

Effective Regulation: Part 3 Helping Restore Transparency

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Effective Regulation: Part 3

Helping Restore Transparency



Global Markets
Institute

Reduce arbitrage opportunities

In the first paper of our series on effective regulation, entitled "Avoiding Another Meltdown," we outlined key principles for improving financial regulation by reducing opportunities for financial holding companies to arbitrage regulatory and accounting standards, asset pricing, and risk controls. In this paper, we offer proposals that would help to put these principles into practice. We illustrate our ideas with simplified case studies of some key arbitrage problems, and show how our suggestions could potentially reduce them.

Strengthen controls on transfers of risk between affiliates

A serious set of problems that surfaced during the financial crisis relates to transfers of risk within financial holding companies that allowed risks to move to where they would receive favorable accounting or regulatory treatments. The range of failures and the sizeable differences in the way these issues surfaced, suggest that the problem is not so much a specific set of rules, but the generally unconstrained nature of these transfers of risk. We therefore propose that risk transfers between affiliates should be restricted so that risks flow to entities that employ full mark-to-market accounting and on-balance-sheet reporting. In essence this means that, within a financial company, risks should flow only to its investment banking arm, not away from it. Further, affiliates should not be able to subsidize investment banking businesses by offering other financial services at below-market prices. This is especially important when these businesses are subsidized by government-guaranteed deposit insurance or any other government-based advantage.

Additional restrictions are appropriate for securitizations

For transactions involving asset-backed securitizations, we recommend two additional restrictions. First, securitized loans should, in aggregate, face the same capital requirements as the underlying loans would face if they were held on financial institutions' balance sheets. Second, to qualify for regulatory capital relief, securitizations must be sold to true third parties (not to affiliates), and tranches of securitizations must be sold in equal-proportional "slices" relative to their size.

Helping to restore transparency

The current system provided significant incentives for financial companies to hold and internally transfer complex forms of risk. This made monitoring these risks challenging, and therefore made the unwind of the current crisis more difficult than it otherwise might have been. If the incentives to hold and internally transfer complex forms of risk are reduced, then financial firms will likely evolve into simpler and more transparent entities. This should make it easier, in our view, for regulators and investors alike to evaluate the health of financial firms, and would reduce the likelihood of a similar crisis.

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Improving transparency

In the first of a series of papers on effective regulation, entitled “Avoiding Another Meltdown¹,” we offered principles for improving regulation of the global financial system in the wake of the financial crisis. These principles focused on eliminating the opportunities for arbitrage of regulatory and accounting standards, asset pricing, and risk controls that have accompanied the growth of complex financial holding companies and the spread of securitization.

Since the publication of that paper, we have been asked to provide more details on how these suggestions might be implemented. Of course, our suggestions are among many that have been proposed by various regulators and market participants². We hope our ideas will provide an overview of the key requirements for preventing similar problems in the future. **Thus, in this third paper of the series, we sketch out our proposals, illustrating them with simplified examples of arbitrage problems and showing how these problems might be reduced.**

Before we begin, it is worth noting that most financial institutions maintained disciplined risk controls in the face of powerful competitive pressures. The problems that have arisen involved a small number of financial products and firms. Further, by helping to intermediate the global flow of capital between borrowers and savers, the financial system overall helped to support global economic growth. The response to the crisis must continue to permit capital to flow through an efficient market process to where it will be most productive. Nevertheless, we acknowledge that the damage caused has been enormous, and solutions must address the gaps in the financial system that allowed problems to go unchecked.

Unconstrained transfers of risk within financial companies

A serious set of problems that surfaced during the financial crisis relates to transfers of risk within financial holding companies that allowed risks to move to where they would receive favorable accounting or regulatory treatments. The range of failures and the large differences in the way these problems surfaced, suggest that the problem is not so much a specific set of rules, but rather the generally unconstrained nature of these transfers of risk. Specifically:

- For a number of years, major financial institutions have been allowed to operate several business lines—each with potentially different accounting, regulatory standards, and capital requirements, and separate methods of internal pricing.
- This allowed risks to be housed in the units where accounting, regulation, capital requirements and internal pricing were most favorable. Risks often gravitated to areas

¹ Please see “Effective Regulation Part 1: Avoiding Another Meltdown,” published in March 2009 and available at <http://www2.goldmansachs.com/ideas/public-policy/index.html>.

² Some of the key initiatives that have been put forward include the creation of a systemic risk regulator and a resolution authority; higher standards for capital and risk management for systemically important firms; more transparent and comprehensive disclosures for over the counter (OTC) derivatives markets; requirements for money market funds to reduce the risk of rapid withdrawals; and requirements for hedge funds or other private pools of capital above a certain size to register with the SEC. The FASB (the US accounting standard setter), in conjunction with the IASB (the international accounting standard setter), has also established the Financial Crisis Advisory Group (FCAG), which provides advice on the standard-setting implications of the global financial crisis. Several amendments regarding fair value measurements have been made by the FASB since the FCAG was formed. *(Footnote 2 continued on page 4).*

where supervision was weakest, and were permitted to grow beyond appropriate and manageable bounds.

- This is particularly true for certain securitizations, which allowed for complex transfers of risks within financial companies that were difficult to track.

As we noted earlier, a number of regulatory and accounting proposals have been made to address these problems, as well as several other issues that arose during the financial crisis. We add some overriding principles that we believe should help to address a major contributing problem—namely, generally unconstrained risk transfers within financial companies. In our view, risk transfers must be tightened so that risks follow predictable paths and are visible to markets and regulators alike. This would help to simplify the assessment of the health of financial companies by forcing profits and risks reported by financial firms to accurately and fully reflect their true economic value.

This is relatively straightforward in principle, but more complex in execution. Our suggestion for implementation of these principles is as follows:

- Within financial holding companies, risk transfers between affiliates should be restricted so that risks flow to entities that employ full mark-to-market accounting and on-balance-sheet reporting. **In essence, this means that risks should flow only to the investment banking arm and not away from it.**
- **Affiliates should not be able to subsidize investment banking businesses by offering other financial services at below-market prices.** This is especially important when these businesses are subsidized by government-guaranteed deposit insurance or other government-based advantages. In particular, loans to investment banking clients should be marked to market and reported on the balance sheet to ensure that revenues and profits are accurately stated. Without such restrictions, revenues and profits can be substantially overstated and risks hidden.

For transactions involving asset-backed securitizations, we would recommend the following additional restrictions:

- **Securitized loans must, in aggregate, face the same capital requirements as the underlying loans would face if they were held on financial institutions' balance sheets.** Securitization allows for the dispersal of risk—it does not eliminate it. Therefore, the total capital held against the tranches of a securitization should equal the aggregate capital that would have been held against the underlying loans (had they not been securitized).
- **To reduce risks reported on financial statements or receive regulatory capital relief, securitizations must be sold to true third parties (not to affiliates) and tranches of securitizations must be sold in equal-proportional "slices."** These restrictions would force the establishment of market prices for all tranches, and would make these prices visible to both markets and regulators. They should also

² (Continued from page 3). Additionally, the FASB has proposed revisions to current standards governing the transfer of assets and the consolidation of special-purpose entities (FAS 140 and FIN 46(R)). The change to FAS 140 would eliminate the concept of a "qualifying special purpose entity," which had been critical to securitization. This would apply not only to future QSPs but also to all existing ones, forcing banks to consolidate many formerly off-balance-sheet entities back onto their balance sheets, potentially raising their capital requirements. For a substantive and thorough review of the regulatory issues and specific recommendations that have been suggested, we recommend the following pieces: (1) A Framework for Financial Stability, www.group30.org/pubs/reformreport.pdf. (2) The Road to Reform, issued by CPRMG III in August 2008, www.crmppolicygroup.org/docs/CRMPG-III.pdf and (3) Treasury Outlines Framework for Regulatory Reform, www.treasury.gov/press/releases/tg72.htm.

prevent financial companies from warehousing difficult-to-sell or under-capitalized tranches. Market discipline can only be expected to work if assets are actually sold into the market.

As we discussed in the first paper in our series on effective regulation, and as we will show here in a handful of simplified examples, the regulatory and accounting systems in place today provided significant rewards for complexity. This includes complex structuring of securities, balance sheets, and even financial holding companies themselves. We believe that if proposals such as ours, or proposals that are aimed at removing those incentives, are implemented, much of the complexity that has developed in the financial system will fade. Financial firms may even reorganize so that they are structured along product and client lines rather than according to regulatory distinctions. This would make it easier, in our view, for both markets and regulators to evaluate the health of financial firms, and would reduce the likelihood of a similar crisis.

Illustrative case studies: Detailing the arbitrage opportunities

To better understand how the rules we propose could have affected behavior in the run-up to today's crisis, we provide some illustrative case studies:

Accounting arbitrage

In this illustrative case study, we focus on how financial companies can recognize profits today while deferring the recognition of related losses until tomorrow. This practice can allow financial companies to obscure the true economics of a transaction, and it limits financial statement transparency and encourages poor lending, in our view.

Illustrative case study

- Company A wants to buy a subsidiary from a competitor. To do so, it needs both advice on structuring the transaction and financing in the form of loans.
- The economic profit the financial holding company can earn by providing the combined services is \$5 mn.
- A financial institution that can "split" the transaction—offering advice from its investment banking unit and loans from its commercial banking unit—can appear to generate far higher profits. For example, a financial company can charge \$50 mn for the investment banking services, but rebate \$45 mn by providing the loans needed at below-market interest rates, such that a true mark-to-market on the loan would show a \$45 mn loss.
- The underlying economic result is that the financial institution still earns \$5 mn on the combined transaction, but it can report **revenues** today of \$50 mn.

The bank has two options to show the inflated revenues:

- Hold the loan as an asset on its books at full face value, under "held-to-maturity" accounting. In this case, the financial institution would recognize the \$45 mn loss on the loan only if the loan became non-performing over time.
- Alternatively, hold the loan as an asset under "held-for-sale" accounting. Under these rules, the financial institution would need to show a "temporary impairment" to the value of the loan. This impairment would reduce the value of the loan on the financial institution's balance sheet. But it would not be recorded on the profit-and-loss statement, and thus would not diminish revenues today.

Why does the choice of accounting treatment matter?

It matters because choosing a certain method of accounting can allow the financial institution, within existing regulations, to overstate revenues and understate losses—distorting the underlying economics of a transaction. In this example, the unreported loss inherent in below-market lending allows revenues to be overstated and may not be visible to the investor unless the loan becomes impaired at a later date. This “profits today, losses tomorrow” approach not only obscures the true economics of the transaction, but it also makes financial statements less transparent and strongly incentivizes poor lending practices.

Mark-to-market accounting, on the other hand, ensures that revenues reflect the actual economics of the transaction. Further, mark-to-market accounting ensures that balance sheets are more accurate, making it easier for capital markets to assess risk and provide capital in periods of stress. This compares to the recent past, when concerns about the validity of balance sheets undermined the ability of markets to provide capital, forcing financial institutions to turn instead to governments.

However, this does not imply that mark-to-market accounting is necessary or even appropriate in all circumstances. For simple consumer and small business loans, classic held-to-maturity accounting can provide more stable access to credit for communities, and no less a form of transparent reporting. The key problem arises when lending is either directly or indirectly linked to a broader banking relationship, where off-market loans can distort both the reported economics and lending incentives.

How would our suggestions reduce this arbitrage opportunity?

Forcing the loan to be held in the investment bank would subject it to mark-to-market accounting. In our example, this would force the financial institution to realize both the \$50 mn in fees and the \$45 mn in losses on the loan, at the same time, reducing the net profit to \$5 mn. This would make the income and balance sheet reflect the actual economics of the transaction and would reduce the incentive to make bad loans.

Capital arbitrage

Here we focus on how securitization allows for financial companies to reduce their capital reserves without reducing their risk exposure. We explain how our suggestions would address this arbitrage opportunity when we discuss the ratings arbitrage example next.

Illustrative case study

- When a bank makes a loan, it is required under international standards (Basel standards) to hold a certain amount of capital against the risk of the loan going bad. As we show in Exhibit 1, we assume that the capital “cushion” required for a \$100 loan is \$5.
- However, if the bank securitizes this loan (along with others), and keeps the entire security on its own balance sheet, the same international standards allow the capital cushion to fall to \$4.10 (also illustrated below). Securitization has allowed the bank to reduce its capital by a remarkable 20%—while still holding 100% of the risk. While this example is highly simplified, the problem is quite real. In many cases, the simple act of securitizing loans lowered capital requirements substantially—even though the loans were never sold in a public market.

Exhibit 1: Securitization allows for an approximately 20% reduction in capital held

Tier 1 (min) 8%

Whole loans	Reserve requirement	Risk weighting	Minimum tier 1	Tier 1 allocation	Total capital allocation
Pool of loans	1%	50%	8.0%	4.0%	5.0%
Total					5.0%

RMBS	Split (A)	Risk weighting (B)	Tier 1 capital (C)	Tier 1 capital for the tranche (B * C)	Tier 1 capital allocation (A * B * C)
AAA	75%	20%	8.0%	1.6%	1.2%
AA	10%	20%	8.0%	1.6%	0.2%
A	8%	50%	8.0%	4.0%	0.3%
BBB	5%	100%	8.0%	8.0%	0.4%
Equity*	2%	NA	8.0%	100.0%	2.0%
Total	100%				4.1%

*The BB-rated tranche is considered to be 'residual equity.' It has no risk weighting, but the capital requirement is 100%.

Source: Goldman Sachs Global Investment Research.

Ratings arbitrage

Current regulations surrounding securitization tacitly assume that securitized assets are sold, rather than retained on the originating firm’s balance sheet. The previous example focused on the arbitrage available when an entire securitized asset is held within a financial holding company rather than sold. This next example focuses on the issues that arise when parts, but not all, of a securitized asset are sold.

Illustrative case study

- An asset-backed security is created, consisting of two tranches, each assigned a rating. The lower-rated tranche contains 80% of the risk of the security, while the higher-rated tranche contains 20% of the risk.
- If capital requirements match the underlying risk of the tranches in this securitized asset, no problems should arise. For example, of the total capital held for the loans, 80% of that capital should be associated with the lower-rated tranche and 20% with the higher-rated tranche.
- There is an arbitrage opportunity, however, if the security is designed and rated such that 90% of the capital required is associated with the lower-rated tranche. In this case, the financial company would have very strong incentives to sell the low-rated tranche and keep the highly rated tranche. This would create a situation where the financial institution was left with less capital than would be appropriate to manage the risk—in this case, just half of the appropriate level (10% of the capital versus 20% of the risk).

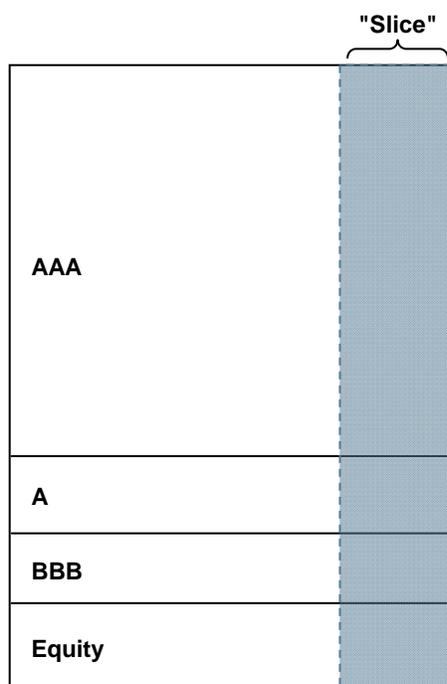
How would we propose to reduce these arbitrage opportunities?

- **Capital should add up.** The simplest way to reduce the capital arbitrage opportunity highlighted above is to require that securitized loans, in aggregate, face the same capital requirements as the underlying loans would face if they were held on financial institutions’ balance sheets. After all, securitization transfers risk—it does not eliminate it. Thus, the underlying capital cushion should not be dramatically reduced.

In the capital arbitrage case study above, the financial institution would be required to hold the full \$5 in capital against 100% of the risk, even if the loan were securitized, unless and until the institution sold part of that risk to a truly independent third party. This would more accurately reflect the true risk on the financial institution’s balance sheet.

- **Securitized assets must be sold to true third parties and tranches of securitized assets must be sold in equal-proportional “slices.”** The easiest way to reduce the ratings arbitrage opportunity outlined above is to allow for regulatory capital relief only when full “slices” of securitized assets are sold to true third parties (not to affiliates). We refer to the sale of a “slice” as the sale of all tranches in proportions relative to their size. See Exhibit 2.

Exhibit 2: A “slice” of the tranches of a securitization



Source: Goldman Sachs Global Investment Research.

Assume that in our ratings arbitrage case study, the low-rated tranche contains 25% of the total dollars associated with the securitized assets. In order to achieve capital relief, a financial firm would need to sell \$3 of the higher-rated tranche for each \$1 of the lower-rated tranche. This requirement may seem too stringent, given that risk was diminished by the sale of a tranche, regardless of what was sold. Yet, although this is true, partial capital relief could easily provide strong incentives to warehouse mispriced risk.

We believe that the rules we propose would strongly encourage underwriters to design securitized assets that would make all tranches attractive for sale. They would further incentivize underwriters not to warehouse the “ugly parts” of securitized assets. This would be likely to bring market discipline back into the process and return securitization to its original intent of reducing hazardous concentrations of risk. At its most basic level, this

rule says, “If something is a loan, treat it as a loan. If it is treated as a security, it needs to be sold and not simply labeled as such.”

Valuation arbitrage

Here we discuss an arbitrage opportunity that does not exist in theory (as it is technically not allowed), but which can occur in practice. If assets are priced differently in different affiliates within a single holding company, and transfers between those affiliates are allowed, then “phantom” profits can be created by changing an asset’s location.

Illustrative case study

- Consider an AAA-rated tranche that a trading desk values at 50 cents on the dollar, based on the desk’s actual ability to sell the asset. Consider that the same asset is valued at 100 cents on the dollar by a structured investment vehicle (SIV) of the same financial company, where valuation is driven by ratings.
- In this case study, there are strong incentives for the investment banking arm to continue to produce more AAA-rated tranches, and to sell them to the SIV, as long as the sale price is between \$0.50 and \$1.00.
- In theory, all parts of a holding company should value the same asset at the same price, and transfers of this type should never produce profits. However, when internal valuation and risk control systems fail to prevent this type of transaction, the potential build-up of risk is tremendous. Collecting risk in the investment bank (rather than shifting it to the SIV) and using trading desk valuations (rather than ratings-based prices) make this type of build-up in risk far less likely, in our view.

How do we propose that this problem be addressed?

We believe that financial holding companies and investment banks, in particular, should be required to have a strong, independent valuation and control group that can require each asset to have a single price, regardless of where it sits within the financial institution. Further, by prohibiting sales between the investment bank that originates securities, on one hand, and affiliates such as SIVs, on the other hand, the potential for building large amounts of this type of risk could be substantially reduced. Further, by making risk move toward the investment bank, where assets are traded rather than held, pricing is likely to become more accurate rather than less.

Conclusions

We believe that regulators and capital market participants are best able to evaluate financial markets when financial firms are required to use similar means to build, mark, and hold risks, and are required to employ the most transparent financial reporting possible. If, instead, firms are allowed to choose which regulatory systems, accounting frameworks, or internal controls suit them, then the likelihood of something going wrong goes up significantly. Although we recognize that the investment banking model is imperfect, we believe that it has the strongest pricing, risk discipline, and transparency of the different models used today. Thus, requiring risk to flow to the investment bank—and remain there unless sold to a true third party—would likely provide the greatest transparency and risk discipline by subjecting the transferred asset to full mark-to-market accounting. This requirement would also likely provide the strongest capital and disclosure requirements.

As we noted earlier, we think that if proposals such as ours or others aimed at removing the incentives to arbitrage the system are implemented, then much of the organizational complexity that has developed in financial holding companies would disappear. We expect that financial firms would be incentivized to reorganize along product and client lines, rather than along regulatory or accounting lines. One possibility for how a financial holding company might organize itself—though clearly not the only one—is as follows:

- A lending bank, funded by deposits and dealing mostly with retail consumers and small- to- medium-sized businesses. Loans made to such clients are best understood in terms of risk to future cash flows rather than market volatility; accordingly, these transactions would be recorded—appropriately—under hold-to-maturity accounting standards.
- An investment bank (or a broker-dealer or a trading company), which would deal with marketable securities and financial services for companies that access public markets for funding, as investors, or both. For these sorts of transactions, market prices are almost always available, and we believe that mark-to-market accounting should be employed. Such accounting provides the most immediate and clear assessment of the health and profitability of the entity.

Such an arrangement, which mirrors how a number of holding companies organize their business relationships today (though not their balance sheets or income statements), would likely make it easier for both market participants and regulators to assess the health and profitability of financial companies. Perhaps even more importantly, if the rules no longer rewarded complexity or allowed the system to be arbitrated, then markets should be able to provide the appropriate rewards for clarity, transparency, and economic value added.



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