DOLLARS & SENSE
TD Economics

October 27, 2016

U.S. YIELD AND ECONOMIC DIVERGENCE HOLD CENTER STAGE

Highlights

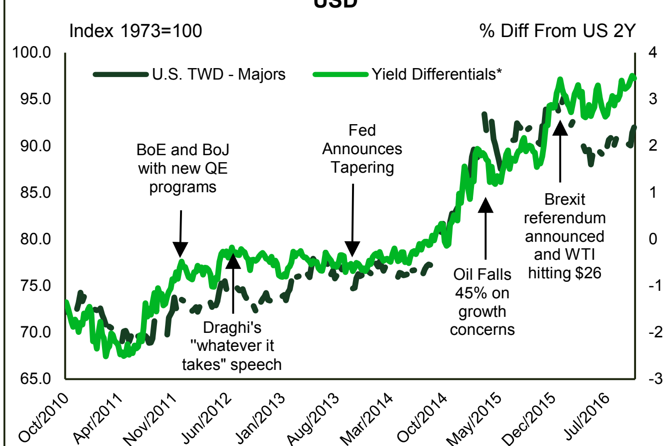
- The Federal Reserve is on course to raise rates by year-end and bond yields have started to incrementally price in this outcome. Even though the pace is slower than once thought, it stands in stark contrast to the ongoing monetary stimulus initiatives among other major central banks.
- Given structural headwinds, U.S. real GDP growth of 1.7-2.0% is all that it takes to make progress on the employment and inflation front. Idiosyncratic global shocks have failed to pull the U.S. off course, further distinguishing it from global peers.
- Two-year government yield differentials globally have captured this divergence and we expect this to continue for the next two years. Economic and yield divergence will keep the shine on the greenback.

The re-start of policy divergence is here. With the Federal Reserve preparing to raise rates once again, short-term bond yields and currencies are reflecting this inevitability. Five years of persistent upward pressure on the trade-weighted U.S. dollar is punctuated by the recent revisting of the upper bound of its trading range. The greenback continues to stand as a symbol of strength, as economic uncertainty plagues its global peers. The Fed's ability to raise rates, while other major central banks continue with stimulus, is captured by two-year government bond yield differentials (Chart 1). We believe these differentials will continue to widen once the upward path of the Fed rate hiking cycle is realized and stands in contrast with ongoing monetary stimulus decisions among other major countries. In other words, the appreciation in the U.S. dollar to date is justified.

Achieving the lowered bar for U.S. economic growth is dollar positive

During the five year greenback bull-run, all advanced economies have had their expectations for growth lowered. The U.S. economy has been no exception. In fact, the Congressional Budget Office has reduced potential real GDP growth to such a great extent that the economy is now more than $450B smaller than it was expected to be just 2 years ago. The run-rate for U.S. real GDP is now just 1.5-2.0% growth per year. This is incredibly low by historical standards, but it is the best an advanced economy can do given structural limitations of an aging population and the associated global phenomenon of weak productivity growth. That said, the U.S. is in the unique position of having a cyclical upswing in the consumer and wage cycle that will allow GDP growth to

CHART 1: YIELD DIFFERENTIALS GUIDING THE USD



Source: WSJ FRB TD Economics *Avg deviation of UK, Germany, Japan and Canada 2 year differntial from the US.

Beata Caranci, VP & Chief Economist 416-982-8067
James Orlando, Economist, 416-413-3180

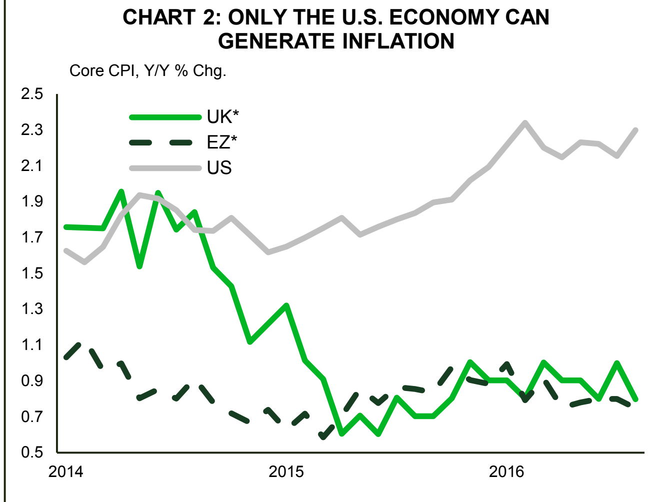
meet these reduced expectations, and likely exceed them. The consistent improvement in the labor market is finally providing real gains to the consumer via higher wages. Real after tax median incomes in 2015 rose by just over 5%. This was the fastest pace in nearly a decade. More recent data from the Atlanta Fed's wage tracker is showing persistent support for wages. Consumers are spending this augmented income and are acting as the main source of growth in lifting GDP higher.

The Federal Reserve recognizes this and is confident that the economy can withstand additional tightening of monetary policy, as early as December. This is remarkable given the numerous uncertainty shocks that have stunted the UK, Euro zone, and Canada from achieving their lowered advanced economy growth targets. But, as we've commented on numerous occasions, economic activity in the U.S. economy is very inward focused, marked by one of the lowest export dependencies of an advanced economy. Financial markets may be overly attributing weakness abroad to the U.S., particularly when it comes to inflation dynamics. Chart 2 demonstrates that core inflationary pressures in the U.S. are not comparable to its peers, particularly considering that the elevated U.S. dollar has been exerting downward pressure on import prices. In the absence of this influence, U.S. core CPI would be 0.3 percentage points higher than it is today.

The U.S. has been insulated from global shocks

Despite a number of economic and geopolitical shocks over the last year, none have led to systemic financial stress. The consequence has been significant cuts to near-term economic growth for specific economies, but not others. For example, it was initially feared that Brexit would cause financial market stress and impact investment in more than just the UK. This transmission hasn't happened (yet) and the knock-on impacts appear to be confined to mostly the UK economy. This is good news for other economies, but it also means currency volatility, as the Pound adjusts to the UK's new found sequestration. Additionally, if the UK's Prime Minster, Theresa May, is able to initiate negotiations for a hard exit from the EU in early 2017, this would unquestionably add to volatility.

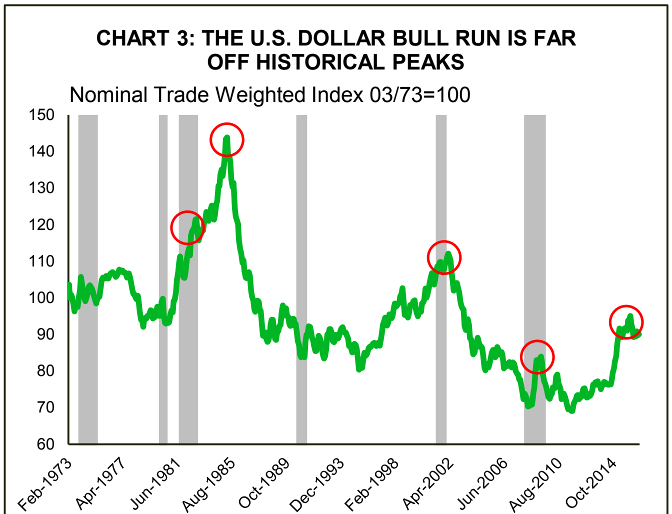
Across the Channel, Europe is trying to stabilize growth as it fights off the potential uncertainty surrounding its banking sector. With low net interest margins across the region and now Deutsche Bank facing hefty fines from the U.S Department of Justice, the ECB may have to extend



Source: Haver Analytics, TD Economics. *12-month mov. avg.

Quantitative Easing (QE). The Euro certainly has downside potential with this lingering risk. Likewise, unresponsive inflation expectations in Japan are proof that Abenomics has been limited in its effectiveness and that bolder policy is necessary. Even Canada has been slow to advance its rotation of growth towards the export sector and business investment against a mature housing and consumer cycle. The Canadian dollar has been largely range bound at $0.75 to $0.79, recently hitting the lower end with a surprise revelation by the BoC Governor that a rate cut was under discussion at the most recent policy meeting. While the U.S. economy just meets its low bar for growth, its global peers are still falling short.

Underperforming growth means less inflationary pressures and more appetite for stimulative monetary policy.



Source: NBER, WSJ, TD Economics.

So even with our expectation that the Fed will embark on a singular 25 basis point rate hike per year, the weak growth momentum from major trading partners results in divergent monetary policy. Two-year government yield differentials have been incrementally pricing this divergence. As we move past 2016, the divergence will only expand further. We estimate that differentials between the U.S. and other major economies could end 2018 at their highest levels since the 2002 peak for the trade weighted U.S. dollar. Certainly we are more optimistic than the markets regarding the ability and willingness for the Fed to execute one rate hike every nine to twelve months. But if the Fed does hike rates as it is suggesting by the end of the year, this will go a long way to help motivate a market re-pricing of the future path of rates. This would be captured in short-term yield differentials, which could dictate the next leg up for the trade weighted U.S. dollar (Chart 3).

Yields of longer maturity in the U.S. will also continue to increase over the course of next year. This is based on the path of rates, but also the realization that QE around the world is not providing the boost to inflation that was originally thought. We estimate that the U.S. 10 year is 0.5-1.0% lower than it would have been in a world without QE. Due to the global financial linkages, a re-launch of a rate hike cycle by the Fed and re-assessment of monetary policy means a flow through of higher long term rates not just in the U.S., but also globally on the margin.

Beata Caranci
VP & Chief Economist
416-982-8067

James Orlando
Economist
416-413-3189

INTEREST RATE & FOREIGN EXCHANGE RATE OUTLOOK

		Spot Rate	2016				2017				2018			
		Oct-26	Q1	Q2	Q3	Q4F	Q1F	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
Interest Rates														
Fed Funds Target Rate		0.50	0.50	0.50	0.50	0.75	0.75	0.75	1.00	1.00	1.00	1.25	1.25	1.25
3-mth T-Bill Rate		0.32	0.21	0.26	0.29	0.65	0.65	0.70	0.90	0.90	0.95	1.15	1.15	1.20
2-yr Govt. Bond Yield		0.87	0.73	0.58	0.77	0.90	0.95	1.00	1.05	1.15	1.25	1.35	1.40	1.45
5-yr Govt. Bond Yield		1.30	1.21	1.01	1.14	1.30	1.30	1.40	1.45	1.50	1.60	1.65	1.70	1.75
10-yr Govt. Bond Yield		1.79	1.78	1.49	1.60	1.80	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15
30-yr Govt. Bond Yield		2.54	2.61	2.30	2.32	2.50	2.50	2.50	2.55	2.60	2.65	2.70	2.75	2.80
10-yr-2-yr Govt Spread		0.92	1.05	0.91	0.83	0.90	0.85	0.85	0.85	0.80	0.75	0.70	0.70	0.70
Exchange rate to U.S. dollar														
Chinese Yuan	CNY per USD	6.77	6.45	6.65	6.67	6.88	6.96	7.04	7.12	7.18	7.30	7.40	7.50	7.50
Japanese yen	JPY per USD	105	112	103	101	104	105	105	105	106	106	107	107	108
Euro	USD per EUR	1.09	1.14	1.10	1.12	1.09	1.09	1.09	1.10	1.10	1.12	1.12	1.12	1.12
U.K. pound	USD per GBP	1.22	1.44	1.32	1.30	1.22	1.22	1.22	1.23	1.24	1.24	1.25	1.25	1.26
Swiss franc	CHF per USD	0.99	0.96	0.98	0.97	1.01	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.00
Canadian dollar	CAD per USD	1.34	1.30	1.30	1.31	1.34	1.34	1.34	1.33	1.33	1.33	1.32	1.31	1.31
Australian dollar	USD per AUD	0.76	0.77	0.74	0.77	0.74	0.72	0.72	0.73	0.74	0.75	0.75	0.75	0.75
NZ dollar	USD per NZD	0.72	0.69	0.71	0.73	0.67	0.65	0.64	0.64	0.64	0.64	0.64	0.64	0.64
Exchange rate to Euro														
U.S. dollar	USD per EUR	1.09	1.14	1.10	1.12	1.09	1.09	1.09	1.10	1.10	1.12	1.12	1.12	1.12
Japanese yen	JPY per EUR	114	128	113	114	113	114	114	115	116	119	119	120	120
U.K. pound	GBP per EUR	0.89	0.79	0.83	0.86	0.89	0.89	0.89	0.89	0.89	0.90	0.90	0.90	0.89
Swiss franc	CHF per EUR	1.08	1.09	1.08	1.09	1.10	1.10	1.10	1.11	1.10	1.12	1.12	1.12	1.12
Canadian dollar	CAD per EUR	1.46	1.48	1.44	1.47	1.46	1.46	1.46	1.46	1.46	1.49	1.48	1.47	1.46
Australian dollar	AUD per EUR	1.43	1.48	1.48	1.47	1.47	1.51	1.51	1.50	1.49	1.49	1.49	1.49	1.49
NZ dollar	NZD per EUR	1.52	1.65	1.55	1.54	1.63	1.68	1.70	1.71	1.72	1.75	1.75	1.75	1.75
Exchange rate to Japanese yen														
U.S. dollar	JPY per USD	105	112	103	101	104	105	105	105	106	106	107	107	108
Euro	JPY per EUR	114	128	113	114	113	114	114	115	116	119	119	120	120
U.K. pound	JPY per GBP	128	162	136	132	127	128	128	129	130	131	133	134	135
Swiss franc	JPY per CHF	105.2	117.3	105.0	104.4	103.0	104.0	104.0	104.0	105.5	106.0	106.5	107.0	107.5
Canadian dollar	JPY per CAD	78.1	86.7	79.0	77.2	77.6	78.4	78.4	78.9	79.3	79.7	80.7	81.7	82.4
Australian dollar	JPY per AUD	79.9	86.3	76.4	77.6	77.0	75.6	75.6	76.7	78.1	79.5	79.9	80.3	80.6
NZ dollar	JPY per NZD	74.7	77.9	73.2	73.8	69.7	68.3	67.2	67.2	67.5	67.8	68.2	68.5	68.8

F: Forecast by TD Economics, October 2016; Forecasts are end-of-period; Source: Federal Reserve, Bloomberg.

GLOBAL STOCK MARKETS

	Price Oct-26	30-Day % Chg.	YTD % Chg.	52-Week High	52-Week Low
S&P 500	2,139	-1.2	3.9	2,190	1,829
DAX	10,710	0.8	9.2	11,382	8,753
FTSE 100	6,958	0.7	6.0	7,098	5,537
Nikkei	17,392	3.8	-0.3	20,012	14,952
MSCI AC World Index*	414	-1.5	-0.8	424	353

*Weighted equity index including both developing and emerging markets.
Source: Bloomberg

COMMODITY PRICE OUTLOOK

	Price	52-Week	52-Week	2016				2017				2018			
	Oct-26	High	Low	Q1	Q2	Q3	Q4F	Q1F	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
Crude Oil (WTI, $US/bbl)	49	52	26	33	45	45	50	52	52	55	55	56	56	57	57
Natural Gas ($US/MMBtu)	2.68	3.22	1.49	1.97	2.13	2.85	2.90	3.10	3.15	3.25	3.25	3.30	3.30	3.30	3.30
Gold ($US/troy oz.)	1267	1366	1051	1182	1259	1335	1325	1300	1300	1290	1290	1300	1300	1350	1350
Silver (US$/troy oz.)	17.6	20.6	13.7	14.9	16.8	19.6	19.0	18.5	18.5	18.0	18.0	18.5	18.5	19.5	19.5
Copper (cents/lb)	214	236	196	212	215	216	219	220	221	226	227	230	230	235	235
Nickel (US$/lb)	4.64	4.93	3.45	3.86	4.00	4.65	4.55	4.25	4.25	4.50	4.50	4.50	4.50	5.00	5.00
Aluminum (Cents/lb)	76	77	65	69	71	73	72	74	74	76	76	78	78	78	78
Wheat ($US/bu)*	5.86	7.95	5.58	5.89	6.06	5.73	6.25	6.20	6.20	6.25	6.30	6.30	6.35	6.40	6.50

F: Forecast by TD Economics, October 2016; Forecasts are period averages; E: Estimate. Source: Bloomberg, USDA (Haver).

INTERNATIONAL INTEREST RATE OUTLOOK

	Spot Rate	2016				2017				2018			
	Oct-26	Q1	Q2	Q3	Q4F	Q1F	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
Germany													
ECB Deposit Rate	-0.40	-0.40	-0.40	-0.40	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
3-mth T-Bill Rate	-0.87	-0.59	-0.68	-0.80	-0.70	-0.70	-0.70	-0.70	-0.70	-0.70	-0.70	-0.70	-0.70
2-yr Govt. Bond Yield	-0.64	-0.52	-0.66	-0.68	-0.60	-0.55	-0.50	-0.45	-0.40	-0.35	-0.30	-0.25	-0.20
5-yr Govt. Bond Yield	-0.44	-0.33	-0.57	-0.58	-0.45	-0.45	-0.40	-0.40	-0.35	-0.30	-0.25	-0.20	-0.15
10-yr Govt. Bond Yield	0.09	0.15	-0.13	-0.12	0.10	0.10	0.10	0.15	0.15	0.20	0.25	0.30	0.35
30-yr Govt. Bond Yield	0.72	0.84	0.83	0.78	0.70	0.70	0.70	0.70	0.75	0.75	0.80	0.80	0.85
10-yr-2-yr Govt Spread	0.72	0.67	0.53	0.56	0.70	0.65	0.60	0.60	0.55	0.55	0.55	0.55	0.55
United Kingdom													
Bank Rate	0.25	0.50	0.50	0.25	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
3-mth T-Bill Rate	0.30	0.51	0.46	0.32	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
2-yr Govt. Bond Yield	0.27	0.44	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.25	0.25	0.30	0.30
5-yr Govt. Bond Yield	0.54	0.84	0.35	0.22	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90
10-yr Govt. Bond Yield	1.15	1.42	0.87	0.75	1.15	1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.55
30-yr Govt. Bond Yield	1.79	2.29	1.70	1.49	1.80	1.80	1.80	1.80	1.80	1.85	1.85	1.85	1.85
10-yr-2-yr Govt Spread	0.88	0.98	0.77	0.64	0.95	1.00	1.05	1.10	1.15	1.15	1.20	1.20	1.25
Australia													
Cash Target Rate	1.50	1.75	1.75	1.50	1.50	1.50	1.50	1.50	1.50	1.75	1.75	1.75	2.00
3-mth T-Bill Rate	1.60	2.04	1.69	1.53	1.75	1.75	1.75	1.75	1.75	2.00	2.00	2.00	2.25
3-yr Govt. Bond Yield	1.73	1.90	1.55	1.52	1.75	1.75	1.75	1.75	2.00	2.00	2.00	2.25	2.25
5-yr Govt. Bond Yield	1.94	2.09	1.65	1.60	2.00	2.00	2.00	2.00	2.25	2.25	2.25	2.50	2.50
10-yr Govt. Bond Yield	2.27	2.49	1.98	1.91	2.30	2.30	2.30	2.30	2.55	2.55	2.55	2.80	2.80
10-yr-3-yr Govt Spread	0.53	0.59	0.43	0.39	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55

F: Forecast by TD Securities, October 2016; Forecasts are end-of-period; Source: Bloomberg.