OFFICE OF FINANCIAL RESEARCH

MARKETS MONITOR

October 2015
(data as of October 20)

A monthly review of financial market themes and developments

Shift in Monetary Policy Expectations Supports Risk Assets

Risk assets such as equities, corporate bonds, and emerging market currencies appreciated notably in October, recovering somewhat from the sharp losses in recent months. The catalyst for the rally appeared to be weaker U.S. labor market data, which delayed the expected start of monetary tightening by the Federal Reserve. Extraordinarily accommodative monetary policy has supported risk asset prices since the global financial crisis and this month's market reaction suggests that these prices may still be contingent on accommodative policy. It remains to be seen whether current U.S. asset price ranges can be sustained once the Federal Reserve begins to raise interest rates, broadly expected to occur between December and June.

Developments during the last month

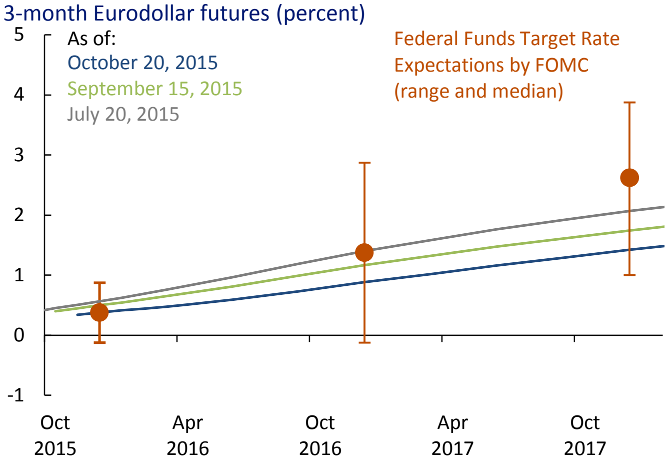
- The market-implied path of the Federal Reserve's policy rate increase shifted further into the future, with the highest probabilities for liftoff now in the first half of 2016.
- Global risk assets rebounded, driven by the shift in expectations for a Federal Reserve rate hike.
- Oil prices also rebounded at the start of October, but remain highly volatile.
- At the end of September, U.S. money markets followed the pattern of recent quarter-ends: Overnight secured funding rates spiked and utilization of the Federal Reserve's reverse repurchase agreement facility hit new highs.

Weaker U.S. economic data have pushed back market expectations for a Fed rate increase.

The market-implied path of the Federal Reserve's policy rate flattened further in October (Figure 1). The downward shift reflected a weak U.S. labor market report and the release of minutes from the September meeting of the Federal Open Market Committee (FOMC). These same concerns contributed to pronounced declines in market-based U.S. inflation compensation, which reached its lowest levels since 2009 (Figure 2). The market-implied probability of a Federal Reserve rate hike in 2015 is now down to approximately 25 percent to 35 percent, with an implied probability of a rate hike at the October 27-28 FOMC meeting of less than 10 percent.

Figure 1. Market-implied path of Fed Policy Rate flattens notably

3-month Eurodollar futures (percent)



Note: FOMC expectations are from the 9/17/2015 meeting.

Sources: Bloomberg L.P., Federal Reserve Board

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Global risk assets advanced on expectations for continued or additional accommodative policy among central banks in advanced economies …

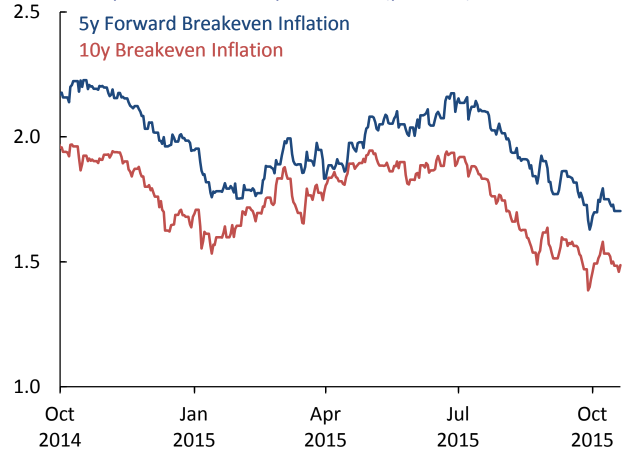
U.S. equities have rebounded strongly in October, although fundamentals remain weak. The S&P 500 index has rallied since the start of October and is up 10 percent from its August low (Figure 3). As with the broader rally in risk assets, this rebound has been attributed to the delay in an expected Federal Reserve rate hike. The rebound has occurred in the face of weaker U.S. equity fundamentals, such as the slowdown in global growth, negative effects of a stronger U.S. dollar on earnings, and continued weakness in the energy sector. For the third quarter, analysts continue to expect negative revenues and earnings for energy stocks, with modestly positive growth for non-energy S&P 500 stocks.

Emerging market assets have rebounded, following months of deterioration. Emerging market currencies have rallied since the start of October (Figure 4), led by a 5 percent to 8 percent appreciation in commodity-sensitive currencies. Emerging market equities and credit have also advanced. Despite the rebound in emerging market assets, some of the recent gains also represent a technical recovery driven by covering of short positions and moderation of excessively bearish sentiment. Overall, emerging market economic fundamentals remain very weak. In its latest World Economic Outlook, the International Monetary Fund (IMF) downgraded its forecast for emerging market growth.

…despite ongoing concerns over spillovers from deteriorating Chinese growth.

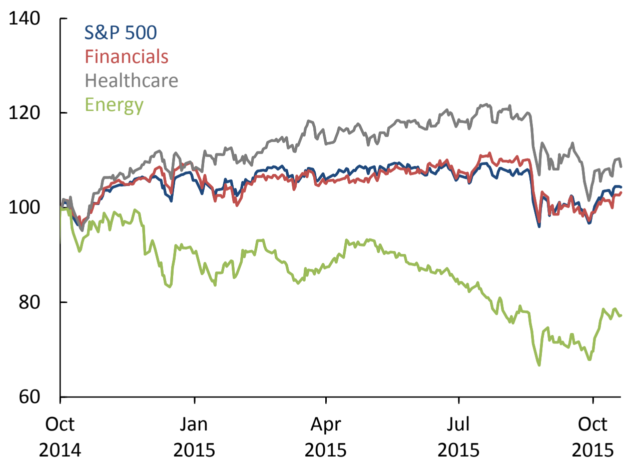
Chinese currency and equity market prices and volatility have stabilized since the August devaluation. The difference between onshore and offshore yuan exchange rates has diminished significantly, a potential sign that the People's Bank of China continues its effort toward inclusion in the IMF SDR (special drawing rights) basket. Volatility in Chinese equity markets has also moderated over the last month, with major indices higher in October, following consecutive monthly declines since June (Figure 5).

Figure 2. Breakeven inflation declines on weak growth outlook
Market-implied inflation expectations (percent)



Source: Bloomberg L.P.

Figure 3. U.S. equities rebound despite weak fundamentals
S&P 500 sector performance (Index 100 = October 1, 2014)



Source: Bloomberg L.P.

Figure 4. Commodity-sensitive emerging market currencies rebound
(FX unit per $US, Index 100 = October 1, 2014)

Note: The JPMorgan Chase & Co. EM Currency Index is inverted to provide the same interpretation as other currency indexes.
Source: Bloomberg L.P.

However, the outlook for the Chinese economy remains weak even after officially reported growth in the third quarter was slightly better than expected. The median consensus forecast calls for the slowest annualized growth of gross domestic product, or GDP, since the financial crisis. The resilient services sector has led growth so far this year, but recent declines in the unofficial services-sector purchasing managers' index (PMI) suggests weakness going forward.

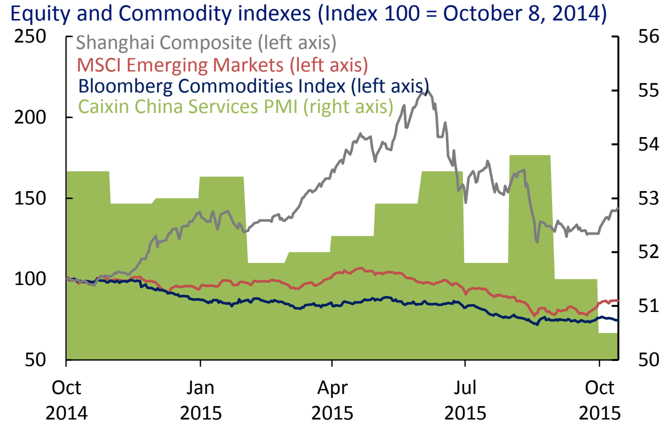
Oil and U.S. corporate credit markets also strengthened in October, but volatility persists.

After trading in a tight range for most of September, Brent and WTI crude futures prices have increased 2 percent to 5 percent since the end of September, in highly volatile trading (Figure 6). Currently, prices are trading from $44 to $48. News of slowing U.S. production sparked a sizable rally early in the month, which was then partly unwound after data showed high levels of production by the Organization of Petroleum Exporting Countries (OPEC) and U.S. inventories. Oil prices have been highly volatile amid uncertainty about an apparent supply glut since OPEC was perceived to shift away from its price-stabilizing role in late 2014.

The recent oil price jump also boosted risk appetites for U.S. corporate credit. Investment-grade and high-yield corporate bond spreads tightened in October, and demand improved for new credit issuance from higher-rated corporate borrowers. However, spreads remain well above the level after the sell-off in August due to the weak level of energy prices, global growth weakness, and accumulating company- and sector-specific issues (Figure 7). Performance in credit derivative products has come under pressure. Separately, the Markit CDX North America High Yield Index, a prominent corporate credit default swap index, has been re-based to better match cash high-yield indexes, with the addition of more energy firms causing a pronounced increase in the spread. The high-yield CDX is expected to be more volatile as a result of this re-basing, but it will reduce the mismatch facing investors who use the CDX to hedge against risk from the cash bond index.

Figure 5. Chinese markets stabilize despite weak growth outlook

Equity and Commodity indexes (Index 100 = October 8, 2014)

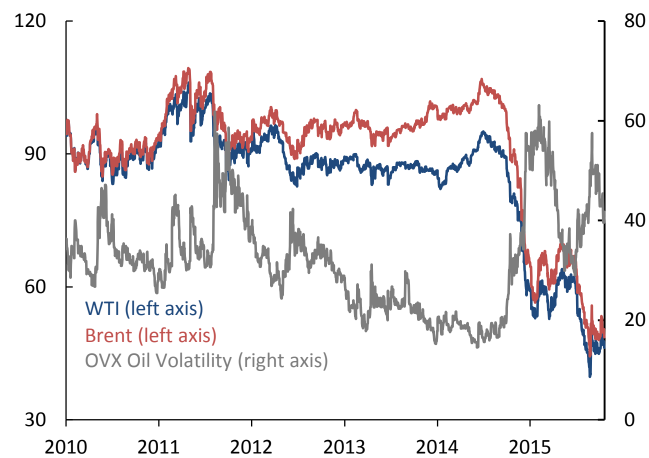


Note: Caixin PMI is reported monthly. A reading at 50 indicates no change, while a reading below 50 represents a contraction and above 50 represents an expansion. The MSCI Emerging Markets index is in USD terms.

Source: Bloomberg L.P.

Figure 6. Oil volatility remains elevated

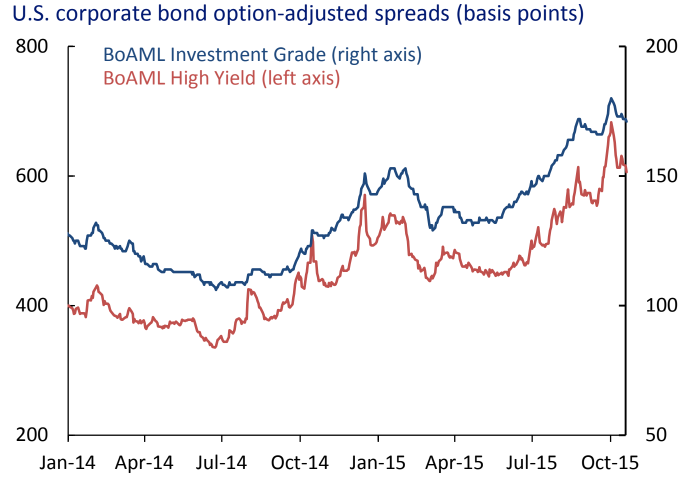
Crude oil prices ($US per barrel) and volatility (percent)



Source: Bloomberg L.P.

Figure 7. U.S. corporate bond spreads remain at multiyear highs

U.S. corporate bond option-adjusted spreads (basis points)



Source: Haver Analytics

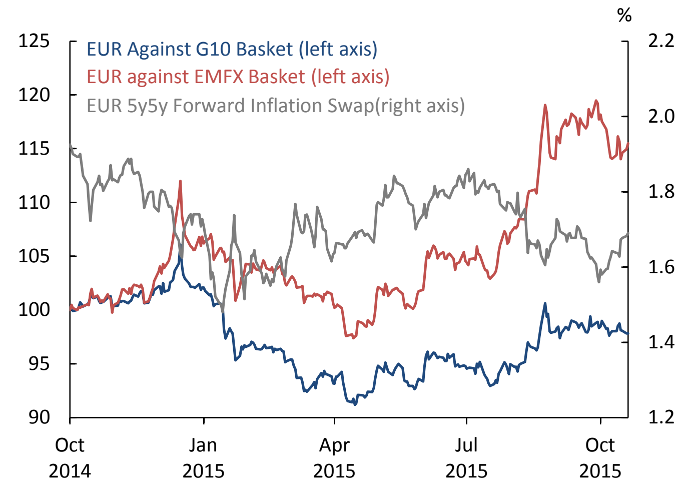
Downside risks to growth and inflation have also increased expectations for monetary accommodation in the euro area.

Lower commodity prices, slowing emerging market economies, and strengthening of the trade-weighted euro have increased downside risks to the outlook for inflation and growth in the euro area. The euro has appreciated by 5 percent in real terms against Europe's major trading partners since the middle of July and market-implied inflation expectations have declined (Figure 8). Since the European Central Bank (ECB) highlighted downside economic risks at its latest monetary policy meeting in October, market expectations have increased for the ECB to ease policy further in December, potentially including an extension of its asset purchase program beyond September 2016 or an increase in the pace of purchases.

Quarter-end dynamics led to increased repo rates in the interdealer market and use of the Federal Reserve reverse repo facility.

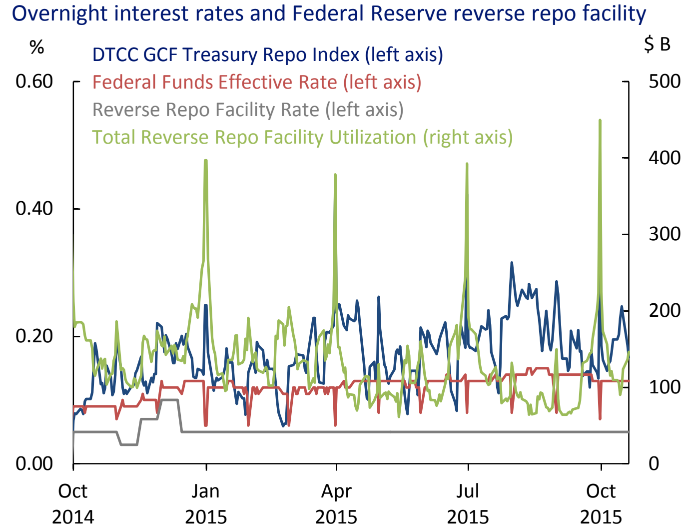
At the end of September, U.S. money markets followed the pattern from previous quarter-ends, as bank-affiliated dealers decreased their participation in short-term wholesale funding markets. Utilization of the Federal Reserve's reverse repurchase agreement (repo) facility reached a new high, which was spread between demand for the overnight facility and the longer-tenor repos that span the quarter-end (Figure 9). Overnight secured-funding rates increased and unsecured rates declined. Around quarter-end, large bank-affiliated dealers tend to curtail their repo activity in an effort to reduce their balance sheets, while at the same time the fed funds effective rate declines due to a lack of borrowing demand.

Figure 8. Euro appreciates as inflation expectations weaken
(Index 100 = October 1, 2014)



Source: Bloomberg L.P.

Figure 9. RRP utilization hits all-time high at quarter-end
Overnight interest rates and Federal Reserve reverse repo facility



Source: Bloomberg L.P.

Selected Global Asset Price Developments

	LATEST LEVEL (10/20/2015)	30-DAY CHANGE (bps or %)	30-DAY CHANGE (standard deviations)*	YTD CHANGE (bps or %)	12-MONTH RANGE**
EQUITIES					
S&P 500	2031	3.7%	0.7	-1%	
U.S. KBW Bank Index	71	2.8%	0.3	-4%	
Russel 2000	1163	0.0%	-0.1	-3%	
Nasdaq	4881	1.1%	0.0	3%	
Euro Stoxx 50	3256	3.1%	0.5	3%	
Shanghai Composite	3425	10.6%	0.8	6%	
Nikkei 225	18207	0.8%	0.1	4%	
Hang Seng	22989	4.9%	0.6	-3%	
FTSE All World	268	3.0%	0.6	-3%	
RATES					
U.S. 2-Year Yield	0.63%	-5	-0.1	-4	
U.S. 2-Year Swap Rate	0.74%	-6	-0.2	-16	
U.S. 10-Year Yield	2.07%	-7	-0.2	-10	
U.S. 10-Year Swap Rate	2.03%	-13	-0.4	-25	
U.S. 30-Year Yield	2.92%	-2	0.0	16	
U.S. 2y10y Spread	143	-2	-0.1	-7	
U.S. 5Y5Y Inflation Breakeven	1.84%	-13	-0.5	-30	
U.S. 5Y5Y Forward Rate	2.83%	-8	-0.2	7	
Germany 10-Year Yield	0.63%	-4	-0.1	9	
Japan 10-Year Yield	0.31%	0	0.1	-2	
U.K. 10-Year Yield	1.86%	2	0.2	10	
Euro area 5Y5Y Inflation Breakeven	1.69%	1	0.2	-4	
FUNDING					
1M T-Bill Yield	0.10%	12	0.5	9	
DTCC GCF Treasury Repo	0.17%	3	0.2	-8	
3M Libor	0.32%	0	0.1	6	
Libor-OIS Spread	15	-1	-0.1	2	
EURUSD 3M CCY Basis Swap	-24	0	0.0	-10	
U.S. MBS					
FNMA Current Coupon	2.78%	-6	-0.2	-5	
FHLMC Primary Rate	3.82%	-9	-0.4	-1	
CREDIT					
CDX Investment Grade 5-Year CDS Spread	81	4	0.2	14	
CDX High Yield 5-Year CDS Spread	435	54	0.5	78	
CDX Itraxx Euro 5-Year CDS Spread	79	9	0.6	16	
U.S. 5-Year Sovereign CDS Spread	18	2	0.4	1	
IMPLIED VOLATILITY					
VIX Index	16	-29%	-1.5	-18%	
V2X Index	22	-24%	-1.3	-17%	
VDAX Index	20	-19%	-1.1	2%	
MOVE Index	71	-6%	-0.5	3%	
3M2Y Swaption Volatility	57	-12%	-0.7	-17%	
3M10Y Swaption Volatility	79	-2%	-0.2	7%	
DB G10 FX Volatility Index	9	-8%	-0.8	-3%	
JPM EMFX Volatility Index	11	-5%	-0.5	4%	
FOREIGN EXCHANGE & COMMODITIES					
U.S. Dollar Index***	95	0.1%	0.0	5%	
EUR/USD	1.13	0.4%	0.1	-6%	
USD/JPY	120	-0.1%	-0.1	0%	
GBP/USD	1.54	-0.6%	-0.3	-1%	
USD/CHF	0.96	-1.3%	-0.4	-4%	
Brent Crude	49	1.0%	0.2	-26%	
Gold	1176	3.2%	0.6	-1%	
S&P GSCI Commodities Index	363	1.4%	0.2	-13%	
EMERGING MARKETS					
JPM EMFX Index	69	1.0%	0.5	-11%	
MSCI Emerging Market Equity Index	864	4.2%	0.6	-10%	
CDX EM 5-Year CDS Spread	331	3	0.0	-4	

* 30-Day change standard deviations based on monthly data from January 1994 or earliest available thereafter.

** Trailing 12-month range. Latest (O); Mean (|).

*** Dollar index from Bloomberg (ticker: DXY); averages the exchange rates between the U.S. Dollar and major world currencies.

Sources: Bloomberg L.P., OFR analysis