

# MACRO ANALYSIS:

## **Introduction:**

Macro Analysis is a very important analysis type when it comes to assessing a particular financial instrument. Macro analysis looks at the behaviour of an economy as a whole over the medium term, always taking into account the various forces that drive its performance.

Each economy has its own particular characteristics and dynamics, and there are many forces that shape them. A country's economy is the product of the behaviour of people within that economy, as well as outsiders interacting with it. This behaviour is influenced by a variety of factors such as monetary & fiscal policy as well as politics, technology and law. One thing that all economies have in common is that there are a few standardised ways of measuring performance, activity, efficiency and many other factors. A broad range of economic data is released on a regular basis and this is something that traders usually look at when making their trading decisions. This economic data is usually split into leading and lagging indicators, as described in the sections below.

When analysing a currency pair, we tend to look at the macro outlook for the two countries involved and compare their relative performance. Analysis of other financial instruments (such as equities, precious metals, commodities etc.) also requires a solid understanding of the corresponding macro elements. Macro analysis is a key aspect for people who put on trades with a medium-term horizon. The combination of macro analysis (for the general trade direction) and technical analysis (for entry & exit points) can be a very powerful weapon in a trader's arsenal.

## **Leading Indicators:**

### **Payroll Data**

Payroll data is usually collected on a monthly basis by a designated body which samples a big number of businesses across the country in question. For example, in the US, the Bureau of Labor Statistics (BLS) samples more than 400,000 businesses and produces a number of statistics among which the most important one is the monthly Nonfarm Payrolls number. This number is used to gauge the health of the job market and is generally accepted as a relatively accurate method to predict business cycles. This number can be quite volatile and is quick to react to changing economic conditions. An average of 200K+ is typical of an expansionary phase, while during periods of economic contraction we usually observe payroll numbers oscillating around zero (sometimes with brief extreme negative spikes).

## **Production Indicators**

Manufacturing Production is an indicator that shows the % change in the total value of products generated by manufacturers (inflation adjusted). A positive number indicates expansion while a negative number shows contraction. A large (or larger than expected) rate of change indicates strength for the currency in question.

Industrial Production is a very similar indicator to Manufacturing Production, the only difference being that it covers the industrial sector (manufacturers, mines, utilities).

Manufacturing & Industrial Production figures are marked to 100 at their onset, which is set during a specific year. They tend to be very sensitive to interest rates and consumer demand, and therefore a useful way to forecast future GDP growth and inflation.

Inventory Levels measure the change in worth of unsold products that are still held by retailers, wholesalers and manufacturers. An increase in inventory levels indicates a lack of consumer demand and hence suggests a weakening economy.

## **Retail Sales**

Retail Sales is one of the most important indicators of consumer behaviour. It shows the rate of change of the total value of sales on the retail level. It's probably the most robust and reliable gauge of consumer spending, which accounts for a very big part of overall economic activity. In western economies, personal consumption is typically between 60-70% of GDP.

## **Jobless Claims (Initial and Continuing)**

Jobless Claims are weekly numbers that measure the number of people who file for unemployment insurance. Initial claims show the number of individuals who filed for the first time, while Continuing claims show the overall number of remaining individuals who qualify for it. High claims numbers indicate an increasing unemployment rate and hence weakness in the labour force & economy in question.

## **Building Permits / Housing Starts**

Building Permits show the rate of change of building permits issued by the government. Housing Starts show the rate of change in new constructions underway. These two numbers combined are good indicators of housing demand and this is important since the construction industry is usually one of the first to go into recession when economic conditions deteriorate.

## **Purchasing Managers Index (PMI)**

PMIs are a collection of very important data which show purchasing managers' activity. This activity is usually a leading indicator of overall economic importance, as purchasing managers have early access to company performance data and make their decisions accordingly. PMI data includes individual activity levels in the Manufacturing sector, the Construction sector and the Services Sector. The ISM (Institute for Supply Management) index is such a particular US-based index that includes hundreds of firms

and covers employment, production, inventories, new orders and deliveries. A reading of 50 is considered to be a flat reading; any number higher than that is expansionary and any number below that shows contraction.

### **House Price Index**

National Statistics agencies compile and produce an indication on the rate of change of the average selling price of homes. High readings indicate increased housing demand and hence are a positive indicator for the economy.

## **Lagging Indicators:**

### **Gross Domestic Product (GDP)**

GDP measures the total amount of goods and services (inflation-adjusted) that a country produces. The most common measure of GDP is the Quarter-On-Quarter change, as this shows the economy's current trend. Most western economies adjust their monetary and fiscal policies with a target of consistent positive growth. GDP is a broad measure of economic activity and is a good indicator of a country's economic health. Higher than expected GDP readings are bullish for a country's currency, and vice versa. (Note: Two or more negative QOQ GDP change readings constitute a recession).

The basic equation of GDP is:

$$\text{GDP} = \text{Consumption} + \text{Investment} + \text{Government Spending} + (\text{Exports} - \text{Imports})$$

### **Unemployment Rate**

The unemployment rate shows the percentage of the work force that is unemployed and actively looking for employment. One of government's main concerns is to keep the unemployment rate as low as possible.

The lower bound of unemployment is frictional unemployment, which is a level of unemployment always present due to temporary transitions made by workers and employers. Another type of unemployment is structural unemployment, which is a longer-lasting form of unemployment due to fundamental shifts in the economy (e.g. due to technological advances or changes in competition or government policy). Finally, there is also the phenomenon of seasonal unemployment, which occurs as consumer demand shifts from one season to the next.

One important related item of economic data is the Labour Force Participation Rate (LFPR). The LFPR measures the % of working-age population who are either working or looking for work. People no longer actively looking for work will not be included in the LFPR. An important observation of the past few decades (especially in the US) is that the main driver of the overall unemployment rate drop is the fact that the LFPR has also dropped to multi-year lows. A healthy economy will exhibit a low unemployment rate while also keeping the LFPR at elevated levels.

## **Inflation**

Inflation has many forms and measures, but the most common definition is the rate of change of the general level of prices for goods and services. There are several inflation indices that are commonly used by various countries:

**Consumer Price Index (CPI)**

This index measures the rate of change of prices from the point of view of the consumer, and is used by many countries as the primary inflation measure.

**Harmonised Index of Consumer Prices**

The HICP is favoured by European countries and it monitors the level of costs paid by European consumers for items in a specific basket of common goods.

**Personal Consumption Expenditures**

PCE is the favourite inflation measure of the Federal Reserve and it measures price changes of consumer goods & services.

## **Wage Growth/Decline**

Wage growth is an important indicator for a country's underlying economy, as it gives an insight in the rate of change of individuals' disposable income. National bureaus of statistics usually follow nominal wage growth (i.e. unadjusted for inflation) as well as inflation-adjusted wage growth. Wage growth has a special and direct relationship with inflation; according to the Phillips curve it's the number 1 cause of inflation. For this reason, wage growth is a key indicator when gauging inflation dynamics.

## **Interest Rates**

The main monetary policy tool of a central bank is the "bank" rate. This is the rate at which the central bank lends funds to domestic banks and is usually in the form of very short-term loans. This rate is used with different names in various countries (UK: Base Rate, US: Fed Funds Rate, EZ: Refi Rate etc.). The Bank Rate can be used by central banks to affect economic activity: Cutting rates reduces incentive to save and encourages spending & risk-taking; therefore, it is a method to stimulate the economy. Conversely, raising rates increases incentive to save and increases the cost of borrowing (and hence reduces risk-taking); therefore, it is a method to cool the economy. Central bank interest rate decision meetings are usually the most important economic events and are followed extremely closely by traders and economists across the world.

## **Consumer Confidence Index**

This index measures the level of consumer confidence in economic activity. It's a very useful leading indicator as it can predict future spending behaviour by consumers. This index is usually compiled by surveying individuals and extracting their evaluation of the country's economic prospects. A higher reading shows increased confidence and hence an increased propensity to spend (and vice versa).

## **Durable Goods Orders**

This number reflects new orders placed with domestic manufacturers for delivery of durable goods. These are consumer goods that do not have to be purchased frequently and tend to last for at least 3 years (e.g. cars, consumer electronics, furniture, appliances etc.). This report usually comes in two releases every month: the advance report and the shipments report.

## **Government Balances**

Government balances are three important indicators of a country's financial health. They are influenced by a number of different factors including interest rates, inflation, exchange rates, trade & tax policies and competitiveness.

Budget Balance is the difference between a country's revenue and expenditures. When revenue exceeds expenditures, the country is said to have a budget surplus, and conversely, it's said to have a budget deficit. Persistent deficits can be dangerous as they lead to increased government debt and more debt is issued to cover the shortfall in funds.

Current Account Balance is the sum of Trade Balance + Income from Abroad + Net Current Transfers. When a country runs a current account surplus, it is a net lender to the rest of the world and conversely it is a net borrower.

Trade Balance is the difference between a country's exports minus imports. A positive balance (i.e. the country exports more goods & services than it imports) is called a trade surplus and it's a strong indicator of economic strength & independence. Conversely, a negative balance is called a trade deficit and shows strong dependence on foreign markets for the country's needs. A country running trade deficits will experience an outflow of domestic currency to other countries.

*Balance of Payments* is a number usually calculated on a quarterly basis and it measures the difference in total value of payments into and out of a country. Changes in the BOP can directly affect the exchange rate between the local currency and foreign currencies (e.g. when a country transacts with a foreign country, often payment is required in the foreign country's currency and thus the local country will be required to purchase enough foreign currency in order to meet its payment requirements). A country with a BOP deficit will see its international reserves diminishing and hence it will be forced to devalue its currency by increasing supply – and vice versa. The chart below shows the BOP can affect the supply & demand curve and hence move an exchange rate from one level to another.