



## The “yo-yo” economy

Thursday, August 23, 2012

### Review: Fed in the batter's circle

The latest FOMC minutes suggest the next easing maneuver is a question of when not if, listing a number of policy tools to further stimulate the economy and ease financial conditions.

### Macro Mantra: The “yo-yo” economy

In the aggregate, this recovery has been remarkably stable when looking at a full year. However, at a micro level, there is more differentiation with some sectors of the economy continuing to exhibit low volatility while others showing an increase.

### Data Preview: Bernanke delivers his Jackson Hole sermon

Chairman Bernanke will likely address the range of tools the Fed has at its disposal, how each would work, but not make a definitive commitment for additional action. The tools listed in the FOMC minutes: (1) extend rate guidance; (2) large scale asset program; (3) cutting IOER; (4) BOE style "Funding for Lending Scheme;" and (5) a rules-based framework that ties policy to economic variables.

[Click here for Video](#)

[Click here for Video on iPad](#)

(link enabled after you download and open this report on a PDF reader on iPad)

[Click here for Audio Only](#)

#### The week ahead: 24 to 31 August

Date	Time	Event	Period	Consensus	RM Estimate	Prior
08/24/2012	08:30	Durable Goods Orders	Jul	2.5%	2.0%	1.3%
08/24/2012	08:30	Durables Ex Transportation	Jul	0.5%	0.0%	-1.4%
08/27/2012	10:30	Dallas Fed Manf. Activity	Aug	--	--	-13.2
08/28/2012	09:00	S&P/CS 20 City MoM% SA	Jun	0.3%	--	0.9%
08/28/2012	10:00	Consumer Confidence	Aug	65	64.5	65.9
08/28/2012	10:00	Richmond Fed Manufact. Index	Aug	--	--	-17
08/29/2012	08:30	GDP QoQ (Annualized)	2Q S	1.7%	1.7%	1.5%
08/29/2012	10:00	Pending Home Sales MoM	Jul	1.0%	--	-1.4%
08/29/2012	14:00	Fed's Beige Book				
08/30/2012	08:30	Personal Income	Jul	0.3%	0.3%	0.5%
08/30/2012	08:30	Personal Spending	Jul	0.5%	0.6%	0.0%
08/30/2012	08:30	PCE Core (MoM)	Jul	0.1%	0.1%	0.2%
08/30/2012	08:30	Initial Jobless Claims	25-Aug	--	--	372K
08/30/2012	11:00	Kansas City Fed Manf. Activity	Aug	--	--	5
08/30/2012	/2012	ICSC Chain Store Sales YoY	Aug	--	--	1.9%
08/31/2012	09:45	Chicago Purchasing Manager	Aug	53.5	54.0	53.7
08/31/2012	09:55	U. of Michigan Confidence	Aug F	73.8	73.6	73.6
08/31/2012	10:00	Factory Orders	Jul	0.9%	--	-0.5%
<b>08/31/2012</b>	<b>10:00</b>	<b>Bernanke Jackson Hole</b>				

## Macro Mantra

### The “yo-yo” economy

- **Review:** Extending the forward rate guidance seems to be a done deal for the September FOMC meeting. While it is a close call, we believe the Fed will launch QE3 at the September meeting as well.
- **Macro Mantra:** In the aggregate, this recovery has been remarkably stable when looking at a full year. However, at a micro level, there is more differentiation with some sectors of the economy continuing to exhibit low volatility while others showing an increase.

### Review: Fed in the batter’s circle

The minutes from the August FOMC meeting suggest the next easing maneuver is a question of when not if. They listed a number of policy tools to further stimulate the economy and ease financial conditions in the following order: (1) extend rate guidance; (2) large scale asset program; (3) cutting IOER; (4) Bank of England style "Funding for Lending Scheme". The FOMC also addressed a rules-based conditional policy framework, though that is a broad change to the Fed’s institutional structure that will take time to implement.

The order of policy options speaks volumes. Extending rate guidance seems to be a done deal for September. “Many” on the FOMC view QE as effective. To postpone QE3, the Fed will need to see a “substantial and sustainable” acceleration in growth; stabilization at low growth will not cut it. Despite upside data surprises, growth remains below potential and has not picked up relative to the 1.8% growth rate in H1. It is a close call, but this argues for QE3 in September.

Between now and the September 13 FOMC decision, the capital markets will digest Bernanke’s August 31<sup>st</sup> Jackson Hole Speech and the August employment report (released September 7<sup>th</sup>). Jackson Hole will play the same signaling role to the markets as it did in 2010 and 2011. Bernanke is unlikely to make any clear commitment, but will outline steps the Fed may take based on his economic outlook.

### Macro Mantra: The “yo-yo” economy

A persistent feature in the US economy in the nearly three decades preceding the Great Recession was the steady decline in macro-economic volatility, popularly called the Great Moderation. Today, many market forecasters are quick to point out that because the economic outlook is increasingly uncertain, macro-economic volatility will naturally increase.

*To postpone QE3, the Fed will need to see a “substantial and sustainable” acceleration in growth; stabilization at low growth will not cut it.*

*Growth remains below potential and has not picked up relative to H1. While it’s a close call, this argues for QE3 in September.*

*Bernanke is unlikely to make any clear commitment at Jackson Hole next week, but will outline the Fed’s next steps.*

*Some sectors of the economy have seen a marked increase in volatility during the recovery while others have not.*

Here, we will argue that the reality is more nuanced. This has been a yo-yo economy and a yo-yo market. In the aggregate, this recovery has been remarkably stable when looking at a full year. However, at a micro level, there is more differentiation with some sectors of the economy continuing to exhibit low volatility while others showing an increase.

### Three factors drove down volatility

As a background, let's explore the factors that led to the decline in macro-economic volatility during the Great Moderation. Academic literature has coalesced around three explanations for the drop in volatility:

1. **Structural economic changes:** Improved inventory management and financial innovations have helped households and firms smooth spending and investment through the business cycle, helping the economy weather external shocks.
2. **Good luck:** During the 1970s, the economy was subject to particularly large shocks, namely sizable increases in oil prices. Since then, the shocks have typically been smaller in scale and less frequent.
3. **Improved monetary policy:** Before the Volcker disinflation of the 1980s, the Fed would waffle on their goals. At times, the Fed went for growth, loosening policy aggressively. As inflation picked up, the Fed tightened policy, leading to a sharp downturn, setting in motion the next easing cycle. Since then, central bankers have become more competent doing their jobs, following a rules-based framework.

### Limited structural changes to economy since Great Recession

It is certainly conceivable that the economy has undergone structural changes. On the one hand, because credit conditions remain tight, particularly for consumers, there is less ability for some households to smooth out consumption. On the other hand, credit conditions have eased for some borrowers and companies have not materially changed the way inventories are managed.

Indeed, since 2009, the aggregate economy has been surprisingly stable. As Table 1 shows, in each of the past two years, the economy has grown in a relatively narrow range of 2.0%. Looking beyond the quarterly ebbs and flows, private employment has expanded close to 150,000 per month after a slow start in 2010. While inflation has shown somewhat more variation, headline CPI has run at a 2.1% annual rate since the recession's end, close

*Academic literature points to three reasons behind the Great Moderation: structural economic changes, good luck (the absence of shocks), and improved policy.*

**Table 1: A surprisingly stable recovery**

	Real GDP	Private payrolls	CPI
<b>2010</b>	2.4	104	1.6
<b>2011</b>	1.8	175	3.1
<b>Present (YoY)</b>	2.2	162	1.4
<b>Average</b>	2.1	147.0	2.0

to the Fed's target.<sup>1</sup> At a minimum, this implies that structural changes to the economy have relatively little to do with the recent swings in volatility.

### A rocky path to stable growth

Over the medium term (within the year), however, there has been a noticeable increase in macro-economic volatility. Growth averages 2.0% for the year, but the path to 2.0% is a rocky one. We can investigate this phenomenon drawing on the monthly GDP data compiled by Macroeconomic Advisers. In a normal economic expansion, monthly GDP is contracting less than 30% of the time. By contrast, from the end of the recession in June 2009 through the end of 2011, monthly GDP has declined roughly 40%. Chart 1 summarizes our results. The increasing propensity for monthly measures of GDP to contract highlights the "yo-yo" nature of this recovery. What gives? In part, there has been an increase in the number of external shocks to the economy. As the effects of these shocks fade, the economy gathers momentum.

### Volatility has not picked up uniformly across sectors

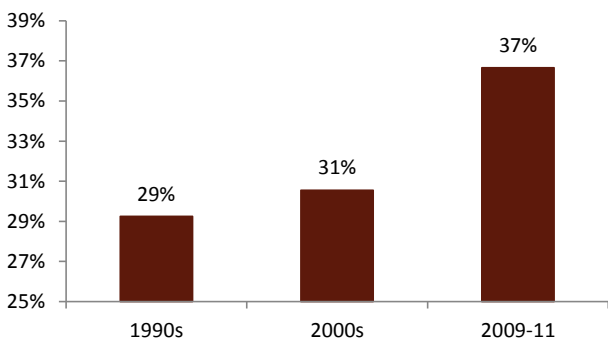
During the Great Moderation, volatility declined across every component of GDP. More recently, however, the rise in volatility is not uniform across all sectors. Using a standard deviation framework from 2005 to 2009, economists from the Kansas City Fed found that volatility rose sharply for goods sectors, business and residential investment, and measures of headline inflation (including food and energy). On the other hand, the rise in volatility has been relatively muted for services consumption, inventories, and core inflation (ex food and energy). Moreover, they highlight the stability in inventories. Had inventory volatility picked up, then structural economic change could be a more meaningful explanation behind the swings in volatility.

We extended this research to the present. Our results, shown in Chart 2, tend to confirm the broad contours of the Kansas City Fed findings. From 2010 to present, volatility has declined in real GDP. However, volatility has increased in residential and structures (CRE) investment. Volatility in goods consumption declined, but not as much relative to the drop in overall GDP.

Let's isolate the higher volatility sectors: residential investment, business investment, goods consumption, and headline inflation. The increase in residential and structures investment volatility is not particularly surprising given that housing and the unprecedented tightening in lending conditions was the epicenter of the recent financial crisis. Outside of residential

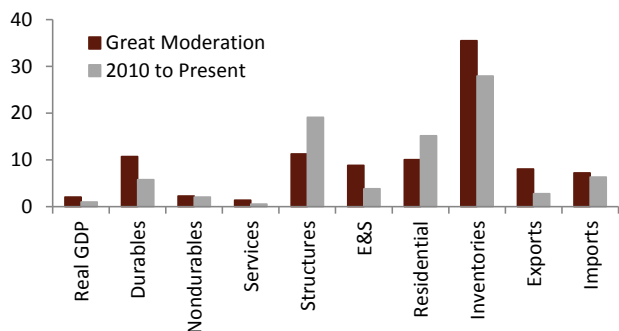
**Chart 1: More ups and downs**

% of time monthly GDP contracts in an expansion



Source: Macroeconomic Advisers, Renaissance Macro Research

**Chart 2: All volatility not built equally**  
(average standard deviation)



Source: Bureau of Economic Analysis, Renaissance Macro Research

<sup>1</sup> For a similar discussion, see "The (Unfortunately?) Consistent Record of the Recovery" by Dave Altig at the Federal Reserve Bank of Atlanta

investment, business investment, goods consumption and headline inflation are particularly sensitive to swings in commodity prices.

### Running out of good luck

And, that's the point. Since the recession's end, shocks have become more frequent. Consider the volatility in the commodity markets (Chart 3). From 2002 to 2007, we saw a steady increase in oil prices. Thereafter, oil entered a speculative bubble in 2008. And, in each of the last two years, oil prices have climbed on intensifying geopolitical tensions in the Mideast. Last year's tsunami sent the global auto supply chain in a tailspin. And, for whatever reason, extreme weather conditions have led to periodic spikes in food prices. So, it seems that the string of good luck the US economy enjoyed during the Great Moderation has run out.

### Monetary policy response has lowered volatility

The debate over the efficacy of monetary policy is beyond the parameters of this piece. We believe quantitative easing is a small positive for growth and the stock market, with limited upward pressure on inflation. However, investor opinion over the growth implications of the Fed's unconventional policy measures runs the gamut. While the Fed has taken steps to boost transparency, it still takes time for the markets to find clarity on Fed action.

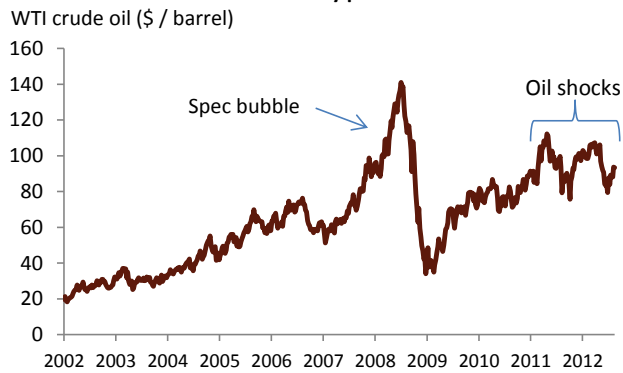
Nevertheless, we have a difficult time pinning the swings in volatility on the Fed, primarily because volatility has tended to glide down after the Fed takes action (Chart 4). The political brinksmanship around fiscal policy is a somewhat easier sell. Market volatility picked up somewhat during last year's debt ceiling debate. But, even here, the pickup in volatility was more noticeable after the debt downgrade, not during the legislative squabbling. All in all, we think changes in policy have had little to do with the upward sporadic swings in volatility since the recession ended.

### Volatility measures will not necessarily mean revert

We view low-growth as a cyclical – not structural – feature of the economy. Potential GDP will accelerate as the economy heals. Volatility has not picked up uniformly across all sectors of the economy, which suggests that structural changes to the economy have been limited. Thus, the economy is not relegated to a permanently higher level of volatility. However, in a lower-growth environment, the economy is more susceptible to shocks, implying periods where measures of volatility can rise significantly.

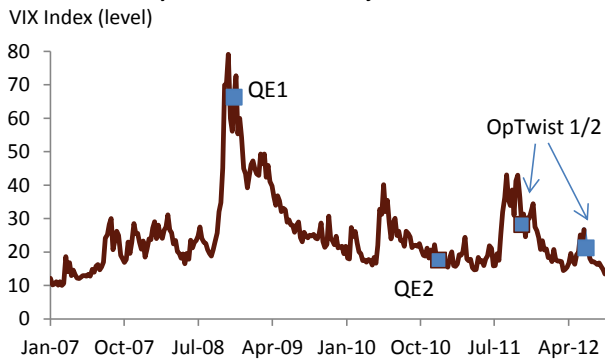
The simplest investable hypothesis is that market measures of volatility will not necessarily mean revert. Moreover, given the economy's vulnerability to shocks, households will likely boost savings to help smooth out consumption on the chance that a shock does materialize.

Chart 3: More shocks to commodity prices



Source: Haver Analytics, Renaissance Macro Research

Chart 4: Volatility tends to fall after major Fed moves



Source: Haver Analytics, Renaissance Macro Research

# Legal Disclaimer

---

**Analyst Certification:** The analyst(s) principally responsible for the preparation of this research report certify that the views expressed in this research report accurately reflect his/her (their) personal views about the subject security (ies) or issuer(s) and that his/her (their) compensation was not, is not, or will not be directly or indirectly related to the specific recommendations or views contained in this research report.

**Analyst:** The analyst does not serve as an officer, director, or advisory board member of the subject company.

The analyst or a member of the analyst's household does not have a long position in shares or derivatives of the subject company.

The analyst or a member of the analyst's household does not have a short position in shares or derivatives of the subject company.

Rafferty Capital Markets, LLC has not acted as an investment banker for the company(s) mentioned in this report in the past or will solicit in the future. The person(s) responsible for preparing this report regularly trade the constituents of the CRB index, currencies, fixed income securities and stock indices.

**Receipt of Compensation:** The research analyst responsible for preparation of this report has not received any compensation from the subject company in the past 12 months. Rafferty Capital Markets, LLC, Member SIPC, FINRA, (the "Firm") does not perform or seek to perform investment-banking services for these companies in the future. Analysts receive no direct compensation in connection with the firm's investment banking business. All Rafferty Capital Markets, LLC employees, including the analyst(s) responsible for preparing this research report, may be eligible to receive non-product or service specific monetary bonus compensation that is based upon various factors, including total revenues of Rafferty Capital Markets, LLC and its affiliates as well as a portion of the proceeds from a broad pool of investment vehicles consisting of components of the compensation generated by directors, analysts or employees and may effect transactions in and have long or short positions in the securities (options or warrants with respect thereto) mentioned herein. Analysts are not eligible for bonus compensation. Although the statements of fact in this report have been obtained from and are based upon recognized statistical services, issuer reports or communications, or other sources that the firm believes to be reliable, we cannot guarantee their accuracy. All opinions and estimates included constitute the analyst's judgment as of the date of this report and are subject to change without notice. The firm may effect transactions as agent in the securities mentioned herein. This report is offered for information purposes only, and does not constitute an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction where such would be prohibited.

Additional information available upon request.

**Additional Significant Risk Factors and Investment Considerations:** The securities or trading strategies discussed in this report may not be suitable for some investors. Investors must independently evaluate each issuer, security, or instrument discussed in this report and consult independent advisors where necessary.

1. Past Performance is not indicative of future results.
2. Market Risk: Securities may decline in value due to factors affecting securities markets generally or particular industries. The value of a security may be worth less than the original investment.
3. Concentration risk: Investing a substantial portion of assets in securities within a single industry or sector of the economy may be subject to greater price volatility or adversely affected by the performance of securities in that particular sector or industry.
4. Leverage Risk: Fluctuations in interest rates on borrowings or the dividend rates on preferred shares as a result of changes in short-term interest rates may reduce the return to common shareholders or result in fluctuations in the dividends paid on the common shares. There is no assurance that a leverage strategy will be successful.
5. Foreign Investment Risk: Investment in foreign securities (both governmental and corporate) may involve a high degree of risk. In regards to debt securities, such risks may impair the timely payment of principal and/or interest.
6. Short selling involves an inordinate amount of risk including the theoretical potential for unlimited losses and losses that can greatly exceed the principal amount invested. In contrast, the potential gain from short selling is generally limited to the principal amount invested. Short sellers can have their stock called away by the lender of the shares shorted, subjecting the short seller to incremental risk. Short sellers by definition must borrow shares, subjecting short sellers to margin risk. The risks cited here with respect to short selling are not all inclusive and investors should consult with their independent advisors prior to engaging in any recommended short selling strategies, including, if applicable, the short sale recommended in this report.

The risks detailed above are not inclusive. Other significant risk factors not identified here may be equally or more important to any particular investor in terms of assessing the overall risks associated with these securities. The information contained herein is illustrative and is not intended to predict actual results, which may differ substantially from those reflected herein. Investors should consider this report as only a single factor in making their investment decision.

Copyright © Renaissance Macro Research, LLC. 2011. All rights reserved. All material presented in this document, unless specifically indicated otherwise, is under copyright to Renaissance Macro Research, LLC. None of the material, nor its content, nor any copy of it, may be altered in any way, or transmitted to or distributed to any other party, without the prior express written permission of Renaissance Macro Research, LLC.