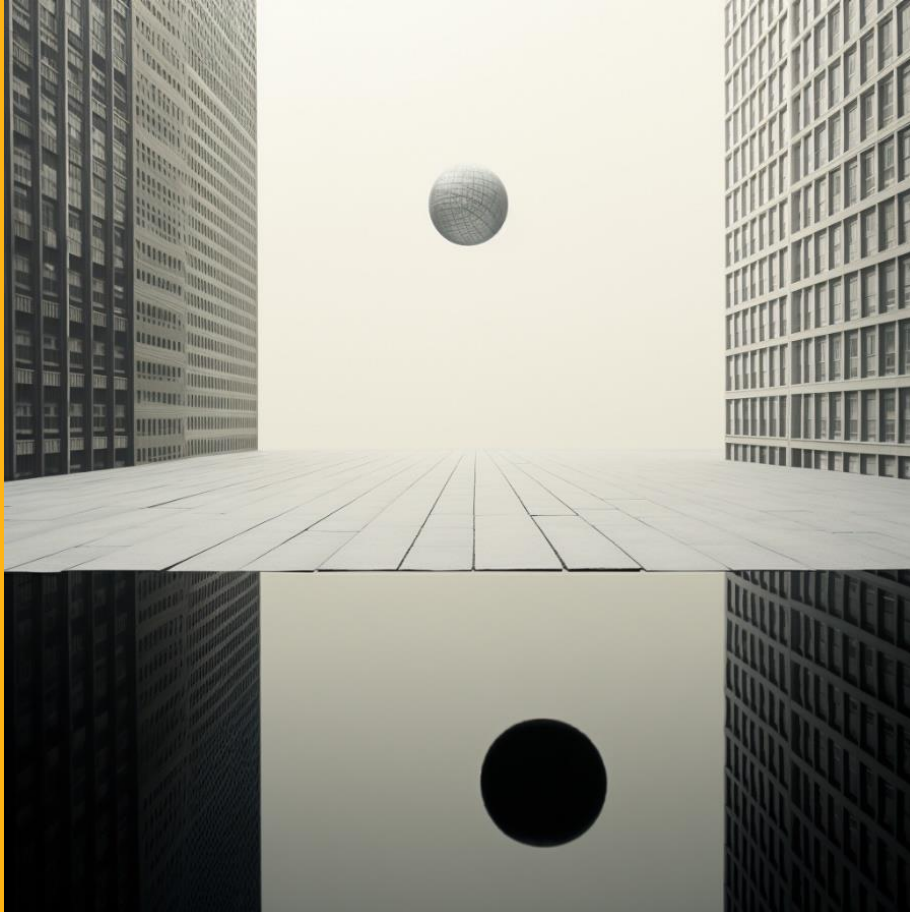


ECON 002:

Principles of Macroeconomics



Lecture 8: Short-Run Macroeconomics

Today

- Introduction to Macroeconomic Equilibrium
- Consumption Function
- Book Chapter 4



The Great Depression



Roaring 1920s:

Urban expansion, post-WWI optimism, speculation, borrow to invest

Speculation = Acquiring an asset with the intent of selling it at a higher price for profit: prices increase, but not necessarily the value.

Buy low, sell high for profit. NYSE & Dow Jones, e.g.: Aug. 1921 = 63.9 Sept. 1929 = 381.2

Can't sell stocks for a profit on Oct 24, 1929.

Dow Jones fell 40%, did not fully recover until 1944...15 years later.

Unemployment = 19.1 to 25%

Other Notable Economic Recessions

- **OPEC embargo in the 1970s, high oil prices, inflation and increased unemployment rates**
 - May 1975 unemployment rate = 9.0%
- **Risky investments by savings & loan associations caused an early 80s crisis.**
 - Dec 1982: Unemployment rate = 10.8%
- **Housing crisis in 2007 led to 18-month worldwide economic downturn**
 - Nov 2009 unemployment rate = 9.9%
- **COVID-19 caused business closures, job losses, supply chain disruptions, and reduced consumer spending.**
 - April 2020 Unemployment Rate = 14.7%.
- **Future impact? \$5.8T of fiscal support or ~28% of GDP between March 2020 and 2021**
 - Highest inflation since the 1980s (as high as 9%), but low unemployment rate (3.6%)
 - Fed aggressively increased interest rates, even yesterday
 - Implications for long-term bank assets

Dec. 2020 Unemployment Rate = 6.7%

Dec. 2023 Unemployment Rate = 4.1%

Dates of Recessions

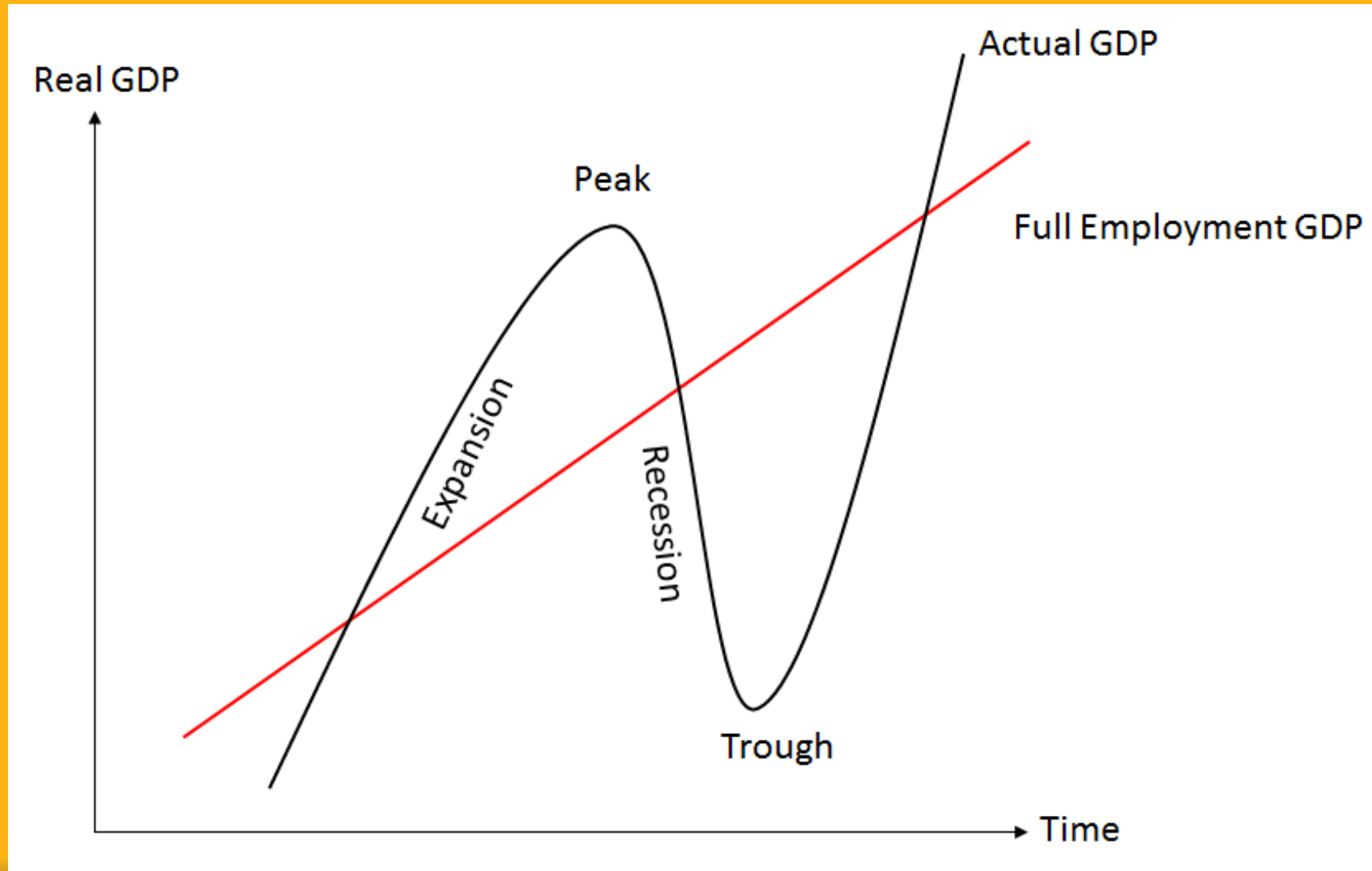
- **The Basics of the Business Cycle**

- Business Cycle: A sequence of growth and decline in economic activity that occurs naturally.
- Expansion: growth in production, employment, and income.
- Peak: highest point of growth or expansion.
- Recession: decrease in production, employment, and income.
- Trough: the lowest point of economic decline

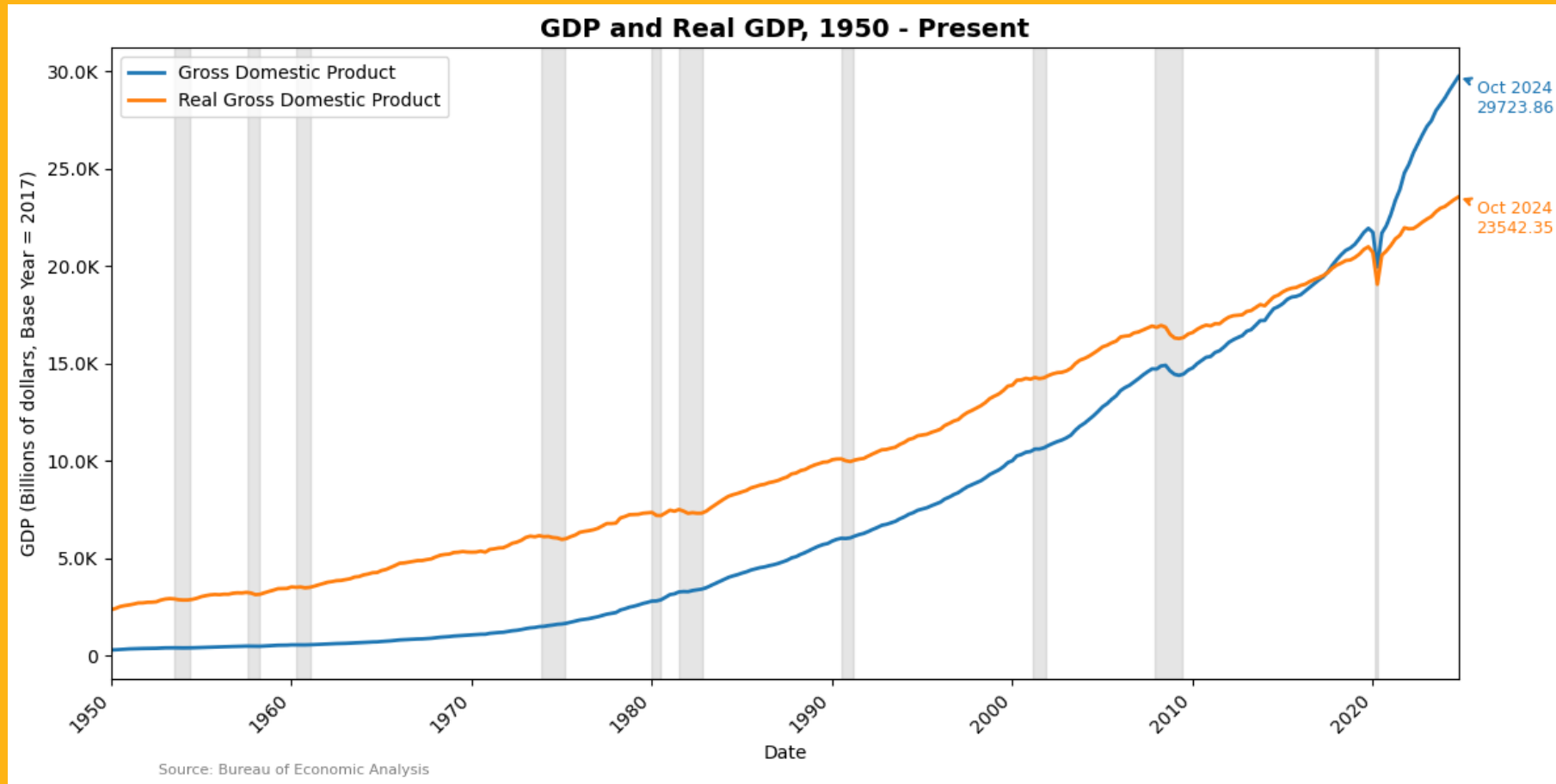
- **National Bureau of Economic Research (NBER)**

- Tasked with determining the duration of economic downturns in the United States
- “a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production and wholesale-retail sales.”
- Depression is an economic downturn that lasts for 3 to 4 years and has a significant decline in GDP of 10% or more.
- Average Recession Length between WWII and 2007: ~10 months
- Great Recession: December 2007 to June 2009 = 18 months

Business Cycle

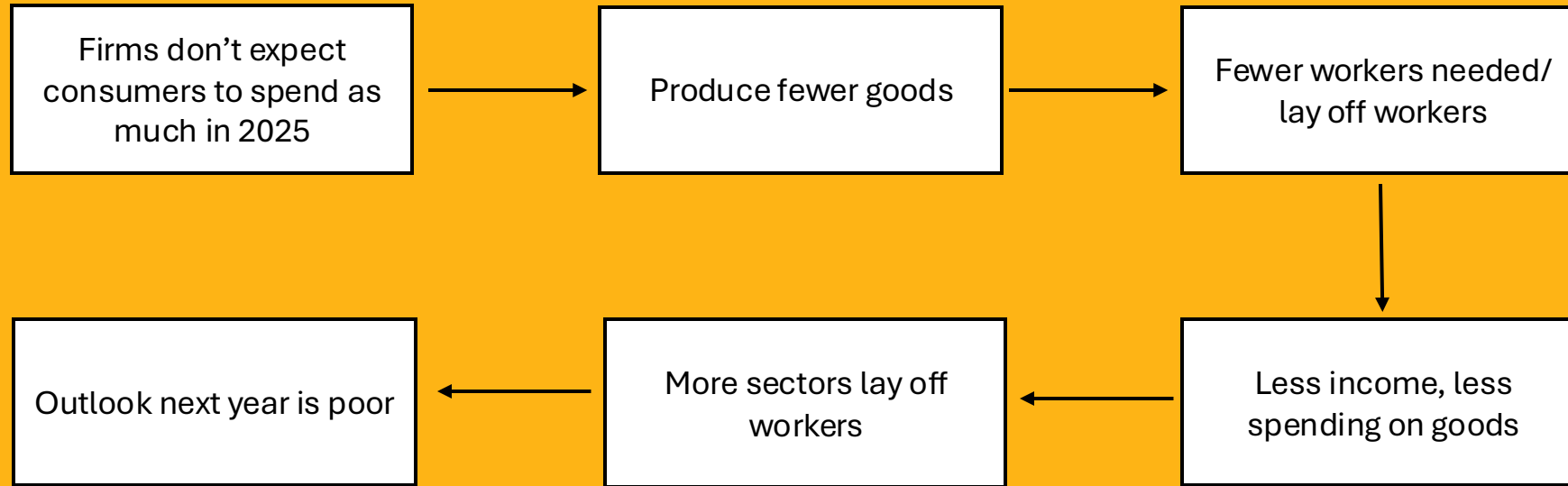


GDP Since WWI



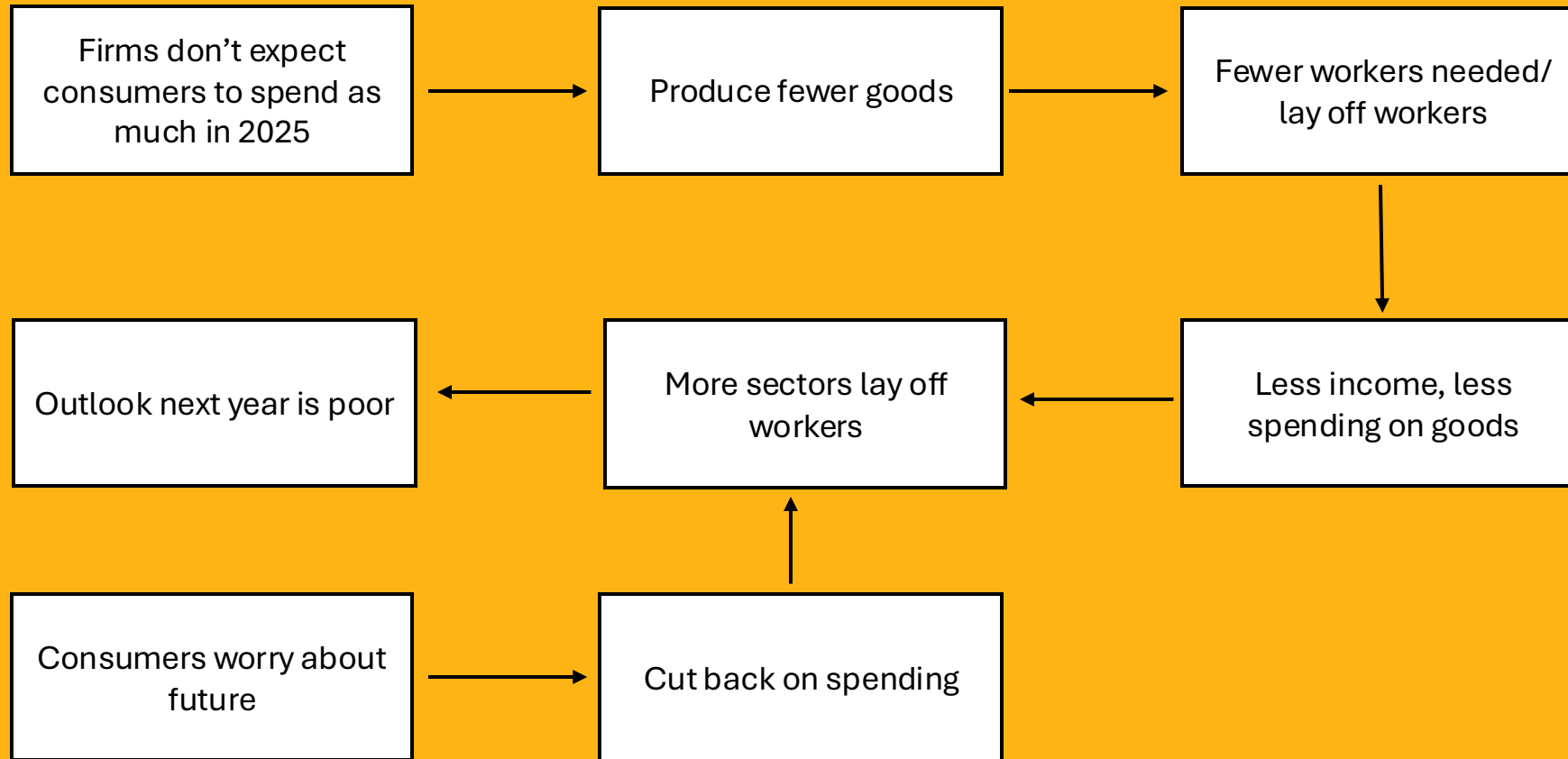
Short-Run Economics

Simple Economic Cycle



Short-Run Economics

Simple Economic Cycle



Spending = Production = Output = Income



- **GDP =**
 - Production(Expenditure)
 - Income(Factor Payments)
 - Firm-Value(Value-Added)
- **Introduce Aggregate expenditures = total spending in the economy = AE**
- **Short-Run Macroeconomic Equilibrium:**
 - Output = Aggregate Expenditures, $Y = AE$
- **Goal: Explain why a particular equilibrium level of output (Y) is occurring by examining changes in AE**
- **Bigger Goal: get economy back to full-employment equilibrium output:**
 - $Y - \text{Bar}$

Define Spending in the Economy



Break down spending in the economy based on categories of spenders

Household consumption = Consumption = C

What determines how much a household spends?

1. Income/Disposable Income

2. Wealth

Define Spending in the Economy

Household consumption = Consumption = C

What determines how much a household spends?

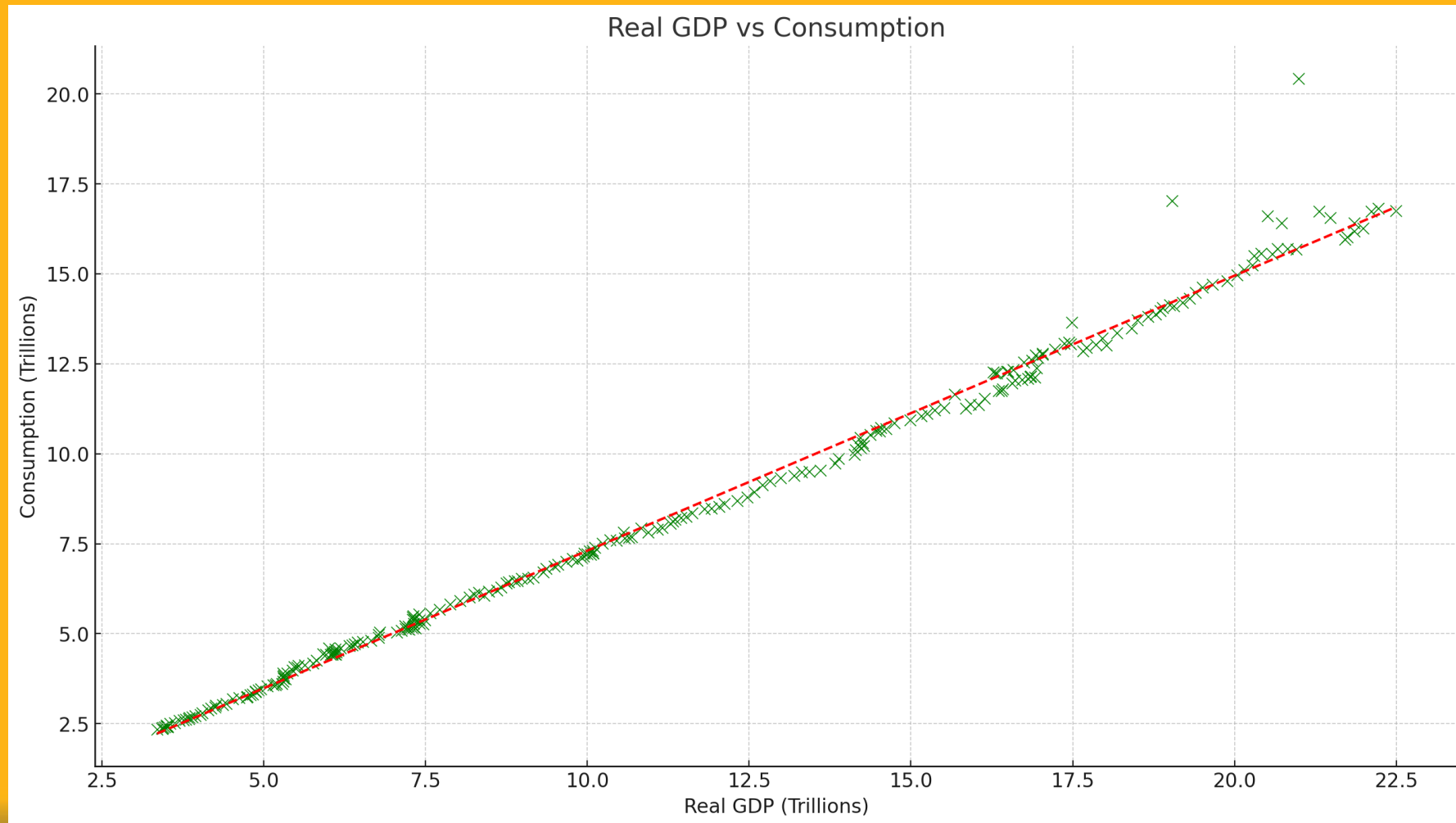
3. Interest Rate

4. Expectations

5. Preferences



How Important is Income (Y)?



How Important is Income (Y)?



Disposable Income and Consumption

- The Relationship between Disposable Income and Consumption:

		Real Disposable Income	Consumption
		0	2000
		2000	3200
		4000	4400
		6000	5600
		8000	6800
		10000	8000

Disposable Income and Consumption



Autonomous Consumption (AC):

Marginal Propensity to Consume (MPC):

Consumption Function

- Consumption Function

		Real Disposable Income	Consumption
		0	2000
		2000	3200
		4000	4400
		6000	5600
		8000	6800
		10000	8000

Consumption Function

- Disposable Income vs. Consumption



Consumption Function

- Consumption Function:

Income (Y)	Taxes (T)	Real Disposable Income	Consumption
4000	2000	0	2000
6000	2000	2000	3200
8000	2000	4000	4400
10000	2000	6000	5600
12000	2000	8000	6800
14000	2000	10000	8000

Consumption Function

- Income vs. Consumption, holding taxes constant



Consumption Function

- What changes the consumption function?

