

Methodology

Rating Banks in Canada

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Insight beyond the rating.

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All DBRS ratings and research are available in hard-copy format and electronically on Bloomberg and at DBRS.com, our lead delivery tool for organized, Web-based, up-to-the-minute information. We remain committed to continuously refining our expertise in the analysis of credit quality and are dedicated to maintaining objective and credible opinions within the global financial marketplace.

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The Canadian Banking Sector in Perspective

The Canadian banking sector is a highly concentrated banking system. As of July 2007, there were 72 banks regulated by the Office of the Superintendent of Financial Institutions (OSFI), holding about \$2.5 trillion in total balance sheet assets and some \$1.6 trillion in deposits. The Canadian banking system is dominated by six banks with assets of approximately \$2.2 trillion and deposits of \$1.5 billion, or 90% of total banking system assets and deposits, as of July 31, 2007. All of these banks are well diversified by product and geography and issue publicly-held debt. The largest banks are involved in several financial services sectors besides banking, including investment banking, wealth management, retail brokerage, fiduciary services such as trust administration, and insurance.

Even as earnings have continued to increase, there are limited opportunities to grow domestically. As such, large Canadian banks have been searching for alternative markets. Since 2001, all the major banks have made acquisitions outside of Canada, including the United States, the Caribbean and Latin and South Americas.

Overview

Ratings assigned to a Canadian bank reflect the opinion of DBRS on the bank's credit quality (intrinsic assessment) and expected external support for the bank (support assessment). DBRS believes the bank's credit fundamentals (intrinsic assessment) are critical to the analysis, and as such, the bank ratings do not excessively rely on expected external support. For banks that are not widely owned, the ratings take into account an assessment of the likely support provided by such parents. In general, this methodology also applies to other deposit-taking institutions in Canada, including trust companies and credit unions.

Ratings are provided as a forward-looking measure of a bank's ability to meet its financial obligations in a timely manner. The long-term ratings express DBRS's view on a bank's remoteness from defaulting or otherwise being unable to pay as agreed on its obligations. Differences in the strengths of banks relative to each other are also reflected in the ratings. DBRS does not employ a formulaic approach to determine ratings, but rather seeks to assess the inextricably linked qualitative and quantitative elements into an overall assessment of a bank's strength and challenges.

The long-term senior debt and deposit ratings cover deposit notes, senior unsecured debt and other similar senior obligations, as well as a bank's ability to meet its full payment obligations on financial contracts on a senior basis. DBRS rates various debt securities issued by a bank individually. These ratings are adjusted for the seniority of the securities versus the senior unsecured debt rating. Short-term ratings indicate the capacity of an issuer or borrower to fulfill in full its short-term repayment obligations in a timely manner with a one-year horizon.

MONITORING

Once issued, DBRS regularly monitors ratings for appropriateness and makes changes when deemed necessary. Bank ratings are an intermediate-term assessment of strength across economic and credit cycles. Lower earnings that are driven by a deteriorating economy or weakness in specific sectors are not cause for downgrade, unless the deterioration results in a longer-term fundamental reduction in a bank's franchise, its earnings profile, its risk management processes, or its exposure to risk. Other indicators include events, which are assessed to determine whether they will have any impact on a bank's fundamentals.



INTRINSIC ASSESSMENT – RATINGS BASED PRIMARILY ON INTRINSIC STRENGTH

For Canadian banks, ratings are based primarily on the intrinsic strength of the bank. Intrinsic assessment reflects a detailed analysis of a bank's strengths and the challenges it faces and is the product of a detailed analysis that leverages qualitative and quantitative analysis. The analysis utilizes publicly available information, as well as non-public information that the bank may share with DBRS as an "insider" for the purpose of Canadian and U.S. securities regulation.

Public information includes financial reports, regulatory disclosures and presentations issued or otherwise made available to the public. Non-public financial information shared with DBRS could include strategic direction, financial and capital targets, loan granularity and asset quality trends. Face-to-face meetings provide further input and an opportunity to assess the quality of the bank's executives – among other things – to manage the franchise and adjust to a changing environment.

By taking into consideration qualitative characteristics, various ratios, stress testing and other metrics, DBRS has a framework to evaluate strengths and weaknesses underpinning a bank's intrinsic assessment. Trends over time provide a useful perspective on whether a bank is gaining or losing strength.

Peer group comparisons are also a valuable tool for identifying relative strengths and weaknesses. In determining the appropriate peers, DBRS considers not only banks that are rated similarly by DBRS irrespective of size and business model, but also banks that share similar size, business model and operating footprint.

REGULATORY ENVIRONMENT

DBRS views the Canadian regulatory structure as providing a strong operating environment with effective regulation and supervision in order to maintain safety and soundness of the banking system. It would be difficult for a bank to receive a strong intrinsic assessment in a weak regulatory structure.

SUPPORT ASSESSMENT – IMPACT OF EXTERNAL SUPPORT ON THE RATING

For some banks, external support can play a role in determining ratings. Given the fact that an external support assessment is very subjective since there is no explicit support mechanism, DBRS has not tried to quantify the probability of support but rather assess the impact of the bank's deterioration on the health of the financial system in Canada.

The expectation of some form of systemic external support can originate from either national institutions or regional banks with an important local market position. Each of the Canadian banks was reviewed independently to assess its active role and participation in the clearing and settlement system and its contribution to the overall deposit system. Although there is no explicit systemic external support mechanism for the banks, the Bank of Canada has responsibility and authority for the oversight of major clearing and settlement systems operating in Canada, for the purpose of controlling systemic risk. In this context, as defined by the Bank of Canada: "Systemic risk is the risk that the default of one participant in a clearing and settlement system could lead, through the activities of the system, to the default of other institutions or systems" (*Bank of Canada Financial Systems Review*, June 2006).

When a bank is a subsidiary, the rating can be affected by either explicit or implicit parental support, a form of external support.

For further details on support assessment please see DBRS's methodology entitled *Enhanced Methodology for Bank Ratings – Intrinsic and Support Assessments* (October 2006).

Intrinsic Assessment

ANALYTICAL ELEMENTS – INTERCONNECTED BUILDING BLOCKS

DBRS's analysis focuses on five interconnected aspects of a bank's financial health. The following exhibit lists the five building blocks and provides illustrations of their application:

Interconnected Building Blocks	Illustrative Elements
Franchise Strength	Business mix, market positions, distribution channels, management quality, board of directors
Core Earnings	Diversification, net interest margin, efficiency, capacity to absorb adverse events
Risk Profile and Risk Management	Risk management processes Credit, interest rate, market, operational, legal, regulatory risks
Liquidity	Funding profile, composition of deposits, pledgeable assets, emergency liquidity plans
Capital	Capital level, mix, quality and composition, cushion over regulatory requirements

Determining the Intrinsic Assessment from the Building Blocks

DBRS considers these building blocks to be significantly interrelated and considers each building block an essential element in the overall assessment. Accordingly, ratings reflect the interdependent nature of a bank's ability to meet its obligations in a timely manner, rather than a simple additive weighting scheme.

Nevertheless, there is a sequence of the assessment that provides a perspective on the relative importance of the building blocks. Franchise strength is the key driver of the rating. The stronger a bank's franchise, the higher a bank's rating is likely to be. In the absence of some form of parent or systemic support assessment, it is unusual for a bank to be well rated if it has a weak franchise. Equally important are the core earnings that the bank generates from its franchise. Earnings provide the bank with the ability to generate capital and grow. Strong, resilient core earnings provide the capability to withstand adverse events without invading capital, and are therefore the best protection for creditors. Additionally, resilient earnings provide resources to rebuild capital after adverse events.

Franchise strength does not guarantee strong core earnings, although usually one is derived from the other. Banks can have franchises with a number of strengths, including leading market positions, which the bank is nevertheless not translating into comparably strong earnings power due to below-peer margins or high expense ratios. Banks with a higher intrinsic assessment tend to have stronger, more diversified franchises and hence more resilient core earnings power. In assessing core earnings, DBRS takes into account a bank's risk profile that reflects, among other things, its business mix, concentrations, exposure to stress scenarios and its ability to manage risk.

The bank's financial profile, incorporating liquidity and capital adequacy are critical building blocks, and should not be assessed in isolation. A highly rated bank is less likely to have weak liquidity than a lower rated bank, but high liquidity by itself would not necessarily result in a high rating if a bank's franchise and core earnings were weak. Conversely, highly specialized banks with strong liquidity may be rated highly even though their franchises and core earnings are less strong. In evaluating capital adequacy, the analysis seeks to identify how well the bank is capitalized relative to its risk profile, core earnings and regulatory requirements. A well-rated bank has a comfortable capital cushion above well-capitalized levels to ensure that adverse events and/or regulatory actions will not constrain their businesses.

1. FRANCHISE STRENGTH

In assessing a bank's franchise strength, considerations could include:

- Business mix
- Strength of individual businesses
- Customer segments and strength or "stickiness" of customer relationships
- Customer product penetration and length of customer relationships
- Customer service; employee capabilities
- Competitive advantages/disadvantages
- Distribution channels (strength, diversification, adaptability)
- Strength of branch network
- Attractiveness of footprint (economic growth, demographics, etc.)
- Special skill sets; technology
- Product range; product innovation
- Systems and technology (reliability, up-to-date versus antiquated, flexibility)
- Operational capabilities across geographies and businesses
- Integration of different businesses and product lines across the bank
- Management's skills in marshalling the bank's capabilities
- Management of business risk
- Strategy for sustaining growth; potential for growth with current model
- Quality and role of the board of directors

The strength of the bank's market presence in its key product lines directly impacts its capacity to attract new business and compete effectively. In this respect, market penetration is a key consideration, as measured by the size and breadth of asset and deposit gathering and distribution networks, market shares in core products, and the scale of a bank's businesses. Scale can be particularly relevant in providing commoditized services profitably and in spreading overhead costs over a larger revenue stream.

Business Mix

Business mix is an important contributor to the ratings, especially in terms of the counter-cyclicality of the businesses within the mix, since this can lead to stability in core earnings. Although the largest Canadian banks have been and continue to be involved in multiple financial services pillars, including retail and commercial banking, investment banking, wealth management, retail brokerage, fiduciary services such as trust administration and insurance, some businesses generate greater earnings stability than others. Currently, most of the banks would like to increase their contribution from wealth management products that provide annuitized revenue streams.

Asset and Deposit Gathering and Distribution Networks

The strength of a bank's networks is an important factor in DBRS's ratings. DBRS's fundamental premise is that banks with larger distribution networks generally have higher market shares, better market positions and stronger franchises. The branch-based banking and advisory networks are important channels for deposit gathering, assets sales and wealth management product distribution. Most banks also use non-branch distribution channels such as retail brokerage, discount brokerage, independent advisors, dedicated mortgage specialists, ATM, Internet, telephone and kiosks to increase their channel capabilities. Despite the development of these alternative channels, the branch networks remain a critical component of a bank's overall franchise strength.

Larger physical distribution networks mean greater convenience for retail and business customers and therefore attrition is expected to be lower when customers physically relocate. Greater visibility and acceptance among customers increases revenue potential as the branch network is able to sell a broader range of products, offer access to specialists, and customize products to the local market. Importantly, the ability to withstand competition improves, as the potential impact of competitors opening new branches is reduced. These benefits may be partially offset by diseconomies of scale such as the added cost of controlling a larger organization and by the difficulty larger banks tend to have in being responsive to local customers.

Management's Contribution to the Franchise

Management's acumen to create and maintain an optimal business mix is considered, together with the viability, achievability and successful execution of strategic initiatives for entering new markets, building out the current footprint, and broadening the product mix through acquisitions or organic growth. In this context, the experience and depth of the management team to run an institution, along with the capacity of operating systems and the robustness of policies and practices – such as credit administration – to safely manage business volumes, are taken into account. The effectiveness and efficiency of management's use of the bank's resources is evidenced by the bank's profitability relative to the level of risk taken. While success in delivering strong earnings and franchise growth is viewed positively, the risk profile that is generating this growth and the ability of management to cope with an adverse environment are also considered.

Quality and Role of the Board of Directors

The independence, experience and diversity of the Board members are taken into consideration. The preferred model is an active Board meeting several times a year that consists of predominantly independent members bringing together a broad range of experience in business and finance. The composition and independence of the audit committee, as well as the frequency of its meetings, are particularly relevant. Ownership influence on an institution, including class voting structures, is also taken into account. With respect to the chairman and other senior executives, an orderly succession plan and aggregate compensation relative to those of similar banks are relevant issues.

2. CORE EARNINGS

In assessing a bank's earnings power, the analysis looks at the components underlying a bank's earnings and their ability to withstand stress. The revenue diversification, net interest income, contribution of fees and commissions, the efficiency of the operating platform and the amount of loan loss provisions recognized by the bank all influence earnings and profitability. Effective use of the balance sheet is reflected in returns on assets and equity. Ultimate profitability reflects the combination of earnings and capital strength relative to the bank's risk profile. Trends over time and peer comparisons provide ways to gauge the strength and trajectory of core earnings.

Revenue Diversification

The analysis of revenue diversification starts by examining the two primary revenue components: net interest and non-interest income. Net interest income reflects the loan yield, cost of funding and breadth of the loan portfolio. The more resistant net interest income is to economic dislocations in a specific market or industry, the greater the diversification of this revenue component. An important element in analyzing revenue diversification is the contribution of non-interest income sources. Relatively high non-interest income as a percentage of net revenues, particularly fee income not related to lending operations, is generally considered favourably, because such businesses typically involve limited amounts of assets, capital and credit risk but could have modestly higher market and operational risk.

Net Interest Income – Loan Yield, Cost of Funding and Net Interest Margin

The analysis takes into account the breadth of industry sectors represented in the loan portfolio and the geographic dispersion of loans, as well as the diversity of fee-based products and their relative contribution to net revenues. The broader the industry coverage and geographic dispersion in the loan portfolio, the more resistant net interest income is to economic dislocations in a specific market or industry, to geographic competitive pressures, and to structural changes that could impact individual product pricing. The analysis also takes into consideration the competency of the financial institution in originating and underwriting the risk in those industries and geographic areas, as well as its ability to appropriately price the risk inherent in those transactions. The bank's loan mix and the risks inherent in its loan portfolio directly impact the loan yield. A lower-than-peer group average yield on loans can be mitigated by a lower risk profile in the loan portfolio. Yields on securities can impact overall yields on earning assets if the bank has an active trading business.



The cost of funding liabilities is a critical component of core earnings. Generally, a greater share of core deposits drives lower deposit costs. Demand deposits (non-interest-bearing and interest-bearing) and deposits payable after notice usually have lower interest costs and are “stickier” than other forms of funding. A greater reliance on wholesale funding often leads to above-average funding costs. Higher aggregate funding costs can be mitigated by minimal reliance on volatile funding sources. Moreover, an undue reliance on less stable wholesale funding may make an institution more susceptible to market-funding disruption, therefore negatively impacting the stability of core earnings.

Net interest margin (NIM) is an important gauge of a bank’s ability to generate a spread between the yield on its assets and its funding costs. A stable NIM for a sustained period indicates both a balanced loan portfolio with a stable funding base and prudent management of the impact of interest rate volatility, and is therefore a positive rating consideration.

Non-Interest Income

An important element in analyzing earnings is the contribution of non-interest income sources. Relatively high non-interest income as a percentage of net revenues is generally considered favourably, because such businesses typically involve limited usage of assets, capital and credit risk. Consequently, these businesses tend to improve the bank’s risk profile by lowering its exposure to credit and interest rate risks, and by increasing stability and sustainability of earnings.

Asset management and other fiduciary services such as trust administration and custody services, although influenced by market factors, tend to produce relatively stable fees and commissions. Cash management and some treasury operations also produce stable fees. By contrast, brokerage commissions, investment banking fees and trading revenues are more heavily influenced by market conditions, including changes in interest rates and equity valuations, and therefore tend to be more volatile sources of non-interest income.

Efficiency

An important consideration for core earnings is the efficiency of a bank’s operations and how well management manages operating expenses relative to revenue changes. Useful measures include the ratio of operating expenses to operating revenues (expense ratio) and the change in expenses relative to changes in revenue (operating leverage), which shows both trends over time and the performance of a bank relative to its peers. DBRS also reviews other indicators of performance and productivity to ascertain trends.

The expense ratio can indicate differences in efficiency, especially over time. Typically, fee-based businesses have higher expense ratios than lending businesses, which must also absorb the cost of credit. Operating leverage is a better measure of how well a bank manages its expenses if the mix of business changes over time. DBRS views the banks favourably when they can generate positive operating leverage by keeping expense growth below revenue growth. The challenge for banks is that much of their investment is made via current expenditures that can drive up the prevailing expense ratio while revenue growth lags. Well-run banks tend to manage their investment efforts in line with their revenue growth.

Income before Provisions and Taxes

In gauging the strength of a bank’s core earnings, the analysis looks at various profitability measures. An important measure is income before provisions and taxes (IBPT), also known as pre-provision income, which assesses a bank’s resources to absorb the impact of deteriorating loan portfolios and other adverse events out of current income. One of the key measures of a bank’s financial health is the amount of loan loss coverage, defined as pre-provision income relative to loan loss provisions. This measure helps indicate the extent to which earnings can decline and losses simultaneously increase without invading capital.

The analysis also considers IBPT to risk-weighted assets (RWA), which is the regulatory measure of risk-adjusted assets, in addition to standard measures, such as the return on assets and the return on equity.



Core earnings strength is assessed by the extent to which earnings can simultaneously cover large unanticipated losses and non-recurring expenses, accommodate balance sheet growth, and pay dividends expected by shareholders – all without weakening stockholders' equity. While DBRS recognizes the importance of dividends, as dividends signal stability and sustainability of future earnings to capital market participants, we view a strong level of internal capital generation to be an important rating consideration.

3. RISK PROFILE AND RISK MANAGEMENT

Taking risk is an inherent function of banks as financial intermediaries. A critical element of the rating process is evaluating the nature and extent of the risks that a bank faces and how well the bank manages these risks. The ratings process looks at a range of risks and risk management processes. The bank's track record in managing risk generally and asset quality in particular (given its importance for banks in general) through economic cycles, and its capacity to sustain a sound credit profile, are key rating considerations. In this context, the robustness of the bank's policies and procedures, together with the depth and experience of its management team, are key considerations. Meeting with management also enables DBRS to assess management's general risk appetite and its approach to management of those risks.

Asset Quality and Credit Risk Management

The analysis focuses equally on the credit processes, the quality of the loan portfolio, management's ability to recognize and address problems, and how well management copes with deterioration in credit quality. Also considered is the bank's capacity to properly gauge and adjust its loan loss provisions and cover loan losses from core earning, as well as the adequacy of its capital cushion, should earnings be insufficient.

The primary considerations in assessing the credit process typically include the level of authority delegation to ensure adequate controls, the robustness of the internal rating scale to properly identify riskier loans, and in-house exposure limits that minimize concentration risk, including bulky relationship exposures. The bank's underwriting standards for different types of loans are reviewed, as are its policies for avoiding excessive risk concentrations in volatile industries or regions. The frequency of exceptions to house limits and underwriting criteria, and the circumstances under which they are approved, help in assessing the bank's credit discipline.

Asset quality performance is reviewed and the prevailing trends analyzed. This process involves the use of various ratios, loan migration data based on the internal rating scale, and trends in customer credit-worthiness and collateral coverage. Assessing the quality of the loan portfolio involves a review of the composition of loans by customer type, industry and geographic location. Concentrations in potentially higher-risk industries or loan types, such as commercial real estate and sub-prime residential mortgages – along with any factors that tend to mitigate these risks, such as types of collateral held against various loans, credit default swaps, and recourse to third parties – are also considered. For instance, an elevated portfolio concentration in commercial real estate could be mitigated by the combination of conservative loan-to-value (LTV) ratios and debt service capacity requirements, a highly granular and diversified portfolio, and a strong track record in managing this business through various real estate and interest rate cycles. All exposures are aggregated when assessing single-name concentration risk. The securities portfolio is also scrutinized for its composition and credit quality. In retail lending, the evaluation looks at the bank's processes, experience and track record in managing retail credit. The various loan portfolios, including mortgages, home equity lines and loans, credit cards, and automobile leasing, are reviewed in terms of vintage analysis, target markets and product mix. The review also considers the customer segment risk profiles in terms of such parameters as LTVs, BEACON scores and other measures. Compliance with internal policies and external regulatory requirements is also an important aspect of the analysis.

Interest Rate Risk and Market Risk

Given the importance of interest rate risk, considerable attention is paid in the rating process to evaluating the extent of a bank's interest rate risk, its appetite for taking interest rate risk, and how well this risk is managed. In this respect, the analysis considers the maturity profile of the bank's assets and liabilities together with the risk limits approved by senior management under changing interest rate scenarios.



Importantly, management's track record over time in complying with these requirements and maintaining a relatively stable NIM under various interest rate environments is a key consideration.

With the focus on increasing fee-based revenue, market risk has become more important. The DBRS analysis looks at the diversification on the capital markets-related businesses; management's ability to generate consistent revenues over changing capital market conditions; the size of market risk relative to capital; which capital markets components management is willing to increase its risk tolerance in; and whether the bank is being adequately compensated for the market risk taken. Measures include trading revenue relative to average aggregate global trading value at risk (VaR), and VaR as a percentage of average common equity.

Operational Risk

Given the complexity of banks, operational risk is an important consideration in evaluating a bank's soundness and the potential for losses that could impair earnings and capital. These risks include diverse elements such as minimizing human error, failures in systems and technology and the inability to meet regulatory and compliance requirements. The bank's track record in managing operational risk over time and its disaster recovery plans also receive considerable attention. With the implementation of Basel II in fiscal 2008 for the large Canadian banks, the regulator will be quantifying the level of operational risk that exists at each bank.

4. LIQUIDITY

The bank liquidity analysis focuses predominantly on the bank's liquidity portfolio and on the sources of funding and the stability of these funding sources under changing economic and interest rate environments. The maturity profile and cost of the various funding liabilities also have a material impact on the robustness of the bank's liquidity. Importantly, the bank's contingency liquidity plans to deal with potential funding dislocations are reviewed.

In the spectrum of funding sources, core deposits are the most attractive because they tend to be both relatively stable and typically lower in cost than wholesale funding. Excessive reliance on wholesale funding contributes negatively to bank ratings, while modest reliance on wholesale funding is viewed positively, especially for smaller banks that have less access to the capital markets and fewer alternative sources of funding. To the extent that a bank's business model is more focused on capital markets activities, a greater reliance on wholesale funding is to be expected.

Liquidity is also about balancing the sources of funding with the characteristics of the bank's assets. Given the lower liquidity of some loan products, core deposit funding that accounts for a large percentage of the loan portfolio is considered a rating strength. Large deposits (those in excess of \$100,000), brokered deposits and unsecured borrowings are more confidence-sensitive and can become much more expensive when liquidity is required.

DBRS seeks to understand a bank's preparedness for dealing with a liquidity crisis. The review process considers the unique characteristics of each bank. Contingency liquidity plans for the bank that involve sufficient long-term funding and reliable additional borrowing capacity from various sources to continue operations without major disruptions are viewed favorably. DBRS also looks at a bank's access to a variety of liquidity sources beyond internal resources. Access to the Bank of Canada for overnight collateralized borrowing is also considered, as is the extent to which borrowing capacity is constrained by the type of pledgeable collateral. Liquidity plans that involve the sale of assets are given more credence when a bank has demonstrated its ability and experience in selling such assets and the assets are relatively marketable. Securitization provides access to liquidity, but can pose liquidity challenges if access to the capital markets is curtailed, particularly when a bank's funding is heavily reliant on securitization. Such challenges need to be factored into the liquidity assessment.



5. CAPITAL

The composition and adequacy of capital receives careful analytical attention as a measure of the bank's solvency and its capacity to absorb losses in excess of its earnings. Factored into the analysis are the scale, diversity and business risk of the bank's franchise, the resiliency of its earnings power, the reliability of its operating practices and the soundness of the bank's risk management processes. DBRS also assesses the ability of the bank to generate capital from operations, which can be deployed to sustain balance sheet growth, make strategic acquisitions and accommodate required capital expenditures, as well as management's practice in prioritizing capital adequacy relative to meeting shareholder expectations regarding return on equity.

Management targets for various capital ratios and the cushions over the respective regulatory "well-capitalized" levels are important considerations. Also important is management's practice of paying dividends and buying back shares to support per share earnings growth and, in turn, share price. A high dividend payout rate could hinder healthy balance sheet growth and prudent investment into the bank's infrastructure and businesses, as shareholders have come to expect the same amount of dividends in the future irrespective of the bank's earnings.

Considerable attention is paid to the level of a bank's regulatory capital ratios, particularly Tier 1, and the extent to which these levels provide a cushion above the regulatory well-capitalized minimums. Having an adequate cushion is an important consideration because the regulator ultimately decides whether a bank has sufficient capital to remain solvent. The regulator may also place constraints on banks that they perceive to have inadequate capital, including limitations on acquisitions and dividend payments.

DBRS uses various capital ratios to illuminate different perspectives on the Company's capital position. No single measure, however, encapsulates all the factors determining capital adequacy.

Capital Ratio Analysis

Regulatory capital ratios contain two kinds of adjustments that DBRS finds useful. To better reflect the regulators' assessment of capital as a protection for depositors, the regulators adjust the numerator by excluding most intangibles and other comprehensive income, but include preferred securities and other qualifying hybrids in Tier 1 capital. Second, the regulatory ratios adjust assets for risk. To adjust for risk posed by assets, a RWA measure is created that reflects the weighting of assets based on risk and includes asset equivalents for off-balance sheet exposures such as commitments. DBRS also looks at the regulatory leverage ratio, asset-to-capital multiple, which is more constraining in that assets are not risk-adjusted. Under Basel II, the regulatory risk assessment becomes more granular and more aligned with the actual risks embedded in the assets and other exposures across a bank's activities, including operational risk.

Extending the analysis, DBRS also considers the ratio of tangible capital to RWA that takes advantage of the regulatory risk-weighting. DBRS utilizes this ratio to adjust for the greater risk that goodwill could be written down. This measure tends to penalize banks that have made large acquisitions. In evaluating capital adequacy, DBRS considers the extent to which a bank is generating earnings from the acquired assets and the degree to which the assets underpinning the goodwill still have value. This measure is beneficial as it takes into account the different risk profiles across banks. For some banks, DBRS can also utilize these banks' own estimates of economic capital that reflect much more extensive assessments of risk than the current regulatory approach. The extent to which the evaluation of capital adequacy can rely on these estimates depends upon the quality of the underlying analysis.

In broad terms, banks with a limited product range and a heavy dependence on net interest income tend to have more exposure to credit risk and higher earnings volatility, necessitating higher capital levels. This scenario is typical of most small banks. By contrast, large Canadian banks tend to have more diversified franchises and derive a larger share of their revenues from fees and commissions that provide some insulation from adverse trends in credit risk and generally produce more stable earnings. Consequently, larger banks typically require less capital.

Mix, Quality and Composition of Capital

The mix, quality and composition of capital are other important considerations in the overall assessment of capital. DBRS has a preference for equity over hybrids as a cushion for bondholders and other senior creditors.

Regulatory Environment

DBRS views the Canadian regulatory structure as providing a strong operating environment with effective regulation and supervision in order to maintain safety and soundness of the banking system. Regulators constrain the risks that banks might take, therefore reducing the risk that actions by poorly managed banks could lead to disruptions in local or national markets. Particularly important in limiting such risky actions by banks is the strengthened ability of regulators to take prompt corrective action if a bank's condition is deteriorating or if it is deviating from sound practices. The regulators may put pressure on management to sell the bank, divest some assets or find other solutions to recapitalize the bank and restore it to sound financial condition. DBRS would consider a weak regulatory structure to be a negative factor in its overall ratings assessment.

Another element in DBRS's ratings assessment is the evaluation of management's relationship with its regulators. Any indications of an adversarial relationship would cause DBRS to be concerned about the strength of the franchise and its prospects. Close supervision is also good for senior debt holders, because it reduces the risk that sustained deterioration may pass unnoticed.

Support Assessments

In addition to Intrinsic Assessment, which takes into consideration the five interconnected building blocks described above, DBRS factors support assessment into its ratings of Canadian banks. The level of such expected support is reflected in the degree of uplift to the intrinsic assessment. DBRS's ratings are articulated in more detail in the methodology report entitled *Enhanced Methodology for Bank Ratings – Intrinsic and Support Assessments* (October 2006). Some key considerations are described below.

SYSTEMIC SUPPORT

The assessment of expected external support for banks is an important factor in determining the final rating. Given the fact that this assessment is very subjective due to a lack of explicit support mechanism, DBRS has not tried to quantify the probability of support but rather to assess the impact of the bank's deterioration on the health of the financial system in Canada.

Although there is no explicit support mechanism for the banks, the Bank of Canada has responsibility and authority for the oversight of major clearing and settlement systems operating in Canada, for the purpose of controlling systemic risk. In this context, as defined by the Bank of Canada, "Systemic Risk" is the risk that the default of one participant in a clearing and settlement system could lead, through the activities of the system, to the default of other institutions or systems (*Bank of Canada Financial Systems Review*, June 2006).

The expectation of some form of systemic external support can originate to either national institutions or regional banks with an important local market position. Part of the analysis involves assessing a bank's role and participation in the clearing and settlement system and its contribution to the overall deposit system.

Under DBRS's current ratings process that is consistent across countries, the six largest Canadian banks receive a Support Assessment (SA) of SA2. For more detail, refer to the methodology report entitled *Enhanced Methodology for Bank Ratings – Intrinsic and Support Assessments* (October 2006). This SA2 designation reflects the expectation of some sort of systemic external support, with an element of timeliness therein.



SUPPORT FROM PARENT COMPANY OR OTHER OWNERS

Expected parent company support can have an influence on the bank's credit ratings. Considerations include the parent company's willingness and ability to stand ready to use available resources to provide adequate capital funds to its subsidiary bank during periods of financial stress or adversity. Non-widely held Canadian banks can be owned by non-bank parents that could be stronger/weaker than their bank subsidiary.

Notching and Seniority of Rated Debt Classes

In cases where a bank's condition has deteriorated significantly, equity owners are highly likely to face losses, while senior creditors may still receive payment in full. Reflecting the greater risk of loss for holders of subordinated debt, as this debt is viewed as part of total capital, this debt is typically rated a notch below senior debt issued by the same entity. Similarly, ratings of innovative Tier 1 securities and preferred shares also take into account the ranking of these securities in the issuer's capital structure and the issuer's credit strength. Depending on the specific structure of hybrid securities, they are typically rated one or two notches below senior debt. DBRS typically rates innovative Tier 1 securities and preferred shares two notches below senior debt. For more detail, please refer to the DBRS methodology reports entitled *DBRS Treatment of Preferred Shares and Hybrids* (June 2005) and *Short-term and long-term Rating Relationship* (October 2006).

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