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Crisis Detection and Prevention: Implications for Investors and Officials

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Remarks at The Boston Economic Club

I extend hearty thanks to the Boston Economic Club – and in particular President Lisa Chioffi – for the kind invitation to meet with you today.

It is always a pleasure to visit Boston. What is not to like about being in Boston? There is a palpable sense of U.S. history. There is a vibrant asset management and academic community. And...for me, as a New York Mets fan...there is only modest baseball angst in visiting this city.

Today, I have been invited to speak about crisis detection and prevention – from my perspective at Treasury, on Wall Street, and now somewhere in between. It is gratifying to see friends in attendance at today's luncheon. Over the years, we have experienced, endured, and grown smarter from varying episodes of financial distress. I naturally look forward to your thoughts and ideas – during the discussion period or afterward.

I believe strongly that there is a rhythm to financial crises. Clear patterns exist – providing investors with the opportunity to profit and / or avoid excessive risks. Similarly, for officials, predictable patterns offer a path to promote safer and more vibrant financial markets.

The Crisis

I have watched the global financial crisis in utter disbelief. Myths have been propagated by many^{1,2} – now for over eight years.

Recently, remarks by the new Minneapolis Fed President Neel Kashkari reminded me of a few of the unhelpful – but convenient narratives – lingering from this past crisis.³ They include selective memory, casting full blame on financial institutions, and absolving the government of accountability.

Kashkari noted that “lessons [that he] learned during the 2008 financial crisis strongly influence [his] assessment of new regulatory measures.” He continued that “almost by

¹ Stephen, Golub, Ayse Kay, and Michael Reay, “What were they thinking?” Vox EU, September 8, 2014.

² Jeremy Warner, “Fed boss Greenspan says no one saw the crisis coming. Really?” The Telegraph, April 7, 2010.

³ Neel Kashkari, “Lessons from the Crisis: Ending Too Big to Fail,” Remarks at the Brookings Institution, Washington, DC, February 16, 2016.



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definition, we won't see the next crisis coming." In 2006, he evaluated what might "trigger the next crisis." He "looked at a number of scenarios" and "didn't consider a nationwide housing downturn." **He then concluded that, therefore, "we must assume that policymakers will not foresee future crises, either."**

This analysis is flawed. Worse, it relies on a faulty assumption – as the bedrock of a proposed policy to bust up the banks. This is simply dangerous.

Kashkari's idea is based on a single data point. His experience at Treasury in 2006 - when the team, was suspicious, looked around, but could not find any signs of a crisis. **This revelation is astonishing.**

The team missed detailed records, reports, and documentation of findings by Treasury in 2005.

In early 2004, while at Treasury, I created and chaired for nearly two years an inter-agency crisis prevention group within the U.S. Government called the Financial Vulnerabilities Working Group (VWG). The objective of the VWG was simple. We developed a Wall Street style strategy group within the U.S. government with pre-existing resources and talent. We were fortunate. **A wide range of gifted and thoughtful individuals participated from thirteen different agencies.**

The mission was to think prospectively about factors that could threaten economic or financial stability on a global basis. As emerging market crises were fresh, we looked there. But we also looked elsewhere.

We were clear. The next crisis would likely present in the U.S. It would likely stem from housing or global imbalances. Volatility was massively mispriced due to Fed policy. Instruments were being created similar to the unit trusts in the 1920s.⁴ Once unusually low financial market volatility reverted to its historic mean, investors would default, asset prices drop, and credit be curtailed...creating a systemic event.

As a former economist and strategist on Wall Street, I wanted to be sure that the group avoided falling into a Chicken Little⁵ trap. So, we worked hard to avoid sending false signals. **We investigated a number of feared crises – often reporting that the threat would fall short of escalation or simply defuse.**

Yet, perhaps, most importantly, the group recommended developing crisis resolution strategies. **We suggested practical ideas – such as the construction of various call trees to mirror, assess, and react to potential crises.**

⁴ John Kenneth Galbraith, "The Great Crash 1929," Houghton Mifflin Harcourt, 1954.

⁵ Chicken Little is the character in a children's story with a moral. The chicken believes the world is coming to an end – constantly uttering the phrase "The sky is falling!" Of course, the story finishes and all is well.



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Unfortunately, the group was disbanded after I returned to the private sector in late 2005.

So, I am naturally distressed by the latest ill founded remarks regarding crisis detection and resolution in the public sector. Perhaps, today, I am even more fearful of dangers radiating from policies reliant on a central assumption that is flawed.

Out of this experience, I want to share with you lessons for improving future crisis detection and prevention.

Preserve Institutional Knowledge

First, preserve institutional knowledge. This concept applies equally to official and financial institutions.

Would the world have been a better place if Kashkari and his colleagues were aware of our clear and focused findings? I don't know. But, I do know that the policy response may have been swifter and more purposeful – providing officials with greater time to assess conditions and react.

To be sure, institutional knowledge (or access to the thinking of others over time) is essential. For instance, I am grateful to many – who shared their experience and knowledge during the course of my career.

As a young economist – years ago – at Bank of America, my expectation was to cover on Europe and Africa. My expertise was the European Monetary System (EMS), the snake in the tunnel – as well as the then recent exchange rate moves in the wake of the Plaza and Louvre Accords. However, the Latin American debt crisis was upon us. Aside from intermediate Spanish at the time, I knew very little about Latin America. Yet, I was tasked to write a report for the Bank's Credit Committee to help allocate limits for our Ecuadorian exposure.

I literally knew nothing about Ecuador. Yet, I had access to extraordinary information.

Readily within reach were risk reports filed over the years, financial models, and studies completed by the Bank Advisory Committee working to restructure Ecuador's debt.

Within a few weeks, I was surprisingly up to speed. I was fluent on Ecuadorian issues – due solely to the work of my predecessors, the Bank's vision to save and transfer files, and discussions with more senior economists. **To this day, I will never forget the opening line of a country risk report – written with surprising humor and courage for a banker. The report opened:**

“In anticipation of the Earthquake, Ecuador suspended its interest payments to banks.”



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This one line crystallized an essential factor underpinning analysis of credit risk ... the willingness in addition to the ability to pay. This line helped convince me to propose the retention of a low credit rating – despite promising debt negotiations where I would soon run the economic and financial modeling.

I offer these vignettes to argue that the preservation of institutional knowledge is essential for official and private organizations.

Folks – we can do a lot better detecting and preventing crises.

Kindleberger, Aliber and the “Never Befores”

Today, we confront challenges of epic proportion. Simply put, a glance back at the last thirty years is insufficient.

Yes. Crisis detection is complex. Yet, **ideas presented in Charles Kindleberger’s *Manias, Panics and Crashes*, first published in 1978 ... is essential for investors and officials to design better systems to detect and prevent crises, today.** Even though the book is now in its seventh edition with insightful expansion by Robert Aliber,⁶ I am surprised why it has yet to be more actively embraced by institutions.

Of relevance for today, Kindleberger (a Keynesian) wrote that **“Speculative manias gather speed through expansion of money and credit or perhaps, in some cases, get started because of an initial expansion of money and credit.”⁷**

In this spirit, I believe that three “never before” – in response to the latest crisis – will drive our economic and financial future.⁸ For instance, “never before” has there been such:

- **Large scale intervention by central banks and governments,**
- **Growth in the financial regulatory apparatus and labyrinth of rules governing markets,**
- **Distortions across a wide range of financial markets.**

Resolution of these three never before are key to future crisis detection and prevention strategies ... and exiting from this morass of slow growth and economic uncertainty. Here, three inter-connected forms of analysis offer a practical path, while resting on the ideas of Kindleberger, Aliber,⁹ and others.¹⁰

⁶ Robert Z. Aliber and Charles P. Kindleberger, *Manias, Panics and Crashes*, Palgrave Macmillan, Seventh Edition, 2015.

⁷ Charles P. Kindleberger, *Manias, Panics and Crashes*, BasicBooks, 1989.

⁸ Lawrence Goodman, “It’s the ‘Never Befores,’ Stupid,” Remarks at the Stronger Global Economic Growth Conference, February 28, 2016 - http://centerforfinancialstability.org/speeches/Shanghai_022816.pdf.

⁹ Robert Z. Aliber, “Currency Turbulence and Banking Crises,” working paper, January 20, 2015.



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Crisis detection and prevention should center on these three broad factors:

- **Market drivers and liquidity,**
- **Fundamentals,**
- **Timing and triggers.**

I will focus largely on market drivers and liquidity – due to the extraordinary nature of central bank measures. To be sure, we need to better understand the relationship among money, credit, and macro.

Central Bank Liquidity Leads to Crowded Trades

Monetary and financial measurement is in our DNA – at the Center for Financial Stability. We offer the broadest and most comprehensive measures of US monetary and financial liabilities on a monthly basis freely to the public. The data – developed under the leadership of Professor William A. Barnett¹¹ – are the cornerstone of our Advances in Monetary and Financial Measurement (AMFM) division.¹²

Yet, challenges on the monetary front remain enormous.

In response to the financial crisis, the Federal Reserve engineered the largest surge of its balance sheet since the founding of the Fed in 1913. For instance, the Fed's high powered money or monetary base expanded by nearly 400% from the peak-to-trough over a period of six years. When evaluated over time, this is the by far largest cumulative six-year expansion in history (see Appendix 1).

In fact, the second largest six-year cumulative expansion was less than half of the recent swell in the size of the Fed's balance sheet. This expansion – ending in 1944 – was arguably much more beneficial. It helped the U.S. exit from the Great Depression and a World War. Thus, there are legitimate questions regarding the cost / benefit calculus today from such recently deployed extraordinary policy measures.

For investors, the swell in the monetary base has led to a succession of crowded trades and outsized gyrations in market positioning. (Note: this will be clearly illustrated later).

¹⁰ Nick Sargen is writing a book "Global Shocks: An Investment Guide for Turbulent Markets" - expanding on many of these ideas.

¹¹ William A. Barnett, "Getting It Wrong: How Faulty Monetary Statistics Undermine the Fed, the Financial System, and the Economy," MIT Press, 2012.

¹² See <http://www.centerforfinancialstability.org/amfm.php>.



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Dearth of Financial Market Liquidity Leads to Bouts of Volatility

Despite this extraordinary infusion of central bank liquidity, financial market liquidity has been shockingly limited. In fact, the former has likely damaged the latter.

Our data show that the availability of market finance is more than 30% below a reasonable level to support liquid markets. Of course, there was excessive growth in market finance and an overabundance of market finance prior to the financial crisis.¹³ Yes, the overabundance of liquidity provided the fuel for well documented excesses.¹⁴ Yet, this is now a very old story.

The new story is that this shortage of financial market liquidity exposes markets and the economy to potentially unnecessary shocks.¹⁵

It is no wonder that in this environment that we have already experienced:

- A Treasury flash crash,
- Complaints of vanishing prices in G-10 FX, and
- Ongoing fears in corporate bond markets.

But why should we care if a few speculators lose from market volatility? Well, first, a dearth of liquidity can evolve into a solvency crisis. Secondly, the global financial crisis vividly illustrates how financial markets in freefall can take the real economy along for a dangerous ride.

So, our data have broad and important implications for crisis detection and prevention – in addition to measuring growth and inflation prospects.

I was delighted to learn recently that one of the top macroeconomic journals – the Journal of Monetary Economics – and the Carnegie-Rochester-NYU conference is now interested in the “potential role of Divisia monetary aggregates for monitoring aggregate liquidity and financial stability.”¹⁶ It is very good to see that the profession is now viewing this as a priority.

Investors: Beware of the Crowded Trade

For investors, lax monetary policies and promotional fiscal policies have created a swell in debt not witnessed since WWII – under very different circumstances. **Debt is no longer simply a**

¹³ CFS market finance includes: money market funds, repurchase agreements, and commercial paper.

¹⁴ Lawrence Goodman, “Liquidity Shortage: Houston, We Have a Problem,” Center for Financial Stability, February 25, 2015.

¹⁵ Michael J. Casey, “Shadow-Credit Rise is Good Sign,” *The Wall Street Journal*, March 28, 2015, p. C3.

¹⁶ Call for Proposals for the November 2016 Carnegie-Rochester-NYU Conference -

<http://www.journals.elsevier.com/journal-of-monetary-economics/call-for-papers/call-for-proposals-for-the-november-2016-carnegie-rochester/>



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problem for emerging markets.¹⁷ Advanced economies are now at the epicenter of this debt creation and undoubted future challenges.

Many today refer to the “debt super cycle.”¹⁸ Whether or not this is a debt super cycle or not, I honestly have no idea. Yet, I do know two things:

- **Debt defaults in unexpected countries will likely lie ahead.**
- **Crisis conditions will worsen.**

Central banks seem ready to double down on increasingly experimental policies. Surprisingly, these new and untested experiments are often lauded as “creative.” But the consequence is that risks will mount – whether the latest twist and turn is another generous dollop of Quantitative Easing (QE), further conversion of the central bank into a fiscal entity by conducting credit policy, or the latest perversion “negative interest rates.”¹⁹

But, what is an investor to do? **Sadly, these measures will only complicate the investment process for both institutional and individual investors alike. Crowded trades are and will remain the norm.**

Analysis of position data represents a possible defense and source to better read markets. Positioning data help measure mounting pressure, increasingly evident swells, and the risk of disruptions from the collapse of small, medium, and potentially gigantic bubbles.

The Crowded Oil Trade

The oil market vividly illustrates the phenomenon of the crowded trade, its sharp advance, and excessive reversal. These dynamics were only hastened and accelerated by Saudi production strategy.

At the end of 2008 – before the start of QE, oil prices peaked at roughly 140 dollars / barrel. This was largely demand driven. Demand from emerging economies – such as China – was strong. While, new sources of supply were stagnant. In this environment, speculative activity was limited (see Appendix 2). The net positions of speculators or noncommercial oil market players were net long, but they were small and close to equilibrium (dark blue line in Appendix 2).

With the start of the global financial crisis, demand plunged. Prices followed retreating to roughly 40 dollars / barrel in early 2009.

¹⁷ Henry Kaufman, “Debt: The Threat to Economic and Financial Stability,” Federal Reserve Bank of Kansas City, Jackson Hole, WY, August 27-29, 1986.

¹⁸ Ray Dalio, “Pay attention to the long-term debt cycle,” Financial Times, January 25, 2016.

¹⁹ Charles Goodhart, Elga Bartsch, and Jonathan Ashworth, “Transmission Matters – Musing on Money Multipliers and Credit Creation,” Morgan Stanley, March 8, 2016.



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However, with the advent of QE and free money, prices and speculative positions were quick to respond. Global demand for oil remained weak, yet oil prices headed higher.

The rise in speculative net long positions – fueled by inexpensive money and the idea of new production technology frontiers^{20, 21} – propelled prices back to over 100 dollars / barrel. In fact, **net speculative positions long positions or bets in futures markets reached all time highs** (see blue line in Appendix 2).

However, as easy money was tapered back and inventories became excessive, oil prices and speculative positions crashed. This unleashed a supersized downward price spiral – with prices bottoming at 26 dollars / barrel.

What's a government to do???

Rapid expansion of the financial regulator apparatus and labyrinth of new rules governing markets represents a major structural shift.

Here, governments would be well advised to measure the impact of recent regulation on their respective markets and economies.

Regulation is vital.

Here, a famous Bostonian, Keynesian economic advisor to JFK, and expert over many decades on financial crises – Professor John Kenneth Galbraith – offered essential thinking regarding the interplay between regulation and financial crises. **Professor Galbraith summed it all up by noting that:**

“Regulation and more orthodox economic knowledge are not what protect the individual or financial institution when euphoria returns.” ...

“There is protection only in a clear perception of the characteristics common to these flights into what must conservatively be described as mass insanity.”²²

Conclusion

Having just returned from China and learning that this is the year of the smart monkey, I was amused to see that **eight conclusions sprung from my remarks** today. For in China, people with the lucky number eight have the potential to **explore things undiscovered.**

²⁰ Robert Shiller refers to “new era economic thinking”.

²¹ Robert Shiller, “Irrational Exuberance,” Princeton University Press, 2000.

²² John Kenneth Galbraith, A Short History of Financial Euphoria, Penguin Books, 1990.



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My eight conclusions include:

- First, **develop a thoughtful crisis detection and prevention effort,**
- Second, **directly link crises (or recovery) scenarios with discreet action plans either for policy or asset allocation strategies,**
- Third, **watch central banks as major determinants of market drivers and liquidity – in concert with fundamentals as well as timing and triggers,**
- Fourth, **deepen our understanding of the relationship between financial markets and the real economy,**
- Fifth, **prepare for debt workouts,**
- Sixth, **watch crowded trades and positioning data,**
- Seventh, **dispassionately assess the impact of recent regulations on the economy,**
- Eighth, **preserve, promote, and propagate institutional knowledge.**

I hope that these eight conclusions help us **explore things undiscovered** and successfully **navigate the never before**s.

Only then will investors and officials have a shot at improving crisis detection and prevention.

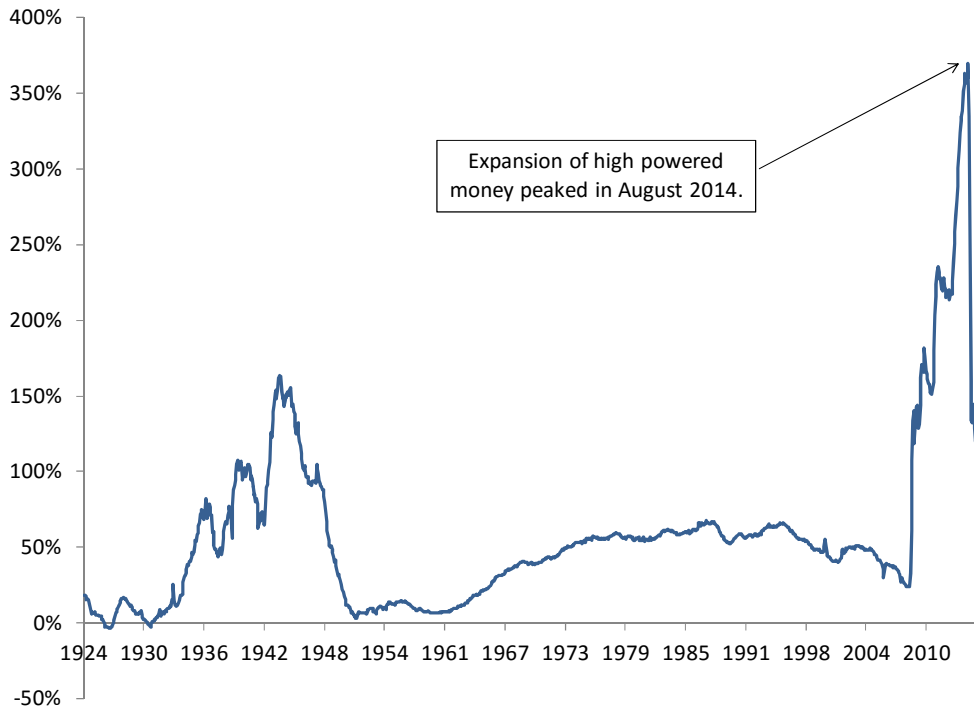
Thank you.



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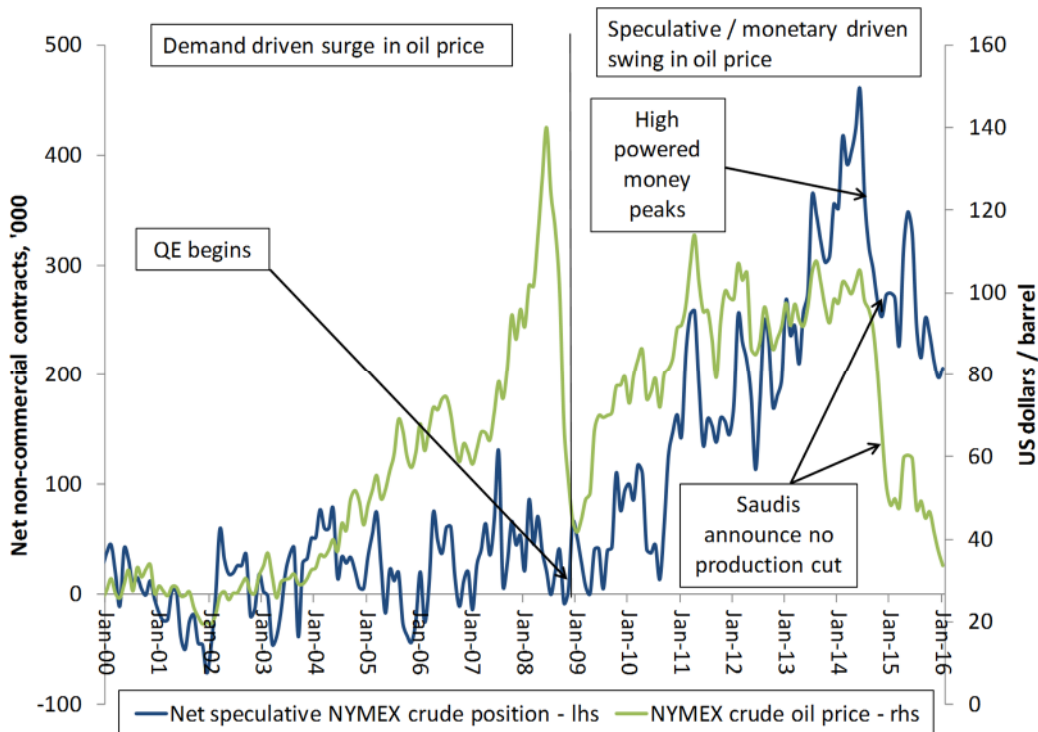
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Appendix 1. Largest surge of money in the history of the Fed



Source: Federal Reserve Bank of St. Louis and Center for Financial Stability.

Appendix 2. Long speculative crude oil positions hit historic high before collapse



Source: CFTC, Bloomberg, and Center for Financial Stability.



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