

The William Taylor Memorial Lecture

The Credit Crisis: The Quest for Stability and Reform

Presented by

E. Gerald Corrigan

Managing Director

Goldman, Sachs & Co.

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## I. Introduction

Good evening ladies and gentlemen. It is my distinct privilege and honor to, once again, deliver the Bill Taylor Memorial Lecture. Even long after Bill's death, memories of my long association with him remain vivid and, often, they still produce a chuckle as flashes of Bill's sense of humor remain with me. One of the stories I most remember was Bill's colorful description of delivering newspapers as a young boy in Chicago.

Having mentioned Bill's sense of humor, as he looks down on us today from his lofty perch, I am sure he sees nothing humorous about the conditions in credit markets and in the banking system. To the contrary, if Bill were with us, he would be horrified by current conditions. In fact, if he were with us, there is some possibility that his presence might have played a role in containing the breakdown in financial discipline before such excesses became so deeply embedded in the financial system. Unfortunately, however, we are where we are, which begs the question as to how we managed to get ourselves in this mess in the first place. In a proximate sense the answer to that question is simple; namely, it was the housing bubble and all of the excesses associated with the bubble that were the trip-wire for the crisis.

While the bubble was the proximate cause, the underlying causes which built up over a period of years were much more complex. Thus, I will begin with a discussion of those underlying forces as I see them.

## II. Causes and Consequences

First: for several years running, global financial markets had been awash with liquidity. This condition reflected in part the recycling of (1) excess savings from Asia in general and China in particular; and (2) excess cash from energy producing countries. It may also have reflected the phenomenon of an extended earlier period of very low interest rates, especially in the United States. These factors are also reflected in the global economic and financial macroeconomic imbalances that had long been recognized as potential sources of instability. There can be no doubt that ample financial market liquidity and relatively low interest rates were an important driving force behind the pervasive “reach for yield” phenomenon of recent years and that the “reach for yield” phenomenon was, in turn, an important factor in driving the surge in demand for and supply of highly complex structured credit products.

Second: reflecting in part the forces discussed above and the intensity of competitive factors in the financial marketplace, it is clear that credit risk had been mis-priced for some time. The evidence of this is clear in the terms and conditions of credit extensions in the segments of the mortgage markets, in the leveraged finance sector, and in the willingness of market participants to acquire highly leveraged structured credit products whose returns relied on a continuation of benign credit conditions for an extended period of time. More generally, the extraordinary tightness of credit spreads across virtually all classes of credit products was widely seen as unsustainable. In these circumstances, it was recognized that, sooner or later, credit spreads and credit terms would inevitably adjust. However, it was all too easy for many, if not most, market participants to conclude that when the correction took place it would be gradual and orderly. Obviously, that conclusion was wrong.

Third: for a variety of reasons – some structural, some technological and some behavioral – contemporary finance has become incredibly complex. We see this in the speed and complexity of capital flows, we see it in the complexity of many classes of financial instruments (some of which contain significant embedded leverage), and we see it in the extraordinary complexity faced by individual financial institutions in their day-to-day risk management activities and in their policies and practices related to valuation and price verification for some classes of financial instruments. Needless to say, the complexity factor is an issue as it pertains to the capacity of the international community of supervisors and regulators to discharge their responsibilities.

The key issue here is not complexity *per se* but rather the extent to which complexity feeds on itself, thereby, helping to create or magnify contagion risk “hot spots” that may have systematic implications. Thus, we are faced with the pressing need to find better ways to manage and mitigate the risk associated with complexity, a subject that will continue to challenge the best and the brightest among us.

Fourth; on the upside of the cycle, leverage in its many forms clearly was a driving force in creating the market conditions that would trigger the crisis just as the inevitable de-leveraging on the downside of the cycle would severely amplify the magnitude of the crisis. However, recognizing the role of leverage is one thing, while understanding that leverage can take several forms is quite another matter. Leverage may refer to borrowing money to finance the purchase of securities or other financial instruments. It may also refer to so-called embedded leverage associated with some financial products or instruments. Examples of this include investments in subordinated tranches of asset-backed securities or certain classes of holdings of credit default swaps. In the case of these and other instruments, the market exposure is magnified relative to an investment in the underlying instrument and gains and losses are experienced more quickly,

sometimes much more quickly, than in an un-leveraged investment. Thus, the risk of loss to which investors found themselves exposed far exceeded most, if not virtually all, stress scenario modeling they had performed. This is one of the reasons why write downs and provisions have been much greater than virtually all observers anticipated in the early stages of the crisis.

The multiplier effect of embedded leverage may also be compounded. For example, mezzanine tranches of mortgage securitizations (which, themselves, have embedded leverage) were often purchased by CDOs, which, in turn, issued senior and subordinated tranches, creating embedded leverage on leverage in the subordinated pieces. Some of these CDOs in turn found their way into CDOs squared, compounding the leverage even further. Exposures to rising delinquency rates were, as a result, greatly magnified for investors in these instruments. On certain occasions, these highly leveraged CDO-related instruments were acquired by various forms of investment vehicles that were themselves highly leveraged. In other words, we have seen many examples in which both balance sheet leverage and embedded leverage were compounded by a “stacking” of leverage on leverage.

Finally; reflecting in part the forces described above, the current crisis has witnessed patterns of contagion the speed and reach of which are different in degree, if not kind, from that which we have witnessed in earlier periods of financial instability. To a considerable extent, the “hot spots” where contagion forces have emerged share at least three common denominators: (1) the contraction in market liquidity, which has been largely driven by a huge shift from risk-taking to risk-aversion, was itself driven by the fear of the unknown and a limited ability to anticipate with confidence the sensitivity to loss in many financial instruments; (2) greater leverage in balance sheet terms and in the use of off-balance sheet vehicles and the presence of embedded leverage in certain classes of financial instruments; and (3) risk mitigation

cushions which were either too thin or were at least partially neutralized by basis risk developments.

In August of this year, the duration of the crisis had crossed the one year mark in a setting in which many observers sensed that while further problems and write-downs were still in the pipeline the worst of the adversity might be largely behind us. Obviously, that wishful thinking was quickly shattered as the events of September were to unleash a chain reaction of financial train wrecks the likes of which far exceeded our wildest imagination of a worst case scenario. Needless to say, this turn of events has resulted in financial and human dislocations of monumental proportions and has substantially elevated the risks of recession in the U.S. and elsewhere despite massive governmental and central bank intervention.

All of this raises the very fundamental question as to what were the forces that triggered this violent collapse in confidence in financial institutions and financial markets in recent weeks? In my judgment, the underlying causes of this collapse in confidence lies in the fact that on Wall Street and Main Street institutional and individual investors lost confidence in financial reporting and loss recognition at financial institutions on a broad scale. The resulting phenomenon of extreme risk aversion has produced the very result I and others have feared for decades; namely, gridlock in financial markets and in the financial intermediation process generally.

Before turning to what we can do to remedy this situation and build a much more secure and stable financial environment for the future, allow me to discuss briefly the dynamics of the forces that produce financial market gridlock.

## The Dynamics of Financial Gridlock

To put the phenomenon of financial market gridlock in perspective we must understand how financial institutions behave in an environment characterized by the uncertainty and fear that we are witnessing today. Let me cite a couple of illustrations. First; it is quite natural and rational that individual institutions will go to great lengths to protect themselves against counterparty credit risk. Thus, institutions on a broad scale will strive to obtain (1) higher initial margin; (2) greater and/or higher credit quality collateral coverage (ideally in cash); and (3) larger haircuts on various types of short term secured credit facilities. I might also add that central banks behave in a broadly similar fashion in that they too will require larger haircuts on secured lending facilities especially as they broaden the definition of acceptable collateral. While this behavior is perfectly understandable at the level of the individual institution, for the financial system as a whole it contributes to gridlock especially when we recognize that any point in time the amount of high quality collateral in the system is finite.

Second; in the current environment and especially in the wake of Bear Stearns, Lehman and AIG, individual institutions have substantially increased their excess liquidity holdings typically in the form of wholly unencumbered government securities. In the aggregate, the increase in such liquidity reserves is a very large number. Obviously, substantially higher liquidity reserves in the current environment are both appropriate and necessary but increases in such liquidity reserves also tend to “lock-up” incremental amounts of liquidity.

While I could cite still either examples (e.g., the demand for cash by hedge funds to finance large investor redemptions in the period immediately ahead) the point I am seeking to make should be clear; namely, rational actions at the micro level can produce results at the macro level which impair the workings of credit markets and the financial intermediation process

generally. Looked in this light we should not be entirely surprised by the huge amounts of central bank liquidity that has been absorbed by the global financial system over the past 14 months.

### Stabilization and Recovery: Short-Run Priorities

Let me now turn to some observations regarding the agenda for stabilization and recovery. For starters, we must keep in mind that the restoration of confidence is a delicate process in which great care must be exercised. For example, we must guard against changes in accounting practices that might reinforce doubts – if not outright skepticism – about financial reporting and loss recognition that are at the heart of the crisis in confidence. With that word of caution in mind, I believe that the agenda for stabilization and recovery should include the following:

First, the international community of central banks should extend the maturity of some or all of their liquidity facilities to 365 days. Such a move, by itself, will not reverse the gridlock I spoke of earlier but it will provide greater certainty in the availability of funding over a longer period of time which clearly will work in the right direction in helping to relieve the financial log jam.

Second; the Treasury must move with all deliberate speed in order to implement the the mortgage-related initial stages of TARP. I am confident that this initiative will provide clear benefits in terms of enhanced liquidity and price discovery in mortgage markets. The details for reverse auctions and related matters are challenging but are clearly manageable particularly given the contemplated role of the private sector in the implementation of the plan.

Third; across the community of nations, governments must stand ready to promptly provide capital infusions into going concern financial institutions in order to supplement private capital. It now appears that there is something approaching an international consensus on this point even if, appropriately, the specifics will differ from country to country. For example, in the United States, a meaningful fraction of TARP resources should be used for this purpose.

Being realistic, we must also recognize that there may be financial institutions that are deemed to no longer be viable. To the extent that occurs, the official community must be resourceful and creative in forging case-by-case resolutions that do not protect shareholders but – in the current environment – do protect depositors and other creditors as well.

Fourth, we must re-double efforts to implement a family of measures that will restore confidence in critical segments of the marketplace with special emphasis on the credit default swap market. Here, I can report that significant progress is being made and that a number of initiatives are proceeding on a fast track. Let me cite two powerful examples:

- Over the last several months trade compression and netting initiatives have reduced the notional amount of CDS index trades from \$30 trillion to about \$16 trillion and aggressive efforts are now underway to further reduce the notional amounts of both index and single name trades in the period immediately ahead.
- Thanks in no small way to the leadership of the New York Fed, it now appears that the initial operations of a global clearing house for credit default

swaps will take place next month starting with index traders and extending to single name trades in early January.

Finally; while I am mindful that pressures on budget deficits in the U.S. and elsewhere are very real, the economic outlook has deteriorated to the point where additional fiscal stimulus must be on the table. In other words, the priority must be to mitigate the risk of a major and prolonged downturn in the economy – an event that would itself raise havoc on the budgetary outlook.

### Reform and Rehabilitation

As market conditions begin to stabilize – which they will – our efforts must turn to the long and difficult task of reform and rehabilitation across the financial system. That task will be formidable in substance and it will have a major political overlay given all that has gone wrong and the extent to which taxpayer money is being used to manage the crisis. Clearly, neither I nor this audience have the time to discuss the full agenda for reform and rehabilitation but I do want to briefly highlight the main thrust of the Report of the CRMPG III which, as most of you know, was published on August 6. Among other things that Report calls for the following:

- Under US GAAP most, if not virtually all, off balance sheet securitization and related vehicles will, overtime, be consolidated onto the balance sheets of their sponsors. While this eventuality is not likely to have a major impact on risk-based capital charges such as Basel II, it will have a major impact on leverage ratios once the changes in accounting rules begin to take effect late next year or early in 2010.

- The Report recommends a comprehensive and rigorous new framework of policies, procedures, standards and disclosure requirements regarding primary and secondary market activities in the marketplace for “high-risk complex financial instruments.” I will not be at all saddened or surprised if, as a result of these recommendations, some of the most toxic structured credit products literally disappear from the financial landscape.
  
- The Report contains 44 Recommendations and five “Core Precepts” aimed at enhancements in risk monitoring and risk management, all of which are written in a manner that will require ongoing accountability on the part of senior management, boards of directors and supervisory bodies.
  
- The Report also contains 23 Recommendations – many of which have timetables for implementation – regarding measures to “enhance credit market resiliency.” In all cases these recommendations can be implemented only by concerted industry-wide initiative supported and encouraged by the official community. This subject matter is extraordinarily complex and will require a substantial commitment of resources even in the face of evident pressures on the bottom line at financial institutions. As I noted earlier, substantial progress in implementing these recommendation is being made but much remains to be done.

The unifying theme of CRMPG III is, of course, containing systemic risk, a responsibility all of us share. CRMPG III is neither the first nor the last word on this subject but in combination with other initiatives from the private and public sectors we are capable of building a stronger, safer and more efficient system of financial intermediation. I can think of no greater tribute to the

memory of Bill Taylor than for all of us to muster the energy, the commitment and the sense of purpose to get on with this critical effort in which all of us have a compelling common interest.

Thank you.

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