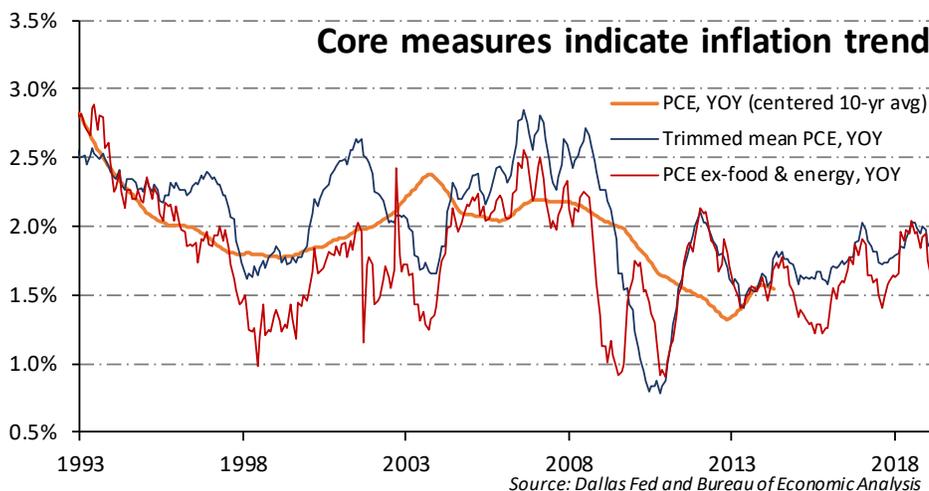


ECONOMIC WEEKLY

DOES THE FED'S NEW INFLATION FAVORITE UNDERCUT THE CASE FOR EASING?

Lately, we have been hard on the Fed. Maybe a little too hard. While it's fair to say the Fed's inflation forecasting models are broken, economists everywhere have diverse theories explaining inflation, and none work very well.

While many have ideas about what might be missing from the Fed's inflation models, economists elsewhere have not successfully incorporated them into a better prototype for the FOMC to consider. As a result, the only thing working better than the Fed's model is intuition, which is fine for traders trying to beat the Fed at its own game, but more than a little tricky to justify as the basis for policy.



Inflation forecasting is particularly critical now, but a brief historical look shows today's questions are not unique to 2019. An example of the lack of viable alternatives to the Fed's methodology is evident in the way the decades-long battle between monetarists and Keynesians petered out once QE failed to produce inflation. In 2010, Larry Kudlow, then the host of CNBC's *The Kudlow Report*, predicted Janet Yellen's appointment as Fed Chair would result in "[inflation ahead](#)," because she was not a monetarist. Yellen would use her Phillips-curve approach to justify keeping rates low, he warned, despite an inflated money supply. Prices were about to take off, he predicted.

As if. Rates stayed low alright, but inflation didn't budge. Rather, it bounced along between 1.5% and 2.0% through her tenure. It's important to remember that while Yellen argued that it was important to stay disciplined and continue

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ECONOMICS

Chris Low, Chief Economist
212.418.7909
chris.low@ftnfinancial.com

Rebecca Kooshak, Economic Analyst
212.418.7966
rebecca.kooshak@ftnfinancial.com

Disclosures are on the last page of this report.

consulting Fed inflation models, the FOMC actually kept rates lower than the models suggested was optimal. A lot lower. And still there was no inflation. You don't really hear much about monetarism in the US anymore.¹

Fed officials and staff are comfortable discussing the problems with their inflation forecasting methodology. Former governor Dan Tarullo wrote a paper positing the Fed has [no working theory of inflation](#). And here's a flashback from the minutes to the September 2017 FOMC meeting: "Many participants expressed concern that the low inflation readings this year might reflect not only transitory factors, **but also the influence of developments that could prove more persistent.**" They guessed what these developments might be, but reached no conclusion. And now, two years later, a few FOMC participants are once again starting to suspect persistent low inflation cannot be explained entirely by a series of transitory developments, and once again, no one is quite sure why.

The continuous drive to get inflation right

The Fed staff is not sitting idle on its inflation forecasting laurels. Because Fed economists are aware Taylor-rule-based forecasts are missing something, they have put enormous energy into finding new ways to think about prices to more effectively guide policy. One particularly clever approach is the trimmed mean PCE, developed by Dallas Federal Reserve Economists Jim Dolmas and Evan Koenig.

Many regional Federal Reserve Banks have developed their own looks at inflation, but the Dallas indicator is frequently cited by Chair Powell and the FOMC minutes when participants conclude current policy is completely appropriate despite a global plunge in inflation expectations. It's the new favorite son of inflation measures.

The trimmed-mean PCE is not a forecasting tool. Rather, it is part of an ongoing effort to better understand inflation in real time. Specifically, when inflation lurches higher, as it did last year, or lower, as it has this year, FOMC policy makers need to ascertain whether the change is sustainable. If they had a forecast they could trust, it would be easy, but they don't.

Traditionally, economists strip out volatility with core inflation measures excluding the same components every month. The most common core-PCE measure eliminates food and energy, for instance. The Dallas Fed's trimmed-mean PCE eliminates much more. Last month, 24% of the PCE was stripped from the lower end and 31% from the upper end. The number of goods and services and the specific items eliminated vary from month to month so that the core always consists of the most stable components.

"The trimming proportions were chosen to minimize the expected distance (in a root-mean-square sense) between the annualized monthly trimmed-mean inflation rate series and three proxies for unobserved 'true' core inflation: a centered 36-month moving average of monthly all-items inflation, a forward-looking 24-month average, and a band-pass filtered trend² that isolates movements in all-items inflation with a period below 36 months."

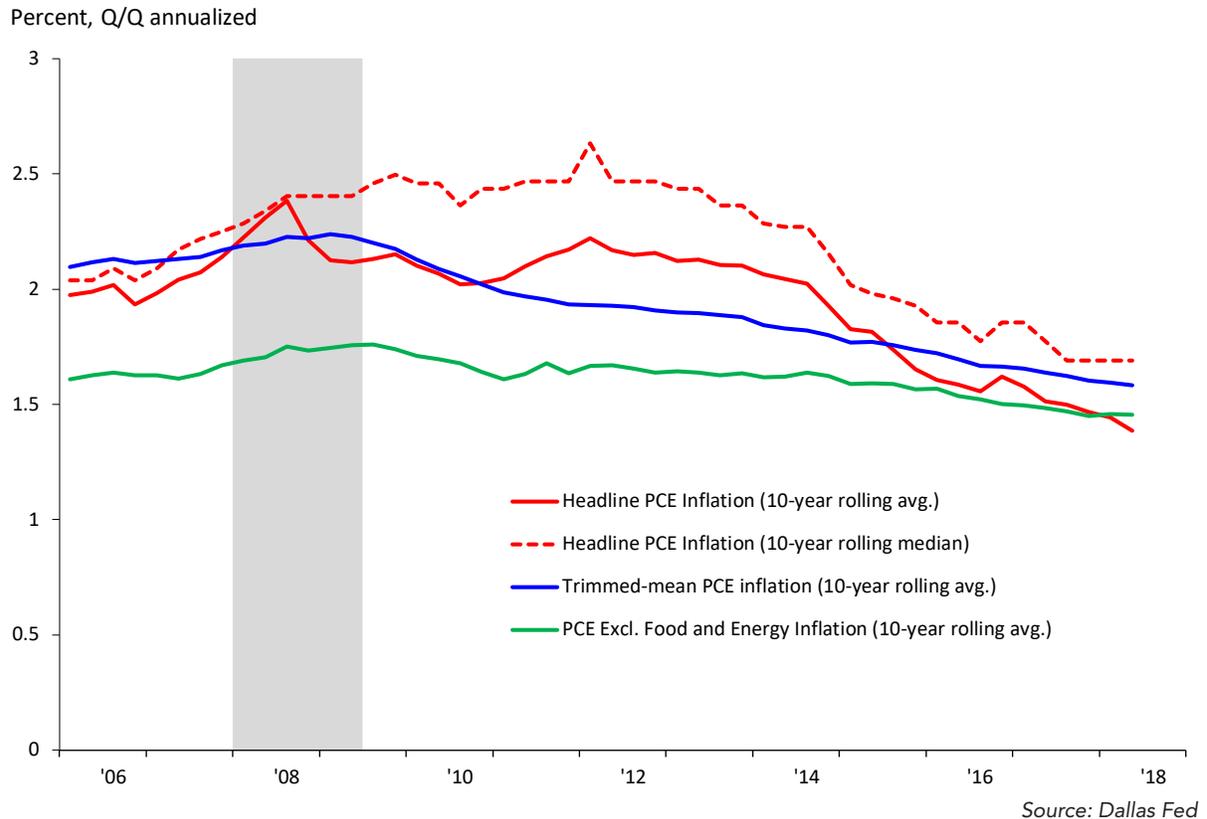
It's a mouthful, but it boils down to an effort to arrive at a measure of inflation that is consistent with both a long-run trend and a medium-run forecast with the least possible volatility.

¹ Monetarism worked well before it stopped working. The most likely reason is not that monetarism broke but that the measures of money supply no longer capture all of the money in the economy. Too much financial activity now takes place away from the banking system.

² According to Lawrence Christiano and Terry Fitzgerald, who wrote about them in a 1999 [paper](#), "The 'ideal' band pass filter can be used to isolate the component of a time series that lies within a particular band of frequencies."

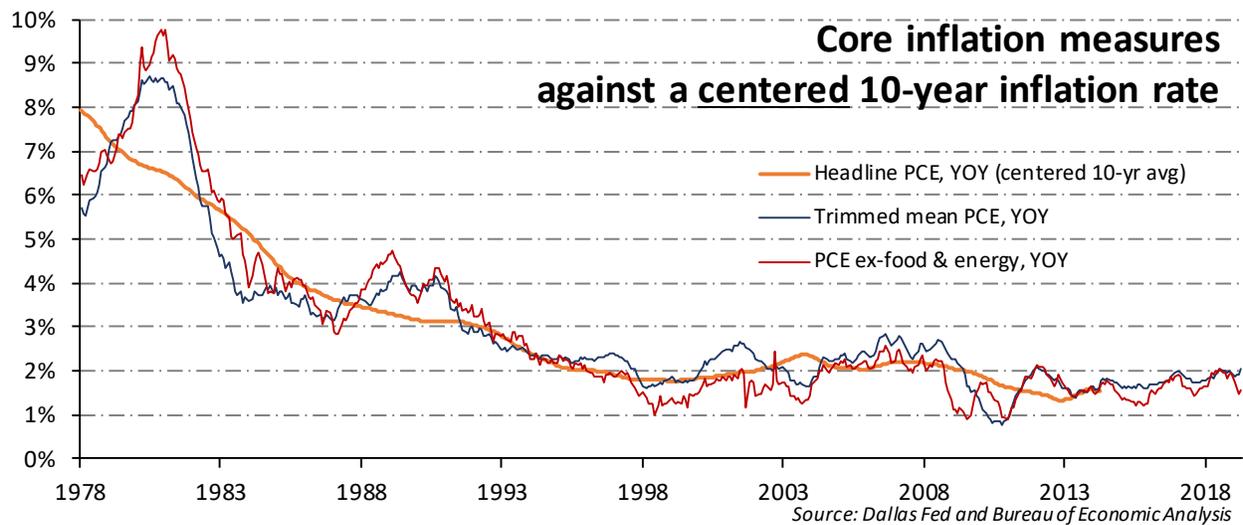
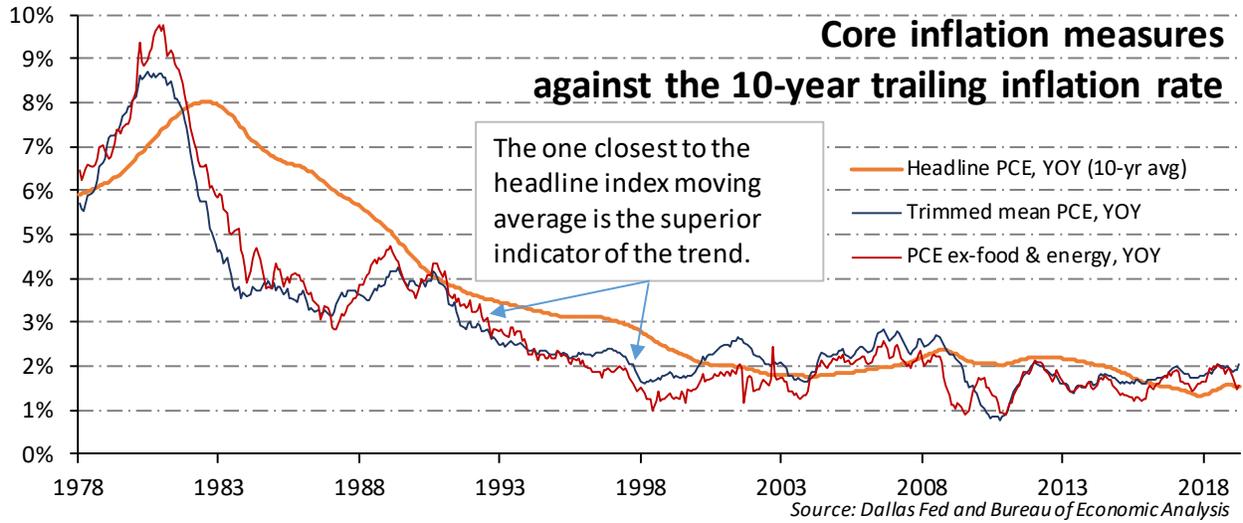
A paper introducing the trimmed-mean concept offers the following chart to demonstrate the effectiveness of the trimmed-mean compared to PCE ex-food and energy as a guide to the underlying inflation rate:

Figure 1. Trimmed-mean and headline inflation share a common longer-run trend



Note that the trimmed-mean PCE tracks the core inflation rate, but at a higher level, and is more consistent with the 10-year average headline PCE rate for nine of the thirteen years shown. When we drew back the timeline to get a longer view, the trimmed-mean series differs from the 10-year inflation trend by almost the same amount as the PCE deflator ex-food and energy. It is a modestly better guide to future inflation. But better is still not that helpful, however, especially when inflation is low the trimmed-mean PCE “misses” don’t shrink in proportion.³

³ Since 1983, the absolute value of the average monthly difference between the Dallas Fed trimmed-mean PCE and the centered 10-yr average PCE inflation rate is 0.39%. The core ex-food and energy differed by an absolute average 0.36%.



Pros and cons

The biggest advantage to using the trimmed-mean approach to gauge the inflation trend is it eliminates non-cyclical prices. That is also the biggest disadvantage, considering 55% of the movement in the PCE index is attributable to these non-cyclical components. Inflation is increasingly less sensitive to the economic cycle, and this development is persistent enough to overcome cyclical inflation for years. To bypass about one-half of inflation’s components is to ignore the inexplicable piece of inflation that has thrown off inflation forecasts inside and outside the Fed for decades.

In other words, there are cyclical and acyclical inflation components. The Dallas trimmed-mean PCE is touted for capturing almost only cyclical components. This is implicitly a good thing, because economists, by definition, consider fluctuations in acyclical elements to be “transitory.” **Yet, the acyclical components as a group have contributed a distinct disinflationary influence for decades. They are, collectively, less transitory than the cyclical components.**

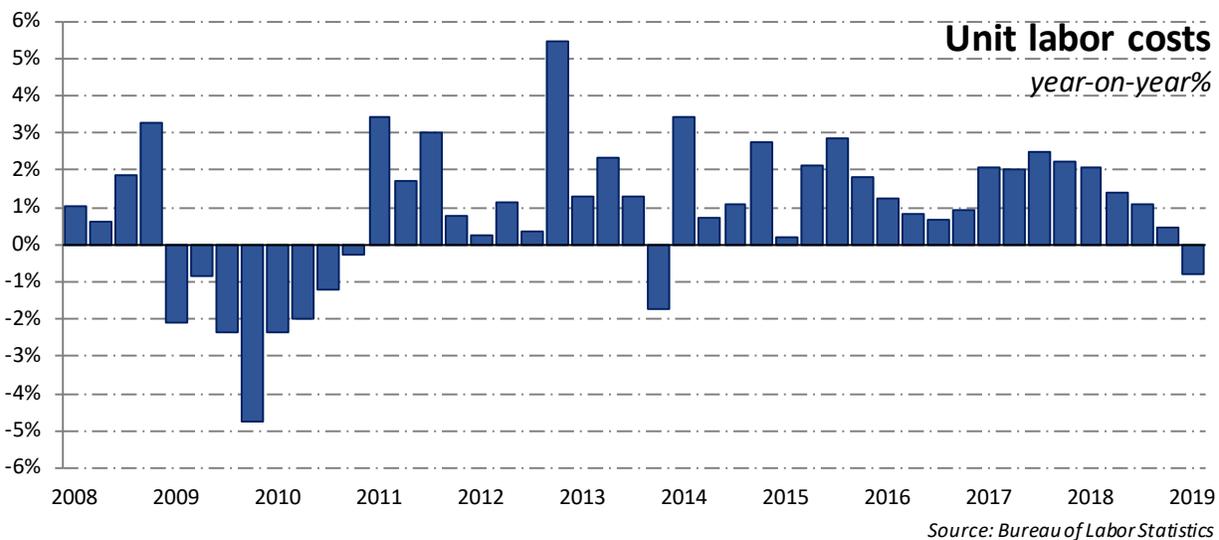
The other reason to be wary of cyclical-heavy inflation gauges is that some cyclical components — most notably housing — are far more cyclical than others. Housing accounted for 25% of the Dallas trimmed mean PCE in May, which is about the same as its weight in the core PCE, but in months when tenant-

occupied housing components do not fall out of the series, as they did in May, rent and owners' equivalent rent measures account for about 30% of the index. This emphasis on housing overstates inflation, especially late in the business cycle, because rents are more cyclical than other cyclical components.

Also, bear in mind the way the Fed fights cyclical inflation is by limiting income growth. The Fed prevents inflation by raising interest rates, as they did in 2017-18, until economic growth slows, wage growth slows, and cyclical inflation is tamed. But when cyclical inflation is perpetually higher than acyclical inflation, as it has been for most of the past 20 years, most households are better off with faster wage growth and faster cyclical inflation, because this combination results in wages that gain more against inflation over time.

Last year's productivity surprise

Inflation was surprisingly benign last year despite tariffs on more than \$200bn in Chinese-made imports. One reason is, despite wage growth accelerating to more than 3%, productivity growth accelerated enough to reduce unit labor costs. The latest data, reflecting the Q1 GDP revision, transforms the trend from level growth through most of 2017-18 to the steady, six-quarter downtrend shown below. The Q1 drop, now -0.8%, is no longer a one off. It is the tail end of a year-and-a-half decline.



Despite a significant drop in the unemployment rate — to a level few, maybe none, thought possible — labor costs fell. **If the decline doesn't reverse, cyclical inflation will subside this year.** Unfortunately, no one can confidently say why productivity accelerated last year, and no one can confidently say whether it will continue to accelerate this year. Nevertheless, strong productivity growth is one more reason to question the wisdom of putting too much faith in a trimmed-mean inflation measure. It is useful, it adds to our understanding of inflation, but it is only part of a bigger, complex puzzle. To really understand the trends underlying inflation requires regularly taking the index apart to its component pieces, as we do in [The Weekly Report](#) "Inflation Lab" every month. In that way, it is possible not just to see if cyclical inflation is accelerating, but how wide or narrowly based the trend is, and how effectively it is being offset by acyclical disinflation.

– Chris Low, Chief Economist

THE WEEK AHEAD

THIS WEEK'S NUMBERS		PRIOR	CONSENSUS			FTN
			HIGH	LOW	MEDIAN	
Tuesday, June 18	Housing Starts - May	1235k	1252k	1198k	1240k	1240k
	Housing Starts MoM - May	5.7%	1.4%	-3.0%	0.4%	0.4%
Wednesday, June 19	FOMC Rate Decision (Upper Bound)	2.5%	2.5%	2.3%	2.5%	2.5%
	FOMC Rate Decision (Lower Bound)	2.25%	2.25%	2.00%	2.25%	2.25%
	Interest Rate on Excess Reserves	2.35%	--	--	--	2.35%
Thursday, June 20	Current Account Balance - 1Q	-\$134.4b	-\$118.6b	-\$128.1b	-\$125.0b	-\$125.0b
Friday, June 21	Existing Home Sales - May	5.19m	5.54m	5.20m	5.30m	5.25m
	Existing Home Sales MoM - May	-0.4%	6.7%	0.2%	2.1%	1.2%

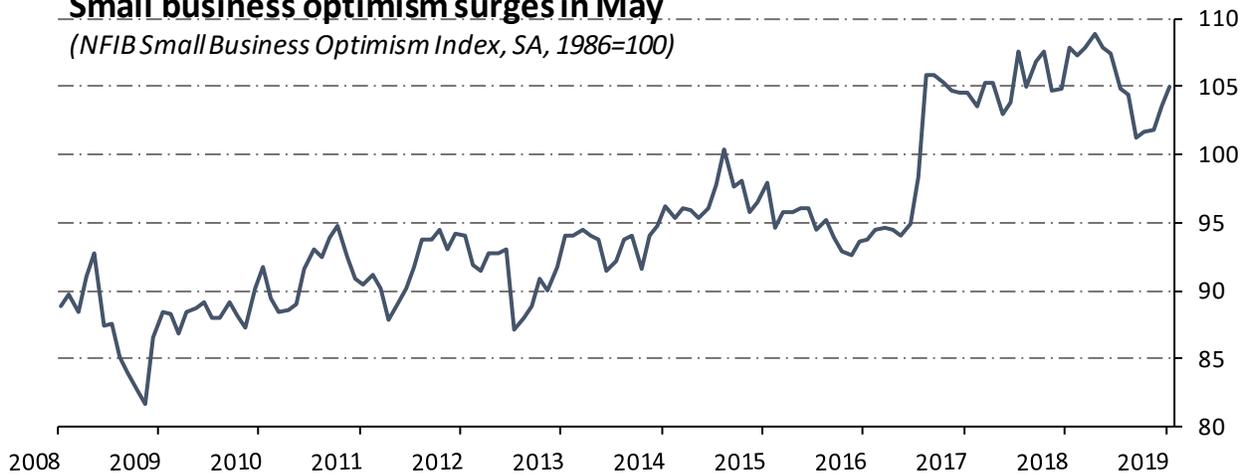
Review

This week, President Trump and Mexico reached a deal on immigration control, small business owners surveyed showed far more optimism than US multi-nationals or US consumers, and US and China's retail sales rose in May to 3.2% year-over-year and 8.6%, respectively. As an aside, with respect to trade, a [report from International Data Corp](#) showed Huawei (and Xiaomi to a smaller extent) increasing market share in Europe at the expense of Apple and Samsung.

- Tuesday's Small Business Optimism Survey surged to 105.0, highest since November 2018. Small businesses, the largest creators of private employment, were particularly optimistic about capital spending, hiring, inventory investment, and profitability, which is a little odd considering significant small-business layoffs in the May ADP figures.

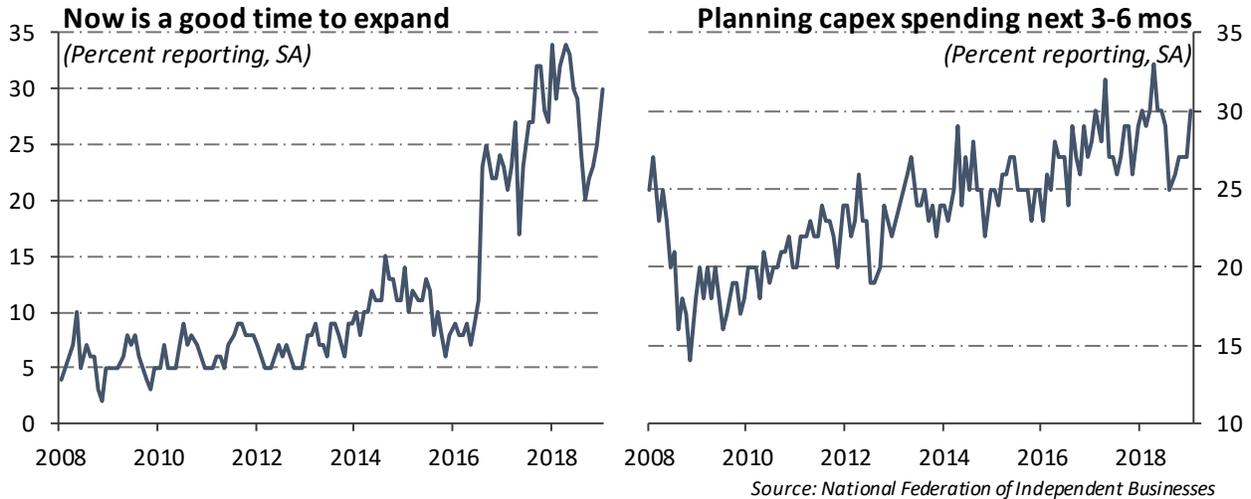
Small business optimism surges in May

(NFIB Small Business Optimism Index, SA, 1986=100)



Source: National Federation of Independent Businesses

- Sixty-four percent of respondents reported capital outlays on new equipment, vehicles, facility expansion, or new buildings. Thirty percent plan capital outlays in the next few months with the strongest responses coming from transportation, manufacturing, professional services, and construction industries.



- Hiring, particularly skilled construction and transportation workers, was among the biggest problems facing firms. (Taxes, especially the impermanence of the tax cuts, was the second biggest.)
- April’s JOLTS Job Openings edged down slightly from 7.474 million to 7.449 million. The largest chunk of openings came from the South (2.6m) and the smallest from the Northeast (1.2m). The leading industries were professional and business services (1.4m), health care & social assistance (1.0m), and accommodation and food services (0.9m). Unemployed workers looking for work rose 387k from March to 5.824m in April.



Source: Bureau of Labor Statistics, Haver Analytics

- Mexico and President Trump defused the tariff-immigration dispute over the weekend. Mexico’s Foreign Minister agreed to take steps to reduce illegal immigration to 2017 or 2018 levels from this year’s heightened levels. Terms reportedly include Mexico sending 6k National Guard police to its southern border and a legislative change to its “safe third country status,” which apparently means Central Americans seeking asylum status in the US would have to wait in Mexico rather than crossing the border into the US to wait out approval. The legislative change is expected to take 90 days. White House Special Adviser Kellyanne Conway said tariffs remain an enforcement mechanism that could go into effect “at any time” should Mexico fail to uphold its part of the agreement.

- US consumer sentiment dropped in June from May's 100.0 to 97.9 on tariff concerns and slowing gains in employment. The University of Michigan's Chief Economist Richard Curtin said, "Some of the decline was due to tariffs on Mexico...but most of the concern was with the 25% tariff on nearly half of all Chinese imports." Forty percent of respondents made negative mentions of tariffs, which is up from 21% in May and 30% in July 2018. They also made spontaneous mentions of buying-in-advance household durable goods items, which may explain the rise in current economic conditions, from May's 110.0 to 112.5, and the drop in expectations from 93.5 to 88.6.

The Atlanta Fed revised its Q2 GDPNow forecast from 1.4% last week to 2.1%, primarily reflecting much better-than-expected retail sales. May retail sales were close to consensus, but April was revised up five tenths. The NY Fed revised its Nowcast from 1.0% to 1.36% reflecting retail sales and the rebound in industrial production.

The Bank of Japan and Bank of England hold monetary policy meetings next week, on Wednesday and Thursday, respectively. Next week's key international releases are manufacturing and composite PMIs on Friday.

The ECB hosts its annual [ECB Forum](#) in Sintra, Portugal Monday and Tuesday. This year's theme is the history and future of the European Economic and Monetary Union.

Preview

Note: ★ = High Impact Event
All times Eastern Daylight

Saturday, June 15

- CFA Institute holds all three levels of CFA exam. The Asia-Pacific region leads CFA candidate growth.

Sunday, June 16

- Italian Deputy Prime Minister Matteo Salvini scheduled to meet with VP Mike Pence in Washington.
- 8:30pm – Singapore: Electronic Exports Y/Y – May (Last: -16.3%)

Monday, June 17

- ★ Public hearings in Washington on President Trump's proposed tariff on the remaining \$300 billion of Chinese imports.
- EU foreign ministers meet in Luxembourg.
- 4:30am – Italy: General Government Debt – Apr
- 5:00am – EU: Labor Costs – Q1 (Last Y/Y: 2.3%)
- 8:30am – US:
 - Empire Manufacturing – Jun (Last: 17.8; Con: 12.0)
 - NAHB Housing Market Index – Jun
- 8:55am – UK: BOE Governor Mark Carney speaks in London.
- 11:30am – US: \$36bn 3M and \$36bn 6M Treasury Bill Auctions

- ★ 1:00pm – EU: Mario Draghi opens reception of ECB’s annual ECB Forum. This year’s topic is “20 Years of European Economic and Monetary Union.”
- 2:00pm – EU: Olivier Blanchard from the Peterson Institute for International Economics gives dinner speech at ECB Forum.
- ★ 4:00pm – US: Treasury International Capital Flows – Apr
- ★ 9:30pm – China: New House Price Index – May

Tuesday, June 18

- A second ballot in the UK leadership contest to choose Theresa May’s successor. Successive rounds of voting will continue until field narrows to two candidates. Expected to continue until July 22.
- 2:00am – Germany: PPI
- 2:00am – EU: EU27 New Car Registrations – May (Last: -0.4%)
- 5:00am – EU:
 - Trade Balance – Apr
 - CPI – May F
- 5:00am – Germany: ZEW Survey – Jun
- 6:00am – EU: Peter Praet gives presentation on *the single monetary policy: 20 years of experience*. (Panel discussion chaired by Bank of Ireland Governor Philip Lane follows.)
- 8:30am – US:
 - Housing Starts – May
 - Building Permits – May
- 8:30am – Canada: Manufacturing Sales M/M – Apr (Last: 2.1%)
- ★ 10:00am – US: BOE Governor Mark Carney, former Chair Janet Yellen, and Mario Draghi speak on policy panel at ECB Forum in Portugal.
- 1:00pm – US: \$26bn 1Y Treasury Note Auction
- 7:50pm – Japan: Trade Balance – May

Wednesday, June 19

- A leading think tank hosts Chairman of the Joint Chiefs of Staff Joseph Dunford for a discussion of US military and defense strategies in conflict areas and the current state of cooperative efforts with US allies.
- ★ The Bank of Japan announces its monetary policy decision.
- ★ Governor Kuroda holds post-meeting press conference.
- 4:00am – Italy: Trade Balance – Apr
- 4:30am – UK:
 - CPI – May
 - PPI – May
- 8:30am – Canada: CPI – May (Last Y/Y: 2.0%)
- 8:30am – EU: ECB member Benoît Cœuré chairs panel on the future of the European Monetary Union. (Participants include former Fed Vice Chair Stanley Fischer and IMF’s Gita Gopinath.)
- 10:00am – EU: Mario Draghi gives closing remarks at ECB Forum.
- ★ 2:00pm – US: FOMC Rate Decision
- ★ 2:30pm – US: Jay Powell press conference

Thursday, June 20

- EU heads of state meet in Luxembourg for start of two-day meeting to appoint new leaders to the European Commission and ECB; also expected to sign-off on plans for a euro-area budget.
- 1:30am – Japan: All Industry Activity Index – Apr (Last M/M: -0.4%)
- 2:00am – Japan: Machine Tool Orders – May F (Last Y/Y: -27.3%)
- 4:00am – EU: ECB Publishes Economic Bulletin
- 4:30am – UK: Retail Sales
- ★ 7:00am – UK: Bank of England announces monetary policy decision, which is expected to remain unchanged.
- 8:30am – US:
 - Current Account Balance – Q1 (Last: -\$134.4b; Con: -125.0b)
 - Philadelphia Fed Business Outlook – Jun (Last: 16.6; Con: 10.5)
- 8:30am – Canada: ADP Payroll Estimates
- 10:00am – US: Leading Index – May (Last 0.2%; Con: 0.1%)
- 10:00am – EU: Consumer Confidence – Jun A (Last: -6.5)
- ★ 4:00pm – US: BOE Governor Mark Carney gives annual Mansion House speech.
- ★ 1:00pm – US: \$15bn 5Y Treasury Note Auction (Reopening)
- 7:30pm – Japan: CPI – May
- 8:30pm – Japan: Nikkei Manufacturing PMI - Jun P (Last 49.8)

Friday, June 21

- 3:15am – France:
 - Markit Manufacturing PMI – Jun P (Last: 50.6)
 - Markit Services PMI – Jun P (Last: 51.5)
 - Markit Composite PMI – Jun P (Last: 51.2)
- 3:30am – Germany:
 - Markit/BME Manufacturing PMI – Jun P (Last: 44.3)
 - Markit Services PMI – June P (Last: 55.4)
 - Markit/BME Composite PMI – Jun P (Last: 52.6)
- 4:00am – EU:
 - Markit Manufacturing PMI – Jun P (Last: 47.7)
 - Markit Services PMI – Jun P (Last 52.9)
 - Markit Composite PMI – Jun P (Last 51.8)
- 4:30am – Hong Kong:
 - CPI Composite Y/Y – May (Last: 2.8%)
 - Current Account Balance – Q1
- 8:30am – Canada: Retail Sales
- 9:45am – US:
 - Markit Manufacturing PMI – Jun P
 - Markit Services PMI – Jun P
 - Markit Composite PMI – Jun P

- 10:00am – US: Existing Home Sales – May
- 11:54am – US: summer solstice arrives marking the first day of summer in the Northern Hemisphere and the first day of winter in the Southern Hemisphere.
- ★ 12:00pm – US: Fed Governor Lael Brainard and Cleveland Fed President Loretta Mester speak at the last *Fed Listens* event in Cincinnati. The focus is strategies for ending poverty. (Mester votes in 2020)
- 3:00pm – US: San Francisco Fed President Mary Daly hosts podcast on community economics. (FOMC voter in 2020)

– Rebecca Kooshak, Economic Analyst



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