

# THE DOLLAR AND INFLATION

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## I. Introduction

Since 1980, inflation rates have dropped no less than 11 to 13 percentage points. In March 1980 inflation, measured on a year-over-year basis, was ranging from 13.9 percent to 14.7 percent, depending on the index used. By mid-1985, the Producers' Price Index (PPI) was rising at only a 1 percent rate and the Consumer Price Index (CPI-U) was up 3.7 percent, year-over-year. This decline of inflation, or disinflation, has been greater than for any other five-year period since the early 1950s. Indeed, the unexpected shift from a highly inflationary environment to one of disinflation has challenged explanation.<sup>1</sup>

Whatever happened to inflation? How did so pronounced a disinflation occur? Were the recessions of 1980 and 1981-82 the major cause? A tight money policy by the Federal Reserve? Was it disinflationary oil- and food-price shocks? Were there new special factors that came into play, such as shifting patterns of wage-setting, deregulation, or productivity growth? What, in particular, was the effect from rises in the dollar on U.S. inflation?

This paper examines the impact of changes in the value of the dollar in the disinflation experience of 1980 to 1984. A detailed 25-equation model of the inflation process, embedded in a large-scale macroeconometric model of the United States developed at Shearson Lehman Brothers, is simulated to provide a quantitative assessment of the contribution to lower inflation from dollar strength over this period. The full model reflects the impacts on inflation of various price indices at the commodity, retail and economy levels from the exchange rate, oil and energy price shocks, agricultural prices, wage costs and productivity growth, supply bottlenecks, and aggregate demand in relation to potential capacity. The interactions of prices in the various stages-of-processing of production are reflected as changes in prices and work through the chain of costs and prices.

The implicit price deflators of the National Income and Product Accounts (NIPA) are determined by the "gap" between potential and actual output; unit labor costs; cost "shock" factors such as oil and food prices; the exchange rate; and various input materials prices as reflected in the Crude Materials and Intermediate Goods and Supplies prices of the PPI.<sup>2</sup> Producer or wholesale prices are driven by the exchange rate, energy prices (oil and natural gas), farm prices, unit labor costs, and the speed of vendor deliveries (a proxy for capacity pressures or bottlenecks). Consumer prices, or the CPI-U, are determined by the same forces driving the implicit price deflators in the NIPA.

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1. Discussions of the recent experience can be found in Cagan and Fellner [1], Eckstein [4], McClain [8], and Perry [9].

2. "Shock" inflation is defined and discussed in the context of supply-side factors in Eckstein [3].

A more important role for the dollar in the U.S. inflation experience than might have been indicated previously is determined.<sup>3</sup> The empirical results show that the role of the dollar in the disinflation of the 1980s was considerable, probably second only to the economy-wide slack in driving inflation rates lower. The various components or stages-of-processing price indices of the PPI show quick and substantial responses for Crude Materials, Intermediate Supplies, and Finished Goods prices in response to changes in the dollar exchange rate. The CPI-U also responds strongly, but not as much as the PPI since a mixture of goods and services prices are included. Commodities prices seem more sensitive to changes in the dollar. The implicit GNP deflator is significantly affected, although somewhat more slowly and by less than the PPI.

Section II briefly discusses the possible causes for the 1980s disinflation. In Section III, the reasons for the dollar surge between 1980 and early 1985 are explored. Section IV is concerned with the process by which the dollar impacts on inflation in the contemporary U.S. economy. Section V presents a brief summary of the inflation model used for the analysis and empirical estimates of the dollar's impact, with and without full interactions between inflation and the economy, for 1980 to 1984. Section VI is concerned with the potential future impacts of a declining dollar.

## II. The 1980s Disinflation

Five extraordinary developments mark the recent disinflation experience. Each played an independent role in reducing inflation, but to some extent was a consequence of a rising dollar.

First, the downturns of 1980 and 1981-82—the only time in the past 40 years when recessions occurred for three consecutive years—created record slack in product and labor markets that pushed price and wage inflation rates downward. Manufacturing capacity utilization fell to 68 percent in December 1982, a postwar low, down from the previous recent peak of 86.5 percent in December 1978. The unemployment rate reached 10.7 percent, a postwar high, in November 1982. Considerable slack remained even in 1985, the third year of the expansion, in part from a leakage of U.S. spending to producers abroad as a rising dollar directly reduced the prices of imported goods.

Second, disinflationary oil price shocks in March 1983 and February 1985 helped to lower inflation. Declines in OPEC oil prices from \$34 to \$29 a barrel in 1983—and still lower in 1985—reversed the upward spiral in oil and energy prices of the 1970s. Agricultural prices also have been declining and the same is true for metals prices. The rising dollar has had an impact here, reducing purchasing power in world commodities markets and lowering the quantities demanded for oil, agricultural, and basic commodities. Weak food exports by the U.S. because of the higher dollar have been an element in this process.

Third, the pattern of wage-setting changed, with employers tending to pass downward pressure on prices into wages as a means of preserving growth in profits. In more and more wage agreements, lower inflation is now accepted as an assumption. The role of the dollar here is indirect, through the effects of a new dimension of competition on industrial sales and prices. With more sources of basic materials and supplies, producers have been unable to raise prices. The impacts have been diffused into lower wages.

Fourth, deregulation of the transportation, banking and financial industries increased competition and helped to lower inflation, particularly through the diminished monop-

3. See Dornbusch [2] for similar estimates.



sony power of unions. Increased competition for most industrial companies as a result of the stronger dollar stiffened the stance against union attempts to raise wages.

Finally, the dollar, as measured against the Morgan Guaranty trade-weighted average of 15 OECD currencies, appreciated by 56.4 percent, in nominal terms, from July 1980 to the end of February 1985, directly lowering inflation through impacts on import prices. The indirect effects on inflation from the stronger dollar also have been sizable, operating through the factors previously indicated. In the recent periods previous to 1980, the dollar had depreciated sharply, adding to inflationary pressures.

Federal Reserve policy also operated to reduce inflation, by adhering to a monetary growth targeting policy up to and through much of 1982. Indeed, the result of the Federal Reserve's holding firm on a regime of high nominal and real interest rates, in a sense, provided the basic underpinning for much of the disinflation. The restraint of high interest rates held down economic growth, maintained slack in product and labor markets, and raised the value of the dollar. Through this channel, a new one for the monetary authority, the central bank had perhaps the major influence on the 1980s disinflation. The central bank set the backdrop, operating through the more proximate factors identified above.

While all of these considerations have been keys to the disinflation of the 1980s, the dollar may have been the most significant of the proximate factors. Taking account of both the direct and indirect effects of the extraordinary rise in the U.S. currency, only the deep recession and its after-effects might rank higher.

Why did the dollar rise so much and how did it lower inflation? Just how much disinflation has arisen from the dollar's strength? And, will there be significant inflationary effects from a declining dollar?

### III. Why the Dollar Soared: The Dollar-Inflation Interaction

A key factor in the rise of the dollar was the "loose fiscal-tight money" policy mix in the U.S. economy during the first half of the late 1980s. Large federal budget deficits contributed to strong economic growth and caused substantially higher nominal and real interest rates, given the Federal Reserve's strategy of targeting monetary growth. The dollar's rising value reflected promising growth prospects and high real returns on U.S. investments. A stronger dollar, in turn, contributed to a lower inflation rate. The lower inflation rate—given the policy mix—raised real interest rates and strengthened the dollar. This "virtuous" cycle, a kind of positive feedback loop between the dollar, inflation, real interest rates and the dollar, then impacted to raise the trade deficit and trade debt. U.S. interest rates and the dollar then had to stay high enough to attract foreign capital and to curb domestic capital outflows so that the budget and trade deficits could be financed. Competitive pressures in the form of falling market shares in the production or goods side of the economy, both from rising imports, higher prices of exports and lower ones for imports, and declining exports, intensified the disinflation in the manufacturing sector. Weakness in the tradeable goods and manufacturing sectors maintained slack in product and labor markets, increased price competition, and helped establish new patterns of lower wage settlements.

As the dollar soared, the impact of foreign competition grew. Not only did U.S. consumers and businesses expand travel and purchases abroad, but more and more U.S. manufacturers used foreign components and materials as inputs in production. American companies increasingly located factories and establishments abroad. And, exports of what were once highly exportable goods, such as agriculture products, only rose slowly, if at all. As a result, by the end of 1985, the U.S. merchandise trade deficit will have more than doubled since 1983. With intense foreign competition across a wide range of goods

and the diversion of many purchases overseas, U.S. prices have remained under intense downward pressure.

**Table I.** Federal Budget Deficits, the Dollar, and Trade Deficits

	Unified Budget Deficit (Billions of \$'s, Fiscal Years)	Dollar <sup>a</sup> (Percent Change, Calendar Years)	Merchandise Trade Deficit (Billions of \$'s, NIA Calendar Years)
1975	-43.6	0.1	8.7
1976	-60.6	3.6	-9.0
1977	-45.0	-0.4	-30.5
1978	-40.9	-8.2	-33.6
1979	-27.7	-1.5	-30.6
1980	-59.6	-0.1	-24.2
1981	-57.4	9.7	-28.4
1982	-110.7	10.4	-35.4
1983	-195.4	4.0	-60.4
1984	-175.4	7.1	-106.2
1985E	-211.9	4.3	-126.0

<sup>a</sup>Percent appreciation or depreciation vs. the Morgan Guaranty trade-weighted average exchange rate of 15 foreign currencies from OECD countries.

The effects of dollar appreciation on inflation were both direct and indirect. The prices of goods and services purchased abroad declined, directly reducing the inflation rates in various price indices. The indirect effects operated mainly through a new dimension of competition for U.S. producers—high quality, low cost imports. The soaring dollar increased, albeit with lags, the relative prices of U.S. exports and lowered the purchasing power of foreigners for U.S. goods and services. Import prices, on the other hand, dropped sharply on an absolute and relative basis, making foreign goods extremely attractive for American consumers and businesses.

The weakening of exports and a surge of imported goods imposed a pricing discipline on U.S. business never before experienced in the postwar era. Competitive pressures on prices were felt keenly in product markets, ranging from autos to semiconductors, and they have been transmitted to wages and costs. The deep slack in the domestic economy from the early 1980s recessions helped to make the competitive pressures stick. Another effect was on oil prices, with the strengthened dollar raising the oil bills of most nations and dampening their demands for oil and energy. This produced extra downward pressure on OPEC oil prices.

#### **IV. The Dollar and Disinflation—The Process**

In the contemporary U.S. economy, now more open to trade and capital flows than ever before, a rising dollar affects inflation in numerous ways. Most obvious are the effects on the prices of goods and services bought directly from abroad. Basic commodities such as food, raw materials, and oil become cheaper to U.S. consumers and producers. At the



same time, however, since foreigners have to make payments for oil and other commodities in dollars, the costs to them rise and the quantities demanded fall. Lower costs of materials to U.S. producers work through various stages-of-processing production processes to reduce intermediate- and finished-goods prices, thereby helping to lower retail prices. The impact has been especially great on oil prices, since payments are settled in dollars.

A second effect of the dollar's appreciation on inflation is through the cost of financing. A stronger dollar lowers inflation and raises the real interest cost of financing purchases of goods for sale or for inventories. Speculative purchases and the hoarding of inventories can be a major source of inflationary pressure, but have been absent in recent years.

A third effect is the slack in the economy created by declining net exports. Between the fourth quarter of 1982 and the third quarter of 1985, real net exports in the United States dropped \$58.1 billion. In four other postwar expansions that lasted this long, the average change in real net exports was +\$2.3 billion. The weakness of real net exports between mid-1984 and mid-1985 cost the United States two to three percentage points of real economic growth per quarter. The gap between actual demand and potential output has remained wide as a consequence, considerable losses of jobs have occurred, and there has been a related rise in the failure rate of business and financial institutions—all serving to diminish inflation.

A fourth effect is indirect: the combination of increased foreign competition, the loss of market shares in the tradeable goods industries, outsourcing, and the erosion of goods-producing activities, makes price and cost reductions necessary as a competitive response to attract business.

Fifth, there are direct and indirect effects on wages. Labor costs abroad become cheaper, encouraging the construction or use of capacity overseas. Downward pressure on prices is transmitted to wage costs. Unit labor costs are held down as U.S. workers lose jobs to employees of foreign goods producers.

Because of interactions among materials costs, labor costs and other prices in the stages-of-processing prices mechanism, the net result is a much larger effect on inflation from shifts in the dollar than might otherwise be expected. This is especially so in the contemporary U.S. economy, compared with periods when the U.S. economy was less open and exchange rates were not fully flexible.

## V. The Dollar and Disinflation—Model and Estimates

A newly developed 25-equation model of the inflation process was employed to quantitatively assess the role of the dollar in the recent U.S. inflation experience.<sup>4</sup> In this model, inflation rates reflect the behavior of (1) the exchange rate; (2) oil and energy price shocks; (3) agricultural prices; (4) wage costs; (5) productivity growth; (6) materials costs; (7) supply bottlenecks; and (8) aggregate demand in relation to potential output.

The model allows for interactions among prices in a stages-of-processing chain of costs and prices. In this framework, the commodity-based PPI quickly reflects fluctuations in

4. The tests and simulations were performed both without and with full feedback between the 25-equation inflation submodel and the rest of the Shearson Lehman Model of the U.S. Economy. Interactions between the various price and wage equations were permitted in one set of experiments, but no other feedback was allowed. The "gap" between actual and potential output, unit labor costs, crude oil prices, the exchange rate itself, interest rates, and so on were not permitted to vary in response to the changes of inflation which stemmed from an autonomous change in the exchange rate. In other exercises, the impacts of changes in the exchange rate on inflation, the economy, and financial markets were permitted to flow back through to inflation.



the dollar. Changes in the value of the dollar affect prices of crude materials, intermediate goods and supplies, and finished goods. These comprise the PPI which therefore responds more sensitively to dollar fluctuations than the CPI-U, since the latter includes a mixture of goods and services prices. More general measures of inflation in the U.S. economy, such as the implicit GNP deflator, are likely to be affected slowly and by smaller amounts.

The generic model of inflation essentially takes the form:

$$P_{it} = f(\text{gap}_t; \text{ulc}_t; \text{mc}_t; \text{pag}_t; \text{poil}_t; \text{exch}_t; \text{capac}_t) \quad (1)$$

where  $P_{it}$  represents the particular inflation rate being explained; the  $\text{gap}_t$  is the relation between actual and potential output;  $\text{ulc}_t$  is unit labor costs;  $\text{mc}_t$  is materials costs;  $\text{pag}_t$  is agricultural prices;  $\text{poil}_t$  is the price of crude oil;  $\text{exch}_t$  is the exchange rate;  $\text{capac}_t$  is capacity utilization or a measure of slack in the production side of the economy. The dependent variable is the logarithm of the ratio of current to lagged price and thus represents percentage change; the same holds true for  $\text{ulc}_t$ ,  $\text{mc}_t$ ,  $\text{pag}_t$ , and  $\text{poil}_t$ . In contrast,  $\text{gap}_t$ ,  $\text{exch}_t$ , and  $\text{capac}_t$  are expressed as logarithms of *levels*.

The generic form is specialized, depending on the particular price index. For example, the Crude Materials price index in the PPI is mainly determined by agricultural and oil prices and aggregate demand in relation to output. Intermediate Goods prices are importantly determined by crude oil and energy costs, the exchange rate, unit labor costs, and the speed of vendor deliveries. The major determinants of the PPI for Finished Goods are materials prices (crude and intermediate goods), the exchange rate, and oil prices. The implicit GNP deflators typically have as inputs the gap between actual and potential output, unit labor costs, materials costs based on the PPI, the exchange rate, and food and energy costs.

Potential output in the "gap" variable responds to changes in the utilized labor force, business capital formation, energy, and the rate of technological change. Agricultural commodity and oil prices directly impact on basic producer prices which, in turn, affect final goods prices through materials costs. The exchange rate directly impacts on most prices, especially for basic commodities, reflecting the direct effect of changes in import prices and the indirect effects of foreign competition.

Wage inflation, a key element in unit labor costs, is determined as

$$w_t = g(\text{ru}_t; p^e_t; (y/mh)_t; \text{exch}_t) \quad (2)$$

where  $\text{ru}_t$  is the unemployment rate;  $p^e_t$  is the expected rate of price inflation;  $(y/mh)_t$  is output per manhour; and  $\text{exch}_t$  is the exchange rate. The dependent variable is the logarithm of the ratio of the current to the lagged wage rate and as such represents percentage change. The same is true for the *expected* inflation and productivity variables; the unemployment rate and exchange rate, on the other hand, are logarithms of *levels*.

Figure 1 shows the historical tracking of inflation for the implicit GNP deflator in a simulation of the fully endogenized model of the economy, with interactions permitted over 1972 to 1984.<sup>5</sup> The performance of the implicit GNP deflator, which reflects the working and interactions of the inflation system in the context of the complete model of

5. The sample period used for estimating the inflation model is 1963:1 to 1984:4; for the complete Shearson Lehman Model, it is generally the same, though data availability forced smaller intervals for some equations outside the price sector.



the economy, tracks history relatively well, picking up most of the major swings in the simulation period although not to their full extent.

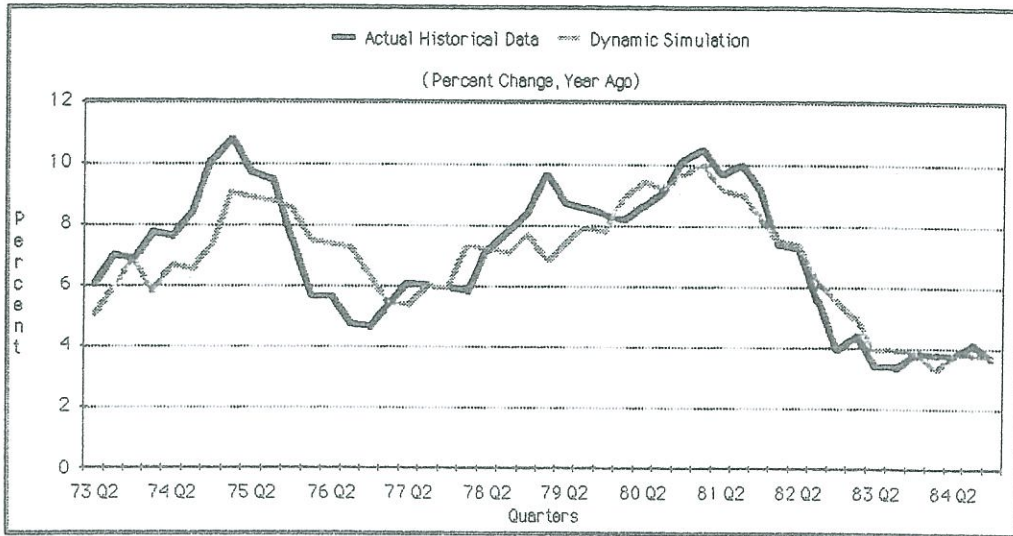


Figure 1. Performance of the Model in Tracking Inflation as Measured by GNP Deflator

To help assess how much the dollar appreciation affected inflation during the early 1980s, the 44.5 percent appreciation of the dollar between the third quarter of 1980 and the fourth quarter of 1984, as measured against the Morgan Guaranty trade-weighted exchange rate, was removed from an historical baseline simulation of the U.S. economy over that period.<sup>6</sup>

Table II. Inflation With No Appreciation of the Dollar, 1980:3 to 1984:4 (Changes from history, percentage points)<sup>a</sup>

Year	PPI-Finished Goods	CPI-U	Implicit GNP Deflator
1981	1.2	0.6	0.6
1982	3.1	2.0	2.0
1983	4.3	3.1	3.1
1984	5.2	3.9	3.8

<sup>a</sup>Computer simulation of 25-equation inflation model with dollar exchange rate set at 1980:3 value.

6. The simulation underlying Table II was performed over the period 1980:3 to 1984:4. Simulations with econometric models should only be regarded as approximations, since the results are one set in a potential distribution of many and the shocks analyzed can perturb the equation coefficients themselves.

According to the results of this computer simulation, inflation rates would have been 3.75 to about 5 percentage points higher by 1984 if the dollar had remained unchanged, depending on which inflation index was used. The effect of the dollar's appreciation on inflation was greatest for the PPI, with different responses for Crude Materials (6 percentage points); Intermediate Goods and Supplies (4.8 percentage points); and Finished Goods (5.2 percentage points). Without the dollar appreciation, the rate of inflation for the CPI-U would have been 3.9 percentage points higher by 1984. For the implicit GNP deflator, the estimate is 3.8 percentage points.

The effects cumulate over time, with the greatest impacts in 1983 and 1984, when the dollar surged the most. Wage costs were estimated to be 0.5 percentage point higher in the first year without any dollar rise. The effect was 3.4 percentage points by 1984.

When the same experiment was performed in a simulation of the full Shearson Lehman Model of the U.S. economy, the negative feedback effects on the economy from the higher inflation generally were offset for the first year or two by improved net exports, such that inflation rates were essentially the same or slightly higher than in the simulation with the inflation submodel. These effects were reversed later as the higher inflation and higher interest rates crowded out domestic sector spending. It should be noted that since the simulations were triggered by "autonomous" changes in the exchange rate, with no specification of the underlying causes, the complete system results have to be viewed cautiously.

The estimated impacts of the dollar on inflation are considerably higher than others have found.<sup>7</sup> This is not so surprising given the unusual configuration of factors affecting trade, growth and inflation since 1980 and the very current nature of the sample period of estimation for the inflation model. The equation coefficients reflected the recent experience even though the sample period of estimation spanned 1963:4 to 1984:4.

## VI. What Next?

After nearly five years of appreciation, the dollar finally began to decline in early 1985. Between late February and late October 1985, the dollar had dropped 15.5 percent against the Morgan Guaranty trade-weighted average of 15 OECD currencies; 26.6 percent against the British pound; 23.5 percent against the German deutschemark; 23.9 percent against the French franc; 17.5 percent against the Italian lira; and 18.6 percent against the Japanese yen. Has the string run out on the disinflationary effects of the dollar?

In another computer simulation, a sustained 10 percent depreciation of the dollar was imposed on the model from mid-1985 through 1988 (Table III). This sensitivity test showed sizeable rises in all price indices, although again there were differences in magnitude and timing, depending on the specific index used to measure inflation.

The falling dollar has the quickest impact on the PPI-Finished Goods—inflation accelerates by 1.0 percentage point in the initial six months following the dollar's decline, by 1.6 percentage points after one year, and 1.9 points after two years. The CPI-U is 0.9 percentage point higher in the first year and 1.4 percentage points higher after two years. Because some 53 percent of the CPI-U measures goods prices and 47 percent is for services, the response in the CPI-U is smaller and slower than in the PPI. The PPI is an all commodities price index and thus more sensitive to changes in import prices. The implicit

7. Dornbusch [2] provides estimates relatively close to those reported here. Sachs [10], on the other hand, finds lower figures for the impact of the dollar on inflation.



Table III. Sensitivity of Inflation to Dollar Weakness  
(Changes from baseline, percentage points)<sup>a</sup>

Year	PPI-Finished Goods	CPI-U	Implicit GNP Deflator
1986	1.6	0.9	0.9
1987	1.9	1.3	1.3
1988	1.9	1.4	1.4

<sup>a</sup>10 percent drop in the Morgan Guaranty trade-weighted average exchange rate of 15 OECD countries, starting in mid-1985, without full model feedback.

GNP deflator also is 0.9 percentage point higher in the first year of impact, and 1.9 percentage points higher after two years.

Thus, as long as the declines of the dollar are sustained, the string will have run out on the dollar induced disinflation. The sensitivity of inflation to a decline in the value of the dollar appears to be sizable and relatively quick, *assuming a fixed path for the other determinants of prices*.<sup>8</sup> This implies that a sustained, permanent reduction in the value of the dollar could threaten a reinflation in the United States.

But, although the model shows a considerable response of inflation to a dollar decline, other factors may prevent the price responses to the dollar's 1985 decline from being so quick and large. Even in full model simulation, not all the determinants of inflation vary or are reflected in the equation coefficients. Foreign producers may attempt to maintain market shares as the dollar declines by holding the line on product prices. Already ample profit margins would narrow but import goods price inflation would be minimized. Labor market slack still persists, with the unemployment rate over 7 percent, and new wage settlements, cost-of-living clauses, and institutional patterns of collective bargaining tending to hold wage inflation down. Oil prices are under pressure as the OPEC cartel disintegrates. Ample food supplies and new entrance into the seller's side of agriculture markets, such as China, are holding down food prices. All of these effects cannot be reflected in the equations or coefficients of the inflation model used in deriving the estimates presented, and likely would mitigate the speed and response of inflation rates to a decline in the dollar.

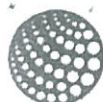
Eventually, however, the upside potential on inflation from a sustained dollar depreciation will be realized, especially as the trade balance improves enough to push the U.S. economy closer to full capacity. The dollar as one of the two or three major determinants of U.S. inflation is here to stay, especially in an economy that has been increasingly integrated into the rest of the world and must function in a regime of flexible exchange rates.

8. Complete model simulation, allowing for full model feedback on the right-hand side endogenous variables in the inflation equations, produced results close to those reported in Table III. The autonomous reduction in the exchange rate raised real net exports, but this was essentially offset by less real consumption and gross private domestic investment. Higher inflation and higher interest rates "crowded-out" domestic spending so that no significant additional demand-pull inflation was generated.

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**In 2016, Does 2=4?**

Investors have been dealing with a lot of challenging issues in the first week of trading in 2016. In addition to the usual worries about Middle East oil, North Korean nukes, and the Chinese markets, key data on the U.S. have been telling wildly conflicting stories. The manufacturing data, such as the ISM survey, suggest a recession is looming, while the labor market data, such as the jobs survey, suggest the economy is strong and accelerating. What gives?

*Manufacturing:* The mfg. sector is suffering from many of the same problems plaguing China and the other EMEs—a downswing in the commodity supercycle and a slackening in global demand, as well as a strong dollar that has reduced competitiveness. While the ISM survey is a high quality series, its forecasting record regarding GDP growth is spotty, as we pointed out earlier this week. A similar-sized drop in 2002 did not usher in a recession but just the opposite in 2003. But a housing bubble contributed to that 2003 boom.

*Employment:* The employment data have enjoyed a notable acceleration since September to the strongest pace since late 2014. Job growth has been dislocated from GDP growth for years, however, signaling a 3.5% to 4% pace. However, GDP growth decelerated sharply at mid-year to only a 2% pace in Q3 and things look even worse in Q4, with a gain of 1% or even less now possible. An inventory correction, sagging exports, and weakening final demand are responsible for the Q4 slowdown.

This dislocation between jobs and GDP is leading to big problems. The FOMC, seemingly forgetting about GDP growth, given their fixation on the job market, thinks 4 rate hikes will be needed in 2016. A healthy labor market supports further wage gains and a rebound in GDP growth towards a 3%. But the bond market thinks otherwise, arguing only 2 hikes will happen this year if GDP growth barely tops 2%, manufacturing remains in recession, and equity market remains unhappy. Friday’s great jobs report did not change that view.

- **U.S.:** The important numbers (Fri) may show that stronger labor market did not translate into stronger **retail sales** outside of autos. **Business inventories** may have declined, which will cut consensus Q4 GDP forecasts towards 1%. Investors will also be sensitive to any signs from **Fed policymakers** that they might ease on the brakes given the disquiet in the financial markets.
- **Eurozone:** While reverberating less, the recent ECB decision is still puzzling some in the financial markets, most clearly those who were surprised by the lack of any more sizeable action from the central bank last month. Regardless, a clearer impression of the debate may come with the **Minutes to the ECB meeting** due on Thursday. They may not provide that much more added illumination!
- **UK:** For some time now no-one expects the **BoE** to alter policy when it gives its next **policy verdict** (Th), this now arriving alongside the minutes to the **meeting** and (perhaps more crucially) by the **Monetary Policy Summary!** The former will show continued dissent from the hawkish McCafferty in favor of starting to hike rates, but little likelihood around of any other members joining his camp.
- **Japan:** The **current account balance** (Tu) may show some improvement. However, a correction is expected in **machinery orders** (Wed), after a two month surge. We expect no action at the BOJ policy mgt. later this month.
- **Emerging markets:** In **Korea**, The central bank rate may refrain from acting (Th), despite room to work with on the rate front. Inflation remains quite low, and if the bank deems action necessary it could take it, but that is not expected at this meeting.



## Focus on US: It's Back, Two-Tiered Inflation!

Various measures of underlying inflation, ranging from the CPI core and the less familiar sticky price and trimmed median CPI, are showing signs of life, despite headline inflation staying close to zero because of depressed commodity prices.

This phenomenon is not new, as two-tiered inflation-strong service sector inflation and weak commodity price inflation has been a hallmark of the U.S. postwar economy (Chart 1). Since 1999, there have been at least three episodes in which service sector inflation (green heavy line) have been much higher than the headline rate (blue light line), even has commodity price inflation was even lower (red dashed line).

While the degree of slack in the economy is hard to measure, a simple comparison of wage changes to the unemployment rate suggests a sizeable pickup is in store (Chart 2). In fact, the wage dynamic is changing dramatically for lower wage workers as increases in minimum wages are taking hold in many states, sizeable cities, and in certain occupations such as fast food workers.

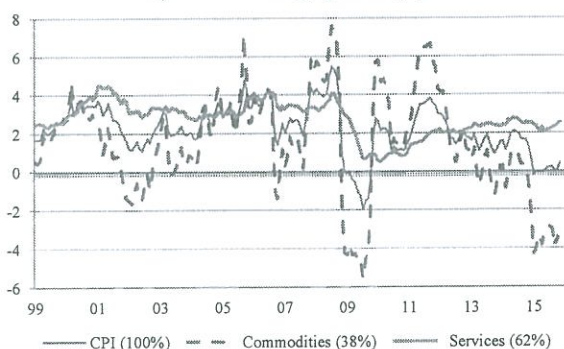
This month, at least 12 states are increasing their minimum wages for their government employees, with the average increase around \$0.75. Similar sized increases are planned for nearly 20 sizeable cities. While these increases may only apply to no more than 1 million workers, the increases are likely to continue for several years as these workers' wage rates head towards \$15, helping to set a higher pace for overall wage gains in the U.S. economy.

Higher wages present the possibility of a stronger economy as those wages are spent. But profits margins are at risk so that investors increasingly fret than a better economy may not provide as big a shot in the arm to the equity markets.

But remember growth is not a zero sum game and that a faster pace of wage gains in 2016 does not mean that profits cannot increase. Only their rate of change might slow.

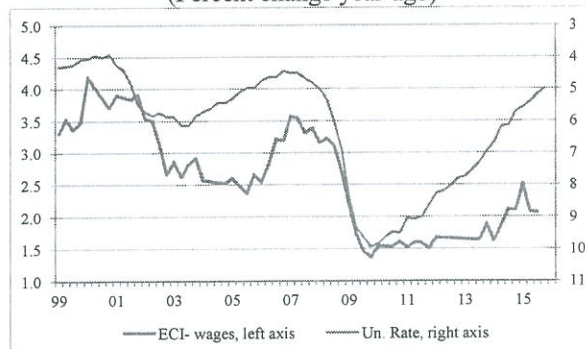
(M. Cary Leahey)

**Chart 1**  
CPI- Two Tiered Inflation  
(Percent change year-ago)



Source: BLS and DE, Inc.

**Chart 2**  
Wages and Slack  
(Percent change year-ago)



Source: BLS and DE, Inc.



## United States

### Jobs Wrap, Retail Sales Ahead

**Major Indicator/Event Wrap-up:** While liftoff is mercifully out of the way, there is little to suggest investors or the central bank can take a breather in terms of monitoring the U.S. economy around year-end, and into 2016. However, a reassuring December jobs gain of 292,000 exceeded everyone’s warm-weather boosted forecasts and threw some cold water on the worries that manufacturing, oil, and China worries are dragging down the U.S. economy.

Still, continued employment momentum, inflation data and prospects, the oil plunge and dollar strength, capex, market volatility, and foreign growth including China are now perhaps even more crucial to watch in months ahead. While downside risks to the U.S. economy appear limited, in DE’s view given broader consumer strength, the potential for an inflation surprise (in both directions) will keep markets on edge as data roll in.

Progress and the path of inflation will be most important in gauging the pace of Fed normalization. DE expects a more-moderate than expected inflation path to yield only two more hikes in 2016, leaving the federal funds rate at a 0.75%-to-1% range at year-end. The median Fed projection is also likely to come down when the Fed meets in December, much focus on the appropriate “neutral rate” going forward.

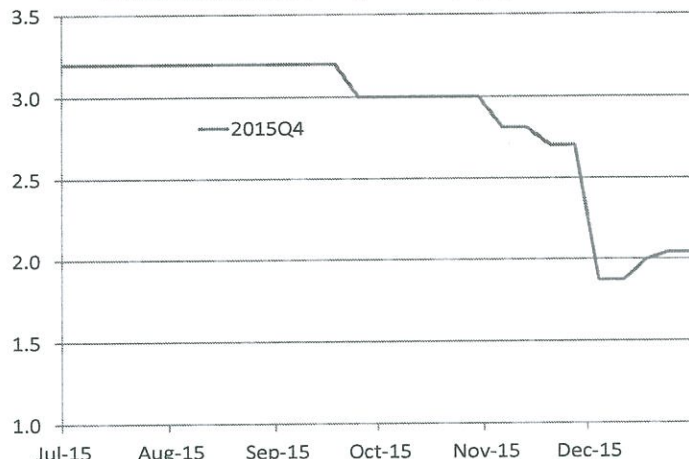
Fourth quarter GDP is now tracking sub-2%, compared to earlier expectations nearer 3%. That will be in part due to a shift in the timing of inventory correction, but also a deceleration in consumer spending after 3% in Q3. Favorable jobs, income, and sentiment figures should support reacceleration, on average, into 2016—but will need to be watched closely.

Surveying the equity market landscape, earnings season will show more clear drag from Energy. Top-line S&P 500 earnings growth is tracking at roughly flat y/y in Q4, stronger ex-Energy. DE maintains an aggressively bullish strategic (1-3 year) stance on equities relative to fixed income. Rising rates are on the horizon, albeit gradually. DE continues to see moderate dollar strength ahead versus the euro and yen, and a bear market for bonds over time.

### Week Ahead: Sub-2% Consumer Spending in Q4?

A light start to the week features a few Fed speakers including centrist Lockhart (Mon), dove Evans (Wed), and the moderately hawkish Bullard (Thu). Friday will feature a packed slate, with December **retail sales, producer prices, industrial production**, and the January U of M **consumer sentiment index** hitting the tape.

**Chart 3**  
**Clear Moderation in Q4 Consumer Spending Estimate**  
DE Real Consumer Spending Forecast, Q/Q Annualized



Source: Decision Economics, Inc.

## Sub-2% Consumer Spending in Q4?

The consumer looks to be ending the quarter in a bit of a lull, though after a rather solid string of quarters since late 2013, culminating in 3-4% growth on average (with the exception of two soft Q1 results).

Some of the weakness will be due to energy spending on warmer weather, so the innards of the retail and subsequent PCE report will be important to watch.

Still, the takeaway from the quarter will likely be 2% annualized real consumer spending growth, and possibly sub-1% overall GDP growth.

This week, retail sales should remain weak after October 0.1% and November 0.2% (Consensus: +0.1%; DE: -0.1%), only a bit strong ex-autos (Consensus: +0.2%; DE: +0.1%) as gasoline weighs on the total.

DE expects the ex-autos-and-gas figure to post a good deal stronger, possibly 0.5%--which would be read as a good sign. However, with markets and investors newly riled up with respect to the outlook, too soft a headline could be especially damaging.

### DE Forecasts:

- **Economy:** DE sees Q4 tracking nearer 2% annualized after Q3 2.0%, with the high-2% to 3.5% range over coming quarters on average. A sustainable and entrenched expansion in 2016 and 2017, by the consumer. Lower energy prices a net benefit.
- **Inflation:** Lower oil prices mean broad inflation measures will now struggle to reach 2% as fast as assumed previously, but rising inflation remains likely as the lagged effects of easy money and fuller employment take hold later in 2015 and into 2016. DE believes the unemployment rate may need to fall nearer 4.5% before stronger price growth becomes clearer.
- **Fed:** Liftoff commenced, DE base case is two more hikes in 2016, to a 75-100bps range. Employment goals have effectively been reached, albeit with extra "slack" on other metrics. Attention is clearly shifting to the price stability target. Officials' comments are likely to contribute to financial market volatility as transition continues.

(Andrew Husby)

## Canada

### The Weakness Strikes Back

#### Week Ahead: Housing Starts

Last week was filled with releases, starting with industrial product and raw materials prices on Tuesday. Industrial product prices continued their slow decline (albeit with a deceleration) as they fell 0.2% M/M (-0.2% Y/Y). Raw materials prices returned to a decline as energy effects led to a 4.0% M/M (-16.3% Y/Y) decline. The November trade balance showed a welcome narrowing of the deficit to -C\$2.0 billion (from a revised -C\$2.5 billion). The narrowing came courtesy of the first export gain in four months, as autos and metals led the export gain. Thursday brought the December Ivey survey



release, which after climbing to low-atmospheric heights in November (63.6), saw sentiment tumble to 49.9.

Finally, Friday brought the release of both the December labor survey and November building permits. Employment did rise 22,800 during the month, rebounding from the monstrous decline in the wake of the election last month. However, employment growth for the year was less than 1%, showing once again that the economy is not on its way to a strong recovery. Building permits also took quite the tumble on Friday, which after rising 9.9% M/M in October rubber banded back to fall 19.6% M/M as winter approaches.

The coming week has a solitary release, with December **housing starts** expected on Monday. Housing starts have been one area of the economy that has remained strong despite widespread weakness as a low interest rate environment has facilitated building. The December report could show a slight cooling, but starts will still remain quite strong (**DE and Consensus: +200,000**).

#### **DE Forecasts:**

- **Economy:** Q3 GDP expanded 2.3% Q/Q (SAAR), driven by continued strength in the consumer segments. However, the most recent two monthly reports (September and October) have both been disappointing. The coming months' GDP reports will be watched very closely, especially given the weakness in trade seen in October. At least currently, despite some initial indications of a recovery, it would seem that the economy is beginning to stagnate.
- **Inflation:** Core inflation rose to 2.4% Y/Y in March of 2015, the highest core inflation has been since December 2008, but has since fallen to 2.1% Y/Y. However, energy prices have been holding back the total recently, with inflation remaining unchanged at 1.0% Y/Y in October, in-line with expectations. The BoC hopes that inflation should slowly pick back up through the end of the year and into 2016, but as the months go by with no change, there is a question of when that will begin.
- **Bank of Canada:** The BoC has now held the overnight rate at 0.5% since July, with the most recent rate decision in December. In September, inflation fell back to 1.0% Y/Y after climbing to 1.3% Y/Y during the summer. Further rate cuts are not expected in the short term as the current prevailing belief is that inflation will slowly pick up and the economy puts more distance between it and the recession, but depending on performance they are definitely possible.

(Ethan Ward)

## **Eurozone**

### **ECB Splits Detailed?**

**The Week Ahead:** While reverberating less, the December ECB decision is still puzzling some in the financial markets, most clearly those who were surprised by the lack of any more sizeable action from the central bank. Although denied by the likes of ECB President Draghi, a far from negligible contingent within the Council will have cautioned against major, or even any further action, a view supported by the acknowledgment from the ECB that the December action was carried only by (large) majority.



That minority will probably have been swayed by the stronger real economy and monetary backdrop that data has pointed within the Eurozone of late, as opposed to an inflation picture that (at least at the time of the December meeting was no worse than envisaged back in March when the bond purchase program was launched.

Regardless, a clearer impression of the debate in December will come with the **Minutes to the ECB meeting** due on Thursday. *They may not provide much more added illumination*, perhaps being an indication that the recent innovation of releasing accounts ECB meetings will not highlight the extent of splits among members!

**Unimpressive Real Data (Hit by Weather)?** What the minutes may reveal is that the more hawkish camp have been more impressed by strength in monetary data and business and consumer surveys rather than official real economy updates. This may be because official output and expenditure data have been distorted of late by aberration, most recently the very mild weather. The impact of the latter was seen in German retail sales data in November. *Indeed, the November reading was hurt by a 5% slump in clothing sales that was probably weather-related and which may have prompted discounting which featured (and caused) in what were softer-than expected December CPI numbers.*

Indeed, this weather-induced damage to activity may be further evident in the **German 2015 GDP** estimate due on Thursday from which an implied Q4 reading may be gleaned. This is likely to suggest that Q4 German GDP growth was not that much better than the modest 0.3% Q/Q Q3 reading!

It may also be evident in the **Eurozone Industrial Production** data on Wednesday (**Consensus: 0.1% M/M; DE: -0.1%**), where weakness on the energy side may be very notable.

**More Focus on Surveys Needed?** Given such distortions may be at work and adversely affecting official rate data (except for labor market data which have shown more upbeat signs of late), it may be better to focus more on business survey data and private sources of activity. These are designed to highlight both turning points in the economy and gauge underlying growth. Indeed, **Car Registrations** data (Fri) may show more every clear upbeat signs, albeit boosted by working day effects!

**DE View:** The latest economic sentiment indicator and PMI readings need to be placed into perspective as the existing numbers are (already) consistent with above-consensus GDP growth of around 2% continuing on an underlying basis. Otherwise, these survey data are yet another set of numbers refuting the recent ECB assertion that the Eurozone real economy is facing purely downside risks!

#### **DE Forecasts:**

- **Economy:** Fragile and uneven recovery continues albeit with better signs more evident, especially in regard to the consumer. DE sees GDP seeing continued moderate growth, with growth picking up to around, if not over, 1.5% in 2015 and 1.8% in 2016. Downside risks less evident.
- **Inflation:** Headline HICP inflation remains clearly below the 2% target. Partly due to base effects, warm weather and (increasingly) low oil prices, DE sees the rate recovering from the current below-zero towards 0.5% but only then moving higher in the second half of 2016.



- **ECB:** The ECB has announced an extension of its bond buying program. Indeed, while monthly purchases of public and private sector securities will continue at € 60 bln, they are now intended to continue until March 2017, six months longer than originally planned. However, policy is likely to remain on hold for some time as the ECB Council as a whole starts to accept that growth and inflation risks may be more balanced than officially accepted!

(Andrew Wroblewski)

## United Kingdom

### BoE Taking Too Many Plaudits?

**The Week Ahead:** As has been the case for quite some time, no-one expects the **BoE** to alter policy when it gives its next **policy verdict** on Thursday, this now arriving alongside the **minutes** to the meeting and (perhaps more crucially) by the **Monetary Policy Summary!** The former will show continued dissent from the hawkish McCafferty in favor of starting to hike rates, but little likelihood of any other members joining his camp.

Indeed, the minutes this time around are likely to suggest no immediate rush to start hiking rates, still stressing weaker-than-expected wage growth this time with re-emerging EMG worries likely to be manifest, all of which may make the BoE majority stress that it has been correct to avoid the start of the tightening process. *If so, this may be a little too complacent an assertion!*

**Confused Labor Cost Backdrop!** As for the wage backdrop and outlook, the BoE will use its February Inflation Report to examine in more detail why wage growth may have disappointed, something that may be all the more vital for the BoE given the likelihood that average earnings data in the update due later this month may slow further! Even so, and contrary to the impression the BoE has been offering, unit labor costs growth in Q3 was already in line with the 2% target, ie somewhat ahead of the end-2015 timetable envisaged in its most recent Inflation Report.

As a result, BoE arguments that the current pace of (somewhat weaker) wage growth may be inconsistent with its 2% inflation target do not stand up to full scrutiny, with unit wage costs (perhaps the best measure of domestic price pressures) having been in line with that 2% goal for two successive quarters. Indeed, it could be argued (especially in regard to manufacturing) that wage growth may have slowed precisely because productivity has failed to firm any more clearly.

**Productivity Pick-Up Already Occurring?** Aside from its external concerns, it is clear(er) that the apparent uncertainties which the BoE is likely to repeat that it still sees include a lack of clarity about the UK productivity backdrop and outlook and therefore that of unit wage costs.

Even so, a series of economic indicators suggest that productivity may have been picking up more clearly and for longer than official data have so far suggested. If so, and the anticipated pick-up in productivity which the BoE is pointing to has already occurred, domestic cost pressures in coming years may prove to be higher than the central bank thinks, regardless of what volatile and inaccurate official productivity data may suggest



**DE View:** Regardless, it still seems that the MPC thinking remains in a state of flux and this uncertainty may be even more evident this time around, accentuated by the global financial market backdrop. Domestically, despite what seems to be weaker-than-assumed pay growth alongside better productivity, the BoE clearly remains no more certain about the unit labor cost backdrop and outlook. And, of course, it is the latter that remains the crucial ingredient into the overall inflation outlook. The BoE (understandably) notes that clear(er) domestic cost growth will be needed to offset the drag on prices coming from external influences, the latter perhaps even more manifest given the recent further fall in oil prices.

**The Rest of the Week Ahead:** As is usually the case, the coming week also has key data that may have some influence on the BoE decision, albeit this made possibly more difficult given the more stretched timetable the BoE now has in reaching its verdict. Tuesday sees the official **Industrial Production** release, data that saw fresh strength in August and consolidation since. A further modest rise may be on the cards this time around (**Consensus: unch M/M; DE: 0.1% M/M**), but which may still include a further and clear recovery in manufacturing, albeit with warm-weather induced weakness in utility production a clear downside threat!

**Mixed Q4 Growth Risks.** Indeed, expectations for Q4 GDP growth may increasingly be affected by the impact of the very mild weather seen of late undermining utility production, the latter being a small component of the economy but very prone to marked swings. On a more upbeat note the mild weather may help support **Construction Output**, with the November update due on Friday.

#### **DE Forecasts:**

- **Economy:** Some slowing appears to have occurred, especially in regard to Q3 GDP numbers, but actually a clearly-solid underlying trend remains in place as forthcoming data may highlight. As a result, a GDP growth rate just under 2-½% in 2015 is seen, with a little stronger outcome anticipated for 2016.
- **Inflation:** Headline CPI has fallen back recently having turned fractionally negative. But a pick-up is likely into the coming year.
- **BoE:** Bank Rate on hold probably until the middle of 2016, as BoE overlooks soft CPI inflation and notes bounce in wages that is not being fully accompanied by any productivity recovery. But the BoE will be loath to start too soon, with a clear eye on what it regards as too strong a level of sterling!

(Andrew Wroblewski)

## **Other Europe**

### **Sweden: Riksbank Currency Worries Misplaced?**

**The Week Ahead:** Just before the New Year, the Riksbank flagged an ever-clearer worry about the rising Krona, noting that since the last monetary policy meeting in mid-December, the currency has appreciated on a broad-basis. It stressed in a high-profile post on its website that were this development to continue, it would jeopardize the ongoing upturn in inflation. It has gone further in the last week, now stating that any such a decision regarding intervention would be left in the hands of the Governor and first



Deputy rather than the overall Board, thereby seemingly allowing a swifter recourse to this option.

Regardless, the Riksbank is signaling a high(er) level of preparedness to act even though it has no target for the exchange rate, but the krona's value in relation to other currencies is an important factor in the inflation forecast.

**Amending Inflation Target?** This FX stance may tend to suggest that the Riksbank has no appetite to amend its inflation target, despite there being a clear rationale that a lower target may make sense at the current juncture. However, the minutes to the most recent Board meeting showed a clear discussion among members in regard to amending the target, albeit with a clear wariness that it may be counter-productive to do so at this juncture given the persistent undershoot. Even so, there seems to be preference to move away from a focus on the CPI towards a more formal link towards the CPIF measure, ie which excludes the impact of changes in interest rates!

But the stress on the currency still seems misplaced, if not flawed; after all the currency has risen less than 2% in the last two weeks and (in trade-weighted terms) is still preserving the 15% drop that occurred between 2013 and 2014. More notably, the (modest) currency rise seen of late has risen as much due to the very strong real economy readings that have been seen of late, most notably being the very large drop in unemployment alongside more signs of even stronger mortgage lending.

**Excess Focus on Current Inflation Readings.** Of course, Riksbank thinking is being dominated by current inflation readings, rather than the inflation outlook, ie the manner in which inflation targeting should be expressed. This stems from the fact that inflation has failed to rise materially, albeit with some uptrend having occurred of late, albeit with some setback in the last set of data. Indeed, and showing a slightly lower than expected outcome, November headline CPI inflation once again remained at 0.1% Y/Y, thereby still a four-month high. The most notable feature was lower food price inflation.

As a result, the long-standing core measure (CPIX, which excludes mortgage costs and taxes) fell back to 0.6% Y/Y from 0.7%, while the underlying measure (CPIF, which the Riksbank puts more emphasis on and which holds mortgage interest expenditure constant) slipped back similarly but to 1.0%, both falling back from October readings which were the highest in 26 months.

**Higher Price Pressures Emerging!** All of which puts more market and central bank interest on the December update due on Thursday. However, there are signs that solid, if not robust consumer demand is beginning to push up prices, in spite of the still soft CPI backdrop. Indeed, seasonally adjusted real retail sales rose by 0.4% in M/M terms in November, accentuating the clear recent uptrend in the data, the latter highlighted by very strong Y/Y reading of 5.2%.

**DE View:** The data do suggest that price pressures are returning with nominal sales growth of 7%, the latter up over six percentage points in the last 12 months! Indeed, in the last year, the retail sales deflator has swung from -2% Y/Y to the current circa +2%, a very marked swing indeed!

Regardless, amidst the Riksbank's continued worry about the low inflation backdrop is a failure of the Board failing to appreciate that the lack of price pressures is not causing any economic damage, the very opposite!



### DE Forecasts:

- **Economy:** More solid growth is emerging with the 2.4% seen in 2014 likely to have been exceeded clearly in 2015 and probably in 2016 (ie rates of around 3% for both years).
- **Inflation:** Headline and underlying CPI rate likely to remain well below the 2% target for some time yet, but higher pressures are already evident, especially on the retail side.
- **Riksbank:** After the recent rate cuts, worries about below-target inflation triggered successive moves to ever-clearer negative rates. However, on balance, stable policy is envisaged until the rate hike cycle may start perhaps as soon as the middle of next year as strong debt growth becomes key policy issue.

### Switzerland: Inflation on the Turn?

**The Week Ahead:** Consumer price inflation edged up a notch to 1.3% Y/Y in December, thereby up from the record-lows set in each of the previous four months. Notably, the core inflation measures were also a notch higher as the ex-food, energy and fuel measure edged up to -0.9% Y/Y.

**DE View:** Unsurprisingly, the main added price softness in the last few months came in the foreign goods category, down 3.8%, but with a little more marked domestic softness emerging now. To what degree this may be driven by the lagged impact of lower import costs filtering through into the economy is unclear as weaker domestic demand may also be as a cue. **Retail Sales** data (Mon) may offer more clues, especially if the weaker trend of recent months is preserved, let alone accentuated!

### DE Forecasts:

- **Economy:** Recession not an issue, despite drop in Q1 GDP and then a flat Q3 reading. Growth may be around 1.0% for 2015 as strong currency causes temporary slowing. Growth of over 1.5% is likely in 2016!
- **Inflation:** CPI inflation staying negative, likely to average just over zero this year.
- **SNB:** Rates on hold for some time now that Swiss franc cap has ended, but FX intervention continues. Regardless, exchange rate issue may ultimately be overtaken by concerns of a real estate bubble.

(Andrew Wroblewski)

### Norway: Mixed Price Swings

**The Week Ahead:** Definitive **House Price** data (for Q4) on Wednesday may add to signs that the pace of growth has eased of late, albeit this development not having led to any appreciable slowing in household debt growth. Regardless, this will still be welcomed by the likes of the Norges Bank.

Less reassuring for the central bank will be uptrend in **CPI** numbers, something that December data on Monday may only accentuate. Indeed, CPI inflation showed firmer



signs in November data and broadly so, leaving an even more elevated reading in place for the core reading. The headline rate rose from 2.5% Y/Y to 2.8%, a 26-month high. The rise in the Y/Y rate was relatively broad-based, led higher by fuel/energy costs, but with food inflation also clearly firmer. As a result, the core rate, CPI-ATE (excluding taxes and electricity) edge back up to 3.1% from 3.0%, still only just below the June reading of 3.2% which was the highest since late-2008.

**DE View:** Even so, the core reading is now a little above the latest (ie November) projections of the Norges Bank. Regardless, an upward trend seems to be in place this, alongside what are still rapidly rising property prices, very much questioning the easing moves made of late by the Norges Bank, as well as casting some doubt as to whether the Bank should/could ease again!

**No Benefit From Above-Target Inflation?** Norway is perhaps the only industrialized country where inflation is above the central bank target. This has hardly helped the economy generally given the weakness on the real side where rising prices have undermined domestic spending power!

#### **DE Forecasts:**

- **Economy:** Mainland GDP growth should be around 1.5% in 2015, ie slowing notably from that of the previous year, but real activity momentum is still not discernibly weak. Some downside risk as oil-industry may succumb further to energy price slump.
- **Inflation:** Headline and underlying CPI rate have picked up, both having moved back above the 2.5% Norges Bank target. Upward trend to continue through in the coming year.
- **Norges Bank:** After what may be one final cut in the next 2-3 months, the Norges Bank may start the rate hike process by the middle of 2016, especially if the clearer domestic price pressures thereby erode the scope it sees for possible further easing in coming months.

## **Oceania**

### **Australia: Two Sides to the Economy**

**The Week Ahead:** There are signs that the economy, or at least the housing market, is succumbing to recent macro-prudential policy moves. Indeed, new dwelling approvals slumped by a larger-than-expected 12.7% M/M in November, enough to turn the Y/Y rate of growth negative (ie -8.4%) for the first time in 14 months. The drop was broad-based and came alongside a further slide in dwelling approval data! **Home Loans** data (Fri) may add to this picture.

**Labor Market Firming But Correction in Store!** Indeed, the housing market may be slowing somewhat more clearly and/or earlier than the RBA had expected. Regardless, the **Labor Market** may be doing the opposite, showing more and more strength, something that the December update on Thursday may only serve to highlight further, albeit with some correction back in employment on the cards after the very marked strength shown in the last two updates.



Indeed, in the last report for November, employment surged 71 400, actually the fourth very strong reading in the last seven months. As a result, Y/Y jobs growth picked up to 3.0%, with strength emerging on a broad base geographically. Partly as a result, the seasonally adjusted unemployment rate dropped from 5.9% back to 5.8% (the lowest since April last year), this fall occurring despite a further rise in the participation rate to 65.3%.

**DE View:** Notably, that latest batch of data is very probably suffering from distortions, these accentuating the strength in employment. Regardless, the labor market is clearly very strong with the unemployment rate moving below (recently pared-back) RBA expectations and with improving labor market confidence highlighted by the further rise in participation.

#### **DE Forecasts:**

- **Economy:** Real GDP growth has been volatile of late, but (in Y/Y terms) picked up to 2.5% in Q3. A rate slightly higher may now be emerging, ie a little above what the RBA is envisaging and with a pick-up likely through 2016 to around 2.75%, this supported by the thrust of recent real economy data!
- **Inflation:** Q3 CPI inflation stayed at 1.5%, ie still well below target. The outlook for the rest of 2015 sees inflation rising further but not on a core basis, the latter having slowed but having remained within-target. Looking further ahead, an outcome near 2% is likely by end-2015 and higher for next year.
- **Reserve Bank of Australia:** The RBA surprised with a couple of rate cuts so far this year (despite solid domestic data), all at least partly designed to support its clear aspiration to soften the A\$. Even so, the RBA has seemingly ended its easing bias and rates may be on the way back up by the middle of 2016!

#### **New Zealand: Softer Housing?**

**The Week Ahead:** The coming week is yet another largely devoid of key data. Experimental data from the RBNZ on **Home Loan Approvals** may show some further softening in what is still a still-robust trend. Otherwise, December data on credit card spending should show more solid signs in numbers depressed by the lack of inflation. Otherwise, the data backdrop will not be altering the RBNZ mindset, with perhaps the Bank more reassured by the softer currency backdrop that has re-emerged in the last few weeks!

#### **DE Forecasts:**

- **Economy:** GDP growth has slowed of late, actually more hampered by strong import growth than commodity-price induced export damage as domestic demand has been resilient. Looking forward, however, after GDP growth in 2015 of just under 2.5%, an outcome nearer 3% is on the cards for 2016.
- **Inflation:** Headline CPI inflation in Q1 hit the lowest since 1999, but has risen a little in Q2 and stabilized in Q3. Moreover, inflation is expected to rise but modestly so towards 2% into 2016.



- **Reserve Bank of New Zealand:** The RBNZ has seemingly abandoned its easing bias after the most recent cut. Perhaps even more likely then, tightening is likely to resume late in 2016.

(Andrew Wroblewski)

## Japan

### Machinery Orders Correction; Further Decline Expected

**The Setting:** Recovery from the post-VAT-increase plunge in activity has been somewhat shakier than hoped, particularly in production-side data. The ongoing issue is maintaining follow-through on the initial wave of Abenomics enthusiasm - in the face of deteriorated export markets, still uncertain global competitiveness in manufacturing, and only stop-and-go progress in domestic market reforms.

Particularly ambiguous is the outlook for consumers, who benefit from positive wealth effects, a healthy labor market, and lower world energy prices, but are suffering higher prices for many imports and the broad VAT-driven loss in purchasing power. Domestic business-investment plans generally remain conservative - though with some clear hints of increasing liveliness in orders and GDP-basis spending. Exports, though trending mildly higher over recent months, remain under threat, and there are serious China-economy, China-policy, and island-confrontation concerns.

Bank of Japan confidence that a satisfactory path towards 2% inflation would be maintained had weakened enough by October 2014 to prompt a surprise, but relatively moderate, dialing-up of its "Quantitative and Qualitative Easing" program. After its latest full-scale evaluation of the outlook, started from April 2015, the BOJ chose to stand pat, accepting the inevitable delay in achievement of its inflation target - and preserving the little remaining practical room for big QE actions.

Outlook worries also moved Prime Minister Abe to postpone the next stage of VAT increase and to call a snap Lower-House election. The relatively limited number of voters who turned out, lacking a credible political alternative, gave Abe - and Abenomics - a full new four-year mandate. It remains to be seen whether "Third Arrow" economic reforms will be pursued more aggressively than before - though active pursuit of the TPP agreement does suggest that Abe seeks the cover/club it would provide for domestic reforms.

**Week Ahead:** This week features **Current Account Balance** on Tuesday at 8:50 (January 12) and **Core Machinery Orders** on Wednesday at 8:50 (January 13). Note that Monday (January 11) is a Japan public holiday.

**Current Account Balance** is expected to followed its seasonal pattern, yet display much improvement from year ago (DE: ¥1145.9 Billion; consensus: ¥895.0 Billion). Recovery of global economies and the depreciation of yen drive the **Current Account Balance** from negative to current level. However, it is still not in parallel with the pre-crisis level.

A correction is anticipated for **Core Machinery Orders** (DE: -3.0%; consensus: -7.3%), after its two-month surge in September and October (+7.5% and +10.7% respectively). DE expects the magnitude of this correction as moderate and **Core Machinery Orders**



will still show a +10% improvement from year ago. However, further decline may be in sight as yen strengthened due to risk aversion mood in Asia.

#### **DE Forecasts:**

- **Economy:** Severe trade-sector headwinds have been in place since late 2013, and the domestic economy has gradually worked back from a deep payback for the pre-VAT-increase demand surge in the first quarter of 2014. The second quarter's GDP contraction stopped the upward momentum. Recent released preliminary Q3 showed no sign of revival. Despite this sequence of negative GDP readings, DE doesn't consider it true recession for Japan's economy. When trend growth is below 0.5% annualized, normal variance of GDP could push the number into negative territory, notable but not very meaningful. As DE expected, revised GDP number came out positive and may start an expansion phrase. Improving labor market will equip the economy for further growth. But emerging market stability remains a concern.
- **Inflation:** Aggressive inflation targeting, and implicit currency management, drove the BOJ to take even stronger steps than expected to reflate demand and prices. Chances of the Central Bank meeting its inflation target on schedule, never high, were diminished by the oil-price collapse and slow export improvement. Governor Kuroda has now acknowledged the delay and progress on inflation - though in sight - will likely continue to be slow and halting.
- **BOJ:** The Kuroda Policy Board has made drastic changes to the Bank's modus operandi - in April 2013 shifting to a Fed-like open-ended policy of buying large quantities of long-maturity bonds with newly printed money and in October 2014 stepping-up the monthly volume. Another up-move has been ruled out for September, but likely will be necessary - though market realities could limit the size, timing is the question. Policy interest rates have been largely removed from the discussion - but the possibility of downward adjustment to the rate on excess reserves has not been closed.
- **Markets:** Though bond market developments have occasionally challenged the BOJ's duration-removing policy, longer-term interest rates should stay very contained for many months. Eventually, easing global safe-haven demand and growing market conviction that the BOJ is succeeding in pulling up inflation could lift the ten-year JGB rate beyond 1%. Given policymaker acquiescence in, if not active encouragement to, yen depreciation, further decline is in the cards, with ¥130-¥135 as medium-term target.

(Ran Liu)



## Emerging Markets

### Brazil

**Week Ahead:** There are no indicators of note expected this week.

#### DE Forecasts:

- **Economy:** The economy is, for all practical purposes, in deep recession territory. The negative dynamics of domestic demand –*especially* private consumption--are worrisome, as future growth is estimated.
- **Inflation:** Annual inflation is now significantly higher than the 6.5% upper limit set by the monetary council (Copom). A sharp reduction is unlikely, creating a stagflation dilemma for the central bank.
- **Policy:** The central bank is likely to tighten further as inflation rises substantially above target and the government's political troubles mount. But the economy is extremely weak, recessionary, and likely to limit the extent of the bank's move towards a contractionary policy to perhaps 50-to-75 basis points further. At the last meeting, rates were held despite indications of tightening.

### India

**Week Ahead:** Both **inflation** and **industrial production** are expected on Tuesday this week.

The consumer price index has been moving in the 4-5% range lately, but rose slightly higher to 5.4% Y/Y in November. December could bring a cooling in prices as the index returns closer to the typical range of late (DE: +5.0% Y/Y).

In October, industrial production surged ahead to rise 9.8% M/M. Currently, growth of that level seems unsustainable and a deceleration is expected this month, but could still remain fairly strong (DE: +5.5%).

#### DE Forecasts:

- **Economy:** Real GDP is now (and into the foreseeable future) growing faster than 7%, with the acceleration at the moment led by domestic spending, and exports weakening.
- **Inflation:** Wholesale prices are (and will continue to be, for some time) in deflation, while CPI is moving in the 4%-5% range, somewhat close to the RBI's target range.
- **Policy:** The conditions for monetary easing outlined by the RBI have been met: WPI inflation is now negative; CPI inflation is well below the anticipated level, and as pipeline inflation disappears there is very little chance of a significant rebound over the next few months. Further interest rate reductions are likely.

## Korea

**Week Ahead:** December **unemployment** and a **central bank decision** are both expected in the coming week.

The economy has been functioning at, or close to, full employment for some time now. Dramatic changes in the labor market are unlikely, but there could be a slight uptick in unemployment during the month (**DE and Consensus: 6.5%**).

The upcoming central bank rate decision Thursday is unlikely to bring any changes, despite room to work with on the rate front. Inflation remains quite low, and if the bank deems action necessary it could take it, but that is not expected at this meeting.

### DE Forecasts:

- **Economy:** The economy rebounded in the third quarter as the MERS outbreak receded and consumer spending increased, offsetting sales abroad. Even though there were strengths in the report, policy makers still caution that there are risks from uncertainties in overseas markets.
- **Inflation:** Non-existent for the foreseeable future.
- **Policy:** From DE's perspective: (1) there may be some additional fiscal spending; (2) interest rates will either remain at currently low levels for the remainder of the year, or be cut further; and, (3) there will be some downward pressure on the won, both because of BoK intervention and because of a potential extension of the low-interest rate period. On the latter issue, it must be remembered that inflation is well below the bank's policy range, and thus the bank has room, within its own framework, to lower interest rates if it deems such action necessary.

## Mexico

**Week Ahead:** The November **industrial production** figure is expected this week.

Current expectations are that production will continue to chug along at fairly comparable levels to recent results. However, an acceleration is expected from last month's slowdown (**DE: +1.4% Y/Y; Consensus: +1.3% Y/Y**).

### DE Forecasts:

- **Economy:** Real GDP growth will likely pick up the pace in the foreseeable future, driven largely by the resurgent U.S. economy.
- **Inflation:** Slowing to an all-time low of 2.1% in December, inflation has dropped further below the target of 3%. However, inflation is still stable, and further central bank action (after the response to the Fed rate hike) due to weak prices is unlikely.
- **Policy:** Banco de México raised its policy rate 25 bps at the December meeting, largely in response to the Fed's rate increase. The bank is concerned that without a corresponding hike, it could unleash currency depreciation.



## Turkey

**Week Ahead:** The **current account balance** for November is expected this week.

The current account balance actually reached a surplus during 2015 before returning to a very small deficit in October. The November figure is likely to bring a return to previous deficit levels with a large widening (**DE: -\$1.9 billion; Consensus: -\$2.0 billion**).

### DE Forecasts:

- **Economy:** The Turkish economy seems to be modest growth path, with an improvement subject to conditions in Europe.
- **Inflation:** Inflation continues to rise, reaching 8.8% Y/Y in December. As inflation continues to climb, more pressure is on the TCB to take action to reign in prices.
- **Policy:** The odds of higher borrowing costs (i.e., the overnight rate) going up are now higher, and in fact the TCB could resort to shifting the interest rate corridor up to stabilize the lira, *if needed*. The need has not yet been seen and at the last meeting rates were held.

(Ethan Ward)

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## U.S. Economy: Past and Prospect— As the Consumer Goes, So Goes the Economy!

Allen Sinai and Andrew Husby

Data on the overall U.S. economy for the third quarter, September consumption and income data, and the latest Employment Report suggest that U.S. real economic growth is on a solid and sustainably higher path than previously—about 3% inflation-adjusted, *contradicting many perceptions of economic weakness and stagnation.*

The report on Q3 GDP needed to be carefully read in the context of underlying macro fundamentals, particularly those surrounding the American consumer and consumption, in aggregate some 69% of the U.S. economy, in order to see the underlying strength. Some fading of consumption did occur in September, but probably transitory given so many strong fundamentals underlying consumption spending. The latest Employment Report (this past Friday, November 6) and October Retail Sales to-come (this Friday, DE estimate 0.2% Overall, 0.4% Ex-Autos) underscore the consumer prospect in the U.S. economic outlook—previously, now, and going forward.

In particular, the 271,000 increase in nonfarm payroll jobs in October, particularly in strong-growing Services Sectors, drop in the unemployment rate to 5%, now closing in on “full employment,” and accelerating wage inflation in Average Hourly Earnings, 0.4% month-to-month and 2-1/2% over a year ago, indicate that *Jobs and Income, quantitatively the most important fundamental for aggregate consumption, continue to augur well for future consumption, the U.S. economy and, indirectly, non-U.S. economies.*

In Q3, aggregate consumption rose 3.2%, at an annual rate, and now stands 3.2% over a year ago (Appendix Table A.1).

Here, *what is notable is the stagewise progress upward in the year-over-year path of real consumption—1) over the last five quarters a continuing step-up in the pace of consumption to over 3%; 2) in the five previous quarters, 2014Q2-to-2013Q2, an average pace of growth somewhat over 2%; and 3) from 2013:1-to-2012:1, a pace of increase near 1-1/2% per*



quarter, year-over-year.

With consumer fundamentals all supportive, there is no reason to expect any major retrenchment in the pace of aggregate consumption going forward. By comparison, the *trend* rate of increase of consumption, inflation-adjusted, between 1955 and 2005, many of those “go-go” years, was 3-1/2% per annum. *Thus, there is upside room for the growth of consumption, though not likely to reach the high growth that lasted five decades.*

*Consumption is the main story of the pickup in U.S. real economic growth over the past two years, shown in Appendix Table A.2; 2.5% forecasted in 2015 and an actual 2.4% in 2014. This is after weak real GDP growth of near 1% per year between 2007 and 2013.*

*The estimated Q4 track for the U.S. economy and forecast for 2016-17 is 3% plus, a decided uptick from Q3 (Appendix Table A.3). As the coming year unfolds, policy-induced improvement in Japan’s economy, Asia generally, the Eurozone and Europe, Canada and, to some extent, parts of Latin America should help lift slow-growing business sales and profits; in turn, feeding the next stage of what could be the longest American business cycle upturn post-W.W.II, perhaps to even exceed the 10-year expansion of the 1990s.*

*The innards of the U.S. economy, not just the consumer, look stellar, with sector-after-sector much improved and likely to stay so in an environment of increasing U.S. and Global economic activity, relatively low inflation, supportive monetary policies from most central banks, and global interactions of consumption from the U.S. to the rest-of-the-world and then back to the U.S..*

#### **Looking at Recent Data—The GDP Report and Consumption**

The underlying data for Q3 GDP suggested a stronger economy than the 1.5% headline result, principally backed by strong consumption and residential housing.

Inflation-adjusted consumer spending posted 3.2% annualized growth in Q3 and reads above 3% growth in five of the last six quarters. *This would not be happening if not part of a new stronger trend growth path for aggregate consumption, although with periodic interruptions and retrenchment as in any business expansion.*

Pacing with the much improved consumer backdrop also is residential investment which continues to move sharply higher, in Q3 rising at a 6.1% annualized rate. Residential investment also reflects the consumer.

The big drag on real GDP in Q3 came from inventories, where accumulation slowed from \$113.5 billion in Q2 to \$56.8 billion, with the industrial side of the economy going through an inventory correction in response to slower external demand, huge declines in oil and energy prices, and retrenchment in the Energy Sector.

Some details:

- *Consumer spending advanced at a 3.2%, annualized rate, after 3.6% in Q2, roughly the pre-release DE estimate. The pickup in consumer spending has been pronounced, posting a 3% gain Q4-over-Q4 in 2014:3, and maintaining a little higher pace through this last quarter. This is well above the near 2% average growth of consumption over 2010 to 2013.*



- *Residential investment was expectedly strong*, up 6.1% at an annual rate, continuing a new strong pace in-place for the last six quarters.
- *Business fixed investment rose just 2.1%*, annualized, after a 4.1% gain in Q2, with a rise in Equipment Spending (5.3%) offset, in part, by a 4% drop in Structures outlays.
- *Inventories were a clear drag*, the pace of accumulation slowing to \$56.8 billion after \$113.5B in Q2, enough to subtract 1.4 percentage points from headline growth.
- *Net exports' contribution was effectively flat*, as exports rose 1.9% and imports 1.8%.
- *Federal government purchases increased 1.7%*, adding 0.3 percentage points to the growth of real GDP.
- *Inflation was a bit lower than anticipated*, with the Overall PCE Deflator up 1.2%, annualized, and the PCE Ex-Food and Energy up 1.3%.

On monthly data for the third quarter, in September consumption rose only 0.1%, nominal, 0.2% real, slowing from the strong pace of July and August. *This looks to be transitory as auto and retail sales climbed nicely in October.* The DE look ahead to Christmas retail sales is for strong results.

Thus, the outlook for growth remains favorable, with questions: 1) a corporate profits slowdown and potential negative effects on jobs, incomes and spending still to be resolved as 2016 moves into view; 2) weak non-U.S. economic growth, especially in Developing Countries (EMG). The main issue is possible derivative restraint through the effects on spending and hiring from diminished earnings growth via the business sector into the economy.

*The early track on fourth quarter GDP growth is 3%. For 2016, a 3.2% gain is projected accompanied by 2-3/4%-to-3% plus inflation-adjusted consumption.*

Private sector spending, defined as consumption, residential investment and business fixed investment is estimated by DE at near 3-1/2% in 2016.

Looking at the recent data on the labor market, the economy does seem to be approaching "full employment."

The unemployment rate, now at 5%, lies in the latest range of full employment, 4.9%-to-5.2% indicated by the Federal Reserve. Over time, the assessment of the full employment unemployment rate has come down, starting at about 5-1/2% until March 2014 (then 5.2%-to-5.6%), to 5.2%-to-5.5% December 2014, and 5%-to-5.2% in March 2015. Other measures, including those for "Slack," show significant cumulative improvement over the past year-or-two. The perhaps most sensitive indicator of Slack, wage inflation, picked up sharply in the last labor market report, to 0.4% month-to-month and 2-1/2% year-over-year.

### **Looking at the Data—Labor Market Support: As the Consumer Goes So Goes the Economy**

*Solid and sustainable expansion should continue going forward*, likely at a stronger pace than previously, *supported by strong consumer fundamentals.* These are:

- 1) *Jobs and Income*—continued nonfarm payroll gains, though not necessarily 200,000 plus, per month, and a declining unemployment rate, all strongly supportive of good gains in real spending.



*The October Employment Report spoke to strength in this primary determinant of consumer spending, strong in all dimensions—a robust 271,000 gain in nonfarm payrolls, a decline in the unemployment rate to 5%, essentially full employment according to the Federal Reserve, and a rise in a sensitive indicator of “Slack,” Average Hourly Earnings, to 2-1/2% year-over-year.*

*The increase of wage inflation was the first sign of a possible acceleration of wage inflation at a low unemployment rate. The so-called wage-Phillips Curve may finally be clicking-in, foreshadowing larger increases in disposable income going forward. This is an estimated 0.5% rise for disposable income in October, or a 6% annual rate, suggesting a strong uptick for real disposable income. Real disposable income is the most important short- to intermediate-run determinant of aggregate consumption.*

2) *Household financial conditions and balance sheets in far better shape than in decades.*

Household debt-to-assets; debt-to-income; debt-to-equity; interest charges relative to income; a lower unemployment rate; rising wealth; higher assets-to-liabilities all have improved hugely over the last few years, indicating that household balance sheets and credit conditions surrounding the consumer are fully recovered from the Great Financial Crises.

A summary measure for the household balance sheet—the DE Index of Household Financial Conditions—now is at the lowest level in decades, where low levels suggest financial health and high levels financial weakness.

3) *Household real net wealth—up \$23.5 trillion since Q1:2009 (\$31.2 trillion nominal), thanks to stronger housing activity, rising home prices, and a strong bull equity market.*

The “wealth effect” on household spending is smaller than in previous upturns, given that the distribution of increased wealth is skewed to higher income families. But, still about \$1 trillion in aggregate real consumption, or 7%-to-8% of aggregate consumption, mostly in the last two years, has been added to the economy from the wealth effect. A 4% propensity-to-consume wealth is used for this estimate.

4) *Consumer sentiment is effectively “normal” after being long-depressed.*

The U. of M. Consumer Sentiment Index stood at 90 in October, well above the range of 55.8-to-85.1 over 2010-to-2013.

5) *Low short- and long-term interest rates have helped keep the cost of household financing and interest charges relative to income and debt very low, a plus for household spending.*

6) *Bank lending and consumer borrowing have picked up, with total consumer credit rising 7.1% year-over-year in September, exceeding even the 2003-07 pace of growth. Student loans make up the bulk of that growth. Revolving credit was up at an average pace of \$5 billion per month in the three months through September (against an average \$2.7 billion in 2014 and \$1.1 billion in 2013), reflecting increased loan demands by consumers and more availability of credit.*

7) *Oil and energy price shock. A “permanent” decline in crude oil prices over the past year-and-a-half has freed up nearly \$100 billion from energy goods and services*



spending relative to 2014, available for consumption in the non-energy economy and also for increased savings.

### **Technology and Inflation**

*Key in recent years is the notable absence of a pickup in inflation, in wages or labor compensation and in prices, nothing at all significant in the labor market given the large improvement for a wide variety of labor market indicators.*

*The “Phillips Curve” relationship between a tightening job market and inflation has just not materialized yet, something that also occurred in the second half of the 1990s.*

*There are two major “external” shocks holding down price inflation around the globe.*

- A major wave of technological change that lowers the jobless rate where inflation might pick up, i.e., NAIRU, to lower than 5%, perhaps in the 4-1/4%-to-4-1/2% range. Consumers are able to get more and cheaper goods and services via an expanding array of tech-driven channels. The composition of spending also likely has changed toward lower-priced items and global sourcing that is less costly.
- A huge drop in crude oil prices that is “permanently” lower relative to the \$110/barrel that prevailed at its peak in the first half of 2014.

The second shock is not without its risks. Commodity-dependent emerging economies have been in various stages of recessionary conditions, while other EM economies are dealing with internal transitions of their own (China) to what should be more sustainable growth foundations.

*Oil price shocks, up-and-down, have been well analyzed in macroeconomics. For net oil-consuming countries such as the United States, permanently lower oil and energy prices/costs should increase real purchasing power, raise consumer spending and induce some additional business spending, adding to growth, increasing jobs, and lowering the unemployment rate while, at the same time, reducing price inflation. This would be represented by a downward shift in the Phillips Curve.*

*The technology shock should increase productivity, potential output growth, actual economic growth, increase jobs, lower the unemployment rate, and if reducing cost functions and costs, for numerous countries lead to lower price inflation at the same time.*

*The New “New Technology” is of this nature, increasing demand through higher growth, lowering the unemployment rate, taking down costs hence prices, and increasing price competition through increased supplies.*

*The “Disruptive Technology” that this wave represents should be associated with a downward-shifting Phillips Curve, i.e., at the same time declining unemployment and inflation rates.*

### **DE “Basic Prospect” and “Alternative Risk” Scenarios**

Consumption remains as the engine of growth for the U.S. economy, despite risks from reductions in business spending and hiring because of significantly diminished growth in sales and earnings.



*DE is maintaining a 5% "Mild Recession" Scenario risk. The Baseline outlook is upgraded (to 65% odds from 60%), and the "Growth Disappointment," Scenario has odds reduced (10% from 15%).*

The "Basic Prospect" and "Macroeconomic Risk" Scenarios:

- 1) *Basic Prospect* (65% probability, up from 60%)—pickup on strong consumer fundamentals (Q4 real GDP growth tracking at 3%, forecast over 3% in 2016).

The U.S. expansion should undergo another lift up in the growth of real GDP, firming over time. On this, better economies abroad and fewer negative dollar effects, a reacceleration of corporate earnings compared with a flat 2015 should emerge and, with lags, business spending and hiring pick up. The jobless rate is expected at 4.3% by the end of 2016 and to decline near 4% in 2017.

- 2) *Growth Disappointment* (10%, down from 15%)—strong dollar effects weaken corporate sales and earnings in this Alternative Risk Scenario and lead to restrained hiring and reduced Capex. Foreign economic growth continues in a soft and middling fashion. The Federal Reserve would hold off on any interest rate hikes. Earnings growth would turn negative near-term with a milder rebound than in the Basic Prospect.
- 3) *Mild Recession* (5%)—a mild economic downturn late in 2016 on business cutbacks, with less jobs growth driving less income and consumer spending, diminishing and weak economic growth, and recession dynamics that are cyclically reinforcing. Here, the Federal Reserve would have to reinstitute another Quantitative Easing (QE) or go to a negative federal funds rate.
- 4) *Delayed Upturn* (10%, unch.)—the U.S. expands at nearer a 4% pace late this year and next on a boomy upturn in consumer spending. Stocks rise sharply for a time as does the U.S. dollar; borrowing and lending pick up—a potential Boom-Bust pattern. Price inflation is higher and long-term interest rates spike up. Profits are stronger in this Scenario, supporting the stock market.
- 5) *Inflation Surprises* (10%, unch.)—*unusual risks both to the upside and downside on price inflation.* Transitory factors holding down inflation could remain persistent, necessitating easy money policies for longer. But, a more stable or declining dollar and stable crude oil prices could lead to an upside surprise on inflation. *Either pattern would provide a surprise to financial markets.*

#### **Federal Reserve Scenario—December the First Hike and Then Beyond?**

Increasingly, odds favor "Normalization" of interest rates beginning at the December 15-16 FOMC Meeting, the first hike above zero in the federal funds rate in well over six years.

The jobless rate, now at 5%, suggests significant cumulative improvement in the labor market over the last year-or-two, the question being whether the latest momentum will push the unemployment rate to "below" the full employment jobless rate, or 4.9%-to-5.2% range on Fed projections.

Beyond December, another hike in March, then in August or September would take the federal funds rate to a 0.75%-to-1% range at yearend 2016. The median path for the policy



rate as seen by the Federal Reserve in September has the funds rate higher than the DE forecast at yearend 2016, in a 1.25%-to-1.5% range.

### **Financial Markets and Asset Allocation**

#### *Fixed Income—U.S. Interest Rates Moving Higher*

The range for the 10-year Treasury yield now is higher, at 2-1/8%-to-2-1/2% over the near-term, up from 2%-to-2-1/4% previously. The end-2016 expectation is 2-3/4%-to-3%.

Credit spreads may widen some, but should remain relatively tight. A significant widening below U.S. Treasury yields in German Bunds and Japanese JGBs should be expected.

Both short- and long-term interest rates should tend higher over time, with several years of economic expansion still in the cards.

#### *Strong Dollar—The Dollar as “King”*

DE reiterates a positive view for further dollar appreciation based on strong U.S. economic fundamentals, interest rate differentials favoring the dollar, and the Federal Reserve being ahead of the Eurozone and Japan in terms of the monetary policy and interest rate cycle.

Target for the Euro is 1.05 dollar/euro and toward parity over the next three-to-six months.

On the yen, the DE directional view remains ¥130-¥135/dollar over a three-to-six month horizon. More monetary easing by the Bank of Japan (BOJ) will likely occur but not right away.

*Against most other currencies, the dollar, now “King of Currencies,” should move higher.*

#### *S&P500 “Fair Value”—In the Current Range*

DE is now pricing S&P500 Forward Earnings at \$127 (up from \$126, looking at all 2016 essentially). On a P-E Ratio of 16x forward earnings, 2032 is DE's current fair value estimate for the S&P500 (up from a previous 1985).

The U.S. equity market has been relatively dead in the water much of the year, as earnings growth has diminished sharply and moved negative year-over-year in Q3. Possibly, earnings growth, particularly ex-Energy, Materials, could start to pick up again in Q4.

The current fair value range for the S&P500 is assessed at 1975-to-2125.

DE believes that the real GDP, consumption, and employment data very much support a continued bullish stance on equities, permitting the Federal Reserve to begin a gradual normalization of short-term interest rates in mid-December.

#### *Longer-Term, Recommended Strategic Asset Allocation Strongly Favors Equities*

*Equities—Strongly Overweight* (back up to 85% from a tentative/tactical 80% in early October, vs. Neutral 55%) on a 1-to-3 year horizon; *Strong Underweight Fixed Income* (10% vs. Neutral 35%); *Underweight Cash & Equivalent* (5% vs. Neutral 10%); and *Overweight Alternatives*.

Favored Sectors continue to be Consumer Discretionary, Health Care, and Info Tech.

*Global:* Europe still a Strong Overweight (hedged), also Japan (hedged), and the U.S., in that order, Developing Economies Underweight.



**Table A.1**  
**Consumer Spending: Last Five Years**  
**Shift Up In Trend?**  
**(\$ 2009 Bils.)**

	Quarters												2015F	Annual																	
	2015:3 (A)	2015:2	2015:1	2014:4	2014:3	2014:2	2014:1	2013:4	2013:3	2013:2	2013:1	2012:4		2012:3	2012:2	2012:1	2014F	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	
Aggregate Consumption	11269	11179	11081	11033	10919	10826	10725	10690	10599	10554	10518	10453	10424	10397	10379	10264	10264	10264	10264	10036	9843	9999	10036	9815	9528	9206	8866	8600	8388		
Pct. of Real GDP	68.7	68.4	68.5	68.3	67.9	68.1	68.2	67.8	67.9	68.1	68.0	67.9	67.8	67.9	67.9	67.4	68.3	68.3	67.9	67.9	68.3	67.4	67.5	67.2	66.9	66.8	66.6	66.1			
% Chg., Annualized	3.2	3.6	1.7	4.3	3.5	3.8	1.3	3.5	1.7	1.4	2.5	1.1	1.1	0.7	2.4	2.8	2.7	2.3	2.0	1.8	1.8	2.3	3.0	3.5	3.8	3.1	2.5	2.5			
% Chg., Q4, Y-o-Y	3.2	3.3	3.3	3.2	3.0	2.6	2.0	2.3	1.7	1.5	1.3	1.3	1.3	1.4	1.6	1.8	2.2	2.3	2.0	-1.6	-0.4	-0.4	2.3	3.0	3.5	3.8	3.1	2.5	2.5		
Composition:																															
Consumption—Durables	1482	1458	1430	1424	1403	1377	1333	1325	1311	1301	1294	1267	1242	1222	1214	1152	1152	1152	1086	1023	1083	1142	1142	1092	1047	993	918	857	798		
Pct. of Cons.	13.2	13.0	12.9	12.9	12.8	12.7	12.4	12.4	12.4	12.3	12.3	12.1	11.9	11.8	11.7	11.2	11.2	11.2	10.8	10.4	10.8	11.4	11.4	11.1	11.0	10.8	10.3	10.0	9.5		
Pct. Chg., Q4, Y-o-Y	5.7	5.9	7.3	7.5	7.0	5.9	3.1	4.6	5.6	6.4	6.6	7.2	8.1	7.7	6.3	7.4	6.1	6.1	-5.5	-5.1	-5.1	4.6	4.3	5.4	8.2	7.1	7.3	5.2			
Consumption—Nondurables	2444	2423	2398	2394	2375	2361	2341	2339	2324	2310	2306	2279	2281	2276	2274	2263	2263	2263	2224	2175	2215	2239	2239	2202	2132	2064	1999	1931	1896		
Pct. of Cons.	21.7	21.7	21.6	21.7	21.8	21.8	21.8	21.9	21.9	21.9	21.9	21.8	21.9	21.9	21.9	21.7	21.8	21.8	22.2	22.1	22.1	22.3	22.3	22.4	22.4	22.4	22.5	22.5	22.6		
Pct. Chg., Q4, Y-o-Y	2.9	2.6	2.4	2.3	2.2	2.2	1.5	2.6	1.9	1.5	1.4	0.8	0.9	0.5	0.4	2.8	2.7	2.7	2.2	-1.8	-1.1	1.7	3.3	3.3	3.3	3.5	1.9	1.7			
Consumption—Services	7373	7325	7277	7240	7164	7109	7066	7042	6978	6957	6931	6919	6910	6906	6898	6851	6851	6851	6728	6645	6701	6650	6650	6520	6349	6154	5966	5840	5736		
Pct. of Cons.	65.4	65.5	65.7	65.6	65.6	65.7	65.9	65.9	65.8	65.9	65.9	66.2	66.3	66.4	66.5	66.8	66.8	66.8	67.0	67.5	67.0	66.3	66.3	66.4	66.6	66.9	67.3	67.9	68.4		
Pct. Chg., Q4, Y-o-Y	2.9	3.0	3.0	2.8	2.7	2.2	1.9	1.8	1.0	0.7	0.5	0.6	0.5	1.0	1.3	2.8	2.7	2.2	-0.8	-0.8	0.8	2.0	2.0	2.7	3.2	3.2	2.2	1.8	2.2		

(A)—Advance GDP Report  
(F)—DE Forecast

**Table A.2**  
**U.S. Economy—2001 to 2015F; Quarterly 2012 to Date; Annual 2001 to 2015F**

	Quarters														
	2015:3 (A)	2015:2	2015:1	2014:4	2014:3	2014:2	2014:1	2013:4	2013:3	2013:2	2013:1	2012:4	2012:3	2012:2	2012:1
Real GDP (% Chg., Annualized) (% Chg., Q4, Y-o-Y)	1.5 2.0	3.9 2.7	0.6 2.9	2.1 2.5	4.3 2.9	4.6 2.6	-0.9 1.7	3.8 2.5	3.0 1.5	1.1 0.9	1.9 1.1	0.1 1.3	0.5 2.4	1.9 2.5	2.7 2.8
Private Sector Real GDP (Consumption, Residential Construction, Business Fixed Investment)	3.2	3.9	2.0	3.9	4.3	4.2	2.2	3.8	2.1	1.6	3.0	2.2	0.9	1.8	4.6
(% Chg., Y-o-Y, Avg. Annual)	3.2	3.5	3.6	3.6	3.6	3.1	2.4	2.6	2.2	1.9	2.0	2.4	2.5	3.4	3.4
(% Chg., Q4, Y-o-Y)															
Net Exports (\$ 2009 Bils., Avg. Annual)	-536	-535	-541	-464	-429	-443	-434	-382	-428	-434	-426	-426	-447	-453	-463

	Annual														
	2015F	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
Real GDP (% Chg., Q4, Avg. Annual)	2.5	2.4	1.5	2.2	1.6	2.5	-2.8	-0.3	1.8	2.7	3.3	3.8	2.8	1.8	1.0
(% Chg., Y-o-Y)	2.3	2.5	2.5	1.3	1.7	2.7	-0.2	-2.8	1.9	2.4	3.0	3.1	4.4	2.0	0.2
Private Sector Real GDP (Consumption, Residential Construction, Business Fixed Investment)	3.4	3.2	2.2	2.9	3.0	1.9	-4.5	-1.6	1.4	2.8	4.2	4.4	3.3	1.3	1.6
(% Chg., Q4, Avg. Annual)	3.4	3.6	2.6	2.4	2.7	3.5	-2.3	-4.1	0.9	2.5	3.4	4.2	4.7	1.3	0.9
(% Chg., Y-o-Y)															
Net Exports (\$ 2009 Bils.)	-542	-443	-417	-447	-459	-459	-392	-547	-704	-786	-777	-732	-642	-585	-504

(A)—Advance GDP Report  
(F)—DE Forecast

**Table A.3**  
**Real GDP Growth and Consumption—2006-2017F**

	Annual															
	2017F	2016F	2015F	2014	2013	2012	2011	2010	2009	2008	2007	2006				
Real GDP (% Chg., Avg. Annual) (\$ 2009 Bils., Q4-over-Q4)	3.7 3.5	3.1 3.4	2.5 2.3	2.4 2.5	1.5 2.5	2.2 1.3	1.6 1.7	2.5 2.7	-2.8 -0.2	-0.3 -2.8	1.8 1.9	2.8 2.5	3.3 3.4	4.2 4.2	4.7 1.3	2.7 2.4
Aggregate Consumption (% Chg., Avg. Annual) (\$ 2009 Bils., Q4-over-Q4)	3.2 3.4	3.1 3.0	3.2 2.8	2.7 3.2	1.7 2.3	1.5 1.3	2.3 1.5	2.0 3.1	-1.6 -0.1	-0.4 -2.0	2.3 1.5	-0.4 -2.0	-1.6 -0.1	-0.4 -2.0	2.3 1.5	3.0 3.3

(F)—DE Forecast