12 Sum up: Variables' relationships in macroeconomics

We have described many relationships between macroeconomic variables in this primer. In this last chapter, we're going to sum up all of those relationships and also describe some more in order to help you prepare for trading.

- An increase in consumption, investment or exports leads to a short-term increase in output and an increase in prices. A decrease in any of these variables leads to a decrease in output and a decrease in prices.
- A higher preference from foreigners for domestic products will increase exports. A lower preference from domestic agents for foreign products will decrease imports. Both situations will increase net exports.
- Firms will invest more (less) if interest rates decrease (increase).
- Households increase (decrease) their savings if interest rates increase (decrease).
- An increase (decrease) in money supply will increase household consumption and firms' investment, causing a positive shift in the aggregate demand curve. Thus, it will increase output and prices in the short run.
- A positive (negative) shift in aggregate demand increases (decreases) output and prices in the short run.
- A positive (negative) shift in aggregate supply increases (decreases) output and decreases (increases) prices in the short run.
- Only technological progress can make the long-term supply curve move. Short-term supply and demand curves move around the long-term supply curve.
- In a small open economy, the international interest rate can have a great impact on the domestic economy. The international interest rate, the domestic interest rate and the exchange rate are related to one another with the following log formula:

  $$e = i* - i + \hat{e}$$

  Where:
  e: the exchange rate (foreign currency value based on domestic currency value)
  $i*$: the international interest rate (Usually, the US Fed rate for a small open economy)
  i: The domestic interest rate.
  $\hat{e}$: The expected exchange rate.
  As you see, there is an inverse relationship between the interest rate and the exchange rate. However, there's a direct relationship between the international interest rate and the exchange rate. When the international interest rate increases (decreases), then we see an increase (decrease) in the exchange rate, i.e., we see a decrease (increase) in the domestic currency value.
- Usually, when we expect economic growth, we also expect that firms will do great. Thus, stock prices will rise.
- Besides, since firms will increase their production, they will ask for more debt, resulting in an increase in interest rates, which in turn will make bond prices decrease.

- When interest rates increase, the exchange rate (the value of a foreign currency based on the domestic currency) will decrease, i.e., the domestic currency will increase in value.
- When we expect a recession, we expect firms will do badly. Thus, stock prices will go down. Then bond prices will increase, the exchange rate will increase and the domestic currency will decrease in value.
- In a small open economy, when we see a monetary expansion (tightening), it will make the aggregate demand curve shift to the right, i.e., it will increase (decrease) output and prices. The fiscal policy is ineffective in this case. For a closed economy, both fiscal and monetary policies are effective to increase output.
- International reserves are assets held by the central bank of an economy. This is useful as a protection against currency crises. If you see a country (except the US) which has low international reserves, you should be careful, because it can have the risk of a currency crisis since the economy will not be able to have sufficient dollar reserves to face an abrupt change in its exchange rate.
- Quantitative Easing usually increases asset prices. However, if badly managed, can make the economy enter into hyperinflation. Whenever you see a country applying this type of policy, you should always check inflation month by month in order to be careful.
- The FOMC Meetings hold eight meetings per year. These meetings are given by the FED. Usually, markets are always focused on what the FED will say at each meeting to plan to trade and invest ahead. You can base your strategy based on this event.