



Financial Regulation and Efficiency: Tradeoffs in the Post-Financial Crisis Era

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A presentation prepared by the author for the C.D. Howe Institute's Financial Services Research Initiative on November 5, 2014; amended for publication.

Since the financial crisis of 2007-2008, it is understandable that almost all of the attention paid to the financial sector has been aimed at answering the question: "How do we make the financial sector more stable?" or less productively but more politically salient: "How do we avoid government bailouts of banks?" While these questions are indeed important, both are subsidiary to the primary question to which we *should* always be seeking answers, namely "What do we need to do to ensure that the financial sector does its job effectively and efficiently?"

The purpose of this paper is to refocus the discussion on the effectiveness and efficiency question, and talk about the relevant instruments to achieve the appropriate *balanced* promotion of public policy goals as they apply to the financial sector.

Purpose of Financial System

Within the general framework of a market economy, the purpose of the financial system (markets, banking and insurance) is:

- (1) to facilitate the flow of savings to their most productive use;
- (2) to facilitate the transfer of risk to economic agents best able to bear the risk, and to meet the liquidity preferences of diverse economic agents;
- (3) to facilitate households' smoothing of consumption over their lifetime (time transformation); and
- (4) to do these three allocative/transformation functions without contributing to inherent instability of the real economy.

To repeat: the purposes of the financial system are to facilitate investment allocation, risk allocation, liquidity preference and lifetime consumption allocation without adding to the instability of the animal spirits inherent in the non-financial "real" economy.

An earlier version of this paper was presented at a joint meeting of the Calgary School of Public Policy and the Toronto Financial Services Alliance, February 10, 2014.

The goals of public policy with respect to the financial sector should thus be to establish the legislative, legal and regulatory frameworks that enable the financial system to carry out its allocative functions effectively, subject to the minimum constraint of not exacerbating the instability inherent in the real economy.¹

It is these allocative functions that contribute to growth of output and incomes. If we want higher incomes, we need efficient financial markets and institutions.

I would contend that since 2007-2008, policymakers (especially politicians) around the world have focused almost exclusively on the goal of constraining instability in the financial system and have lost sight of the importance of allocative efficiency. While there is always some trade-off between the efficiency and stability goals when selecting policy instruments. I believe that around the world (and certainly in the United States, the U.K. and the Eurozone) the particular choice of regulatory instruments to reduce financial instability (and potential costs to taxpayers) has impaired allocative efficiency and hence economic growth much more than necessary. Macro stability is achieved by the combination of appropriate micro supervision policies, or prudential regulation, market conduct policies and monetary and fiscal policies. The chosen mix of policies may well not have been as effective in the mitigation of instability as it could have been.

My main focus at the end of this paper is on prudential regulation. But prudential regulation (and in particular the exercise of that regulation by the supervisory agency) operates in conjunction with market conduct regulation and monetary and fiscal policies to promote both efficiency and stability of financial markets and to lessen the amplitude of cycles in the real economy. Hence, prudential regulation must be looked at in the context of the other policies which impact the efficiency and stability of financial markets and institutions. So first, a brief discussion of these other instruments.²

A. Fiscal Policy

No financial system can operate both efficiently and with reasonable stability if markets perceive the growth of public debt is out of control. Thus, it is critical that governments reduce net public debt when the economy is operating above (or close to) potential to allow for increased public borrowing when the economy is operating well below potential. Confidence that governments will pursue "reasonable" fiscal balance is actually a pre-condition for a well-functioning and stable financial system in which government debt serves as the fundamental "risk free" asset.

While reasonable through-the-cycle fiscal balance and debt control is an essential contribution of fiscal policy to the effectiveness and efficiency of the financial system, the structure of tax and expenditure policies is also key. Tax policies that encourage excessive leverage (e.g., mortgage interest deductibility for households and interest deduction for corporations combined with double taxation of dividends) reduce both the stability and effectiveness of the financial

¹ The stabilization goal of monetary and fiscal policy is indeed to act to moderate the amplitude of swings in the real economy, as discussed below.

² While I do not deal with the rule of law issues in this paper, a well-functioning legal system is, of course, the foundation on which an efficient financial system is built:

[&]quot;Commerce and manufactures can seldom flourish long in any state which does not enjoy a regular administration of justice, in which the people do not feel themselves secure in the possession of their property, in which the faith of contracts is not supported by the law, and in which the authority of the state is not supposed to be regularly employed in enforcing the payment of debts from all those who are able to pay. Commerce and manufactures, in short, can seldom flourish in any state in which there is not a certain degree of confidence in the justice of government." – *Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations (1776).* "Commercial credit may be defined to be that confidence which subsists among commercial men in respect to their mercantile affairs.... In a society in which law and the sense of moral duty are weak, and property is consequently insecure, there will, of course be little confidence or credit, and there will also be little commerce." – *Henry Thornton, An Enquiry into the Nature and Effects of the Paper Credits of Great Britain (1802).*

system in allocating capital to its most productive uses. Policies of severe expenditure restraint when business and household incomes are under great stress, can similarly increase financial instability and lead to inappropriate allocation of capital.

B. Monetary Policy

No financial system can function efficiently or with reasonable stability if people do not have confidence in the future value of money. One of the best ways for monetary authorities to promote that confidence is to focus on maintaining a low and stable rate of inflation (or slowly rising price level) by adjusting very short -run interest rates so as to affect the rate of credit creation in the economy. In times of excess demand and upward pressure on prices, increases in the policy rate have proven to be a very effective tool in stemming credit creation and thus inflation. However, in times of excess supply and downward pressure on prices, central banks cannot easily impose negative nominal interest rates to push inflation up to target or to encourage needed credit creation. In this recent circumstance, central banks have attempted to re-start credit creation through quantitative easing (printing money).

In addition to using the interest rate mechanism to encourage or restrain the creation of credit, monetary authorities (including governments and regulators) have other "quantitative instruments" at their disposal. Credit creation by banks can be constrained (as it has been historically) through the manipulation of required reserves at the central bank or by changes in provisioning required by the prudential regulator, or by direct regulation of loan-to-value ratios by the government mortgage insurer, or by restrictions on the nature and form of securities than can be issued. The impact of the central bank's policy interest rate on credit creation does depend on the structure of market conduct and prudential regulations. In setting interest rates (or expanding their balance sheet) central banks must be cognizant of the impact that these other policies (quantitative instruments) and market structure developments are having on credit creation, and thus on financial stability *per se.*³ While central banks must take market and regulatory developments into account, the goal of monetary policy should be price stability. Interest rate policy should not be aimed directly at financial stability *per se.*⁴ Although asset price increases *may* be a harbinger of consumer or output price movements to come, interest rate policy should not target asset prices directly.⁵

And this brings me to the third set of instruments to foster efficiency and stability in the financial system – exchange rates and capital flows.

C. Policy Toward International Capital Flows

An efficient financial system within a country requires open access to international capital markets. But open capital markets and a globally integrated banking system can lead to destabilizing inflows or outflows of short-term funds and large gyrations of exchange rates. A floating exchange rate generally promotes both efficiency and mitigates instability for open economies, as do open and free capital markets. However, very unstable short-term capital flows can in some circumstances reduce both efficiency and stability. Thus, in some very limited circumstances, controls on international capital flows may contribute both to stability and efficiency (e.g., Chile), although in most incidences in recent history, capital controls further reduced efficiency without bringing

³ For example, the Bank of Canada took into account the relaxation of mortgage insurance standards in 2005-2006 when setting monetary policy.

⁴ Of course if there were to be a generalized expansion of credit growth which might be a harbinger of both asset price instability and potential future inflation, interest rate policy would take this into account. This was recognized at the time of the renewal of inflation targets in Canada in 2011.

⁵ The 2010 use of interest rate increases in Sweden to counter perceived financial system risks when inflation was well below target provides a cautionary lesson.

about improved stability (e.g., Argentina). Floating exchange rates generally improve financial efficiency and stability. Indeed, experience since 1971 and in particular since 1997 has demonstrated that floating (although often volatile) exchange rates actually enhance stability. In part, the failure to allow exchange rates to float has allowed global imbalances in savings and investment to build to the point where they actually trigger financial instability.

Global imbalances grew fairly consistently after 1997. China generated excess savings (Ben Bernanke's savings glut) and, until 2005, pegged the renminbi to the US dollar, thereby steadfastly refusing to allow the renminbi to strengthen and gradually work off this savings imbalance. Stung by the 1997 crisis, a number of other emerging market countries pursued policies to build large foreign exchange reserves and thus export their surplus savings. At the same time, Germany began to generate excess savings while locked into a fixed exchange rate with its euro partners. These excess savings had to be absorbed by the rest of the world, in particular the United States (and in Germany's case, by other countries in the euro area). US households became the global consumers of last resort absorbing the savings of others on the basis of credit provided through the global financial system and packaged (dangerously) by American mortgage originators, securitizers, and investment banks.

While the root cause of the 2007-2008 financial crisis lay in global financial imbalances (and imbalances within the eurozone) caused in part by rigid exchange rates and inappropriate fiscal policies,⁶ the proximate culprit in the 2008 crisis has been generally identified (in particular by politicians) as being poor or inadequate market conduct and prudential regulation. It is to these issues I now turn.

D. Market Conduct Regulation

To the extent that regulatory failures were the proximate cause of the financial crisis, the greater failure was market conduct regulation, not prudential regulation, although it is the latter which has received the most attention. In particular, it was the regulation of fixed income securities markets that proved to be inappropriate (mortgage-backed securities (MBSs), derivatives repos, complex securities, asset-backed commercial paper (ABCP), etc.). Hence, there has been some global attempt to regulate fixed income markets.

In 2007-2008 some fixed income and derivatives securities were so unregulated that the securities did not meet even the most basic transparency requirements. I think here of the ABCP conduits in Canada, US mortgage-backed securities, Collateralized Loan Obligations (CLOs) and other types of asset-backed paper in Europe. And of course there was not any pretense to regulate over-the-counter (OTC) derivatives. Not only were these products unregulated, they were opaque and not traded in transparent markets. They were not necessarily an efficient means of finance and certainly contributed very significantly to financial instability. Clearly improvements were warranted. The question was, and remains, what to do to improve the stability of these markets and products without killing the ability of these markets to allocate capital and risk efficiently?⁷

Clearly transparency of fixed income markets does need to be improved both for efficiency and stability reasons. To date, the answer has been to drive standard OTC products onto exchanges (or clearing houses) to eliminate counterparty risks and increase monitoring of flows. I would argue that this "market driven" approach has generally been the right one to improve stability and make some modest efficiency

⁶ See Martin Wolfe, *Shifts and Shocks*, chapter 4. Also see my speeches from 2005-2006. In particular, my speech to the New York Association of Business Economists on March 29, 2006, and my lecture at Princeton the next day on the "Evolving International Monetary Order." See also the speeches of Mervyn King, Governor of the Bank of England, in 2006.

⁷ Certainly "efficiency" does not require that fixed income markets be regulated in the same way that public equity markets are regulated. Arguably public equity markets are so over regulated and have become so inefficient that many formerly public firms are going private. IPOs as a means of financing growing enterprises have diminished, and totally unregulated crowd funding is on the rise. Here, the sheer cost of regulatory compliance is slowly destroying public equity issuance as an efficient means of finance (and has been since Sarbanes – Oxley).

gains. However, we are now observing conditions that may limit this approach. A shortage of high-quality collateral has emerged. Implementation and management of transactions through clearing houses have proven to be more difficult and costly than anticipated. Some useful specialized types of OTC transaction are not easily standardized for trading on exchanges, but should continue to be conducted on a bilateral basis and treated as part of a bank's loan book, not as a tradable security. More work needs to be done on these two issues.

Nevertheless, the re-emergence of complex structured products, which have many of the same opaque toxic qualities as those issued in the middle of the last decade, is worrying. Careful study is required. Securities commissions should insist on improved disclosure. But most importantly, securities commissions must work closely with monetary authorities and prudential regulators so that the vast shadow banking sector is subject to surveillance and supervision for systemic risk similar in principle (but not in detail) to that provided banks by prudential regulators.

In addition, credit rating agencies (CRAs) have to do a better job than last time in rating complex products. But, most importantly, buyers must do their homework. "Caveat emptor" is not only the most efficient market regulatory mechanism, it may also prove to be more effective in promoting stability than tight regulation of CRAs.

E. Prudential Regulation

Finally, I now want to turn to prudential regulation of banking, the instrument that has received the most attention since 2008 from politicians and policymakers around the world and here in Canada.⁸

The ostensible objective of this focus has been to "avoid financial instability of the type we observed in 2007-2009," although at least some of the actions taken to date seem to be aimed more at punishment of alleged culprits than avoiding future problems. So far, as I observed, nowhere has the objective been "to improve the efficiency of the system" or even "to minimize efficiency losses." The dominant view has certainly been that the crisis arose because of "market failures" in the banking system and that tighter prudential regulation of banks was required to offset these failures and to reduce the incentive for (greedy) bankers to make risky bets where the "wins" would accrue to the bankers and the "losses" be borne by the taxpayer. The attitude of global regulatory authorities has been: "if this tighter regulation increased costs to customers and reduced the efficiency of financial intermediation, so be it."9 It was argued that the future output gains from greater stability would swamp any ongoing output losses due to reduced efficiency of financial intermediation.

Little effort has been directed at ascertaining the least-cost way of achieving stability goals. Governments around the world have demanded stability at any price. Cautions about the cost implications of regulatory measures have been dismissed as the whining and moaning of grossly overpaid bankers and traders. Direct compliance costs may be significant (as much as 20 percent of pretax profits). Further, the diversion of effort of key personnel (and boards) to compliance undoubtedly has significant costs. And these costs are passed on to customers. Even more difficult to measure are the medium-term costs of real output and investment foregone because of reduced loan books.

Overall detailed cost-benefit analysis is admittedly very difficult to do.¹⁰ The benefit is the present value of reducing

⁸ In this paper, I focus on regulation of banking only, although increased regulation of some insurance products has had a significant impact on the efficiency of financial markets. That said, financial efficiency would be increased if credit default swaps were regulated as an insurance product.

⁹ The statement may be too harsh with respect to the Canadian prudential regulator. See Jeremy Rudin "Getting the Balance Right"; speech to the Economic Club of Canada, September 30, 2014.

¹⁰ Many studies by central banks have pointed to long-run social benefits of tighter capital and liquidity rules exceeding the costs of these rules while the Institute of International Finance (IIF) came to the opposite conclusion.

the impact of some future financial crisis of unknown timing and magnitude while the costs are immediate in terms of slower growth due to decreased lending (also difficult to quantify) and in terms of direct costs of compliance. But I can offer some indicative judgements on some ways in which prudential regulation might be "tweaked" to reduce efficiency losses relative to the stability gains of regulation.¹¹ All of these ways involve somewhat greater reliance on market discipline and less on compliance with detailed, black-letter laws and regulations, enforcement of which places value on regulatory compliance over effective risk management by bankers themselves.¹² And all my judgements involve careful consideration of the interaction of prudential supervision policy with fiscal, monetary, international and market conduct policies. All involve a rather "rough and ready" principles approach to rule-making that leaves very considerable discretion to the supervisory authority. I make these judgements on the basis of past experience. It is far better to set rules that are roughly right than ones that are precise, and possibly precisely wrong. And it is far better for the prudential authority to concentrate on judgemental supervision rather than an application of rigid rules. Of course, this requires a degree of trust between the political and regulatory authorities and between the financial institutions and their supervisors. It is important that all parties in all countries work together to foster this trust, as we mainly try to do in Canada.

I know turn to the "big seven" issues in prudential regulation.

1. Dampening Volatility: Reserves for Expected Losses

In the good old days, banks accumulated "hidden reserves" in good times when loan losses were low and drew on them in bad times. While this smoothing process was not transparent, it was actually very effective and operated to dampen cyclical volatility. As I understand it, the new International Financial Reporting Standards (IFRS) 9 accounting standards will now permit provisions to be taken to cover expected losses. Supervisory guidance that facilitates through-the-cycle provisioning for expected losses would be preferable to the current framework of permanent capital requirements, which exacerbates volatility and encourages behavior that actually exacerbates the cycle. While the construction of requirements for provisioning would need to contain a judgmental element (so is not without complication), such requirements would be clearly superior to the system of "capital buffers" favoured by the FSB (Financial Stability Board) and national regulators including OSFI (Office of the Superintendent of Financial Institutions). De facto, these buffers could not be drawn down in bad times, nor could they be raised enough to curb credit creation in times of irrational exuberance.

Fiscal authorities have never liked this approach to general provisions because it reduces revenues in good times, but in terms of the long-run creation of reserves, it is clearly efficiency enhancing and stability enhancing.

2. Assuring Loss Absorption Capacity

Since 2008, authorities have operated on the assumption that regulated banks had to operate with much more loss-absorbing capacity. They have argued that all banks, *regardless of the riskiness of their assets*, required much higher levels of minimum capital, and in particular that more "tangible common equity" (TCE) was required. Directionally they were right, but we have no analytic assessment that the new standard minimum levels of capital represent the best trade-off of stability and efficiency over the cycle. However, the speed of implementation has clearly slowed credit creation and growth since 2011, and had a consequent impact on the transmission mechanism for monetary policy. The monetary policy and regulatory arms of the Federal Reserve, for example, seem to have been working at cross purposes.

¹¹ I use the word "tweaked" advisedly. I certainly do not subscribe to the view that the provision of credit is too important to be left up to bankers nor to the opposite view that financial intermediaries require no more oversight than widget manufacturers.

¹² See Jeremy Rudin's speech, op. cit., page 6.

Regulators will never get the risk weights right at the aggregate level. Even risk managers in the individual banks will never get their own weights quite "right." Of necessity, models are always backward looking as the only data we have are historic. Hence, too much reliance should not be placed on precise calibration or precise compliance. Nevertheless, in my view it is better to overweight trading assets relative to the banking book and allow banks reasonable latitude to trade on their own account and not just as agents for their clients. Ring fencing and the Volcker rule are clumsy ways to reduce the possible de-stabilizing effects of trading on their own account. Own-account trading provides critical liquidity both to support the efficient operation of capital markets and to reduce volatility.

In my view, banks manage risks best when their efforts are directed to rigorous stress tests as opposed to compliance with a highly detailed set of formula-driven rules, especially if those rules are universal and do not take account of a bank's own experience. Supervision to ensure that credit and market-risk managers are carrying out realistic stress tests is important to enhance the stability of the banking system without the efficiency loss in diverting key personnel to compliance activity.

Finally, there remains an important issue about what qualifies as regulatory capital (TCE only, or some elements of contingent capital like preferred shares, convertible sub-debt, etc.) – and what subtracts from regulatory capital (Definedbenefit pension liabilities, minority shares, etc). Precise national definitions here can easily create un-level playing fields across banks with different structures – and can have unintended consequences. Further work needs to be done to ascertain both the effectiveness of the various types of capital in promoting stability and the true efficiency costs of raising different types of capital.¹³

3. Controlling Leverage

Excessive leverage is always at the root of financial crises and thus broad, unweighted leverage restrictions are an important backstop to risk-weighted capital requirements. Moreover, they are fairly straightforward to compute and to comply with. The leverage ratio is a good "second line of defence" and permits a more rough and ready calculation of compliance with risk-weighted capital rules. That is why OFSI has imposed leverage limits in Canada and why leverage control is an appropriate "back-up constraint" for all global banks. But the word "back-up" is important. Were leverage to be the primary constraint, this would be an enormous incentive for banks to invest overly in higher-risk assets. Canada's "belt and suspenders" approach is an appropriate one.

4. Assuring Liquidity

To maintain confidence, a bank must maintain enough liquid assets to meet a sudden surge in withdrawals. Maintenance of liquidity is expensive. The greater the fraction of assets that must be held in highly liquid form (deposits at the central bank, cash, government bonds, etc.), the less the ability of the bank to create credit. As regulators continue to develop new liquidity rules (net stable funding ratio, or NSFR) it is very important not to underestimate the real economic cost of rules that are too tight. Stable funding rules which go too far in discouraging the pooling of liquidity between banks increase the aggregate intermediation costs to lenders and borrowers. The central bank (or other government institution such as CMHC) has an important economic efficiency role to play by providing a usable (and used) discount window or pooling mechanism.

The discount window is at the same time stability enhancing and efficiency enhancing. It would be used by some individual banks in "normal" economic times but available to all banks without attendant stigma in times of stress. It should not be seen as a mechanism to "bail out" failing banks at a cost to the taxpayer, but rather as an appropriate mechanism to reduce the cost of liquidity through pooling. Of course, as lender of last resort, the central bank faces the terribly difficult problem of assessing whether an institution is just illiquid or fundamentally insolvent. But, operated appropriately, the

¹³ I remain skeptical about the stability-enhancing value of contingent capital or "bail in debt." In my experience, the presence of bail in bonds in a bank's capital structure will make it impossibly expensive for a bank under stress to raise equity capital or for the deposit insurance agency to arrange for a takeover of a stressed bank prior to its failure.

window generates profit for the central bank (and hence for the taxpayer) while at the same time lowering the liquidity costs for banks and their customers (who are also taxpayers).

5. Reducing Instability in International Capital Flows

Although banks are no longer the dominant players facilitating international capital flows, they still play a very important role. They can play this role most efficiently if they can rely to some extent on their global capital to back operations in individual jurisdictions. To the extent that national prudential regulators begin to insist that global banks hold excessive amounts of capital locally, the efficiency of both the local and global financial system is impaired. To the extent that local prudential rules vary significantly from international norms, the global banking system fractures and the efficiency of global financial markets is reduced with no ostensible gains in stability.¹⁴ As I said earlier, while controls to temper the inflow of "hot money" may be appropriate in the short run, open markets and floating currencies are generally the best way to foster stability over the medium term.

6. Facilitating Resolution

The object of regulation should not be to prevent all failures of financial institutions but rather to ensure that situations involving weak or failing institutions can be resolved expeditiously without weakening confidence in the system as a whole. Hence, the importance of an early resolution mechanism whereby the authorities (usually the deposit insurer) can step in to operate then reorganize or sell a weak and failing bank. This works best if the authorities have the power to intervene early, and banks (especially large ones) are legally and practically organized in such a way that facilitates selling off parts of the business in an orderly way. Requiring large banks to organize themselves appropriately and to have "crisis resolution plans" that can be activated quickly when trouble strikes enhances stability and usually has a secondary benefit of enhancing efficiency.

It is very important that the authorities have the power to intervene early well before a bank is on the brink of failure (Canadian authorities have had this power since the 1990s). It is also important that both the competent authority and the bank itself know enough about possible paths to resolution that action can be taken expeditiously when needed. The process of creating a "living will" is an excellent way for a bank to manage both its risks and to plan for the most effective allocation of its capital under changing circumstances. But requiring overly detailed "resolution plans" (where form trumps substance) is expensive, and excessive detail is unlikely to be helpful when a crisis actually occurs.

Finally, simplification of the legal structure of complex institutions is probably both stability and efficiency enhancing.¹⁵ But since at least part of the complexity has arisen for tax considerations, the regulatory and fiscal authorities need to work together (and work with the banks) to reduce the incentives for complexity.

7. Aligning Incentives

Stability is enhanced when internal incentives within the bank are set up to reward prudency and penalize excessive risk taking. This can be done in two general ways:

- (a) by setting out a plethora of detailed rules governing bank organization and risk management and monitoring compliance in detail; or,
- (b) by setting out some broad principles of risk management that banks must follow, including aligning

15 The problem is not that banks are "too big to fail" but rather that they are too complex to fail.

¹⁴ I would observe that the global banking system is fracturing not only because host countries are imposing different rules and insisting that adequate capital to be held locally by international banks through subs rather than branches (as we used to do in Canada), but also because *home* jurisdictions are imposing constraints on the international operations of their own banks. Know-your-customer (KYC) and anti-money-laundering (AML) rules are essentially forcing international banks (especially in the US) to stop doing business with correspondent banks in order to minimize exposure to penalties.

compensation procedures with longer term enterprise performance, and then exercising discretionary supervisory oversight.

The US, the UK and some other advanced economies have broadly chosen model (a); that is, the method which maximizes dead weight compliance costs of both the banks and the regulatory authority. Moreover, it diverts highly skilled talent within the banks from productive activities (which improve efficiency and may actually lower risk) to check-thebox type of compliance activities. In so doing, this approach may actually increase risk. In this approach, the regulatory staff and those of the bank come to see each other as "the enemy." Costs mount. Banks seek to relocate or re-construe activity to find a more favourable regulatory environment. The banking system as a whole becomes more fragile as all institutions are forced to adopt exactly the same risk management procedures.

Model (b), the broad principles approach, results in more variation in the way banks manage risk. Moreover with a more cooperative relationship, both banks and supervisors can discuss emerging risks and find more innovative ways to manage risk as they traditionally have done in Canada. Deadweight compliance costs for both banks and supervisors are reduced. While the possibility of a single institution failing is (marginally) greater than under the detailed rules method, the system as a whole is more robust.

Conclusion: Implications for Canada

Since the 1960s, Canada has done well in balancing stability and efficiency concerns. Starting with the Porter Commission report and the 1967 *Bank Act* revisions, Canada has constantly updated its legislative framework for financial services. By-in-large, this framework served us well through the first decade of this century. With its emphasis on principlesbased regulation, close cooperation between the principal authorities (Finance, OSFI, Bank of Canada and CDIC) and continuing dialogue between the authorities and the large banks and insurers, the Canadian framework put Canada in an excellent position to weather the global financial crisis of 2007-2008. The only real weakness shown up by the crisis was the rather weak provincial securities commissions' framework for oversight of markets for ABCP and other complex fixed income securities.

While our framework held up well, the same cannot be said for the framework in many countries. Hence, politicians and many regulatory authorities have rushed to implement new measures to curb perceived instability. As I have just outlined, these measures have mainly relied on overly precise and inordinately complex black-letter regulations ostensibly to improve stability, regardless of efficiency losses and deadweight overhead cost of compliance. Unfortunately, Canada is being dragged along by this overzealous black-letter global movement by authorities to cabin, crib and confine financial institutions. In the long term, this approach will prove expensive in terms of lost efficiency and lower growth of output and incomes. Thus, in the end it will probably have to be at least partially unwound. We in Canada would be well advised to stick with our pre-2008 "principles approach" to prudential regulation. This approach to prudential (and market conduct) regulation, combined with our continuing emphasis on sound fiscal policy, consistent inflation targeting monetary policy, open financial markets and a floating exchange rate will serve Canada well, now and in the vears ahead.

Since 2008, Canada seems to have been (somewhat unwillingly) dragged by the international regulatory community along the inefficient American-style "black-letter law" path to regulation. I am encouraged that OSFI and the Bank of Canada understand both the limitations of that approach and the need to pursue a "partnership" approach with the financial services industry.¹⁶ It is in the interest of Canadians, who are the customers of the financial services industry, that the authorities and the financial institutions pursue this cooperative relationship with a focus on the efficiency of our financial system.

¹⁶ See Jeremy Rudin speech, op. cit.