

On Prudent Regulation

To Regulate Foreign or Domestic Intermediation?

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n traditional Chinese medicine, the doctor is paid as long as the patient is healthy. The patient comes in four times a year for a checkup, with adjusted lifestyle recommendations. Payment is stopped once the patient is ill. In the US, as long as the economy is healthy, "the financial doctor" in the form of the prudential regulator is considered redundant. Moreover, the prudential regulator is frequently viewed as a spoiler who inhibits growth and development. This is the paradox of prudential regulations in a capitalist economy—the better the regulator's performance, the lower the demand for its services. The success of the regulator or a prolonged period of economic tranquility leads to complacency, reducing the demand for his services, inducing underregulation, which leads to a financial calamity. While the identity of economic actors that benefited directly from crisis avoidance is unknown, the cost and the cumbrance of regulations are transparent. Hence, crises that have been avoided are imperceptible and are underrepresented in the political discourse, and the demand for regulation declines during prolonged good times, thereby increasing the ultimate cost of eventual crises.

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The 1990s was a prolonged period of what was perceived as the 'great moderation' of the global economy, a period of remarkable decline in the variability of both output and inflation, reducing the demand for financial regulations. This may explain the growing acceptance during the 1990s-2000s of Greenspan's seductive "market-stabilizing private regulatory forces" doctrine. Deepening global financial integration, and the growing confidence that global risk diversification, reduced systemic risk sharply lowered the risk premium. The successful private bailout of Long-Term Capital Management (LTCM) in

1998 was taken as a vindication of the efficacy of "market-stabilizing private regulatory forces," where the main role of the Fed is providing coordination services among the private parties involved in the bailout. However, the resultant complacency provided the background for the onset of the present crisis—calamity akin to a global LTCM on steroids. This time, however, the crisis is too big to be dealt with by private bailouts. The present challenge of rethinking the global financial architecture is to upgrade regulations in ways that recognize the paradox of prudential regulations during times of deepening financial integration, while taking into account the emergence of new domestic and foreign players, and new exotic financial instruments.

While the seeds of the present crisis were mostly homegrown, international flows of capital magnified its costs. Although it is a mistake to single out any class of foreign players as the key domino, the crisis awakened us to the need to overhaul global financial regulations. Global financial integration produces the by-product of "regulatory arbitrage": capital tends to flow to under-regulated countries, frequently resulting in excessive risk taking, in anticipation of future bailouts. Dealing with "regulatory arbitrage" requires coordinated prudential regulations that should apply as equally as possible to domestic and foreign players. Such regulations should be tailored to the risk category and exposure of each player above a minimum size, independent of the player's nationality. This would require a major overhaul of the information gathered by regulators and provide the benefit of setting a minimum global standard on information disclosure, as well as margin and leverage requirements on all financial players above a minimum size.

A coordinated globalized prudential regulation, by

increasing the cost of prudential deregulation, would mitigate the temptation to under-regulate during prolonged good times, thus adding a side benefit. Thereby, it would act like Odysseus' solution to the temptations of the Sirens: sealing sailors' ears with wax. We review in greater detail the need for comprehensive prudential regulation, and discuss possible implications on the investment practices of sovereign wealth funds (SWFs) savings funds controlled by sovereign governments that hold and manage foreign assets—and international hedge funds.

The Need to Regulate

Financial crises are as old as financial intermediation, and there is no reason to expect them

to disappear. Financial intermediation entails maturity transformation—funding a longer-term tangible investment with shorter-term savings. The essence of a financial crisis is a rapid financial disintermediation due to financial panic. In practice, this involves a "flight to quality," where savers attempt to liquidate assets in financial institutions due to a sudden increase in their perceived risk, moving their savings to safer assets, such as foreign currency and foreign governments' bonds in developing countries, or currency, gold, and government bonds in the OECD countries. As such, financial intermediation is exposed to financial fragility, in which heightened perceived risk may lead to liquidation, putting the entire financial system at risk. The ultimate manifestation of financial crises includes bank failures, stock market crashes, and currency crises, occasionally leading to deep recessions. The economist Hyman Minsky theorized that financial fragility—which is related to the business cycle and to leverage—is a typical feature of any capitalist economy. These considerations are at the heart of the large literature propagated by the stock market crash of 1929 and the Great Depression, including FED Chairman Ben Bernanke's seminal works on these topics.

Economic reasoning implies that the cost of inappropriate prudential regulation is magnifying the hazard of pre-existing distortions. A vivid example of such a distortion is moral hazard: this arises when investors believe they will be bailed out of their bad investments by the taxpayer, and therefore have little incentive to undertake proper monitoring of their investments (Heads I win, tails the taxpayer loses.). In these circumstances, taxpayers subsidize the investment. A frequent rationale for such bailing out is the "too big to fail" doctrine—the cost of systemic risk triggered by the failure of large financial institutions



Above: A trader clenches a phone at the New York Stock exchange. Opposite: Hedge fund directors are sworn in before a US House of Representatives Committee hearing on the regulation of hedge funds.

frequently implies that, independent of the ideology of the financial regime, when push comes to shove, tax payers will bail out large financial institutions. The lesson of the Great Depression is that failure to do so is too costly. Minimizing the costs of such bailouts necessitates prudent regulations. The challenge for the regulator is that, due to the nature of market forces and the interaction among market participants, it is impossible to predict the timing of a crisis. But the ugly head of moral hazard is widespread. For example, purchasing a house with zero down payment entails private profits when the house appreciates, but social losses when the house depreciates significantly, when the "owner" may walk away from the mortgage, saddling taxpayers and the community with the losses. Similarly, when a bank financing mortgages sells its portfolio to a third party, the bank's profit base switches from the provision of prudential services associated with issuing mortgages into a commission-based service, thus reducing the bank's incentives to properly monitor the allocation of credit. Both distortions can be mitigated

that offer higher private rewards, at a possible cost of a higher bailout bill paid by the domestic taxpayer down the road. These forces imply that the boundaries between domestic and global regulation are getting fuzzier, calling for international coordination of minimum standards, where regulation should deal with risk exposure induced by large financial actors. This requires setting new standards for information disclosure.

Asymmetric information disclosures

An underappreciated fact is that the regulator in the United States imposes stringent disclosure requirements on the non-financial corporate sector, subject to strict confidentiality of the micro-level data disclosed to the regulator. Curiously, there is no comparable information disclosure requirement imposed on the financial sector. To illustrate, the Bureau of Economic Analysis (BEA) does an annual survey of US direct investment abroad. The data collection is confidential, and is based on mandatory surveys conducted by BEA from all the establishments above

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by proper regulation, including imposing a significant minimum down payment on the homeowner, and capping the share of mortgages that the financing bank can package and resell in the market place. Enforcing these regulations calls for the watchdog to be the party spoiler, described by William McChesney, FED Chairman during the 1950s-1960, as "tak[ing] away the punch bowl just as the party got going." This activity has been in short supply in recent decades.

Globalization and Financial Crises

While the seeds of the present crisis are domestic, globalization of financial markets may deepen domestic vulnerabilities in under-regulated markets, frequently magnifying the resultant appreciation of domestic assets during economic booms, and assets deflation during busts. This follows the economic logic of the cost of a distortion. In financial autarky, only the pool of domestic saving can feed excessive investment and risk taking induced by the moral hazard distortion. Global financial integration implies that, in the absence of proper regulation, the global pool of saving becomes the feeder of excessive investment. The darker side of financial globalization is that such diversification would expose countries to new vulnerabilities, triggered by the magnification of the moral hazard distortions in countries that under-regulate their markets. This follows the logic of "regulation arbitrage," where the global pool of savings moves towards markets a critical size. It contains detailed confidential information, including direct investment, employment data, R&D expenditures, trade in goods and services, and selected financial data. This, and other data collected by federal agencies, provides the regulator with timely information about the non-financial sector. In contrast, there is no comparable attempt to collect data dealing with exposure of the financial sector. As a result, the regulator is frequently in the dark regarding the overall balance sheet exposure of investment banks, hedge funds, and other non-commercial financial intermediaries. The interweaving of credit arrangements implies that the collapse of a major financial institution that borrowed from financial intermediaries may trigger systemic risk, where the "too big to fail" doctrine induces a bailout (see the massive bailout of AIG during the fall of 2008). Hence, any serious regulatory reform should start with upgrading data collection, inducing mandatory periodic confidential reports of the balance sheet exposure of all financial institutions above a minimum size operating in the domestic market.

Standards for Prudential Regulation

Having periodically updated confidential information on the balance sheets of all the significant financial players allows for adopting regulations that should better fit future financial challenges. The required regulatory oversight should be performed by each national authority, in ways akin to the role of a doctor in traditional Chinese medicine.

Insight about the needed regulation is gained by recalling a key result of economic theory: the diversification benefits associated with increased globalization can be best obtained by buying a share of a "global fund," composed of all the traded assets of all countries. Such diversification provides the best mechanism for eliminating idiosyncratic risks. Short of engaging in potentially destabilizing zerosum speculation, large players in the global capital markets should not expect, on average, to get more than the gains associated with holding such global "country funds." Such diversification does not, however, eliminate the exposure to global risks, including exposure to commodity shocks, and global business cycles.

The above suggests that passive portfolio investment in well-diversified indices is welcome, and does not call for any special regulation. All other types of financial positions should be classified into several bins by the degree of exposure to derivatives, short positions, and downside risk that exposes taxpayers to possible bailouts. The greater the taxpayer risk exposure, the higher should be the capital requirement imposed by prudential regulators. The classifications into bins, setting maximum leverage ratios, minimum capital requirements, and other technical details should be revisited periodically, coordinating globally needed regulations to mitigate damaging "regulatory arbitrage" across borders. To minimize the hazard of a "too big to fail" crisis set by under-regulated financial institutions, this coordination applies also for the periodic adjustment of the minimum size of a financial institution under oversight, to ensure that a large enough share of each financial market is regulated.

Sovereign Wealth Funds

Private analysts put current sovereign wealth fund assets in the range of at US\$3 trillion or even higher, projected to grow to as much as US\$13 trillion in the next ten years. This is an amount larger than the current global stock of foreign reserves of about US\$6 trillion. While not a new phenomenon, the recent activities and projected growth of SWFs have stirred debate. Much of the discussion has been devoted to the need for individual SWFs to be more transparent about their investment approach. This would require providing more information on the type and amounts of assets they hold, and about their governance structure, by clarifying how decisions are made and monitored. Sovereign wealth fund asset holdings now amount to much less than the funds under management by mutual funds, pension funds, and insurance companies: US\$20 to 30 trillion each. But they are more than the US\$1.9 trillion under management by hedge funds and almost US\$1 trillion by private equity groups.

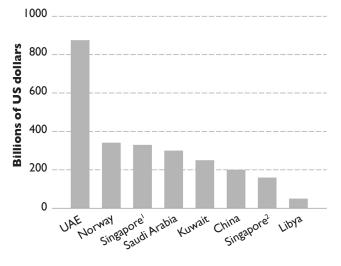
There are currently no rules concerning the investment practices of sovereign wealth funds, and both Western governments, and governments with sovereign wealth funds, remain suspicious of each other. These funds have also been instrumental in the subprime crisis; Citigroup, Merrill Lynch, and other major financial players in the US have all received capital infusions from investors in East Asia and the Middle East. As sovereign wealth funds purchase sizeable stakes in some of the most important financial institutions in the world, the lines between economic and foreign policy blur. Apprehension about the size effect of these funds is not new, reflecting the possibility that a large fund may use its market power strategically, potentially leading to greater financial instability, and occasionally benefiting large players. An example of these concerns is the alleged role of large private hedge funds in coordinating speculative attacks on the British pound and other currencies participating in the European exchange rate mechanism in the early 1990s.

As Larry Summers noted in the Financial Times, an extra dimension added by SWFs is the possibility that sovereign investors may use their strategic leverage for narrow nationalistic objectives. These may include supporting domestic "national champion" firms, buying controlling positions in foreign firms with proprietary knowledge, or increasing control of financial and tangible infrastructure abroad (telecommunication, energy, ports, etc.). The adverse political reaction to efforts by China's state-owned oil enterprise to acquire the US oil firm Unocal in 2005, and by the United Arab Emirates' DP World to acquire several major US ports, are well known. The Abu Dhabi Investment Authority's recent US\$7.5 billion investment in Citigroup prompted less concern, in part because of the Authority's assurances that it would not seek any control or active management.

Imposing mandatory periodic reports of the balance

The State's Coffers

Estimated Value of the Largest Sovereign Wealth Funds



GIC I/

Morgan Stanley, 2007

²Temasek Holdings 1/

sheet exposure of all significant financial institutions should go a long way towards alleviating most of these concerns. In the absence of proper transparency, nationalistic objectives can be advanced indirectly by delegating them to more anonymous third parties, thereby bypassing SWFs. In case of need, greater transparency should allow the regulator to apply a battery of anti-trust and other regulations to deal



A teenager participates in a peaceful demonstration in Reykjavik. Iceland's recentand dramatice conomic collapse draws attention to the risk of under-regulation.

with what may be deemed improper play by large financial operators. Yet, due to principal-agent problems, some SWFs may be reluctant to increase their transparency. But by no means is resistance to greater transparency unique to SWFs. Hedge funds and private equity managers may share similar views about greater transparency. This, however, is not a reason to prevent a country's national regulators from using mandatory codes of transparency with strict enforcement of confidentiality, on all significant financial players investing in that country. The required transparency should reflect the riskiness of the asset classes involved. This approach provides a menu of choices to SWFs and hedge funds.

Some SWFs and other financial intermediaries may opt for passive holdings of well-diversified indexes, with a minimal transparency load. The Norwegian SWF provides a good example of a large fund following what is practically state of the art management practice. The Fund's investment strategy is to maximize financial return with moderate risk, and a high degree of transparency. The long term strategic allocation, as of June 2008, consisted of equities and fixed income instruments, where equities account for 60 percent of the Fund's strategic benchmark

portfolio. The size of the fund implies that it owns about one percent of listed European equities and a half percent of listed equities on a global basis. Such a strategy, as long as it follows a passive investment mode with low frequency adjustments, provides ample opportunities for diversification gains, minimizing the local taxpayer exposure and not exposing the financial system to zero (or negative) sum games. Other players may opt for more narrowly targeted investment strategy, potentially associated with derivatives and leverage. These are precisely the activities that should be regulated. Chances are that improved global prudential regulation will also reduce the use of exotic instruments, but this is what a financial doctor may call for: under-regulated financial players tend to use and abuse these derivatives.

The recent collapse of Iceland, operating in ways akin to a "national hedge fund" illustrate the risk that underregulated investment, fuelled by excessive leverage, leads to political tensions among nations. The recent downfall of Icelandic banks operating in the United Kingdom resulted in the application of its Anti-Terrorism Crime and Security Act to freeze the British assets of Iceland's Landsbanki bank, triggering political tensions between the United Kingdom and Iceland. It will be a global political calamity if a collapse driven by under-regulated SWFs, foreign hedge funds, or other foreign players leads to similar political tensions between larger countries. Yet under-regulated domestic hedge funds can deliver equal or greater damage, as was vividly illustrated by the collapse of LTCM in the late 1990s, and Lehman Brothers recently. Indeed, when Warren Buffett referred to derivatives as "financial weapons of mass destruction," he had the good sense of focusing on the weapon, and not the nationality of the user. With proper global regulatory design, there would be fewer reasons to discriminate between foreign versus domestic funds.

Applying uniform standards of discourse, leverage and capital ratio regulations would level the financial field. While the actual regulation in each country should be the domain of domestic regulators (the Treasury, Central Bank, and others like them), the delicate task of coordinating a minimum uniform global standard should be the domain of organizations like the Bank for International Settlements, the International Monetary Fund, and similar agencies. Doing it properly requires an overhaul of these organizations. They need to upgrade the share of qualified practitioners and financial economists versed with recent financial innovations, and equip them with enough resources and talent to track, investigate and regulate the evolving financial innovations as well as the financial mischief that would certainly continue to emerge. Following these steps would reduce "regulatory arbitrage," and the political bickering that views SWFs and foreign capital as the seeds of domestic problems. Refraining from differential nationalist treatment may also facilitate deeper global diversification, while minimizing the downside risk of instability brought about due to excessive leverage.