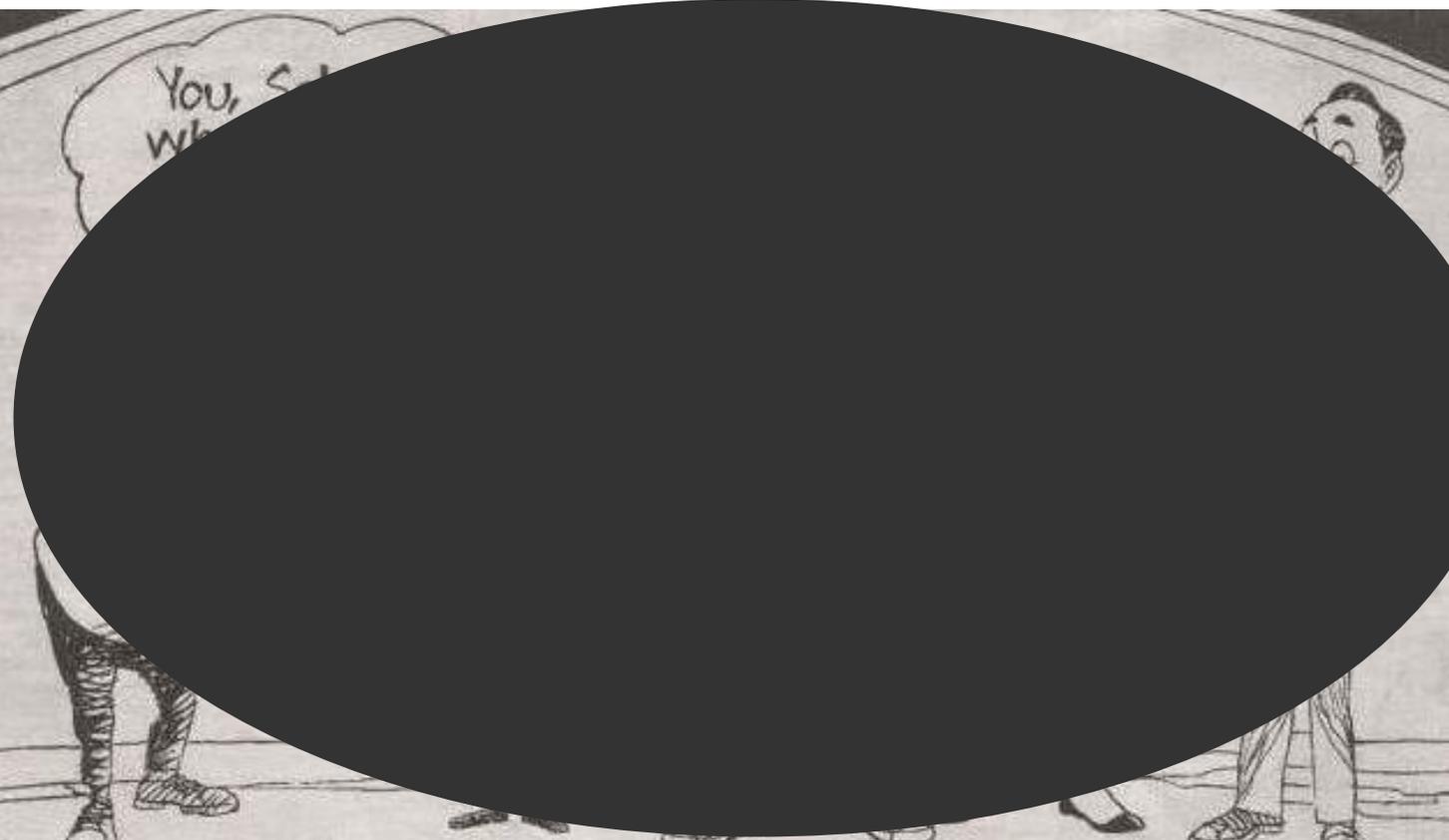


# Some Reflections on Prices, Inflation & Macroeconomic Policy



**Scott Fullwiler**

*University of Missouri-Kansas City &  
Global Institute for Sustainable Prosperity*

***Forum for Macroeconomics & Macroeconomic Policies • October 28, 2020***

• Context

• Measurement

• Theory

• Policy

• Conclusions

# ***The Federal Reserve's Review of Its Monetary Policy Strategy, Tools, and Communication Practices***

**Vice Chair Richard H. Clarida**

- “[A] key development in recent decades is that inflation appears less responsive to resource slack”
- “[T]he strengthening of the labor market in recent years has highlighted the challenges of assessing the proximity of the labor market to ... full employment”



# Fed has no reliable theory of inflation, says Tarullo

“The substantive point is that we do not, at present, have a theory of inflation dynamics that works sufficiently well to be of use for the business of real-time monetary policymaking,” said Mr Tarullo in a speech at the Brookings think-tank in Washington.

- **Context**
- **Measurement**
- **Theory**
- **Policy**
- **Conclusions**

**The 'Price Level' of Economic Theory Cannot Exist.**  
**In the Real World It is Necessarily a Social Construction**

**Price setting**



**Price Data Collection & Imputation**



**Price Weighting**



**Price Index**

# What's Down with Inflation?

Tim Mahedy and Adam Shapiro

## 42% of Core PCE is PROCYCLICAL

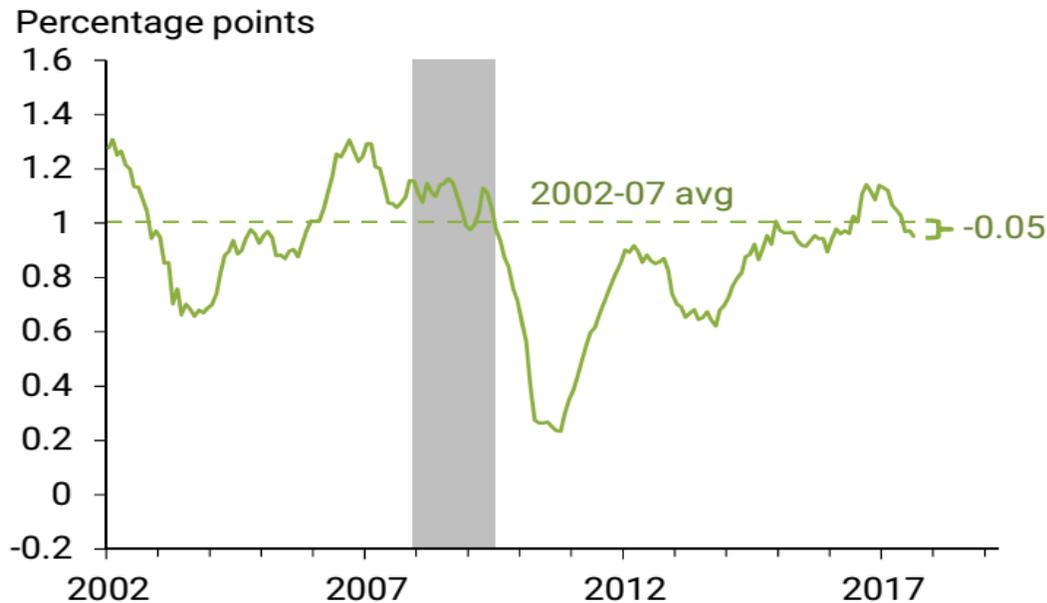
**Includes housing, recreational, food services, some non-durable goods**

## 58% of Core PCE is ACYCLICAL

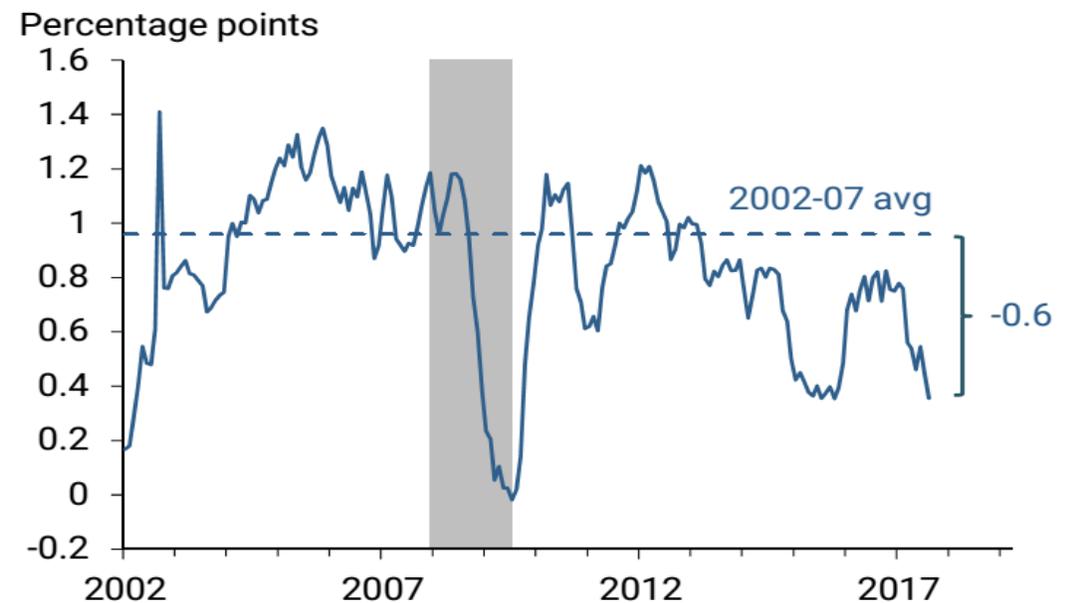
**Includes health care, financial services, clothing, transportation**

### Contributions to core PCE inflation from procyclical and acyclical sources

#### A. Procyclical contributions



#### B. Acyclical contributions



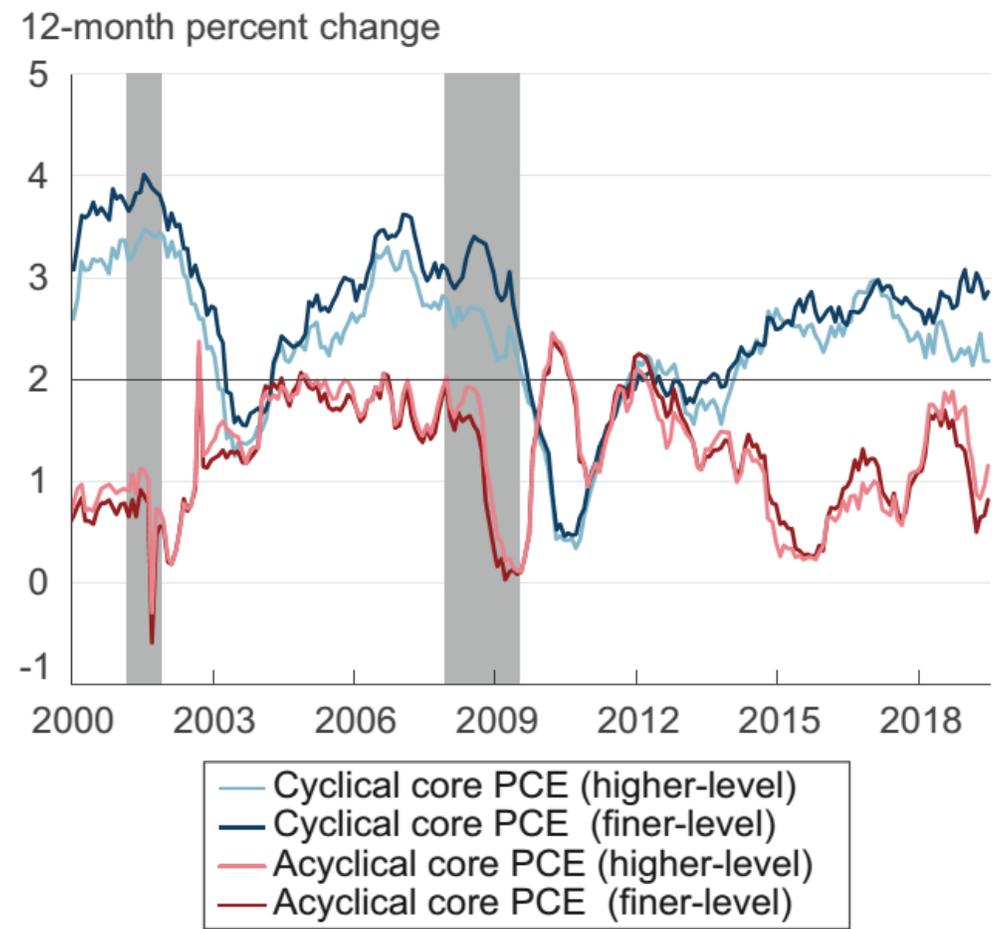
# Cyclical versus Acyclical Inflation: A Deeper Dive

Saeed Zaman\*

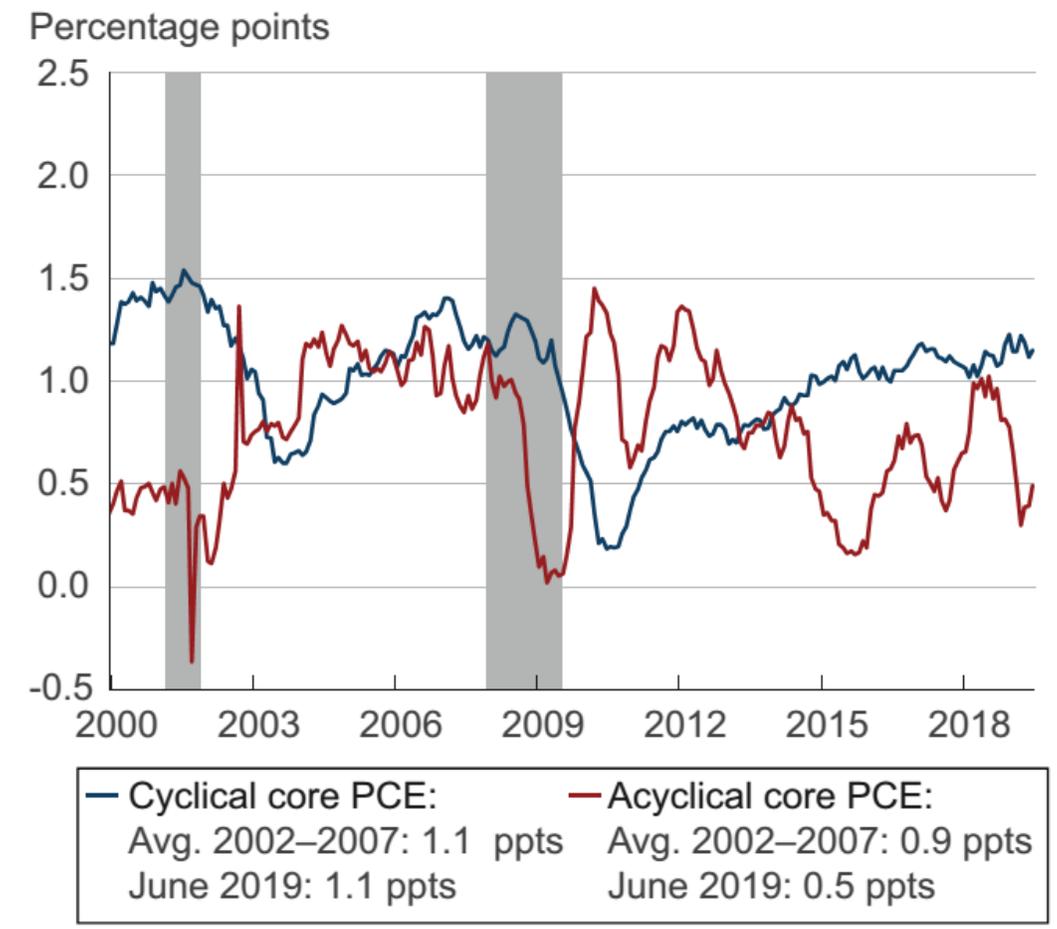
September 4, 2019

FEDERAL RESERVE BANK *of* CLEVELAND

**Figure 2. Higher-level versus Finer-level Cyclical Core PCE**



**Figure 3. Contributions to Core PCE**

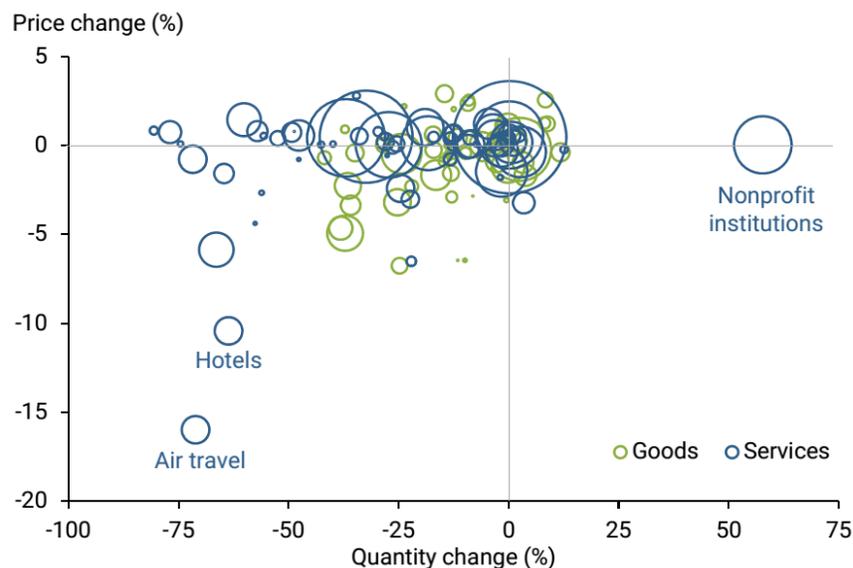


## A Simple Framework to Monitor Inflation

Adam Hale Shapiro  
Federal Reserve Bank of San Francisco

August 2020

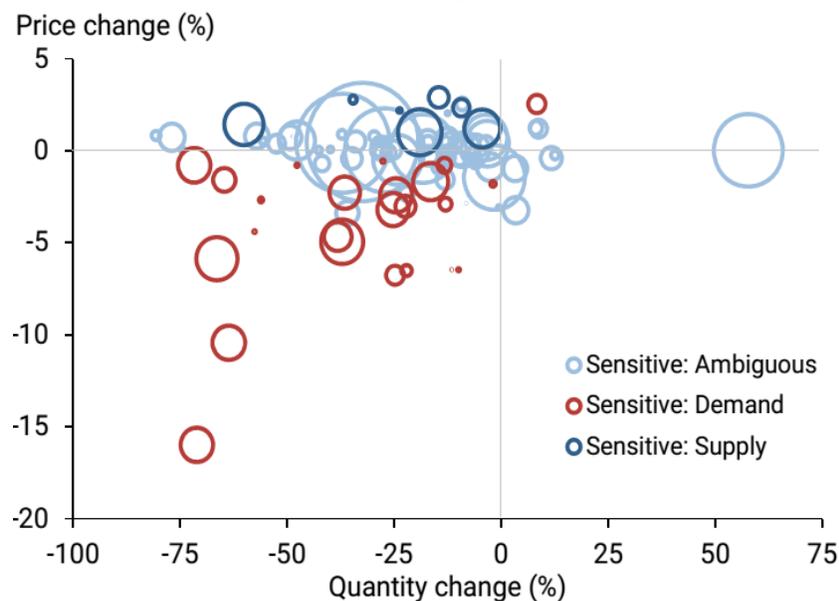
**Figure 1**  
Changes in price and quantity for goods versus services



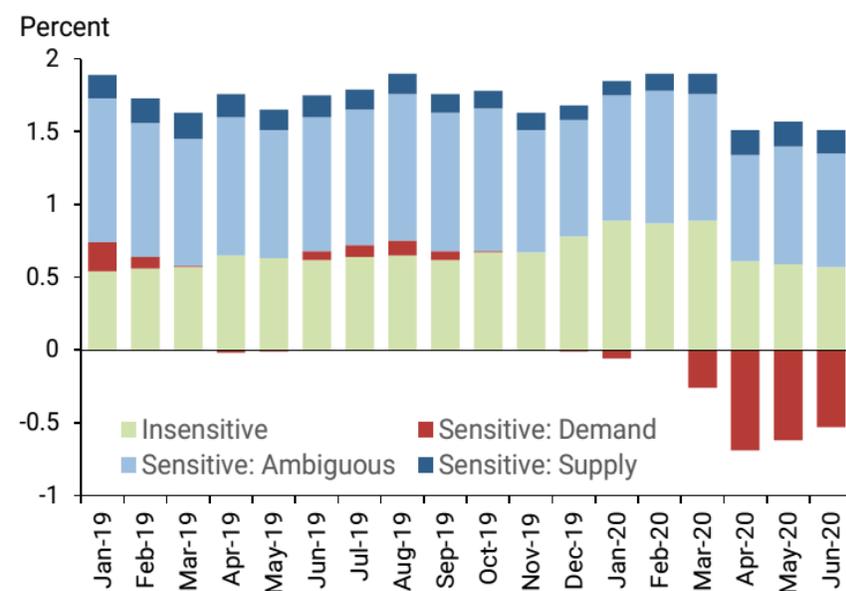
**Figure 3**

## Categorizing COVID-sensitive inflation by effects from demand versus supply

A. Changes among sensitive group by demand, supply



B. Demand, supply contributions to inflation



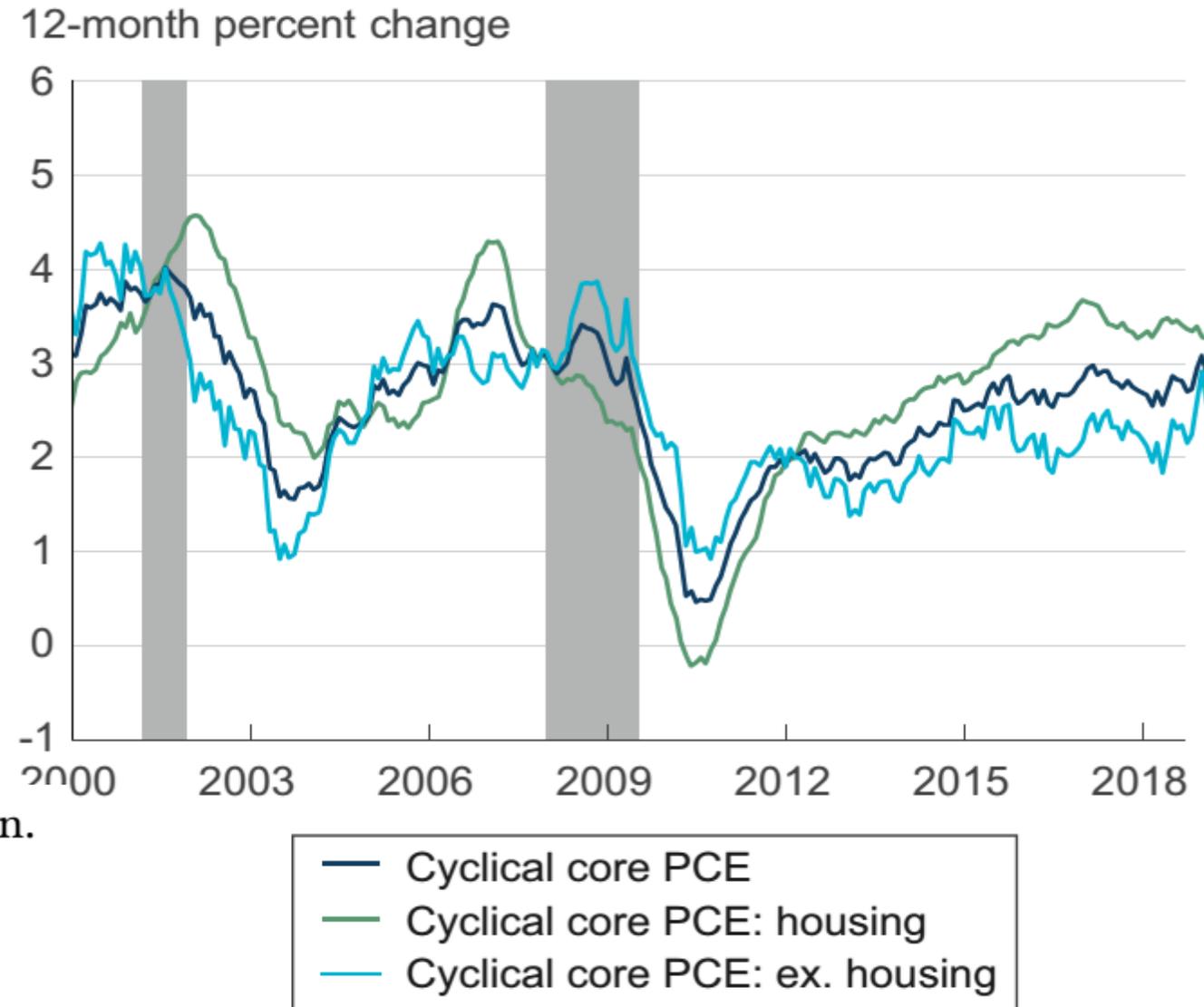
The key assumption of the methodology is that inflation dynamics are best explained at the categorical (or sectoral) level. There is ample evidence in the literature that this assumption holds. For example, the health care services sector is sensitive to prices administered by the government (that is, Medicare and Medicaid) as shown in [Clemens and Gottlieb \(2017\)](#), [Clemens, Gottlieb, and Shapiro \(2014\)](#), and [Clemens, Gottlieb, and Shapiro \(2016\)](#). Certain products, such as airline services [Gerardi and Shapiro \(2009\)](#) and technology goods ([Aizcorbe \(2006\)](#) and [Copeland and Shapiro \(2016\)](#)), tend to strongly move with technological progress and sector-specific competitive pressures.

# Cyclical versus Acyclical Inflation: A Deeper Dive

*Saeed Zaman\**

By contrast, housing is a key driver of cyclical inflation. Five of the seven disaggregated subcomponents underlying the housing sector are identified as being cyclically sensitive, and these five subcomponents collectively constitute 44 percent of cyclical core PCE inflation. Moreover, these housing subcomponents tend to be more cyclically sensitive than other subcomponents.

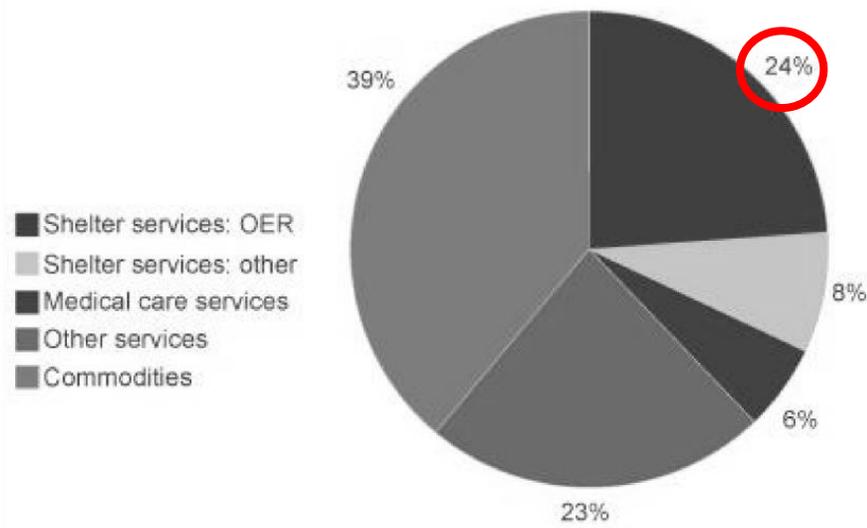
Figure 4. Cyclical Core Housing versus Excluding Housing



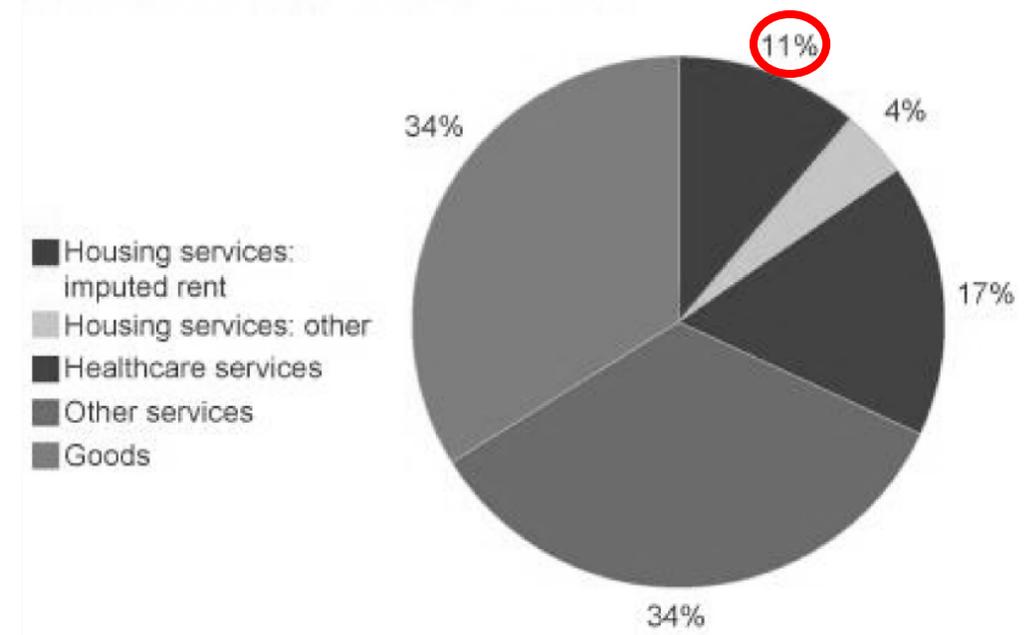
# What's Up in Inflation? Shelter and OER

02.21.14

## Breakdown of CPI Relative Weights



## Breakdown of PCE Shares



William Bednar  
Edward S. Knotek II

These two rental measures tend to move together over a very long time horizon. But there are important conceptual differences between the series that can explain both short-term and longer-lasting divergences. To construct the OER and rent of primary residences indexes, the BLS samples a single set of rental units. It then adjusts the sample weights for those units according to their shares in either the owner-occupied or rental market. But the universes of rental and owner-occupied housing naturally differ —think single-family owner-occupied houses versus large multifamily apartment complexes— and the changes in their rents or implied rents differ as well. In addition, the treatment of utilities differs depending on whether utilities are included in rents or not, because owners pay for their own utilities and the BLS measures utility prices separately. (The BLS provides excellent resources

- **Context**
- **Measurement**
- **Theory**
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- **Conclusions**

# What if There Are No Conventional Price Mechanisms?

Posted on [November 26, 2013](#) by [Devin Smith](#) | [9 Comments](#)

By Frederic S. Lee

The 40-50 studies in the past fifteen years by Alan Binder and others which cover developed countries around the world further support the existence of price stability. One basis for its existence is the administered cost-plus pricing mechanism (used by virtually all business enterprises to set the prices) which neutralizes the impact of changing sales on costs hence prices. So price stability and its underlying pricing mechanism are systemic features of developed economies such as the American economy resulting in a disjuncture between price and quantity.

Turning to wage rate stability, evidence of its existence goes to the 19<sup>th</sup> century. Moreover, from the 1980s, wage rate stickiness has been a major concern of mainstream economists; and since the early 1990s, numerous empirical studies have shown its widespread existence, thus, as in the case of price stability, making it an irrefutable economic Altogether, the implication is that there is no connection between the wage rate and the demand for labor

Finally there is the question of the interest rate and its connection to investment decisions in plant and equipment and research and development. Again, the empirical evidence on the investment decision process shows that enterprises take a great many variables into account, including the interest rate. But in the end, the significance of the interest rate in the final decision is almost reduced to nothing. This is in part due to the fact that enterprises

Since there is no unitary force moving "general prices" in contradistinction to relative prices, there is no unitary value of money. There is only a range of things you can buy at different prices. Why then do we persist in treating Consumer Price indices as fundamental? Why is the same index used to adjust everything from wage contracts to social security? In other words, if effective demand doesn't determine the price level but only impacts specific prices, and only weakly at that, what theoretical meaning does a price index have? So the consumer price index grew 3 per cent faster, so what? Does that say something about the value of money in general or did 6 industries increase their target profit margins? Did product quality change significantly across a number of products important to consumers? Neoclassicals try to get around the product quality issue by "quality adjusting" price level indices. However, once you don't have some homogeneous substance which is the "essence" of all output (whether that substance is labor time, or utility) there is no theoretical basis for such adjustments.

## Are General Price Level Indices Theoretically Coherent? - Tankus Notes

Using developments in Post-Keynesian theory originating with Means I would argue that an index of consumer prices fixed relative to organized exchange prices and an index of administered goods and service prices could be constructed separately in a coherent way. I would further make the case for constructing an index of tradable administered price goods and services and non-tradable ones since they behave differently (whether because of baumol disease productivity factors or because non-tradable goods face localized and more geographically concrete competition). However, the reason to construct these indices isn't to claim all the prices in the index will change for the same reason but simply to say that they are more similar to each other than the prices in other indexes. Nor would we any longer be driven to claim that faster growth in one more more of these indexes necessarily says anything about the state of effective demand and thus necessarily implies that x or y macroeconomic policy is worthwhile.

# The Nature of Prices Is Inherently Legal/Regulatory/Administered/Budgetary

- **Utilities**
- **Interest rates**
- **Taxes (sales/property)**
- **Education subsidies/student debt**
- **Intellectual property**
- **Antitrust treatment of corporate power**
- **Antitrust treatment of labor 'power'**
- **Energy, agriculture**
- **Medical/Medicare/Medicaid**
- **Housing, rent**
- **Government procurement**
- **Involuntary unemployment**
- **Carbon**

# When DoJ and the FCC slowed inflation

MARCH 28, 2019 1:00 AM

By: **Brendan Greeley**

In late 2011, the DoJ and then the FCC both signaled disapproval of AT&T's \$39b plan to buy T-Mobile, and then AT&T gave up the deal. It was a surprise to most people watching;

Restrictive contracts were a great way to maintain ARPU. So starting in 2012, T-Mobile realized it suddenly had the motivation and means to act like a real company and not just a takeover target, and so it went after everyone else's ARPU. It cut both prices and terms, and the rest of the industry had to follow.

So when Janet Yellen noted what she called a "one-off," "transitory" move in the price of wireless service in 2017, a move that she said was part of what was holding down inflation, *she was looking back at five years of newly aggressive antitrust policy from DOJ and the FCC.* Antitrust policy then became monetary policy. It lowered inflation.

# What's Down with Inflation?

Tim Mahedy and Adam Shapiro

Through various pieces of legislation, including the Affordable Care Act (ACA), the federal government has slowed the growth of Medicare payments to physicians and hospitals. These payments are directly included in the BEA's health-care services price index,

**FRBSF** Economic Letter

# The Problem With Inflation: It Often Doesn't Exist

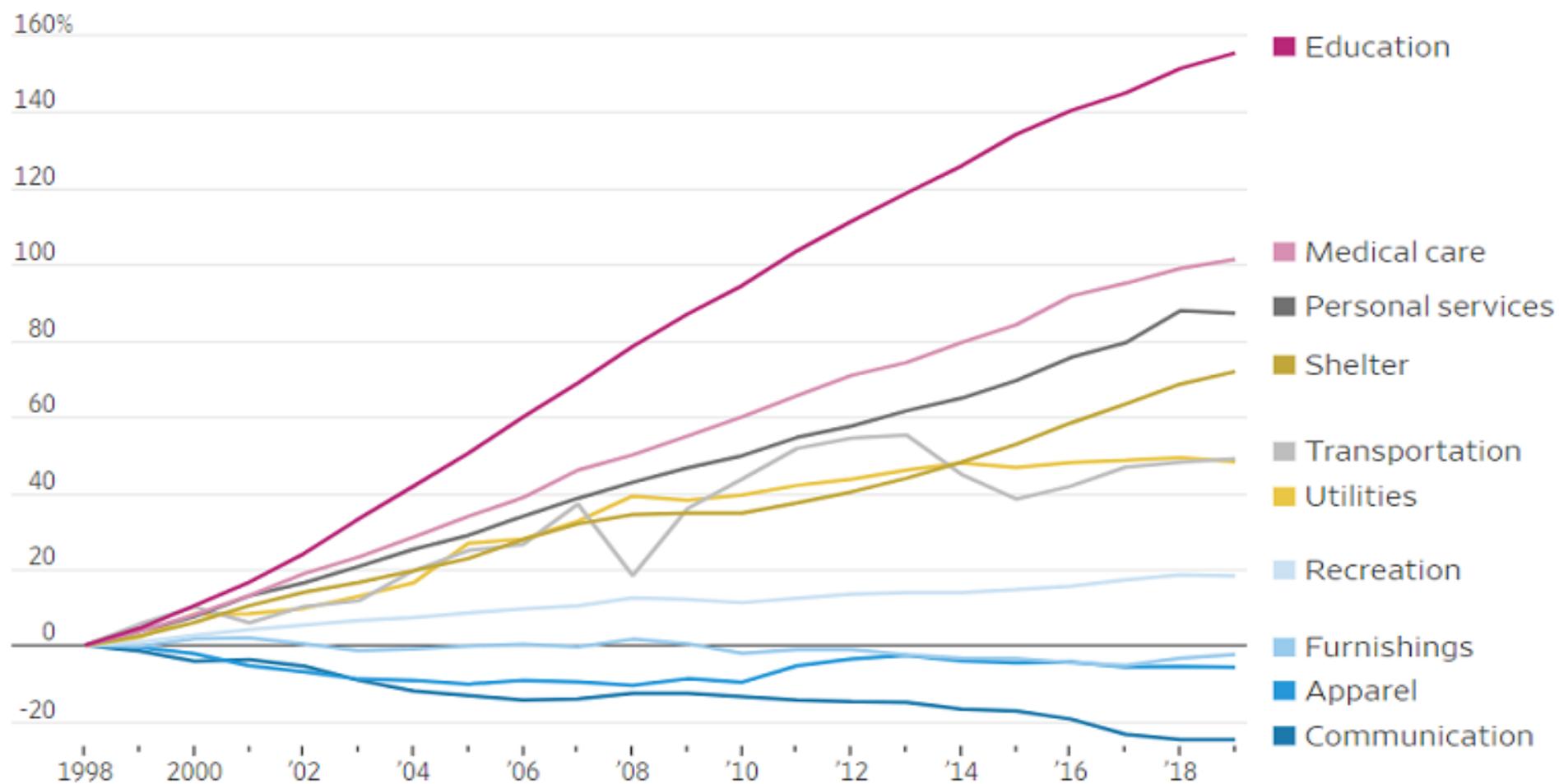
Neither the Fed nor investors seem worried about inflation, and they are probably right

By *Jon Sindreu*

Aug. 4, 2019

## Consumer prices rise at wildly different rates depending on the product

Cumulative change in U.S. consumer prices



Source: Bureau of Labor Statistics

# Japan's Government Is Undermining its Own Efforts to Boost Inflation

By Paul Jackson

March 26, 2019, 3:00 PM CDT

Japan relies heavily on imports for its energy requirements, leaving it highly exposed to swings in oil prices, which are a key driver of its core consumer price index.

Another large chunk is comprised of prices for things that typically require a nod from the government before they can rise, like hospital charges, public housing and train fares. Needless to say, politicians are loathe to back higher prices in these areas given years of wage stagnation in Japan.

Ironically for the BOJ, its ultra-low interest rate policy keeps mortgage rates down, depressing the rental component of CPI, which makes up more than 18 percent of the basket.

- **Context**
- **Measurement**
- **Theory**
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- **Conclusions**

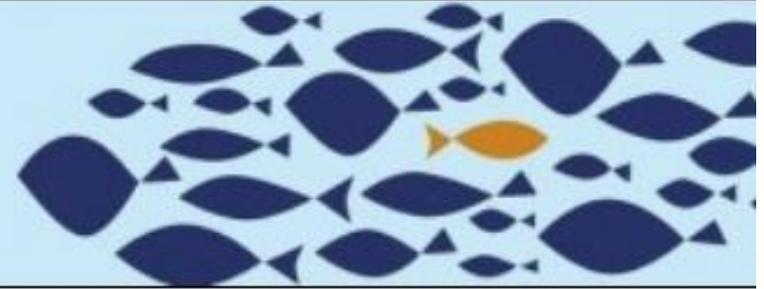
“To say that net output to-day is greater, but the price-level lower, than ten years ago or one year ago, is a proposition of a similar character to the statement that Queen Victoria was a better queen, but not a happier woman than Queen Elizabeth—a proposition not without meaning and not without interest, but unsuitable as material for the differential calculus. Our precision will be a mock precision if we try to use such partly vague and non-quantitative concepts as the basis of a quantitative analysis.”

Keynes, GT, p. 40

# So ... what's the point of policy and the price index?

- What if a cure for cancer raises inflation?
- If prices are rising faster in communities with larger concentrations of the historically marginalized & disenfranchised ...
  - What if these prices are not heavily weighted in the headline/core/trimmed mean/median, etc., price index policy makers use?
  - What if these prices ARE heavily weighted in policy makers' favored price index?
- Is it a coincidence that “excessive wage growth” is historically the main thing economists & central bankers worry about?

# New Economic Perspectives



[← Dynamic Scoring—a First Step?](#)

[Leonhardt is Wrong about Liberals,  
Conservatives and the Family Debate →](#)

## Replacing the Budget Constraint with an Inflation Constraint

Posted on [January 12, 2015](#) by [Scott Fullwiler](#) | [18 Comments](#)

By [Scott Fullwiler](#)

# CBO Now

- **Projects deficit effects of policy proposals**
- **Assumes unemployment converges to 'natural rate'**
- **Assumes real GDP converges to 'potential'**
- **Assumes inflation converges to low rate**
- **Assumes Fed sets interest rate on government debt**

# A Better CBO

- Project pricing effects of policy proposals
- Connect pricing effects to price index(es)
- The necessary 'pay for' is the rise projected price index increase relative to target
- Possible 'pay fors' go well beyond traditional taxing/spending, consistent with how price indexes actually work
- Measures to monitor in real time—cyclical and acyclical

# An MMT response on what causes inflation

First, when we suggest that a budget constraint be replaced by an inflation constraint, we are not suggesting that all inflation is caused by excess demand. Indeed, from our view, excess demand is rarely the cause of inflation. Whether it's businesses raising profit margins or passing on costs, or it's Wall Street speculating on commodities or houses, there are a range of sources of inflation that aren't caused by the general state of demand and aren't best regulated by aggregate demand policies.

Thus, if inflation is rising because large corporations have decided to use their pricing power to increase profit margins at the expense of the public, reducing demand may not be the most appropriate tool. The recent controversies over rising housing rents and drug prices demonstrate that we need alternative tools in place to manage the power of big business and ensure their pricing policies are consistent with public purpose. The experience of the last decade inadvertently reflects the potential strength of alternative inflation-fighting tools, as one of the reasons inflation has remained below target for the past ten years is legislated cuts to medicare and medicaid payments.

The National Inflation Control Team consists of: 1. the Central Inflation Control Team; 2. the Provincial Inflation Control Team; and 3. the Regent/City Inflation Control Team.

# President Jokowi Signs Presidential Decree on National Inflation Control Team

Date 21 Agustus 2017

In the meantime, the composition of the Central Inflation Control Team consists of: a. Chairman: Coordinating Minister for the Economy; b. Vice Chairman I: Governor of Bank Indonesia; c. Vice Chairman II: Minister of Finance; d. Vice Chairman III: Minister of Home Affairs.

Members: 1. Minister of Trade; 2. Minister of Agriculture; 3. Minister of Transportation; 4. Minister of Energy and Mineral Resources; 5. Minister of National Development Planning /Head of National Development Planning Agency (Bappenas); 6. Minister of Public Works and Public Housing; 7. Minister of State-Owned Enterprises; 8. Cabinet Secretary; 9. Chief of the National Police of the Republic of Indonesia. F. Secretary: Deputy for Macro Economic Coordination and Finance, Coordinating Ministry for the Economy.

In addition, the Provincial Inflation Control Team has the following tasks: a. Collect data and information on the development of prices of crucial and essential goods and services at the provincial level; b. Prepare inflation control policies at the provincial level by taking into account the national inflation control policies; c. Make efforts to strengthen the logistics system at the provincial level; d. Coordinate with the Central Inflation Control Team and the Regency/City Inflation Control Team; and/or e. Carry out other measures in the context of resolving obstacles and issues of inflation control at the provincial level.

Moreover, the Regency/City Inflation Control Team has the task: a. Collect data and information on the development of prices of crucial and essential goods and services at the Regency/City level; b. Develop inflation control policies by paying attention to the national inflation control policies and inflation control at the provincial level; c. Make efforts to strengthen Regency/City logistics systems; d. Coordinate with the Central Inflation Control

# Lots of Automatic Stabilizers

- Increase number of tax brackets, indexed on average to inflation target
- Index government purchases, transfers, tax expenditures, tax credits, etc. to inflation target on average
- Triggers for engaging and thresholds for winding down discretionary automatic stabilizers such as transfers to states, tax cuts, income transfers, and other spending
- Framework for offsetting state/local governments' cyclical budget shortfalls (provided, say, structural budgets are balanced, or whatever)
- Job Guarantee, & index the wage to inflation target on average (+ some measure of trend productivity)

# Financial Stabilization

- From a Minskyan perspective, adjusting short-term rates to manage the economy is destabilizing
- Many ways already in place in numerous countries to go beyond adjusting short-term, risk-free interest rates to regulate the QUALITY of credit, including adjusting margins of safety and haircuts
- What government & CB allow in the expansion will be taken onto their financial statements in the next crisis
- A complementary tool (from RBNZ research) is for central bank to adjust interest tax procyclically on targeted loans by quality/geography/etc
- Interest on domestic-currency national debt is a policy variable. Remove it from monetary policy transmission

- **Context**
- **Measurement**
  - **Theory**
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# Some takeaways ...

- **MV=PY, Phillips Curves, & ‘unemployment is low already’ are NOT settled or uncontroversial**
- **There is no theoretically pure “price level” in the real world. It’s necessarily a social/political construct**
- **Prices are inherently legal/administrative/regulatory/budgetary**
  - **Replace the budget constraint with an inflation constraint broadly implemented, while recognizing “the inflation rate” is itself inherently value-laden**

**Thank You!**

