



# “Life after Stress Testing: Adapting FX to the New Financial Services Environment”

Excerpts from the keynote address presented by Richard Mahoney, Chair, Foreign Exchange Committee, at Forex Network New York 2009, a conference sponsored by *Profit & Loss Magazine*, New York City, June 3, 2009.

## Introduction

I'd like to express my personal congratulations to everyone at *Profit & Loss* on reaching your tenth anniversary. Ours is a business that thrives on information, and publications like *P&L* are an indispensable part of our media mosaic. These are tough times for the news industry, and I want to assure the team at *Profit & Loss* that we never take our financial news providers for granted.

Walking through lower Manhattan on my way here this morning, I couldn't help reflecting on how much the world has changed during the past eight years. It would be an understatement to say that much of that period has been a stressful time—indeed, “stress testing” has become as much a part of our vocabulary as “9/11.”

My thesis today is that our foreign exchange market has, in fact, been stress tested—and has passed with flying colors. I'll talk a little bit about the institutional arrangements that enabled us to successfully handle stress testing, with special emphasis on an institution I know well—the New York Fed. I'll touch on lessons learned and the shape of things to come.

## Interesting Times for Risk Management

Any discussion of the work done by the New York Fed's Foreign Exchange Committee during these—as the Chinese say, *interesting* times—must begin with the notion of risk. Even before we heard the names Jérôme Kerviel and Bernie Madoff and learned the fate of Bear Stearns and Lehman Brothers, the world's public and private sectors were grappling with a series of distinct but related challenges, all of them carrying the label “risk”: financial system risk, economic risk, inflation and inflationary expectations risk, currency risk, moral hazard risk, and perhaps policy independence risk.

At the Foreign Exchange Committee, we had been examining the toxic mix of these risks and their impact on the foreign exchange market. Then as the events of 2008 unfolded, the tenor of our work changed from deliberations to crisis management.

## The Foreign Exchange Committee – Structure and Function

To understand how the Committee responded to this challenge, it's helpful to first understand the Committee's basic structure and function. The Committee was established thirty years ago as an independent body under the sponsorship of the Federal Reserve Bank of New York. It serves as a forum to facilitate communication between the markets and the Federal Reserve System and, where appropriate, official institutions in the United States and abroad. The Committee focuses on improving risk management practices as well as develops recommendations and issues papers on related topics.

Basically, the Foreign Exchange Committee can have up to thirty members, with responsibility for inviting members to serve resting with the Federal Reserve Bank of New York. Institutions represented on the Committee are chosen with consideration of their participation in the North American FX market and their size and general importance. Individuals are considered based on their role, market stature, and commitment to the industry, as well as on their ability to speak for their institutions. The Committee is made up of New York City-based banks, other U.S. banks, foreign banks, investment banks and other dealers, intermediaries, and the New York Fed. Member terms are typically four calendar years. The Committee also has a Membership Subcommittee; other work streams are organized on an ad hoc basis. The Foreign Exchange Committee has a formal



document of organization, which you can find on our website [<http://www.newyorkfed.org/FXC/>]. There, you'll also find listings of past and present membership, publications, and annual reports.

It's important to note that the Committee is not a rule-setting body. Everything we publish is presented as recommended best practices or guidelines.

By and large, the FX market has fared well over the past eight years compared with some other markets—in fact, it has performed well in this country over the last twenty years. The Committee's success in contributing to the stability of our market can be traced back to the Federal Reserve Bank of New York's insight in organizing the original Committee as a broadly diversified mix of institutions.

## Transcending Roles to Cooperate in the Public Interest

In our relationships with one another, we're sometimes clients, almost always counterparties, and invariably competitors. Getting a group of banks to transcend their natural stakeholders—clients, shareholders, employees, and so on—and cooperate in the public interest is a fairly unique accomplishment. The Committee's work to ensure that we have a smoothly functioning marketplace has been battle tested—stress tested, if you will—over the last eighteen months, but it's the product of a process that's been under way for years.

The success of the Committee's work is a credit not just to the men and women who sit as members, but also to the associated professionals within our own institutions whose input we seek across a wide range of issues. Depending on the kind of advice we need or the issues we're investigating, we can bring together groups of risk managers, lawyers, or compliance officers from our respective banks. Normally, people in these positions wouldn't have an opportunity to collaborate across institutions on an industry-wide basis. Providing that opportunity has proved to be a tremendously successful Committee initiative.

Also important to the Committee's work is the input we receive from two standing working

groups: the Operations Managers Working Group and the Chief Dealers Working Group. We also collaborate with the Financial Markets Lawyers Group.

Combining the long and short perspectives, what we've been doing for the past fifteen years proved to be enormously helpful as we shifted to a crisis management mode in the days following the Bear Stearns events.

## The Committee's Role in Crisis Management

You all know the crisis management timeline: what started out as a rapid expansion of alpha trading strategies and leverage during the run up to the bursting of the housing bubble became a financial crisis, and the financial crisis morphed into a global economic crisis. These events were followed by the even more urgent concern that further destabilization could lead to social or geopolitical crises.

The impact of these events on the Committee was considerable to say the least. Generally, our role, and how we advise the Fed, are determined in response to how the world is evolving and what the implications of that evolution are for market functioning, policy, transparency, and risk, as well as for end-user efficiency.

In the wake of last year's events, our working groups have focused on various dimensions of the global financial crisis. These groups have been looking at risk management, in particular, "what went wrong" last year, the as-yet unaddressed broader issue of systemic risk, and the market's increased focus on counterparty risk. Systemic risk is the risk that one market participant's failure to meet its required obligations will prevent other participants or financial institutions from meeting theirs. Last autumn, this type of risk became intertwined with a particularly malevolent strain of reputational risk—the impact of negative public opinion on capital and liquidity. These are inter-related topics, but mitigation techniques point to the possibility of new market structures.

We are also looking at the Committee itself, and how we functioned during the crisis. As I mentioned earlier, the Foreign Exchange Committee is an advisory group to the New York



Fed. We're not a crisis management group. But we found ourselves doing that last year. An advisory group in the private sector can do only a limited amount of crisis management. So we're always asking ourselves how we can communicate more effectively with the market—and in an appropriate manner. On the latter score, I will note that, to guard against anti-trust considerations, we have a Federal Reserve lawyer present anytime we meet, whether physically or by conference call.

## Global Financial Markets in the Aftermath of the Crisis

In terms of broad market outcomes, two of the most probable implications of the financial crisis are the need for increased capital in the financial system and the need for increased supervision of financial system participants. Whether that supervision takes the form of new regulation, broader regulation, consistent regulation, or better adherence to existing regulation isn't certain at this point—but we will see more supervision. Our FX market will perform well under this increased scrutiny.

Despite the current economic climate, the trends of cross-border investment, diversification across asset classes, and channel and platform evolution will continue. Nondealers will continue to make up a significant part of these markets—smaller commercial and investment banks, mutual and pension funds, central banks and sovereign funds, insurance companies and corporates, wealth managers, and hedge funds. Transparency and resiliency are important to mitigating systemic risk, so we are seeing movement toward centralized exchanges and clearing. The repositioning of classic mid- and back-office functions—trade affirmation and confirmation, settlement and reconciliation, pricing and valuation, collateral and trade lifecycle management—is likely to have a significant impact on market structure and business models. These trends, against a backdrop of continued technological and regulatory evolution, foreshadow major changes in the global financial markets.

The benefits of the shift to central counterparties—transparency, risk mutualization, and

efficiency through netting—will compel some markets and asset classes to move in this direction. How this will impact the foreign exchange market is unclear at the moment.

## Lessons Learned from the Financial Crisis

The need for standardized documentation is one of the major crisis management lessons learned from the meltdown. It's difficult to unwind or replace trades if documentation isn't uniform. A hidden benefit from standardization of documentation is that it makes negotiation much easier. If everyone put the same language on the back of barrier option confirmations, for example, disagreement over what constitutes a barrier breach would be virtually eliminated.

Other examples of important standardization include ISDA documentation terms associated with defaults—what constitutes an event of default and what actions one would take in a closeout. Consensus on those terms is important. The more we can encourage consistency, the more predictable the outcomes will be in a crisis. This in itself is a risk mitigant.

Counterparty risk is a topic that deserves special attention, because it's become a matter of such acute concern. And no wonder: the credit crisis triggered huge liquidity concerns and was accompanied by two spectacularly large instances of fraud. Everyone wants to know more about their counterparty; rogue trading and fraudulent portfolio management are just as alarming to investors as evaporating collateral and a credit crunch. We've learned that liquidity is neither infinite nor free, and business models are being rethought.

## The Future: What Lies Ahead

I'll shift to a preview of where I see our market heading and what we foresee down the road in terms of regulatory changes; I'll also offer some thoughts on the aspects of our market that will endure once all the dust from the meltdown events has settled.



## Market Outlook

Let's look at the market first. I think FX volumes have stabilized at lower levels. The world has deleveraged, and by that I'm referring to the world in all aspects—algorithmic traders, retail traders, or just cross-border trade and finance professionals. Global equity indexes were down about 40 percent last year and down another 10 to 15 percent during the first quarter, before they rebounded in the past two months. Those declines are reflected in the net asset values of global funds, so the FX transactions needed to hedge the exposures may be down 40 to 50 percent across those market segments.

Global equity markets will recover, but slowly. We probably will not see the leverage in the markets either at the high end—at the institutional level—or at the low end—at the retail level—that we saw in 2006 and 2007. Global GDP growth is likely to be negative in 2009, so I don't see a quick reversal or an uptick in global FX volumes. The markets will recover eventually.

What about structural changes? The rise of hedge funds has been a dominant theme in institutional investing for the past several years. The hedge fund industry's prime broker model is evolving rapidly. Two years ago, as much as two-thirds of the prime brokerage market was dominated by three firms, with a larger number of firms operating on the market's periphery. The world seems to be evolving toward a multi-prime rather than a single-prime broker model, with collateral perhaps being segregated at a third party. I would expect to see a resurgence in interest in foreign exchange prime brokerage. Sophisticated collateral management will become important to all participants. Concerns over collateral ownership in bankruptcy and segregation of collateral suggest that a different business model from the one we had in prime brokerage twelve months ago is now desirable.

And how will evolving market conditions and market structures impact the work of our Committee? As I mentioned, keeping the New York Fed abreast of market conditions is one of our key functions, and the collection of timely and accurate data for trend analysis will be a major area of focus.

One of the areas we're especially interested in is liquidity, particularly in the forward FX market

beyond three months. However, it's difficult to collect the data; we're already asking operations managers to amass a fairly onerous amount as it is. Still, we do discuss our empirical observations, as well as general issues about liquidity and the depth and breadth of the market at different times during the global dealing day.

Some issues are parochial and will surface only when an incident occurs. For example, the Gulf countries and EBS and Reuters now post rates for major currencies on Saturday. The existence of a 24/7 platform implies a 24/7 market. But can you really trigger a barrier option on a Saturday afternoon? There may be differences of opinion about what critical mass of activity warrants barrier breach, or what happens when one platform deals at one rate and another platform doesn't. Liquidity fragmentation brings its own set of challenges for the market. Market and platform evolution will rule out a "one-size-fits-all" approach.

Given all the turmoil in recent months, the FX market has been amazingly efficient and has served a broad constituency very well—although everything could change if bank capital requirements argue for different prices based on counterparty credit quality or the mechanics of settling the trade. Retail foreign exchange is undergoing rapid transformation; post-crisis regulatory change is likely, and the intersection of advanced trading platforms, dark pools of liquidity, and path-dependent options is certain to have important ramifications.

Dialogue is essential to our ability to meet these challenges, and our Committee has initiatives under way with similar groups around the world, such as the Joint Standing Committee in the United Kingdom, the Foreign Exchange Contact Group of the European Central Bank, the Canadian Foreign Exchange Committee, the Tokyo Foreign Exchange Market Committee, the Treasury Markets Association of Hong Kong, the Singapore Foreign Exchange Market Committee, and the Australian Foreign Exchange Committee. These interactions are ongoing and focused on gathering timelier and more accurate FX trend analysis data.

The adaptability and resiliency of our market may give us a measure of insulation from the credit, leverage, liquidity, and risk management



issues that have roiled other markets. But we must recognize that we're in the midst of fundamental changes to the structure of the global financial landscape. Key to our adaptability and resilience has been the commitment of public and private FX leaders to embrace and accommodate change in a manner consistent with transparency and market integrity.

### **The Role of the Individual**

We live in a world of advanced technology—indeed, much of the discussion at today's conference will address the role of technology in our market. Allow me to close with a word on the importance of people to our business. One of our industry's success stories last year was the extent to which settlement through CLS was executed smoothly during the collapse of Lehman and Bear Stearns. Credit for much of that success belongs to the senior credit officers who cleared the transactions for those two institutions.

Our market is an amalgamation of private institutions, each making individual risk decisions. Different institutions might have different views on any one of these topics, so the concept of trying to move the entire industry toward consensus is

fragile. In any areas where these new developments are occurring, there will be winners and losers. Some people will perceive developments as threats to their business model, others will see a competitive advantage—there are bound to be differences of opinion. We have to be careful in areas such as documentation to recognize what we have in common without denying what makes us different as market participants.

### **Conclusion**

I'd like to close with some personal thoughts. Trading vocations are often described with martial analogies—courage and daring, for example. In the Samurai Bushido Code (the warrior code of the samurai), the brother of valor is rectitude—the power to decide on a course of conduct with reason, and without wavering. It's related to the Japanese *giri*—or duty—that individuals owe to their families, their employers, and society at large. Compensation may be a way of keeping score, but it speaks little about the values that matter—veracity, justice, and sincerity. Adhere to these values, and be proud of your market, your profession, and your employer.