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US outlook: Above consensus growth and inflation risks rising

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- Our house view for the US economy has shifted in light of political developments in Washington in recent months. Passage of legislation entailing a substantial tax cut and significant fiscal stimulus now seems much less likely than it did in the wake of the US election results late last year. Accordingly, we have marked down our forecast for US growth this year by a couple tenths and for 2018 by a full percentage point.

- This revision nevertheless leaves our forecast somewhat above consensus at 2-1/2% for this year and about in line with consensus at 2-1/4% for next year. We still see animal spirits in the business sector having been lifted enough by easing of the regulatory environment under the Trump Administration to give business spending a noticeable boost this year. Indeed, we see significantly above-trend growth in 2017 being led by stronger capex and supported by solid consumer fundamentals.

- Despite the markdown of our growth forecast, our outlook for unemployment, inflation, and the Fed has moved in a slightly more hawkish direction. This is partly because smaller tax cuts and lower investment spending yield smaller gains in labor productivity and a slower pick up in supply-side growth. But other factors affecting labor supply trends have changed importantly as well. The cyclical rebound in labor force participation now appears to have less room to run than we had assumed previously, resulting in a more rapid decline in unemployment.

- Our forecast now has the unemployment rate falling noticeably below 4% next year, and the risk is that the labor market continues to tighten faster than expected, putting more upward pressure on prices than generally anticipated. As a result, we see the Fed raising rates faster than the median FOMC dots project over the next two years and substantially faster than the market currently expects. This policy path will lead to tighter financial conditions and will eventually help to slow growth to below a rising (2%) trend rate and move the unemployment rate back up--though not until beyond our current forecast horizon.

- We see risks on both sides of this baseline forecast. On the one hand, stronger fiscal stimulus combined with a more dovish Fed could keep more rapid growth going for a while, but would exacerbate inflation pressures and likely bring the current expansion to an end by 2019 or 2020. On the other hand, government policies that spur capex could give productivity and supply side growth a more substantial lift and keep stronger growth going for years to come.

Introduction

With another weaker than initially expected first quarter now behind us, and a good deal of political flotsam over the dam, we take a fresh look at prospects for the US economy and for Fed policy over the balance of 2017 and the years just beyond. This publication marks the first edition of a joint project to present a unified house view on the US economy by our US Economics team, Joe LaVorgna and Brett Ryan, and our Global Economics team in New York, Peter Hooper, Matthew Luzzetti, and Torsten Slok. We anticipate updating this publication roughly quarterly or as unforeseen developments dictate.

In what follows, we first outline how our house view on the economy has changed since the last major revision shortly after the presidential election in November. We then present our new baseline forecast with an emphasis on how it compares to and differs from the current "consensus view" as defined by a combination of the median Bloomberg survey of US economic forecasters and the median of the latest FOMC summary of economic projections. Finally, we consider several risk scenarios that consider how things could develop if our baseline assumptions are incorrect.

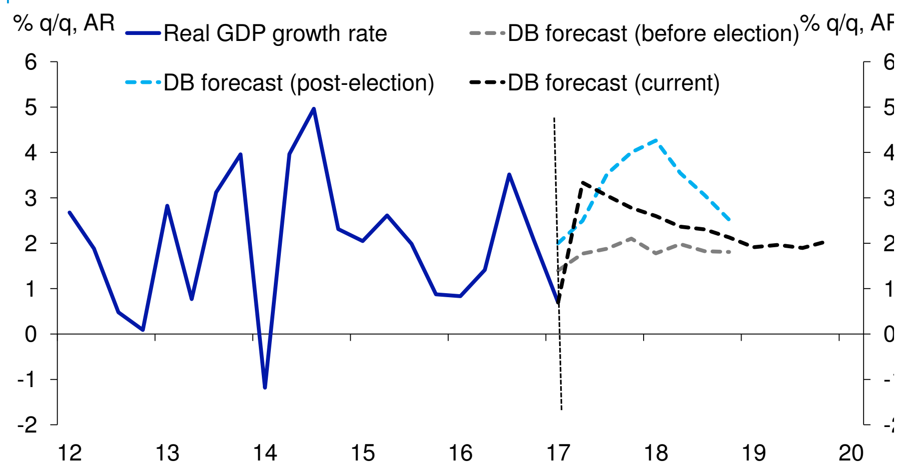
Shift in view: Politics in Washington are proving difficult

Our view has shifted importantly in two respects since our last forecast revision. The first concerns politics. Shortly after the election, we elected as a group to move to a significantly above-consensus call on the economy. We assumed that the surprising election result of a Republican administration working with a Republican-controlled Congress would succeed in breaking through the usual political gridlock in Washington. Optimistically, we saw this new coalition achieving significant elements of tax reform, infrastructure spending, and deregulation as soon as this year. Anticipation and realization of these outcomes would give animal spirits - especially business sentiment – a significant lift, boosting both business and consumer spending, and thereby stimulating extra growth in both aggregate demand and aggregate supply.

The strength of the Freedom Caucus and the failure of the Republican Party to work in concert has come as a surprise. A Republican party that had been strongly united on health care "reform" pre-election, has had difficulty finding common ground to pass legislation post election. Much the same seems in store for tax reform and likely infrastructure spending. Gridlock in Washington is alive and well, and prospects for significant fiscal stimulus have dimmed substantially. As a result, we have shifted our baseline view to assuming that only modest tax reform or fiscal stimulus legislation will be passed any time soon. The possibility that meaningful legislation is passed is now viewed not as the most likely outcome but rather as a real upside risk to our forecast. At the same time, we do still see some important lift to private spending from the elevation of sentiment caused by the perception of a shift to a more business friendly regulatory environment. The Trump Administration has clearly been active and effective on that front via executive orders and key appointments.

The net result of this shift in fiscal policy assumptions and the weaker than expected outcome for growth in Q1 has been to revise down our growth outlook for 2017 by half a percentage point and for 2018 by a full percentage point since our initial forecast revisions following the November election result. [1]

Figure 1: Changes in quarterly real GDP growth profile



Source: BEA, Haver Analytics, Deutsche Bank

The second shift in our view has been in the labor market. Previously we had assumed that labor force participation would continue to rise cyclically through this year before eventually leveling off and returning to a demographically-driven secular downtrend. This assumption had kept us from moving unemployment substantially lower in the face of an above-consensus growth forecast. It also kept our Fed call reasonably close to consensus. What we have seen in recent months is a significant slowing of labor force growth, and further evidence that the anticipated decline in labor force participation will be occurring sooner rather than later. We now take more to heart analysis like Alan Krueger's presented at last Fall's Boston Fed conference. He noted that the most recent increases in labor force participation had been the result not of a cyclical reflow of discouraged workers back into the labor force, but rather the result of a slower rate of departure from the labor force of the long-term unemployed.[2] This suggested that the rise in labor force participation was nearing its end.

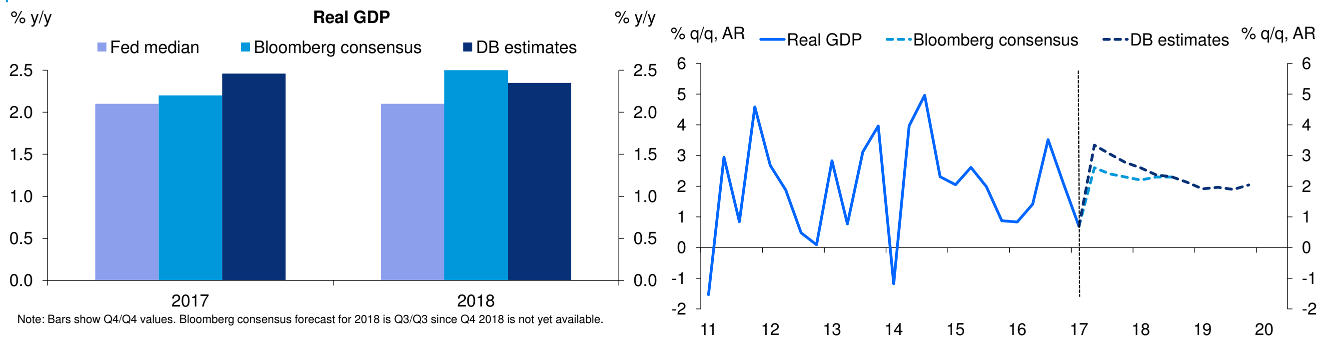
The effect of this shift in view on the labor market, as well as a somewhat slower pickup in productivity growth associated with lower business spending on capital, is to offset most of the effect of our lower forecast for GDP (aggregate demand) growth on both the labor market and the Fed call. With a moderately above-consensus growth outlook, at least for this year, we still see the unemployment rate falling somewhat faster and core inflation rising somewhat faster than consensus. This leaves us with a somewhat steeper trajectory for the fed funds rate than the Fed's dots chart and especially market pricing. We see risks on both sides of this view on inflation and the Fed.

1 When it became clear that Q1 growth was again going to be substantially weaker than initially expected, we marked down our forecast for 2017 from 3.0 to 2.7%. The current revision takes it down another two tenths, due to slower/less progress on tax cuts.
2 See Krueger, Alan B. (October 4, 2016), "Where have all the workers gone?"

Baseline view: Growth to pickup in 2017, then slow toward potential through 2019

Our current forecast for GDP growth is still moderately above consensus for this year, and moves to be roughly in line with consensus next year. We see growth peaking in Q2 on the bounce back from another surprisingly weak Q1 and then gradually returning toward a slowly rising rate of potential GDP growth over the next couple years.

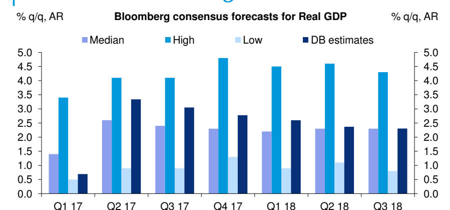
Figure 2: DB growth expectations above consensus in '17, in line in '18



Source: BEA, Bloomberg Finance LP, Haver Analytics, Deutsche Bank

Our baseline assumption is that political constraints on Capitol Hill will limit what is passed in the way of tax cuts to something relatively modest in terms of its net stimulus to GDP. For example, the reduction of the corporate tax rate from 35% to 25% paired with a modest cut in individual income taxes is estimated to boost GDP by several tenths (less than one half) of a percentage point based on simulations with the Fed's FRBUS model. [3] A package of roughly this magnitude appears to be consistent with what is assumed in the private consensus forecast. The Bloomberg median forecast sees the federal budget deficit widening by one-tenth of a percent of GDP this year and three-tenths next year. At the same time, the CBO current law baseline forecast has the structural deficit narrowing by a tenth this year and three tenths next year. This comparison suggests that the consensus view sees policy changes resulting in modest net fiscal stimulus (a tenth or two this year and a bit more—several tenths—next year). This is roughly consistent with our own down-scaled assumption.

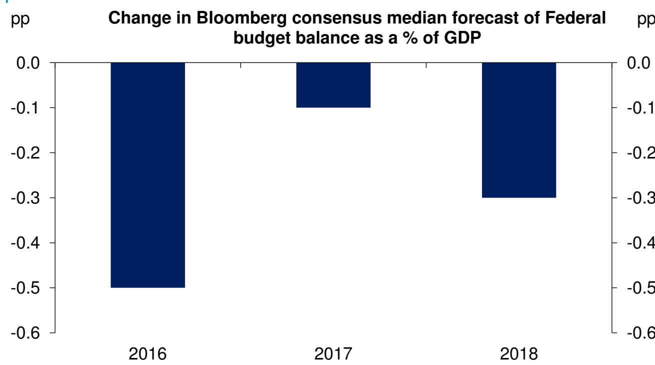
Figure 3: Significant dispersion around consensus growth forecasts



Source: Bloomberg Finance LP, Deutsche Bank Research

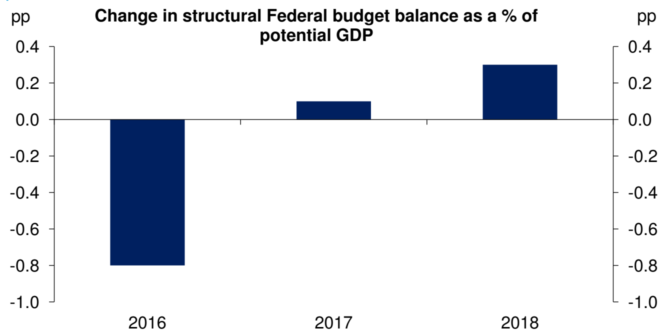
3 For similar simulations see: DB Global Economic Perspectives (6 December 2016), "Using the Fed's model to evaluate Mr. Trump's fiscal proposals."

Figure 4: Consensus expects some budget easing in 2018



Source: Bloomberg Finance LP, Deutsche bank

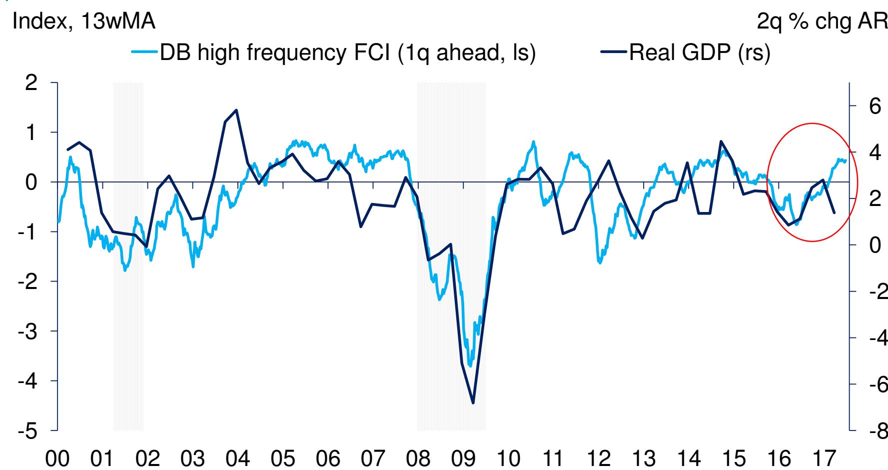
Figure 5: CBO sees some budget tightening in '18 without policy changes



Source: CBO, Haver Analytics, Deutsche Bank

We also see the recent easing of financial conditions supporting growth near term. Indeed, the roughly 0.25 index points improvement in our high-frequency FCI equates to about a 15bp cut in the fed funds rate in terms of how it supports GDP growth. Looking ahead, we expect financial conditions to become less supportive as Fed tightening proceeds, market rates move up, the dollar resumes an upward drift, and gains in the equity market slow from recent peak rates. Consistent with this view, our strategists see the 10-year Treasury yield rising to 2.75% by year-end and further to 3% by end-2018, and the broad dollar appreciating by about 2.75% and 5% in 2017 and 2018.

Figure 6: Easier financial conditions should support growth

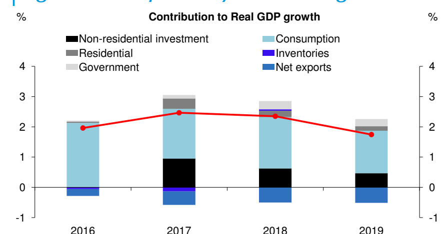


Source: BEA, Haver Analytics, Deutsche Bank Research

Components of aggregate demand

Above-trend GDP growth is driven by a combination of moderate (slightly above consensus) growth in consumer spending and a more robust (and further above-consensus) expansion in private investment. Relatively slow government spending growth and declining net exports are both a drag on growth, with net exports a noticeably greater drag than consensus in our case potentially due to a relatively strong appreciation of the dollar.

Figure 7: Capex key to faster growth



Source: BEA, Haver Analytics, Deutsche Bank Research

Figure 8: Comparing GDP components with consensus

Bloomberg Consensus (%y/y)				
	2016	2017	2018	2019
Real GDP	1.6	2.2	2.3	2.2
Consumer	2.7	2.6	2.5	2.4
Private Investment	-1.6	3.8	4.2	3.9
Government	0.8	0.7	1.5	1.3
Exports	0.4	2.6	2.7	3.3
Imports	1.2	4.4	3.5	4.0

DB (%y/y)				
	2016	2017	2018	2019
Real GDP	1.6	2.3	2.6	2.0
Consumer	2.7	2.6	2.7	2.3
Private Investment	-1.6	5.4	6.2	3.9
Government	0.8	0.2	1.5	1.5
Exports	0.4	2.6	2.0	2.1
Imports	1.2	4.9	4.9	4.5

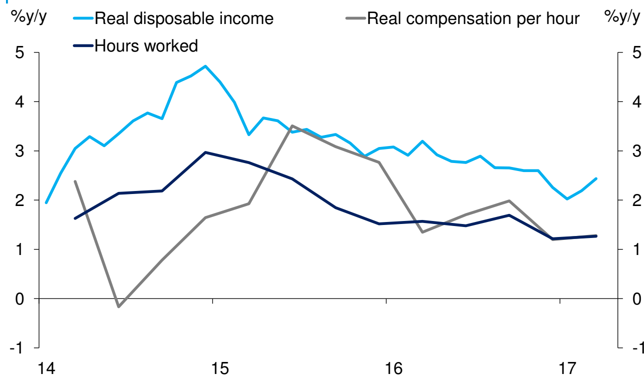
Source: Bloomberg Finance LP, Deutsche Bank

Consumption: On consumer spending, we expect a substantial bounce in Q2 from Q1 weakness because fundamentals underlying the household sector look solid. Momentum in hiring and a gradual uptrend in wage inflation underpin at least moderate real income growth. In addition, we see spending being bolstered by strong household balance sheets on average, with the ratio of household wealth relative to income testing new highs thanks to a buoyant stock market and home price inflation running in the vicinity of 5-7%. The personal saving rate has bounced up in recent months, and has room to decline ahead, supporting spending in excess of income growth, given the longer term negative correlation between wealth and saving. Consumer confidence, which has moved to the highest level in more than 15 years will also be supporting growth in spending.

Figure 9: "Animal spirits" should support consumer spending

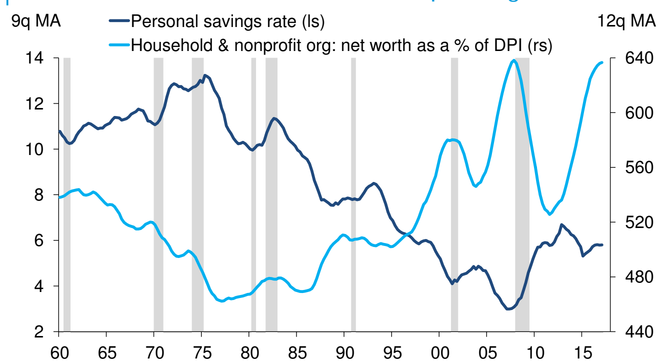
Source: Conference Board, Haver Analytics, Deutsche Bank

Figure 10: Income growth should remain moderate…



Source: BEA, BLS, Haver Analytics, Deutsche Bank

Figure 11: …and scope for lower savings, driven by elevated wealth, to boost consumer spending

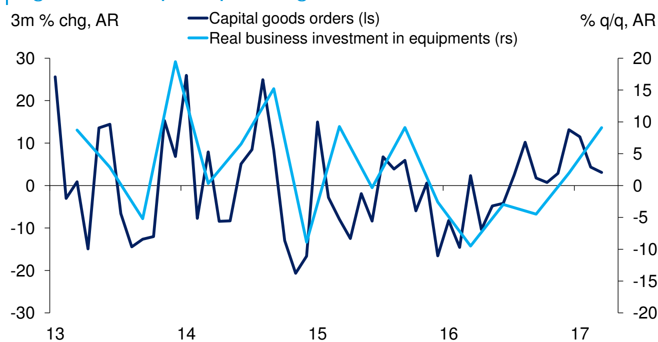


Source: FRB, BEA, Haver Analytics, Deutsche Bank

Business fixed investment: Following a long period of very sluggish performance in capital spending, the outlook for this sector is brightening significantly. Near-term signs are encouraging. Following a year or more of significant decline, orders for capital goods have been growing again over the past year. Fed surveys indicate that plans to increase capex in the future have been rising impressively of late. Spending in the energy sector, especially on structures, is bouncing back nicely in response to the bottoming and partial recovery of oil prices over the past year-

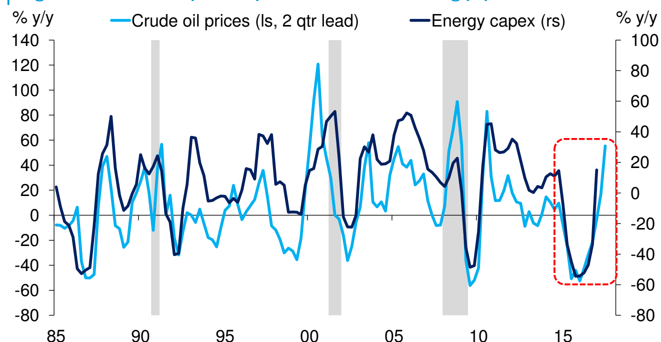
plus, although recent oil price dynamics may put the extent of this recovery at risk. Also importantly, animal spirits in the business sector have gotten a significant lift, evidently from the dramatic shift toward an easier regulatory environment under the new Administration. While regulatory easing could have increased costs in some areas in the longer term, the perception of a 180-degree turn in the implementation, administration, and enforcement of new and existing regulations in a number of sectors appears to have dramatically improved the environment for business activity in the near term and given business sentiment a substantial lift. We assume that this lift in spirits will bolster capex just as the more burdensome regulatory environment in years past was a depressant. Accordingly, our forecast for growth in real business fixed investment, including equipment, structures, and intellectual property averages nearly double the consensus expectation of a 4% rate of expansion in 2017.

Figure 12: Capex spending has turned around…



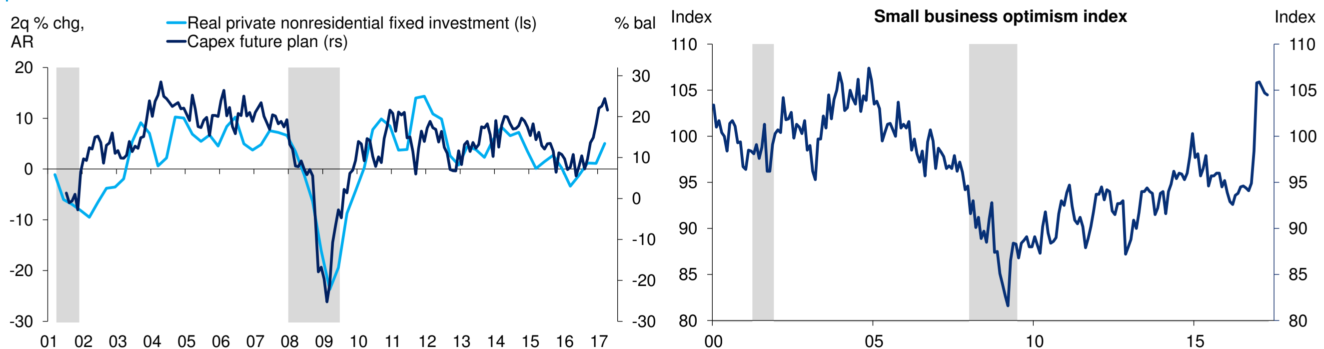
Source: BEA, Census, Haver Analytics, Deutsche Bank

Figure 13: …helped by rebound in energy prices



Source: BEA, EIA/CME, Haver Analytics, Deutsche Bank

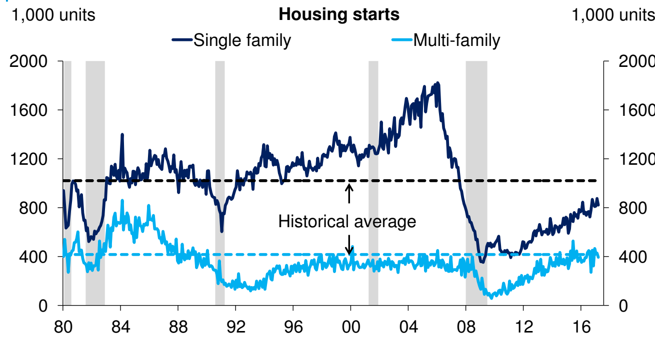
Figure 14: Survey leading indicators point to potential for a sharp rise in capex ahead



Source: FRB Richmond, FRB Philadelphia, FRB Kansas City, FRB New York, NFIB, Haver Analytics, Deutsche Bank

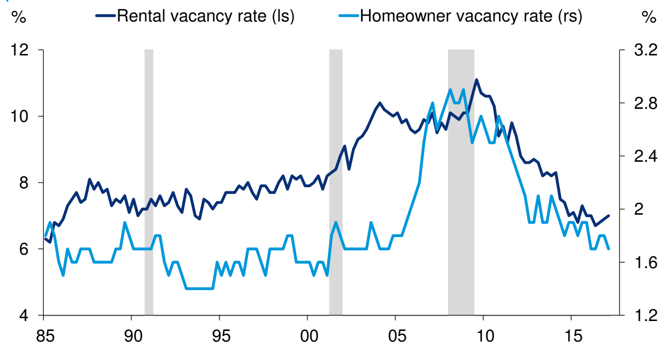
Residential Investment: Household spending on durables will likely be boosted by further increases in homebuilding. Residential construction has recovered to previous norms in the multifamily sector, but still has a ways to go in the single-family sector. Signs that the housing market continues to tighten (implying that more homebuilding is needed) are seen in both rental and homeowner vacancy rates, which have continued to trend downward at relatively low levels by historical standards.

Figure 15: Single family housing starts are still depressed…



Source: Census, Haver Analytics, Deutsche Bank

Figure 16: ….at a time when vacancy rates are tight historically

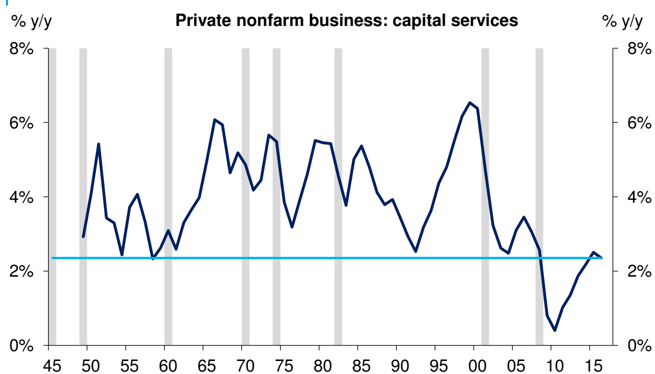


Source: Census, Haver Analytics, Deutsche Bank

Inventories: After correcting down in Q1, we judge the inventory to sales ratio to have returned to a more desired level. We expect inventory accumulation to adjust up to a more normal rate over the next few quarters, adding several tenths to GDP growth over that period.

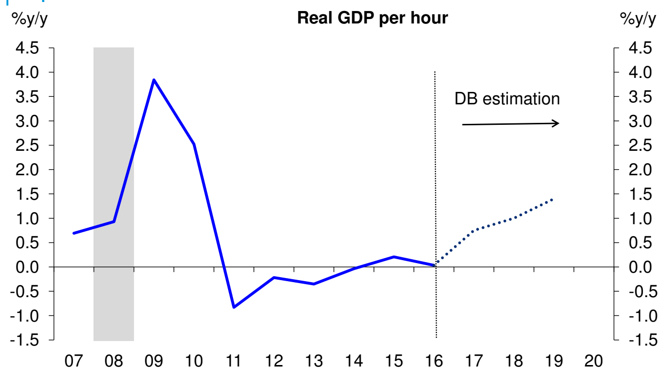
Supply side: The projected pickup in investment growth has important implications for the supply side of the economy. The very slow growth of private capital services over the past decade has resulted in a near record low in labor productivity growth. Growth in output per hour worked in the nonfarm business sector averaged 0.6% per year over the past five years, relative to a longer-term historical average of close to 2%. The five-year average growth of labor productivity for overall GDP is zero, also way below its historical norm. Productivity growth generally tends to rise when the labor market tightens, and it has recovered some in the past year--to 1.1% for nonfarm business and 0.7% for total GDP. We anticipate a gradual pickup in productivity growth in the coming years led by stronger capex spending – real GDP per hour should reach 0.75%, 1% and 1.4% by end-2017, 2018 and 2019. This should lift the real potential growth rate of the economy to near 2% by 2019. Note that this return to 2% is reliant on a pickup in capex spending that improves productivity growth driven in part by policy changes, namely deregulation and passage of a modest tax reform.

Figure 17: Growth in capital services has rebounded but remains low



Source: BLS, Haver Analytics, Deutsche Bank Research

Figure 18: Productivity growth should pick up as capex improves

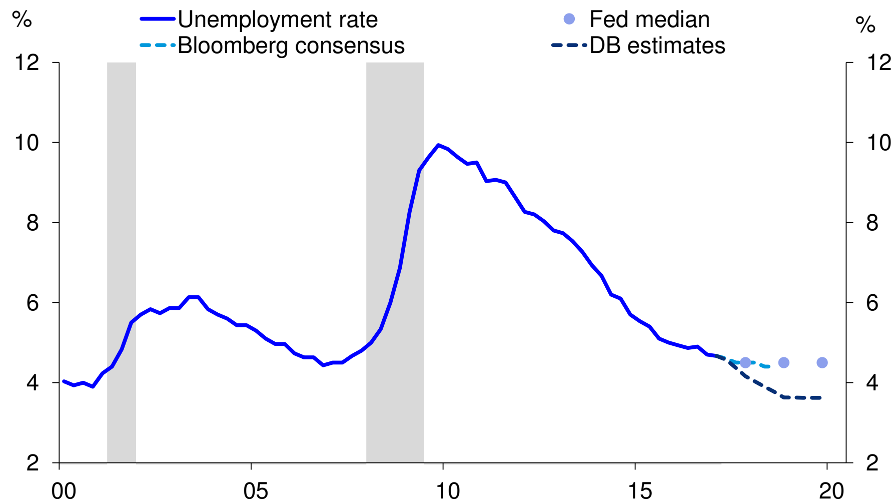


Source: BEA, BLS, Haver Analytics, Deutsche Bank Research

Labor market: Unemployment drops below 4% in 2018 as participation falls

With above-trend growth in 2017 and 2018, our forecast anticipates that the unemployment rate will fall to 4.2% at the end of this year and then to 3.6% by end-2018, where it stays through 2019 when the economy grows near its potential growth rate. These expectations are considerably below the Fed median and consensus, and therefore it is worth exploring the details underlying this expectation.

Figure 19: Our forecast sees a more aggressive decline in the unemployment rate



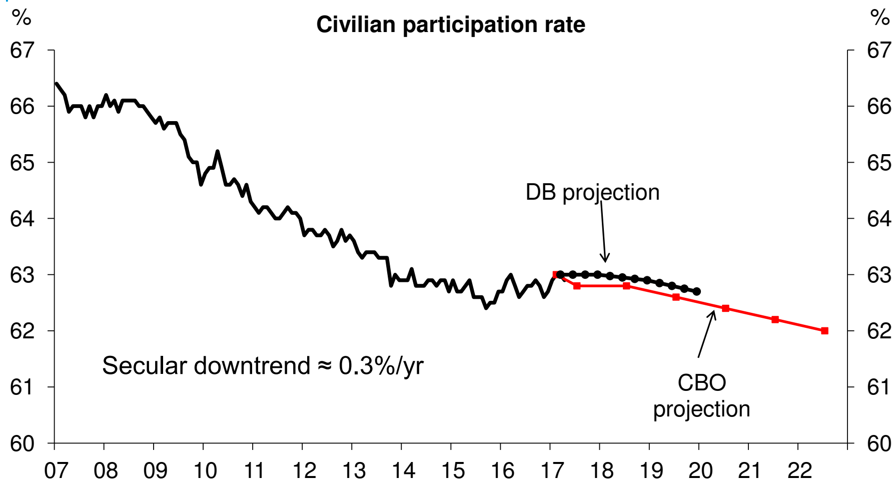
Source: BLS, FRB, Haver Analytics, Deutsche Bank

Our labor market projections feed directly off of our views for GDP growth and the supply side of the economy. There are three key inputs: GDP growth, productivity growth, and labor force participation. The first two inputs determine the level of employment, while the last input is key to determining the size of the labor force and thus the level of unemployment. Our real GDP growth and productivity growth assumptions imply average monthly nonfarm payroll growth of about 200k, 160k and 75k in 2017, 2018 and 2019, respectively. [4]

Based on our own previous analysis and several research pieces from academia and the Fed, we view the labor force participation rate to be on a structural downtrend of about 0.25 percentage points per year. However, in the near term we see participation stabilizing this year and only declining by 0.1 percentage points next year due to some remaining cyclical bounce that partially offsets the structural downtrend. In 2019, the participation rate should no longer be depressed due to cyclical factors, allowing for a return to its structural downtrend.

4 These projections have the nice feature that once the participation rate returns to its structural downtrend, about 75k average monthly job growth is required to keep the unemployment rate steady. This is consistent with recent analysis from the Chicago Fed's staff and comments from a number of FOMC members. See the following analysis for more: Aaronson, Daniel and Scott Brave (July 2013), "Estimating the trend in employment growth." Chicago Fed Letter, Number 312.

Figure 20: Labor force participation rate to remain steady near term and then resume downtrend

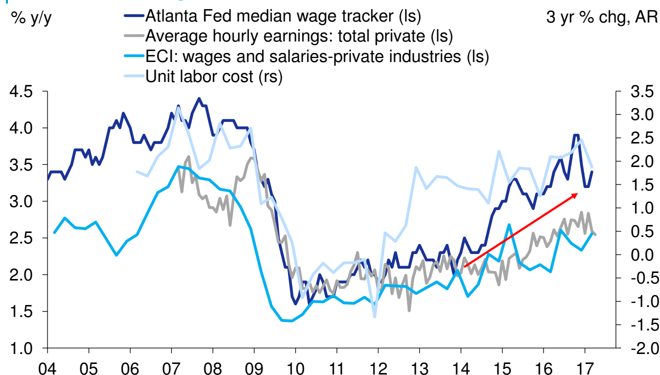


Note: CBO projection comes from Long term budget outlook, March 30, 2017.

Source: BLS, CBO, Haver Analytics, Deutsche Bank

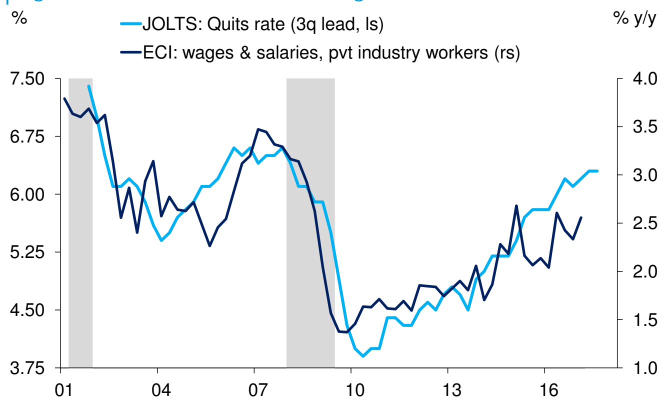
With these assumptions in hand, the unemployment rate falls to 4.2% by the end of this year and bottoms near 3.6% in 2018, about one percentage below NAIRU which we judge to be close to 4.7% given the recent uptrend in wage growth.[5] The downtrend we anticipate in unemployment is more aggressive than expected by both consensus and the Fed median expectation. This divergence is likely due to a combination of factors: we expect faster growth, a more significant decline in participation, and likely a somewhat more modest uptick in productivity growth in the coming years. A tightening labor market should allow for the uptrend in wage growth to continue in line with leading indicators (e.g., the quits rate).

Figure 21: Uptrend in wage growth should continue as labor market tightens...



Source: FRB Atlanta, BLS, Haver Analytics, Deutsche Bank Research

Figure 22: ...in line with leading indicators



Source: BLS, Haver Analytics, Deutsche Bank Research

5 The other key assumption for these projections is population growth, which we assume to be about 0.9% annually in line with Census estimates.

Inflation: uptrend takes hold after near-term weakness; overshoot of Fed target

The unemployment rate path is a key input into our inflation outlook, which as a starting point, is based on a relatively standard Phillips curve model. That is, core inflation is driven primarily by: (i) lagged core inflation, (ii) inflation expectations as measured by long-term inflation expectations from the Philadelphia Fed's Survey of Professional forecasters, (iii) the unemployment gap, and (iv) import price inflation (relative to core inflation). The drivers of inflation are thus expectations of future inflation, economic slack, and the dollar which is a key determinant of import prices. [6]

Using this model we find that after slowing in the near term due to a weak recent inflation print, core PCE inflation (in year-over-year terms) is expected to rise to 1.8% by yearend, and then further to 2.1% and 2.4% by end-2018 and 2019, respectively. Meanwhile, core CPI inflation is expected to follow a similar trajectory but at a slightly higher inflation rate in line with the historical gap that prevails between CPI and PCE: core CPI ends the next three years at 2.1, 2.4 and 2.7% respectively. [7]

Given the sharp fall in the unemployment rate, it may be a surprising feature that core inflation does not rise significantly more rapidly than Fed and consensus expectations in 2017 and 2018. A relatively flat Phillips curve -- i.e., only modest responsiveness of core inflation to labor market slack -- is behind this result. We have documented in the past that the Phillips curve has flattened over time. [8] Yet we view a re-steepening of the Phillips curve, and thus a more rapid increase in inflation especially in 2019, as a significant risk to the outlook, given evidence that the Phillips curve tends to steepen as the unemployment rate falls further below NAIRU (i.e., that the relationship between inflation and slack may be non-linear). We discuss this possibility further in a subsequent section on risks to our baseline forecast.

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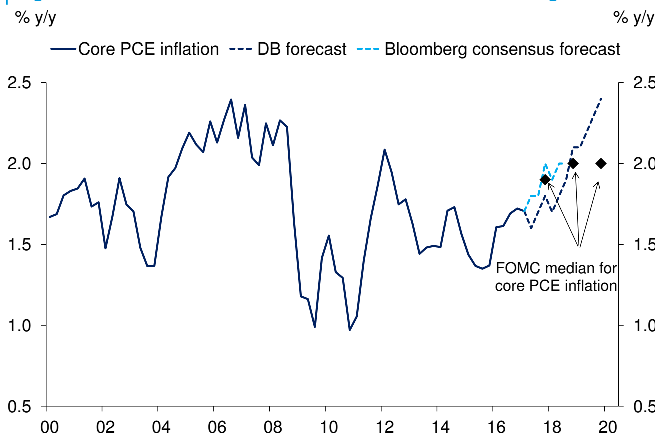
6 A technical feature of the model, which is a common assumption in these types of models, is that the coefficients on lagged inflation and inflation expectations are constrained to sum to one. This ensures that there is no long-term trade-off between inflation and economic activity.

7 The historical gap between core CPI and core PCE inflation has averaged about 0.3 percentage points over time.

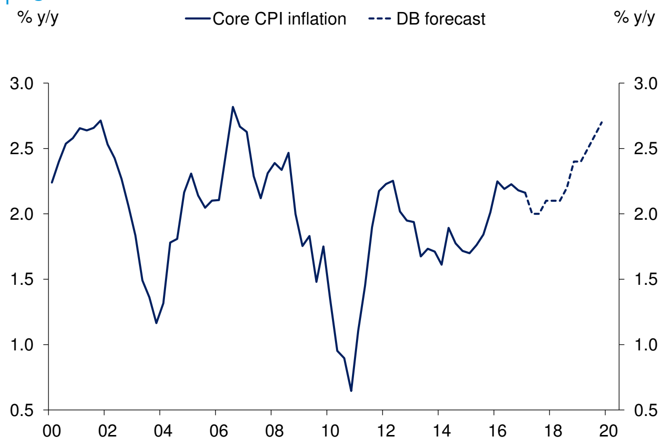
8 The flattening of the Phillips curve is a common finding across many developed economies. See the IMF's report "The dog that didn't bark: has inflation been muzzled or was it just sleeping?"

Figure 23: Core PCE inflation overshoots Fed target in '18



Source: BEA, Bloomberg Finance LP, Haver Analytics, Deutsche Bank

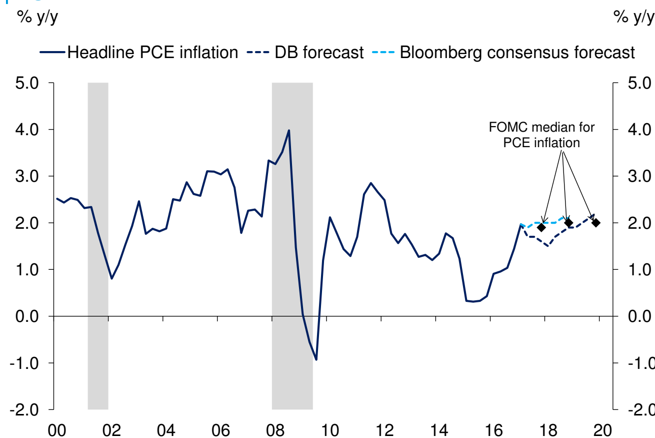
Figure 24: Core CPI inflation forecast



Source: BLS, Haver Analytics, Deutsche Bank

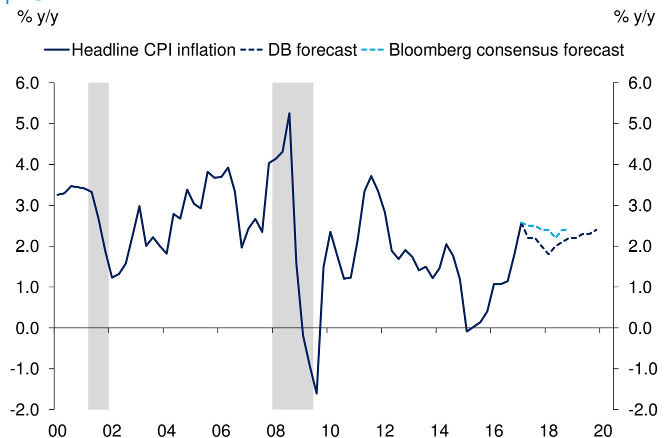
Headline inflation projections are then driven by our core inflation forecasts, DB's expectations for oil prices, which we translate into future gasoline prices, and food price inflation. Using these assumptions, headline PCE and CPI inflation should decline modestly through end-2017 and then resume an uptrend, reaching 1.9% and 2.2% by end-2018 and 2.2% and 2.4% by end-2019.

Figure 25: Headline PCE inflation falls then rises



Source: BEA, Bloomberg Finance LP, Haver Analytics, Deutsche Bank

Figure 26: Headline CPI inflation forecast



Source: BLS, Bloomberg Finance LP, Haver Analytics, Deutsche Bank

Fed: somewhat more aggressive than consensus, well above market

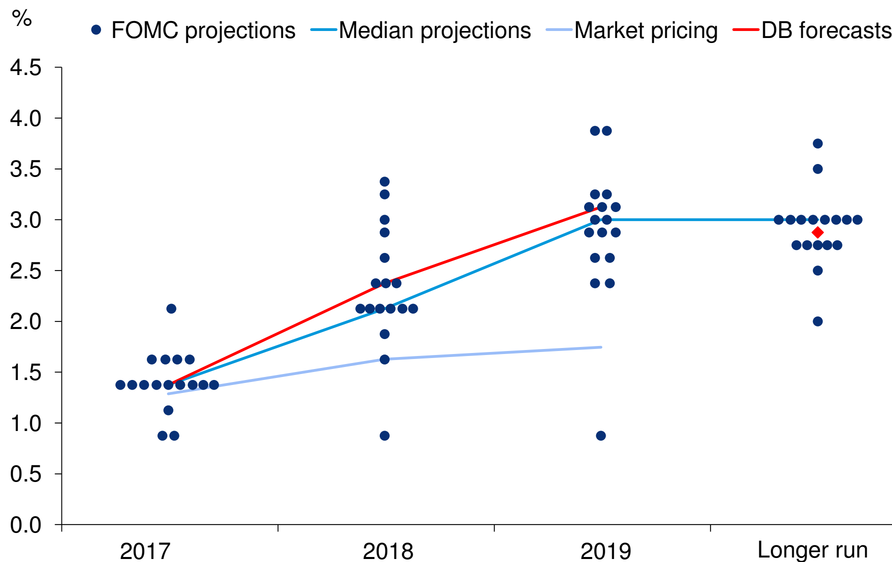
Despite downgrading the growth outlook, our expectations for Fed policy in the coming years remain broadly unchanged. This apparent inconsistency is driven by our expectation that the unemployment rate will fall more rapidly as the labor force participation rate resumes its downtrend, which in turn will lift inflation. That is, although growth is lower, the two sides of the Fed's dual mandate continue to justify at least the tightening path that we had previously anticipated.

The Fed remains on course to raise rates two more times this year -- in June and September -- and announce the start of phasing out the reinvestment of its balance sheet in December. Reinvestment of both MBS and Treasuries should be phased out over a period of about twelve months. The current composition of the

Fed has clearly signaled their desire for the balance sheet to be unwound in a passive manner and intends to return to using the fed funds rate as the primary tool for monetary policy to tighten or ease.

Beyond 2017, we expect the Fed to raise rates four times in 2018--one hike more than reported in the median dots from the March 2017 FOMC meeting--and then three more times in 2019. This path lifts the fed funds rate to 2.25-2.5% by end-2018 and 3-3.25% by end-2019, at which point it is above our estimates of the long-run nominal neutral fed funds rate of about 2.75-3%. Tightening Fed policy helps to constrain growth and bring the economy back toward its potential growth rate in 2019.

Figure 27: Fed funds rate expectations slightly above Fed, well above market



Source: FOMC, Bloomberg Finance LP, Deutsche Bank

Risk scenarios

We consider several risk scenarios:

1. **More fiscal expansion.** Our baseline assumes only a modest amount of fiscal stimulus is implemented this year and next. If the Republican Party succeeds in getting a large corporate tax cut and smaller personal tax cut through both the House and the Senate, such stimulus could easily add more than a percentage point to aggregate demand (GDP) growth in 2018.

2. **More dovish Fed.** We have also assumed no major changes in the Fed's policy reactions to economic developments. If changes in the Fed leadership and make-up of the Board of Governors shifts the FOMC in a more dovish direction, the result could well be a slower ascent of rates, stronger growth, and eventually more inflation pressures.

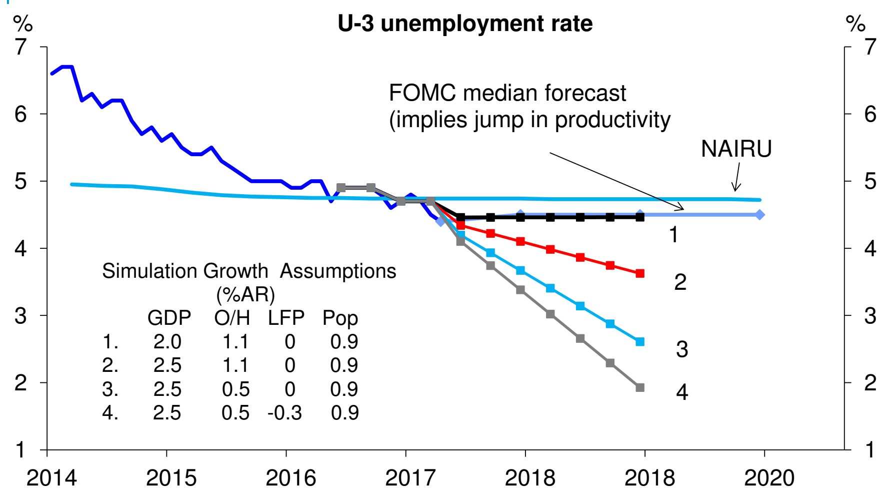
3. **Supply side slowdown.** Our baseline forecast assumes only a gradual shift back toward the secular downtrend labor force participation (LFP) and a substantial recovery in productivity growth over the next two and a half years. Labor force participation (LFP in the chart below) could resume its secular

downtrend sooner, and growth of productivity (i.e., output per hour or O/H in the chart below) could pick up more sluggishly than we assume. If so, potential growth could remain below 1.5%, and continued GDP growth in the 2-2.5% range would push unemployment well below 3% by late 2018, raising inflation pressures substantially.

4. **Faster supply side pickup.** While we have assumed a significant recovery of productivity growth, a combination of investment-friendly fiscal measures and an unusually strong positive response of productivity to labor market tightening could push productivity growth even higher and faster than we assume. This positive supply side effect would be augmented if labor force participation remained elevated for longer than we have assumed.

Any combination of the first three risk scenarios would put the Fed significantly behind the curve on inflation, result in an aggressive catch-up in monetary policy and a likely recession as soon as 2019-20. Under the fourth risk scenario, a positive one, potential growth could move back into the 2.5-3% range and the current economic expansion would last many more years.

Figure 28: Unemployment rate could fall even more rapidly than we project, especially if productivity growth fails to improve or labor force participation declines sooner



Source: BLS, Haver Analytics, Deutsche Bank

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Appendix 1

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