

CAMRI Global Perspectives

Monthly digest of market research & views

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QE Comes and Goes

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QE: what is it?

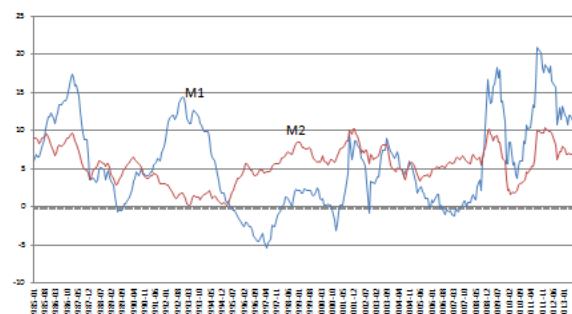
Quantitative easing is not a new monetary policy tool. It has been used by the Federal Reserve and the Bank of England in past crisis more or less successfully and less so by a number of developing country central banks. Central banks resort to purchasing their own government's debt (quantitative easing) during extreme financial crisis and when they run out of room to maneuver using traditional policy tools. In the present situation, advanced economy central banks lowered policy rates close to zero, effectively limiting further traditional easing actions. In the US the Federal Reserve also included mortgage backed securities (MBS) issued by Federal agencies to their purchases in a targeted approach to aid a severely stressed sector of the economy.

The Scope of QE in the US

The Federal Reserve began purchasing US Treasury securities and guaranteeing the short-term debt of several financial and non-financial companies in September 2008. The Fed began purchasing MBS in January 2009. By the end of June 2013 the

Fed purchased \$2.3 trillion securities under QE and expanded their balance sheet 3.8 times. The unprecedented surge in central bank reserves led to an escalation in monetary growth.

Monetary Growth Surges After the Beginnings of QE and QE2

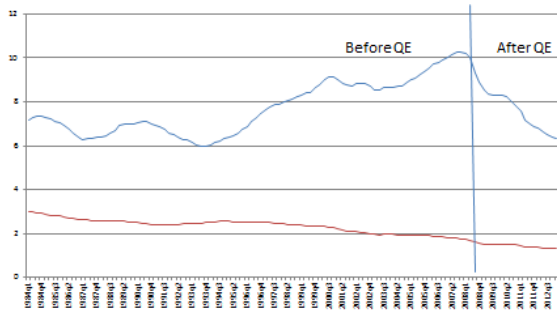


In the initial phases of QE, annual M1 growth accelerated to 18%, up from an annual average rate of 2.3% in the previous 5 years. M2 growth did not accelerate as rapidly as M1 did because interest rates on time deposits at banks became so unattractive in the near zero interest rate environment. It did rise to a peak annual rate of 10% after QE2, and it is presently growing at an annual rate of 6.8%.

Monetary growth greatly exceeded nominal GDP growth and as expected, the velocity of

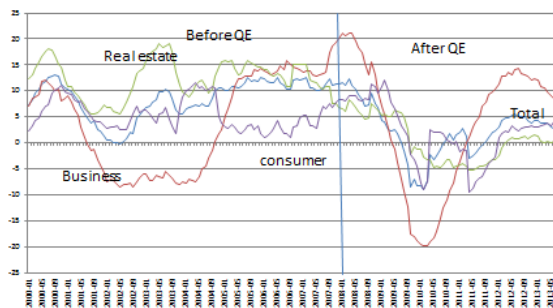
M1 and M2 declined. M1 velocity plunged well below its previous ranges, and M2 long term declining velocity accelerated slightly.

Money Velocity Drops Sharply After QE



Most importantly, bank loan growth did not suddenly surge; total loan growth remained extremely low in the first years of QE and then crept slowly upward to a below average rate of 5% in the past year. Instead of lending for economic growth purpose, banks continued to manage their immense excess reserves by lending overnight to other banks at trivial rates in the Fed Funds market. Their ultra conservative actions both inhibited the economic responses to aggressive monetary ease and avoided any potential for creating price inflation.

Bank Loans Never Surged After QE(%AR)

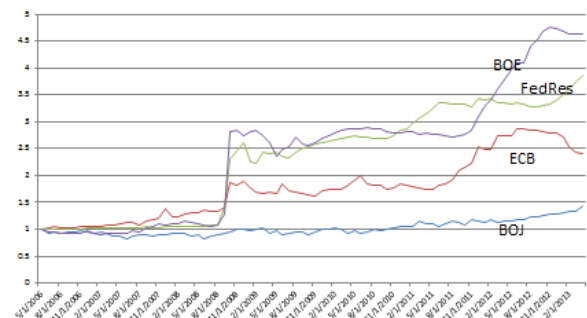


The Fed wasn't alone

During the recent financial crisis, other central banks followed the Fed in introducing QE to their policy mix. The Bank of England, the European Central Bank and, most recently, the Bank of Japan pursued aggressive monetary easing. The Bank of China also followed suit, creating a massive amount of liquidity to finance the massive government economic support program in 2008. M2 has increased at a rate of 15.8% in the past year and, more importantly, credit advanced at a rate of 14.5%. China's total credit increased from \$9 trillion in 2008 to \$23 trillion in 2013. As a result, China's credit to GDP ratio jumped from 75% to 200%, a historically worrisome level.

Even smaller emerging market central banks had to adopt a low rate environment to prevent a flood of liquidity from pouring into their small financial markets, hence creating asset price distortions and appreciating their currencies to unwelcomed levels.

Growth of Central Bank Assets in past 7 Years



Has QE been Successful?

It was eminently necessary in the midst of the crisis, and universally complemented and copied. Naturally it is impossible to determine exactly how much good it did because we can never know what might have happened to the economies of the world, the global financial markets, and non-financial firms had the Fed not acted so bravely and determinedly. However, the grand sage of monetary policy, Milton Friedman, advised we should judge monetary policy's success by the growth of prices and output, and not by present policy settings. The economy has grown slowly and steadily from the recession, and it has successfully weathered the headwinds from contracting fiscal policy. Moreover, it has not created inflation in goods and services, as inflation is typically measured, nor in any country where it has been recently applied.

However, if QE lingers too long it will create many disruptive side effects. Prolonged monetary accommodation has already caused sizable portfolio rebalancing and shifted risk appetites toward more risky financial alternative investments. Another adverse side effect is its inhibiting effect on an economy's long term growth by distorting investment decision criteria. Investment decisions made today depend mainly on their dependence upon near costless liquidity and credit, instead of the risk-adjusted return from innovation and real productive investment.

What Will Happen When QE Ends

Risk attitude will change abruptly. This will have far reaching impact upon financial markets and to a lesser extent the real economy. First, interest rates will rise immediately in anticipation of future policy tightening. Highly leveraged investments will suffer, especially credit extended on adjustable rates. Rising interest rates will slow credit creation and dampen demand for real investments. Second, money will be diverted away from risky assets. Investments in emerging markets will be vulnerable. This will apply to all emerging economies, even China. As emerging market assets are sold, it will increase the demand for dollars. The dollar will appreciate against most emerging market currencies. The outlook for equity markets is uncertain because its historical performance in a rising interest rate environment has been quite mixed. However, once market participants begin to anticipate that rising rates will choke off economic activity then equity prices will fall.

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KEY INDICATORS TABLE (AS OF 30 JUNE 2013)								
INDEX	LEVEL (LC)	%1MO (LC)	%1MO (USD)	%1YR (LC)	%1YR (USD)	INDEX	LEVEL	%1YR
S&P500	1606.28	-1.33%	-1.33%	20.70%	20.70%	3MO LIBOR	0.27	-40.71
FTSE	6215.47	-5.21%	-5.14%	16.38%	12.69%	10YR UST	2.49	51.11
NIKKEI	13677.32	-0.61%	0.93%	54.90%	24.45%	10YR BUND	1.73	9.19
HANG SENG	20803.29	-5.72%	-5.64%	10.91%	10.93%	10YR SPG	4.77	-24.69
STI	3150.44	-4.86%	-5.16%	12.73%	12.64%	10YR SGS	2.35	46.03
EUR	1.30	0.08%		2.71%		US ISM	50.90	1.40
YEN	99.14	-1.30%		24.25%		EU PMI	48.80	8.20
CMCI	1412.30	-3.78%		-5.01%		JP TANKAN	-2.00	50.00
Oil	96.56	4.99%		13.65%		CHINA IP	8.90	-6.30

Source: Bloomberg

APPENDIX

GLOSSARY OF KEY TERMS (Source: Bloomberg, with tickers in parenthesis. In US\$ where applicable)

S&P500: capitalization-weighted index of the prices of 500 US large-cap stocks (SPX)

FTSE: capitalization-weighted index of the prices of the 100 largest LSE-listed stocks (UKX)

NIKKEI: capitalization-weighted index of the largest 225 stocks of the Tokyo Stock Exchange (NKY)

HANG SENG: capitalization-weighted index of companies from the Hong Kong Stock Exchange (HSI)

STI: cap-weighted index of the top 30 companies listed on the Singapore Exchange (FSSTI)

EUR: USD/EUR exchange rate: 1 EUR = xx USD (EUR)

YEN: YEN/USD exchange rate: 1 USD = xx YEN (JPY)

CMCI: Constant Maturity Commodity Index (CMCIPI)

Oil: West Texas Intermediate prices, \$ per barrel (CLK1)

3MO LIBOR: interbank lending rate for 3-month US dollar loans (US0003M)

10YR UST: 10-year US Treasury yield (IYC8 – Sovereigns)

10YR BUND: 10-year German government bond yield (IYC8 – Sovereigns)

10YR SPG: 10-year Spanish government bond yield, proxy for EU funding problems (IYC8 – Sovereigns)

10YR SGS: 10-year Singapore government bond yield (IYC8 – Sovereigns)

US ISM: US business survey of more than 300 manufacturing firms by the Institute of Supply Management that monitors employment, production inventories, new orders, etc. (NAPMPMI)

EU PMI: Purchasing Managers' index for the 17 country EU region (PMITMEZ)

JP TANKAN: Bank of Japan business survey on the outlook of Japanese capital expenditures, employment and the overall economy, quarterly index (JNTGALLI)

CHINA IP: China's Industrial Production index, with 1-month lag (CHVAIOY)

LC: Local Currency

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