

Session 1

Introduction to Global Macro Investing

Schedule

Session No.	Week Number	Session Outline	Deliverables
1	2 Sep (Week 3)	<ul style="list-style-type: none"> General Introduction to Macroeconomics and Global Macro Investing 	<ul style="list-style-type: none"> Finalize Report Theme Data Consolidation on Current Economic Outlook
2	9 Sep (Week 4) <i>TMA Week</i>	<ul style="list-style-type: none"> Qualitative Analysis Macro Indicators 	<ul style="list-style-type: none"> Finalize Qualitative Indicators Analysis of Historical Qualitative Indicators
3	16 Sep (Week 5) <i>TMA Week</i>	<ul style="list-style-type: none"> Quantitative Analysis 	<ul style="list-style-type: none"> Finalize Quantitative Indicators Analysis of Historical Quantitative Indicators
4	23 Sep (Week 6) <i>TMA Week</i>	<ul style="list-style-type: none"> Asset Allocation Strategies 	<ul style="list-style-type: none"> Selection of Relevant Assets
5	30 Sep (Week 7) <i>GBA Week</i>	<ul style="list-style-type: none"> Technical Analysis 	<ul style="list-style-type: none"> Technical Analysis on Relevant Assets

Schedule

Session No.	Week Number	Session Outline	Deliverables
6	7 Oct (Week 8) <i>GBA Week</i>	<ul style="list-style-type: none"> Portfolio Optimisation Techniques Portfolio Performance Evaluation and Monitoring 	<ul style="list-style-type: none"> Portfolio Optimisation Portfolio Evaluation and Monitoring
7	14 Oct (Week 9) <i>GBA Week</i>	<ul style="list-style-type: none"> Geopolitical Analysis and its Impact on Global Macro Investing 	<ul style="list-style-type: none"> Historical Performance Evaluation and Analysis
8	21 Oct (Week 10) <i>GBA Week</i>	<ul style="list-style-type: none"> Slide Deck Design (Hands-on) Chart Plotting and Formatting (Hands-on) 	<ul style="list-style-type: none"> Report Draft #1
9	28 Oct (Week 11) <i>BUS100 Class Test*</i>	<ul style="list-style-type: none"> Summary & Recap of Global Macroeconomics Team Discussion 	<ul style="list-style-type: none"> Report Draft #2 Slide Deck Draft #1
10	4 Nov (Week 12) <i>ECA Week</i>	<ul style="list-style-type: none"> No session 	<ul style="list-style-type: none"> Report Draft #2 Slide Deck Draft #1

Important Dates

Hard Deadline: **2 December 2023**

Internal Presentation Day: **9 December 2023**

Resources

- CapitalIQ
<https://libguides.suss.edu.sg/SNPCapital>
- Financial Times
<https://www.ft.com/>
- Factset
<https://my.apps.factset.com/flagship-streetaccount/Today'sTopNews/asia>
- Factiva
<https://snapshot-factiva-com.suss.remotexs.co/Pages/Index>
- Statista
<https://www-statista-com.suss.remotexs.co/>
- Economist Intelligence
<https://eresources.nlb.gov.sg/main>
- Marketline
<https://eresources.nlb.gov.sg/main>
- Bloomberg
<https://www.bloomberg.com/asia>

Lesson Outline

1. Admin
2. Why Global Macro
3. Hedge Funds
4. Global Macro Strategy
5. Risk: Alpha and Beta
6. Asset Classes
7. Real Life Examples
8. Summary

Why Global Macro?

What is Macroeconomics

- In contrast to equity research which is more specialized, macroeconomics looks at the performance of economies.
- Proper understanding of macroeconomics can help to reduce poverty, increase social equity and promote sustainable growth through sound monetary and fiscal policies.
- That is the high-level use of macroeconomics but what is the relevance to retail investors or fund managers?
- Macroeconomic study can help identify both short & long term investment opportunities on a global scale.
- You study the impacts of one economy on the other and from there you can craft your investment strategies.
- You study the economic trends of key economies (mainly United States) to do trend analysis and forecast the economic outlook.
- Macroeconomics is dynamic and ever changing.

What are Hedge Funds

Pooled investment structure set up by money managers that employ a wide range of strategies to earn active returns (*alpha*) for *accredited investors*

Core Characteristics

- **Restrictions:** Unlike mutual funds, HF has fewer restrictions on their investment decisions
- **Flexibility:** HF can short and leverage their positions and have access to wider range of asset classes
- **Fees:** Typically charges both management and performance fees (2/20 model)



Brief History

- Coined and first started by Alfred W. Jones
- Made investments while hedging financial losses, hence 'Hedged Fund'
- Minimised risks on long-term stocks by short-selling underperforming assets



Core Differences

Risk & Reward Profiles

HF: engages in high-risk, high reward strategies
MF: sticks to a defined strategy
PE: focuses on long term returns by investing in companies

Investment Horizons

HF: Varying investment horizons
MF: More liquid
PE: Requires long term commitment

Regulations

HF: Very flexible in terms of investment decisions
MF: Tend to be heavily regulated
PE: Has its own sets of regulations, especially regarding company M&As

Common Strategies

LONG/SHORT EQUITY

- Maintains long and short position in equities and equity derivatives
- Purchase undervalued stocks; sell overvalued stocks
- Can be broadly diversified or sector specific

RELATIVE VALUE

- Compares value of asset to a related asset or benchmark
- Assumes prices will revert to historical average in the long run; mean reversion
- Pairs trading is a common strategy

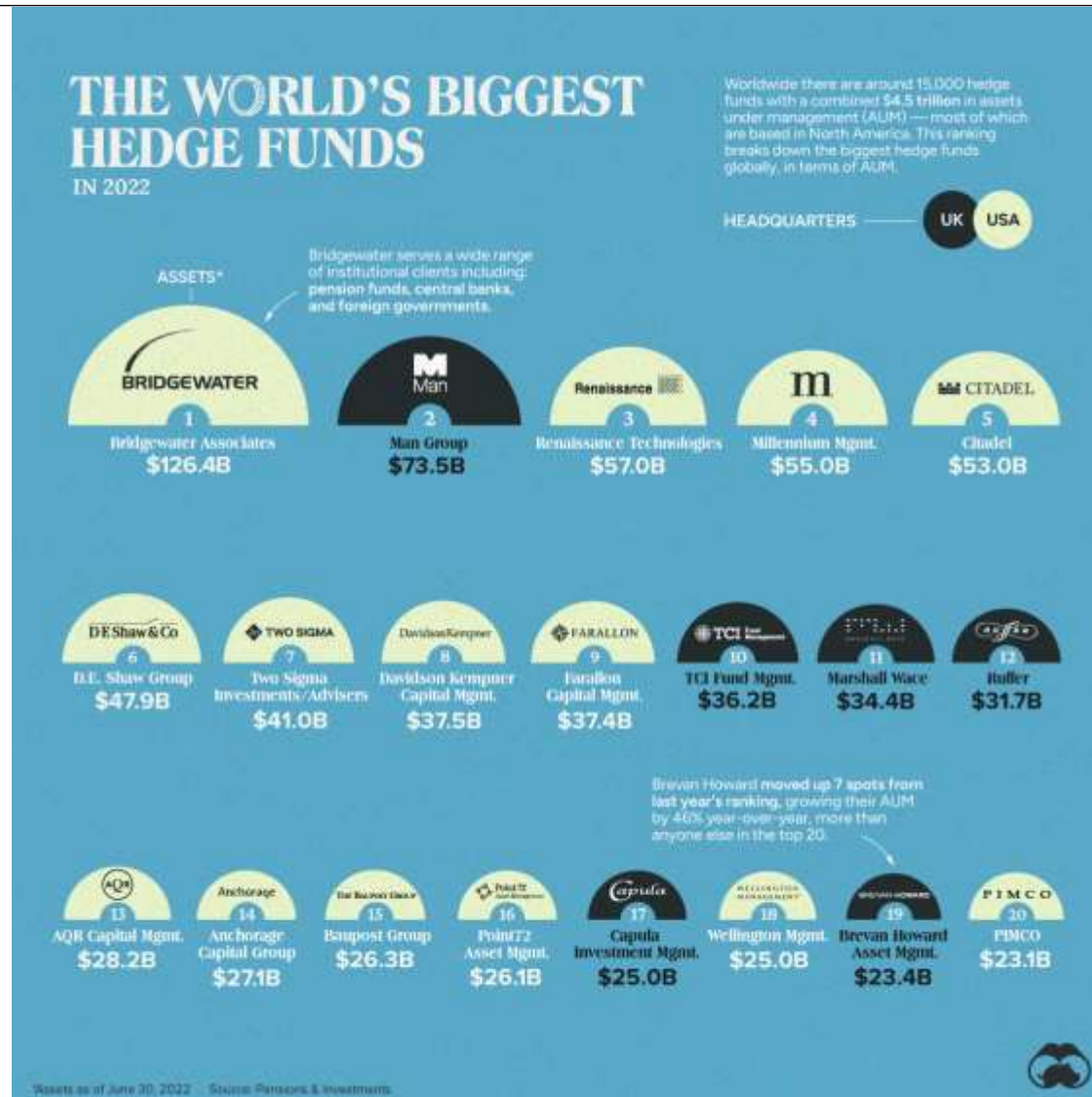
GLOBAL MACRO

- Looks to profit from economic and political changes around the world
- Analyses how macroeconomic trends affects interest rates, currencies, equities
- Take up position in asset classes that are most sensitive to their views

EVENT DRIVEN

- Performs during a strong economy where corporate activities are high
- Maintains positions in companies that are involved in mergers, restructuring, tender offers, share buyback etc.
- Usually higher risk and longer horizons

Top Hedge Funds



Why Adopt a Global Macro Strategy

- Very **opportunistic** strategy
- Embraces Volatility, Uncertainty, Complexity and Ambiguity
- **Low Correlation** with markets
- Generates strong risk-adjusted **returns** regardless of prevailing market conditions



Why Adopt a Global Macro Strategy

ALPHA (α)

BETA (β)

Macro generates **Alpha** by successfully timing **Beta** !

If predictions are correct and market exposure is timed correctly, portfolio will outperform benchmark
 → Generates α



Adjusting the market exposure (β) of portfolio based on macroeconomic views
 → Essentially 'timing the market' based on Macro views

Alpha and Beta

ALPHA (α)

- Risk-adjusted measure of the so-called “excess return” on an investment
- Measure of assessing a manager’s performance; ie. Measured against a benchmark
- $\alpha > 0$ suggest overperformance

$$\alpha = R - R_f - (\beta * \text{Market Risk Premium})$$

Where:

$$R_f = \text{Risk Free Rate}$$

$$\text{Market Risk Premium} = \text{Market Return} - R_f$$

BETA (β)

- Measures the sensitivity of a manager’s returns to the performance of the markets
- Estimates how a 1% change in a particular market will be reflected in the returns
- $\beta > 1 \rightarrow$ More volatile than benchmark, vice versa

$$\beta = \frac{\text{Cov}(r_i, r_m)}{\text{Var}(r_m)}$$

Where:

$$r_m = \text{average expected return on the market}$$

$$r_i = \text{expected return on an asset, } i$$

Alpha and Beta Calculation

- a) Find the Beta of Alphabet (GOOG) and Tesla (TSLA)
- b) Assuming a portfolio containing 100% of GOOG, calculate its **alpha** (Assume $R_f = 3\%$)
- c) Assuming a portfolio containing 100% of TSLA, calculate its **alpha** (Assume $R_f = 3\%$)

Global Macro

Discretionary

- An investment theme is established based on macroeconomic analysis
- Analysis can span wide range of global economies and asset classes
 - Macro indicators like inflation and growth rates
 - Specific policies and its impact on the economy
- Risk management implemented by portfolio manager

Styles

Systematic

- Fund develops computerized algorithm to identify market & price movements
- Algorithm makes decision to buy/sell on a variety of proprietary indicators
- Success is determined by robustness and research process behind model
- Risk management integrated into model → little or no discretionary intervention

Global Macro

Fundamental

- Evaluate opportunities based on criteria such as valuation metrics, economic forecasts, interest rate and currency outlooks, and fiscal and monetary policy
- The information employed may be macro-economic or the aggregation of micro-level information

Inputs

Technical

- Technical managers employ predictive signals that are generated from market-related information (e.g., price, volume, order book)
- Often involve the use of pattern recognition and other types of advanced statistical forecasting tools

Short-Term

- Short-term managers express trades with holding periods typically less than one week, often capitalizing on intra-day mispricing
- These strategies are trading and resource intensive, and they can only be implemented in highly liquid markets

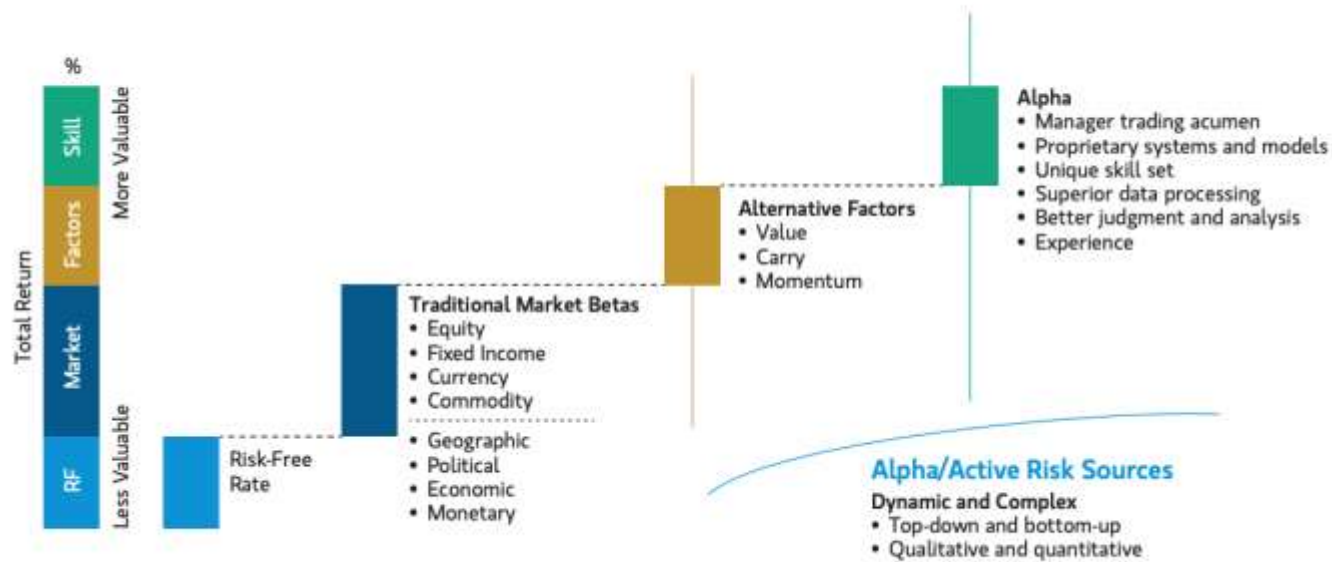
Time Horizon

Long-Term

- Long-term managers express trades with multi-week to multi-month time horizons.
- Transaction costs are less important in long-term strategies than in short-term ones.

Global Macro

DISPLAY 1
Return Decomposition



For illustrative purposes only.

GLOBAL MACRO

ANNUALISED RETURNS **10.15 %**

ANNUALISED VOLATILITY **7.15 %**

S&P 500

ANNUALISED RETURNS **9.75 %**

ANNUALISED VOLATILITY **14.26 %**

Asset Classes

Equities

- Represents ownership in a company
- Constitutes a claim on part of the company's assets and earnings

Why Equities?

- **Growth Potential:** Potentially offer higher returns, especially if managers identify undervalued companies or sectors poised for growth
- **Short Selling:** Conversely, funds can profit from declining stock prices.

Asset Classes

Fixed Income (Bonds)

- Debt instruments issued by governments or corporations to **raise debt**
- Debt holders receives **periodic interest payments** and **return of principal upon maturity**

Why Fixed Income?

- **Income Generation:** Provides steady income through interest payments
- **Diversification:** Acts as a counterbalance to equities; often rising in value when stocks decline
- **Macro Plays:** Proxy for interest rate movements, credit spreads, or sovereign credit risks

Asset Classes

Commodities

- Physical goods such as gold, oil and agricultural products

Why Commodities?

- **Inflation Hedge:** Real assets can act as a hedge against inflation
- **Diversification:** Often have a low correlation with stocks and bonds
- **Macro Insights:** Influenced by global macroeconomic factors (Geopolitical events, supply-demand imbalances)

Asset Classes

Foreign Exchange

- Currencies of various countries

Why FX?

- **Macro Plays:** Can be predicted based on interest rate differentials, economic policies and geopolitical events
- **Diversification:** Currency plays can be uncorrelated with traditional asset classes
- **Leverage:** FX market allows for significant leverage, amplifying potential returns (and risks).

Asset Classes

Derivatives

- Financial contracts whose value derives from underlying assets
- Common derivatives include options, futures, and swaps.

Why Derivatives?

- **Hedging:** Used to hedge against potential losses in other investments.
- **Leverage:** Gain large exposures with a relatively small amount of capital.
- **Speculation:** A bet on the direction of interest rates, stock indices, or other financial metrics

Asset Classes

Private Equity

- Investment in private companies; not publicly traded companies

Why PE?

- **High Return Potential:** Private companies, especially start-ups, can offer significant returns if they grow or go public.
- **Control:** Investors often get a say in the company's management or strategic decisions.

Asset Classes

Real Estate

- Investment in physical properties
- Either owning real assets or through Real Estate Investment Trusts (REITs)

Why Real Estate?

- **Stable Cash Flows:** Rental properties often provide a steady income
- **Inflation Hedge:** Real estate often appreciates over time, acting as a hedge against inflation
- **Diversification:** Returns can be uncorrelated with traditional financial markets

Asset Classes

Real Estate

- Securities of companies facing bankruptcy or financial troubles
- Could be Equities or Debt

Why Real Estate?

- **Deep Discounts:** Securities often purchased at significant discounts to their intrinsic value
- **Turnaround Potential:** Substantial upside if company recovers or undergoes successful restructuring,

Global Macro Strategies in real life

Black Wednesday (1992)

George Soros, “the man who broke the Bank of England”, placed a \$10million against the pound and nearly bankrupted BoE

Background

- Exchange Rate Mechanism (ERM) set up stabilize exchange rates, reduce inflation, and prepare for monetary integration
- UK was not originally involved but joined eventually in 1990; pegged at a rate of DM2.95 and fluctuation band of +/- 6%
- Appeared to be a success until mid-1992, its disciplinary effect had reduced inflation throughout Europe under the leadership of the German Bundesbank.



Global Macro Strategies in real life

Sterling Withdrawal from ERM

- Investors feared that the exchange rate value of several currencies within ERM were inappropriate
- German reunification in 1989 spurred government expenditure
→ Bundesbank printed more money
- Led to inflation in Germany; Bundesbank had to raise interest rates
- Placed upwards pressure on German mark and other central banks had to raise rates to maintain their pegged exchange rates

UK historic inflation rate



PA graphic. Source: ONS Consumer Prices Index. Figures for 1950-88 are estimates

Global Macro Strategies in real life

Soros' Investment Thesis

- Thesis: UK's weak economy and high unemployment rate would not permit them to maintain this policy for long
- Bet that UK would either devalue the pound or leave the ERM

The Trade

- Established short positions in pounds → borrowed pounds
- Opened long positions in marks → purchased mark-denominated assets
- Made great use of derivatives like options and futures; Position amounted to \$10 billion
- Many investors followed suit, placing huge downward pressure on the pound



Global Macro Strategies in real life

BoE Intervention

- Central Bank tried to defend the peg by purchasing 15 billion pounds with their reserves → limited effectiveness and pound fell dangerously close to lower band
- On 16 Sept 1992, BoE announced 2% rate hike to 12% to boost pound's appeal
- A few hours later promised to raise rates to 15%, but investors refused to budge
- Traders kept selling and BoE kept buying
- Finally, UK decided to leave ERM and rates returned to initial level of 10%.

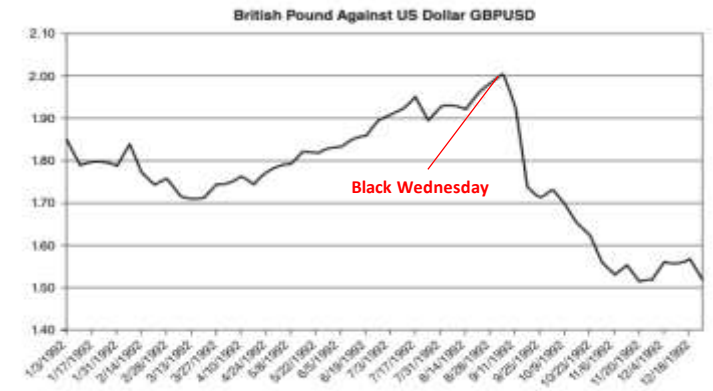
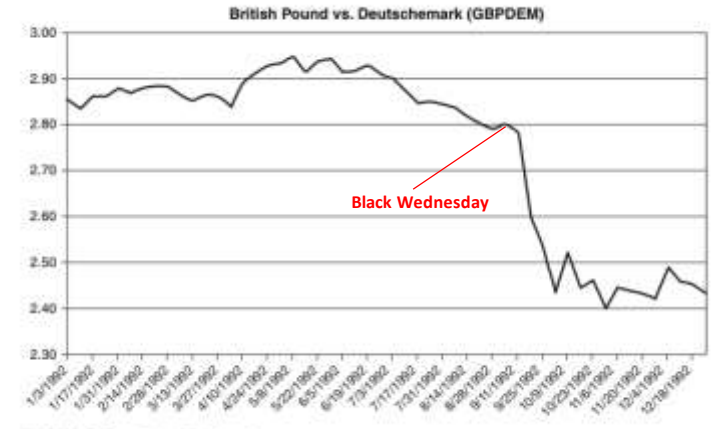


FIGURE 2.3 GBPUSD after Soros

Activity

Actionable Trades

- Identify one ongoing global macroeconomic trend (economic, political ie.)
- Form one investment idea based off the macroeconomic trend
- Suggest one actionable trade to capitalize on this trend

Summary

- The list of factors to examine mentioned here is non-exhaustive but these are the fundamentals that being a global macro analysts should be familiar with.
- Understanding these factors will open numerous ways to approach evaluating the state of the macroeconomics of a country and the world.
- In macroeconomics we are simply using the data we have on hand to make analysis and forecast trends to the best of our abilities. However, the situation can change with a snap of a finger.
- There are numerous unpredictable events such as government policies not resulting of sensible reasoning but politics, economic shocks like covid and outbreak of war such as Russia and Ukraine.

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