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Strengthening Bank Regulation: OSFI's Contingent Capital Plan

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- Bank failures around the world during the recent financial crisis put taxpayers on the hook for trillions of dollars in government back-stopping. Consequently, governments have proposed a number of initiatives, including increases in the level of capital banks must hold, to reduce the risk that the public will soon need to rescue banks again.
- One plan would see banks issuing contingent capital, debt instruments that convert to equity when a bank runs into financial difficulties. Contingent capital would replenish shortfalls in the institution's core capital when it is most needed, so that investors do the bailing out, not the taxpayer. Investors' risk exposure would drive them to monitor bank risk-taking more closely.
- Canada's Office of the Superintendent of Financial Institutions (OSFI) has released a draft proposal for implementation. While a welcome initiative, technical improvements are needed. The trigger for conversion, for example, should occur in stages, before banks get deep into financial difficulty.
- In addition, the terms of conversion the amount of equity investors get in return for the debt they hold – should expose the holders to market pressures. Debt holders would be required to convert the debt into equity at a conversion ratio set when the debt was issued.

Governments of industrialized countries committed over \$14 trillion in public funds – almost one-quarter of global GDP – to support financial institutions during the financial crisis. They had little choice in face of uncertainties about the consequences of large, interconnected institutions failing. This experience makes it clear that the time to repair a financial system is not in the midst of a crisis, and that the groundwork for avoiding crises and mitigating them must be laid in advance.

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¹ See Allesandri and Haldane (2009).

The Plan

In early 2010, Canada's Minister of Finance and the Superintendent of Financial Institutions put their support behind a proposal that would reduce the likelihood of bank failures and shift the costs of their rescue away from taxpayers. This Embedded Contingent Capital proposal would require financial institutions to issue a special type of debt instrument that would be converted into equity if their financial condition deteriorated beyond a certain point. This contingent capital would be:

... a notional systemic risk fund within the bank itself - a form of self insurance prefunded by private investors to protect the solvency of the bank. Institutions would be required to raise [this contingent capital] by market issues that would be priced to reflect the market's assessments of the risk. (Dickson 2010a.)

The Office of the Superintendent of Financial Institutions (OSFI) has moved to implement this proposal through a requirement that banks issue Non-Viability Contingent Capital (NVCC), a form of contingent capital that will replace types of capital that will no longer qualify as Tier 1 or Tier 2 capital under the Basel III rules.² Conversion of NVCC would be triggered when the Superintendent judges that a bank has ceased to be viable and could potentially be restored to viability through the conversion of the NVCC from debt to equity. Further, the terms of the conversion must significantly dilute the stake of common shareholders, reflecting the principle that they, rather than taxpayers, bear the consequences of a bank's situation.

The concept of contingent capital is neither new nor radical (Flannery 2005, Squam Lake Group 2009). It reverses a prolonged trend toward weakening of shareholders' and depositors' interests in monitoring the affairs of banks. Until 1954, for instance, shareholders were subject to double-liability, which made them liable in the event of failure for making payments equal to the par value of their share holdings. Their role in overseeing banks was further diluted by limits on concentrated ownership added in the 1967 *Bank Act*. The introduction of deposit insurance at the same time eliminated concern by small depositors' with the condition of their bank.

The Case for Contingent Capital

A contingent capital requirement would have a number of benefits:

- 1. Contingent capital's conversion would ease the process of dealing with troubled institutions by reducing outstanding fixed debt;
- 2. At the same time, conversion would replenish shortfalls in the institution's core capital;
- 3. The pricing of contingent capital by investors would strengthen market pressures on banks by making them bear more of the costs of their risk taking;
- 4. Market pricing would be a signal to the regulator of the markets' perception of the risk posed by an institution;
- 5. Contingent capital would provide a cheaper safety buffer for well-run banks than additional equity capital.³

Core equity provides the first line of defense by absorbing the shocks of an institution's initial losses. Subordinated debt in its present form, on the other hand, requires a complicated winding-up or restructuring of the troubled institution. Contingent capital, though less automatic than equity, has the advantage over other debt in that the terms at which it is converted and the timing of the conversion would be specified at the time the instruments are issued.

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² The plans are set out in OSFI (2010a,b). Tier 1 and Tier 2 capital are categories of capital that are required under the Basel III Capital Accord. Tier 1 capital consists of shareholders' equity and serves as a first line of defence in absorbing losses. Tier 2 capital is characterized as supplementary capital and is judged less permanent than Tier 1 capital. Tier 2 capital can include subordinated debt and various reserves.

³ If it did not, the financial institution could choose to use equity rather than contingent capital to meet its capital requirements.

Contingent Capital in Practice

The devil for any regulatory proposal is in the details. The devil for any contingent capital scheme is an expectation of regulatory forbearance toward troubled banks. This expectation has been fostered by authorities historically having delayed dealing with troubled institutions, especially those seen as "too big to fail." This expectation could be overcome to some degree by the design of a contingent capital plan.

Timing: The timing of the trigger for conversion, early or late, will affect the working of contingent capital arrangements.⁴ A late trigger could be based, as in the case for NVCC, on a regulator's declaration that an institution is no longer viable, or by government actions to directly support a troubled institution. A late trigger, however, would reinforce uncertainty about the realization of the conversion in light of governments' past tendencies to rescue troubled institutions. To avoid this possibility, OSFI requires that the acceptance of "a capital injection or equivalent support" would also constitute a trigger for conversion. Still, these long-term triggers could be delayed, or even avoided, if institutions were supported indirectly through other measures such as asset purchases or extraordinary lending facilities.

Early conversion, in contrast, could be based on criteria such as an institution's failure to meet minimum capital standards or by some measure of its market value. Full conversion at this stage would be disproportionate. Such timing could require OSFI to request banks to raise additional capital at some point prior to reaching the trigger point. This request should be made public so as to reduce the impact of reaching the trigger on confidence in the bank. Such an early timing would give banks the opportunity to raise additional capital before their situations become too dire.

Proportionality could be maintained by combining an early trigger with a phased conversion. Inevitably the opacity of banks' financial conditions will leave the authorities with some discretion over the timing of conversion. Early conversion is likely to be more convincing when authorities have some leeway in their actions because it would demonstrate their determination to act.

One advantage of an early trigger is that it reduces the risk of precipitating a run on the affected bank and the possibility of spreading contagion to others. The early call would be less traumatic for several reasons. Compared to a late call it would signal a need to replenish capital to restore it to required levels rather than the more urgent need to preserve the institution's viability. In addition, an early trigger leaves scope for a less drastic phased conversion rather than the complete conversion that would be required with a late trigger.⁷

Terms of Conversion: The authorities have a choice between converting contingent capital for equity on the current terms (share prices prevailing at the time of the trigger event) or on initial terms (those prevailing at the time the contingent capital was issued). The choice of the terms will affect both the division of losses and the effects of contingent capital.

Setting the conversion at the equity's market price at the time of conversion limits the pressures on holders of contingent capital: the price of equity at that time would reflect the institution's condition plus any anticipated dilution of equity. The impact on contingent capital holders would consist of:

- i) any loss they suffer through replacing their fixed debt instrument with equity; and
- ii) any subsequent losses because future market conditions turn out worse than expected at the time of the conversion.

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⁴ De Sousa, Gravelle, Engert and Orsi (2010) refer to this difference as "going-concern" versus "gone-concern."

⁵ An early trigger may be criticized because of the difficulties in determining when an institution actually fails to maintain capital at a specified level. The weak conditions of major banks during the recent crisis were not signaled by the revelation that they missed the required capital standards. The same problem would also bedevil any indicator used as a trigger for conversion, whether early or late.

⁶ Lloyds Bank chose an early trigger for conversion based on its tier 1 capital ratio falling below 5 percent for a debt issue it made in November 2009. (See Hanson, Kashyap and Stein 2010,p.12.)

The call for conversion would provide new information to the market only if the condition of banks were not transparent. It is difficult to justify concealing the condition of banks from the public. Such concealment effectively insulates management's actions from outside scrutiny and facilitates regulatory forbearance. See Allen, Carletti, and Poschmann (2009) for a statement of the case for accounting transparency in banking.

As noted by Goodlet (2010), conversion on the basis of prevailing market value would also be vulnerable to gaming by holders of contingent debt hoping to improve the terms of conversion by depressing the price of the equity.

The effects of conversion based on issue price are quite different. In this scenario, debenture holders would be required to convert the debt into equity at a conversion ratio set when the debenture was issued, even though share prices may have fallen on the market. As before, the holders would suffer losses from the conversion of debt into equity. More of the losses, however, would be shifted onto holders of convertible debt by exposing them to the full deterioration in equity value from the time of issuance to the time of conversion.

The choice between these options depends on the purposes of introducing contingent capital. In both cases, the conversion reduces the fixed debt and replenishes the equity of troubled banks. Using initial equity prices generates greater market pressures on the pricing of contingent capital that would make it a barometer of a bank's riskiness.

The Costs of Contingent Capital

As proposed, contingent capital would replace other components of banks' required capital and would arguably be more expensive. Some of the added costs of contingent capital may be offset by reduced costs of other types of borrowing because of the potential for a larger equity buffer. The added costs would probably not be excessive in light of the growing consensus that even the effect of higher capital requirements on costs to bank customers' would be small.⁸

Nevertheless, added costs from using contingent capital would reflect a shift in the burden of troubled banks away from taxpayers. That such potential costs to taxpayers currently exist can be seen from the two separate credit ratings for Canadian banks. One system judges the banks' own financial strength, and the other, a higher rating, reflects their implied government support. Any higher costs from the adoption of contingent capital requirements would then be the result of investors' judgments of the risks they would face that are now underwritten by the Canadian public.

Contingent Capital in Perspective

The strong performance of Canadian banks during the recent crisis makes it easy to argue that the introduction of contingent capital is unnecessary. But we need to remember that Canadian authorities resorted to extraordinary measures including loan guarantees, special lines of credit and substantial asset purchases to support our banks.¹⁰ The fact that the market capitalization of Canada's five largest banks rose by \$15 billion, or approximately 15 percent, on the heels of the announcement of support suggests that it did much to bolster investors' confidence.

While Canadian banks navigated the crisis better than others, no two crises are the same and our banks could be more vulnerable to the next one. Few would have imagined just few years ago that such large, well regarded banks as Bank of America, Citibank, Royal Bank of Scotland, Credit Suisse, and many others would be on the ropes together. Adding contingent capital now to the regulator's tool kit is a wise measure that, when another crisis threatens, could reduce the need to improvise on the fly.

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⁸ The Bank of Canada (2010) estimates the costs of a 1-percentage-point increase of capital ratios in terms of lending spreads to be between 9 and 17 basis points for Canada. The Macroeconomic Assessment Group, the Basel Committee, and Elliott report similar results

⁹ Moody's second rating places each of the Canadian banks two levels above its stand-alone level.

¹⁰ Many have pointed out that the banks did not take up the government's offer of a loan guarantee. Nevertheless, the offer of a guarantee itself constitutes a guarantee even if it is never used.

References

- Alessandri, P. and A. Haldane. 2009. "Banking on the State." Presentation. November. Accessed at www,bankofengland.co.uk.
- Allen, F., E. Carletti and F. Poschmann. 2009. "Marking to Market for Financial Institutions: A Common Sense Resolution." e-brief. Toronto:C.D. Howe Institute.
- Bank of Canada.2010. "Strengthening International Capital and Liquidity Standards: A Macroeconomic Impact Assessment for Canada." August.
- Basel Committee on Banking Supervision. 2010. "An Assessment of the Long-term Economic Impact of the New Regulatory Framework." August.
- Brown K., and D. Enrich. 2008. Rubin, Under Fire, defends His Role at Citi "Nobody Was Prepared for Crisis of'08," *Wall Street Journal*. November 29, p. A1.
- Cecchetti, S. 2010. "Strengthening the Financial System: Comparing Costs and Benefits." Remarks prepared for the Korea-FSB Financial Reform Conference 3 September.
- Dickson, J. 2010. "Protecting banks is best done by market discipline." Financial Times April 9.
- ————. 2010. "Too-big-to-fail and Embedded Contingent Capital." Remarks to the Financial Services Invitational Forum, Cambridge, Ontario. May 6.
- D'Sousa, C., T. Gravelle, W. Engert and L.Orsi. 2010 "Contingent Capital and Bail-In Debt: Tools for Bank Resolution." Bank of Canada Financial System Review. December.
- Elliott, D. 2009. "Quantifying the Effects on Lending of Increased Capital Requirements." Pew Financial Reform Project Briefing Paper, no 7.
- Flannery, M.J. 2005. "No Pain, No Gain? Effecting Market Discipline via 'Reverse Convertible Debentures,'" in Hal S. Scott, ed., *Capital Adequacy beyond Basel: Banking, Securities, and Insurance*. Oxford: Oxford University Press.
- Goodlet, C. 2010. "Too-Big-to-Fail" A Misguided and Overused Response to Financial Crises." C.D. Howe Institute. October..
- Hanson, S., A. Kashyap, and J. Stein. 2010. "A Macroprudential Approach to Financial Regulation." Paper prepared for the *Journal of Economic Perspectives*. July.
- Macroeconomic Assessment Group of the Financial Stability Board and Basel Committee on Banking Supervision. 2010. "Assessing the Macroeconomic Impact of the Transition to Stronger Capital and Liquidity Requirements." Bank for International Settlements. August.
- Office of the Superintendent of Financial Institutions. 2011a. "Advisory: Non-Viability Contingent Capital."
- Office of the Superintendent of Financial Institutions. 2011b. "Advisory: Treatment of Non-qualifying Capital Instruments.
- Squam Lake Working Group on Financial Regulation. 2009. "An Expedited Resolution Mechanism for Distressed Financial Firms: Regulatory Hybrid Securities.". Council on Foreign Relations Press. April.

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