

C.D. Howe Institute BACKGROUNDER

FINANCIAL SERVICES

Addicted to Ratings:

The Case for Reducing Governments' Reliance on Credit Ratings

Philippe Bergevin



In this issue...

Reducing governments' use of credit ratings may be the single most important step toward improving the credibility of ratings agencies, and reducing investors' undue reliance on them.

THE STUDY IN BRIEF

THE AUTHOR OF THIS ISSUE

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ISBN 978-0-88806-806-4 ISSN 0824-8001 (print); ISSN 1703-0765 (online) Credit rating agencies have been blamed for their role in the recent financial crisis, notably for having assigned high ratings to complex financial instruments that yielded billions in losses to investors. As a consequence, a number of reforms have been proposed or introduced – including for example increased disclosure of rating methodologies. This *Backgrounder* argues that reducing the government use of credit ratings may be the single most important step towards restoring the credibility and integrity of rating agencies.

Over the years, governments have incorporated credit ratings into various regulations, ranging from regulations related to the amount of capital banks must hold to regulations that require some investors to invest in securities bearing high ratings. Credit rating agencies have therefore become, in addition to their traditional role as providers of third party credit risk assessments, providers of "regulatory licences" that allow market participants to meet regulatory requirements or obtain favourable regulatory treatment.

The regulatory use of credit ratings reduces incentives for credit rating agencies to compete on the quality of their ratings and may lead to less diversity in rating decisions. It also contributes to the artificially high demand for highly rated financial instruments, which increases incentives to create increasingly complex and often opaque financial instruments. To the extent that the regulatory use of credit ratings has contributed to investors' undue reliance on ratings, reducing their regulatory use should also help restore investors' own due diligence.

This *Backgrounder* accordingly recommends replacing references to credit ratings in government regulations. The proposed alternatives are internally generated ratings, marketbased measures of risk and non-risk-based measures such as minimum investment amounts. To the extent that some regulatory use of credit ratings may still be warranted, this *Backgrounder* proposes the introduction of a registration and approval process for credit rating agencies based on performance that would enhance their incentives to compete on the basis of rating quality. Finally, this *Backgrounder* supports the provisions of the International Organization of Securities Commissions Code of Conduct.

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"The ratings are simply a set of symbols maintained by private businesses, who operate, not in a controlled laboratory, but in the real world of economic incentives. Regulatory use of ratings is changing the economic incentives of the industry, and that is starting to change the ratings themselves."

Former Executive Vice President, Moody's Investors Services (Moody's Investors Services 2009, p. 2)

redit-rating agencies (CRAs) currently are the target of criticism for their role in the recent financial crisis. They are being blamed notably for having assigned high ratings to complex financial instruments that yielded billions in losses to investors.¹

In response, governments and international organizations have made numerous proposals for reform related to CRAs, ranging from increased disclosure of rating methodologies to the creation of public-sector agencies. This *Backgrounder* argues that reducing the regulatory use of credit ratings is perhaps the single most important step toward restoring the credibility and integrity of CRAs.

An Emerging Problem

Since the publication of *Moody's Analyses of Railroad Investments* in 1909, CRAs have become an essential fixture of financial systems. CRAs addressed an important element of the asymmetry of information between buyers and issuers of debt by providing the former with an independent evaluation and assessment of the latter's ability to meet their debt obligations. Prior to the introduction of CRAs, the specialized financial press and other sources had provided investors with information and statistics about issuers. The main innovation of CRAs was to summarize all relevant information into a simple rating system in which each rating symbol provides an indication of the relative creditworthiness of a company.

CRAs' sole function for much of their history was to provide an independent evaluation and assessment of credit risks to investors. To compete and even survive in such an environment, a CRA needs a great deal of reputational capital – that is, it needs to be perceived by investors as a provider of credible and unbiased credit ratings. Investors, therefore, provide natural checks and balances that compel the CRA to supply the most accurate ratings possible. Even under an issuer-pay model,² a CRA has a vested interest – at least on an ongoing basis – in providing reliable ratings, since issuers pay only for ratings that enhance the marketability of their debt, and unreliable ratings do not achieve that purpose.

Over time, however, governments began incorporating credit ratings into various regulations, deeply affecting the business model of CRAs. In 1975, the US Securities and Exchange Commission (SEC) established the notion of "nationally recognized statistical rating organizations" (NRSROs), initially to allow broker-dealers³ to hold a smaller capital cushion against securities deemed investment grade by such organizations (Securities and Exchange Commission 2008). The use of the term NRSRO has now become widespread in SEC

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¹ For example, close to 90 percent of collateralized debt obligations (CDOs) issued in the United States between 2005 and 2007 that had been rated AAA by Standard & Poor's (S&P) were downgraded as of June 30, 2009, most of them below investment grade (International Monetary Fund 2009, ch. 2). In retrospect, some of the assumptions underlying the ratings of such instruments were overly optimistic.

² Until the early 1970s, CRAs relied on investors for their main source of revenues by charging subscription fees. CRAs now derive most of their revenues from issuers of securities.

³ A broker-dealer is an organization that trades securities for its own account or on behalf of customers.

rules and in other rules, guidelines, regulations, and statutes in the United States.

The story is similar in Canada, where a plethora of federal and provincial laws and regulations make reference to credit ratings. Unlike the United States, however, Canada has no single uniform definition of which credit ratings can be used for regulatory purposes.⁴ Nevertheless, most of the definitions are restricted to ratings issued by the big four CRAs that are active in Canada – namely, DBRS, Fitch Ratings, Moody's Investors Service, and S&P.

The most common uses of credit ratings in Canadian laws and regulations are as follows (see Table 1 for more details):

- Capital adequacy. Banks and other federally regulated financial institutions must set aside an amount of capital against their risk-weighted assets as a cushion for losses. To help determine the riskiness of their assets, some institutions can use credit ratings under the so-called standardized approach, or when generating ratings internally is impossible or difficult such as with securitization exposures.⁵ The amount of capital insurance companies must hold is also partially based on credit ratings.
- *Eligible investments.* In an effort to minimize risk, some regulations require particular types of investors to invest only in securities bearing high credit ratings. Money market funds must invest in debt instruments that are considered low risk by ratings agencies (the equivalent of an A rating from S&P for long-term debt). OSFI also uses credit ratings to determine which financial instruments banks can use as collateral against the lending of securities.
- *Distribution of securities.* The distribution of securities is subject to a number of regulations intended to protect investors. Provincial securities regulations require most securities to be issued and distributed with a prospectus, a legal document that provides investors detailed

information about the security. In certain circumstances, a favourable rating allows securities to be distributed without a prospectus or with a so-called short-form or shelf prospectus.

The Unintended Consequences of the Regulatory Use of Ratings

A direct consequence of regulatory references to credit ratings is that CRAs have become providers not only of credit assessments, but also of "regulatory licenses" that allow market participants to meet regulatory requirements or to obtain more favourable regulatory treatment (Partnoy 1999). This increased role has important implications for the behaviour of both providers and users of credit ratings.

The use of ratings by governments gives CRAs approved by regulators an almost guaranteed market, since regulated market participants must use their ratings for regulatory purposes. It also increases barriers to entry, as it is difficult for new ratings agencies that are not yet recognized by regulators to gain acceptance in the marketplace. Thus, an almost guaranteed market, coupled with limited competition, reduces the incentives for officially recognized CRAs to compete on the basis of ratings quality. In a sense, market discipline increasingly is being replaced by "government discipline." The fact that the use of credit ratings increasingly depends on government acceptance rather than on the extent to which they provide real value to market participants might negatively affect the quality of credit ratings.

Further, investors and governments often have contradictory objectives as users of credit ratings. For regulatory purposes, governments prefer ratings that are interchangeable and homogeneous,⁶ otherwise debt issuers can simply shop around for the most favourable rating.⁷ Investors, on the other hand, value ratings that give them an edge in support of

⁴ Canadian securities regulations refer to an "approved rating organization" or an "approved credit rating organization," while the Office of the Superintendent of Financial Institutions (OSFI) makes reference to an "external credit assessment institution" for capital adequacy purposes. For example, see National Instruments 51-102 and 81-102 and OSFI Guideline A-1.

⁵ In addition, institutions using the internal-rating-based approach may use credit ratings to derive their own internal rating estimates.

⁶ For example, Kisgen and Strahan (2009) analyze the rating methods of DBRS before and after it was deemed an NRSRO in the United States in 2003 and conclude that "the data suggest that DBRS rates bonds more like other major agencies after becoming an NRSRO."

⁷ There is some compelling evidence that some form of rating shopping occurred in the run-up to the recent financial crisis. For example, S&P's criteria for ratings CDOs backed by corporate debt – a market in which S&P had a dominant share – included a relatively generous assumption of zero correlation between industries (Nomura 2006).

Table 1. Credit Ratings in Canadian Regulations, Guidelines, and Rules, Overview of Selected References

Regulation, Guideline, or Rule	Purpose
Capital requirements, banks and trust and loan companies (OSFI Guidelines A and A-1).	Credit ratings issued by certain CRAs can be used to assign a risk weight to an exposure in determining the amount of capital an institution must hold as a percentage of risk- weighted assets.
Capital requirements, federally regulated life insurers (OSFI Guideline A).	Life insurers must hold minimum levels of risk-adjusted capital. Many of the risks factors related to asset defaults, which are used to determine the amount of required capital, depend on credit ratings.
Capital requirements, federally regulated property and casualty insurance companies (OSFI Guidelines A and A-2).	To determine the amount of capital an insurance company must hold, assets are divided into three categories – government grade, investment grade, and non-investment grade – based on credit ratings.
Prudent person approach, federally regulated financial institutions (OSFI Guideline B-1).	By law, the board of directors of a financial institution is required to establish, and the financial institution is required to adhere to, "investment and lending policies, standards and procedures that a reasonable and prudent person would apply." As per guidelines, financial institutions should set limits on investments and loans according to their quality; credit ratings may be used in establishing quality criteria.
Securities lending, all federally regulated financial institutions (OSFI Guideline B-4).	To be considered eligible collateral in securities lending, instruments must bear a minimum credit rating.
Capital requirements for asset securitization, all federally regulated financial institutions (OSFI Guideline B-5).	An institution investing or holding senior tranches or providing second or subsequent loss enhancements can, under certain conditions, use credit ratings to determine the capital requirement for these exposures.
Margin requirements, broker- dealers (Investment Industry Regulatory Organization of Canada Rule 100).	Securities issued or guaranteed by the Government of Canada, the United Kingdom, and the United States, as well as any other national foreign government, provided the securities are rated AAA, are subject to lower margin requirements – that is, the amount of collateral that must be set aside for a given position.
Short-form prospectus eligibility (National Instrument 44-101).	One criterion for being able to distribute securities under a short-form prospectus requires that the securities bear a credit rating above a certain threshold.
Shelf prospectus eligibility (National Instrument 44-102).	Issuers can use a shelf prospectus to distribute certain types of securities provided the issuer has reasonable grounds that the securities would receive a rating above a certain threshold.
Prospectus and registration exemption (National Instrument 45-106).	The securities of a foreign government as well as short-term debt such as commercial paper can benefit from registration and prospectus exemptions if the securities receive a rating above a certain threshold.
Eligible investment, money market funds (National Instrument 81-102).	Money market funds must invest 95% of their net assets in cash, cash equivalent, and debt instruments that are considered low risk by ratings agencies.

Sources: Canadian Securities Administrators (2008); The Joint Forum (2009); OSFI Guidelines; Provincial securities regulators' National Instruments; Investment Industry Regulatory Organizations of Canada Rules. their investment decisions, which should lead to more diversity in ratings decisions. Diversity in opinion in general is important to counterbalance the herd behaviour that characterizes the booms and busts of financial and economic cycles.

In addition, since banks, insurance companies, and money market mutual funds, among other regulated investors, are compelled to invest in highly rated financial instruments or receive preferential regulatory treatment from doing so, the regulatory use of ratings artificially increases the demand for such instruments – although other factors, such as internal investment criteria, also help to explain the high demand for them.⁸

The high demand for financial instruments that bear high ratings provides every incentive for market participants to get creative by, for example, packaging and repackaging debt into increasingly complex and sometimes opaque financial instruments bearing higher ratings than the debt on which they are based would commend.⁹ In the context of the recent financial crisis, the high demand for financial instruments bearing high ratings contributed to the high demand for the subprime mortgages that were backing some of these instruments, helping the development of lax lending standards and the ensuing housing bubble.

Recommendations

The use of credit ratings in government regulations creates a number of perverse effects. This *Backgrounder* accordingly recommends replacing references to credit ratings in government regulations. Regulations could continue to achieve their objectives if they referred instead to market participants' internal assessments of credit risks, to market-based measures of risk such as bond spreads, or to non-risk-based measures such as minimum investment amounts.

Regulations Relating to Capital Adequacy

Banks and other federally regulated financial institutions must set aside a sufficient amount of capital to guard against potential losses. Under current capital adequacy rules, banks as well as trust and loans companies can use internal ratings models to determine their amount of required capital, provided certain conditions are met. For larger institutions, the use of internal ratings models is a good alternative to the use of credit ratings since it would encourage diversity of opinion about credit risk in the marketplace while allowing regulators to have a say in the adequacy of the process by which credit risk is assessed.

To be permitted to use proprietary internal models, institutions should demonstrate to their supervisors that they meet established requirements in terms of their ability to rank and quantify risk and that their management practices are consistent with evolving guidelines issued by regulators. Regulators could continue to use third-party benchmarks such as credit ratings but only to supplement their judgment about the validity of the risk-management practices of regulated institutions and of their ability to rank and quantify risk. Relying on internal models – with appropriate checks and balances by regulators – would reduce the tendency of some regulators and market participants to rely blindly on credit ratings to assess credit risks.

To the extent possible, regulators should encourage the use of internal ratings models by both banks and trust and loan companies. Federally regulated life insurers and property and casualty insurance companies, however, do not currently have the option of using internal ratings models for regulatory purposes. Canadian regulators thus should work on developing regulations that would allow these institutions to use internal ratings models, provided they meet certain requirements in terms of their riskmanagement practices.

Regulators should allow smaller institutions that might lack technical expertise to use market-based measures of risk, such as bond spreads, to determine their capital requirements. Bond spreads – measured

⁸ For example, Brister, Kennedy, and Liu (1992) show that the high yield of bonds with low ratings (inversely to their relatively low prices) reflects not only their high probability of default, but also a regulatory effect.

⁹ As a recent example, many of the private-label mortgage-backed securities that were downgraded during the recent financial crisis are now being repackaged and sliced into tranches, most of which have regained their AAA status. This process, known as "re-remics," is motivated at least partially by rating regulatory arbitrage (International Monetary Fund 2009, ch. 2).

as the difference between the yield to maturity of a particular bond and the yield on a low-risk bond, such as a government bond, with comparable cashflow characteristics and maturity – are not perfect measures of credit risk, but they nonetheless reflect investors' perception of the riskiness of a security and, therefore, can be an adequate alternative to credit ratings for regulatory purposes. Bond spreads reflect not only credit risk, but also the liquidity – the ease with which a bond can be sold – of a particular bond, which, in many circumstances, is actually an advantage for regulatory purposes since it provides a more complete assessment of the riskiness of a bond. Bonds spreads also might reflect factors unrelated to risk, notably differences in tax treatment.

There are, however, relatively straightforward methods around these issues such as the use of credit default swaps instead of government bonds – which are subject to lower tax rates in some jurisdictions – in calculating the low-risk yield. Bond spreads are also more volatile than credit ratings, so that a simple moving average of bond spreads over some period – say, 30 to 90 days – could be used for regulatory purposes (Partnoy 1999).

For financial instruments that are scarcely traded and illiquid, bond spreads and other market-based measures of risk are not appropriate regulatory alternatives to credit ratings.

Regulations Relating to Eligible Investments

Government regulations require some investors to invest only in securities with high credit ratings in order to minimize the risk they take. Currently, for example, money market funds must invest 95 percent of their net assets in cash, cash equivalents, or debt instruments that ratings agencies consider low risk (the equivalent of an A rating from S&P for long-term debt). In instances where the board of directors of a fund and its regulators determine that the board has the ability to rank and quantify risk appropriately, references to ratings should be replaced by internal assessments by the board. As argued earlier, internal assessments of risk encourage diversity of opinion about credit risk in the marketplace while allowing regulators to have a say in the adequacy of the process by which risk is accessed. In other instances, references to credit ratings should be replaced by market-based measures of risk.

Federally regulated financial institutions – when providing securities lending – must use financial instruments that bear a minimum rating to be considered eligible collateral. Again, this reference to credit ratings should be replaced either by internal assessments or by market-based measures of risk.

Regulations Relating to the Distribution of Securities

As noted, provincial securities regulations require most securities distributed in Canada to be accompanied by a prospectus that conveys appropriate information to investors so they can make informed investment decisions. One criterion for being able to distribute securities under a "short-form prospectus" - a prospectus that allows the incorporation of certain information by reference to other documents, thereby reducing the disclosure required in a prospectus - is that the securities bear a credit rating above a certain threshold. Similarly, issuers can use a "shelf prospectus" - one that allows issuers to qualify large amounts of securities for subsequent issuance to distribute certain types of securities provided the issuer has reasonable grounds that the securities would receive a rating above a certain threshold. These references to credit ratings can simply be removed. Criteria already in place, such as the requirement that the issuer publish a current annual financial statement, are sufficient to ensure that enough information is available about the issuer to investors on an ongoing basis (Canadian Securities Administration 2008).

Furthermore, the securities of a foreign government can benefit from registration and prospectus exemptions if they receive a rating above a certain threshold. The idea behind exempting highly rated foreign government debt is that such investments are relatively low risk - even though high levels of government debt currently are raising doubt about the ability of some governments to meet their obligations - and are relatively simple investment products. Again, references to credit ratings in exempting government debt could be replaced by a restriction that only debt issued by governments that are designated by rules or regulations as having relatively low risk of defaulting on their debt should benefit from the exemption (Canadian Securities Administration 2008).

Short-term debt, such as commercial paper, also can be exempted from registration and prospectus requirements because it is considered relatively low risk due to its short-term maturity (less than one year) and investors likely require less information about it than about riskier investments to make informed decisions. The exemption, however, should exclude more complex securities such as synthetic asset-backed commercial paper (see Canadian Securities Administrators 2008), while references to credit ratings could be replaced by a minimum purchase amount, which is a good proxy that the buyer is sophisticated enough to assess the riskiness associated with a short-term debt instrument.

Instances Where Ratings Might Still Be Warranted

In some cases, it might not be feasible or even desirable to eliminate all regulatory references to credit ratings. For relatively small institutions that take a position in thinly traded financial instruments, there does not appear to be any viable regulatory alternatives to third-party opinions about credit risk. Such institutions often do not have the internal capacity to generate credit-risk estimates for regulatory or other purposes. Further, the use of market-based measures of credit risk, such as credit spreads for regulatory purposes, is not a viable alternative to internally generated credit-risk estimates in the case of thinly traded financial instruments such as complex, over-the-counter derivatives - since their lack of trading activity means that the market price might not reflect adequately their riskiness.

The lack of a liquid market, coupled with the limited ability of an institution to provide internal assessments of credit risk, points to the need for external assessments of credit risks. In these limited instances, regulators might allow for the use of credit ratings issued by CRAs for regulatory purposes.¹⁰ To mitigate the perverse effects associated with the

regulatory use of credit ratings – namely, that it provides approved CRAs with an almost guaranteed market, makes entry of new CRAs more difficult, and reduces the incentive of approved CRAs to compete on the basis of rating quality – the certification process associated with determining which CRAs can be used for regulatory purposes should be improved.

Currently, there is no established process for registering and approving CRAs whose ratings can be used for regulatory purposes.¹¹ Accordingly, to minimize the harmful consequences associated with the regulatory use of credit ratings, regulators should put in place a formal, transparent regime to register and approve such CRAs. More specifically, the historical accuracy - say, over the past five years - of a CRA's credit ratings above some minimum threshold relative to that of its peers should be the basis for approving their use for regulatory purposes. Regulators, therefore, would approve only CRAs with a proven track record of accuracy in assessing credit risks. Such a system would realign incentives for CRAs to compete on the basis of ratings quality, while the adoption of a formal registration and approval regime would make it easier for new CRAs to establish themselves, ultimately leading to higher levels of competition in the provision of credit-rating assessments.

Overall Recommendation

Taken together, these changes would greatly reduce the regulatory reliance on credit ratings. Such use, however, is so deeply entrenched in the functioning of the financial system that any changes should be made gradually and with appropriate levels of consultation with all the parties involved. Furthermore, since many CRAs operate globally, Canadian regulators should work, to the extent possible, in concert with foreign regulators and international organizations.

¹⁰ It has been proposed that governments themselves establish the capability to carry on the business of a CRA, becoming providers of credit risk estimates for regulatory purposes. For example, Bill S-230 – *An Act to amend the Bank of Canada Act (credit rating Agency)* – that was tabled in the Canadian Senate during the second session of the 40th Parliament but that was never adopted, provides for the establishment of a credit rating agency by the Bank of Canada. This avenue, however, is fraught with potential pitfalls, including the potential for political influence on the credit-rating process.

¹¹ In the United States, in contrast, under the *Credit Rating Agency Reform Act of 2006*, a CRA may apply to the SEC to be considered an NRSRO, but must, among other things, make available information on the procedures and methodologies it uses to determine credit ratings and on the performance of its credit ratings.

In addition, while these changes are central to restoring the credibility and integrity of CRAs, reducing the regulatory use of ratings is not by itself a panacea. As with any model, the issuer-pay model presents potential conflicts of interest that might incite some CRAs to alter their ratings for short-term gain.¹² Governments therefore should ensure that CRAs operate under the highest standards in terms of the quality and integrity of the rating process, their independence and the avoidance of conflicts of interest, and their responsibility to the investing public and issuers.

Accordingly, governments should ensure that CRAs operating in Canada do so according to the provisions of the International Organization of Securities Commissions (IOSCO) Code of Conduct.¹³ The code stipulates, among other things, that:

- A CRA should prohibit its analysts from making proposals or recommendations regarding the design of some complex financial instruments that a CRA rates;
- a CRA should separate, operationally and legally, its credit rating business from any other businesses of the CRA, including consulting businesses, that may present a conflict of interest;
- a CRA should disclose the general nature of its compensation arrangements with rated entities;
- a CRA should publish sufficient information about its procedures, methodologies and assumptions so that outside parties can understand how a rating was arrived at by the CRA; and
- a CRA should differentiate ratings of structured finance products (i.e., more complex financial instruments) from traditional corporate bond ratings, preferably through a different rating symbology.

Concluding Remarks

The use of credit ratings in government regulations creates a number of perverse effects. Reducing their regulatory use would enhance the normal checks and balances provided by investors, increase incentives for CRAs to compete on the quality of their ratings, and should lead to increased diversity in rating decisions. It would also reduce not only the artificially high demand for highly rated securities, but also incentives to create increasingly complex and often opaque financial instruments. To the extent that the regulatory use of credit ratings has contributed to investors' undue reliance on ratings,¹⁴ reducing their regulatory use should also help to restore investors' own due diligence.

This Backgrounder accordingly recommends replacing references to credit ratings in government regulations. For larger and more sophisticated financial institutions, regulators should rely on market participants' internal assessment of credit risk, as is currently the case for capital requirements for banks. In other instances, market-based measures of risk, such as bond spreads, should be used in lieu of credit ratings for certain regulatory purposes. Non-risk-based measures, such as minimum investment amounts, could also be used in some cases to replace references to credit ratings. In some limited instances, however – namely, for relatively small institutions taking position in thinly traded financial instruments - the use of credit ratings for regulatory purposes might still be warranted. This Backgrounder further recommends that, if credit ratings were still being used for regulatory purposes in some instances, Canadian regulators put in place a registration and approval process for CRAs based on performance that would enhance their incentives to compete on the basis of ratings quality.

Finally, while these changes are central to restoring the credibility and integrity of CRAs, reducing the regulatory use of ratings is not by itself a panacea. Governments should ensure that CRAs operating in Canada do so according to the provisions of the IOSCO Code of Conduct. However, without first addressing the skewed economic incentives created by the regulatory use of ratings, other regulatory reforms are unlikely to achieve their intended results.

¹² Under an investor-pay model, for example, a large investor might pressure a CRA to produce lower initial ratings since securities with lower ratings tend to provide higher yields.

¹³ Many of the provisions of the IOSCO code of conduct have already been adopted on a voluntary basis by CRAs operating in Canada.

¹⁴ For example, some investors might perceive the regulatory use of credit ratings to be a form of government endorsement of the quality of ratings. More broadly, their regulatory use might create an environment in which ratings are considered the de facto measure of credit risk.

References

Brister, Bill M., Robert E. Kennedy, and Pu Liu. 1992. "The Regulation Effect of Credit Ratings on Bond Interest Yield: The Case of Junk Bonds." *Journal of Business Finance and Accounting* 21 (4): 511-531.

Canadian Securities Administrators. 2008. "Securities Regulatory Proposals Stemming from the 2007-08 Credit Market Turmoil and its Effect on the ABCP Market in Canada." Montreal: CSA. October.

International Monetary Fund. 2009. *Global Financial Stability Report: Navigating the Financial Challenges Ahead.* Washington, DC: IMF. October.

Kisgen, Darren J. and Strahan, Philip E. 2009. "Do Regulations Based on Credit Ratings Affect a Firm's Cost of Capital?" AFA 2010 Atlanta Meetings Paper, March 4

Moody's Investors Services. 2009. "RE: Money Market Fund Reform – File S7-11-09." E-mail communication with Elizabeth M, Murphy, Secretary, Securities and Exchange Commission. New York: Moody's Investors Services. September 8. Nomura. 2006. "Rating Shopping – Now the Consequences." New York: Nomura Fixed Income Research. February 16.

Partnoy, Frank. 1999 "The Siskel and Ebert of Financial Markets: Two Thumbs Down for the Credit Rating Agencies." *Washington University Law Quarterly* 77 (3): 619-712.

Securities and Exchange Commission. 2008 "References to Ratings of Nationally Recognized Statistical Rating Organizations." Release 34-58070. Washington, DC. July.

The Joint Forum (Basel Committee on Banking Supervision, International Organization of Securities Commissions, International Association of Insurance Supervisors). 2009. "Stocktaking on the Use of Credit Ratings." June.

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