

Session 2

Qualitative Analysis & Macro Indicators

Lesson Outline

1. Qualitative Analysis
2. Macro Indicators
3. Leading Indicators
4. Lagging Indicators
5. Coincident Indicators
6. Charting

What is Qualitative Analysis?

The assessment of **non-numeric** data to **gain insights** into the economy and geopolitical events

What is Qualitative Analysis

Definition: The assessment of **non-numeric** data to **gain insights** into the economy and geopolitical events

- Provides nuanced understanding of factors that qualitative data cannot capture
- Deals with the intangibles and inexact information that machines struggle to capture
- The understanding of the **people, geography, history** and **cultures** are key

Sources of Quantitative Data

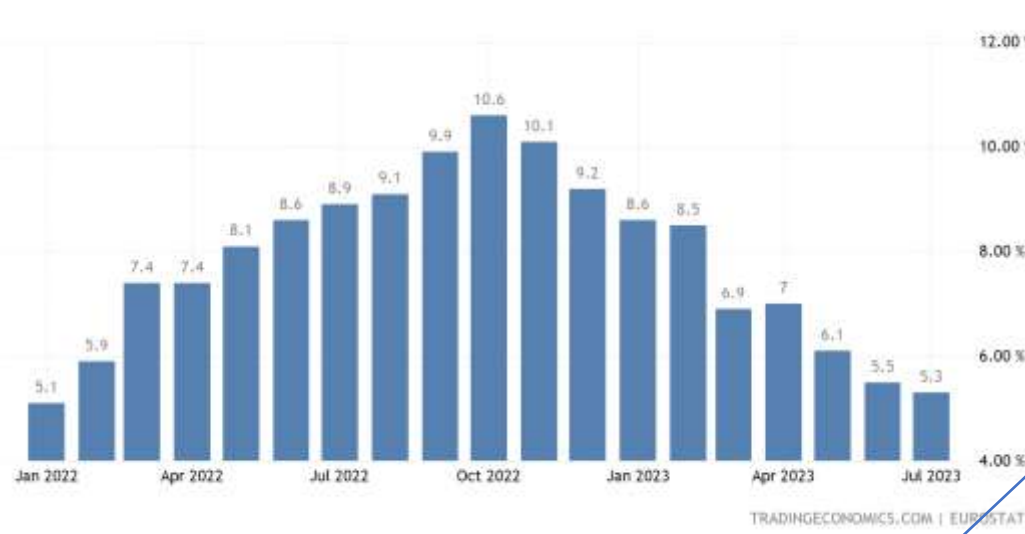
- **News:** Daily updates on major financial publications (FT, Bloomberg etc.)
→ Provide insights into shifting geopolitical landscapes, emerging risks and opportunities
- **Reports:** Publications from global institutions (IMF, World Bank etc.)
→ Offers in-depth perspective on the economy, various sectors and pressing issues
- **Expert Opinions:** Interviews, panel discussions featuring economists, policymakers and industry leaders

Performing Qualitative Analysis

1. Contextual Understanding
2. Monitor Communications
3. Market Reaction
4. Global Impact
5. Long-Term Implications
6. Investment Implications

Note: There is no fix way to perform qualitative analysis!

What is Qualitative Analysis



One of the world's largest aluminum exporter

Third-largest exporter of crude oil

Europe imports nearly 45% of natural gas from Russia



What is Qualitative Analysis



What are Macro Indicators?

Gauges the **health or growth trends** of a country's economy, or of a specific industry sector

What are Macro Indicators

Definition: Gauges the **health or growth trends** of a country's economy, or of a specific industry sector

- Statistics that reflect economic circumstances of a country, region or sector
- Gives insight as to how trades may play out
- Consists of Leading, Lagging and Coincident Indicators

Leading Indicators

Definition: economic factor that changes before the economy starts to change

- Used to forecast significant shifts in the economy; serves as red flags or heads-up for upcoming disruptions
- Are not always accurate and can be misleading
- Present before changes to the economy
- Shows the possibility of change in the future **based on individual movements** of a segment of the economy

Lagging Indicators

Definition: economic factor that changes only **after the change** in the economy has already taken place.

- Determines the after-effects of the shift in the economy; serve as proof of market movements
- Based on economic events and hence can be relied on their accuracy
- Exists after the change in the economy
- Confirm the changes in the economy and are based on facts and figures

Leading Indicators

Definition: predicts **future** movements of the economy

- Data on these financial guideposts will move/change before the economy
- Considerations of these indicators must be taken lightly since they can be incorrect
- Investors most interested in leading indicators

Coincident Indicators

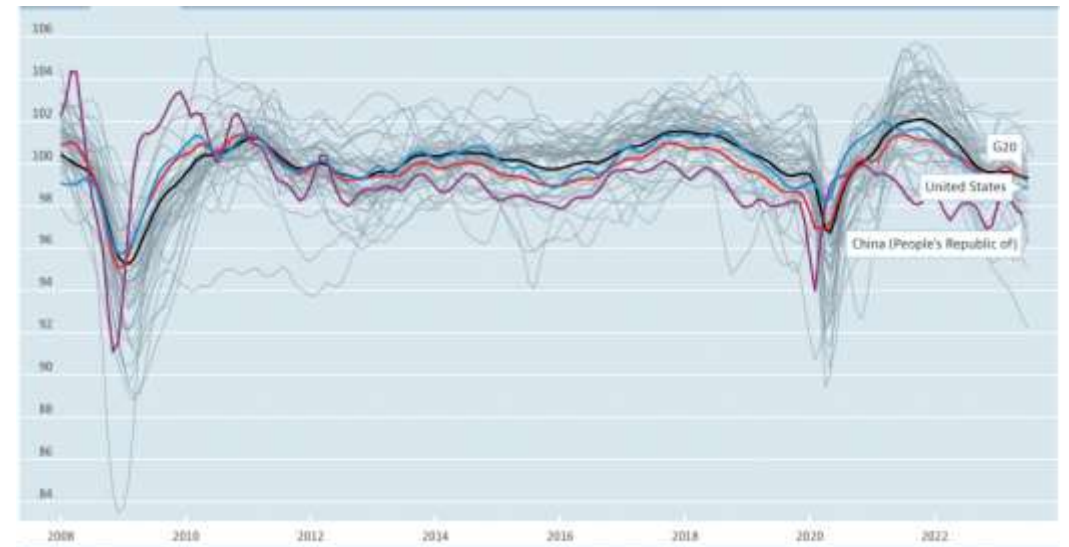
Definition: shows the **contemporaneous state** of economic activity within a particular area

- Usually involve some data collection and reporting lag → Doesn't necessarily reflect current conditions
- Still important because they show economists and policymakers the recent past state of the economy
- Used in conjunction with leading and lagging indicators to get a full view of where the economy has been and how it is expected to change in the future

Business Confidence Index (BCI)

Measures the amount of **optimism or pessimism** business managers feel about the prospects of their company.

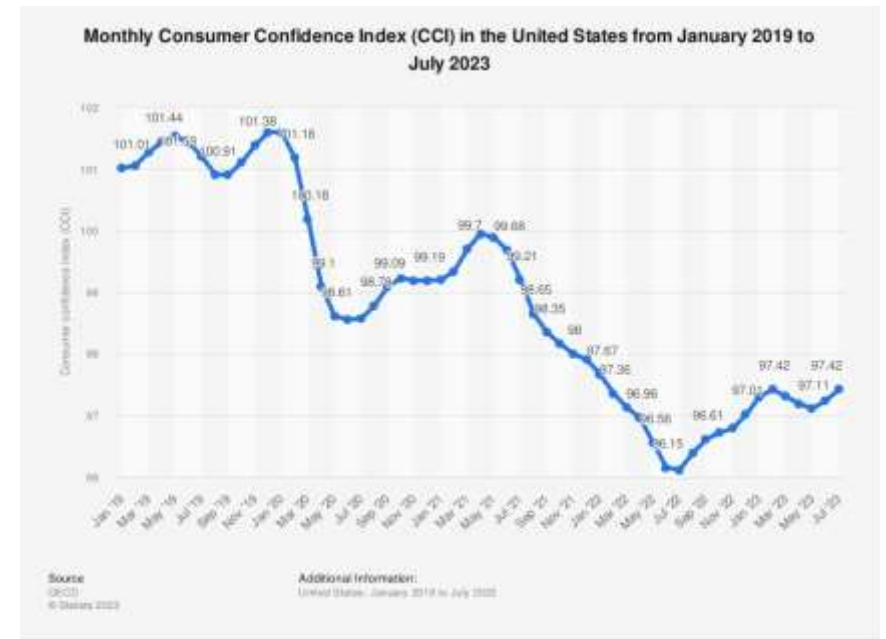
- Based on upon opinion surveys on developments in production, orders and stocks of finished goods
- Used to monitor output growth and to anticipate turning points in economic activity
 - Numbers > 100 suggest increased confidence in near future business performance
 - Numbers < 100 indicate pessimism towards future performance



Consumer Confidence Index (CCI)

Indicates future household consumption and savings given the consumer’s current financial situation

- Based on the consumer sentiment about the current economic situation, employment status and savings
 - Numbers > 100 suggest increased confidence towards future economic situation
 - Numbers < 100 indicate pessimism towards economic situation



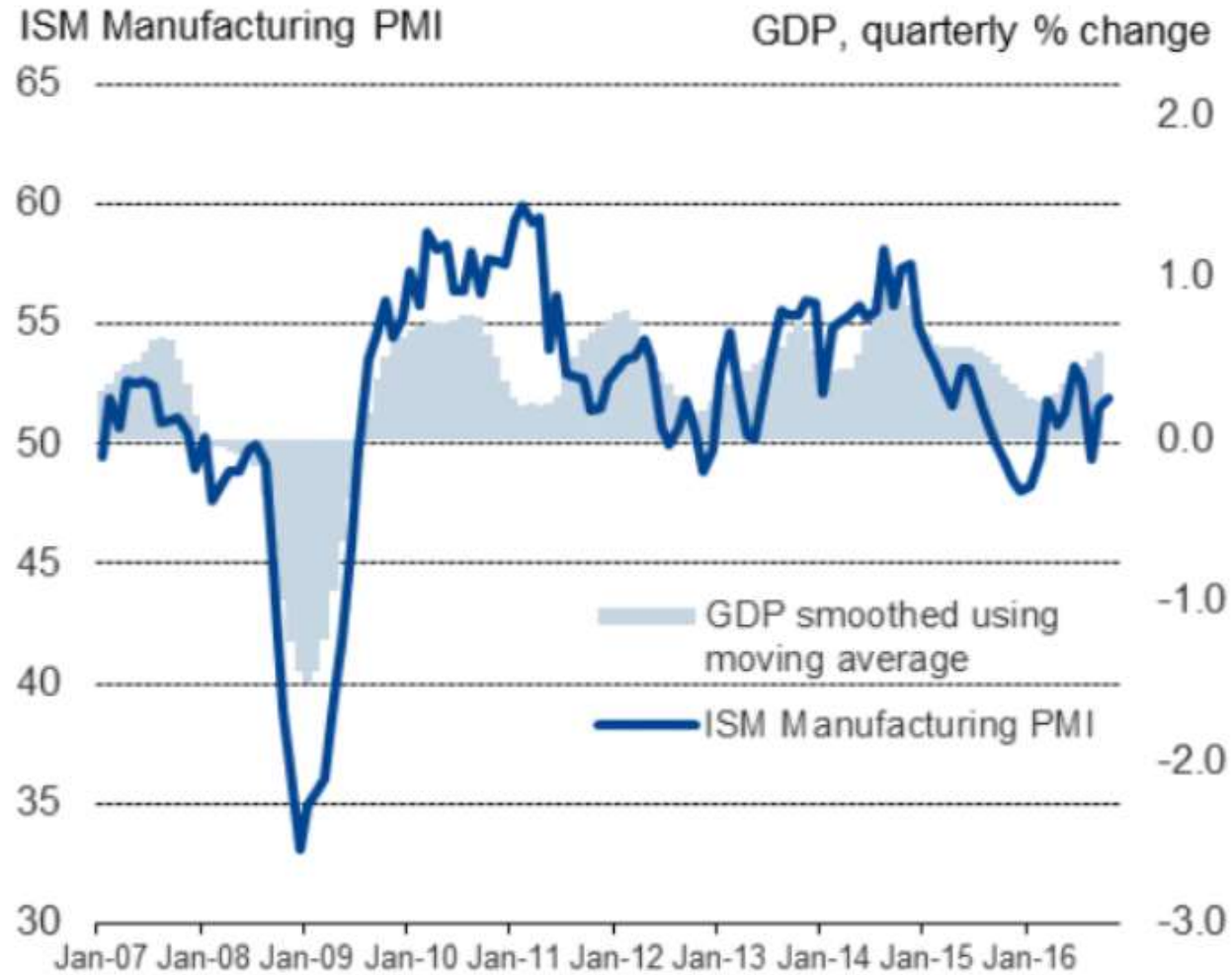
ISM Manufacturing Index (PMI)

Measures the month-over-month **change in economic activity** within the manufacturing & services sector

- Composite index based on a monthly survey of purchasing managers at more than 300 manufacturing firms
 - Gives equal weighting to new orders, production, employment, supplier deliveries, and inventories
 - Provide useful insight to business decision makers, market analysts, and investors
 - Direction of the trend in the PMI tends to precede changes in the trend in major estimates of economic activity and output
- PMI > 50 is an expansion of the manufacturing segment of the economy compared to the previous month.*
- *PMI = 50 means no change.*
 - *PMI < 50 suggests a contraction.*

*There is also a Services Index (ISM Non-Manufacturing Index)

ISM Manufacturing Index (PMI)



Unemployment Rate

Proportion of Labour Force that is **not currently employed** but could be

- Unemployment rates expected to rise when economy is in poor shape and jobs are scarce, vice versa
- One of the most closely-watched indicators for economic health
 - Inverse relationship with stock market and inflation

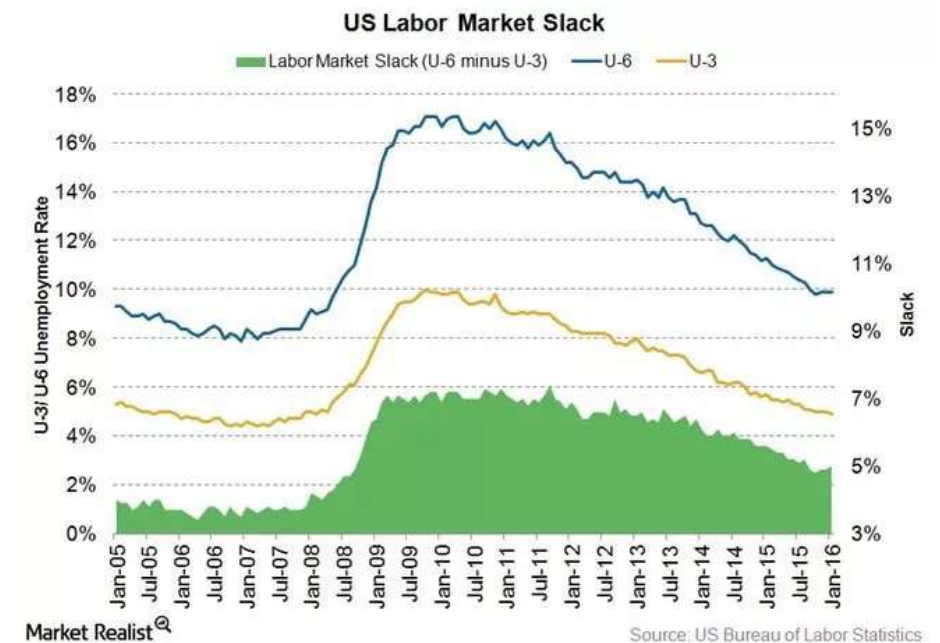
Question: Is a very low or zero unemployment a good thing?

Unemployment Rate

Is a very low or zero unemployment a good thing? **NO**

Inefficiencies in the Market

- Labour market will reach a point where each additional job added does not create enough productivity to cover cost
- Makes every successive job after that point inefficient
- Wage inflation
 - Especially in industrials and consumer disc.
- Smaller firms do not have margins to cope with rising wages



Consumer Price Index (CPI)

Measures the overall **change in consumer prices** based on a representative basket of goods and services over time

- Most widely used measure of inflation, closely followed by policymakers, financial markets, businesses, and consumers
- CPI calculated as a **weighted average** of prices for a **basket of goods and services** representative of aggregate U.S. consumer spending
 - Weightage of the product and service categories in the CPI indexes corresponds to recent consumer spending patterns derived from a separate survey

$$\text{Annual CPI} = \frac{\text{Value of Basket in Current Year}}{\text{Value of Basket in Prior Year}} \times 100$$

$$\text{Inflation Rate} = \frac{\text{New CPI} - \text{Prior CPI}}{\text{Prior CPI}} \times 100$$

Consumer Price Index (CPI)



CPI Categories by Weight (July 2023)

Group	Weight
Housing	34.7%
Food	13.4%
Transportation	5.9%
Commodities	21.3%
Health Care	6.4%
Energy	7.0%
Education	4.8%
Other Expenses	6.5%
Total Expenses	100%

Source: Bureau of Labor Statistics

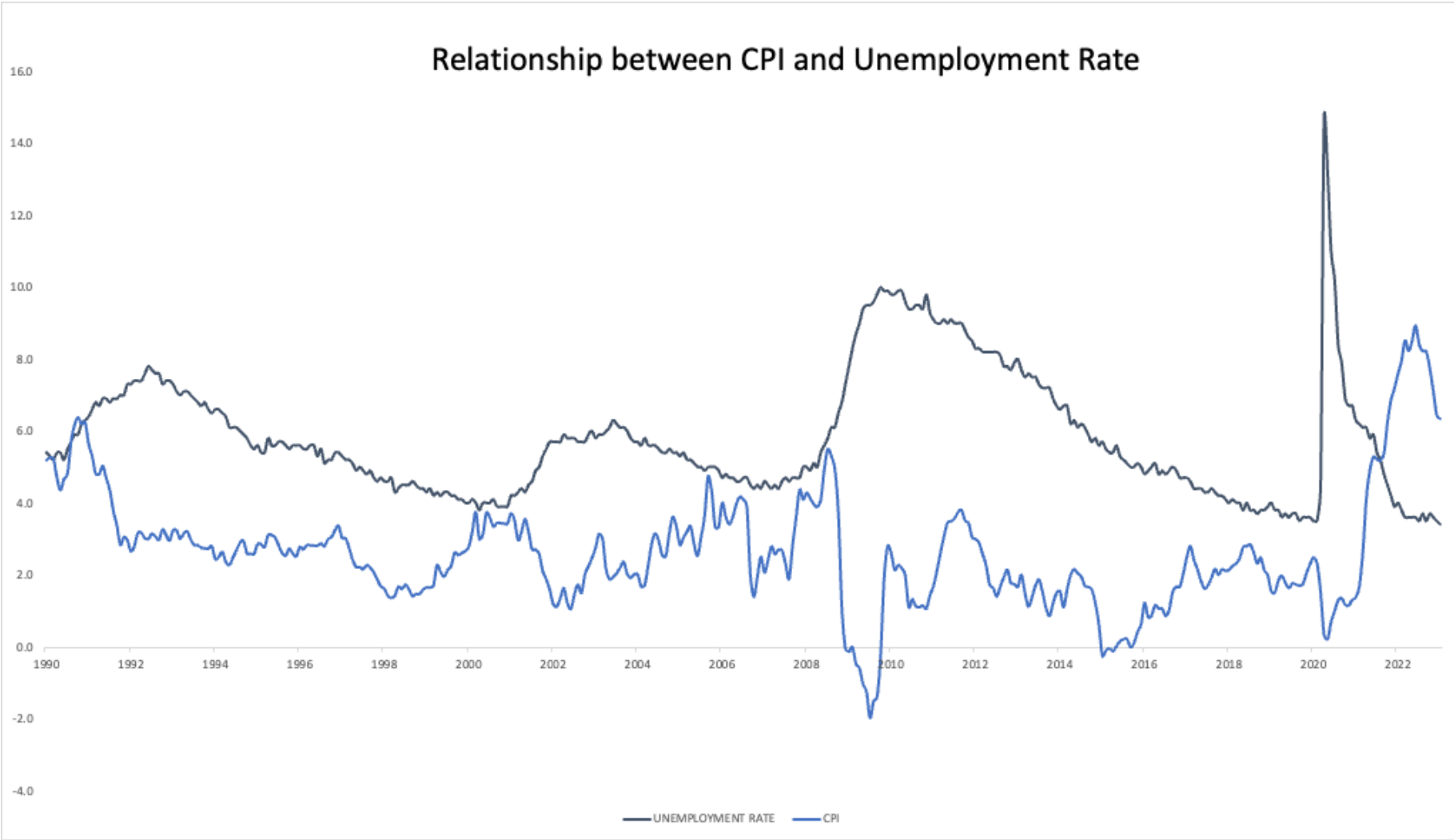
Uses Consumer Price Index (CPI)

- **The FED:** uses CPI data to determine monetary policy
 - Enact expansionary (contractionary) policies to stimulate (dampen) the economy → through FED funds rate
- **Housing:** affects mortgage rates
 - Rates often affected when government enacts policies to stimulate/dampen the economy
 - Landlords uses CPI information to assess annual rent for tenants
- **Financial Markets:** directly impact economic growth, corporate profits & consumer purchasing power
 - Higher CPI generally indicates less stringent policies → debt is cheaper and greater purchasing power
 - Decreasing CPI could indicate government may ease policies to boost economy
- **Labour Markets:** employees may turn to CPI reports when approaching their employers for a raise
 - More suited to using local data to better understand their situation

CPI and Unemployment

Exercise: What is the relationship between Unemployment and CPI

- Analyse the data provided and illustrate it in a chart
- Explain possible reasons for the relationship



CPI and Unemployment

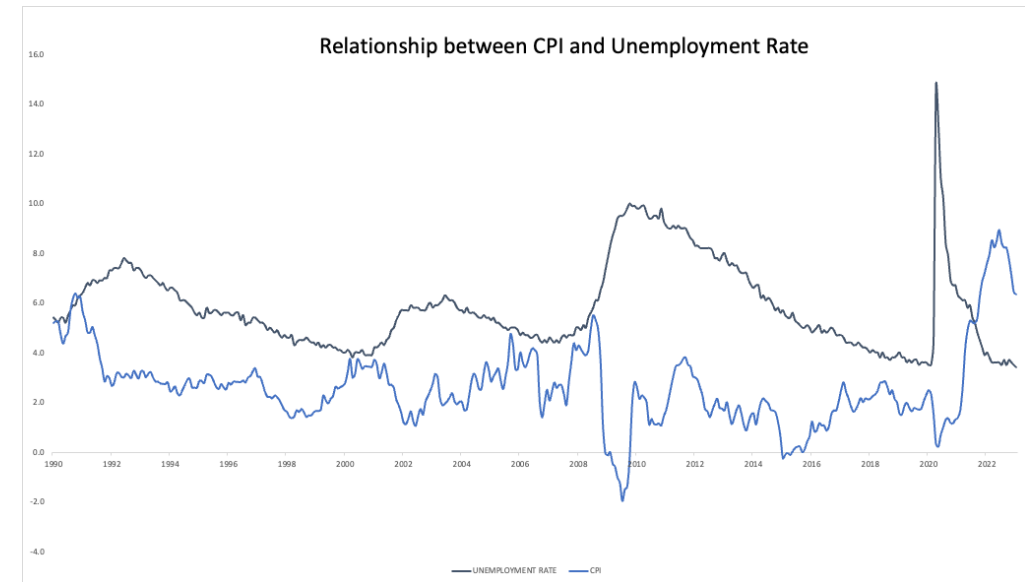
Generally speaking, there is an **inverse relationship** between CPI and unemployment

- When unemployment is high → supply of labour > demand for labour
- With excess supply of workers, there is no incentive for firms to 'bid' for labour
- Hence, wages remain stagnant and wage inflation is non-existent

However:

- When unemployment is low → demand for labour > supply of labour
- In a tight labour market, employers need to offer higher wages to attract employees
- Leads to rising wage inflation

** Wage inflation – the rate of change of wages*



Gross Domestic Product (GDP)

Monetary value of **final goods and services** produced in a country in a given period of time

Production Approach

- Sums the 'value-added' at each stage of production

Total Sales – Value of intermediate inputs

Example

Flour is an input of Bread

Expenditure Approach

- Adds up value of purchases made by final users

Example

- Consumption of food & televisions
- Investment in machinery by companies

Income Approach

- Sum of income generated by production

Example

- Total compensation employees receive
- Operating surplus of companies

Gross Domestic Product (GDP)

Industry	Price	Quantity
Food	\$1	50,000
Clothing	\$5	2,000
Car Tires	\$20	500
Cars	\$1,000	100
Laptops	\$2,000	50

- Suppose that 10% of the production of car tires is sold to motorists while the rest is sold to car manufacturers.
- All other sectors sell 100% of their output to end-consumers.
- Computer manufacturers reported that 80% of their product was sold during the reporting period with the rest held in inventory.
- What is the GDP of this economy measured using the *Production Approach*?

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- What is the GDP of this economy measured using the *Production Approach*? **\$261,000**

Gross Domestic Product (GDP)

Consumption Expenditure (C)

- Spending by households on **brand new goods & services**
 - Resale items are excluded → accounted for previously
 - Services associated with resale and repairs **are included**

Investment Expenditure (I)

- Spending by capital goods for the production of goods & services
 - Physical capital and **new** constructions (housing)
 - Inventory → Calculate net change

Government Expenditure (G)

- Spending by governments on final goods & services
 - Transfer payments should not be included



Gross Domestic Product (GDP)

Net Imports ($X - M$)

- Spending by foreign buyers on domestic output less spending by domestic buyers on foreign input
 - Singaporean in JB counts towards **imports for SG** and **exports of MY**

Balance of Trade

- Trade Surplus ($X > M$)
 - Can create employment and economic growth
 - Fuels higher prices and interest rates
- Trade Deficit ($X < M$)
 - Bad?

Real GDP

Adjust for GDP inflation by fixing currency value

$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{GDP Deflator}}$$

- Considered to be more accurate
- Gives a clearer view of national output after eliminating distortion

	2019		2020	
	Price	Quantity	Price	Quantity
Chicken Rice	\$2	100	\$2.50	200
Bubble Tea	\$1.50	200	\$3	100

- What is the Nominal GDP Growth Rate? **60 %**
- What is the Real GDP Growth Rate? **10 %**

Discussion Time !

THREE Indicators

TWO Charts

ONE Trade Idea

**Thank You
&
See You Next Week!**