



Annual Spring Conference  
May 19-20, 2022  
Madrid, Spain

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There is No Free Lunch-  
How Portfolio Managers  
Need to Adapt to a Shifting  
Macroeconomic Paradigm

**Martin Zorn**  
*Kamakura Corporation*  
*President and COO*

*A Milton Friedman favorite political aphorism:*

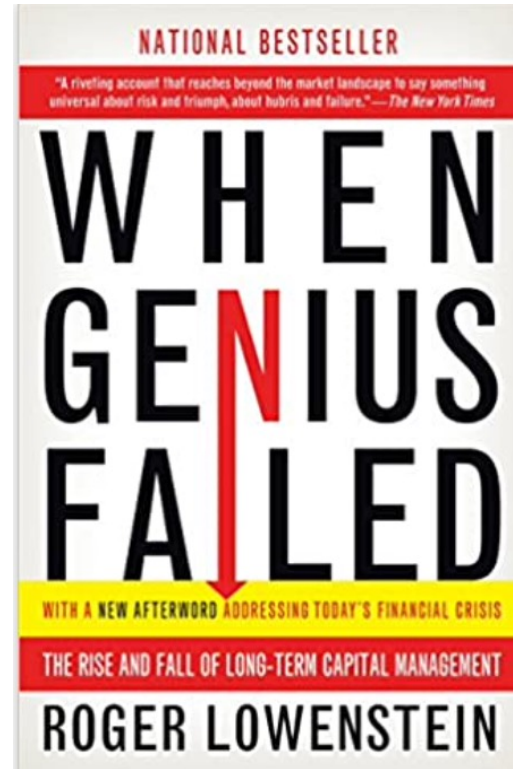
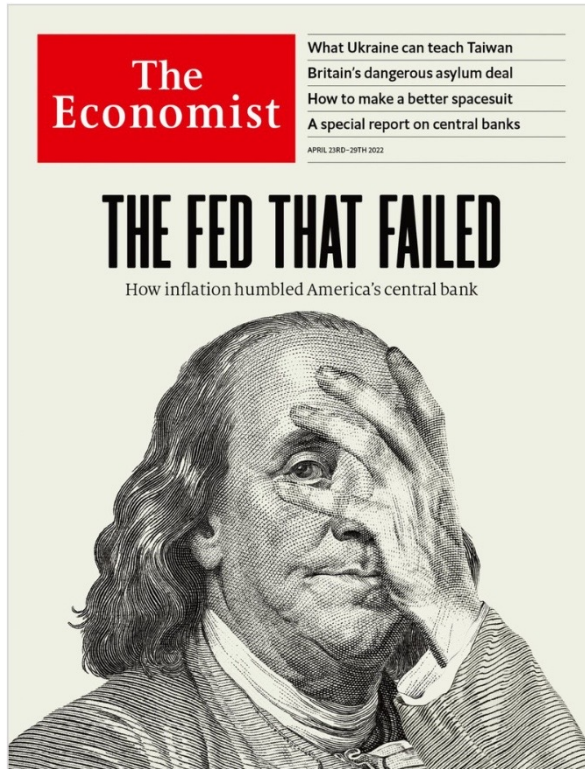
**“There’s no  
such thing  
as a free lunch.”**



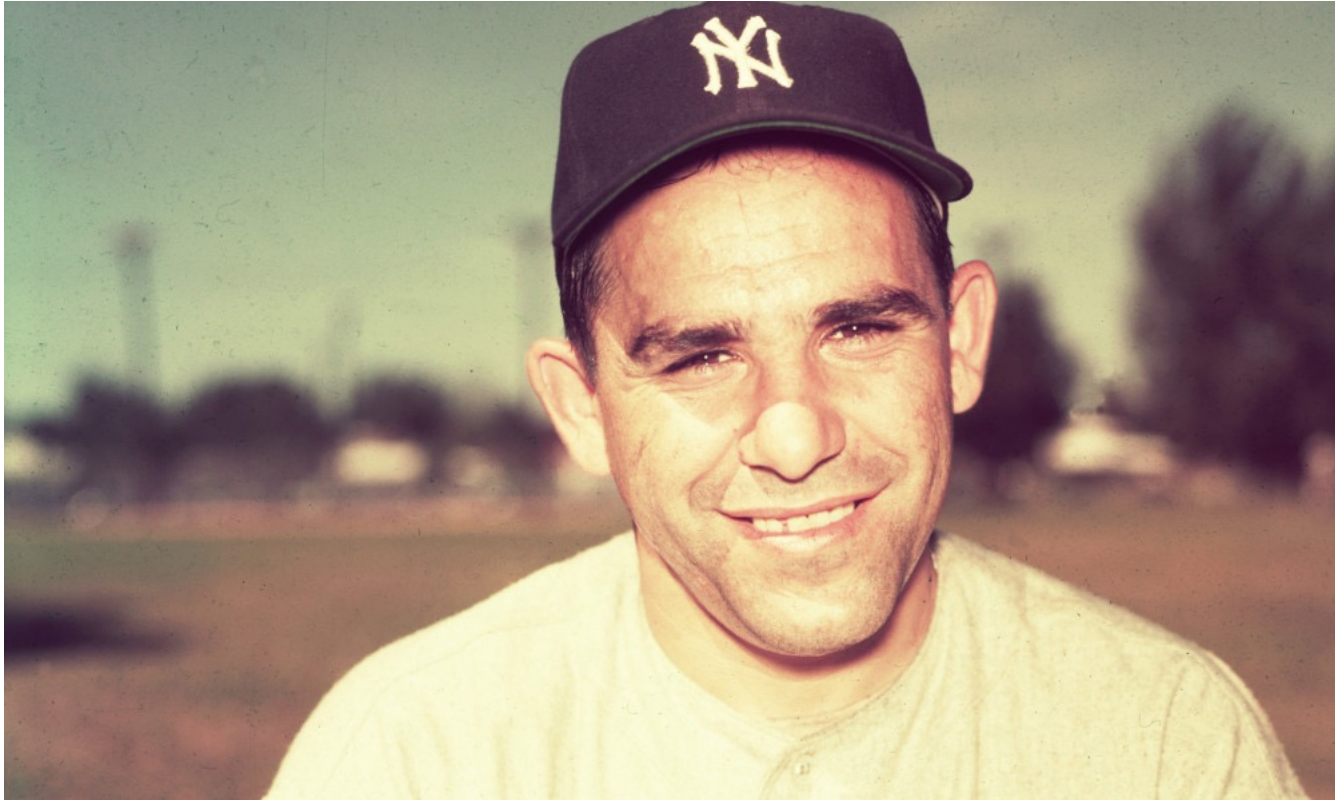
# There is No Free Lunch

- Inflation, Unemployment and Interest Rates
- Fiscal Policy and Sovereign Debt
- Central Banks, Liquidity and Market Distortions
- Credit Cycle – Repealed or “Super-Sized”?

# Does One Learn More from Success or Failure?



**”The future ain’t what is used to be”**



# Why is it that border collies can catch Frisbees better than many humans, including ones with Physics Ph.D.s?

- Andrew Haldane – “The Dog and the Frisbee”



## How To Catch A Flyball

CALCULATE TRAJECTORY:

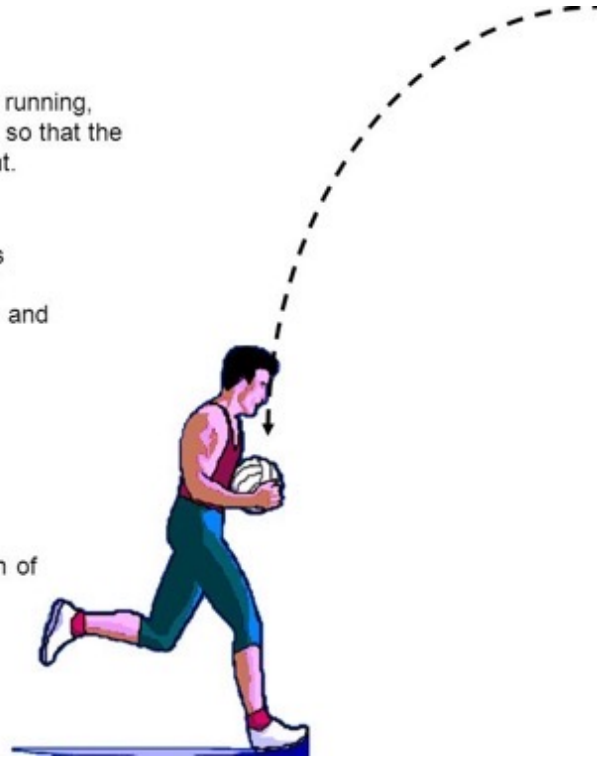
$$z(x) = x \left( \tan \alpha_0 + \frac{mg}{\beta v_0 \cos \alpha_0} \right) + \frac{m^2 g}{\beta^2} \ln \left( 1 - \frac{\beta}{m} \frac{x}{v_0 \cos \alpha_0} \right)$$

# The Dog and the Frisbee

## Gaze heuristic

Fix your gaze on the ball, start running, and adjust your running speed so that the angle of gaze remains constant.

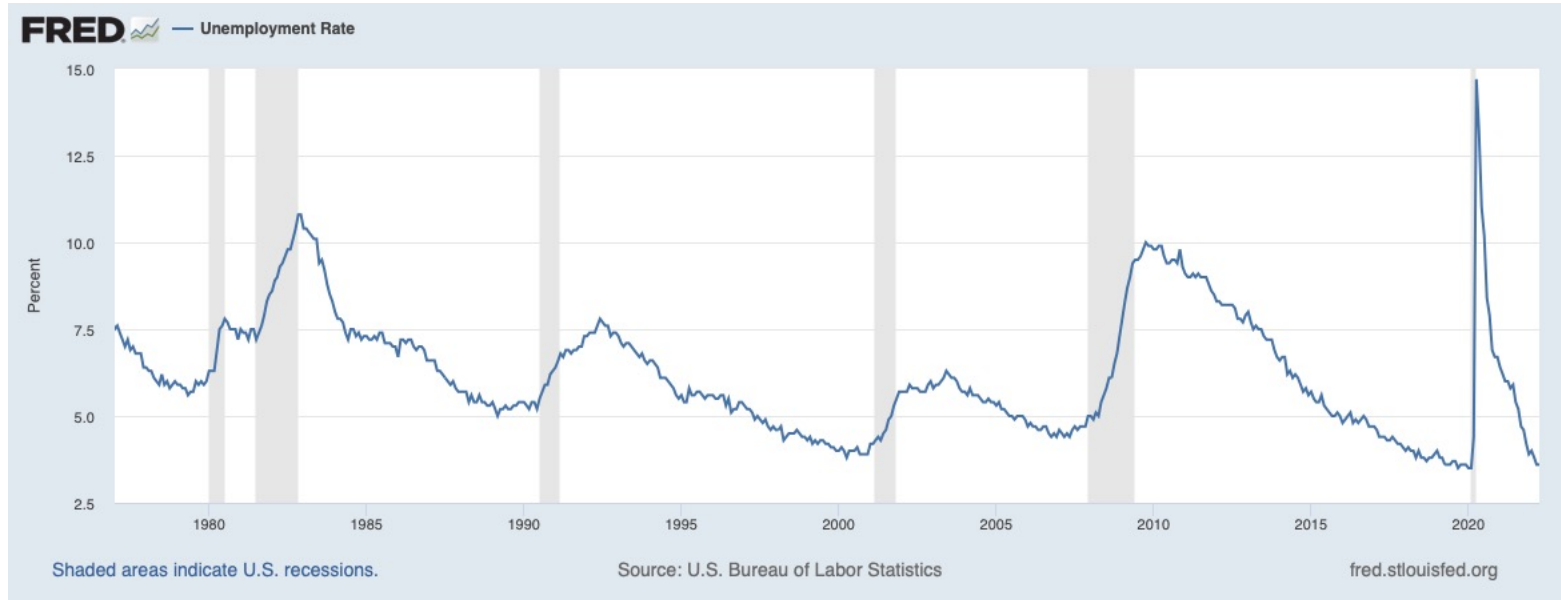
- Bats, birds, and dragonflies maintain a constant optical angle between themselves and their prey.
- Dogs do the same, when catching a Frisbee (Shaffer et al., 2004).
- Ignore: velocity, angle, air resistance, speed, direction of wind, and spin.



# Macroeconomic Factors – Changing Paradigms

- Employment
- Inflation
- Interest Rates
- Global Currencies

# US Unemployment Rate – May 2022



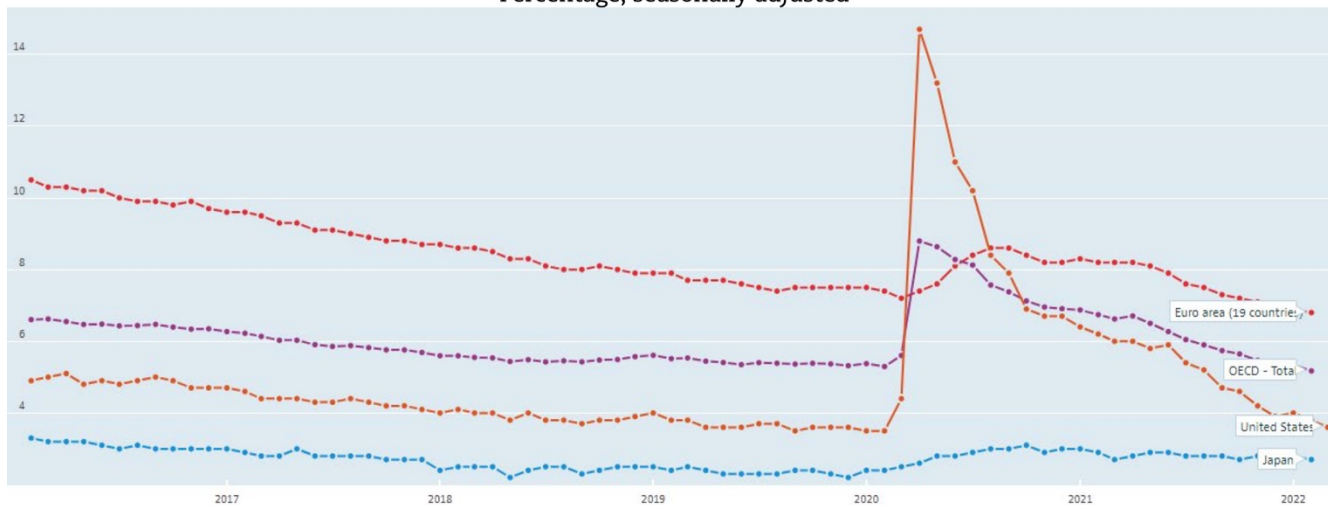
# Unemployment rate in the OECD area drops below the Pre-pandemic rate



Paris, 12 April 2022

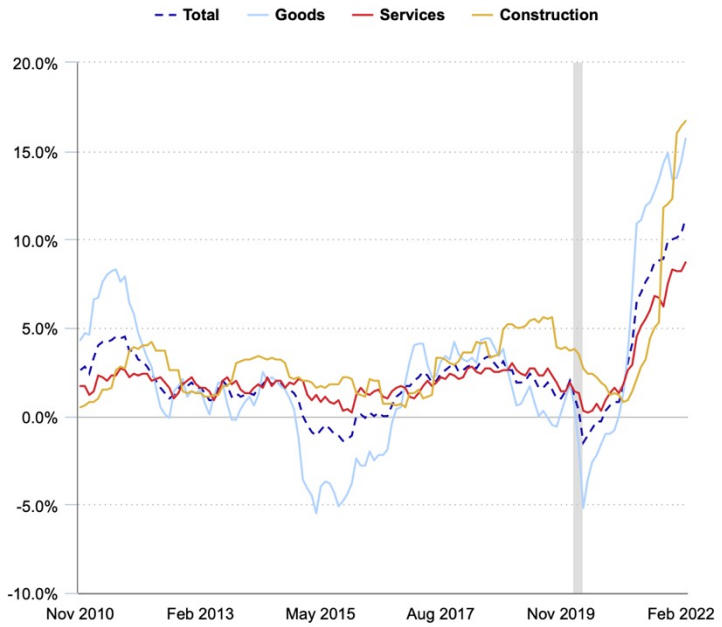
**OECD Unemployment Rates**  
**News Release: February 2022**

Figure 1. Unemployment rates for selected OECD countries and country aggregates<sup>(1)</sup>  
Percentage, seasonally adjusted



# Producer prices for final demand up 11.2 percent for the year ended March 2022

12-month percent change in Producer Price Indexes for final demand, November 2010–March 2022

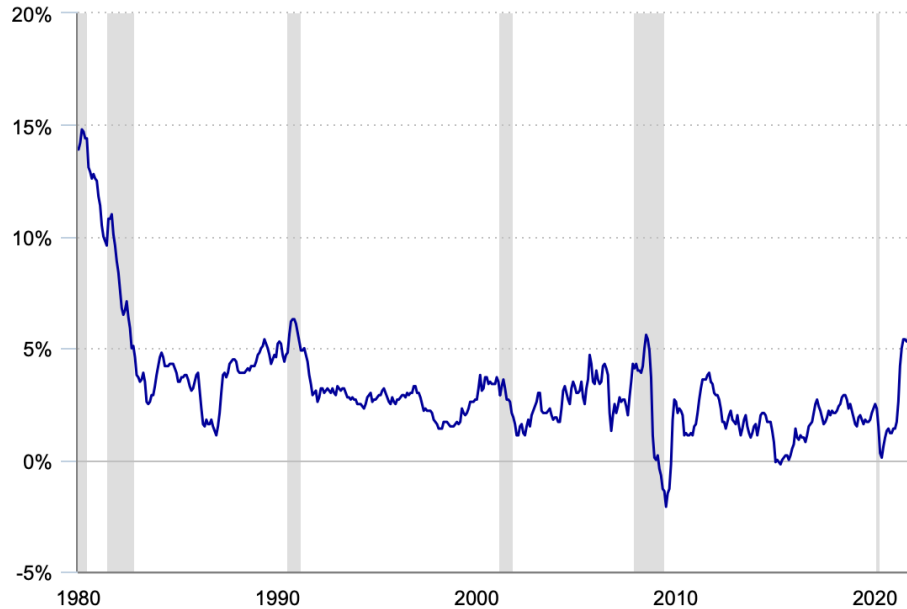


Click legend items to change data display. Hover over chart to view data.  
Shaded area represents a recession as determined by the National Bureau of Economic Research.  
Source: U.S. Bureau of Labor Statistics.



# Consumer prices up 8.5 percent for the year ended March 2022

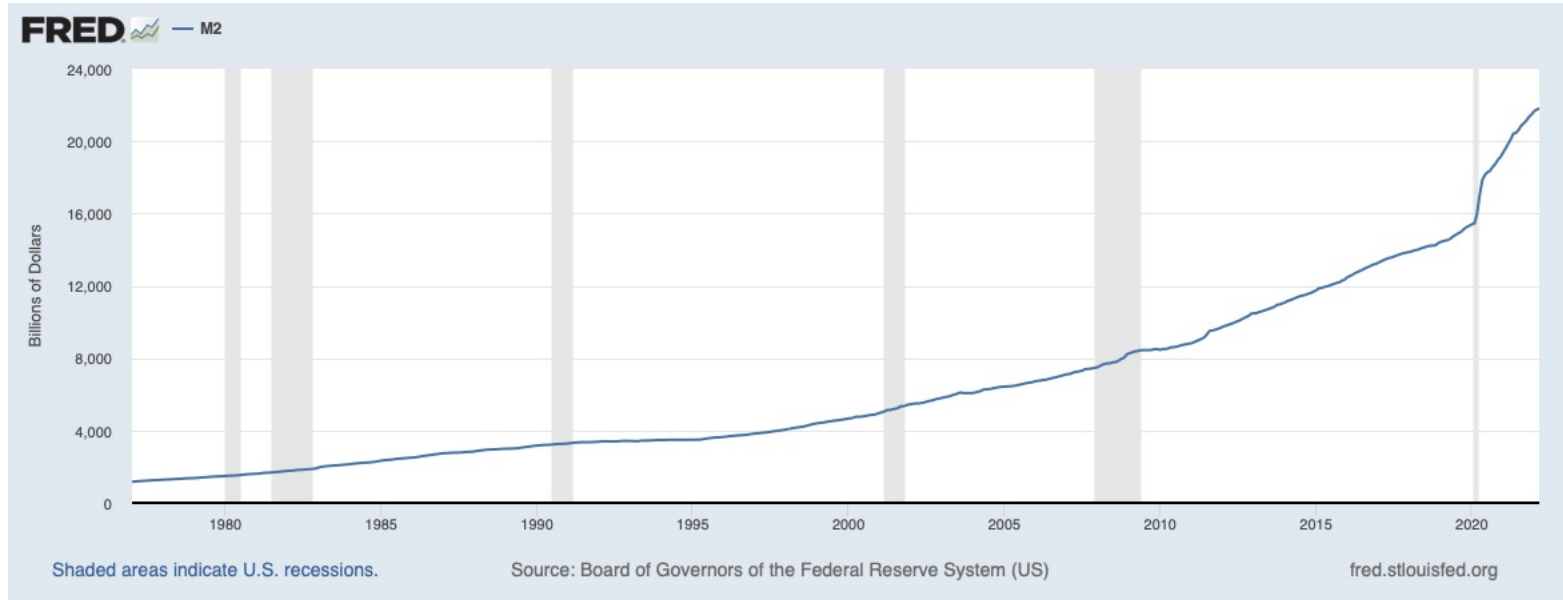
12-month percentage change in Consumer Price Index, January 1980–March 2022



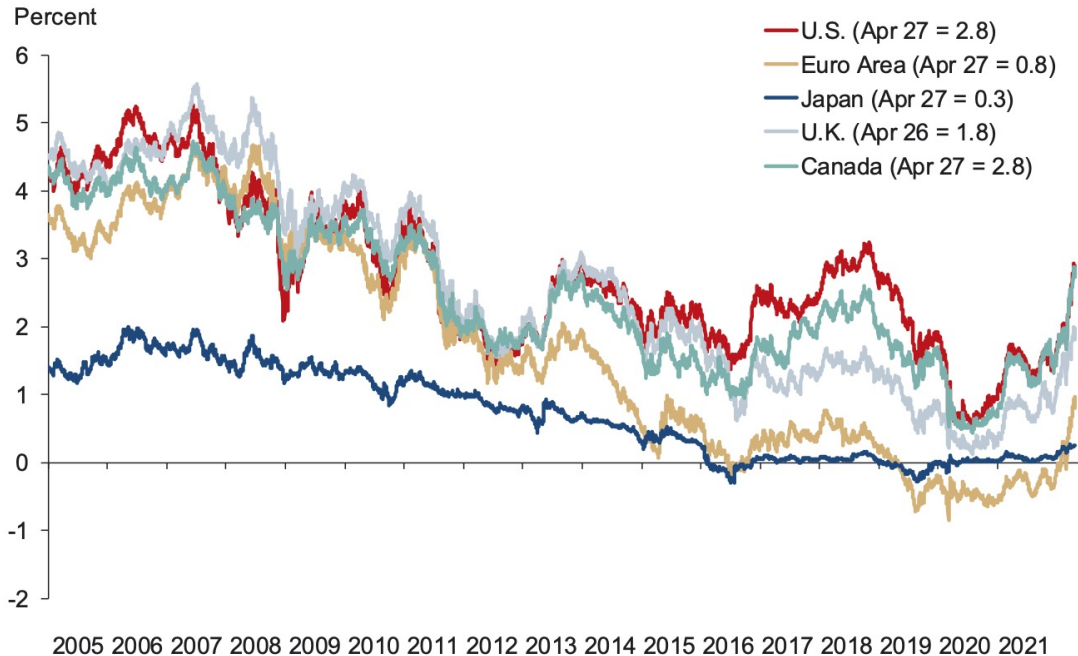
Hover over chart to view data.  
Shaded areas represent recessions as determined by the National Bureau of Economic Research.  
Source: U.S. Bureau of Labor Statistics.



# US Money Supply – M2



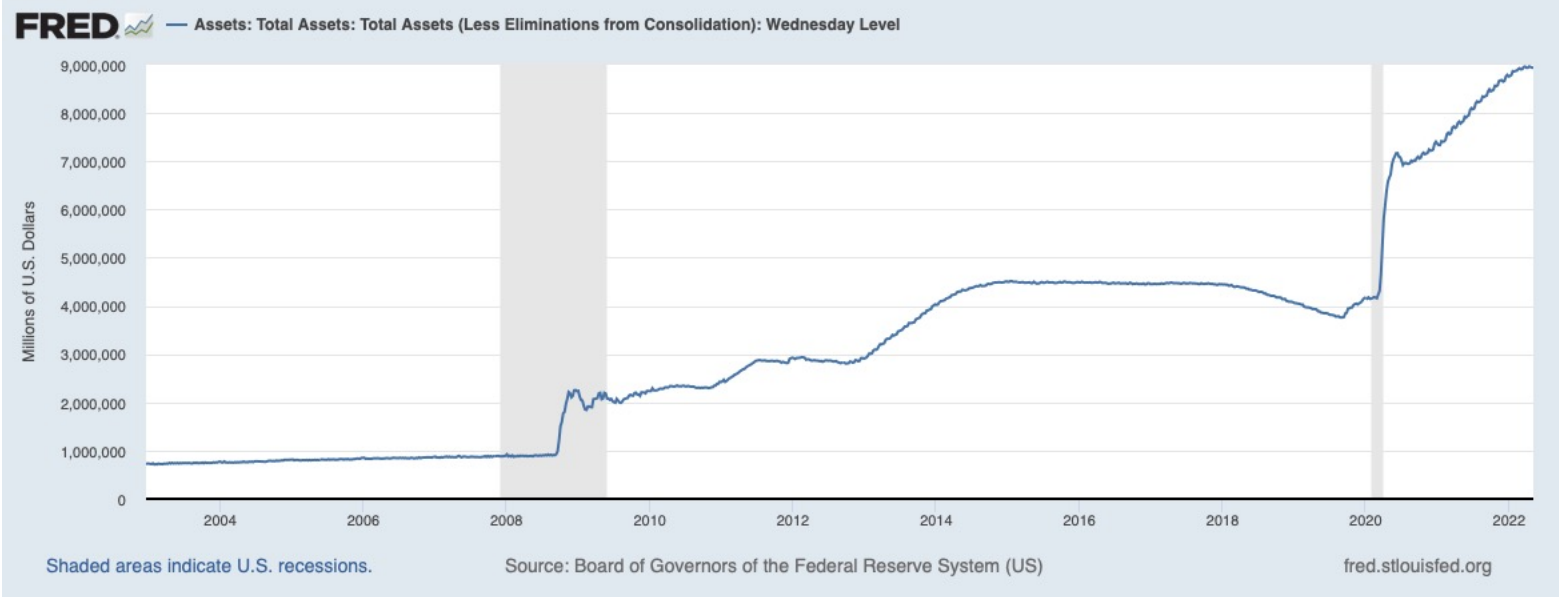
# 10-Year Government Bond Yields in Major Advanced Economies



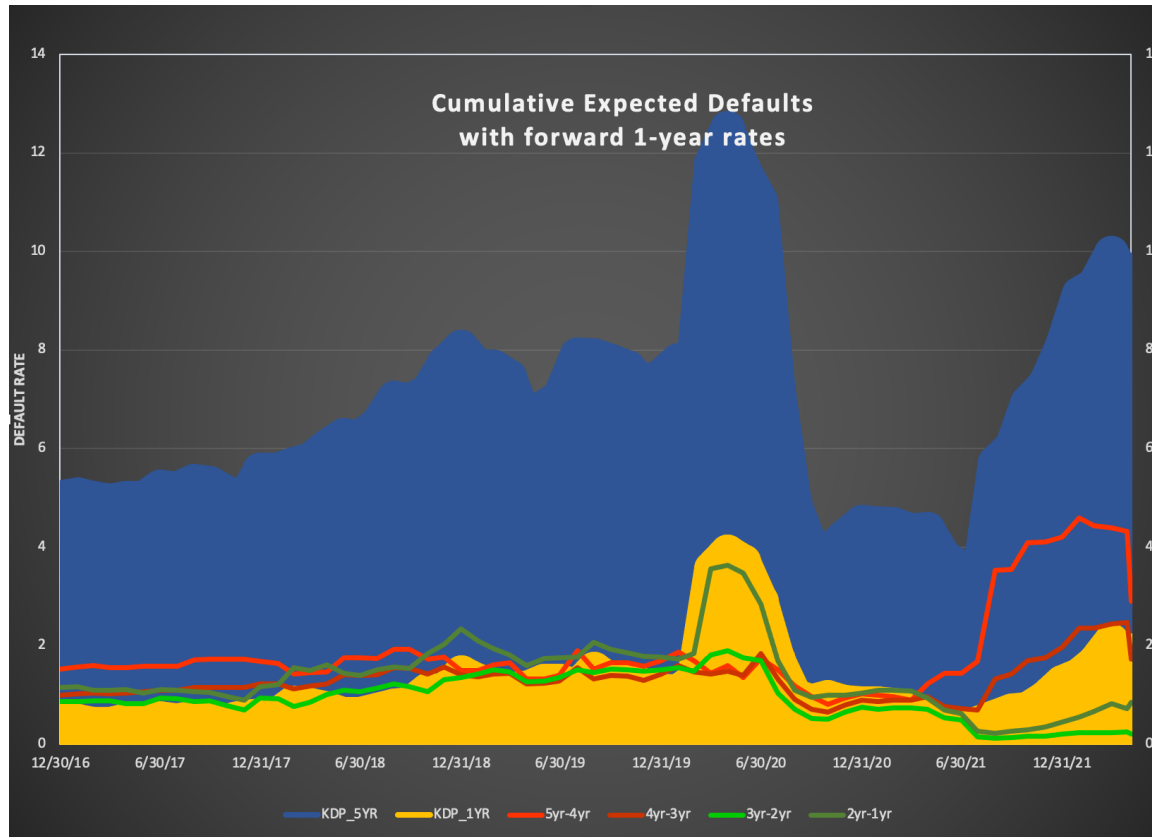
SOURCES: Financial Times, Reuters, Bank of Canada; Haver Analytics

Globalization Institute  
Federal Reserve Bank of Dallas

# The Federal Reserve Balance Sheet



# What is the Impact on Expected Defaults?



1-yr, 5-yr and forward 1-yr expected default rates

Derived from Kamakura Expected Cumulative Default Rates

# The Federal Reserve Has Two Jobs

- Price Stability
- Maximum Sustainable Employment

Looks like someone forgot to stress test their model

# How Did We Get Here?

- We are not asking if inflation is transitory anymore
- Milton Friedman said inflation is always a monetary issue
- The Fed said they had the tools to fight inflation and last year we questioned whether they had the will
- In September 2021, the Fed promised not to raise interest rates until employment had already reached its maximum sustainable level

## How Did We Get Here – Part 2

- The Fed's Models appear to have been rooted on the demand side with too little weight on the supply side
- A recent study of the political persuasion of Fed economists leaned 10.4 to 1 towards one political persuasion over the other
- Think James Tobin over Milton Friedman
- Now the key question is whether the Federal Reserve can clean up their own mess?

# What are the Implications?

- Today's Biggest Challenges
  - US Inflation
  - Europe's Energy Security
  - China's Zero Covid Policy
- What can go wrong?
  - Big Repricing of Currencies
  - 2022 is the year of the "Everything Slump"
  - Poor and Emerging Countries become the roadkill from the solution

# The Role of the Risk Manager

- Role of the trader
  - Capitalize on price fluctuations in the market
- Role of the lender
  - Earn a return on loans with the primary focus on the return of capital
- Role of the investor
  - Earn a return on capital
- Role of the Risk Manager
  - Ensure that the traders, lenders and investors stay on the road and inside the guardrails

# History Check

- How many of you were in your current position during the “Great Recession”? (Dec 2007- June 2009)
- Dotcom Bubble 1999-2000
- Asia Crisis 1997
- Junk Bond Crash 1989
- Latin America Crisis 1982
- The Great Inflation 1965-1982

# What is a Model?

## Abstract Representation of some Real World Setting



- A model is equivalent to its assumptions. To understand a model, one needs to understand the assumptions.
- Implications are mathematical deductions from the assumptions.
- One way to test a model is to test the assumptions.
- Second way is to test the implications.
- If the assumptions are false, so is the model.
- If the implications are wrong, it implies the assumptions are false.

# Review of Model Theory

- Reasonability of the Model's theory and logic as well as production of comparable results from alternative models or mathematical formulas
- Review the material aspects of the model from an empirical, analytical or best-practice perspective
- Identify potential weakness or limitations of the model
- Independent stress testing or back testing of the model
- Is the Model's documentation transparent and clear?
- **Review the appropriateness of the Model's use for its intended purpose**

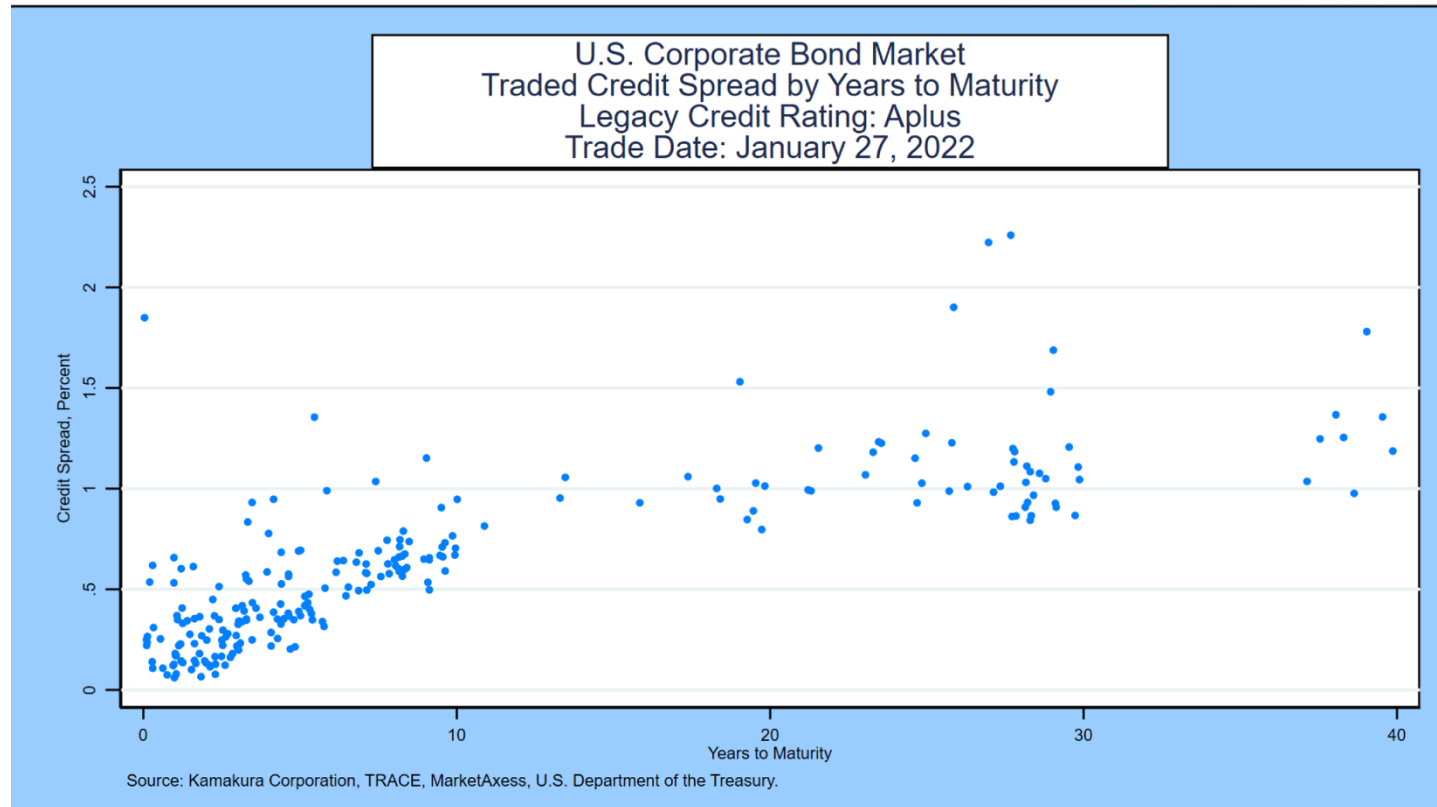
# Understand the Data Input

- Understand the data input
- Understand the data transformation
  - Winsorization
  - Smoothing
  - Normalization
  - Mean Reversion
- Are these techniques appropriate?

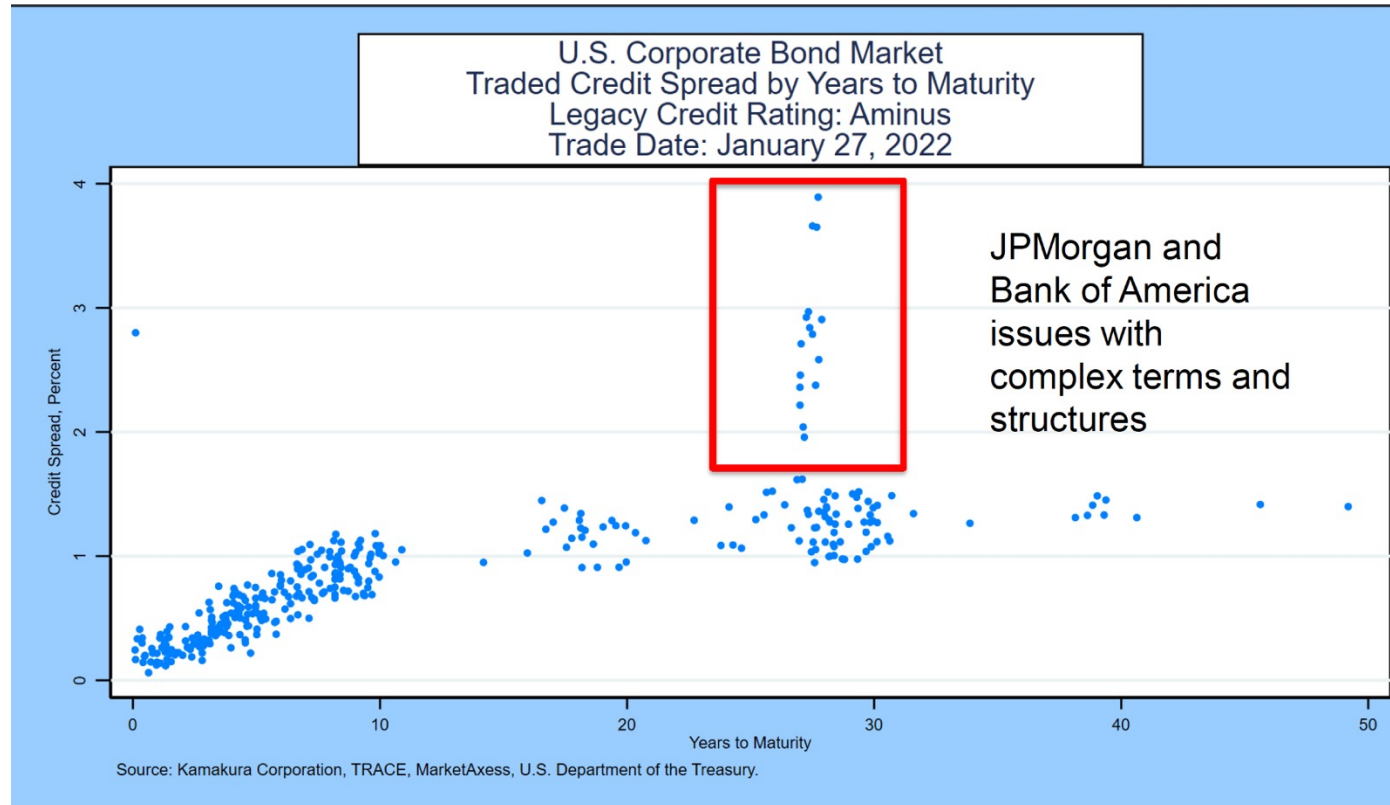
# Why Data Matters

- Data Persistency
- Data Definition – sweat the details
- Data Analysis can differ
- Data Points not captured

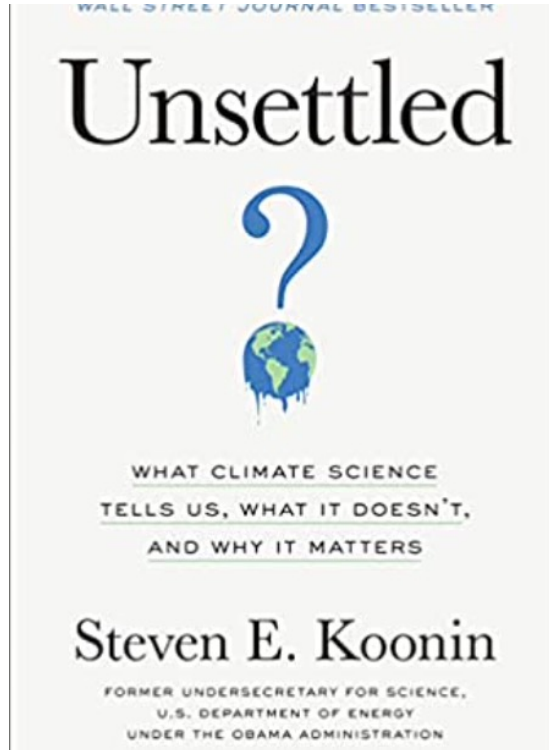
# Lucky Data: A+ Issues



# Unlucky Data: A- Issues



# What Can Go Wrong With the Model



- Degree of Uncertainty
- People in the “right places” present model results as “settled facts”
- Incorrect Attribution
- Fitting the data to the model
- Building in biases

# Final Thoughts

- Geopolitical Flashpoints are not going away
- Policy Consequences and Unintended Consequences
  - ESG
  - Global Debt
- Rising Defaults
- Central bank levers to control inflation are weaker with lower breaking points
- Understand your models and how you are using them –your job is not to predict the future but model what it may look like