insured GIC and common equity that cannot be captured in a simple table! Yield figures are indications only, as of Feb. 6, 2008.

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timing of distributions (i.e., interest payments)

- distributions must be non-cumulative and must not provide for compensation in lieu of missed payments
- banks must have full access to undeclared payments

Most such issues have the feature that the issuer may force a conversion into preferred shares that actually look like preferred shares if circumstances warrant. As with subordinated debt, “step-up” provisions are used in order to convince the unsophisticated that the issue may be fairly compared

with actual bonds that mature on the step-up date.

Given these considerations, it is very difficult to see why these instruments are included in professionally managed bond portfolios and in the DEX Universe Bond Index (formerly the Scotia Capital Universe Bond Index). But they are!

### PREFERRED SHARES

These are Tier 1 Capital Instruments that do not pretend to be bonds. The major differences between Preferred Shares and Innovative Tier 1 Capital Instruments are that the shares:

- Trade on a stock exchange
- Do not have step-up provisions

- Are explicitly perpetual (unless called, with permission of OSFI)
- Are non-cumulative
- Have distributions that are considered “eligible dividends” under the Income Tax Act.

So ... What to Buy?

All investors will take their own view on the chance of a major Canadian bank getting into trouble; all investors will have a different risk/reward trade-off. The only general recommendation I can make is that investors be aware of the precise nature of the bank debt they hold, and of the alternatives available. (See Table 1 on p 16).