DOLLARS & SENSE

TD Economics

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FEDERAL RESERVE POISED TO RAISE RATES IN DECEMBER

Highlights

- The persistent strength in U.S. domestic demand, even in the face of global headwinds, suggests the American economy no longer requires emergency-level interest rates. We expect the Federal Reserve to raise the federal funds rate at its next meeting on December 16th.
- A December Fed hike will increase the spread between Canadian and U.S. yields. With the Bank of Canada likely to sit on the sidelines until mid-2017, this negative spread will keep downward pressure on the Loonie, which we expect to hit a bottom of 71.4 U.S. cents in the first quarter of 2016.
- Weak global growth and the strong U.S. dollar are likely to keep commodity prices and inflation in check. Even with the U.S. unemployment rate at 5.0%, other indicators point to ongoing economic slack. Combined with the unprecedented size of the Federal Reserve's balance sheet, this means the pace of interest rate hikes stateside will be cautious.

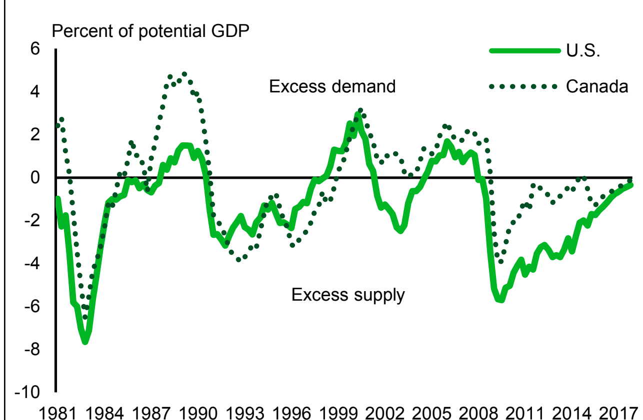
As 2015 draws to a close, expectations in financial markets have solidified on the Federal Reserve moving interest rates off the zero lower bound at the last meeting of the year on December 16th. The persistent strength of U.S. domestic demand, even in the face of global headwinds, suggests the American economy is ready for the move higher in rates.

From a Canadian perspective, a December Fed hike will put further downward pressure on the spread between Canadian and U.S. yields. With the Bank of Canada likely to sit on the sidelines until mid-2017, the negative spreads in short-term rates is likely to persist through the end of 2017. This will keep downward pressure on the Loonie. We expect the Canadian dollar to hit a bottom of 71.4 U.S. cents in the first quarter of 2016. The currency is likely to remain fairly soft until the latter half of 2017, when we expect the first hints of a Canadian rate hiking cycle.

Given that the Fed will lead the way in terms of interest rate hikes, and, as Governor Poloz has noted, this will lead to tighter financial conditions in Canada, the remainder of the discussion centers on the path for interest rates stateside. Critical to determining the path of interest rates is an understanding of where the U.S. economy currently sits in the business cycle. Economists often try to figure this out in the context of the output gap (Chart 1). In its simplest form, this measure tries to capture how close the economy is to its potential (or full-capacity) level. The closer the economy is to this point, the less the need for accommodative monetary policy.

Measuring the output gap requires consideration of a mix of data, spanning estimates of potential GDP, an array of employment metrics, and even attention to how the global environment is influencing domestic inflation dynamics. Piecing together these moving parts leaves two impressions. First, a suite of U.S.

CHART 1: THE OUTPUT GAP



Forecast by TD Economics
Source: Congressional Budget Office & TD Economics

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indicators is showing marked improvement. Second, the American economy is not at risk of overheating, and the Federal Reserve can proceed with caution.

Is the U.S. economy back to "normal"?

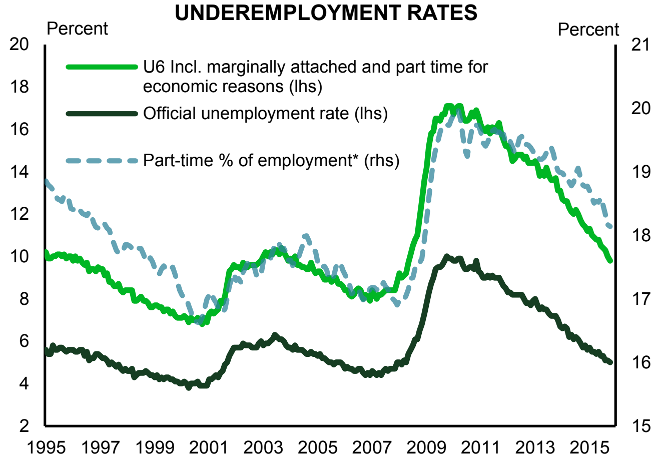
A popular measure of the output gap is where the unemployment rate sits relative to its structural rate. Six years to the month after hitting a peak of 10.0%, the U.S. unemployment rate fell to 5.0% in October. This is consistent with estimates of "normal" that reflects an economy in balance. This raises the question as to whether the economy has already returned to full capacity. More importantly, if so, does the current exceptional stimulative monetary policy setting present a risk that future rate adjustments will need to occur in faster or larger steps?

Not if you look at the U.S. economy holistically. Returning to the notion of where GDP currently sits relative to its potential output offers a different estimate. The OECD, the IMF, and the CBO estimate that economic output in 2015 is on average 1.0% to 2.5% below potential. The OECD does not expect the U.S. output gap to close until 2017, while the CBO and IMF are tracking sometime next year.

Measures of potential or "normal" are prone to revisions. All of the major estimates of potential GDP have come down following the recession, as analysts deepen their understanding of the long-run implications of a financial crisis on investment, productivity, and labour supply. Estimates of the structural rate of unemployment have also moved lower. The average central tendency of Federal Reserve projections for the unemployment rate rose as high as 5.6% in 2013, before edging back to the current level of 5.0%.

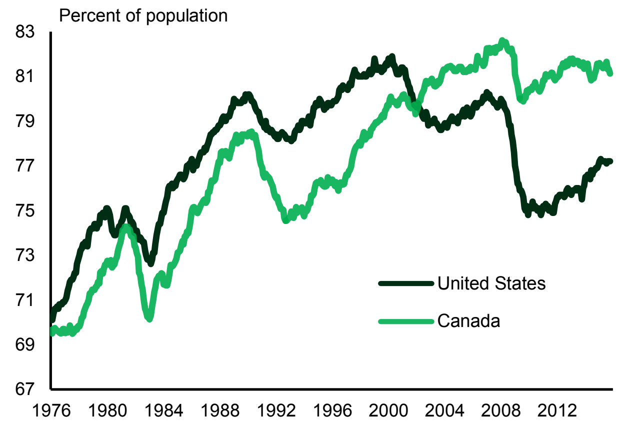
Along this vein, the conventional unemployment rate is not a catch-all measurement of slack. Other U.S. labour

CHART 2: UNEMPLOYMENT & UNDEREMPLOYMENT RATES



*Three-month moving average. Source: Bureau of Labor Statistics.

CHART 3: EMPLOYMENT TO POPULATION RATIO 25-54 YEARS



Source: Bureau of Labor Statistics, Statistics Canada

market indicators are well below their pre-recession levels. For instance, the so-called U6 "underemployment" rate adds in marginally attached workers (people who want a job, but are not currently looking and those employed part time for economic reasons). It is sitting at 9.8% and has fallen from a peak of 17.1%. But, it remains 1.4 percentage points above its pre-recession level in late 2007 (Chart 2). Likewise, the employment-to-population ratio of the core working age group (25-to-54 year olds) is still three percentage points below its pre-recession level (Chart 3).

The bottom line

Even as this remaining slack is absorbed, inflation is likely to remain benign as weak global growth and the strong dollar keep commodity and import prices in check (please see tables for updated forecasts). However, as Fed Chair Yellen has noted, given the lags in monetary policy, the Fed cannot wait until capacity pressures are evident before beginning to normalize monetary policy. This is particularly true when the starting point is zero.

A December lift-off affords the Fed time to pause to assess new information. We anticipate rate adjustments of just 75 basis points in the first year. Adjusting for inflation, this will leave the fed funds rate in negative territory.

Part of the go-slow approach will also reflect the fact that the Fed has an unprecedented balance sheet that it must slowly unwind. This combination of asset run-off and rate hikes offers a dual tightening in financial conditions, particularly if the greenback maintains strength as other major global players like the Euro area, Japan and China continue to favor easier monetary policy. All this suggests that policy normalization is likely to be an evolving and fluid process.

INTEREST RATE OUTLOOK

	Spot Rate	2015				2016				2017			
	Nov-16	Q1	Q2	Q3	Q4F	Q1F	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
CANADA													
Overnight Target Rate	0.50	0.75	0.75	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	1.00	1.25
3-mth T-Bill Rate	0.43	0.55	0.58	0.43	0.45	0.45	0.45	0.45	0.50	0.55	0.80	1.15	1.20
2-yr Govt. Bond Yield	0.61	0.51	0.49	0.53	0.60	0.65	0.75	0.80	0.90	1.05	1.20	1.50	1.75
5-yr Govt. Bond Yield	0.93	0.77	0.81	0.81	1.05	1.20	1.30	1.45	1.55	1.65	1.80	2.00	2.25
10-yr Govt. Bond Yield	1.63	1.36	1.68	1.45	1.80	1.90	2.00	2.10	2.15	2.25	2.35	2.50	2.65
30-yr Govt. Bond Yield	2.33	1.99	2.31	2.21	2.40	2.45	2.50	2.60	2.65	2.75	2.85	3.00	3.15
10-yr-2-yr Govt Spread	1.02	0.85	1.19	0.92	1.20	1.25	1.25	1.30	1.25	1.20	1.15	1.00	0.90
U.S.													
Fed Funds Target Rate	0.25	0.25	0.25	0.25	0.50	0.75	1.00	1.25	1.25	1.50	1.75	1.75	1.75
3-mth T-Bill Rate	0.11	0.03	0.01	0.00	0.25	0.50	0.75	1.00	1.00	1.25	1.50	1.50	1.50
2-yr Govt. Bond Yield	0.83	0.56	0.64	0.64	1.00	1.25	1.50	1.75	1.75	1.85	2.10	2.10	2.10
5-yr Govt. Bond Yield	1.63	1.37	1.63	1.37	1.80	2.00	2.10	2.25	2.25	2.35	2.45	2.45	2.45
10-yr Govt. Bond Yield	2.25	1.94	2.35	2.06	2.40	2.45	2.50	2.50	2.50	2.55	2.65	2.75	2.80
30-yr Govt. Bond Yield	3.04	2.54	3.11	2.87	3.15	3.15	3.20	3.20	3.20	3.20	3.25	3.30	3.35
10-yr-2-yr Govt Spread	1.42	1.38	1.71	1.42	1.40	1.20	1.00	0.75	0.75	0.70	0.55	0.65	0.70
CANADA - U.S SPREADS													
Can - U.S. T-Bill Spread	0.32	0.52	0.57	0.43	0.20	-0.05	-0.30	-0.55	-0.50	-0.70	-0.70	-0.35	-0.30
Can - U.S. 10-Year Bond Spread	-0.62	-0.58	-0.67	-0.61	-0.60	-0.55	-0.50	-0.40	-0.35	-0.30	-0.30	-0.25	-0.15

F: Forecast by TD Economics, November 2015; Forecasts are end-of-period; Source: Bloomberg, Bank of Canada, Federal Reserve.

GLOBAL STOCK MARKETS

	Price Nov-16	30-Day % Chg.	YTD % Chg.	52-Week High	52-Week Low
S&P 500	2,023	-0.5	-1.7	2,131	1,868
S&P/TSX Composite	13,075	-5.5	-10.6	15,451	13,005
DAX	10,684	5.7	9.0	12,375	9,306
FTSE 100	6,128	-3.9	-6.7	7,104	5,899
Nikkei	19,394	6.0	11.1	20,868	16,755
MSCI AC World Index*	399	-2.1	-4.4	443	374

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

COMMODITY PRICE OUTLOOK

	Price	52-Week	52-Week	2015				2016				2017			
	Nov-16	High	Low	Q1	Q2	Q3	Q4F	Q1F	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
Crude Oil (WTI, $US/bbl)	41	76	38	49	59	47	44	44	46	54	62	63	64	66	67
Natural Gas ($US/MMBtu)	2.01	4.41	1.90	2.87	2.78	2.52	3.05	3.20	3.10	3.25	3.40	3.60	3.40	3.20	3.80
Gold ($US/troy oz.)	1086	1302	1084	1218	1191	1125	1135	1100	1125	1175	1210	1200	1175	1125	1075
Silver (US$/troy oz.)	14.3	18.3	14.1	16.74	16.44	14.90	15.35	14.90	15.75	16.25	16.75	16.65	16.25	14.90	14.75
Copper (cents/lb)	219	308	219	264	275	236	238	234	230	225	225	220	225	250	250
Nickel (US$/lb)	4.28	7.77	4.27	6.51	5.94	4.85	5.00	5.50	6.25	6.50	6.50	7.25	7.25	8.00	8.00
Aluminum (Cents/lb)	68	93	67	82	79	73	73	72	74	74	78	78	80	84	84
Wheat ($US/bu)*	6.40	8.85	5.82	7.45	7.34	6.50	6.25	6.50	6.75	6.90	7.00	7.10	7.25	7.35	7.50

F: Forecast by TD Economics, November 2015; Forecasts are period averages; Source: Bloomberg, USDA (Haver).

FOREIGN EXCHANGE OUTLOOK

Currency	Exchange rate	Spot Price	2015				2016				2017			
		Nov-16	Q1	Q2	Q3	Q4F	Q1F	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
Exchange rate to U.S. dollar														
Japanese yen	JPY per USD	123.0	120.0	122.1	119.9	125.0	125.0	123.0	120.0	118.0	118.0	120.0	122.0	122.0
Euro	USD per EUR	1.07	1.07	1.12	1.12	1.02	1.03	1.06	1.10	1.12	1.15	1.15	1.20	1.20
U.K. pound	USD per GBP	1.52	1.49	1.57	1.51	1.46	1.49	1.58	1.62	1.65	1.64	1.64	1.67	1.67
Swiss franc	CHF per USD	1.01	0.97	0.94	0.97	1.06	1.04	1.01	0.97	0.96	0.92	0.94	0.92	0.92
Canadian dollar	CAD per USD	1.33	1.27	1.25	1.33	1.37	1.40	1.37	1.35	1.33	1.28	1.25	1.20	1.20
Australian dollar	USD per AUD	0.71	0.76	0.77	0.70	0.68	0.67	0.67	0.69	0.70	0.72	0.74	0.76	0.76
NZ dollar	USD per NZD	0.65	0.75	0.68	0.63	0.62	0.61	0.59	0.57	0.56	0.58	0.58	0.60	0.61
Exchange rate to Euro														
U.S. dollar	USD per EUR	1.07	1.07	1.12	1.12	1.02	1.03	1.06	1.10	1.12	1.15	1.15	1.20	1.20
Japanese yen	JPY per EUR	132	129	136	134	128	129	130	132	132	136	138	146	146
U.K. pound	GBP per EUR	0.71	0.72	0.71	0.74	0.70	0.69	0.67	0.68	0.68	0.70	0.70	0.72	0.72
Swiss franc	CHF per EUR	1.08	1.04	1.04	1.09	1.08	1.07	1.07	1.07	1.08	1.06	1.08	1.10	1.10
Canadian dollar	CAD per EUR	1.43	1.36	1.39	1.49	1.40	1.44	1.45	1.49	1.49	1.47	1.44	1.44	1.44
Australian dollar	AUD per EUR	1.51	1.41	1.45	1.60	1.50	1.54	1.58	1.59	1.60	1.60	1.55	1.58	1.58
NZ dollar	NZD per EUR	1.66	1.44	1.65	1.78	1.65	1.69	1.80	1.93	2.00	1.98	1.98	2.00	1.97
Exchange rate to Japanese yen														
U.S. dollar	JPY per USD	123.0	120.0	122.1	119.9	125.0	125.0	123.0	120.0	118.0	118.0	120.0	122.0	122.0
Euro	JPY per EUR	132	129	136	134	128	129	130	132	132	136	138	146	146
U.K. pound	JPY per GBP	187	178	192	181	183	186	194	194	195	194	197	204	204
Swiss franc	JPY per CHF	122.1	123.5	130.6	123.6	117.9	120.2	121.8	123.7	122.9	128.3	127.7	132.6	132.6
Canadian dollar	JPY per CAD	92.1	94.6	97.9	90.2	91.2	89.3	89.8	88.9	88.7	92.2	96.0	101.7	101.7
Australian dollar	JPY per AUD	87.2	91.5	94.1	83.9	85.0	83.8	82.4	82.8	82.6	85.0	88.8	92.7	92.7
NZ dollar	JPY per NZD	79.6	89.8	82.8	75.5	77.5	76.3	72.6	68.4	66.1	68.4	69.6	73.2	74.4
Exchange rate to Canadian dollar														
U.S. dollar	USD per CAD	0.75	0.79	0.80	0.75	0.73	0.71	0.73	0.74	0.75	0.78	0.80	0.83	0.83
Japanese yen	JPY per CAD	92.1	94.6	97.9	90.2	91.2	89.3	89.8	88.9	88.7	92.2	96.0	101.7	101.7
Euro	CAD per EUR	1.43	1.36	1.39	1.49	1.40	1.44	1.45	1.49	1.49	1.47	1.44	1.44	1.44
U.K. pound	CAD per GBP	2.03	1.88	1.96	2.01	2.00	2.09	2.17	2.19	2.20	2.10	2.05	2.00	2.00
Swiss franc	CHF per CAD	0.75	0.77	0.75	0.73	0.77	0.74	0.74	0.72	0.72	0.72	0.75	0.77	0.77
Australian dollar	AUD per CAD	1.06	1.03	1.04	1.07	1.07	1.07	1.09	1.07	1.07	1.08	1.08	1.10	1.10
NZ dollar	NZD per CAD	1.16	1.05	1.18	1.19	1.18	1.17	1.24	1.30	1.34	1.35	1.38	1.39	1.37

F: Forecast by TD Economics, November 2015; Forecasts are end-of-period; Source: Federal Reserve, Bloomberg.