"All Hands On Deck": Your Financial Services Organization Can Survive The Storm

By Carlos Morales

Executive Summary:

Similar to a supertanker that goes aground, the financial services industry and the economy came to a sudden stop in September '08. The focus of this article is presenting basic circumstances that anticipated the crisis, **early warning signals** that were overlooked. Capitalizing from this experience and building for the near future, the article points out the requirements in **size** and **shape** that financial institutions should have today to face the new wave of financial pressures that will affect the financial performance. Readers will receive a practical navigation chart with strategic actions to weather the stormy conditions that arrived during 2009 **and will continue in 2010**.

Oil-supertanker crews are trained to make "quick turns" within a 10 mile radius and "sudden stops" in about an hour. The absence of maneuverability and responsiveness is obvious. What may be less obvious, however, is the extensive preparation required before lifting anchor. Prior to leaving the harbor, the crew must efficiently execute a time tested checklist relying upon rigorous training to ensure a safe, timely and successful voyage. With dedicated preparation, the supertanker will arrive at its destination whether the voyage goes according to plan or more importantly even if it does not.

The global economy has not gone according to plan. No one thought that a meltdown of this scale could ever happen. Each day we learn of difficulties and turmoil in different industries and economic sectors. Like the oil-supertanker, the unwieldy global economy is in need of steady hands at the helm. The crew responsible for the financial services industry, *the epicenter of the meltdown*, were caught unprepared and definitely off-course. In pursuit of quick profits and bonuses, the mutinous crew abandoned time tested checklists and critical procedures, assuming excessive risk which spread throughout the globe running aground in the global economic meltdown.

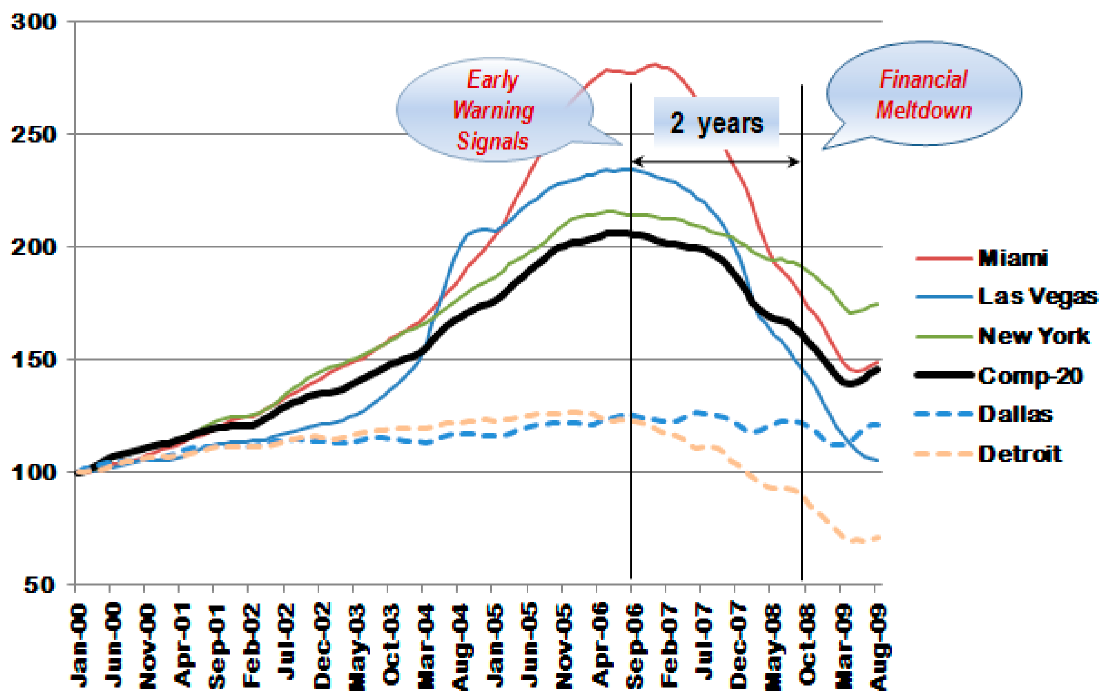
Without the sophistication of econometric models or predictive analytics, I'll identify elements that will help create the new navigation plan to survive this and other coming storms.

Lending 101, Page 1.

Without much effort, I remember plain lessons learned many years ago during my Loan Officer training at *Citibank*. Three basic elements must be considered for safe and prudent lending: 1) Understand in detail the debtor's cash flow which provides the *First Way-Out* of the loan; 2) Secure adequate margin (LTV - Loan to Value ratio) because it could become the *Second Way-Out*; 3) Never lend based on a Second Way-Out. These were classic rules dictated by the Credit Policy Book and strictly enforced at all Citi units around the world. If any factor negatively affected the quality of a loan portfolio, a strict procedure named *Rapid Portfolio Review* dictated steps for handling the emergency. During my tenure within the World Corporate Group (WCG) managing large multinational commercial accounts, I witnessed how consistent the process was in Tokyo, Zurich, Paris, Sao Paulo, Bogota and Atlanta, GA or Kalamazoo, MI. In other words, the supertanker crews were identically trained to make quick turns and sudden stops regardless of their coordinates in global financial waters. These time-tested rules are not "rocket science". All financial institutions have similar guidelines in their lending procedures. The broad size of the crisis, however, makes it clear that such fundamental rules existed, but were knowingly ignored.

Could euphoria cloud your vision?

The euphoria generated by the irrational growth in the stock market and housing prices clouded vision around 2006. The Dow reported a 54% increase during the previous 40 months (from 7,500 in Oct-02 to 11,600 May-06) and the S&P Case-Shiller Index (Home Prices CS Index) indicated a 54% steady increase during the same period (from 133 in Oct-02 to 205 in May-06). The economy was driven by excessive personal consumption, fueled by easily accessible and low cost real estate financing as well as unrealized gains in stocks. The economy was at full throttle, but some warning signals went unnoticed: In September 2006 the CS index indicated a negative trend at sixteen of the twenty major metro areas. The ecstasy of the unrealistic and unsustainable boom times clouded vision and led to perceptions that the economy was just accommodating while the big bubble in the radar was overlooked. The material decrease in real estate was an *Early Warning Signal* that should have triggered *Rapid Portfolio Reviews* (from private or public initiative led by banning regulators) and more conservative mortgage lending should have been immediately implemented.



Such actions may not have stopped the crisis but at least they would have reduced the size and timing of its consequences. It is important to note that Sep-06 is still <u>2 years</u> before the financial meltdown.

Following leading indicators and foreseeing the impact on the economy, the Administration and the Congress are discussing if Officer Tim or Officer Ben should be the whistle blower of systemic risk[1]. While political forces slowly reach an agreement, there is no excuse to delay. Improvement in analyzing and understanding leading indicators

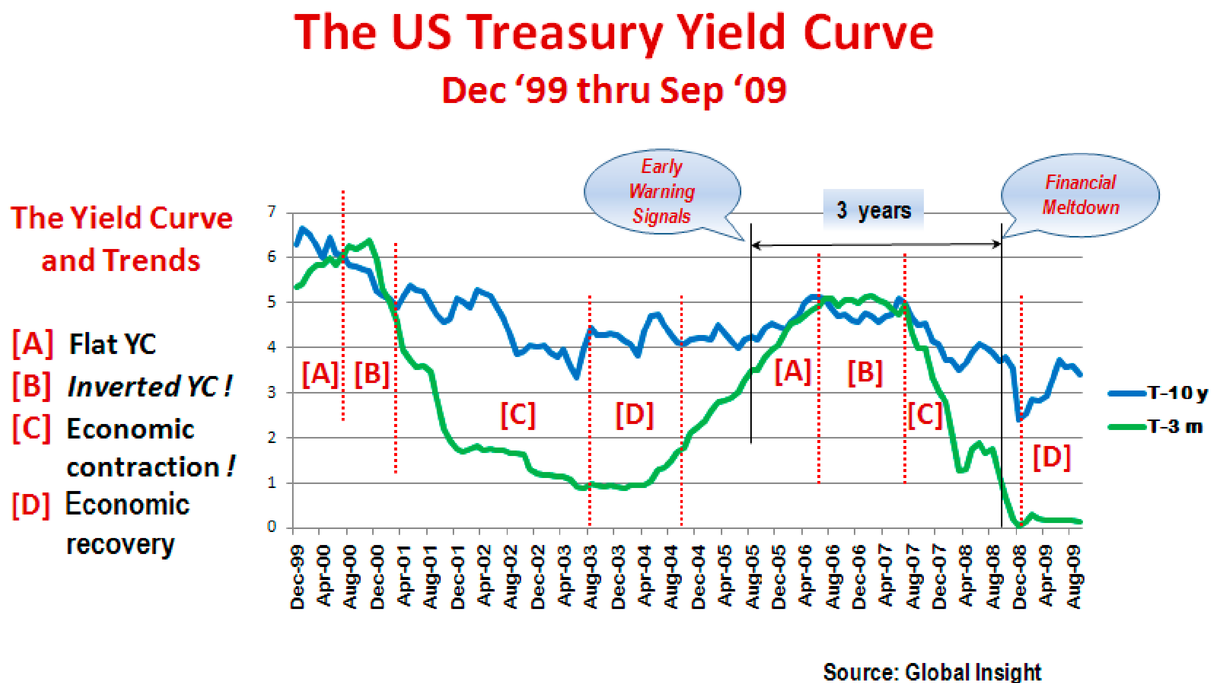
[1] New York Times. An Early-Warning System, Run by the Fed. By Alan Blinder, July 25, 2009.

must begin now. USA Today, in partnership with Global Insight, offers monthly publications tracking 11 major indexes, we should use these Economics 101 indices to better understand our own business.

Where there is smoke there is fire.

The rate paid by the **US Treasury** across all maturities, from 1 month to 30 years, is represented by the yield curve. Both extremes (the 30 day and the 10 year) are major drivers of deposit and mortgage rates. Others like the **Federal Funds Rate** (overnight) and **Libor** (global interbank rates up to one year) are also drivers of the major financial products. The Treasury curve also becomes a leading indicator of economic health and every banker should understand and keep track of the Treasury Curve dynamics. Community banks often fail to consider these rates in their funding and pricing decisions as well as in forecasting techniques. This is a bad practice that makes interest rate risk analysis very difficult.

Beginning early 2004, the yield curve gradually flattened over the next two years (the 3 month rate gradually increased until it reached the 10 year rate). This change in curve shape continued until the yield curve became inverted for one year starting in Jun-06.



Despite the clear indication of a financial stress in the whole system the bad lending practices continued. While the smoke was perceived as early as 2004, the fire wasn't seen until June 2005. What a late response from the Fire Rescue Services! Now the whole town is in flames. As recently as 1999 and 2000, the yield curve also flattened and inverted, forewarning of the 2001 economic slowdown. Unfortunately, times past are times forgotten. Anticipating another foreseeable crisis, banks and regulators should have taken actions to prevent the mortgage crisis and now the unfolding consumer and commercial lending failures we see today. Let me note that September 2005 is still three years before the financial meltdown.

Solid rocks may crumble.

Ignoring warning signs and irrationally confident in inflated asset values, the global financial institutions demanded loan volume provided by securitization of subprime mortgages. During early 2007, subprime mortgages accounted

for 20% (about $1.3 trillion) of the U.S. home loan market[2]. On a quest to offer higher rates in a low rate environment, mutual fund companies created large subprime mortgage investment portfolios. The higher rates were based largely on the "investment grade rating" provided by rating agencies. These shoddily underwritten financial structures also were christened with enticing names such as the "High Grade Structured Credit Strategies Enhanced Leverage Fund" managed by the prestigious Bear Stearns. [3] Pseudo sophistication distorted the fundamentals. While ***subprime*** were loans to borrowers with low FICO, high LTV ratios, and/or misleading documentation, model assumptions and rating practices embedded only basic risk[4]. Not only had the loan underwriters veered disastrously from fundamental banking standards, but then the credit rating agencies' failed to detect and report the actual substandard quality. Their evaluations seriously misjudged the underlying creditworthiness and probability of default. Investment grade ratings, perceived as solid as rock, became appropriately devalued, teaching one of the cruelest lessons of the crisis. It wasn't until Jul-07 that rating agencies woke up and began to downgrade subprime mortgage backed bonds (the beginning of the toxic assets), which became the flashpoint for the subsequent credit freeze. By Q2-2008 rating agencies had lowered ratings on $1.9 trillion in MBS, infecting the whole investment side of the global economy. I still wonder where was the **Page 1 of Lending 101?**

On main street, consumers and community financial institutions bought into the collective euphoria of the "financing-spending" spiral. Meanwhile the big players (global banks, pension funds, insurance companies and rating agencies), in synch with one another, played a different side of the game. Distorted by self-enriching compensation plans that rewarded short term gains, the big players willingly overlooked the huge risk involved. Very basic indicators (home prices and the yield curve trend) warned well in advance that a major crash was approaching.

"THE CRASH"

During early 2009 we had an ***all-crew shift***. Commander Bush passed the whistle to Commander Obama and down the ladder Secretary Paulson passed the depleted checkbook to Secretary Geithner. Meanwhile Speaker Pelosi redefined the legislative agenda under the Democrats' continuing control. We were lucky to have Chairman Bernanke at the helm of the Fed while crossing the bridge over troubled waters. "Essays on the Great Depression", [Princeton University Press, 2004] authored by Bernanke, provided valuable insights to alert Congress and the government about the implication of the crisis. This important text also provided abundant ideas to help manage the crisis but not enough to prevent or reduce its impact.

In September 2008 remarkable events changed the face of Wall Street, Main Street and *Your Street*. The historically well structured US financial system that provides liquidity to the global economy came to a sudden stop.

September 7 - New facts in the housing and mortgage market brought Insolvency to Fannie Mae and Freddie Mac, which were taken over by US Treasury.

September 12 – US Treasury refused to launch the lifeboat for Lehman Brothers, which later filed for bankruptcy and headed toward liquidation.

September 14 - In a shot-gun wedding arranged by the government, Merrill Lynch was quickly acquired by Bank of America. We are still discussing the consequences of such a quick wedding and even who was holding the gun.

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[2] MSN – Will Subprime mess ripple through economy? http://www.msnbc.msn.com/id/17584725
[3] To laugh while learning, watch this 9 minute video. The site has had about a million clicks. http://www.youtube.com/watch?v=mzJmTCYmo9g
[4] Under the subtitle "Inaccurate credit ratings" find a brief but clear description of the destructive role played by rating agencies. http://en.wikipedia.org/wiki/Subprime_mortgage_crisis

September 17 - The Reserve Primary Fund "Broke the Buck" (when the net value of the fund sunk below $1)[5] when it faced the withdrawal of 66% of the fund balance. In the Money Market arena liquidity and security could no longer be assumed. The yield on short-term Treasury bills dipped below zero[6]; there were no alternative safe places to keep money except on deposit with the US Treasury.

September 17 – The Fed threw an $85 billion lifeline to AIG, the largest provider of esoteric financial insurance contracts such as credit default swaps. Several subsequent costly injections have failed to solve the problem.

The supertanker had run aground. Navigation became impossible due to lack of liquidity (and confidence) that spread quickly all around. This demonstrated that a new chapter in finance has arrived. More than we would expect, risks are global today and closely linked.

By pumping billions of taxpayer and borrowed dollars into the economy, some perceive that the crisis would be contained. The statistics show nearly seven million people unemployed, three million foreclosures and other hard to digest facts at the personal, community and institutional levels. Despite the Dow Jones surpassing 10,000 points, we need to fix the wreckage and prepare to continue the voyage.

"PREPARE TO SET SAIL"

Our institutions have undergone major changes in ***size and shape*** which may prevent us from having a safe ride under current and coming conditions.

Size refers to two different situations. Based upon Fair Value Accounting, adjustments were made to financial statements of the institutions with toxic assets (mostly the big and mid size players). The impact has already been seen in net income and equity. The second size consideration is the evolving deterioration of consumer and commercial loans caused by high unemployment, a frozen real estate market and an economic slowdown. These events are slowly unfolding and the effects will be seen gradually during 2009 and 2010[7]. In fact the Stress Tests run by the government forecasts drastic assumptions in all loan portfolio defaults until 2010[8].

Shape refers to the financial terms of different portfolios (investments, loans, deposits and borrowings). The current artificially low rate environment affects the way banks set their product prices. In this environment, bank customers and credit union members are locking in long-term mortgages at fixed rates while opting for the flexibility offered by shorter term deposits. In financial terms, the duration of some loan portfolios are changing from short to long just as some deposit portfolios are changing from intermediate to short. Although evolving market conditions are demanding flexibility, the adjusted ***shape*** is causing a loss of balance sheet agility.

When the economy starts recovering, there will be a need for secure investment alternatives. For instance, commercial paper offered by companies that survived the crisis and/or reshaped their business models will displace the near zero rate that Treasury is offering. Treasury will continue requiring significant resources to fund the trillion-plus dollars that it's pumping into the economy. Because of Treasury's voracious appetite and the actions of the big players, rates must eventually rise. An inflationary environment will result from the economic recovery and pressure for higher interest rates. Inflation is a very broad phenomenon that is hard to contain if not acted upon in a timely manner. Strong but flexible structures will be required to continue a safe voyage. The disappearance of quick securitization now requires funding as in the old days based on real deposits.

There is much speculation about when the Fed will start increasing the discount rate to prevent or control inflation. Senior economists on Wall Street surveyed by The Wall Street Journal and Fed officials are divided into

[5] WSJ described the situation. http://online.wsj.com/article/SB122169845959750475.html
[6] Forbes. http://www.forbes.com/2008/09/17/treasuries-yields-panic-markets-bonds-cz_do_0917markets29.html
[7] The McKinsey Quarterly – What's next for US banks. June 2009.
[8] From the Federal Reserve: http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20090424a1.pdf

two schools of thought[9]: one group believes that the current increase in long-term rates is a clear sign of recovery and the Fed must act now and the other group believes the Fed must delay any rate increase to further help the economic recovery. Only time will tell which group is correct.

Take the Crew Back to the Simulator

What's the implication for the financial community? The lessons learned typically are reported in newspapers, business magazines, trade journals and blogs. But that's a hard to digest amount of information to convert into an organized compendium with specific conclusions.

To navigate upcoming conditions requires brushing up our understanding and management of ***interest rate risk***. Because a significant volume of loans have already been locked at long terms and low, fixed rates ***and*** the deposit side is basically short term, the cost of funds will rapidly grow as market interest rates eventually rise and loans will be unable to adjust at the same pace. Recall the failed savings and loan industry to see the potential crisis imbedded in this situation. It's not a rosy future!

The risk culture developed during the last two decades made us experts in producing parallel rate shocks. Today's complex marketplace mandates that community financial institutions improve their knowledge of interest rate basics *and acquire additional skills to model strategies* considering many variables that will increase their endurance and improve their performance. But to my surprise I find that few are using their ALM simulation models beyond basic regulatory requirements.

The New Navigation Chart

Here is a check-list to build a new navigation chart. The list is not all-inclusive, but it will help develop *your* customized checklist.

At the customer management side:

- Implement customer retention strategies. Customers owning more than one product are more likely to stay.
- Diversify the customer base. Having clients in different market segments may neutralize the impact of economic cycles while spreading risk.

At the lending side:

- Review credit policy to ensure conservative practices. Make sure that "Page 1" of the credit policy espouses solid lending fundamentals. Communicate profusely and improve accountability.
- Reduce the concentration in long term fixed rate loans. Since it's likely that interest rates will increase, its important to plan to remove or adjust periodic and life-time caps on loans to allow flexible rate adjustments.

At the funding side:

- Plan for the soon-to-come increase in deposit rates. Consider strategic moves ***now*** toward longer terms to improve liquidity risk, but mainly to neutralize effects of a broad increase in market rates.
- Increase deposits, searching for a broader and lower cost deposit base. Expanding the deposit base will provide more stable and possible less expensive deposits. Excessive

[9] Wall Street Journal – June 12, 2009. Big Boost in Fed Funds purchase.

dependence on brokered CDs leads to increased cost and greater ***liquidity risk*** due to renewal uncertainty during times of high demand for resources.

At the operational side:

- Improve the quality of data generated by the core system. Traditionally there is not much interaction between the bank operations areas and finance departments; however we must realize that the source of risk analysis data is the core system. To calculate precise cash flows to feed the simulation models, group loans and deposits according to **precise** financial properties, mostly ones related to interest rate pricing and repricing. Models and reports loaded with insufficient or imprecise data lead to wrong conclusions and hence wrong strategies.
- Implement and expand low-cost services. Substitute expensive brick and mortar based services with low-cost alternatives like phone banking, electronic banking and internet. Clients should be rewarded (lower fees) to move to those alternatives.

At the performance side:

- Implement better performance measurement systems. Consider Funds Transfer Pricing to de-segment inherent risks within net interest margins and to identify the most profitable lines of business, products and even customers.

At the risk side:

- Explore using all features and functions within your ALM model. Enhance Economic Value analysis. Improve modeling capabilities by identifying correlations between your institution and market rates. Global Insight provides different rate forecasts based on expected economic trends. This information should be considered when running the ALM model. Familiarize yourself with interest rates trends. The BAI[10], The Federal Reserve[11] and bankrate.com provide current and historical rates.
- Implement periodic and random portfolio reviews to identify and mitigate risks.
- Implement stronger financial planning practices and make ALCO members accountable for assumptions and results. Consider educational sessions on “best practices” [12] for Boards, ALCO members and analysts.
- Get ALCO and liquidity policies independently reviewed to ensure that they are current with all regulatory requirements and meet or exceed industry best practices.
- Evaluate the portfolio quality more frequently. Credit quality deterioration is likely to continue even when recovery begins. High unemployment will continue even after the recovery is underway
- Risk and return go hand in hand. Play it simple and avoid extreme rates. They’re bad for both sides of the balance sheet.
- Last but not least, review the present and future capital adequacy using risk adjusted calculations[13]. Create your own stress tests[14]. Be conservative and add more weight to specific portfolios.

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[10] BAI provides daily rate updates. http://www.bai.org/bankingstrategies/tr/fdata.asp

[11] The Federal Reserve provides a program to download historical information of the mayor market rates. http://www.bai.org/bankingstrategies/tr/fdata.asp http://www.bai.org/bankingstrategies/tr/fdata.asp

[12] **The Institute** at Fiserv - Risk and Performance Solutions (formerly IPS-Sendero) offers a wide variety of cost effective onsite educational programs which can be customized to your specific needs and timeframes. Best practice policy reviews are also available from The Institute.

CONCLUSIONS

Community Financial Institutions serve mostly local markets, but are affected by the national environment. It's important to identify basic statistics and relate them to your local market. This article cited examples of basic indicators impacting local markets as well as the national economy.

The balance sheet structure for the future will shift to funding based once again on real deposits from real customers, depending less on brokered CDs. Forget about the unlimited commissions earned in mortgage underwriting.

Interest rates are the pulse of the economy. To better forecast rates, it's important to understand dominant forces and trends. Identify the big players and their motives.

Retrain your crews for the new navigation conditions. Improve the size and shape of your institution and model different strategies to refine your responses to changing conditions. Take full advantage of the simulation model features.

Private and public companies have access to data and interpretation of economic trends that would identify the early-warning signals while the government is determining the powers of a systemic risk officer. These early warning signals must be measured in global and local arenas.

Build your own navigation chart.
Don't wait until the regulators prepare it, do it yourself, now!
This exercise is for your benefit, not for compliance!

About the Author:

Carlos Morales has been in banking and finance for more than 25 years. During the last years Carlos has been researching about market interest rates as a way to improve funding and pricing modeling, tasks that sometimes community banks find difficult to perform.

Carlos had his first tenure in corporate lending with Citibank and currently works for Fiserv – Risk and Performance Solutions, providing consulting and training in risk, budgeting and reporting. Is based in South Florida and may be reached at **Carlos.Morales@FISERV.com**

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[13] **The Institute**, at Fiserv - Risk and Performance Solutions (formerly IPS-Sendero) has published a number of articles about risk and performance. "RAROC: The One True Metric" is highly recommended and germane to our subject: http://www.riskandperformance.fiserv.com/thought_leadership/articles.asp

[14] From the Federal Reserve: http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20090424a1.pdf

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