

US Economic Perspectives

Expected 2016 Growth Almost Halved

Economics

Americas

2016 Real GDP Growth Cut 130 Basis Points To 1.5%

We are reducing our calendar average real GDP forecast from 2.8% to 1.5% in 2016 but maintaining our 2.5% forecast for 2017. (See details of forecast change in Exhibit 1 on page 3.) Consequently, we no longer foresee 25 basis point federal funds rate increases in each of the quarters of 2016. Instead, we now expect two 25 basis point hikes (September and December FOMC meetings) to a yearend 2016 level of 7% versus the earlier forecast 1 3/4%.

Forecast Rationale

The major reasons for reducing our 2016 growth forecast are somewhat tighter credit conditions, the undesired 2015 inventory building, weaker capital spending signals, and more negative than earlier anticipated effects from the strong dollar and plunging oil prices. The major reasons for no recession in the forecast horizon and a recovery in 2017 growth are no broad-based credit crunch, the end of a 2016 inventory correction, a much more slowly appreciating dollar, and a moderate recovery in oil prices.

H2(15) Growth Already Was At 1.35% Annual Rate

The negative consequences of a strong dollar, weaker oil prices, and reduced inventory building were especially evident in recently reported GDP data for Q4(15). Annualized real GDP growth in Q4(15) slowed to 0.7%, with 0.5% reductions each from deteriorating foreign trade and weaker inventory building. Also, further declines in domestic energy exploration subtracted another 25 basis points from annualized Q4(15) growth. For H2(15), average quarterly real GDP growth was just 1.35% versus 2.25% in H1(15).

Expected Soft H1(16) Is Replay of Weak H2(15)

The weak 1.35% annualized growth in H2(15) is expected to carry over into H1(16). While oil prices and the dollar could stabilize, their complete economic impacts from their earlier movements are registered only with lags. Moreover, there are 2016 legacy effects from previous dollar and oil price swings. Specifically, inventories were built too rapidly. For example, the 3.1% annualized growth of real inventories in Q4(15) came with just flat final sales of goods. Business profits and confidence have waned, with accompanying negative effects on capital spending. For instance, in the Q4 Business Roundtable CEO Outlook poll, the net fraction of respondents expecting higher capital spending in the next half year fell to just 3% versus 21% in the previous survey. Also, a dimmer business outlook stemming from the dollar and oil price changes of 2015 engendered more lender caution heading into 2016.

We expect annualized real GDP growth of just 1.0% in Q1(16) and 1.5% in Q2(16). However, as the oil price, exchange rate, and inventory correction headwinds start to fade, growth should improve somewhat to annualized growth rates of 2.0% in Q3(16) and Q4(16) and 2.5% in calendar 2017. (See quarterly details in Exhibit 2.)

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PIVOTAL QUESTIONS

Q: How weak is the US economy?

Estimated 1.5% growth in 2016 calendar average real GDP is a continuation of the around 1.35% annualized real GDP growth in H2(15).

Q: Will the economy tumble into an outright recession?

Probably not unless there is an unanticipated broad-based credit crunch.

Q: Can growth reaccelerate after near-term soft spot?

Yes. Real GDP growth is expected to rebound to 2.5% in 2017 as the current dollar, oil price, and inventory problems fade.

WHAT'S PRICED IN?

Consensus forecasts among economists at the half-dozen largest Wall Street investment banks are for 2.0% growth in 2016 and 2.1% growth in 2017.

UBS VIEW

Our 2016 growth forecast is below consensus partly because of a sharp expected inventory investment decline. Our 2017 forecasts are above consensus partly due to our projections of dollar and oil price stabilization in the course of 2016.

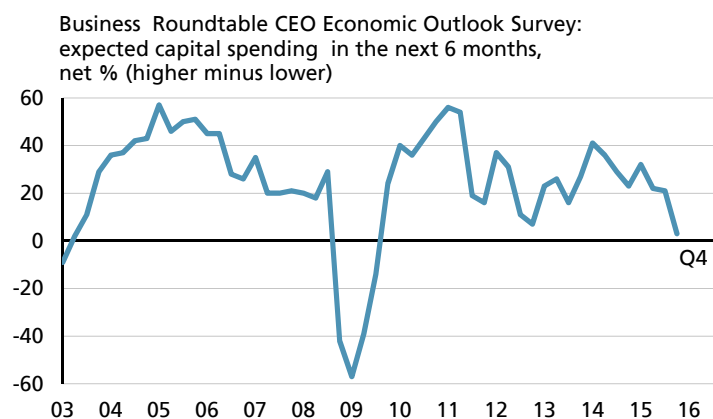
EVIDENCE

The sharp decline in corporations' planned capital expenditures growth exemplifies the near-term caution that corporations should exhibit in their 2016 hiring, inventory, and investment decisions.

UPSIDE/DOWNSIDE RISKS:

An upside forecast risk is unusually strong household formation. The major downside risk is a broad-based credit crunch. UBS fixed-income strategists' credit conditions models suggest around one in six odds of a recession.

Capex plans are plunging.



Source: UBS, Business Roundtable

Exhibit 1: 2016 Real GDP Growth Forecast Changes

Forecast as of Feb. 1	Calendar average % ch 2016E	
	New	Old
Real GDP (Chain)	1.5	2.8
Personal consumption expenditures	2.5	3.0
Business fixed investment	0.8	5.1
Equipment	1.0	5.3
Structures	-2.0	3.8
Residential	7.6	7.1
Government purchases	1.5	1.3
Exports	-0.7	2.4
Imports	2.0	3.8
Change in inventories (\$ bil)	26	70
Net exports contribution (pct pts)	-0.4	-0.3
Inventory contribution (pct pts)	-0.4	-0.2

Source: UBS

Stronger Dollar's Toll Continuing For Time Being

The strong dollar has been accompanied by weaker exports. (See Exhibit 3.) However, even if, as we expect, the rate of trade-weighted dollar appreciation starts to diminish, the dollar affects trade with lags. For calendar 2016, we expect a 0.7% decline in real exports of goods and services, which edged up 1.1% last year. (Note In Exhibit 4 that it has only been in recent months that the manufacturing ISM export order growth index has been under the 50 reading at which export orders are flat.) For 2017, however, we expect renewed 2.1% export growth.

Lower Oil Prices' Surprisingly Negative Effects

One of the biggest surprises last year was that the decline in oil prices did not have the widely hypothesized net positive effects on the economy. We expected a neutral effect as households' spending gains from lower energy prices would be approximately offset by lower domestic energy exploration expenditures. Over the four quarters ending in Q4(15), current dollar spending in the exploration, the shafts and wells GDP category plunged \$81 billion to a \$64 billion annual pace. (See in Exhibit 5 the relation between oil prices and such current dollar spending.) At the same time, the household sector's gain from lower gasoline prices was around \$115 billion, according to the American Automobile Association. However, in calendar 2015 overall personal savings rose by \$78 billion. And part of that rise reflected the household sector not spending elsewhere all of their savings on gasoline expenses. For example, 31% of gasoline is purchased by families who are in the top fifth of the income distribution and whose consumption is not apt to be governed by gas prices. (See Exhibit 6.) If they saved all of their \$36 billion in reduced gasoline expenditures (i.e., 31% of \$115 billion), such saving would represent close to half of the \$78 billion rise in overall personal savings.

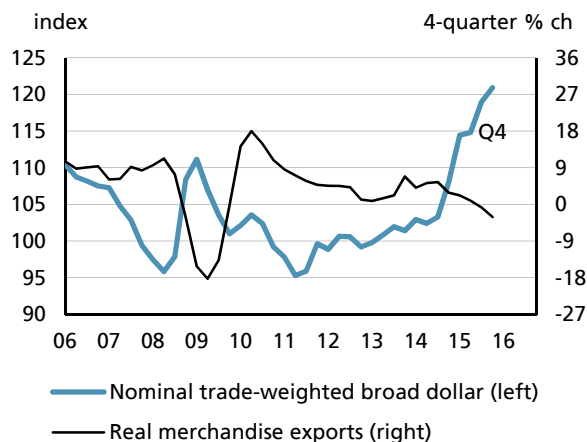
Exhibit 2: Growth forecast

Forecast as of Feb 2 Seasonally adjusted, annual rate	2016 Q/Q % ch, except where noted				Calendar average % ch			Q4/Q4 % ch		
	1QE	2QE	3QE	4QE	2015A	2016E	2017E	2015A	2016E	2017E
Real GDP (Chain)	1.0	1.5	2.0	2.0	2.4	1.5	2.5	1.8	1.6	2.8
Personal consumption expenditures	2.4	2.4	2.5	2.5	3.1	2.5	2.6	2.6	2.4	2.7
Goods	2.4	2.4	2.5	2.5	3.8	2.9	3.0	3.5	2.4	3.3
Services	2.4	2.4	2.5	2.5	2.8	2.3	2.4	2.2	2.4	2.4
Fixed investment	2.0	2.0	2.9	2.5	4.0	2.2	4.4	3.1	2.3	5.5
Business fixed investment	0.4	0.4	2.0	2.0	2.9	0.8	4.4	1.6	1.2	6.1
Equipment	0.0	0.0	1.5	1.5	3.1	1.0	3.6	2.4	0.7	5.0
Structures	-2.0	-2.0	2.5	2.5	-1.5	-2.0	4.1	-3.6	0.2	5.5
Intellectual property products	2.5	2.5	2.5	2.5	5.8	2.3	5.9	4.1	2.5	8.0
Residential	8.0	8.0	6.0	4.0	8.7	7.6	4.3	9.0	6.5	3.4
Government purchases	1.4	1.4	2.1	1.4	0.8	1.5	1.3	1.3	1.6	1.2
Federal	1.0	1.0	3.0	1.0	-0.3	1.4	0.9	1.0	1.5	0.5
State & Local	1.6	1.6	1.6	1.6	1.4	1.5	1.6	1.4	1.6	1.6
Net exports (\$ bil.)	-585	-604	-625	-646	-547	-615	-704	-567	-646	-739
Exports	-1.5	-1.5	0.0	0.0	1.1	-0.7	2.1	-0.8	-0.8	3.5
Imports	1.6	1.6	3.2	3.2	5.0	2.0	4.9	3.4	2.4	6.0
Change in inventories (\$ bil)	37	25	20	24	95	26	61	69	24	84
Private final demand	1.9	1.9	2.1	2.0	2.6	2.1	2.5	2.0	2.0	2.8
Real domestic purchases	1.4	1.9	2.4	2.4	3.0	1.9	2.9	2.4	2.0	3.2
Final sales	1.8	1.8	2.1	1.9	2.2	2.0	2.3	1.9	1.9	2.5
Domestic final sales	2.2	2.2	2.5	2.3	2.8	2.3	2.7	2.5	2.3	2.9
Net exports contribution (pct pts)	-0.4	-0.4	-0.5	-0.5	-0.7	-0.4	-0.5	-0.6	-0.4	-0.5
Inventory contribution (pct pts)	-0.8	-0.3	-0.1	0.1	0.1	-0.4	0.2	-0.1	-0.3	0.3
Nominal GDP	2.0	3.8	4.3	4.3	3.4	3.1	4.8	2.9	3.6	5.2
Key business indicators										
FRB industrial production index	-0.5	0.2	0.7	0.9	1.3	-0.4	1.7	-0.9	0.3	2.3
Capacity utilization rate (% level)	76.7	76.7	76.9	76.9	77.8	76.8	77.0	77.0	76.9	77.1
Civilian unemployment rate (% level)	5.0	5.0	4.9	4.9	5.3	4.9	4.5	5.0	4.9	4.2
Housing starts (millions)	1.31	1.31	1.31	1.31	1.11	1.31	1.40	1.13	1.31	1.40
Current account balance (% of GDP)	-2.9	-3.0	-3.2	-3.4	-2.6	-3.1	-3.5	-2.6	-3.4	-3.6
Inflation										
GDP Chain Price Index	1.0	2.3	2.3	2.3	1.0	1.6	2.3	1.1	2.0	2.3
CPI-U	-0.4	3.0	3.0	3.4	0.1	1.5	2.7	0.4	2.2	2.7
Core CPI-U	2.0	2.1	2.1	2.1	1.8	2.0	2.2	2.0	2.1	2.3
PCE Chain Price Index	0.4	2.2	2.4	2.6	0.3	1.3	2.2	0.4	1.9	2.3
Core PCE Chain Price Index	1.4	1.5	1.7	1.7	1.3	1.5	1.8	1.4	1.6	2.0
Market-based core PCE Price Index	1.2	1.4	1.5	1.5	1.1	1.3	1.7	1.2	1.4	1.8
Income indicators										
Average hourly earnings	2.7	2.9	3.1	3.3	2.2	2.7	3.3	2.4	3.0	3.3
Employment cost index	2.6	2.9	3.2	3.5	2.1	2.6	3.4	2.0	3.0	3.5
Real disposable income	3.8	2.1	2.1	2.0	3.5	3.0	2.5	3.4	2.5	2.6
Saving rate (% level)	5.8	5.7	5.6	5.5	5.2	5.6	5.5	5.4	5.5	5.4
Memo: Nonfarm business productivity	-0.9	0.0	0.5	0.5	0.6	-0.2	0.8	0.4	0.0	1.1
Federal budget balance (\$ bil, FY)					-439	-544	-561			
% of fiscal year GDP					-2.5	-3.0	-2.9			
Federal funds rate (%)	0.38	0.38	0.63	0.88	0.14	0.50	1.38	0.38	0.88	1.88

Note: Fed fund rate estimates represent midpoints of target ranges

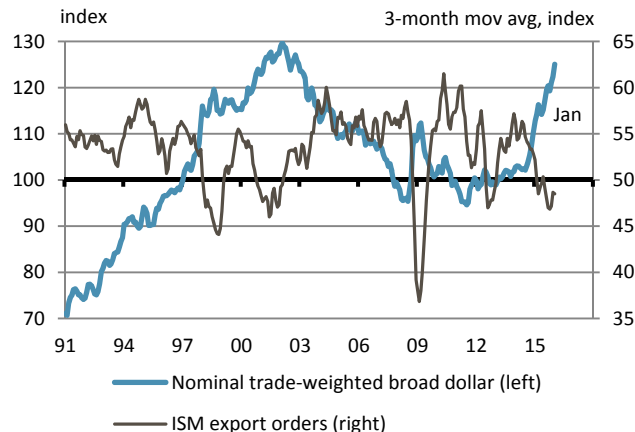
Source: Department of Commerce, Federal Reserve Board, Bureau of Labor Statistics, Treasury Department, and UBS estimates

Exhibit 3: Weaker exports following strong dollar



Source: UBS, Federal Reserve Board of Governors, Bureau of Economic Analysis

Exhibit 4: Dollar impacting export orders.

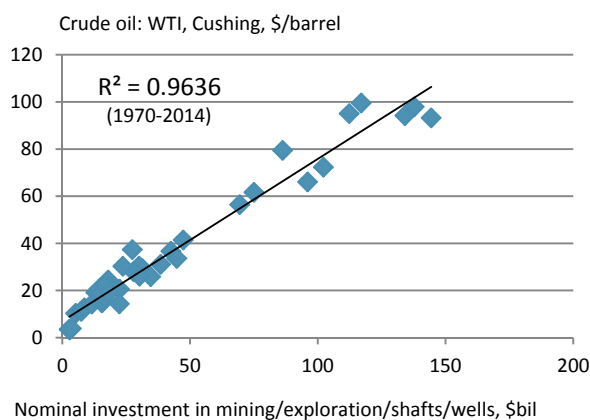


Source: UBS, Federal Reserve Board of Governors, Institute For Supply Management

Inventory Pile Up In Wake of Dollar and Oil Shocks

With sales disappointments from the dollar and oil shocks, inventories have been growing too fast. The annualized pace of real inventory investment fell from \$113.5 billion in Q2(15) to \$68.6 billion in Q4(15.) That decline already subtracted an average of 58 basis points per quarter from annual real GDP growth in H2(15), and inventories are still too high. The \$68.6 billion pace of inventory investment in Q4(15) still represented the stock of inventories growing at a 3.1% annual rate versus flat real final sales of goods. Consequently, inventory/sales ratios have been rising. (See comparison of nominal and real inventory/sales measures in Exhibits 7 and 8.) Thus, we foresee inventory investment continuing to decline through the first three quarters of 2016, with the largest quarterly decrease occurring in the current Q1(16). However, we do not expect outright aggregate liquidation.

Exhibit 5: Oil prices dictate exploration spending.



Source: UBS, Energy Information Agency, Bureau of Economic Analysis

Exhibit 6: The top fifth of the income distribution buys 31% of gasoline and is relatively insensitive to gas prices.

Income Quintiles (2013-14)	National Gasoline Expenditure Shares	Average Annual After Tax Income
Top Fifth	31.2%	\$136,549
Second Highest Fifth	25.0%	\$66,839
Third Highest Fifth	20.7%	\$43,399
Second Lowest Fifth	14.5%	\$29,754
Lowest Fifth	9.2%	\$10,265

Source: UBS, Bureau of Labor Statistics

Exhibit 7: High nominal inventory/sales ratio



Source: UBS, Census Bureau *November

Exhibit 8: Real inventory/sales measure also rising.

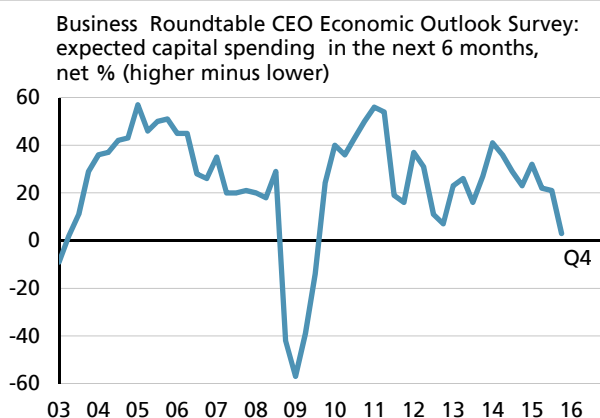


Source: UBS, Bureau of Economic Analysis

More Cautious Capex Environment

In this setting of disappointing consumer spending and exports and an inventory buildup, businesses have been throttling back on their 2016 capital spending plans. For instance, in the Q4(15) Business Roundtable CEO Outlook poll, the net fraction of respondents expecting higher capital spending in the next half year fell to just 3% versus 21% in the previous survey. (See Exhibit 9.) In December, orders for nondefense capital goods excluding civilian aircraft dropped 4.3% versus November when they were off 1.1% from October.

Exhibit 9: Capex plans are plunging.



Source: UBS, Business Roundtable

Exhibit 10: Credit quality spreads are widening.



Source: UBS, Federal Reserve Board of Governors *Quarterly data except for January.

Exhibit 11: Bank lending standards no longer easing.



Note: Shaded areas mark recessions. The all-loan composite lending standards index is composed of lending standards responses for C&I loans, real estate loans, and banks' willingness to make consumer loans, weighted by outstanding commercial bank loans.

Source: Federal Reserve Board, Bureau of Labor Statistics and UBS

Exhibit 12: Jobs partly reflect earlier credit conditions.

Private payrolls average monthly change, 000s

Annual data, 1992-2013	coefficient	t-stat
Constant	143.6	7.9
Lending standards composite index (1 year earlier)	-8.0	-7.6
BAA -Treasury spread, Q4/Q4 chg, bps (1 year earlier)	-0.5	3.0
R2	0.79	

Source: UBS

Job formation to moderate

Despite slow real GDP growth, nonfarm payroll growth remained strong in H2(15). Consequently, productivity growth has been particularly soft. That is partly because productivity improvements depend, in part, on capex. And capital spending has disappointed so far in the current business expansion. Looking ahead, with profit margins under pressure in a low productivity growth environment and somewhat tighter credit conditions, job growth is apt to slow in 2016. Specifically, we expect nonfarm payrolls to rise by around 170,000 per month after the 228,000 average monthly gain last year.

Credit and economy feed on each other

Somewhat tighter credit conditions last year in response to weakening H2(15) growth are one reason for expecting slower job growth in 2016. Credit quality spreads in the corporate bond market have been widening and banks have been somewhat tightening their business lending standards. To be sure, the tightening in lending conditions has yet to look like it did prior to the last two recessions. (See Exhibits 10 and 11.) That said, slower job formation is suggested by our forecast model in which jobs depend on the previous year's credit conditions. (See Exhibit 12).

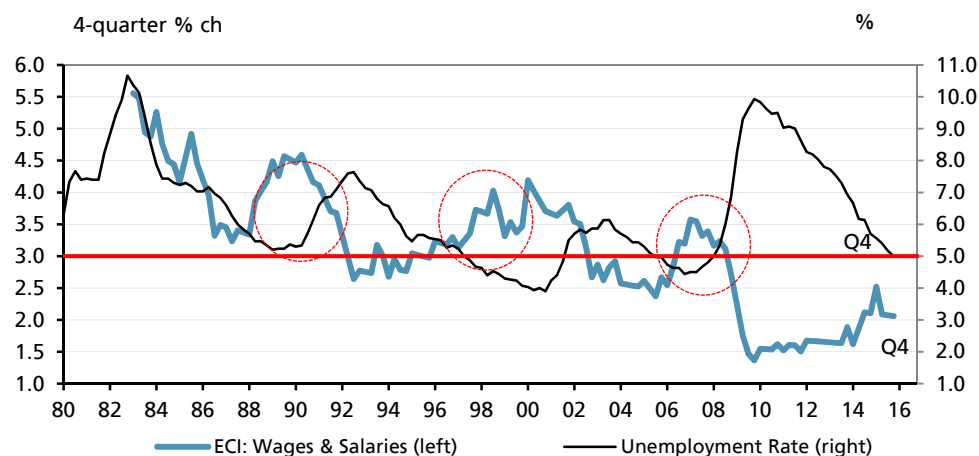
Wages can still pick up with slow growth

However, **slower job growth does not necessarily spell slower income growth if wage growth picks up at a stable but relatively low unemployment rate**. After falling last year, the unemployment rate is expected to stabilize this year at around its recent 5.0% level in December. Since 5% has been an inflection point for wage acceleration in the last few decades (see Exhibit 13), wage gains can still accelerate even with slow job growth. Note: Slow labor force growth means nonfarm payroll gains need to be only around 100,000 per month for the unemployment rate to stabilize.

How will Fed react to growth slowdown?

Slower economic growth statistics should leave the federal funds rate unchanged at ¾% in H1(16). However, with better H2(16) growth data and some pickup in wage growth at a still relatively low unemployment rate, the Fed should resume its rate normalization campaign with two separate 25 basis points moves at the September and December FOMC meetings. With some wage acceleration, core PCE inflation is projected to rise from 1.4% last year to 1.6% versus the FOMC's 1.5%-1.8% expectation for 2016. It is well worth emphasizing that the Fed's growth bar for normalization of a very low federal funds rate is much lower than the traditional bar for tightening an already normal federal funds rate.

Exhibit 13: Wages typically accelerate at an around 5% unemployment rate.



Source: UBS, Bureau of Labor Statistics

Why no recession is forecast

We do not believe that the recent and prospective soft overall economic growth will evolve into an outright recession with quarters of negative real GDP growth.

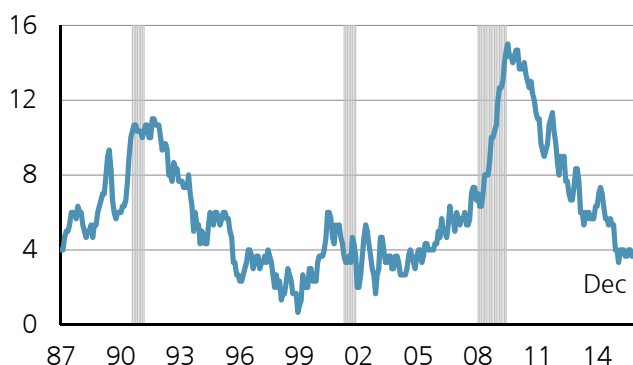
1. While credit conditions have been firming, they still are not as tight as observed prior to recent recessions.
2. Although we believe that the pace of recent inventory building has been too high, inventories still are not as top heavy as they were entering into recent recessions.
3. UBS energy industry analysts foresee the recently very weak West Texas Intermediate (WTI) crude oil price rising to a \$40 per barrel calendar average level in 2016 as excess oil inventories finally are sufficiently whittled.
4. UBS fixed-income strategists believe that less than earlier expected federal funds rate tightening in 2016 means a yearend 10-year Treasury note yield of 2.0%. That is 50 basis points under our earlier forecast when we still anticipated four instead of two Fed tightening steps in 2016.
5. UBS foreign exchange strategists do not foresee much further strong dollar appreciation. For instance, by yearend 2016 the Euro is expected to appreciate to \$1.16 versus its recent around \$1.10 level.

A useful recession signpost

One key signpost for weaker than expected growth is credit availability in the small business sector, which is pivotal for job formation. Through Q4(15), the net percent of small businesses reporting that credit was harder to get was still at a relatively low 4%. By way of contrast, that fraction was rising well in advance of the previous three recessions. (See Exhibit 14).

Exhibit 14: Key recession signpost: small firms' credit

Net % of small firms reporting credit harder to get, 3-month avg



Note: Shaded areas mark recessions.

Source: National Federation of Independent Business and UBS

Valuation Method and Risk Statement

Risks include, but are not limited to, market risk, credit risk, interest rate risk, liquidity risk, inflation risk, and exchange rate risk. Furthermore, valuations may be adversely affected during times of high market volatility and thin liquidity.

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