

Macro for Managers

Mike Aguilar & Daniel Soques

Analysis in this presentation reflects data as of 24Oct2022

Purpose(s) of this presentation

1. Provide a few tools for you to track the economy and integrate into your business decision making process (i.e. complement bottoms up with top down)
2. Give our opinions on the outlook for the US economy

Intended Audience

No macro knowledge is required

Familiarity with profitability drivers

Non-technical, but sophisticated understanding of use cases



AGENDA

- Tips for Tracking the Economy
- Where are we today?
- Where might we be headed?

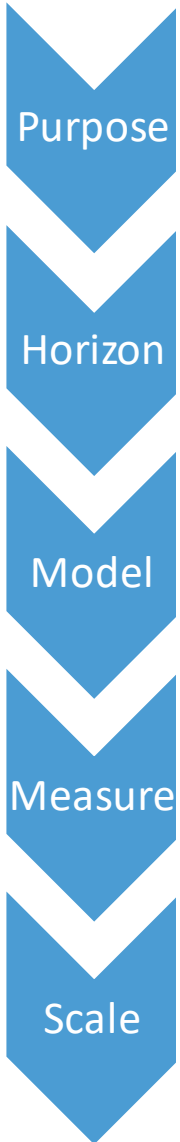


AGENDA

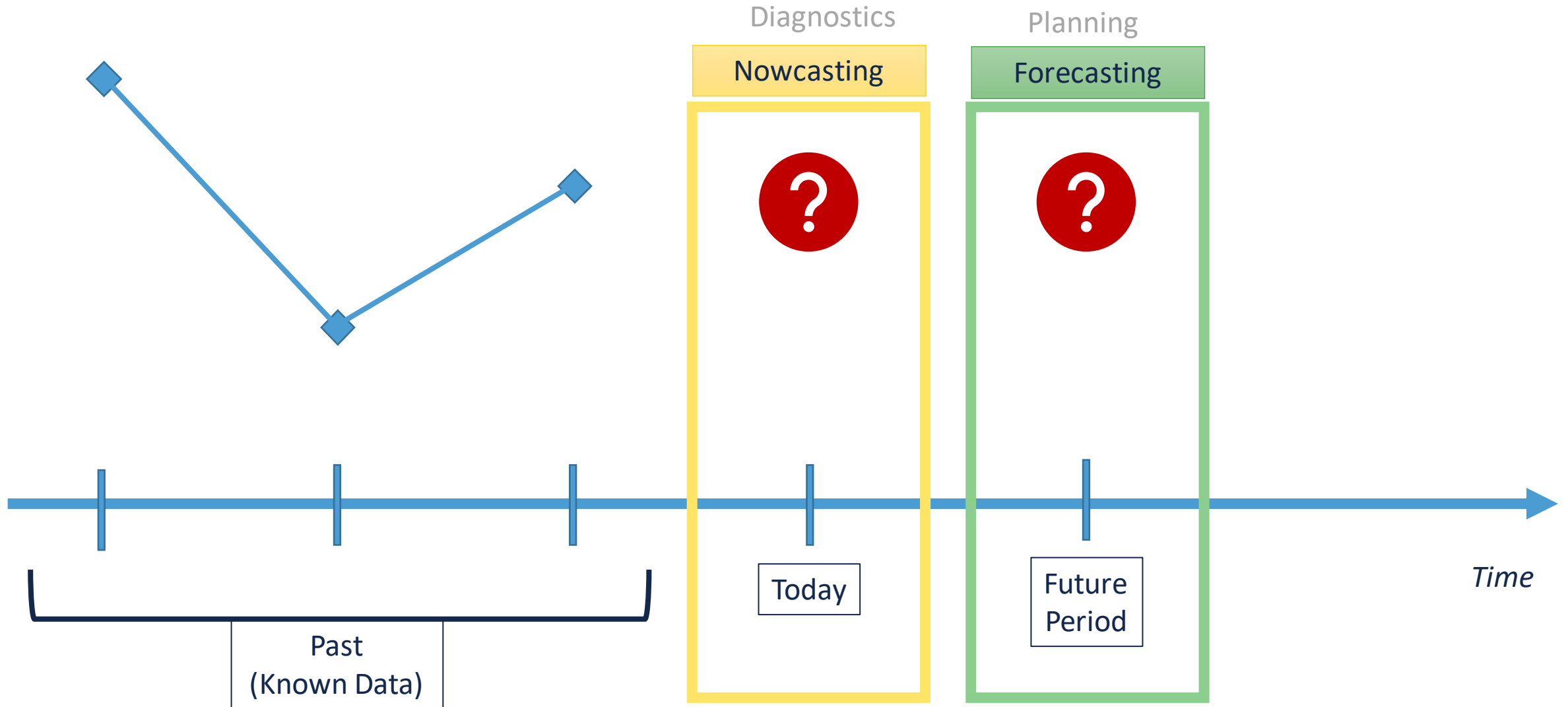
*This is where we'll
spend most of our time
today.*

- Tips for Tracking the Economy
- Where are we today?
- Where might we be headed?

Tips for tracking the economy



Forecasting or Nowcasting



Tips for tracking the economy

Purpose

- Are you forecasting or nowcasting?

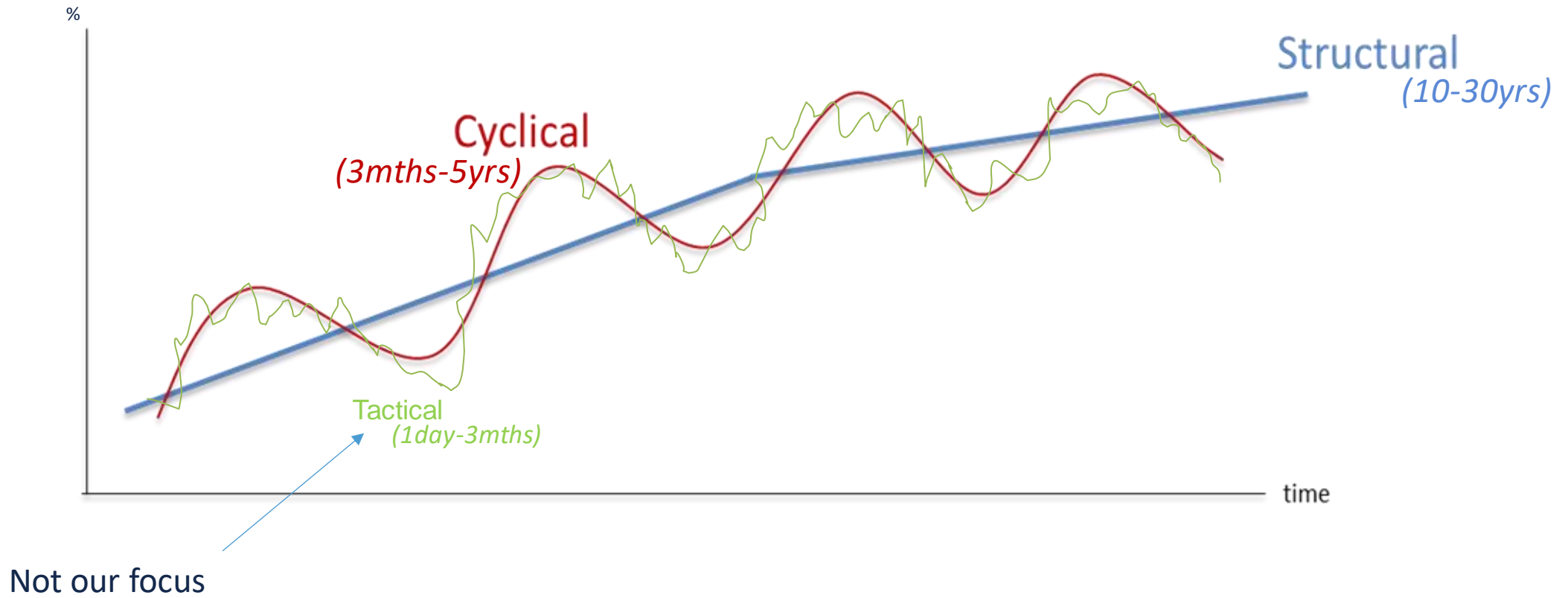
Horizon

Model

Measure

Scale

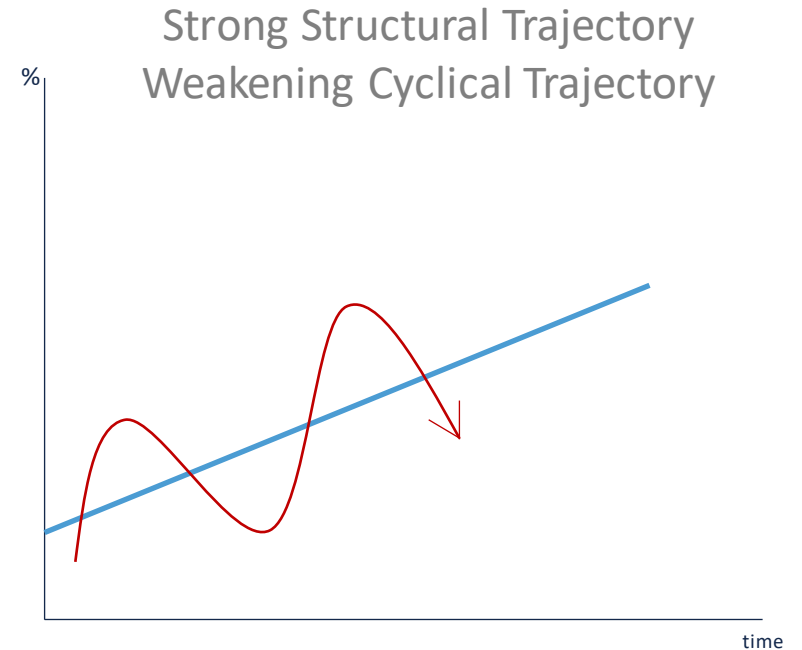
Structural or Cyclical



Why Horizon Matters

Structural Model Perspective

Cyclical Model Perspective



“It might be time to use free cash flow and cheap cost of capital to acquire new targets and proceed with expansion plans.”

*If I didn't know the structural path, I wouldn't have the conviction.
If I didn't know the cyclical path, I wouldn't be aware of this opportunity*

Tips for tracking the economy

Purpose

- Are you forecasting or nowcasting?

Horizon

- Are you planning for cyclical or structural activity ?

Model

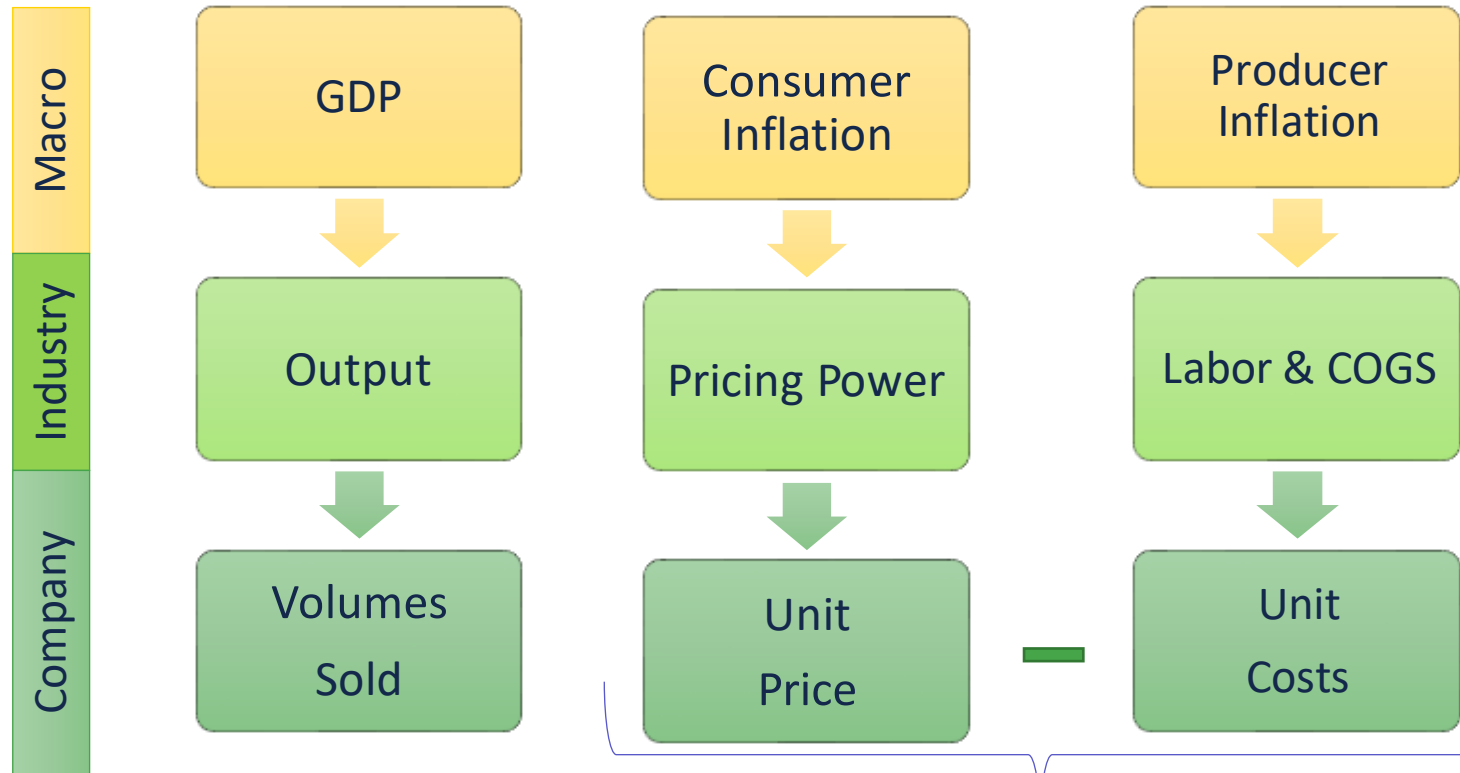
Measure

Scale

WARNING:

All models are wrong, but some are more useful than others

Connecting Macro to the Bottom Line



How are these macro drivers of profits determined for i) Cyclical, and ii) Structural?

Volumes

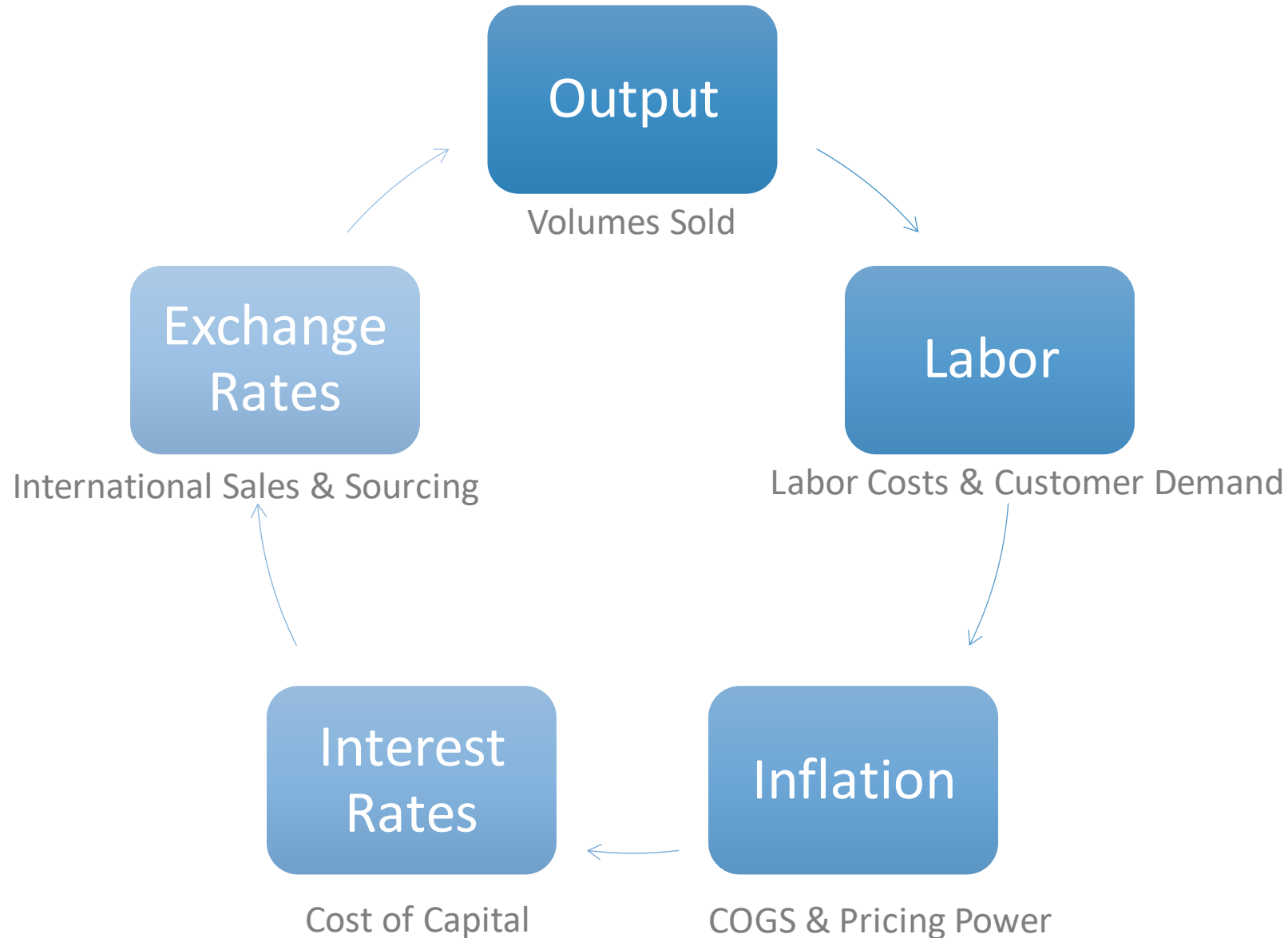


Margins



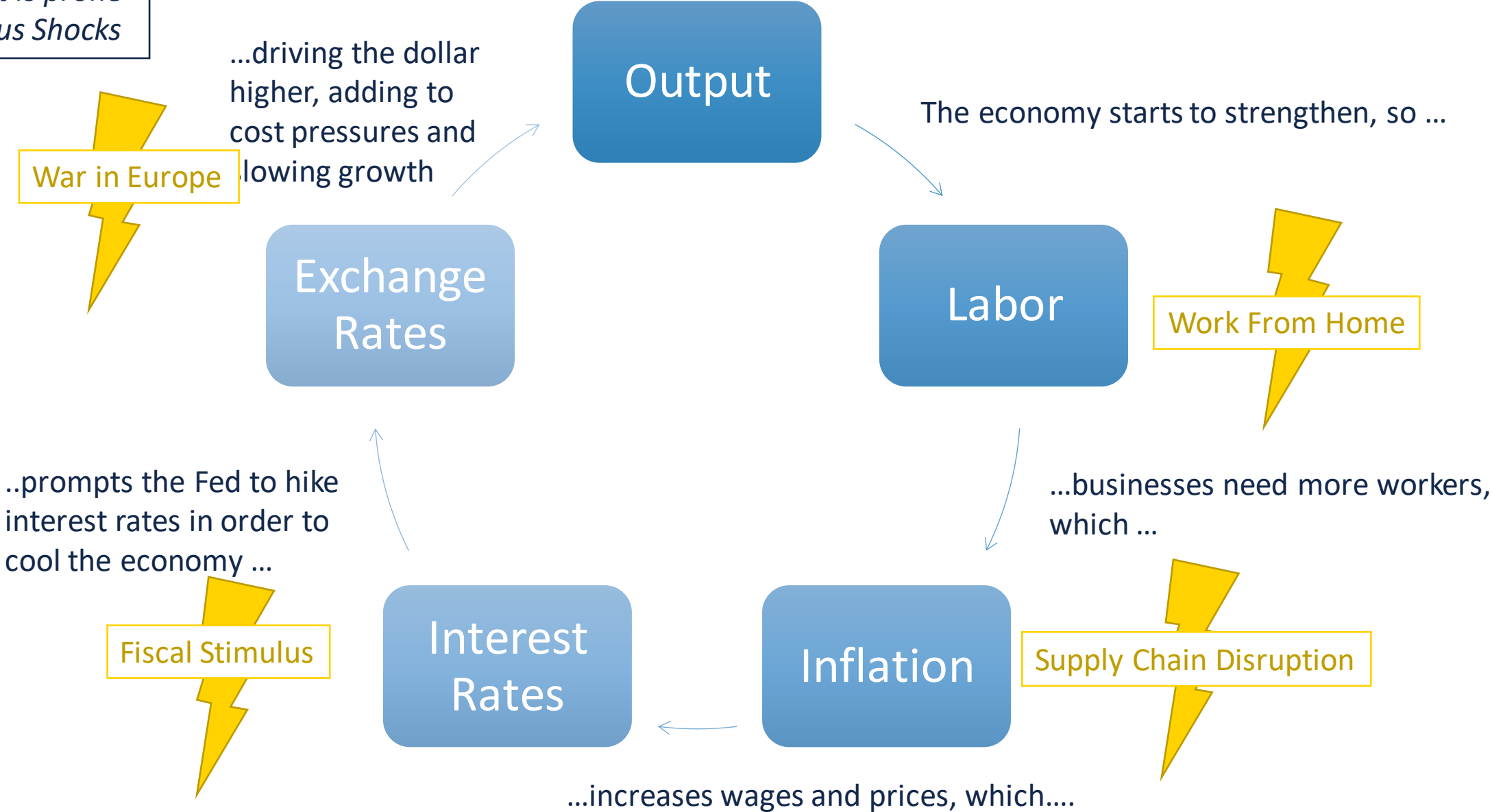
Profit

Cyclical Model of Activity

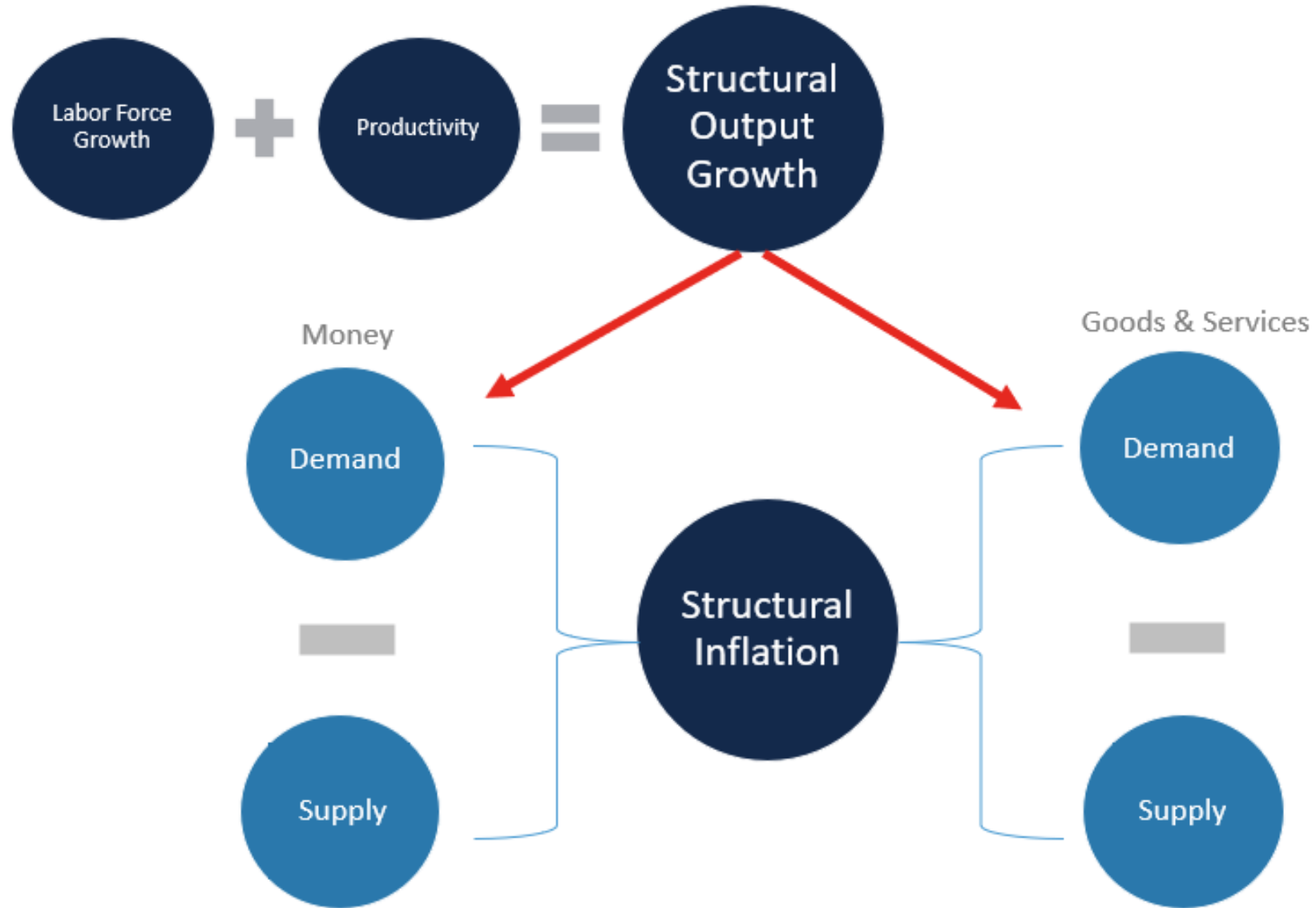


A Beautiful Machine

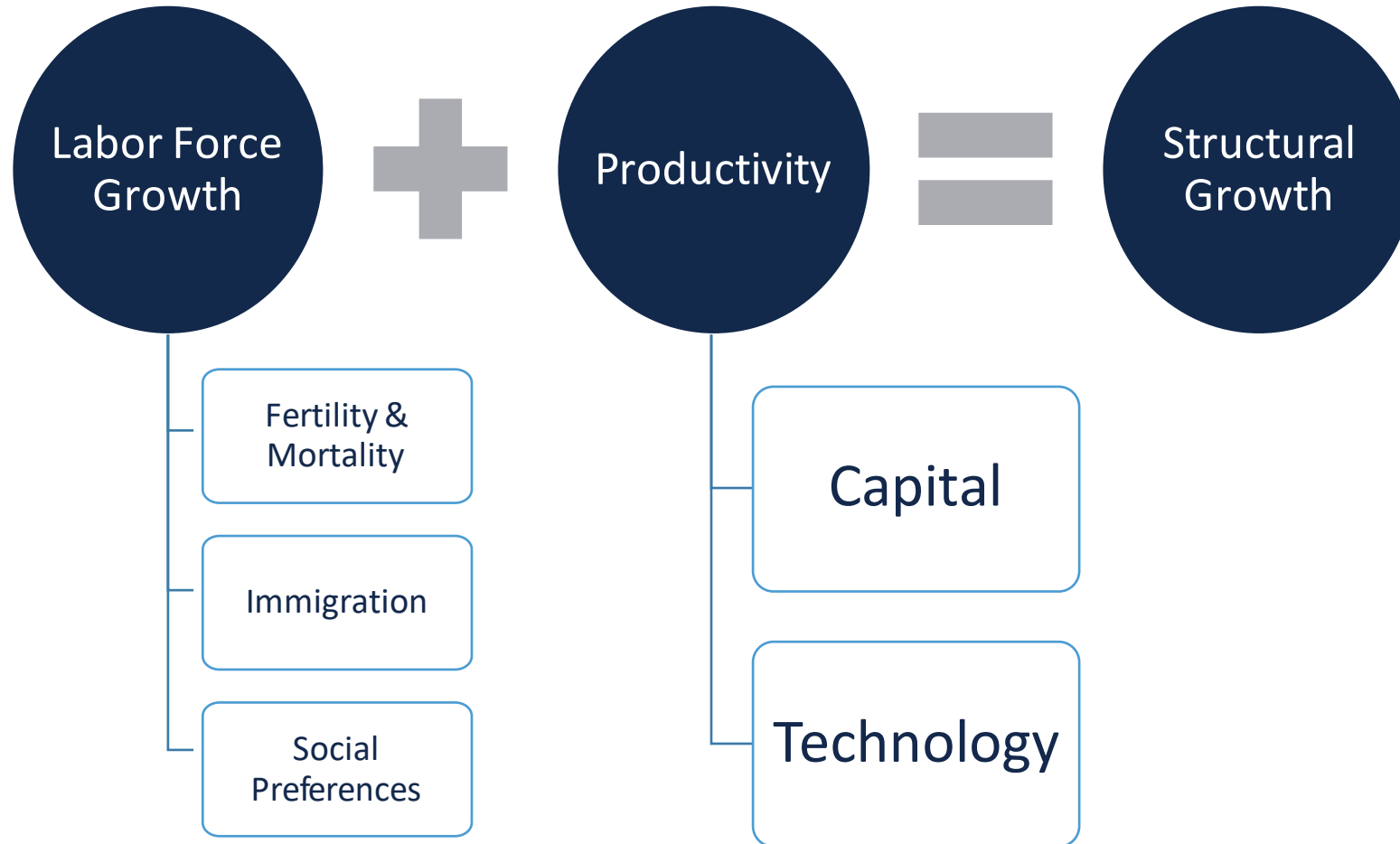
A Self Reinforcing and Self-Regulating process that is prone to Exogenous Shocks



Structural Model of Activity

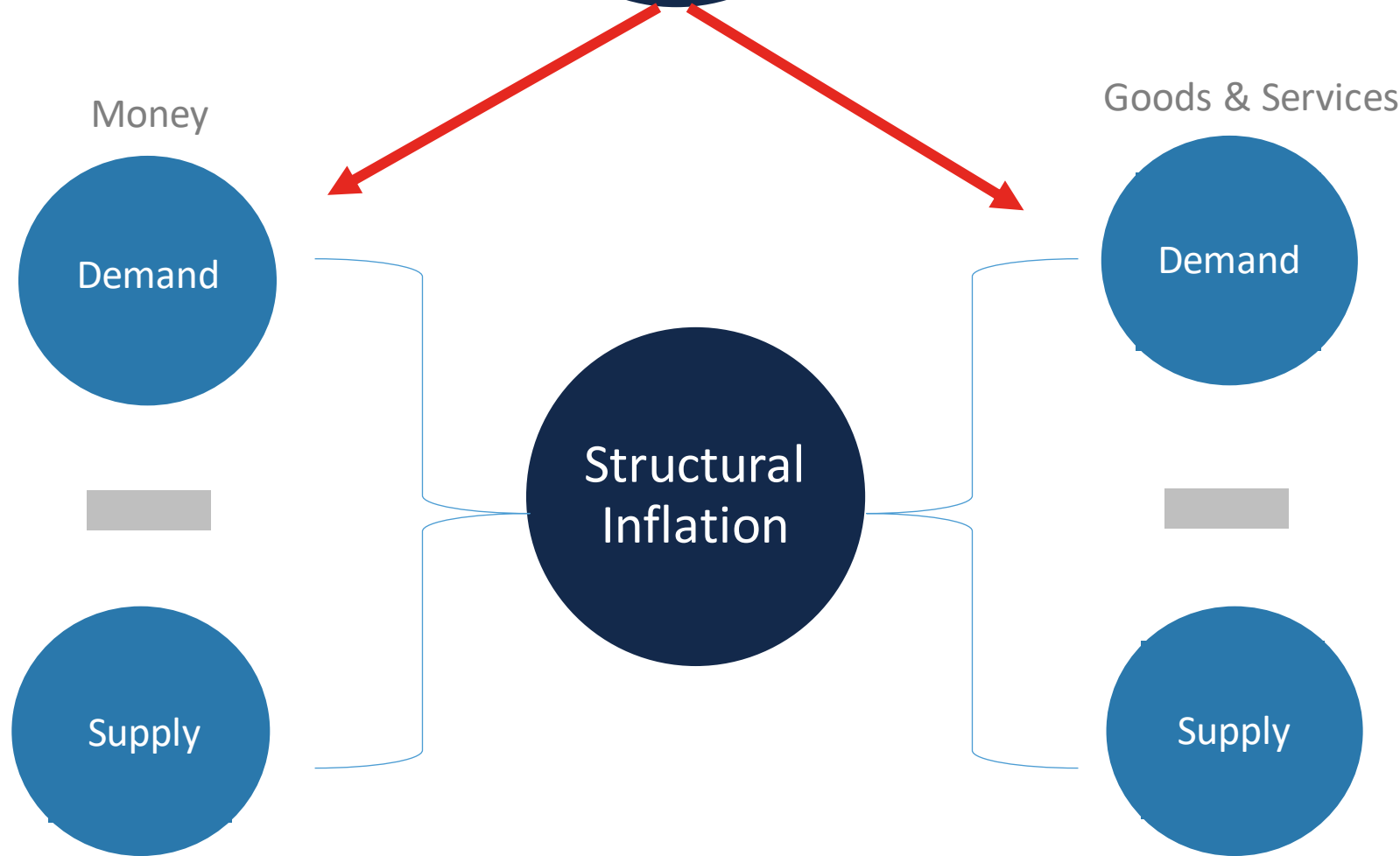


Structural Model of Activity





Structural Model of Activity



Tips for tracking the economy

Purpose

- Are you forecasting or nowcasting?

Horizon

- Are you planning for structural or cyclical activity ?

Model

- Model should be aligned with horizon and purpose

Measure

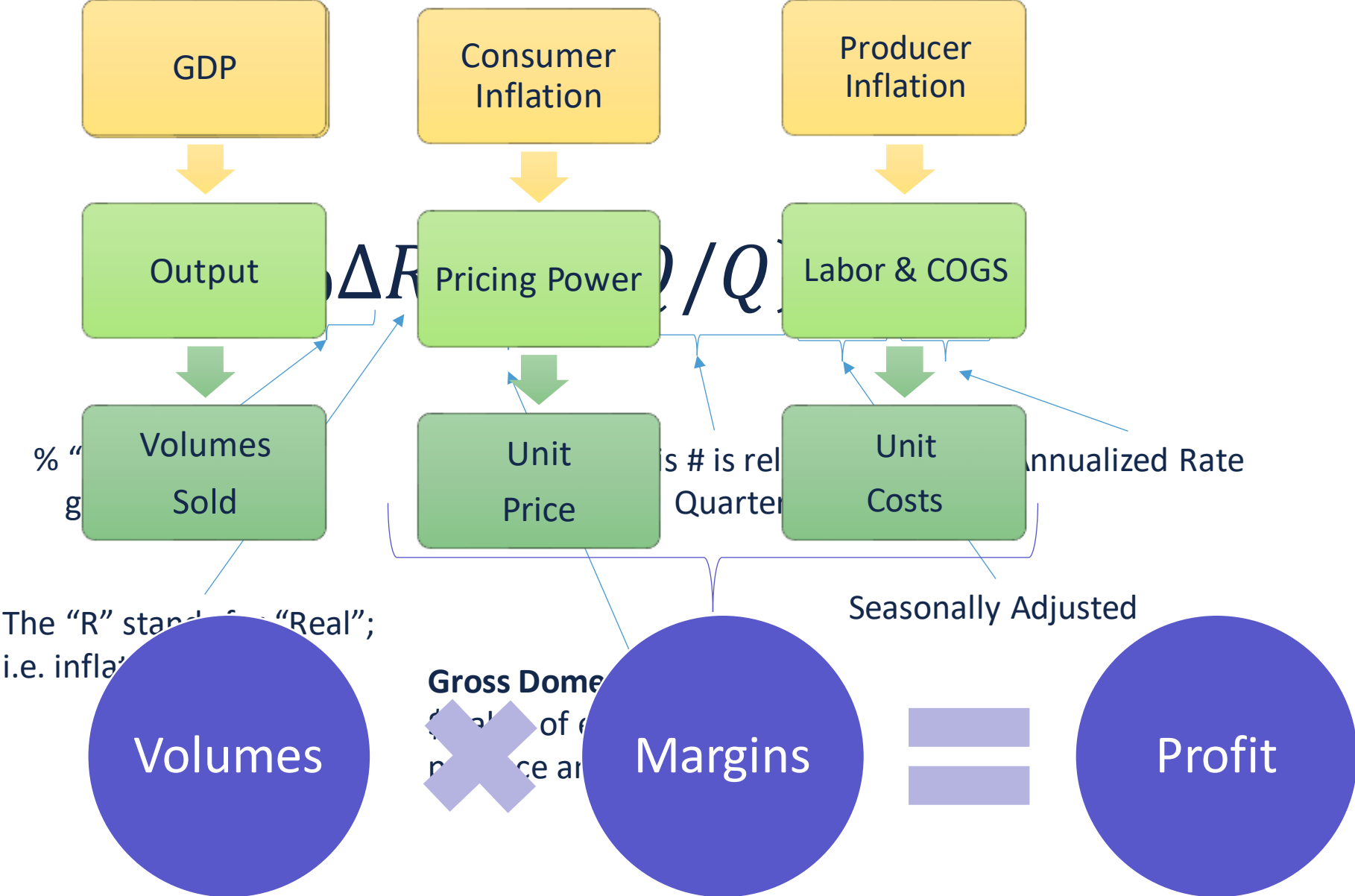
Scale

What are the KPIs for the Economy?

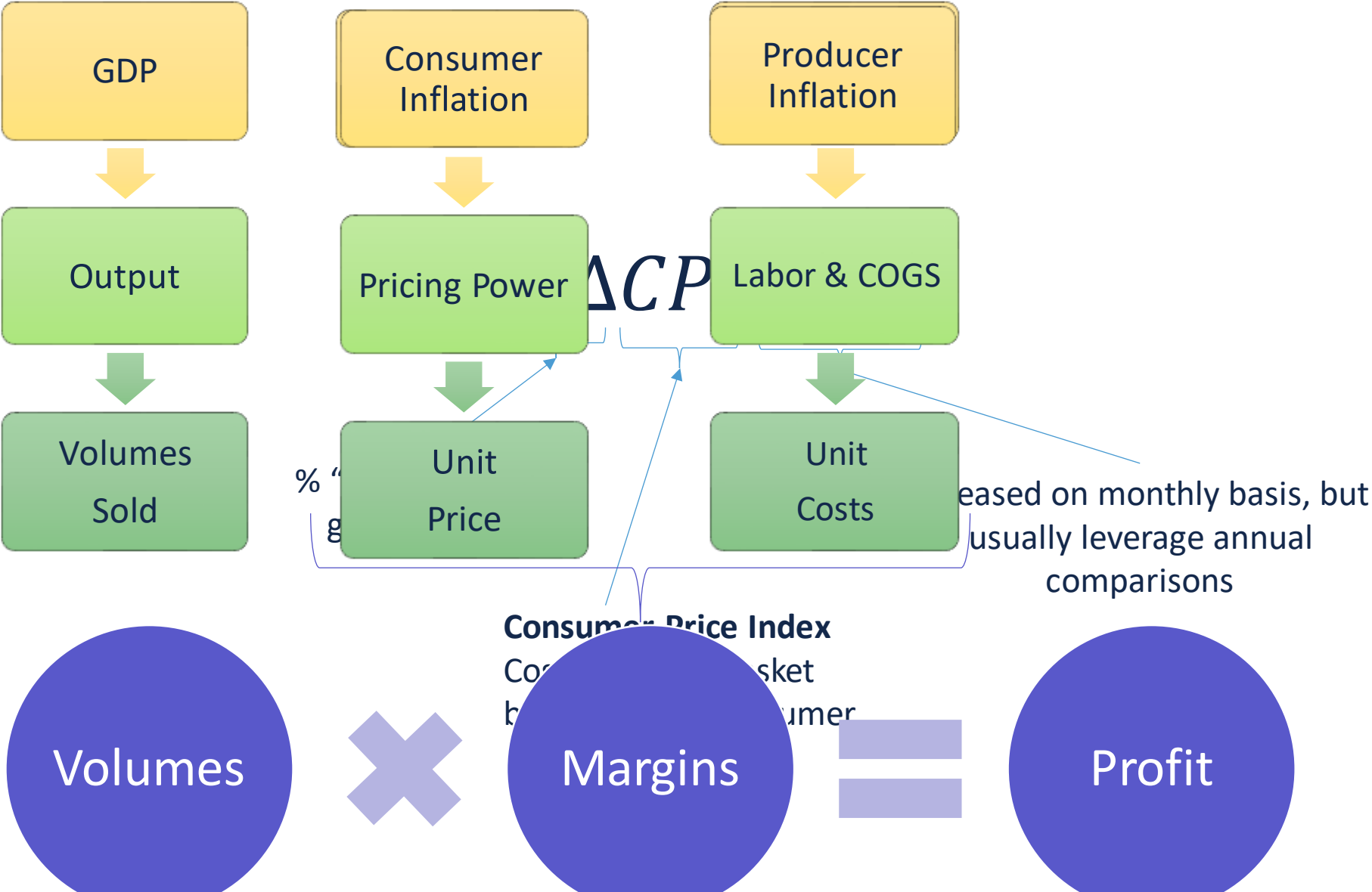
WARNING:

- All economic statistics are WRONG
- They are delayed
- They contain estimation errors
- Economic statistics are simply PROXIES of the truth
- Use with caution

What are the KPIs for the Economy?



What are the KPIs for the Economy?



Note: There are myriad measures of Consumer and Producer inflation. We list here only the most popular (CPI) measure.

A Free Repository of Macro Data



ECONOMIC DATA | ST. LOUIS FED

<https://fred.stlouisfed.org/>

AT A GLANCE

POPULAR SERIES

LATEST RELEASES

TOOLS

NEED HELP?

Consumer Price Index for All Urban Consumers: All Items
+8.2 % Chg. from Yr. Ago on Sep 2022

Real Gross Domestic Product
-0.6 % Chg. from Preceding Period on Q2 2022

Industrial Production Index
-0.2 % Chg. on Aug 2022

10-Year Treasury Constant Maturity Rate
3.97 % on 2022-10-13

U.S. / Euro Foreign Exchange Rate
0.9785 U.S. \$ to 1 Euro on 2022-10-07

Unemployment Rate
3.5 % on Sep 2022

All Employees: Total Nonfarm Payrolls
+263 Chg., Thous. of Persons on Sep 2022

Initial Claims
228,000 on 2022-10-08

Tips for tracking the economy

Purpose

- Are you forecasting or nowcasting?

Horizon

- Are you planning for structural or cyclical activity ?

Model

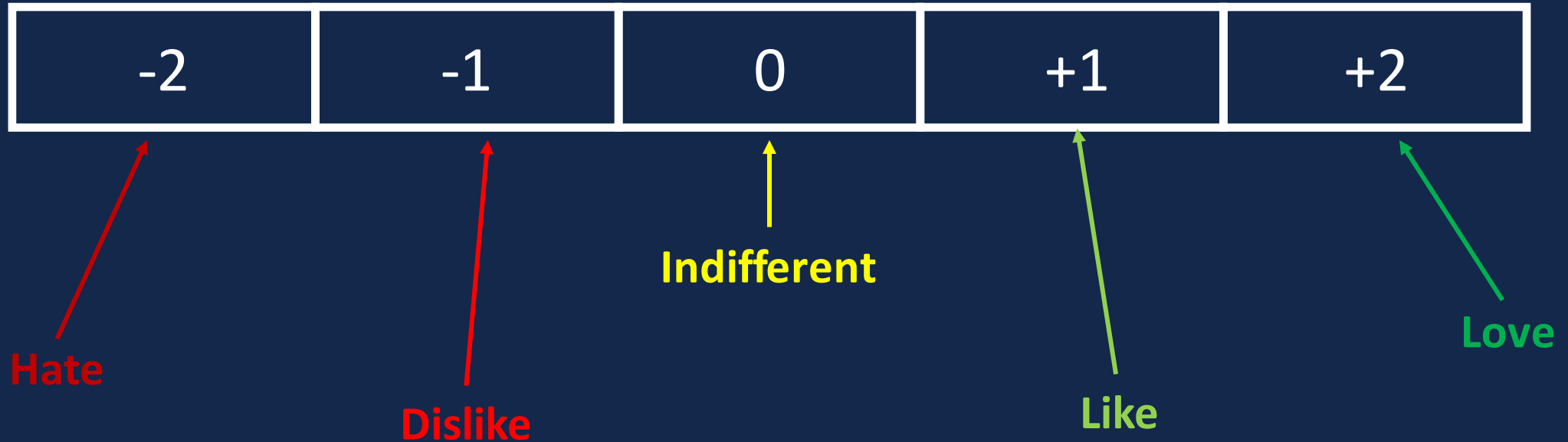
- Model should be aligned with horizon and purpose

Measure

- Identify key metrics to summarize relevant activity

Scale

Simple Scale



Benefits of a simple scale

- 1) Easy comparison across metric/countries/industries of interest
- 2) Permits a holistic view; i.e. qualitative information is important as well.

Simple Scale

Output

-2

-1

0

+1

+2

**We hate
recessions**

**We love strong
output growth**

Inflation

-2

-1

0

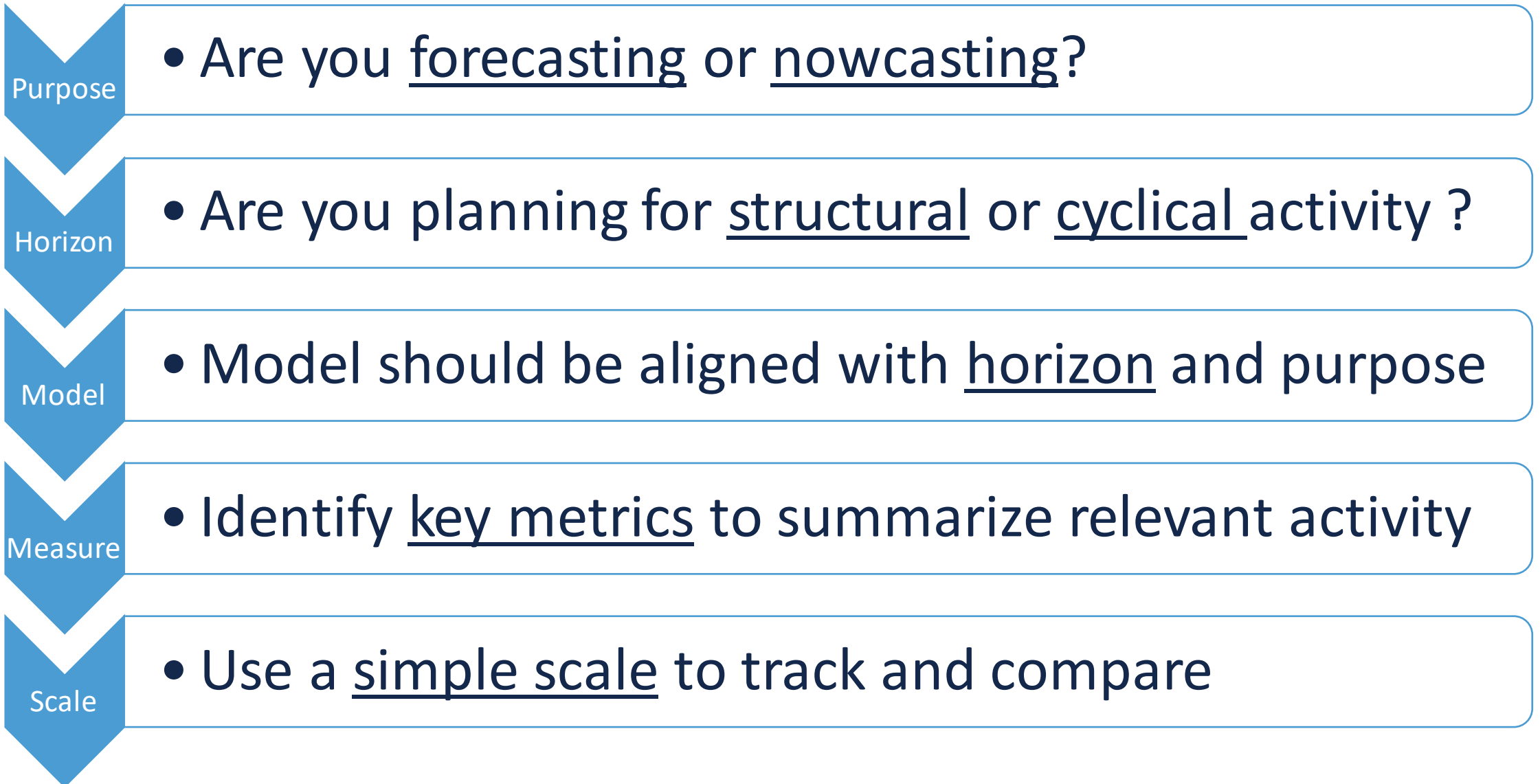
+1

+2

**We hate rapid
inflation or deflation**

**We love stable
prices**

Tips for tracking the economy





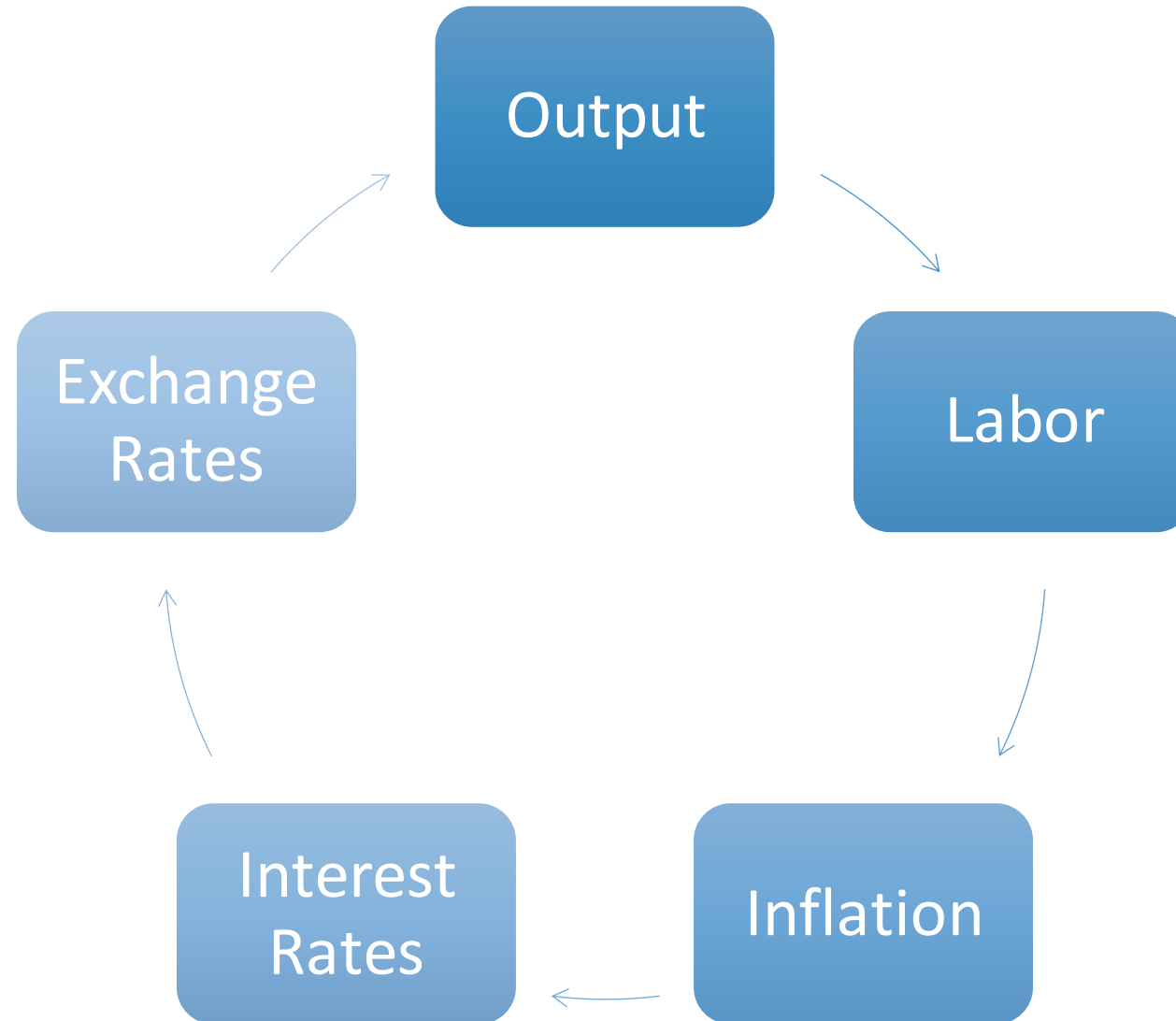
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- Where are we today?
 - Where are we in the Cycle?
 - What is our Structural baseline?
- Where might we be headed?

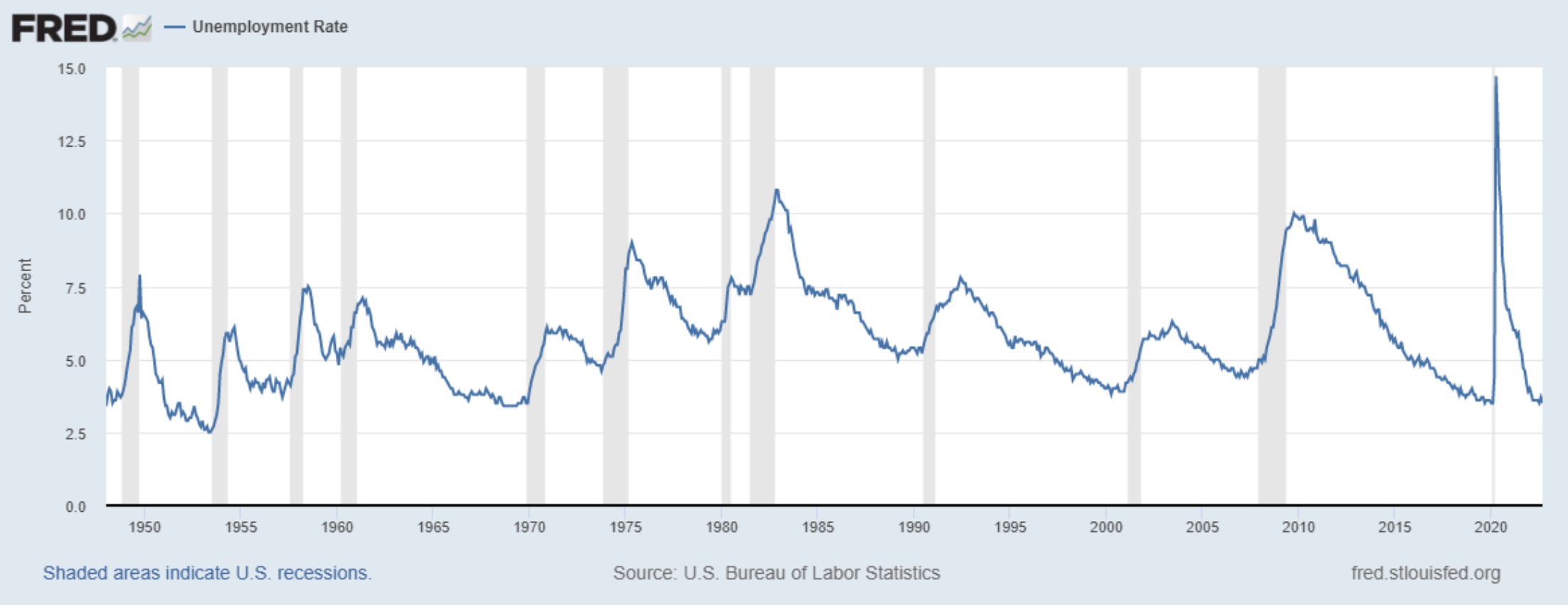
NOWCASTING – WHERE ARE WE IN THE CYCLE?

Cyclical

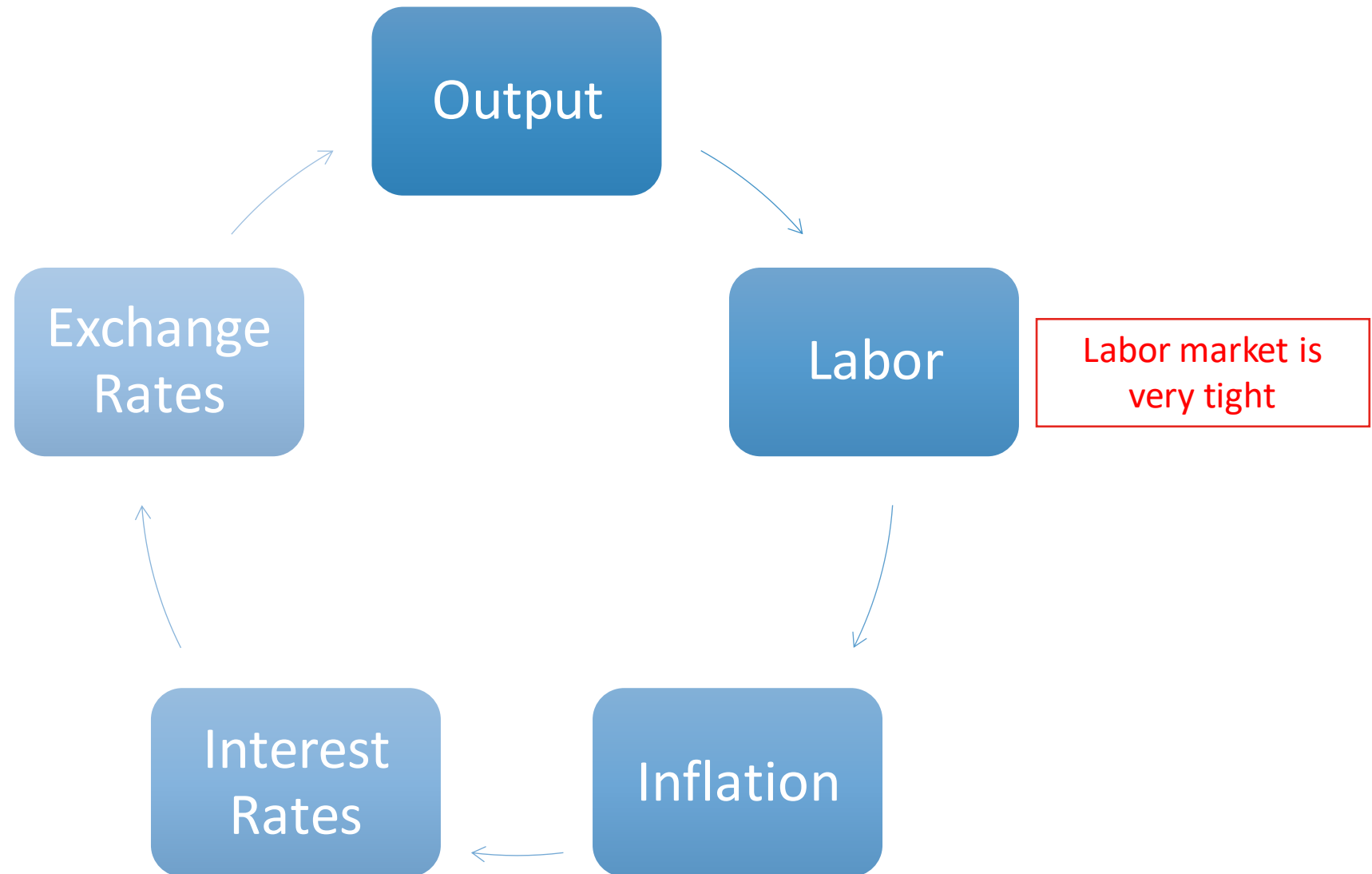
Where are we in the Cycle?



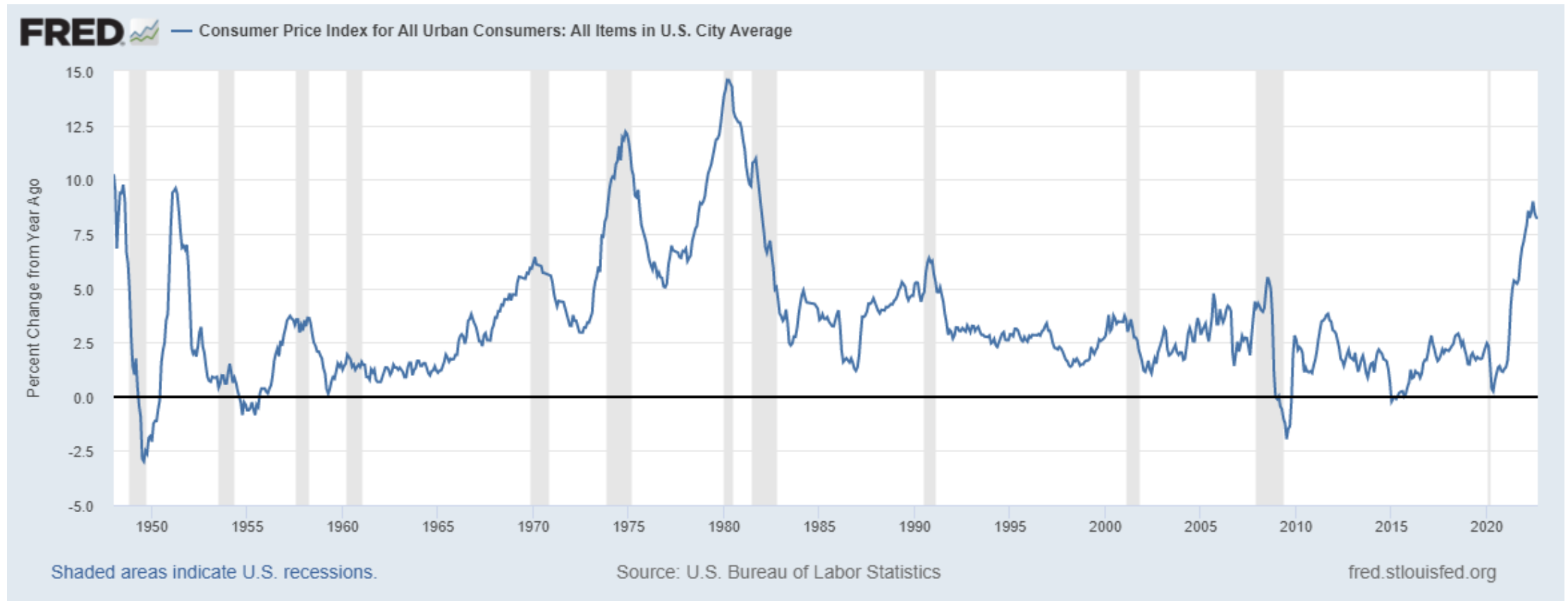
Where are we in the Cycle? - Labor



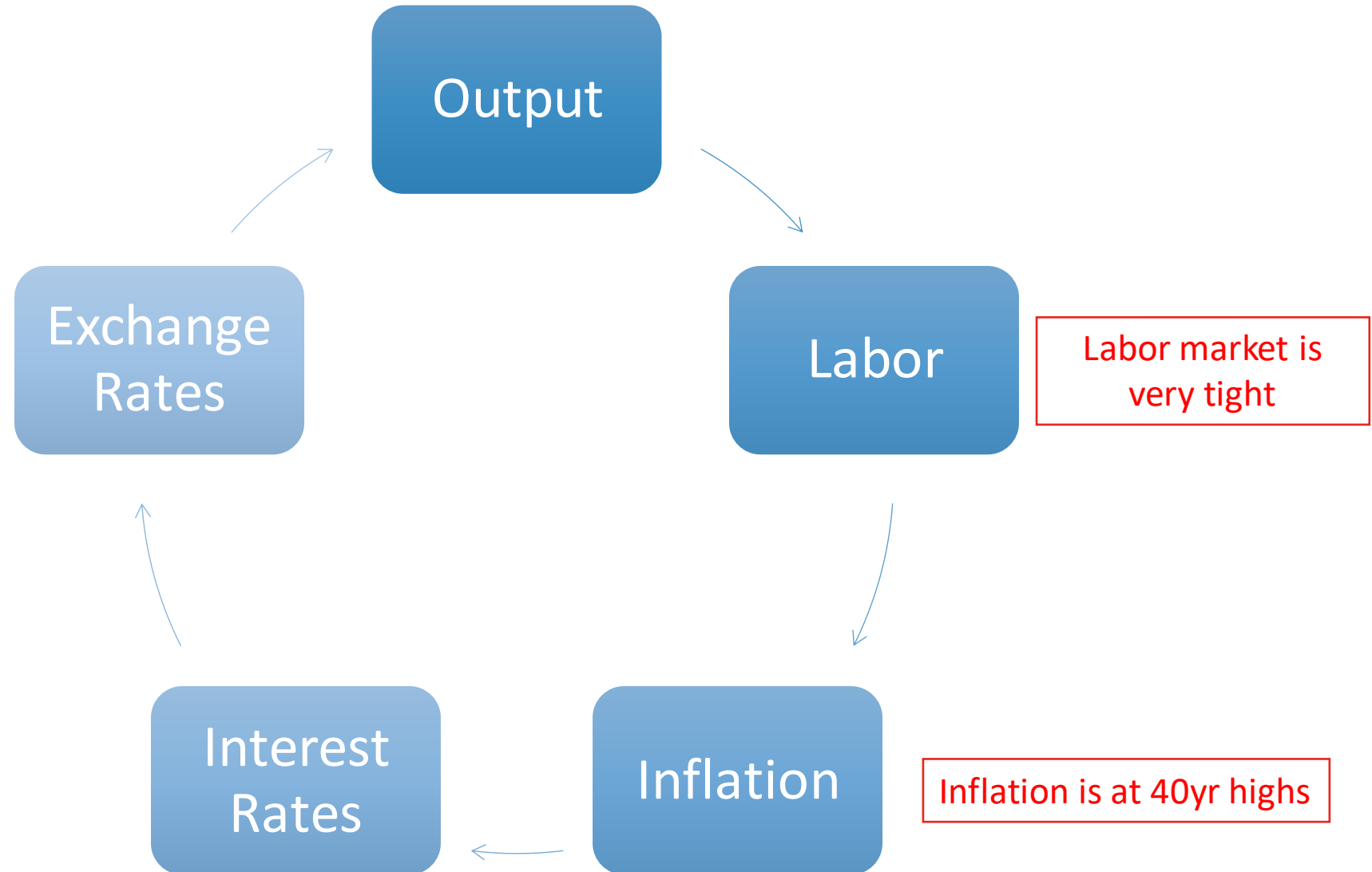
Where are we in the Cycle?



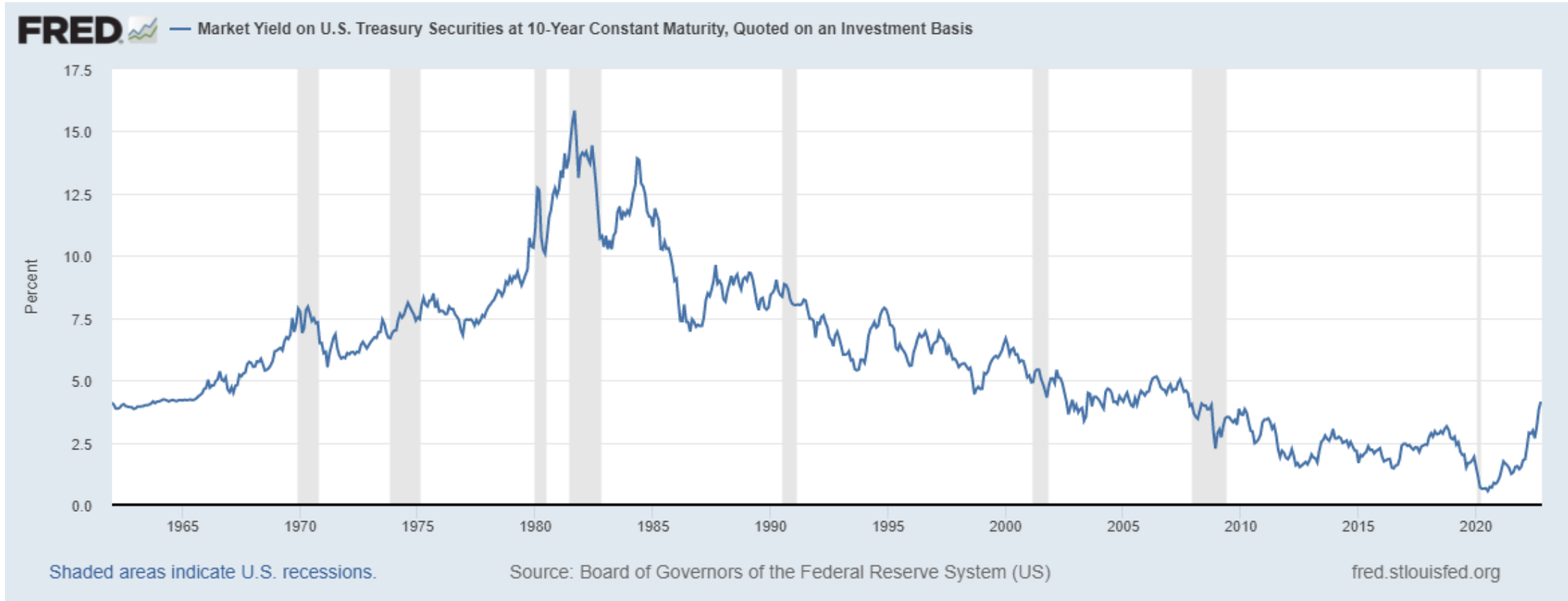
Where are we in the Cycle? - Inflation



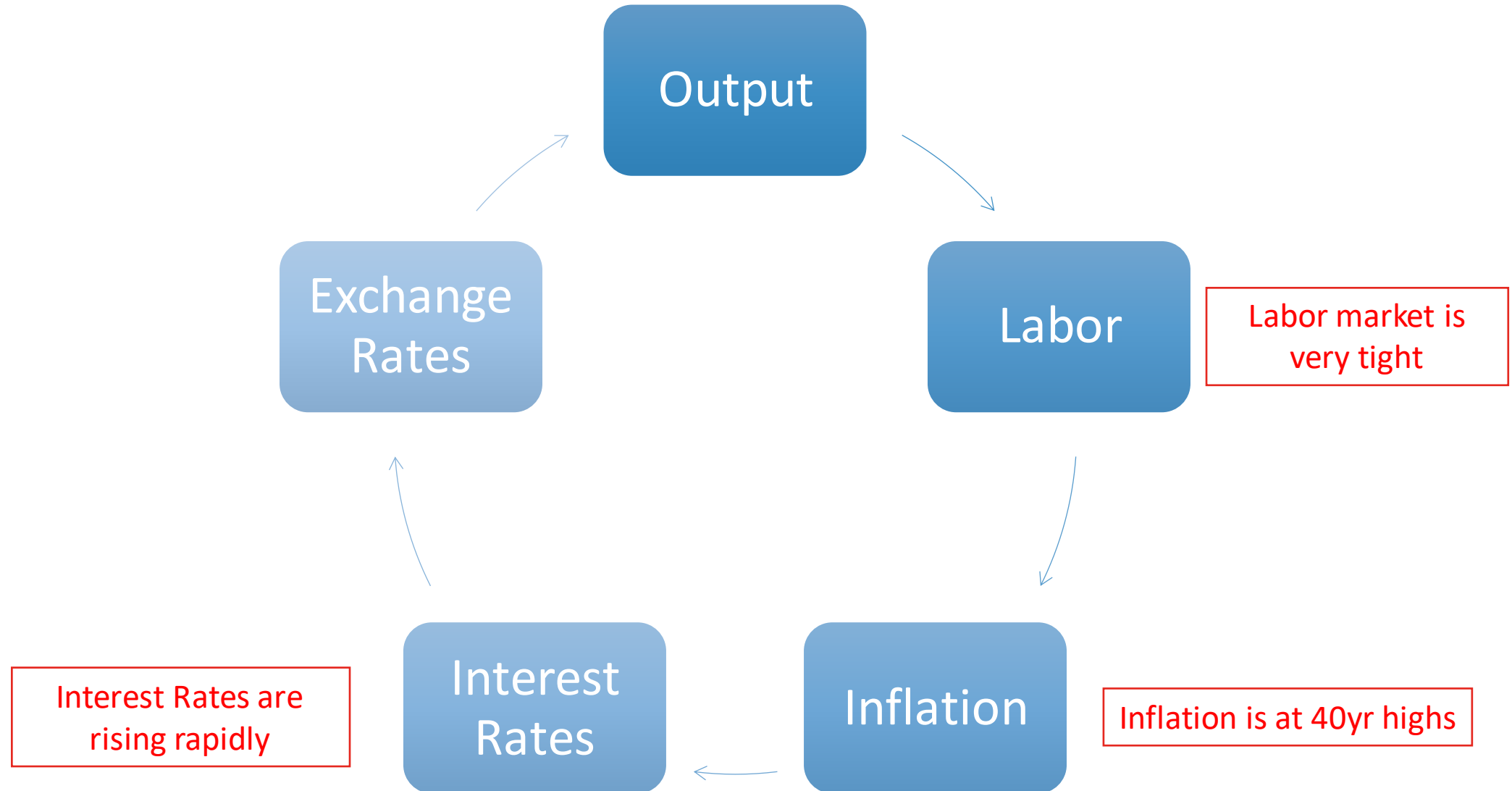
Where are we in the Cycle?



Where are we in the Cycle? – Interest Rates



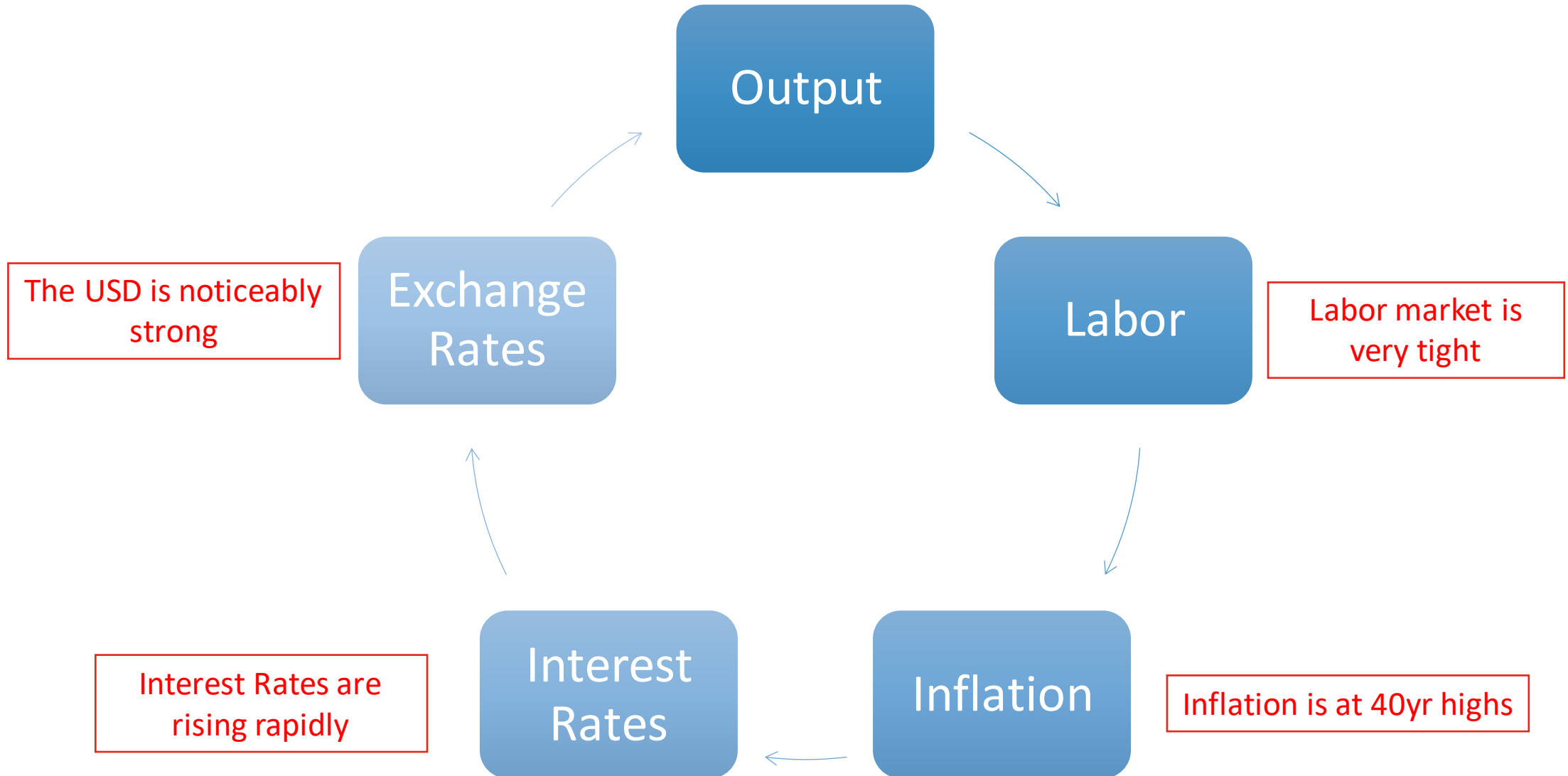
Where are we in the Cycle?



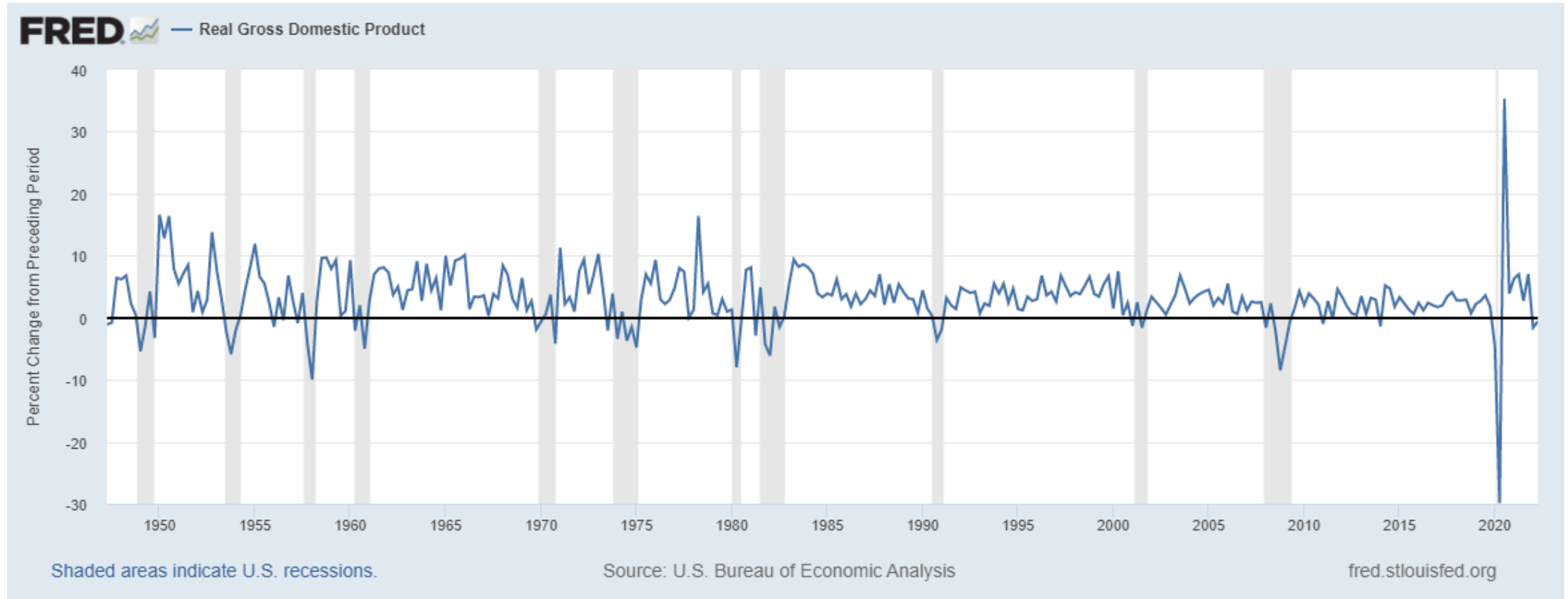
Where are we in the Cycle? – US Dollar



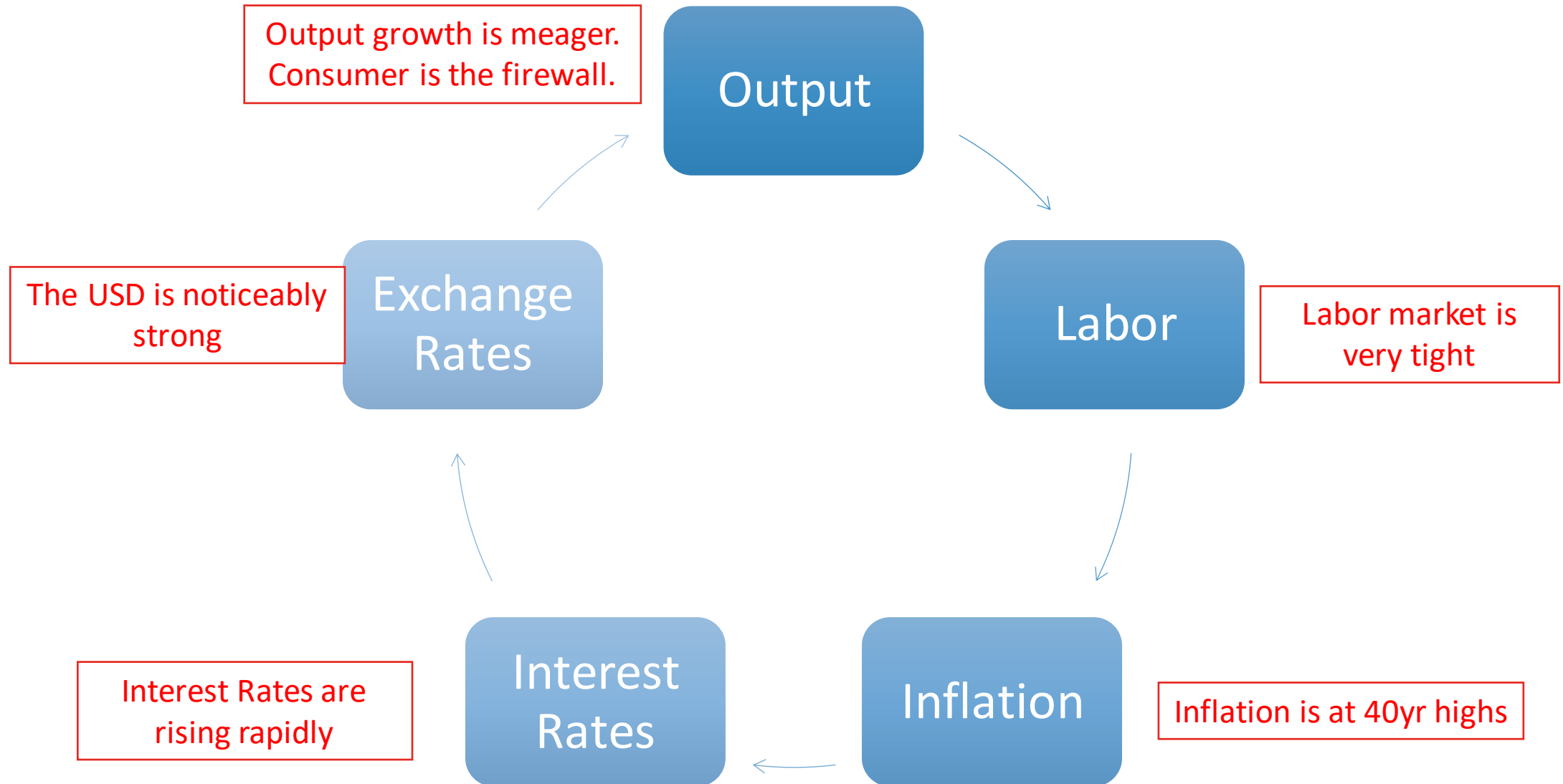
Where are we in the Cycle?



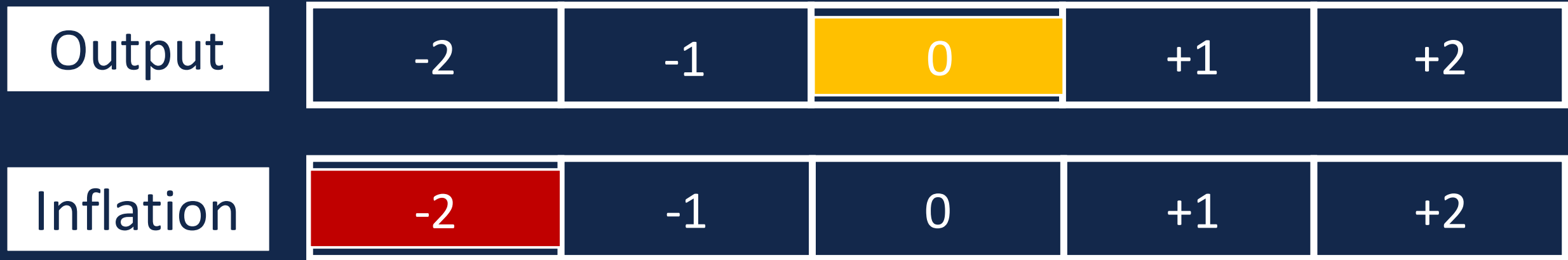
Where are we in the Cycle? – Output



Where are we in the Cycle?



Where are we in the Cycle?



Note: This is our subjective assessment.



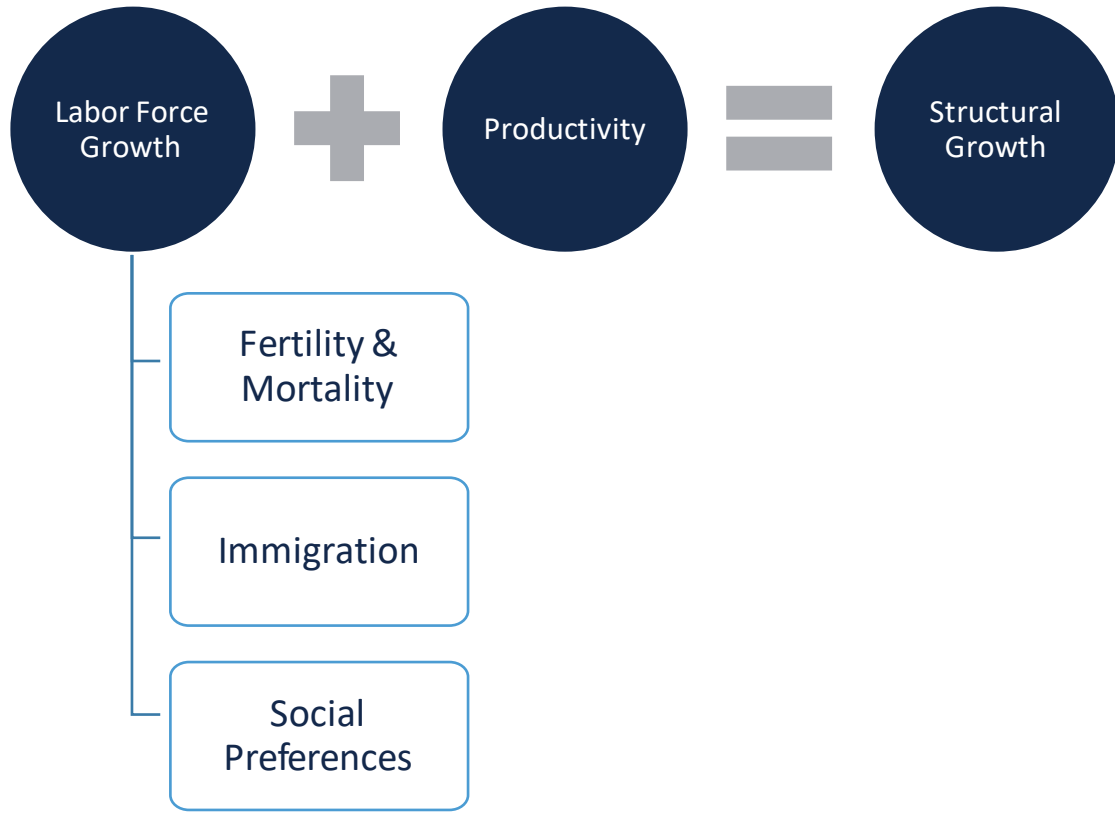
AGENDA

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- Where might we be headed?

NOWCASTING – WHAT IS OUR STRUCTURAL BASELINE?

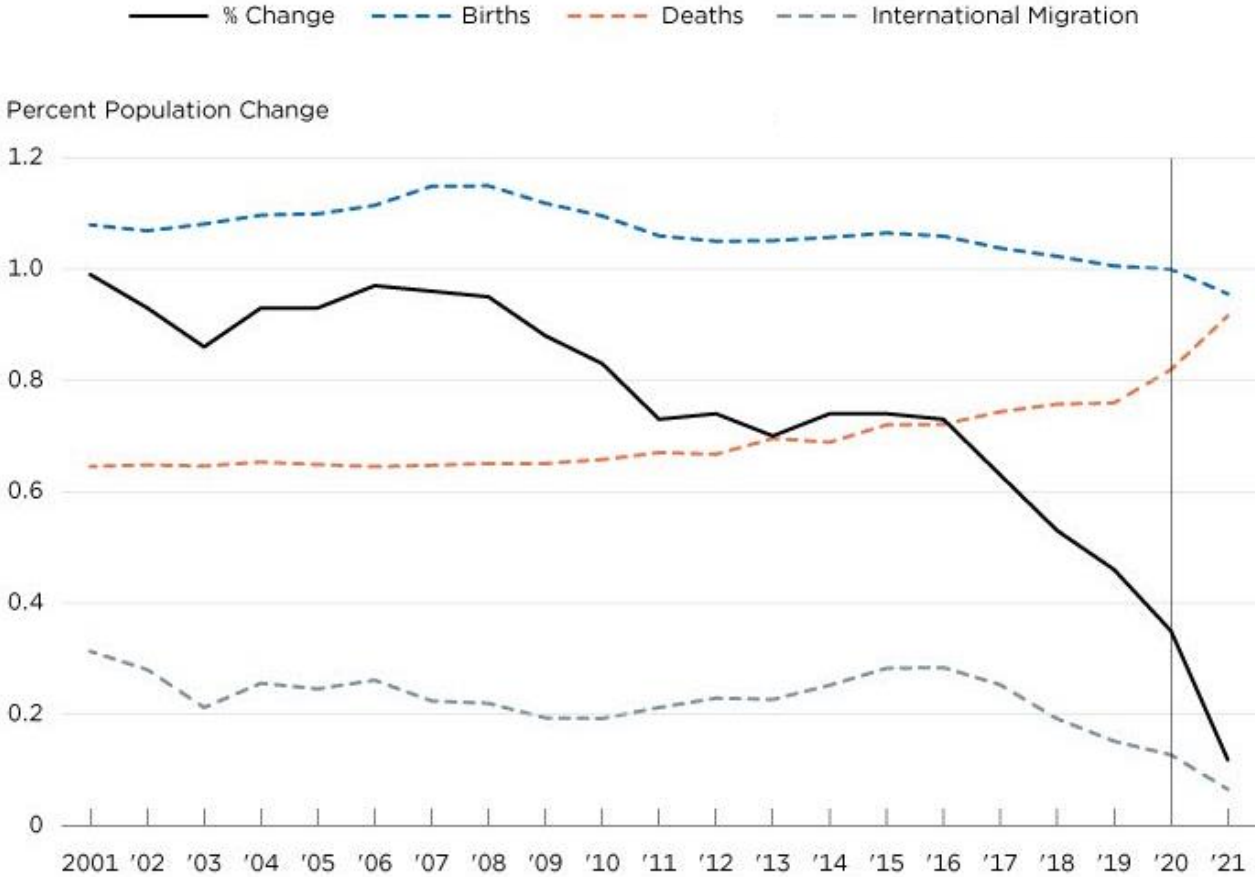
Structural

What drives the Structural Rate of Output Growth?



A slowdown in population growth...

Population Change and the Components of Change: 2001-2021

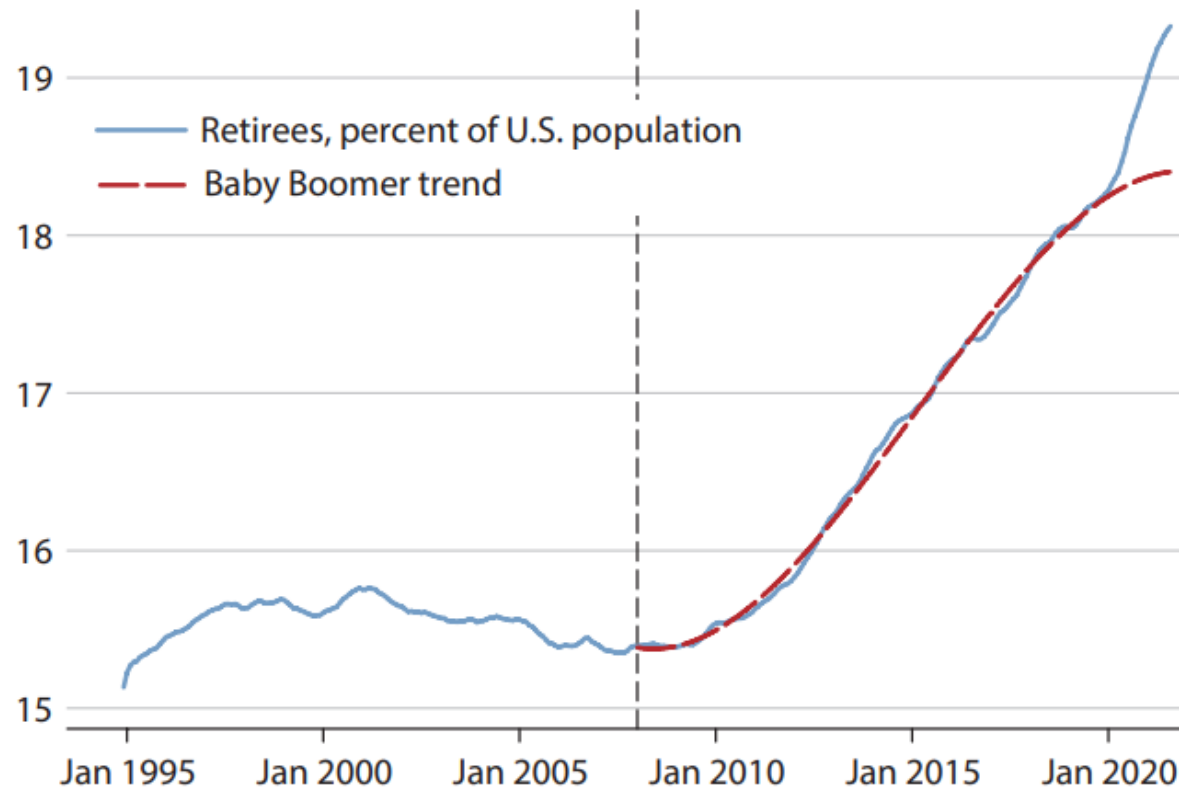


* Components of change include births, deaths and net international migration.
Note: Only data to the right of the line are from Vintage 2021.
Source: U.S. Census Bureau, Vintage 2020 Estimates; Vintage 2021 Estimates; 2000-2010 Intercensal Estimates.

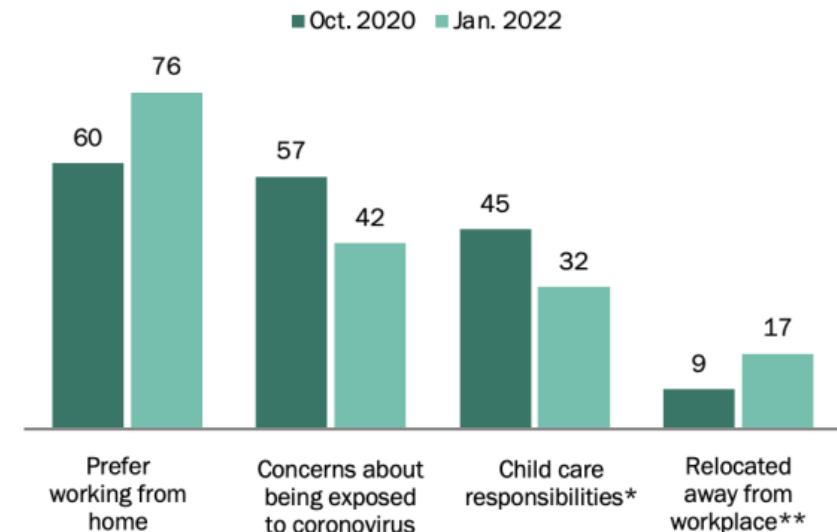
..and increase in retirements/social preferences..

Percentage of Retirees in the U.S. Population and the Baby Boomer Retirement Trend

Percent of U.S. population



Among employed adults whose workplace is currently open, % saying each is a **major reason** why they are working from home all or most of time



*Among those with children younger than 18.

**Either permanently or temporarily

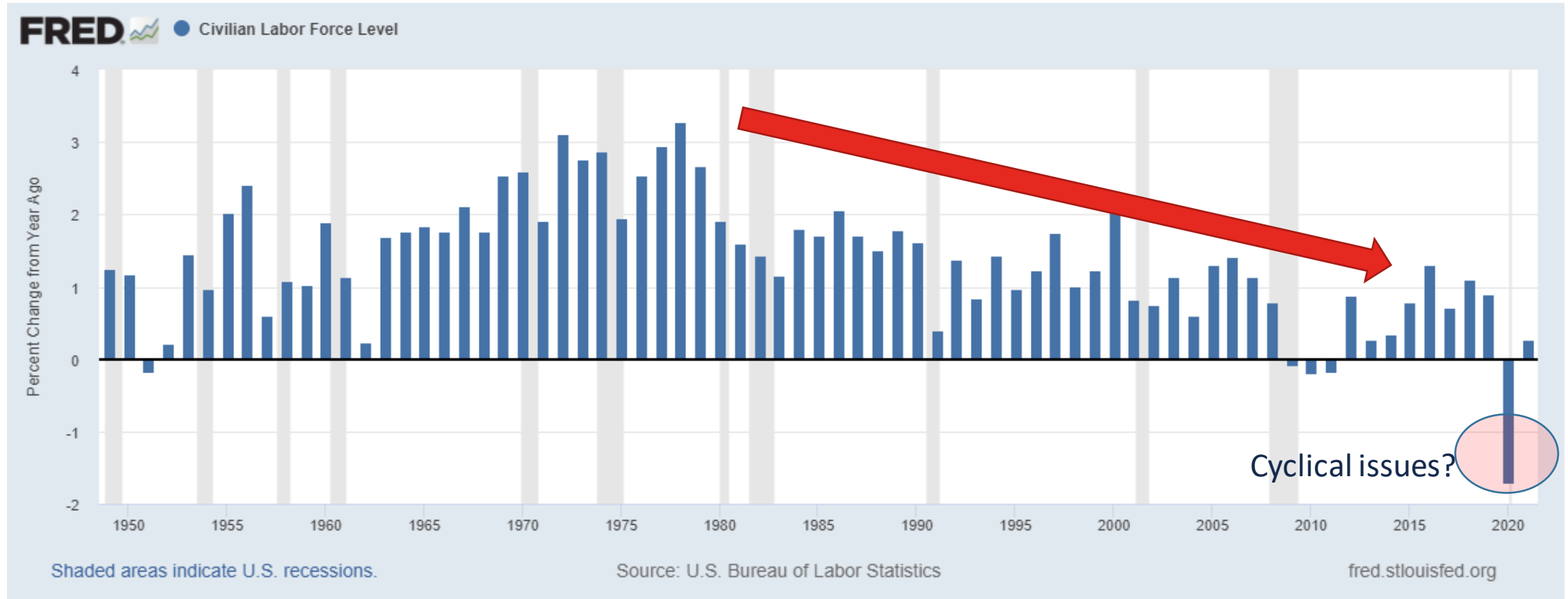
Note: Based on those who say the responsibilities of their job can mostly be done from home.

Source: Survey of U.S. adults conducted Jan. 24-30, 2022.

"COVID-19 Pandemic Continues To Reshape Work in America"

PEW RESEARCH CENTER

..are manifesting in a smaller Labor Force



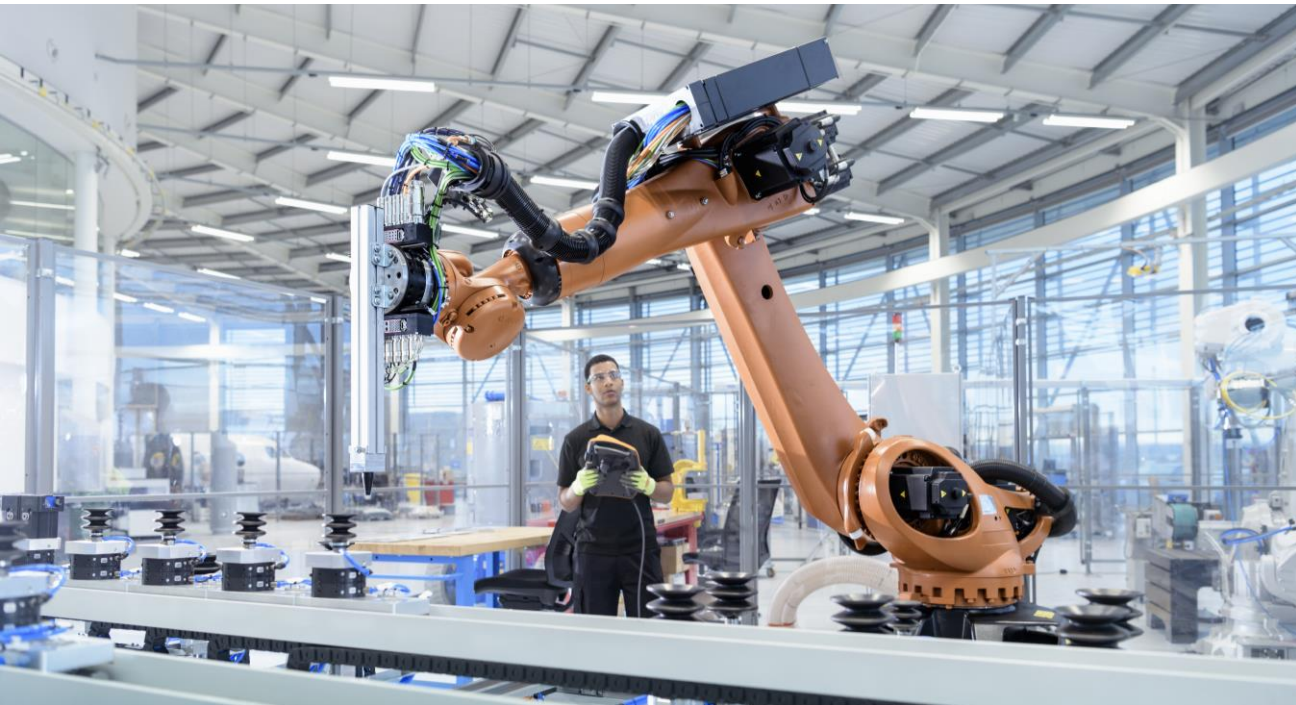


What drives the Structural Rate of Growth?

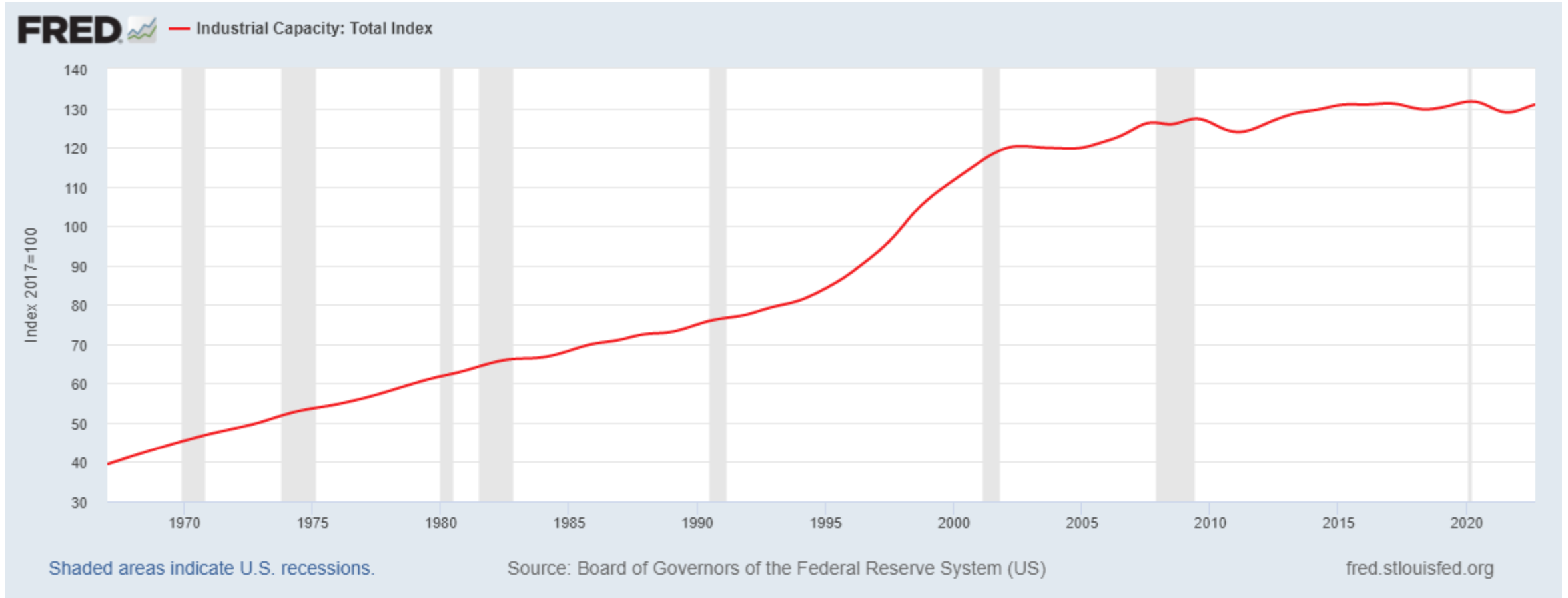


Capital

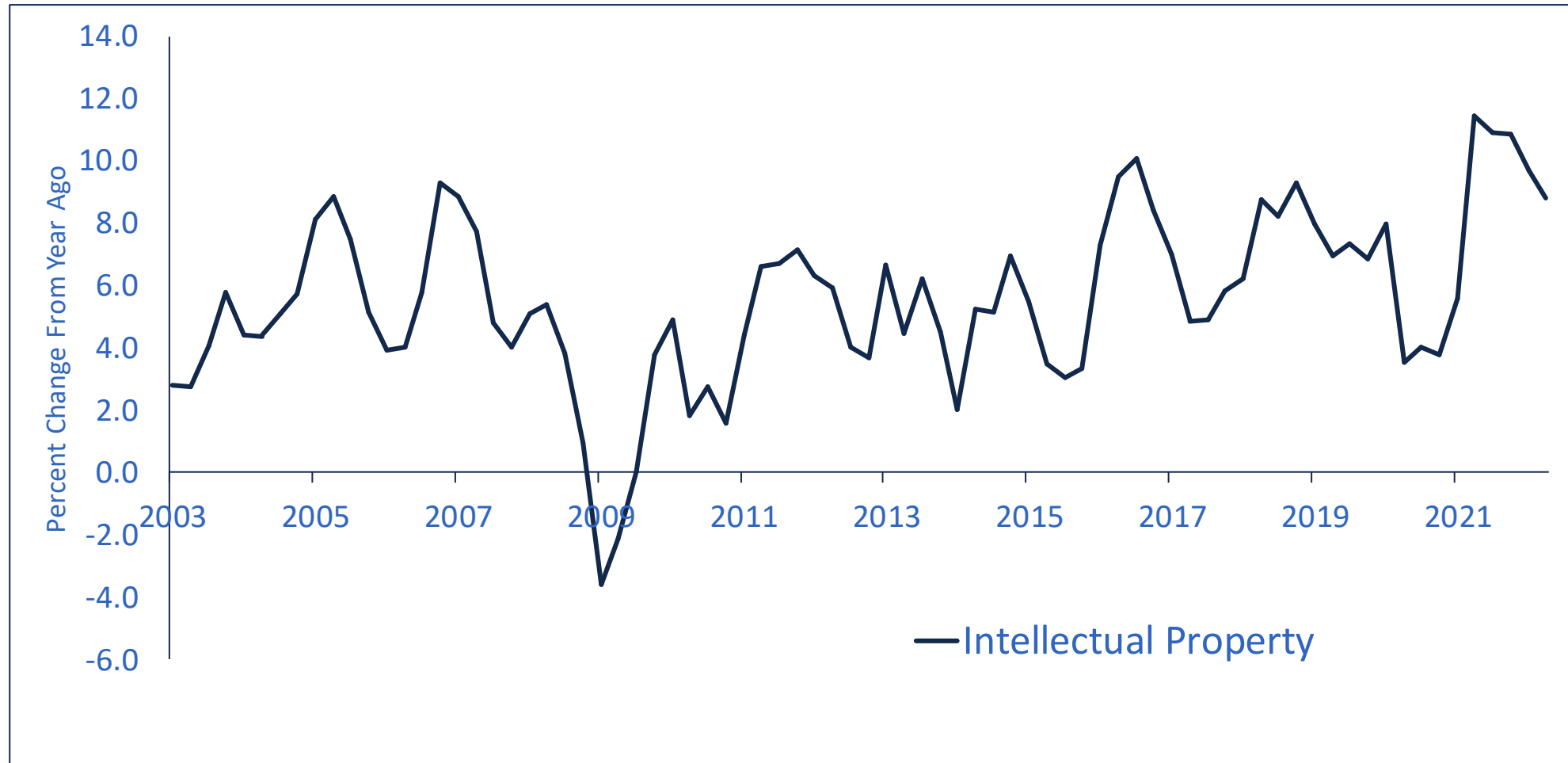
Technology



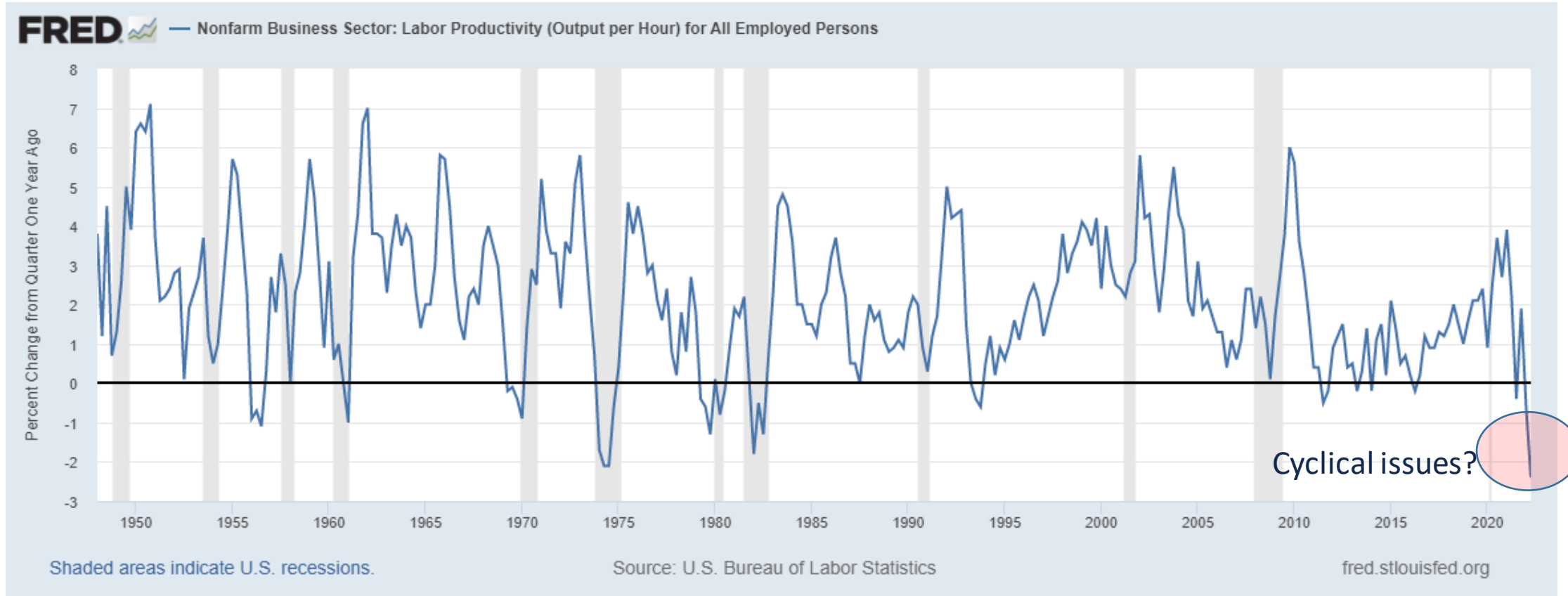
Industrial capacity relatively flat since 2000...



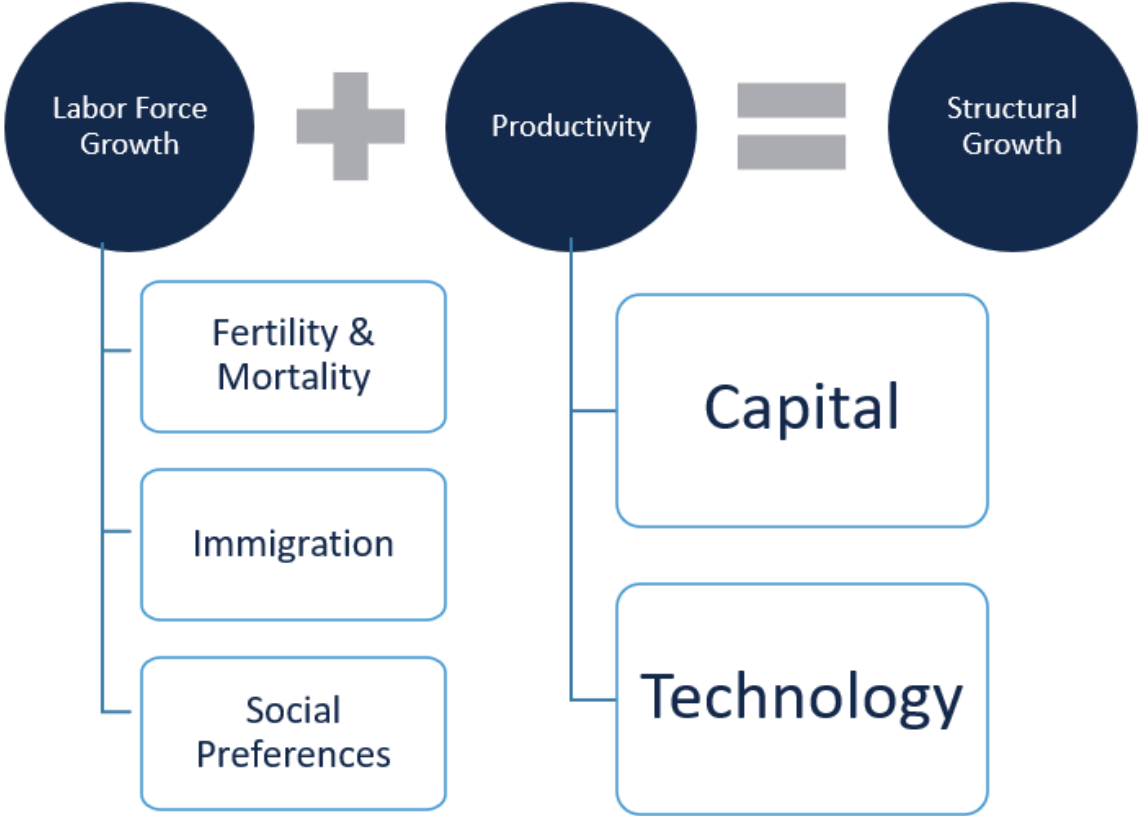
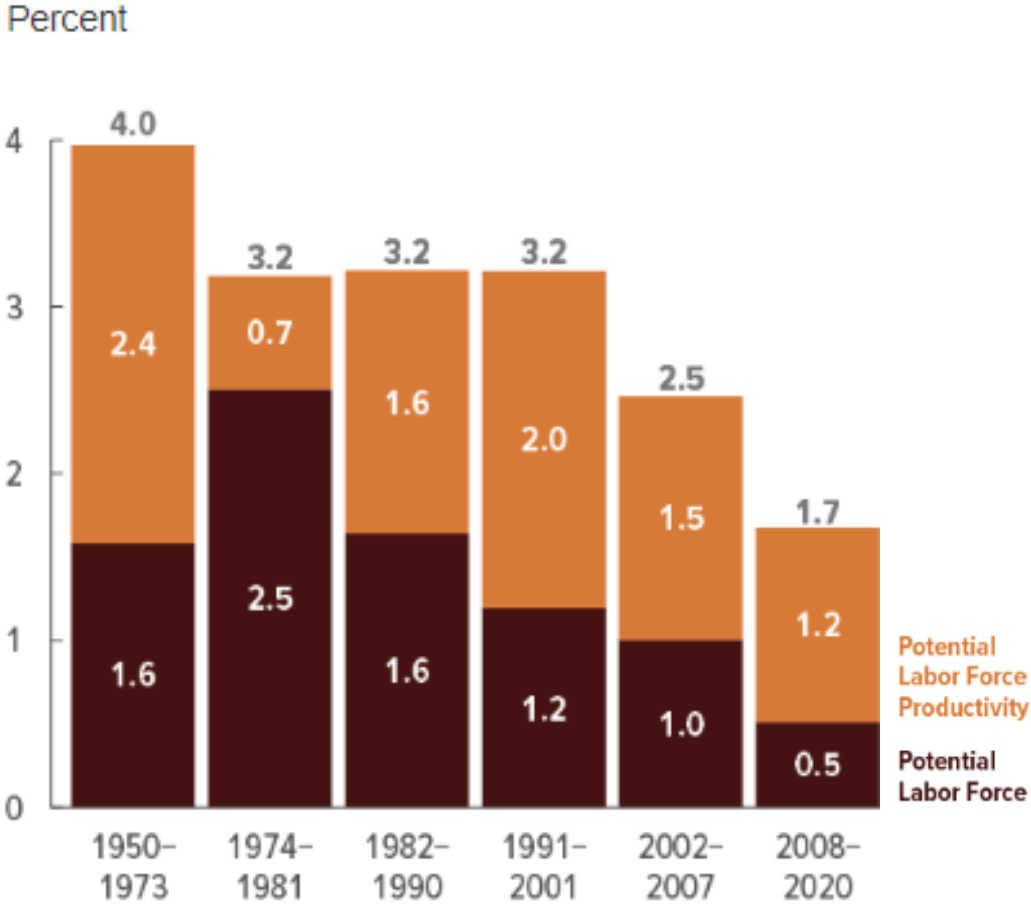
..but IP investments are picking up..



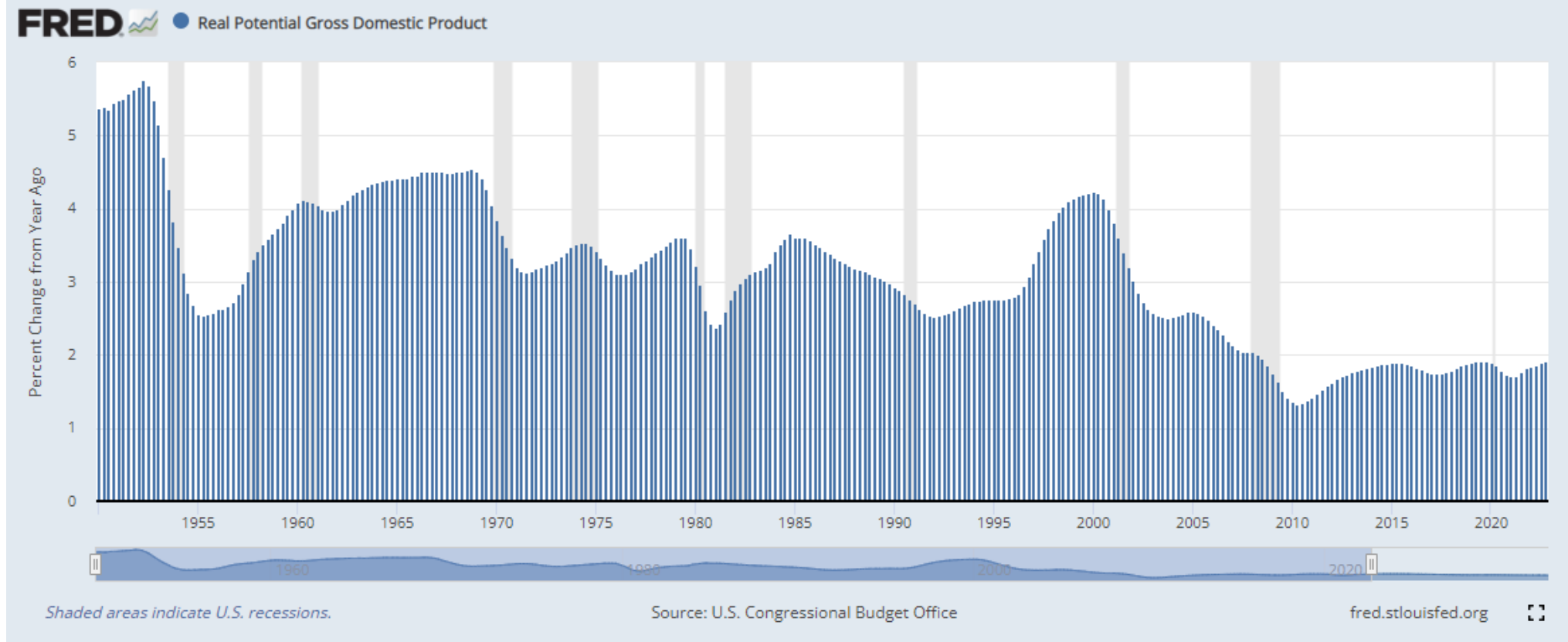
..combining for modest structural Productivity



Are we structurally stable?- Output



What is our Structural baseline? - Output



-2

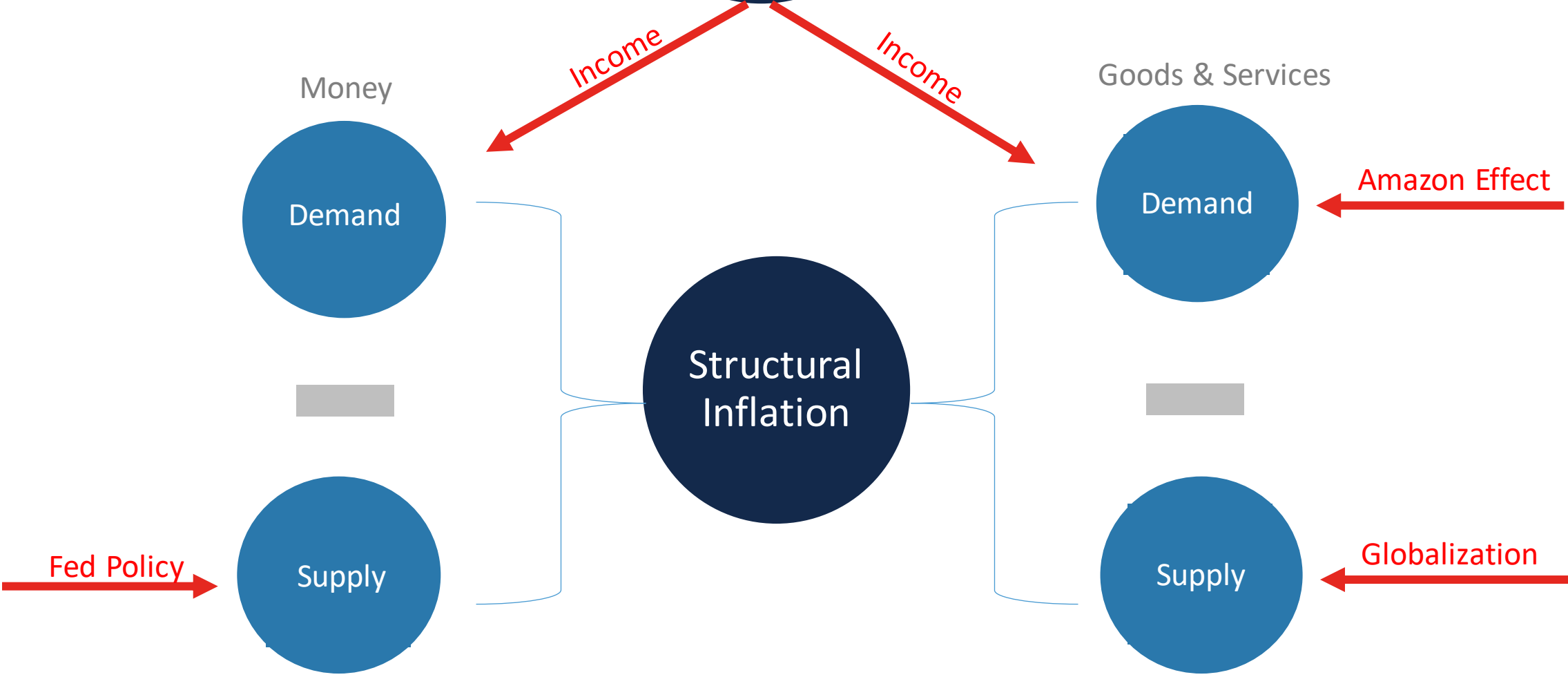
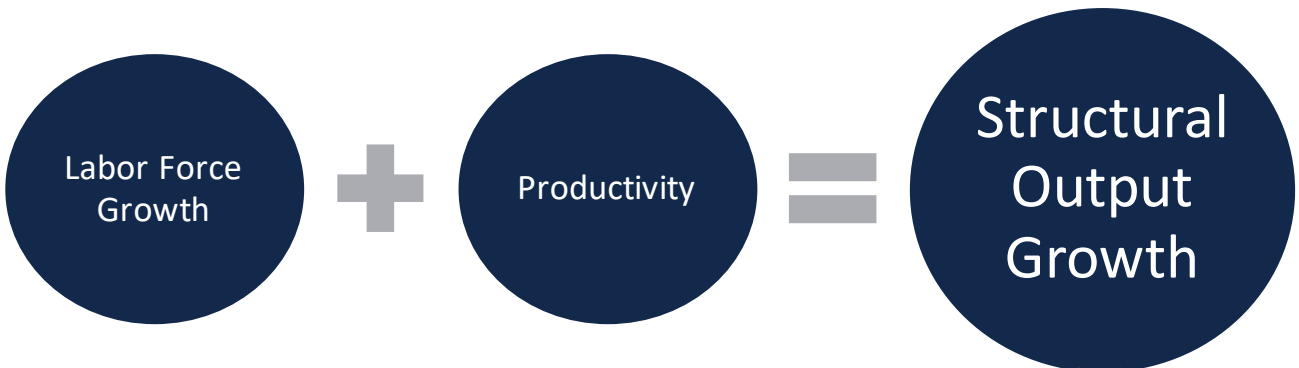
-1

0

+1

+2

What drives the Structural Rate of Inflation?



What is our Structural baseline? - Inflation

Strong Long Term Deflationary Drivers..

“Amazon Effect” --- online competition drives prices lower

Poor Structural Outlook --- e.g. shrinking labor forces curtail demand and prices

Globalization --- increased global competition throughout the supply chain drove prices lower for decades.

..have overwhelmed Inflationary Drivers

Central bank --- era of large balance sheets



What is our Structural baseline?

Output

-2

-1

0

+1

+2

Inflation

-2

-1

0

+1

+2

Note: This is our subjective assessment.



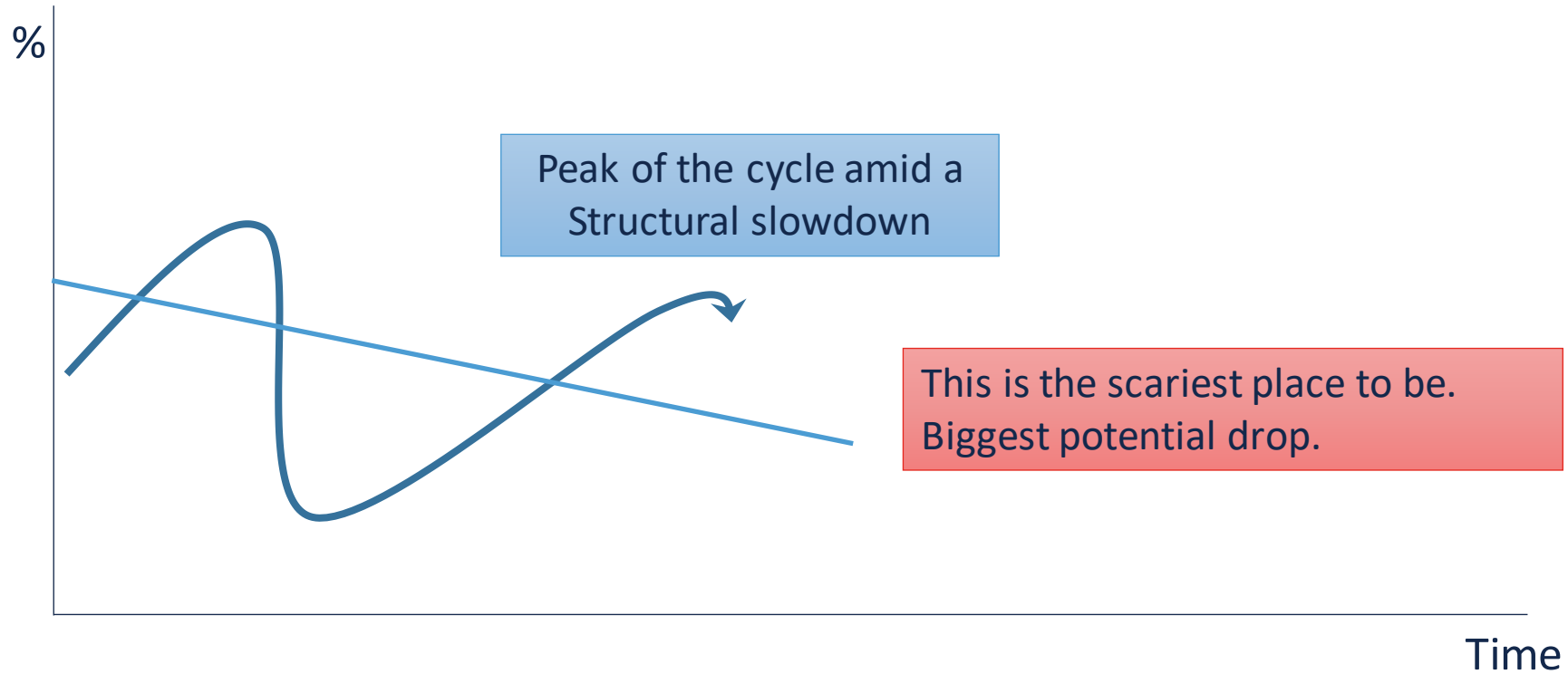
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FORECASTING – WHERE MIGHT WE BE HEADED?

Economic Outlook

Here's our outlook



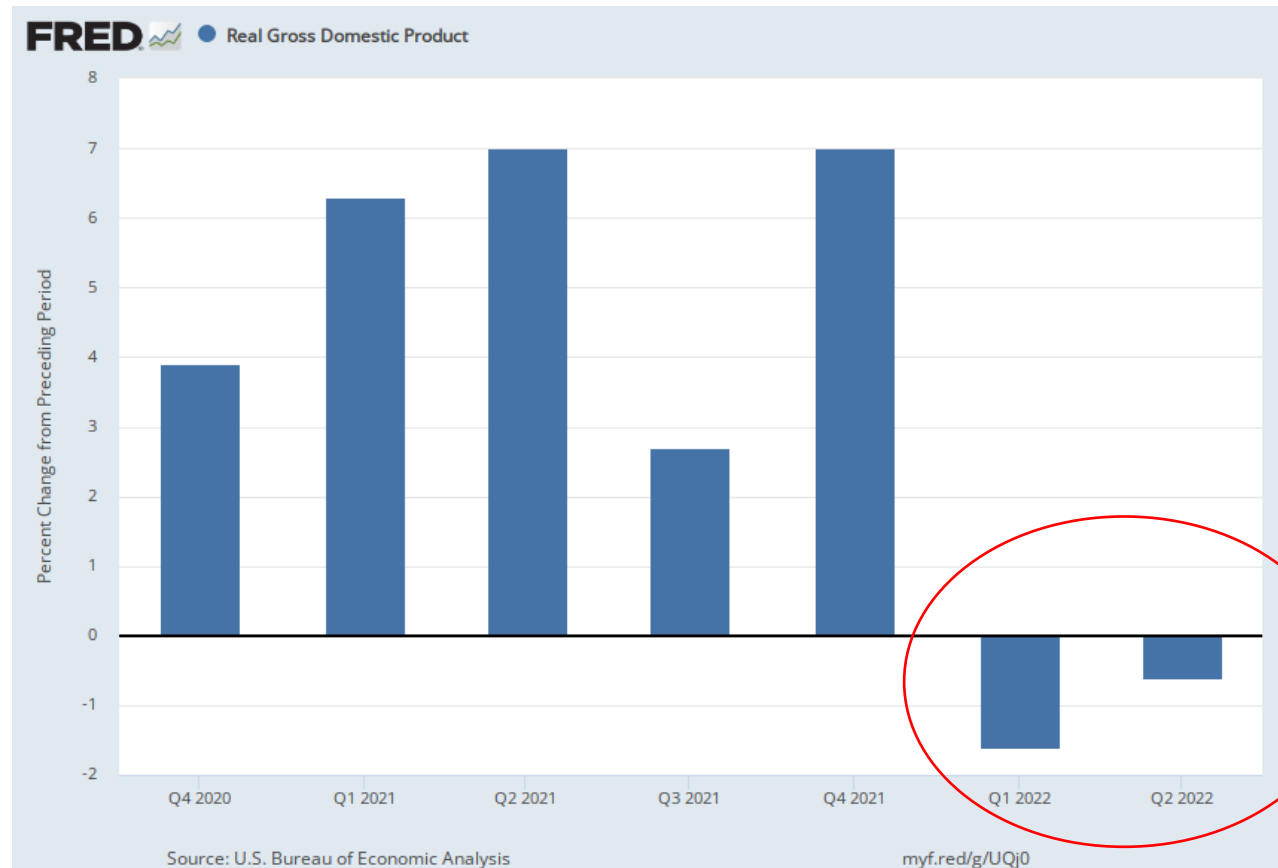
	<i>Nowcast</i>		<i>Forecast</i>	
	Cyclical	Structural	Cyclical	Structural
Output	0	-1	-1	-1
Inflation	-2	-1	-1	0

**Economic
Outlook:
Output**

Are we in a recession?

ARE WE IN A RECESSION?

NO



Caveats:

- 1) Much of the drop was due to unusual items (e.g. inventories)
- 2) These numbers will be revised
- 3) NBER (official arbiter) hasn't decided yet.

Rule of thumb:
2 negative qrts of GDP =
recession

ARE WE HEADED FOR A RECESSION?

Yes

Bloomberg
US Edition

● **Live Now** Markets Economics Industries Technology **Politics** Wealth Pursuits Opinion Businessweek Equality Green

LIVE NOW
UK Prime Minister Liz Truss Resigns [Watch](#)

Politics
Economics

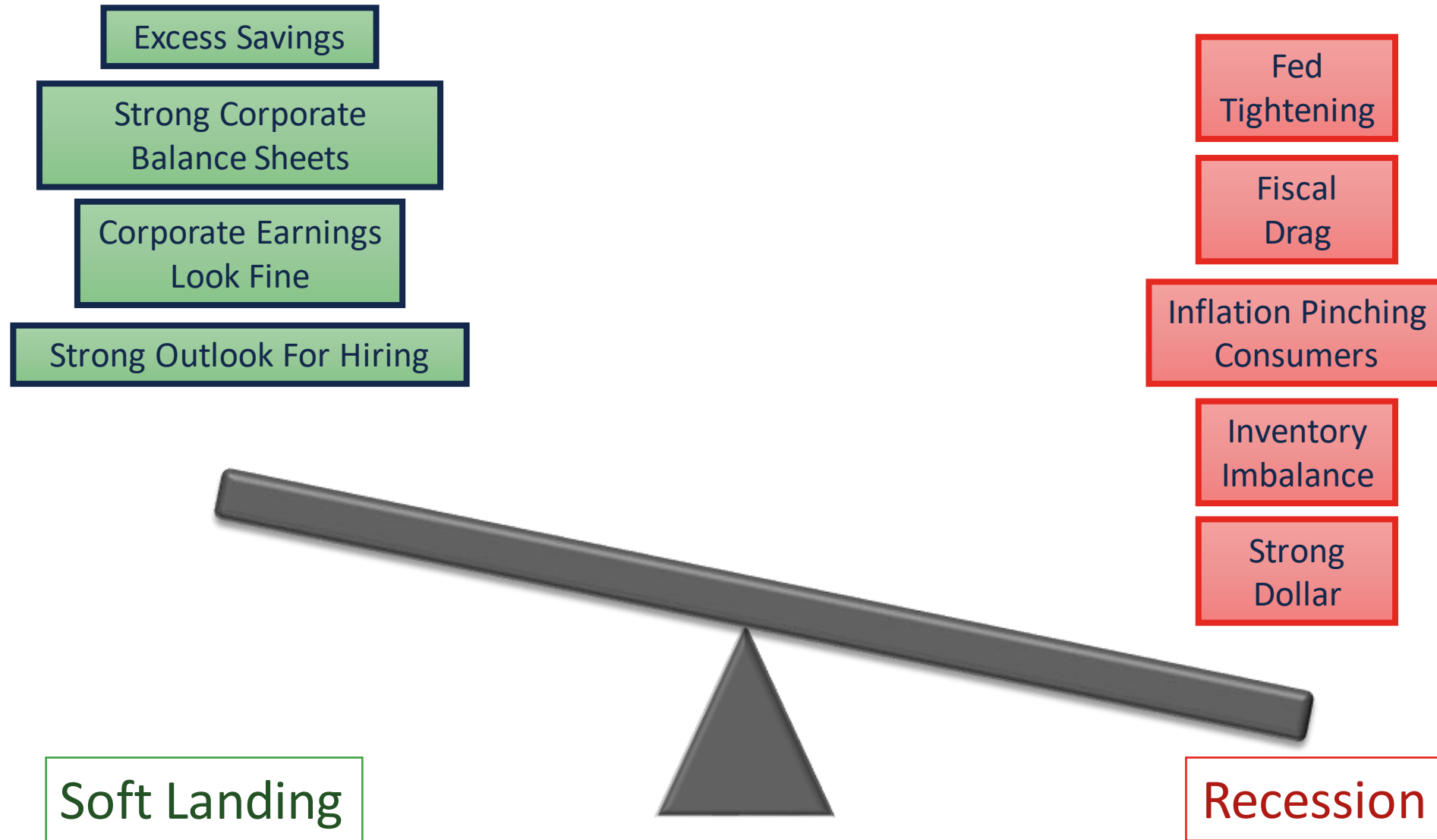
Forecast for US Recession Within Year Hits 100% in Blow to Biden

- Bloomberg Economics sees near certainty downturn will start
- Tightening conditions, inflation, hawkish Fed weigh on outlook

As an economist I hate to say “Yes”.
But, the probability of a recession within
the next 18mths is high.

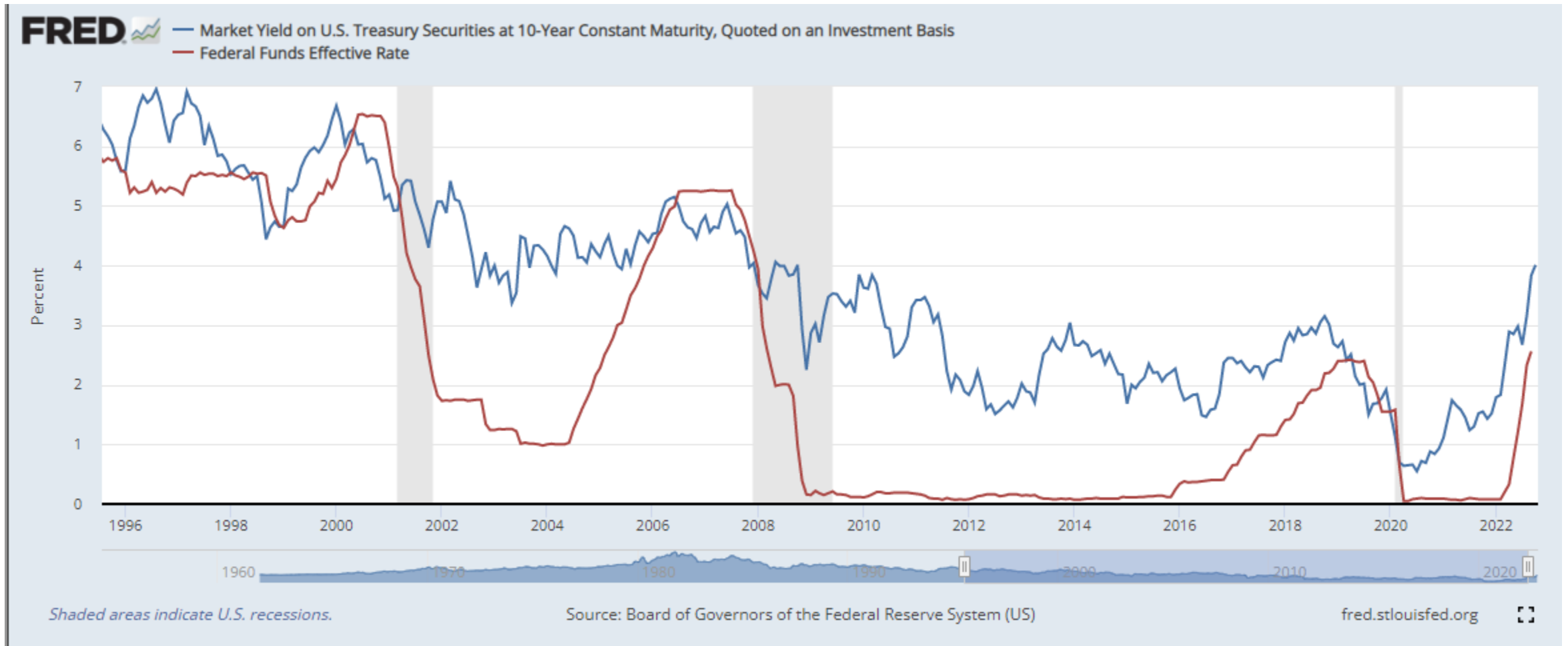


Why are we likely to enter recession?



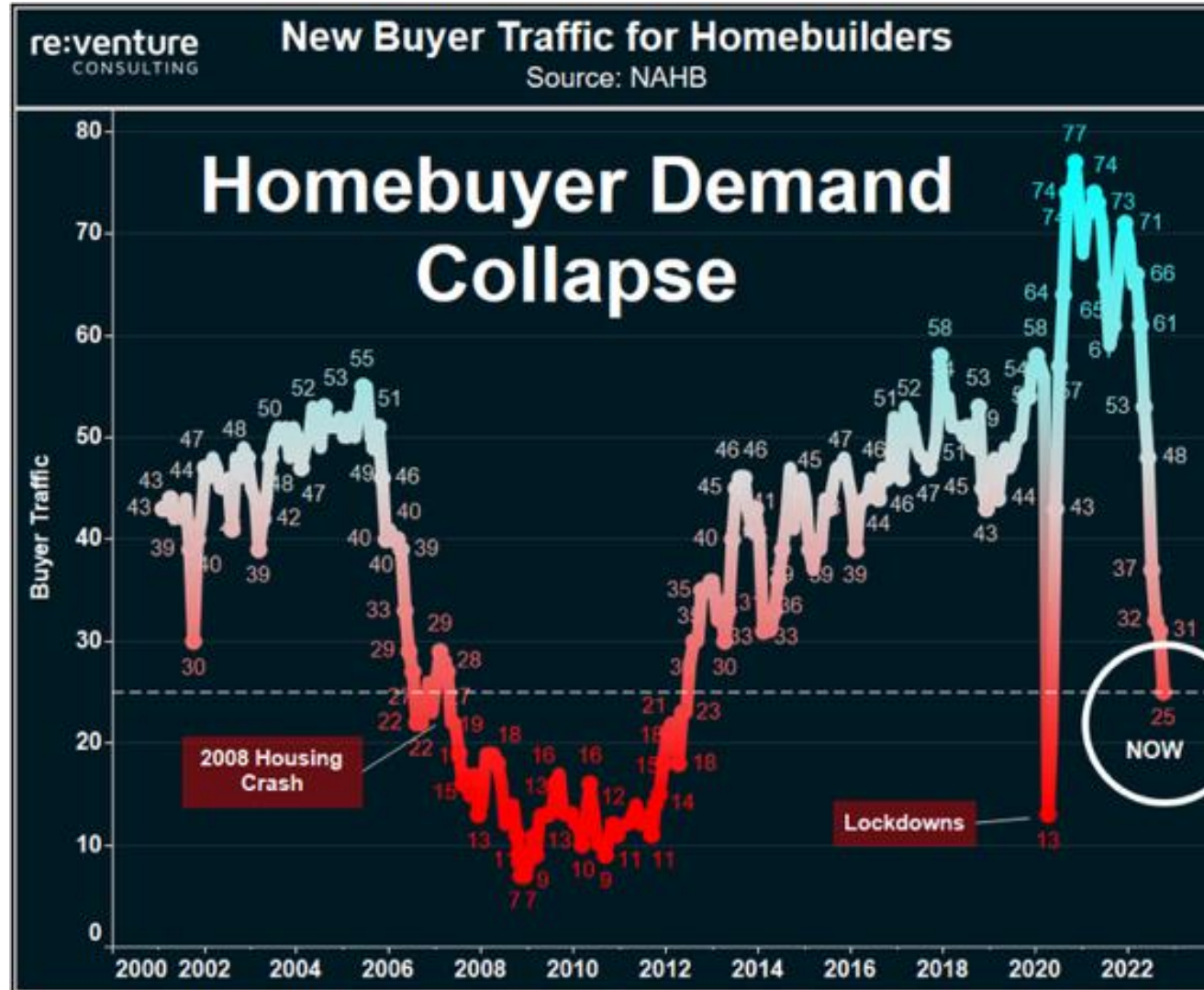
WHY ARE WE LIKELY HEADED FOR A RECESSION?

Interest rates are expected to keep rising rapidly...



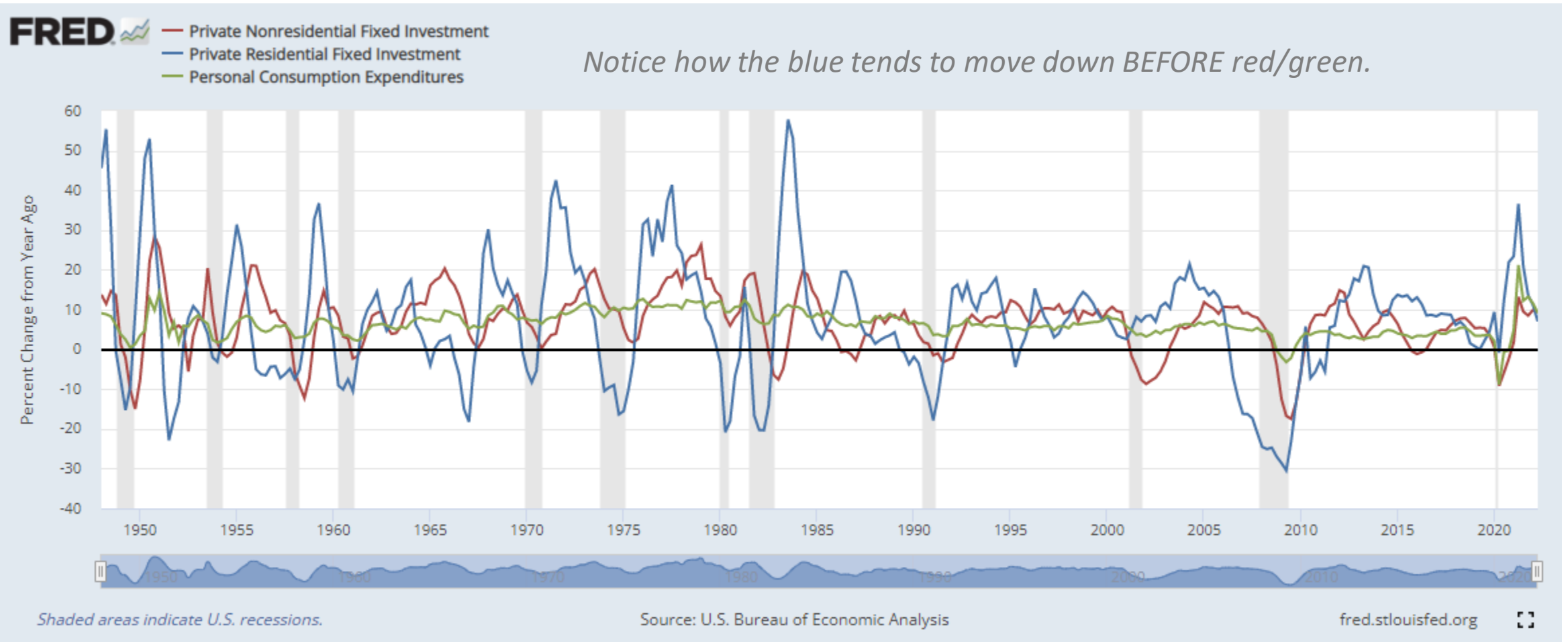
WHY ARE WE LIKELY HEADED FOR A RECESSION?

..which is already impacting housing...



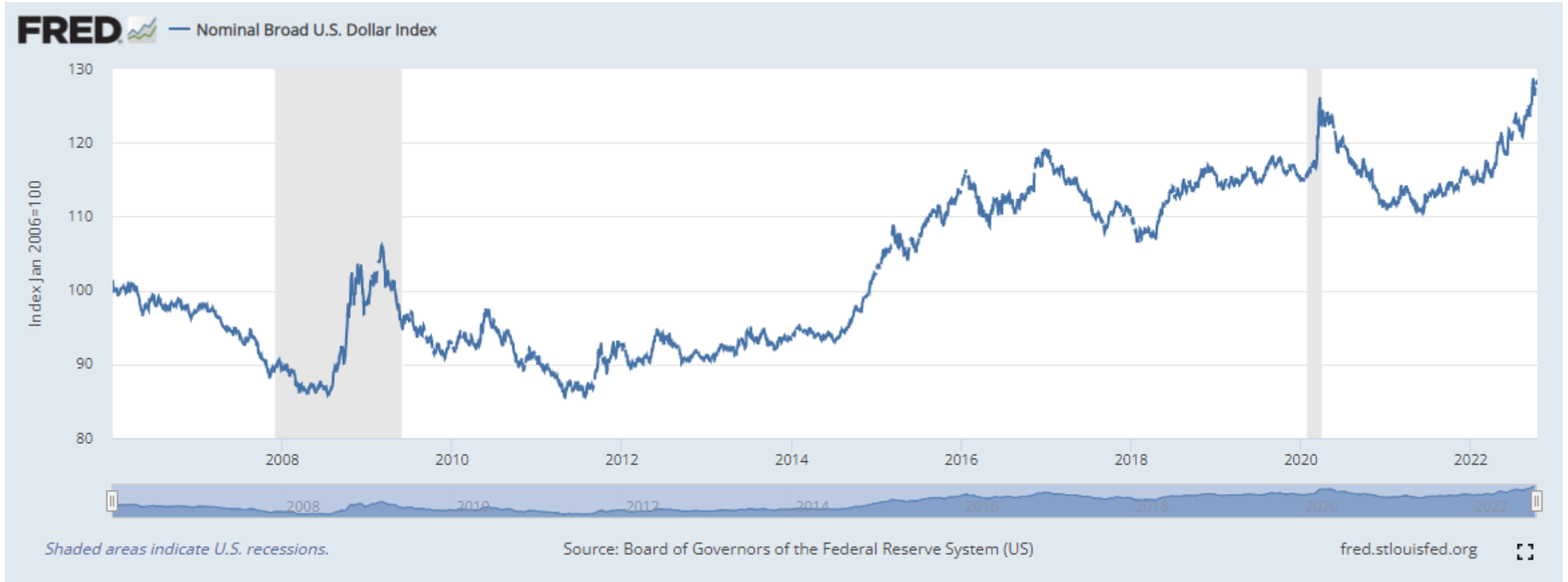
WHY ARE WE LIKELY HEADED FOR A RECESSION?

..which is a bad sign (Housing Leads in Downturns)



WHY ARE WE LIKELY HEADED FOR A RECESSION?

US\$ expecting to keep rallying with interest rates...



WHY ARE WE LIKELY HEADED FOR A RECESSION?

..which is already impacting profits

BUSINESS | EARNINGS

P&G Rides Higher Prices but Says Strong Dollar to Slow Growth

Maker of Tide detergent and Gillette razors now predicts a sales decline for its fiscal year

Reuters + Follow View Profile

Levi Strauss cuts 2022 profit forecast on softening demand, strong dollar

By Ananya Mariam Rajesh - Oct 6

React Comments

IN THIS ARTICLE

LEVI ▼ -1.09%

By Ananya Mariam Rajesh



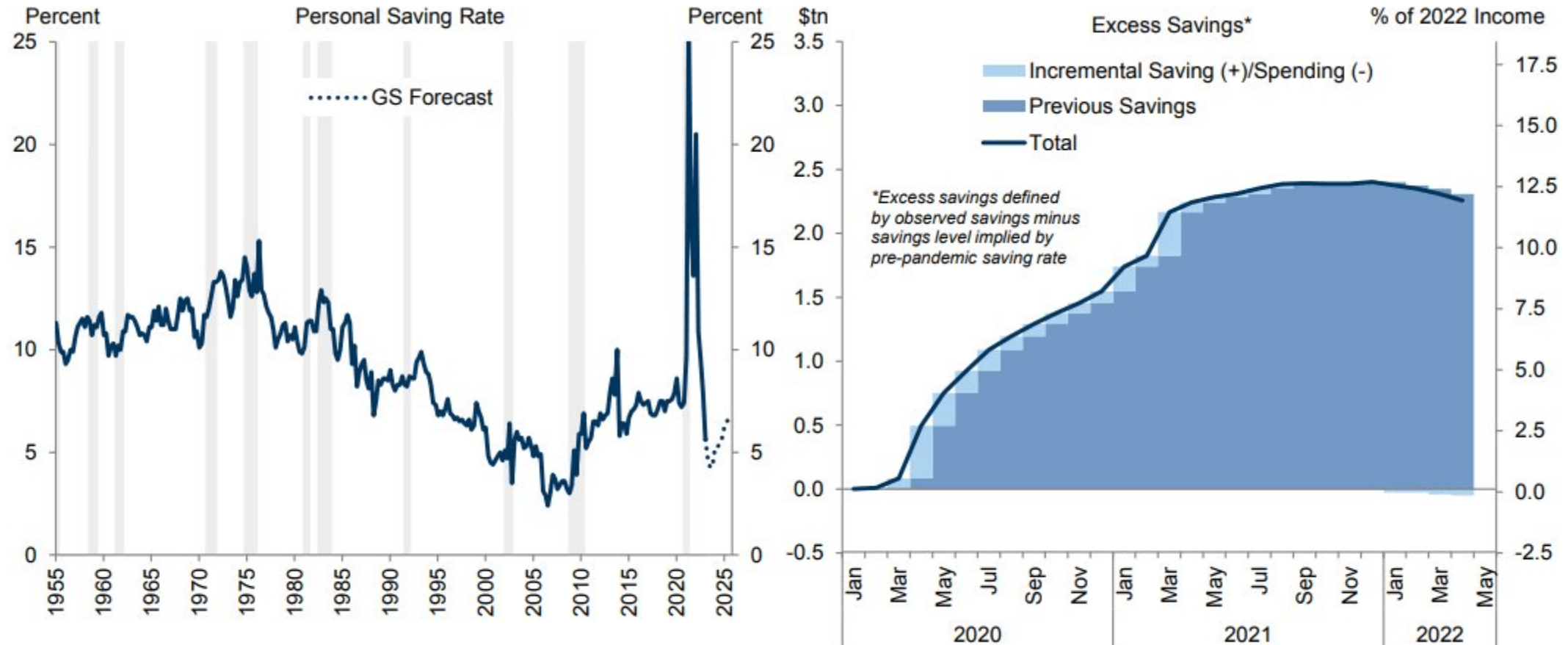
J&J sales grow, but strong dollar tugs at expectations

By TOM MURPHY October 18, 2022



WHY ARE WE LIKELY HEADED FOR A RECESSION?

Consumers have ~\$2trln in excess savings...



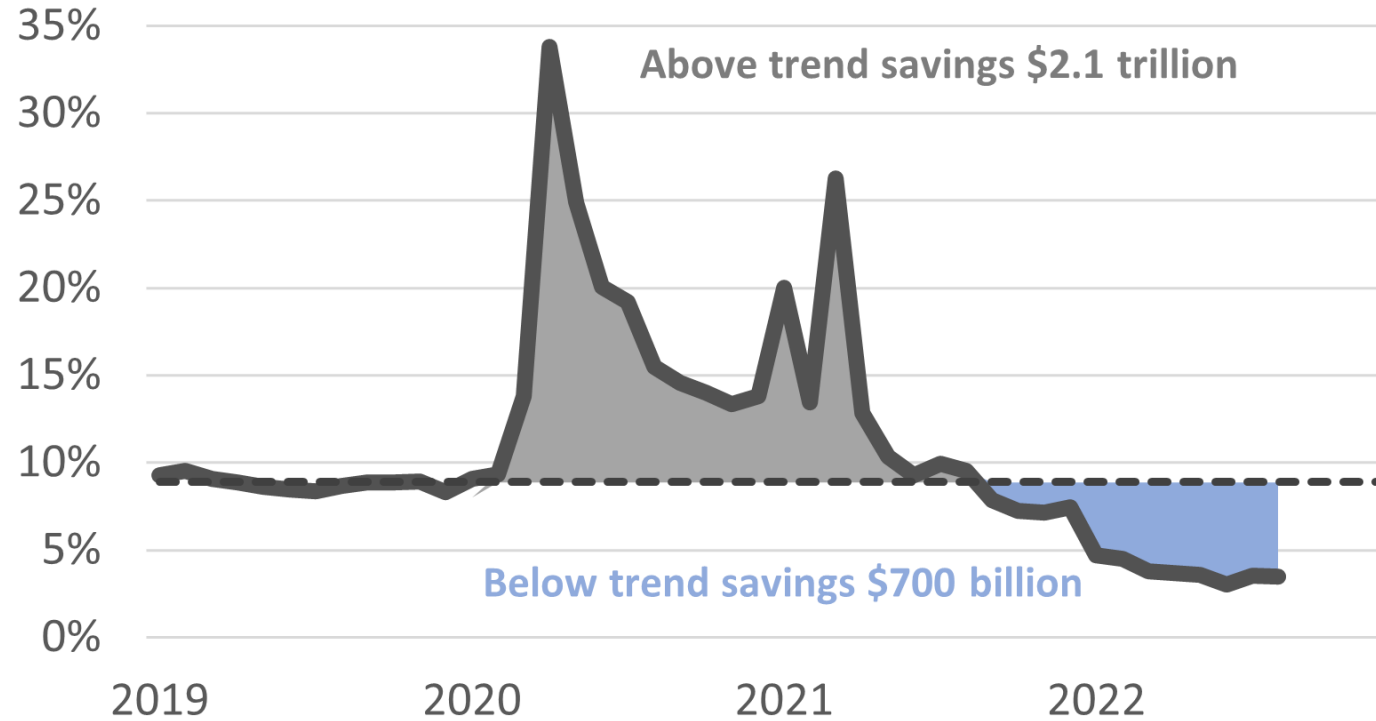
Source: Bureau of Economic Analysis, US Bureau of Labor Statistics, Federal Reserve Board, Goldman Sachs Global Investment Research

WHY ARE WE LIKELY HEADED FOR A RECESSION?

..but continued price hikes causing a drawdown

Households Spending out of Excess Savings

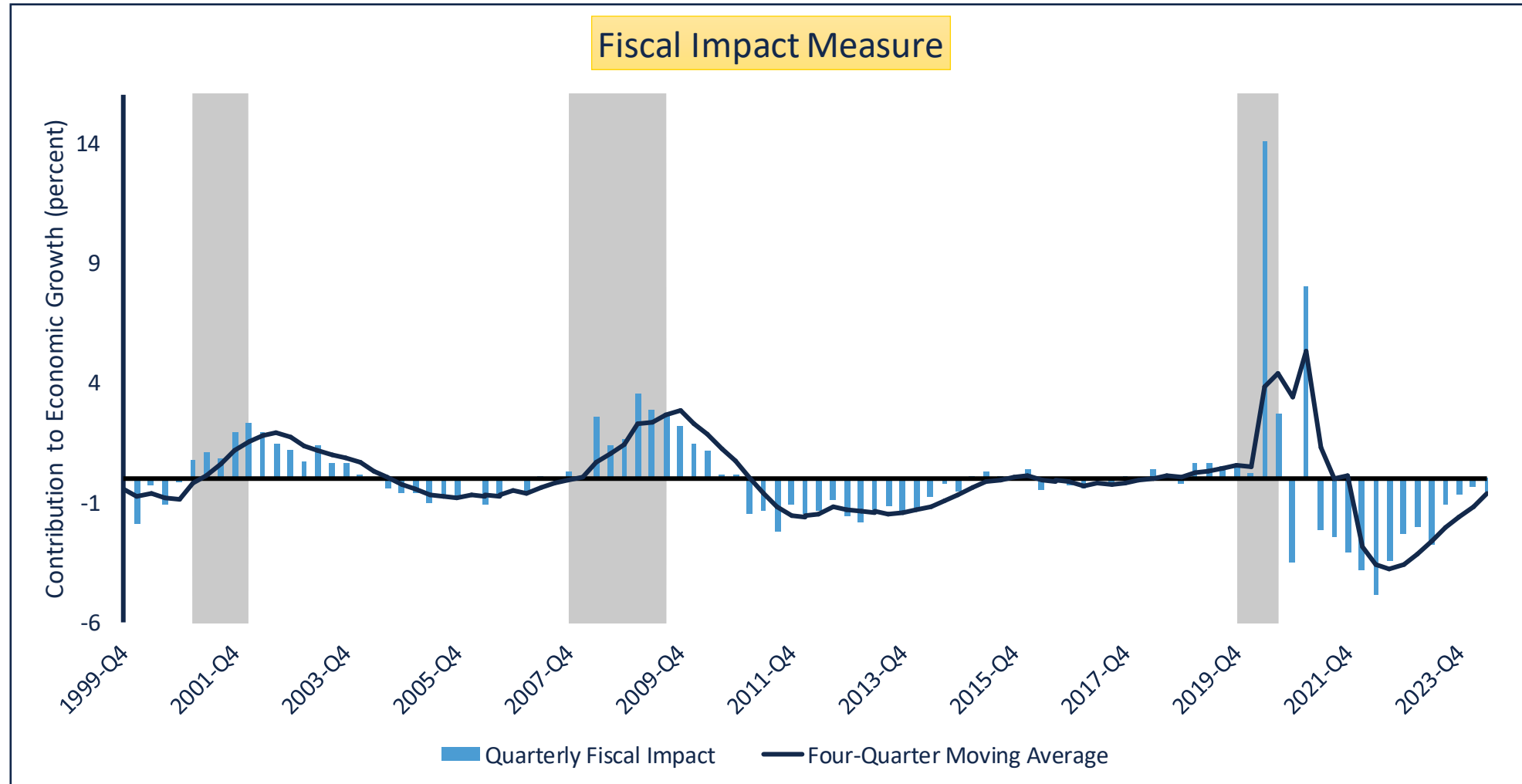
Monthly savings rate, share of U.S. disposable personal income



Latest Data: August 2022 | Source: BEA, Oregon Office of Economic Analysis

WHY ARE WE LIKELY HEADED FOR A RECESSION?

Fiscal Drag is a.....Drag

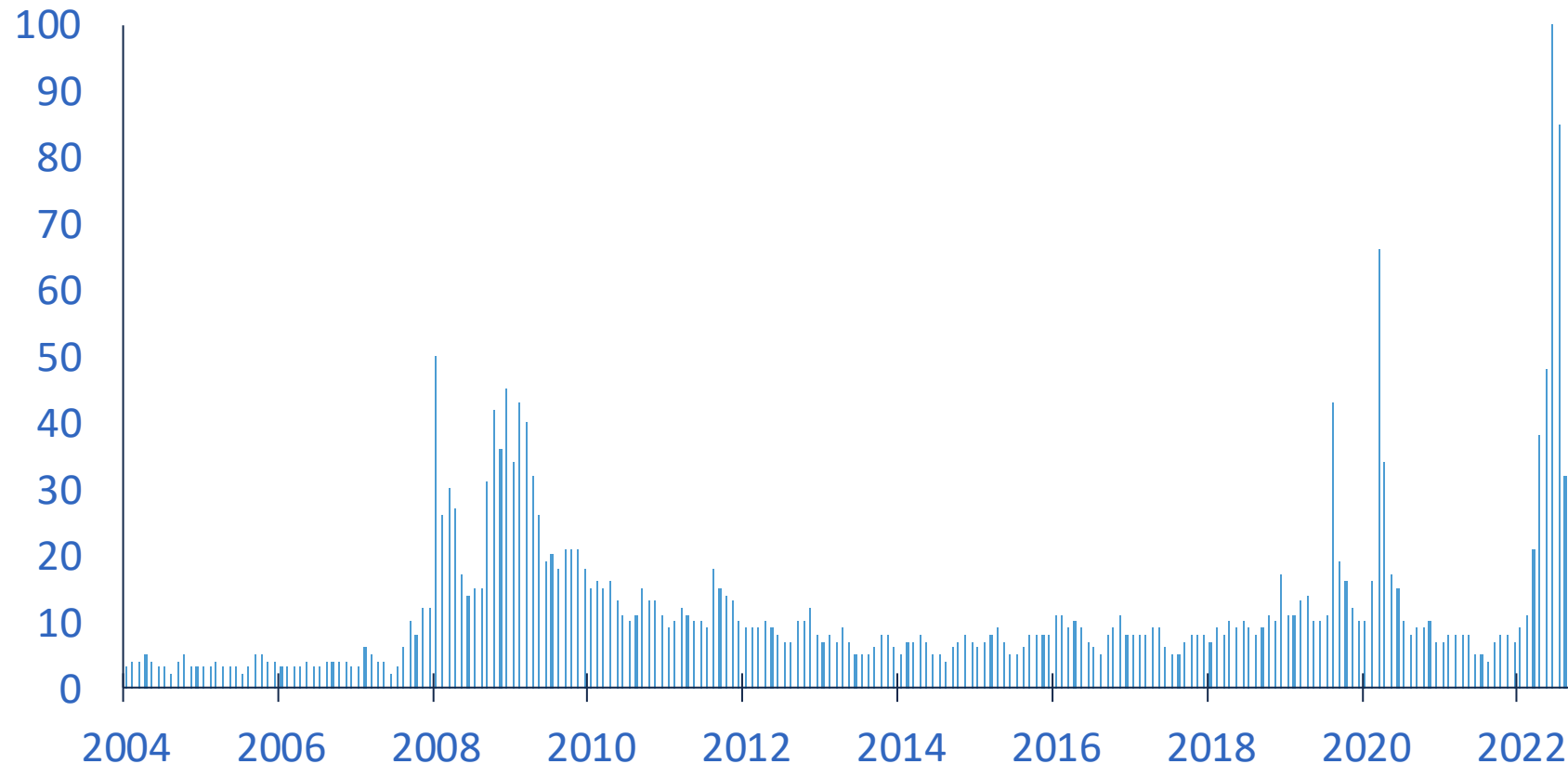


Source: Hutchins Center

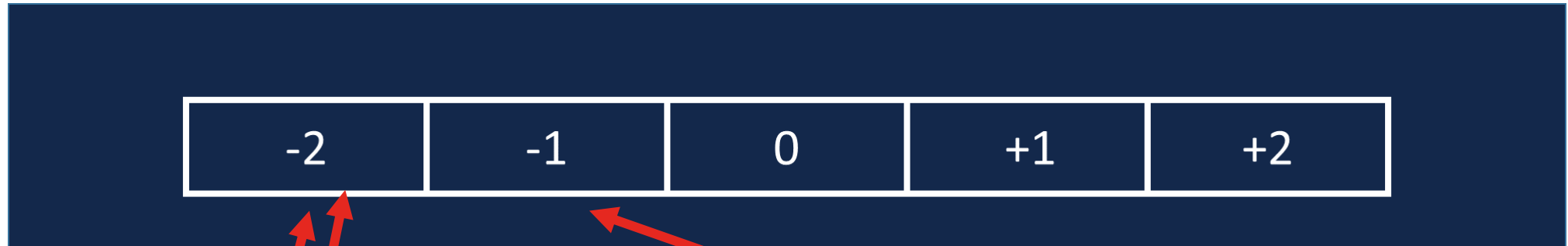
WHY ARE WE LIKELY HEADED FOR A RECESSION?

We might talk ourselves into a recession

Google Search Trends for “recession”



How could this Cycle play out? - Output



Fed breaks something Keeps raising rates, fearful that actions have been ineffective. Inflation could turn quickly to deflation.

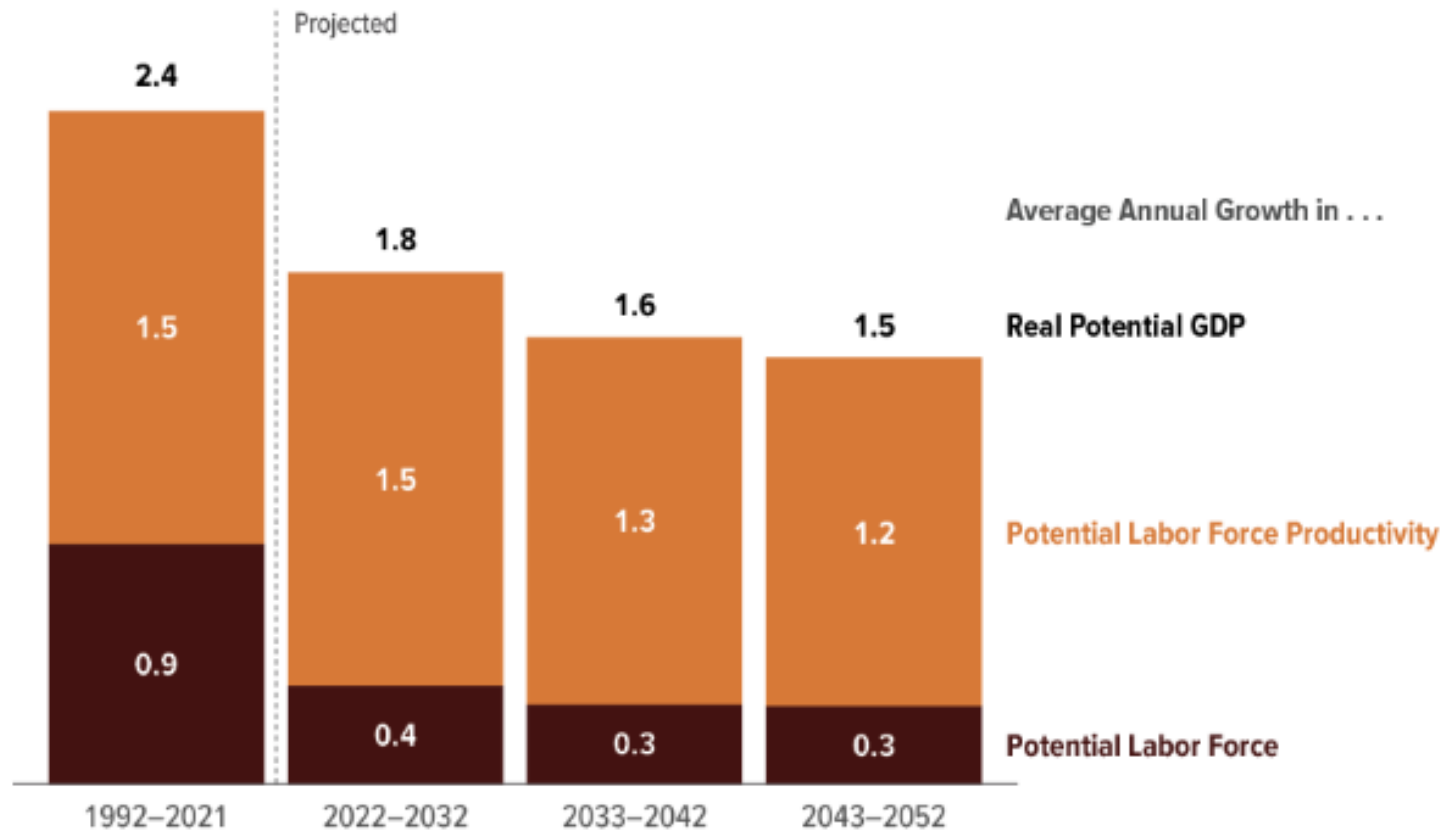
External Shock Fed cuts back on rate hikes. Inflation under control. But we have an exogenous shock: geopolitical tensions with China, war in Europe, renewed supply chain disruptions, food crisis, etc... sends us into stagflation.

Resilient Consumer Consumer remains strong amid tight labor market. Rate sensitive sectors are hit the hardest, but rate increases are moderate.

Regardless, Structural Outlook is Poor

Composition of the Growth of Real Potential GDP

Percent



Source: Congressional Budget Office

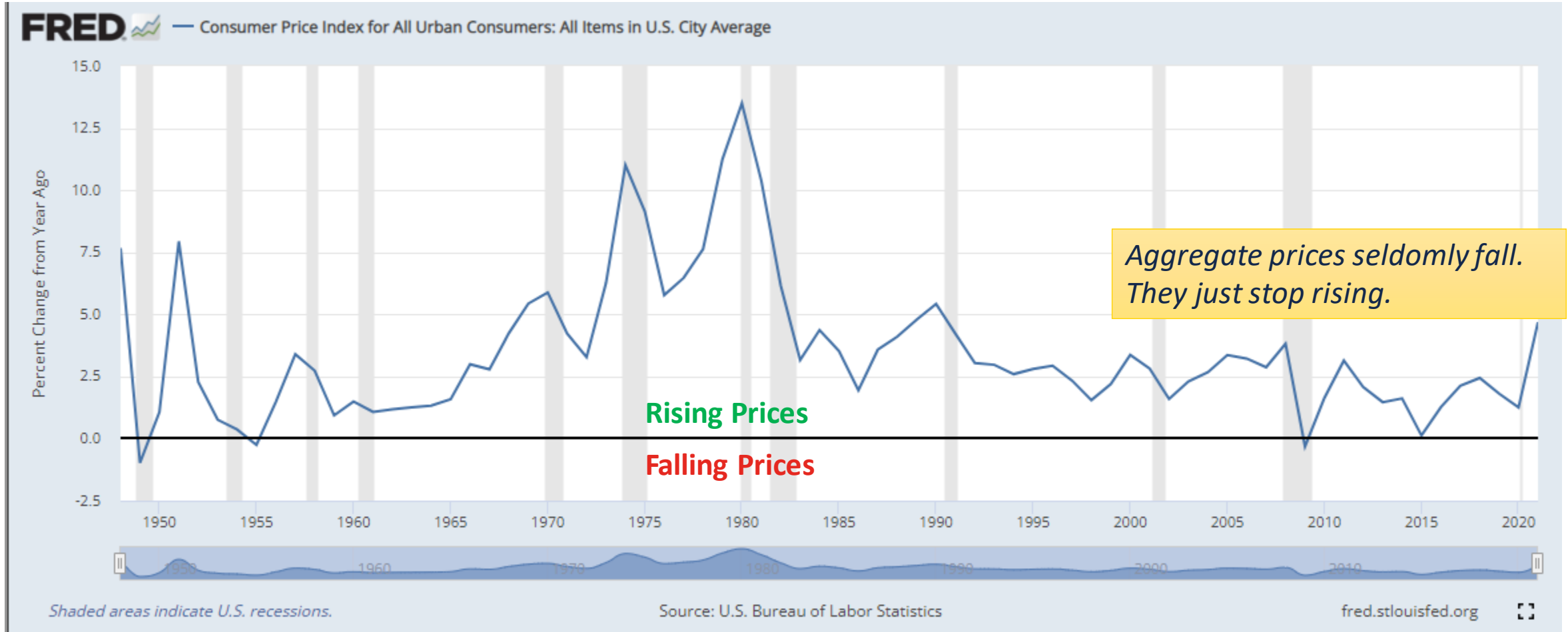
New investments in capital stock prompted by Fiscal policies / Green Initiatives / High Tech Race / Re-Shoring etc..might alter the outlook.

**Economic
Outlook:
Prices**

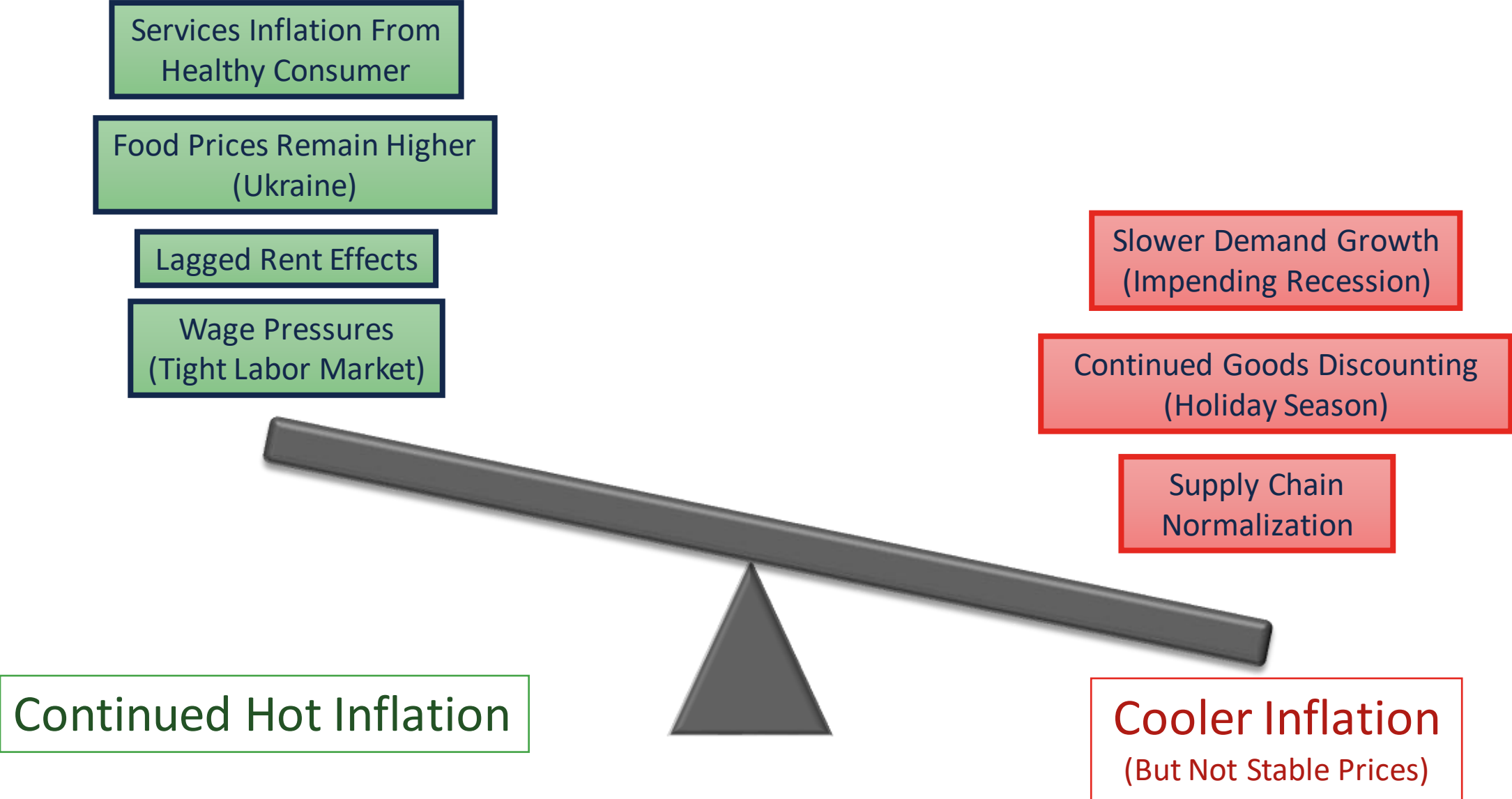
Will prices return to normal?

WILL PRICES RETURN TO NORMAL?

No

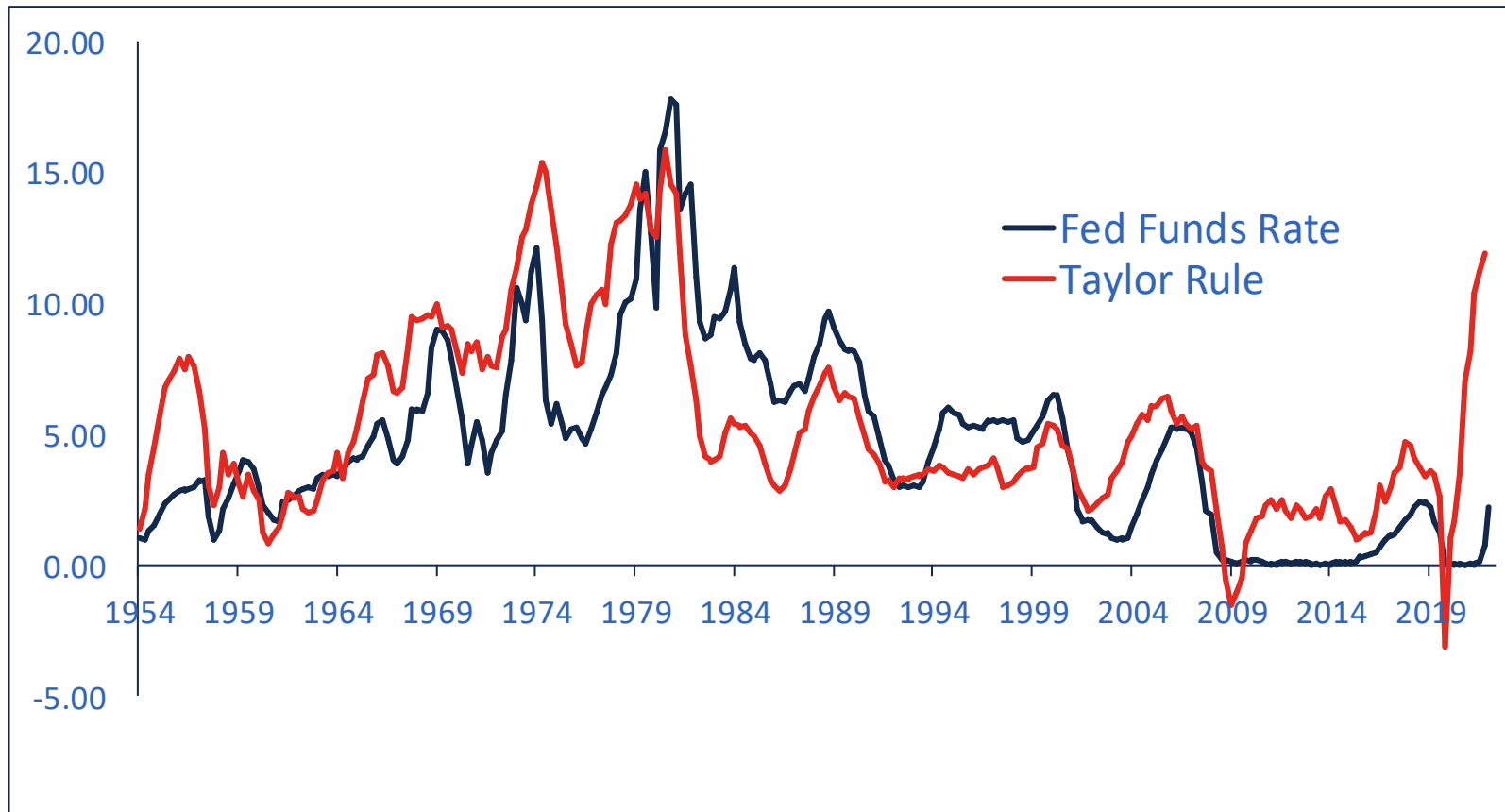


Will Inflation Stop Rising so Rapidly?



WHY WILL INFLATION COOL?

Fed was late to the party.....

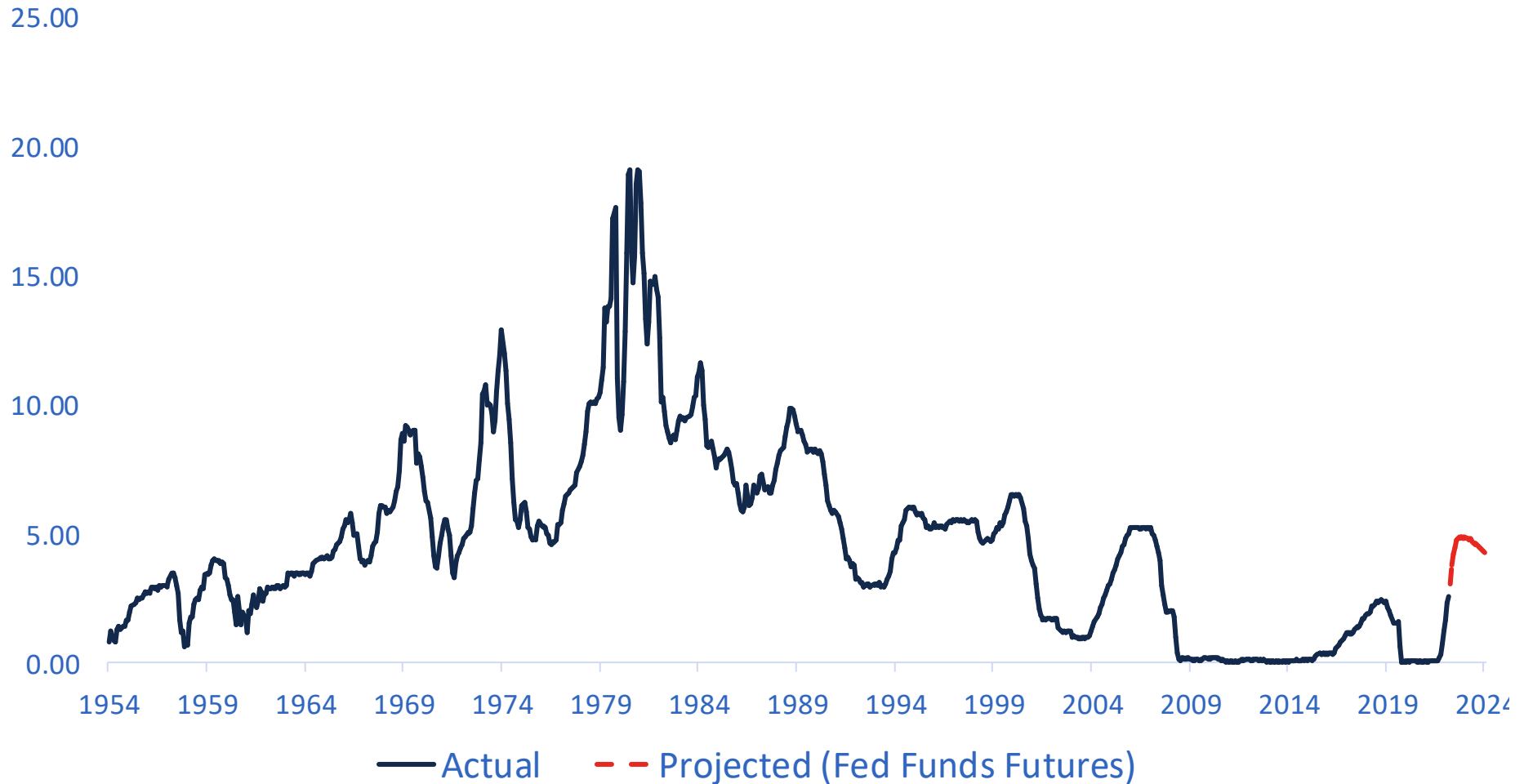


Q1`22 Fed still had 0% interest, but these “rules” suggested they should have been ~7%.

Excessively low interest rates stimulated goods, services, and asset price inflation.

WHY WILL INFLATION COOL?

...but is taking the punchbowl away now...



WHY WILL INFLATION COOL?

Supply chains were in shambles....

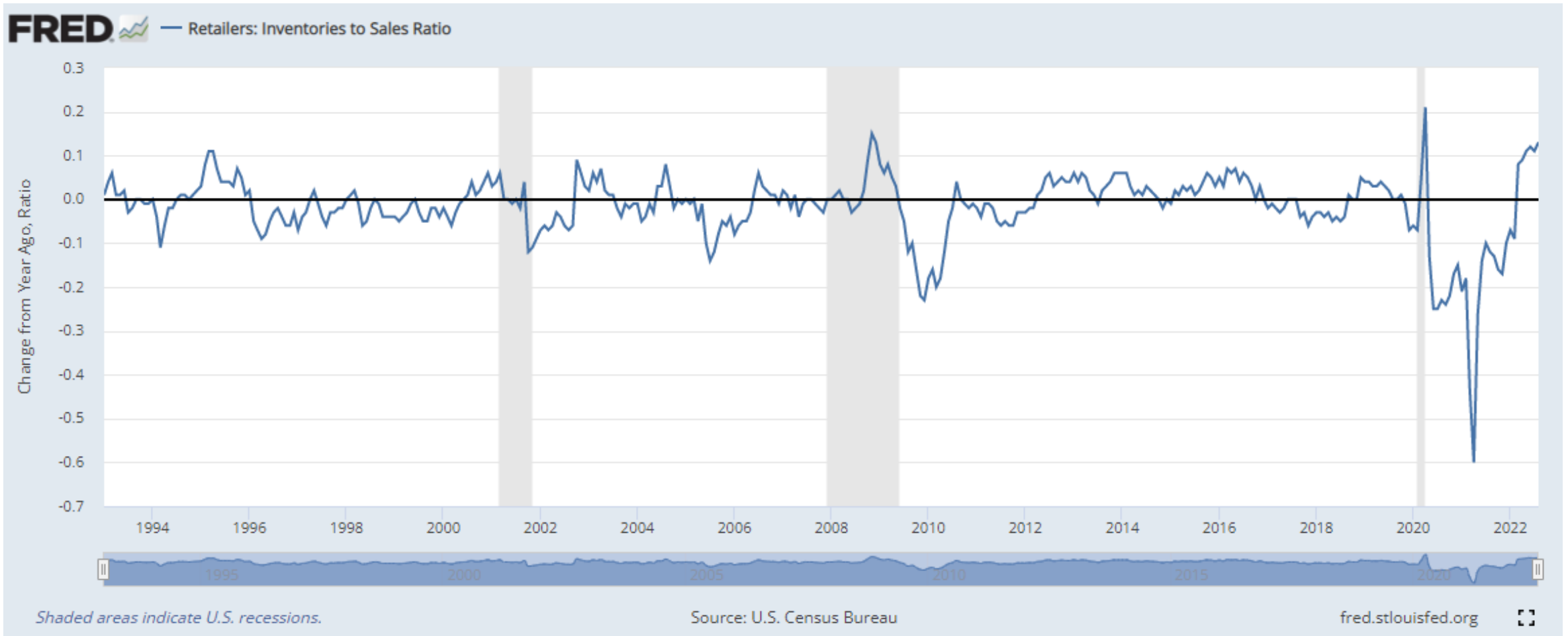


Satellite Images Show Massive Armada Of Idle Cargo Ships Waiting To Dock In Long Beach

The huge logjam of maritime cargo traffic trying to unload cargo in Long Beach harbor has reached epic proportions as seen in these images from space.

WHY WILL INFLATION COOL?

...triggering overordering and subsequent glut..



WHY WILL INFLATION COOL?

...prompting steep discounting by retailers..

Retailers' stockpiles mean deep holiday discounts starting now

Stores are sitting on a record \$732 billion of merchandise — including computers, clothing and coffee tables — and finding that consumers aren't interested



Walmart is slashing prices to get rid of excess inventory

Target's Surprise Inventory Clearout Sale Is Happening Right Now



WHY WILL INFLATION COOL?

...and even avocado prices are falling...

Avocado prices from the Mexican state of Michoacán have jumped 81% this year to \$38 for a 20-pound box.



6mths later →

Avocado surplus results in giveaway of 380,000 fruits in Philadelphia



WHY WILL INFLATION COOL?

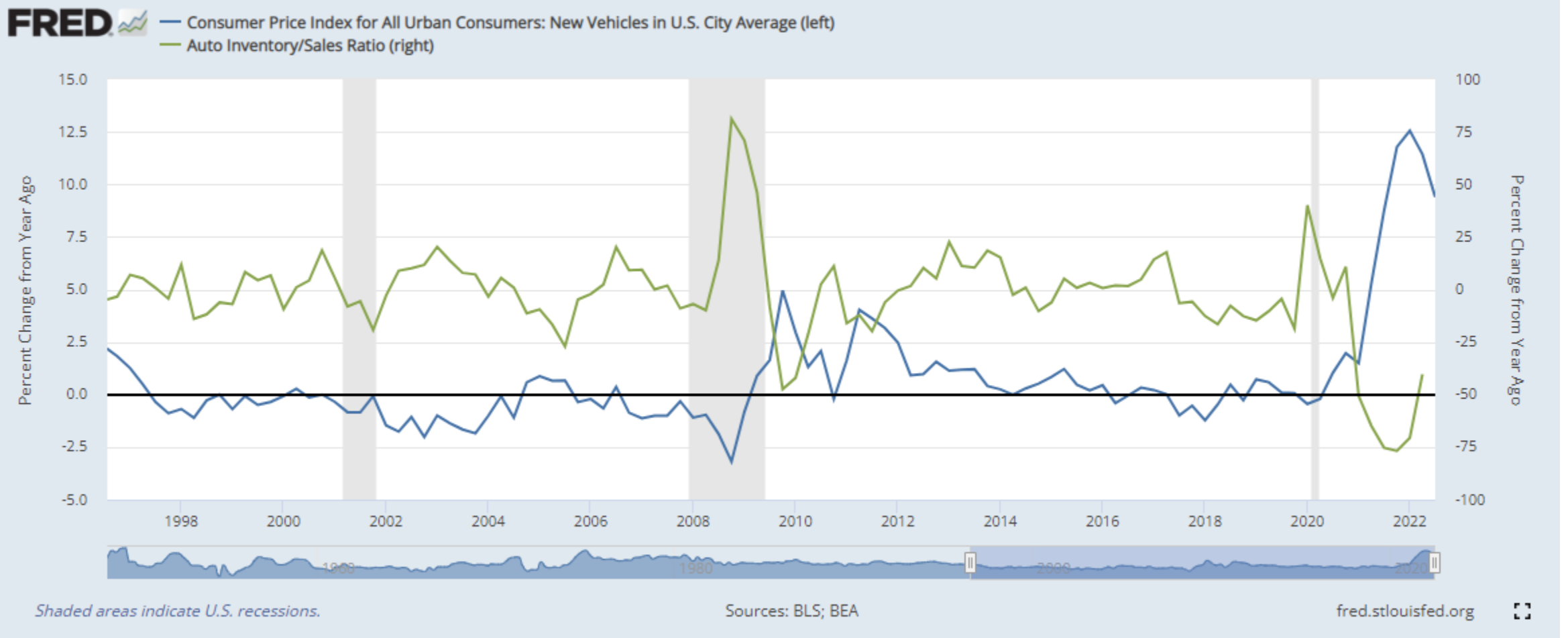
Supply chain pressures are easing now..



WHY WILL INFLATION COOL?

...and with stabilizing sales, we expect slower inflation.

Autos is a prime example



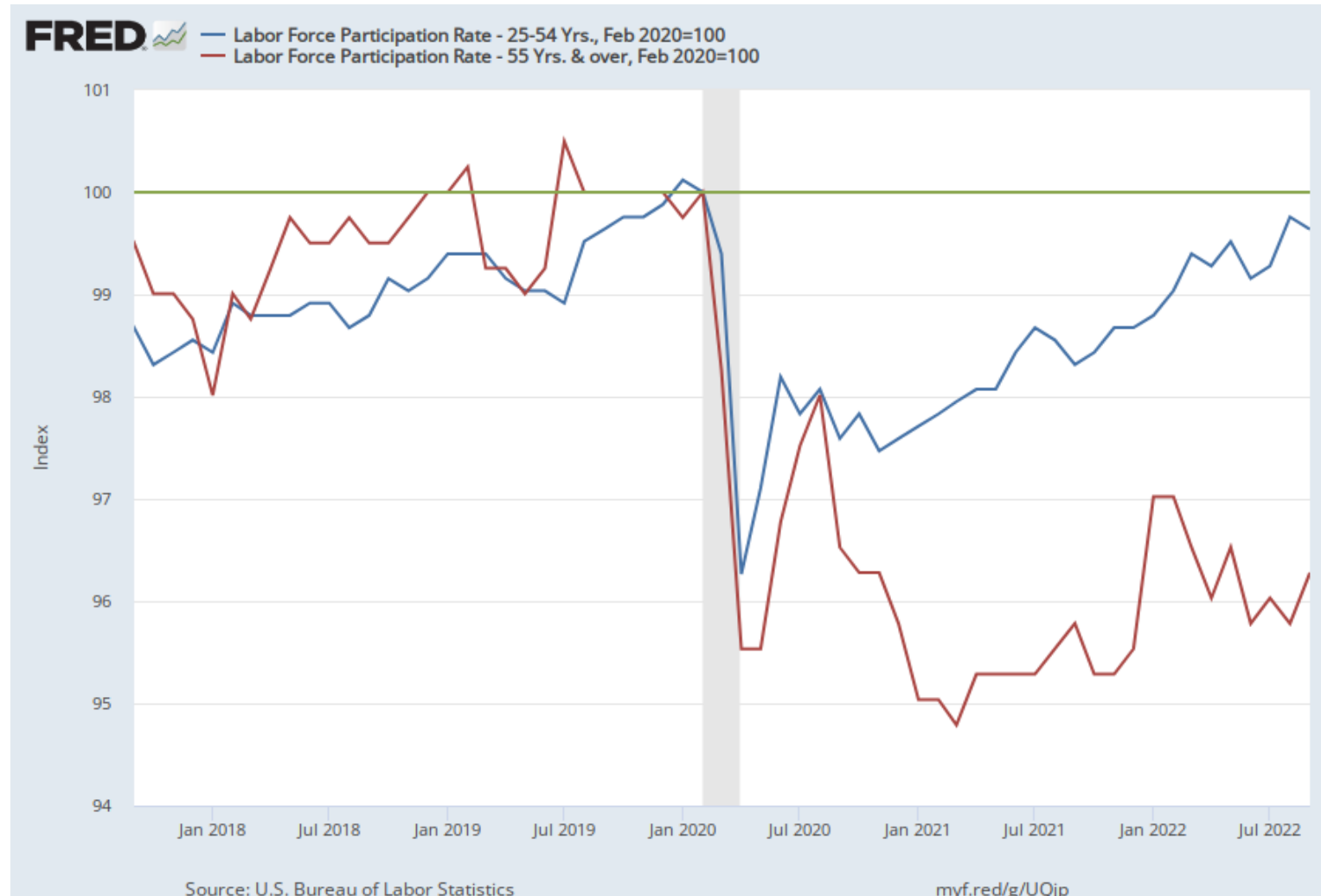
WHY WILL INFLATION COOL?

The labor market is super tight.....



WHY WILL INFLATION COOL?

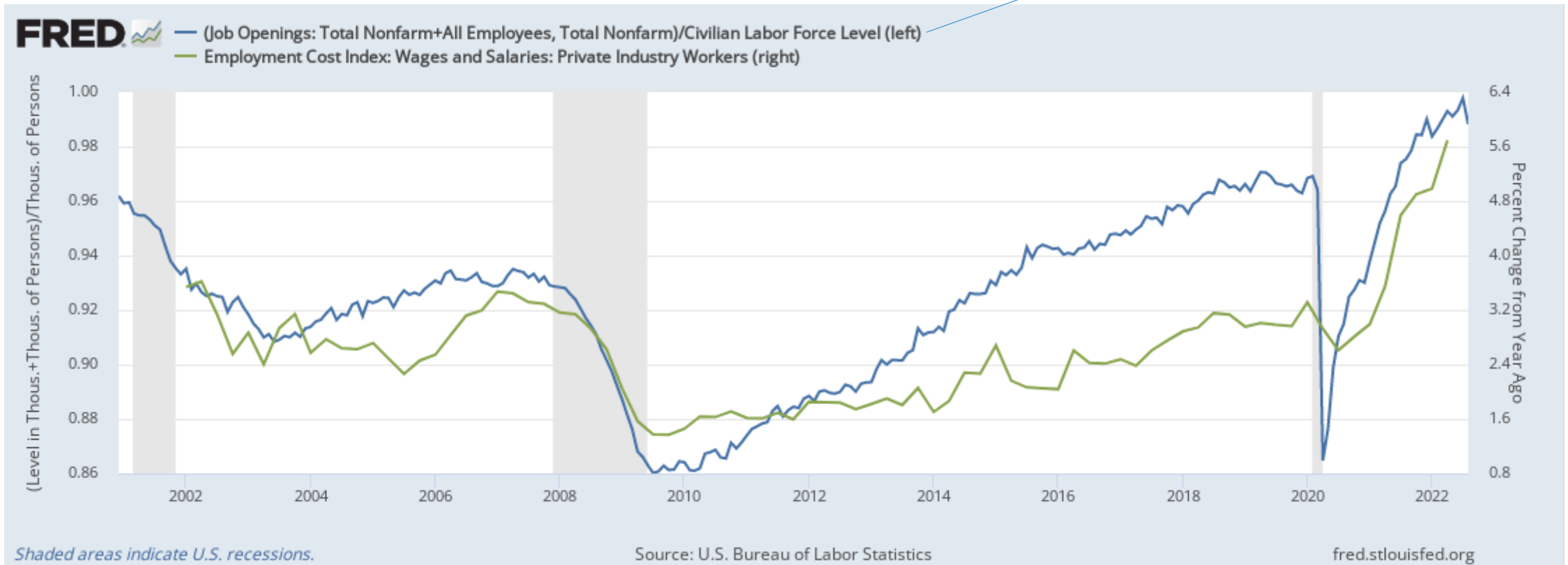
...but people are coming back to work...



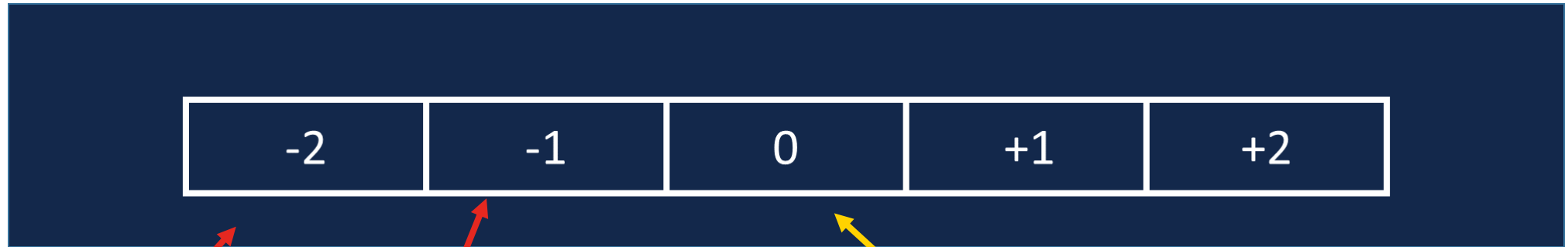
WHY WILL INFLATION COOL?

..which should slow wage gains a bit

Labor Demand / Supply imbalance



How will this cycle play out? - Inflation



Fed breaks something Keeps raising rates, fearful that actions have been ineffective. Inflation could turn quickly to deflation.

External Shock Fed cuts back on rate hikes. Inflation under control. But we have an exogenous shock: geopolitical tensions with China, war in Europe, renewed supply chain disruptions, food crisis, etc... sends us into stagflation.

Resilient Consumer Consumer remains strong amid tight labor market. Rate sensitive sectors are hit the hardest, but rate increases are moderate.

What is our Structural outlook? - Inflation

Strong Long Term Deflationary Drivers..

“Amazon Effect” --- online competition drives prices lower

Poor Structural Outlook --- e.g. shrinking labor forces curtail demand and prices

Globalization --- increased global competition throughout the supply chain drove prices lower for decades.

..have overwhelmed Inflationary Drivers

Central bank --- era of large balance sheets

Globalization --- Reshoring and “supply protection”

-2

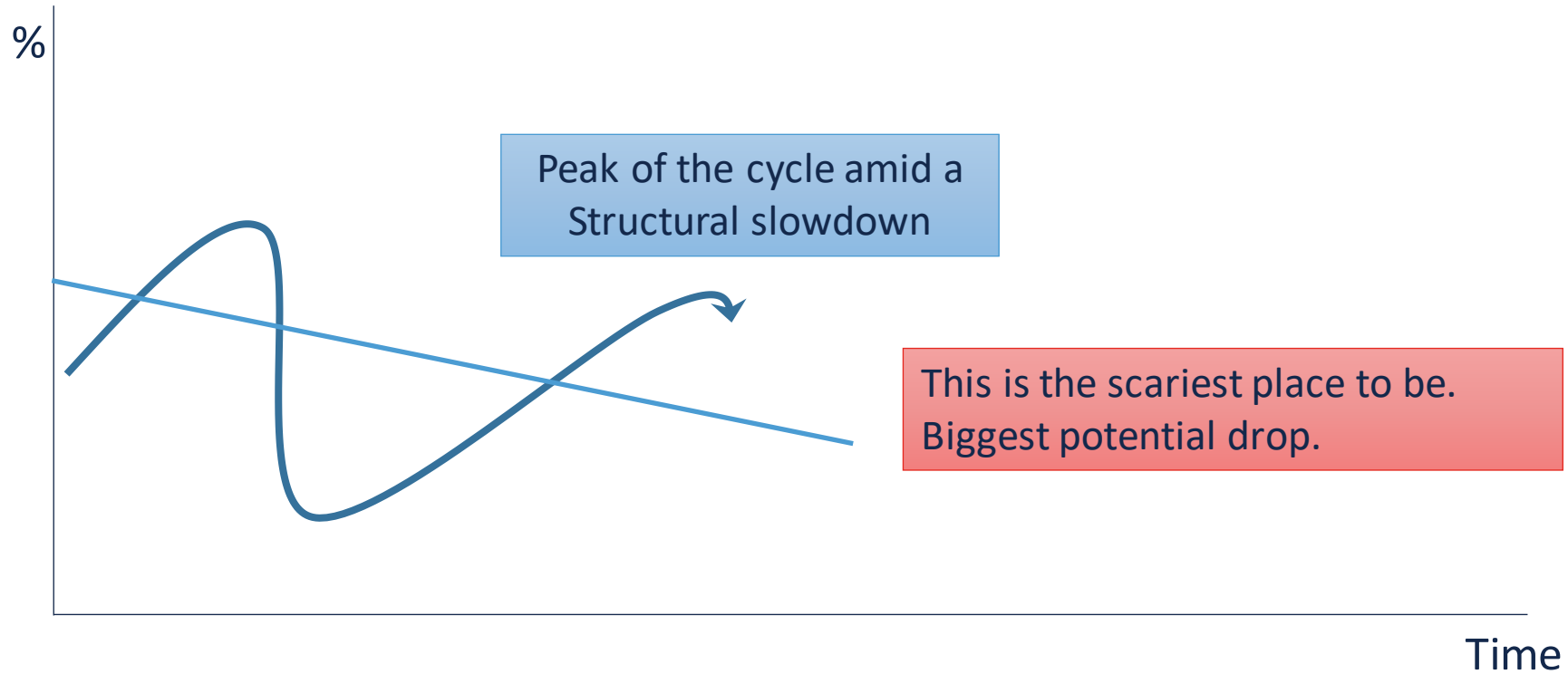
-1

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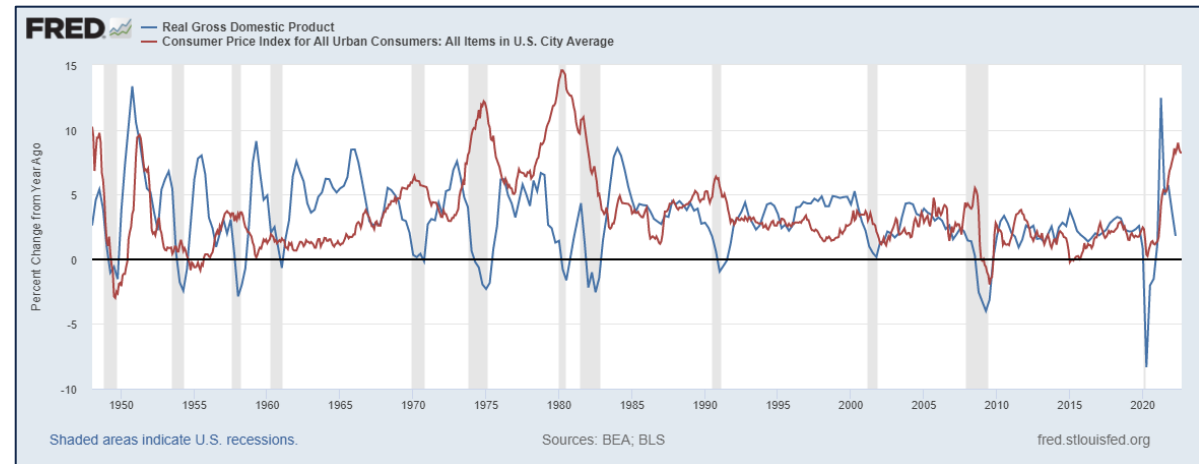
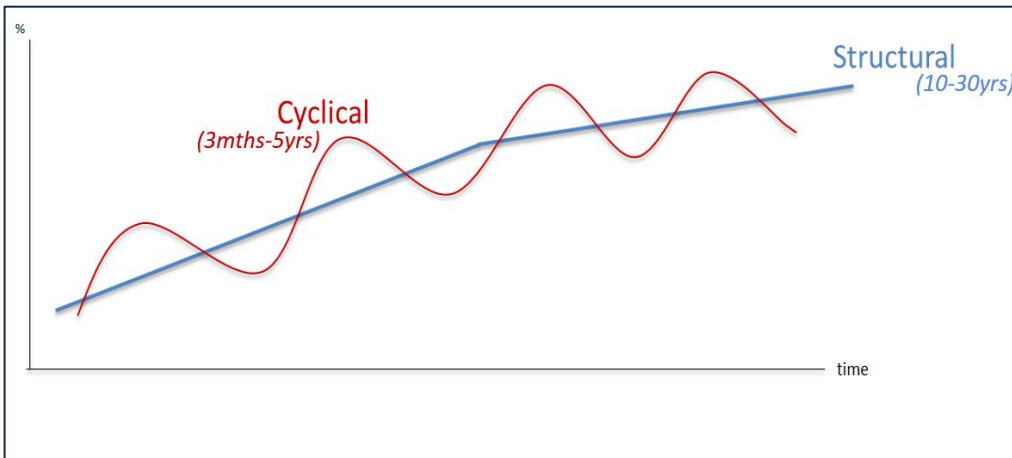
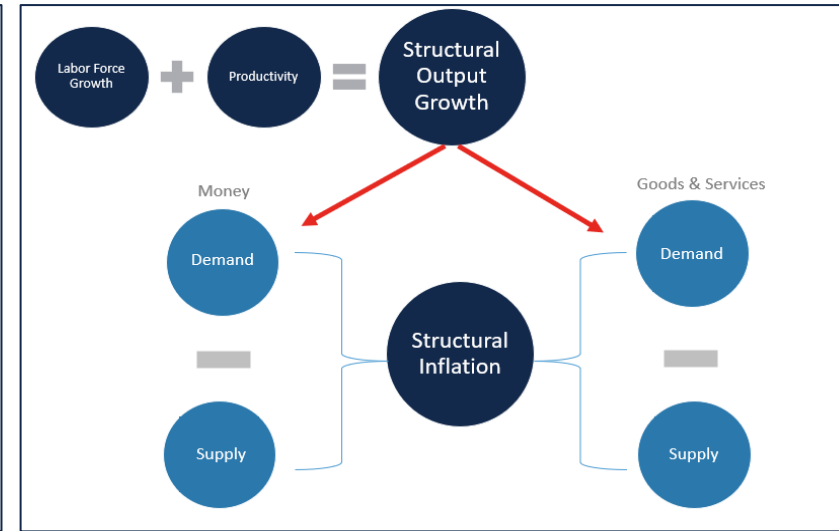
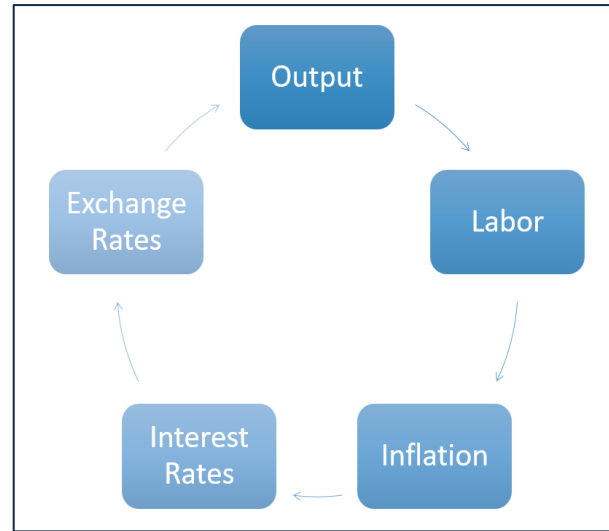
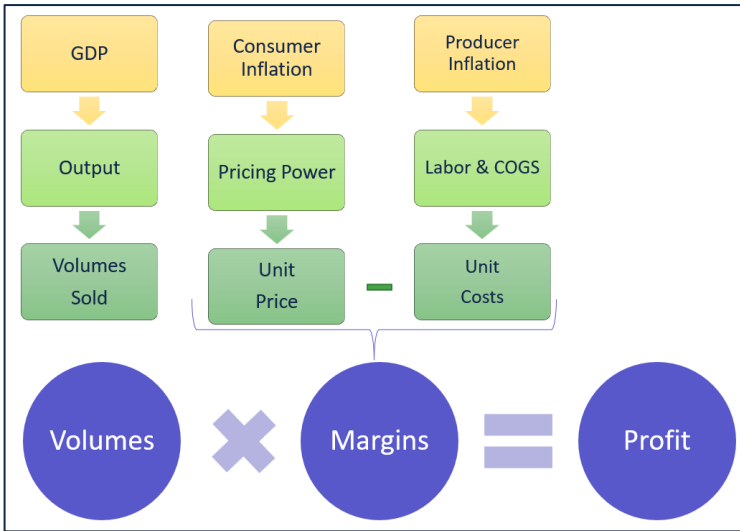
Here's our outlook



	<i>Nowcast</i>		<i>Forecast</i>	
	Cyclical	Structural	Cyclical	Structural
Output	0	-1	-1	-1
Inflation	-2	-1	-1	0

Takeaways

- Purpose
- Horizon
- Model
- Measure
- Scale



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