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Economics Group

Special Commentary

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A Historical Perspective on Fed Tightening

In last week's semiannual testimony to Congress, Federal Reserve Chair Janet Yellen reiterated her expectations that it will be appropriate to begin raising the fed funds target rate from its historically low level later this year. However, as indicated in public statements, meeting minutes and the now infamous dot plot, a few committee members doubt the sensibility of raising rates in 2015. Many others outside of the Fed, including officials at the International Monetary Fund, look at the broad outlook for growth and the Fed's progress on its dual mandate and expect policy tightening will not be warranted until next year. Financial markets currently indicate the probability of the Fed raising rates later this year is about 50-50.

Yet, history has shown us that the Federal Open Market Committee (FOMC) has begun to raise the fed funds target rate well before its mandates were fully realized in prior tightening cycles. In June 2004, core PCE inflation was running well below 2 percent and the unemployment rate was more than half a percentage point above the Fed's estimate at the time for full employment. A decade earlier, when the Fed first raised rates in 1994, inflation pressures were starting to materialize, but a broad range of indicators were still pointing to significant slack in the labor market. So, how does today's economy stack up relative to the environments during these two periods of liftoff, and could markets be caught off guard this tightening cycle?

Grading the U.S. Economy: Professor Yellen's Assessment

Although some Fed officials have stated that the economy has made tremendous progress over the course of the recovery, most have indicated there is further scope for improvement before beginning to tighten policy. Unemployment has fallen more quickly than expected over the expansion, but at 5.3 percent remains slightly above what most FOMC members consider full employment (Figure 1). In addition, a range of other labor market indicators, including rates of labor force participation and underemployment, point to additional slack in the labor market that is not being captured in the headline unemployment rate.

The unemployment rate is not fully capturing the current extent of slack in the labor market.

Figure 1

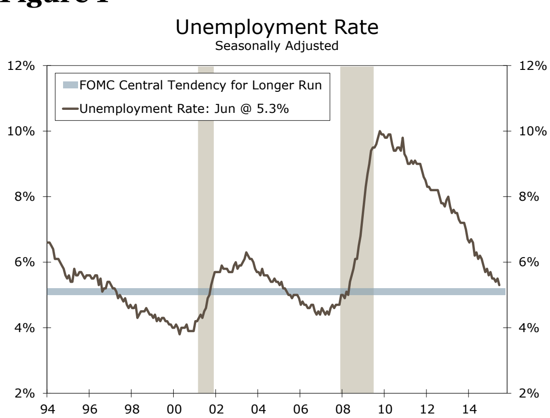
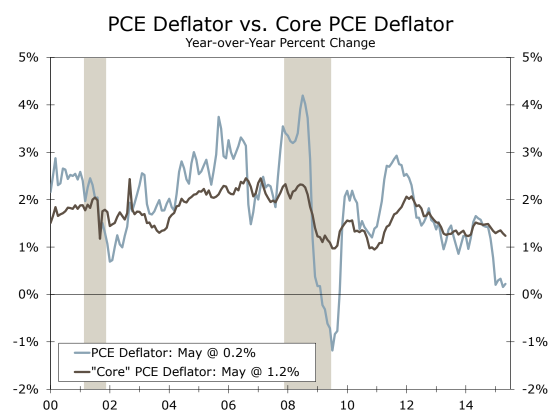


Figure 2



Source: U.S. Depts. of Labor and Commerce, Federal Reserve Board and Wells Fargo Securities, LLC

Inflation has been below the Fed's target for more than two years.

More troublesome may be the continued low rate of inflation. Core PCE inflation has been running below the Fed's long-term 2 percent inflation target for more than two years (Figure 2). The committee has indicated it does not need to see inflation return to target before beginning to tighten monetary policy, but does need to be confident that inflation is moving upward toward its target.

Current labor market and inflation gauges could be seen as giving the Fed scope to hold off on raising rates this year. However, in prior tightening cycles, the markets and the FOMC anticipated remaining accommodative longer than what ultimately occurred, as inflation quickly picked up or the labor market tightened faster than anticipated. With expectations for the possibility of the Fed lifting rates this year increasingly called into question, could we be in for a similar surprise in the coming months?

Labor Markets, Then and Now

While inflation seems to have taken center stage recently in terms of factors keeping the Fed on hold, FOMC members have also expressed concern that there remains considerable slack in the labor market. Even as the headline unemployment rate is hovering just above the Fed's estimate of full employment, the committee considers a more comprehensive range of indicators to obtain a reading on the labor market. Chair Yellen and other committee members have frequently pointed to the number of people working part time that would prefer to work full time (also known as part time for economic reasons) and the still-elevated level of long-term unemployment (Figure 3).

Figure 3

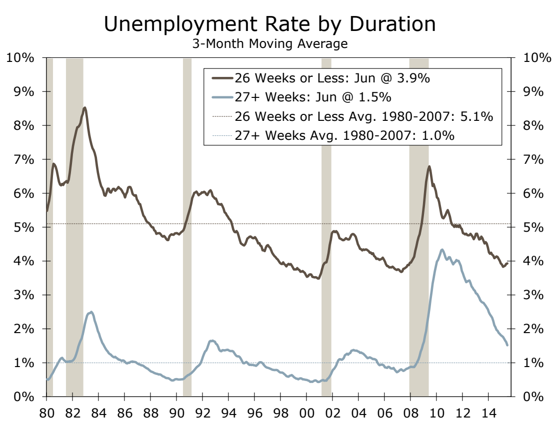
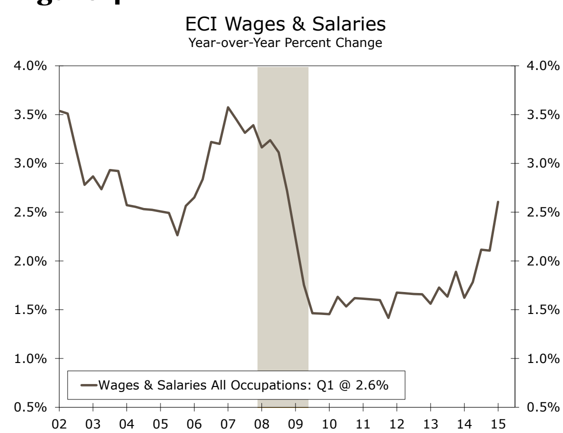


Figure 4



Source: U.S. Department of Labor and Wells Fargo Securities, LLC

Wage inflation is showing signs of picking up.

Perhaps more concerning is that the labor force participation rate has yet to show clear signs of an uptrend, although as discussed in a recent report, we view some recent cyclical progress in the participation rate.[1] Another oft-cited concern is the low wage inflation we have seen thus far in the cycle. Yet, the wage component of the Employment Cost Index (ECI), the Fed's favored measure of wage inflation, has picked up markedly in recent quarters after having been stuck near 2 percent for several years (Figure 4).

The 2004 Cycle: Historic Gains in Productivity Skid to a Halt

In many ways, the labor market in June 2004 was almost the mirror image of where it is today. The headline unemployment rate was at 5.6 percent, well above the committee's projection of the natural rate of unemployment of 5.0 percent (Table 1). However, other indicators were pointing to more diminished slack. For instance, a significantly lower share of part-time workers was involuntary, and long-term unemployment was less prevalent. Moreover, wage inflation, as measured by the wage component of ECI and average hourly earnings, was running hotter than it

[1] See "Time to Worry Again About Falling Labor Force Participation?" (July 13, 2015), which is available on our website.

is in the current cycle. At the same time, however, payroll growth was well below what we have seen recently in the current cycle, averaging just 113,000 jobs per month over the 12 months prior to June 2004. This combination of strong wage growth and less-than-stellar payroll gains was largely reflective of the fact that this period was one of the strongest for productivity growth in our nation's history.

Table 1

Labor Market Indicators

*Note: These numbers reflect the data the Fed had in hand at the time of each meeting (i.e. initial releases)

	Present	June 2004	February 1994
U-3 Unemployment Rate	5.3	5.6	6.7
FOMC NAIRU Estimate	5.0-5.2	5.0	6.5
Labor Force Participation Rate	62.6	65.9	66.7
Long-Term Unemployment Rate (27+ Weeks)	1.4	1.2	1.3
Payroll Growth (Trailing 12-M Avg.)	244K	113K	158K
Involuntary Part-Time Workers (% of Total Part-Time Workers)	24.1	19.2	22.6
Employment Cost Index (YoY)	2.6	3.8	3.5
Average Hourly Earnings (Prod./Supervisory, YoY)	1.9	2.2	2.8

Source: U.S. Department of Labor, Federal Reserve Board and Wells Fargo Securities, LLC

It is worth noting that in May 2004, at the meeting prior to the one in which the Fed raised rates, officials were hesitant to declare the labor market was finally where it needed to be. Delivering the Fed staff view, economist David Stockton said that "The labor market is beginning to show broader signs of life… that said, we still believe it is premature to conclude that the employment situation is firmly on the path of steady improvement."[2]

A slowdown in productivity was the primary culprit for runaway inflation in the 2004 cycle.

It was only eight weeks later at the June meeting, after which the Fed had observed three-straight months of banner employment gains averaging 316,000 jobs per month, that it was convinced the labor market was on the mend. Even then, however, Chairman Alan Greenspan said he saw no signs that "wages and salaries are accelerating in any material way." Instead, he stated "the basic problem is an apparent slowdown in productivity that creates the possibility of increased unit costs." His suspicion ended up being confirmed, as productivity slowed significantly in the coming quarters and inflation ended up taking off. Ultimately, the FOMC brought the funds rate up 325 bps by year-end 2005, about 125 bps more than Fed staff had projected at the time of liftoff (Figure 5).

Figure 5

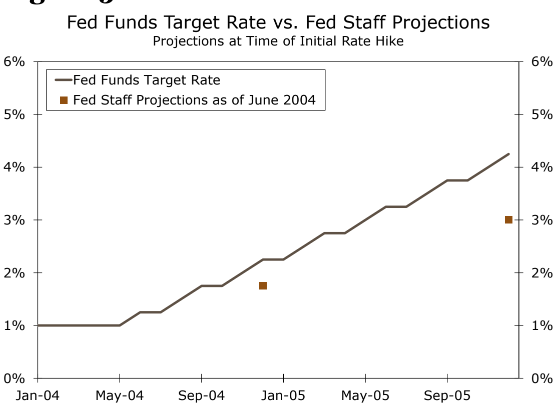
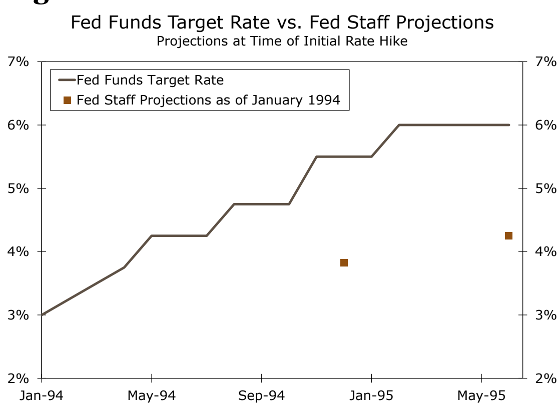


Figure 6



Source: Federal Reserve Board and Wells Fargo Securities, LLC

[2] Historical materials from the Federal Reserve, including meeting transcripts and economic projections, are available at http://www.federalreserve.gov/monetarypolicy/fomc_historical.htm

The 1994 Cycle: Evaporating Labor Market Slack

The labor market tightened at an incredible pace in 1994.

Looking back to February 1994, the labor market environment was similar in many ways to the environment we are experiencing today. The unemployment rate was just slightly above the committee's estimate for full employment and involuntary part-time work was elevated, while the long-term unemployment rate was just a tick lower than its current rate. Fed officials at the meeting expressed concern about "languishing labor force participation" and a lack of "discernable wage pressures," two comments that have certainly been overheard in recent commentary from Federal Reserve officials.

However, after its first move, the labor market story started to change at a breathtaking pace. The headline unemployment rate dropped 0.4 percentage points in May to 6.0 percent and eventually reached 5.4 percent by year-end 1994. All told, the committee ended up raising the fed funds rate 300 bps by February 1995, roughly 200 bps more than it had expected when it first began to tighten policy in 1994 (Figure 6).

Inflation, Then and Now

Persistently low inflation has likely been the biggest hold up in the Fed's plans to raise rates this year. The plunge in oil prices in the second half of last year has left the PCE deflator teetering on the brink of deflation. Core inflation has also been frustratingly weak. While some of the recent softness in core inflation may be attributed to some pass through of lower energy costs and cheaper import prices as the dollar has strengthened, some committee members are worried that the prolonged period of weakness will feed into inflation expectations and risks the credibility of the Fed's 2 percent target.

The 2004 Cycle: A Time of Dollar Weakening and Rising Oil Prices

In 2004, energy prices were rising and the dollar was falling.

Heading into the June 2004 policy meeting, inflation pressures were heating up, and doing so more quickly than officials had anticipated. Available data at the time showed the core PCE deflator increasing at a 2.5 percent annualized rate over the prior three months (Table 2). However, core inflation was still running well below the FOMC's now-explicit target, up 1.4 percent on a year-ago basis. Although some of the acceleration was thought to be due to the transitory pass through of higher energy costs and dollar depreciation—the reverse of today's environment—Fed officials were expecting core PCE inflation to end the year up 1.7 percent versus an outlook for 1.3-1.4 percent at the end of 2015.

However, just three months earlier at its March 2004 meeting, the Fed had projected that core and headline PCE inflation would end the year at 1.1 percent. First, as previously mentioned, the unexpected slowdown in productivity put significant pressure on unit labor costs, which ultimately fed through to consumer prices. In addition, oil prices experienced a run-up in the months prior to the Fed's June meeting, increasing nearly 20 percent between February and June. Finally, after appreciating for much of the early part of 2004, the dollar started unexpectedly declining in early May, eventually falling more than 10 percent by November 2004.

Table 2

Inflation Indicators

*Note: These numbers reflect the data the Fed had in hand at the time of each meeting (i.e. initial releases)

	Present	June 2004	February 1994
PCE (3-M Annual Rate)	2.2	3.6	n/a
PCE (YoY)	0.2	2.4	n/a
Core PCE (3-M Annual Rate)	1.7	1.6	n/a
Core PCE (YoY)	1.2	1.4	n/a
ECI Wages & Salaries (YoY)	2.6	3.8	3.6
Avg. Hrly. Earnings (Prod./Supervisory, YoY)	1.9	2.2	2.8
Core CPI (3-M Annual Rate)	2.3	3.3	3.4
Core CPI (YoY)	1.8	1.7	3.2

** PCE data are marked n/a for 1994 because historical press releases are not available for this period.*

Source: U.S. Department of Labor, U.S. Department of Commerce and Wells Fargo Securities, LLC

The 1994 Cycle: Dust on the Horizon

In the 1994 tightening cycle, inflation was running decidedly closer to rates that would indicate an economy running above its potential. At the time, the FOMC had relied on the Consumer Price Index (CPI) as its primary inflation benchmark. And while the Fed had no explicit inflation target, 1-3 percent was considered a reasonable range for CPI inflation. With core CPI running at a year-over-year rate of 3.4 percent and commodity prices moving upward, committee members appeared anxious that the disinflationary trend of the prior years appeared to be coming to an end. In the view of Greenspan, the "presumption that inflation is staying down is very hard to maintain."

Greenspan's suspicion ended up becoming reality. Many of the same factors that led to a pickup in inflation in 2004 were culprits in 1994 as well. The trade-weighted U.S. dollar dropped nearly 10 percent between January and April 1994, and prices for WTI and Brent increased nearly 50 percent between March and June that year.

Implications: Take Nothing for Granted

With regard to inflation, the environment and near-term outlook remain weaker than when the FOMC determined it was appropriate to begin raising rates in prior cycles. Notably, some of the drivers pushing inflation higher ahead of previous rate hikes, including a weaker dollar, higher oil prices and generally rising commodity prices, are absent in today's environment. Yet, as it did in previous periods, the FOMC still appears to lean heavily on wage growth for signs of underlying inflation pressure, which is beginning to emerge. Thus, even as several labor market indicators continue to point to an elevated amount of slack, the committee has made considerable progress in working toward its longer-term objective of full employment. In fact, in the June 2015 Summary of Economic Projections, all but two FOMC members thought it would be appropriate to raise rates later this year, even as core inflation under the most optimistic submission was expected to only rise to only 1.6 percent.

That said, even if the Fed feels confident in its progress toward fulfilling its dual mandate, a number of other factors could very well keep it on hold. Notably, today's global backdrop looks significantly different than in prior tightening cycles. By June 2004, other major central banks had already been tightening policy for several months, including the Bank of England and Reserve Bank of Australia (Figure 7). As a result, the U.S. dollar actually declined on a trade-weighted basis during much of 2003, and increased only modestly in the months prior to the June 2004 meeting. And even despite a decidedly weak global growth environment throughout much of 1993, dollar strength was far more subdued during this period due, at least in part, to the fact that the Fed was more active in currency markets during this time.

A number of other factors could keep the Fed on hold.

Figure 7

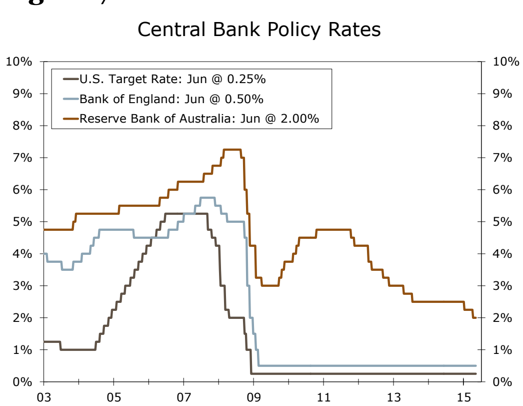
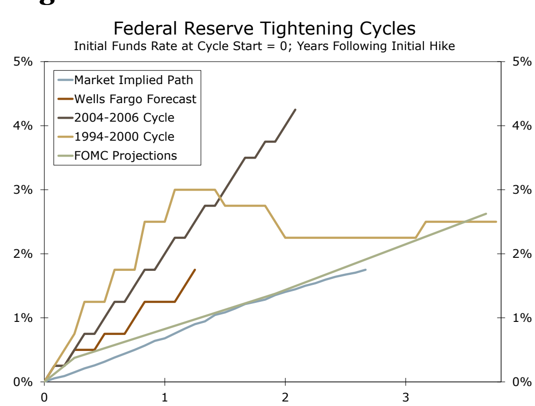


Figure 8



Source: Bloomberg LP, Federal Reserve Board and Wells Fargo Securities, LLC

Of course, individual members of the FOMC have different views of the economy. Today's FOMC has only two members that were part of the committee when the Fed last began a tightening cycle, Chair Yellen and Richmond Fed president Lacker, who is a voter this year. In addition, the experiences of the Great Recession have altered the economic landscape and likely further shaped the views of today's FOMC members. With the federal funds rate currently at zero, today's committee members have voiced concerns that there is less room for erring on the side of raising rates too early.

Yellen's expectation of a "gradual" pace of tightening is far from a guarantee.

More broadly, as we have witnessed in prior tightening cycles, unforeseen developments have a way of spoiling even the best laid plans. For instance, a slowdown in productivity like the one seen in 2004 is certainly not the base case in the current cycle. In fact, in her June press conference, Chair Yellen noted that the FOMC's projections reflected the notion that "there's likely to be some pickup in the pace of productivity growth." That said, if productivity growth falls short of even the Fed's modest expectations, unit labor costs and inflation more broadly could pick up more quickly than the Fed anticipates. In this case, as we have laid out in a previous report, the Fed would need to tighten earlier than expected, all else equal.[3] Moreover, potential GDP growth would be diminished and the terminal fed funds rate would likely be lower than Fed policymakers currently project.

Conclusion

The FOMC has acknowledged on several occasions that inflation remains below the committee's 2 percent target and that some slack remains in the labor market. Yet, given the lagged effects of monetary policy, it would not be unprecedented for the Fed to begin raising rates when either the labor market or inflation is not at a mandate-consistent level. Prior tightening cycles show the Fed beginning to raise rates when inflation was undershooting the Fed's target to a similar degree as today, as well as when the labor market was further from full employment. As such, current gauges of inflation and the unemployment rate do not alone look to prohibit an increase in the fed funds target rate.

With eight weeks to go before the September policy meeting, we believe a rate hike is still on the table for this fall. Further information on hiring and wage growth will be provided in the July and August employment reports, which are likely to show slack continuing to diminish in the labor market. Headline and core inflation have also showed signs of picking up in recent months, but, with core PCE still running noticeably below target, inflation is likely to be the biggest factor in keeping the Fed on hold somewhat longer. Nevertheless, we anticipate the pace of policy tightening may be faster than what Fed officials and markets currently expect, similar to prior cycles (Figure 8). While a number of circumstances today are different than in prior periods of liftoff, the timing and pace of policy actions have surprised markets and even the FOMC before, and caution against taking Chair Yellen's plans to tighten policy only gradually as a guarantee.

[3] See "Idled: What Happened to Productivity?" (July 6, 2015), which is available on our website.

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