

# *Foreign Exchange Fundamentals*

Economic indicators provide a snapshot of the economy's health. Economists look at gross domestic product (GDP), consumer price index (CPI) or the unemployment rate. Currently, these are tradable indicators. This list is by no means complete. There are lots of indicators missing and several important countries where there is no information available at this time. You will find the list comprises of the indicators most likely to produce a move when the number differs from the "general public" consensus numbers.

This list was produced from indicators that have proven themselves as being capable of producing moves when the number differ over the last year. When you understand that indicators go through fads where one may be more important than others, you will learn to adjust them for your trading. This year (2005) the UK places emphasis on housing numbers where the US doesn't place the same weight on them yet.

The big movers have been rated on the linked pages as those that have a verifiable history of moving the currency when the difference between what is expected (Called the consensus) and the actual release number. The consensus available on popular websites and through various free sources are reliable only because they have consistently proven incorrect. Companies do fill a need in making up sheets consisting of hundreds of projections which they sell to the big players. But for our purposes, using the inherent weakness in common estimates works great.

Economists categorize some economic indicators as leading, lagging or coincident. These categories help them see where the economy is in terms of the business cycle, which shows the rising and falling of economic conditions over time. The Federal Open Market Committee (FOMC) examines many economic indicators prior to determining monetary policy. The indicators listed in this section are examples of some of the factors the FOMC considers before issuing its directive on monetary policy.

Trading foreign exchange is exciting and potentially very profitable, but there are also significant risk factors. It is crucially important that you fully understand the implications of margin trading and the particular pitfalls and opportunities that foreign exchange trading offers. On these pages, I offer you a brief introduction to the FX markets, as well as their participants

**Leading indicators anticipate the direction in which the economy is headed. You take the numbers and views into account when determining strength and weakness of a currency but not necessarily to make a trade based on these numbers alone.**

## **EXAMPLES OF LEADING INDICATORS**

**1. Average weekly hours, manufacturing:** The average hours worked per week by production workers in manufacturing industries tend to lead the business cycle because employers usually adjust work hours before increasing or decreasing their workforce.

**2. Average weekly initial claims for unemployment insurance:** The number of new claims filed for unemployment insurance are typically more sensitive than either total employment or unemployment to overall business conditions, and this series tends to lead the business cycle. Initial claims increase when conditions worsen (i.e., layoffs rise and new hiring fall).

**3. Building permits, new private housing units:** The number of residential building permits issued is an indication of construction activity, which typically leads most other types of economic production.

**4. Stock prices, 500 common stocks:** The Standard & Poor's 500 stock index reflects the price movements of a broad selection of common stocks traded on the New York Stock Exchange. Increases (decreases of the stock index can reflect both the general sentiments of investors and the movements of interest rates, which is usually another good indicator for future economic activity).

**5. Index of consumer expectations:** This index reflects changes in consumer attitudes concerning future economic conditions and, therefore, is the only indicator in the leading index that is completely expectations-based. Data are collected in a monthly survey and responses to the questions concerning various economic conditions are classified as positive, negative or unchanged.

**6. Manufacturers' new orders, consumer goods and materials:** These goods are primarily used by consumers. The inflation-adjusted value of new orders leads actual production because new orders directly affect the level of both unfilled orders and inventories that firms monitor when making production decisions.

**7. Manufacturers' new orders, nondefense capital goods:** New orders received by manufacturers in nondefense capital goods industries (in inflation-adjusted dollars) are the producers' counterpart to manufacturers' new orders for consumer goods.

**8. Vendor performance, slower deliveries diffusion index:** This index measures the relative speed at which industrial companies receive deliveries from their suppliers. Slowdowns in deliveries increase this series and are most-often associated with increases in demand for manufacturing supplies (as opposed to a negative shock to supplies) and, therefore, tend to lead the business cycle.

**9. Money supply:** In inflation-adjusted dollars, this is the M2 version of the money supply. When the money supply does not keep pace with inflation, bank lending may fall in real terms, making it more difficult for the economy to expand. M2 includes currency, demand deposits, other checkable deposits, traveler's checks, savings deposits, small-denomination time deposits and balances in money market mutual funds.

**10. Interest rate spread, 10-year Treasury bonds less federal funds:** The spread or difference between long and short rates is often called the yield curve. This series is constructed using the 10-year Treasury bond rate and the federal funds rate, an overnight interbank borrowing rate. It is felt to be an indicator of the stance of monetary policy and general financial conditions because it rises (falls) when short rates are relatively low (high). When it becomes negative (i.e., short rates are higher than long rates and the yield curve inverts), its record as an indicator of recessions is particularly strong.

## Coincident indicators provide information about the current status of the economy.

### EXAMPLES OF COINCIDENT INDICATORS

**1. Employees on nonagricultural payrolls:** It includes full-time and part-time workers and does not distinguish between permanent and temporary employees. Because the changes in this series reflect the actual net hiring and firing of all but agricultural establishments and the smallest businesses in the nation, it is one of the most closely watched series for gauging the health of the economy.

**2. Personal income less transfer payments (in 1996 \$):** The value of the income received from all sources is stated in inflation-adjusted dollars to measure the real salaries and other earnings of all persons. Income levels are important because they help determine both aggregate spending and the general health of the economy.

**3. Index of industrial production:** This index covers the physical output of all stages of production in the manufacturing, mining, and gas and electric utility industries. It is constructed from numerous sources that measure physical product counts, values of shipments and employment levels.

**4. Manufacturing and trade sales (in 1996 \$):** This index includes sales at the manufacturing, wholesale, and retail levels. It is inflation adjusted to reflect real total spending.

## Lagging indicators change months after a downturn or upturn in the economy has begun and help economists predict the duration of economic downturns or upturns.

### EXAMPLES OF LAGGING INDICATORS

**Average duration of unemployment:** This measures the average duration (in weeks) that individuals *counted* as unemployed have been out of work. Decreases in the average duration of unemployment invariably occur after an expansion gains strength and the sharpest increases tend to occur after a recession has begun. This is one of the things just to keep in mind when assessing the current mood of the market.

**Average prime rate charged by banks:** Although the prime rate is considered the benchmark that banks use to establish their interest rates for different types of loans, changes tend to lag behind the movements of general economic activities. This is not of much use to us.

**Ratio of manufacturing and trade inventories to sales:** This is a popular gauge of business conditions for individual firms, entire industries and the whole economy. Because inventories tend to increase when the economy slows and sales fail to meet projections, the ratio typically reaches its cyclical peaks in the middle of a recession. It also tends to decline at the beginning of an expansion as firms meet their sales demand from excess inventories.

**Consumer installment credit outstanding to personal income:** This measures the relationship between consumer debt and income. Because consumers tend to hold off personal borrowing until months after a recession ends, this ratio typically shows a trough after personal income has risen for a year or longer.

**Change in labor cost per unit of output, manufacturing:** Measures the rate of change in an index that rises when labor costs for manufacturing firms rise faster than their production (and vice versa). The index is constructed from various components, including seasonally adjusted data on employee compensation in manufacturing (wages and salaries plus supplements) and seasonally adjusted data on industrial production in manufacturing. Because monthly percent changes in this series are extremely erratic, percent changes in labor costs are calculated over a six-month span. Cyclical peaks in the six-month annualized rate of change typically occur during recessions, as output declines faster than labor costs despite layoffs of production workers. Troughs in the series are much more difficult to determine and characterize.

**Commercial and industrial loans outstanding (in 1996 \$):** This series measures the volume of business loans held by banks and commercial paper issued by nonfinancial companies. The underlying data are compiled by the Board of Governors of the Federal Reserve System. The Conference Board, a New York-based business research network, makes price level adjustments using the same deflator (based on Personal Consumption Expenditures data) used to deflate the money supply series in the leading index. The series tends to peak after an expansion peaks because declining profits usually increase the demand for loans. Troughs are typically seen more than a year after the recession ends.

**Change in consumer price index for services:** Compiled by the Bureau of Labor Statistics, it measures the rates of change in the services component of the consumer price index. It is probable that because of recognition lags and other market rigidities, service sector inflation tends to increase in the initial months of a recession and to decrease in the initial months of an expansion.

## How Indicators Monitor the Four Phases of the Business Cycle

The four phases of the business cycle of rising and falling economic growth are:

**Expansion or recovery,**

**Peak,**

**Contraction or recession**

**Trough.**

The leading indicator system provides a basis for monitoring the tendency to move from one phase to the next. The system assesses the strengths and weaknesses in the economy as clues to a quickening or slowing of future rates of economic growth, as well as to cyclical turning points in moving from the upward expansion to the downward recession, and from the recession to the upward recovery.

The terms "leading," "coincident" and "lagging" refer to the timing of the turning points of the indexes relative to those of the business cycle. Leading indicators anticipate the direction in which the economy is headed. The coincident indicators provide information about the current status of the economy. These indicators change as the economy moves from one phase of the business cycle to the next and tell economists that an upturn or downturn in the economy has arrived. Lagging indicators change months after a downturn or upturn in the economy has begun and help economists predict the duration of economic downturns or upturns.

The system is based on the theory that expectations of future profits are the motivating force in the economy. When business executives believe that their sales and profits will rise, companies tend to expand production of goods and services and investment in new structures and equipment. When they believe

profits will decline, they reduce production and investment. These actions generate the four phases of the business cycle.

### **Key Economic Indicators are the most likely to move the market is the actual numbers differ with the consensus.**

**Consumer Price Index** – a measure of the average price level of a fixed basket of goods and services purchased by consumers as determined by the Bureau of Labor Statistics. Monthly changes in the CPI represent the rate of inflation.

**Durable goods orders** - reflect the new orders placed with domestic manufacturers for immediate and future delivery of factory hard goods.

**Employment cost index** – a measure of total employee compensation costs, including wages, salaries and benefits. This is the broadest measure of labor costs.

**Gross domestic product** – the broadest measure of aggregate economic activity encompassing every measure of the economy, measuring the total value of goods and services produced during a specific period.

**Index of industrial production** – a measure of the physical output of the nation's factories, mines and utilities.

**Jobless claims** – a weekly compilation of the number of individuals who filed for unemployment insurance for the first time. It portends trends in the labor market.

**Motor vehicle sales** – unit sales of domestically produced cars and light-duty trucks. Figures are good indicators of trends in consumer spending.

**Personal income** – the dollar value of income received from all sources by individuals.

**Personal outlays** – consumer purchases of durable goods, nondurable goods and services.

**Producer price index** – a measure of the average price level for a fixed basket of capital and consumer goods paid by producers.

**Trade balance** – measures the difference between exports and imports of both tangible goods and services. The level of the international trade balance, as well as changes in exports and imports, indicate trends in foreign trade.

### ***A History Of Foreign Exchange Trading***

Initially, the value of goods was expressed in terms of other goods, i.e. an economy based on barter between individual market participants. The obvious limitations of such a system encouraged establishing more generally accepted means of exchange at a fairly early stage in history, to set a common benchmark of value. In different economies, everything from teeth to feathers to pretty stones has served this purpose, but soon metals, in particular gold and silver, established themselves as an accepted means of payment as well as a reliable storage of value.

Originally, coins were simply minted from the preferred metal, but in stable political regimes the introduction of a paper form of governmental IOUs gained acceptance during the Middle Ages. Such IOUs, often introduced more successfully through force than persuasion were the basis of modern

currencies.

Before the First World War, most central banks supported their currencies with convertibility to gold. Although paper money could always be exchanged for gold, in reality this did not occur often, fostering the sometimes disastrous notion that there was not necessarily a need for full cover in the central reserves of the government. At times, the ballooning supply of paper money without gold cover led to devastating inflation and resulting political instability. To protect local national interests, foreign exchange controls were increasingly introduced to prevent market forces from punishing monetary irresponsibility.

In the latter stages of the Second World War, the Bretton Woods agreement was reached on the initiative of the USA in July 1944. The Bretton Woods Conference rejected John Maynard Keynes suggestion for a new world reserve currency in favour of a system built on the US dollar. Other international institutions such as the IMF, the World Bank and GATT were created in the same period as the emerging victors of WW2 searched for a way to avoid the destabilizing monetary crises which led to the war. The Bretton Woods agreement resulted in a system of fixed exchange rates that partly reinstated the gold standard, fixing the US dollar at USD35/oz and fixing the other main currencies to the dollar - and was intended to be permanent.

The Bretton Woods system came under increasing pressure as national economies moved in different directions during the sixties. A number of realignments kept the system alive for a long time, but eventually Bretton Woods collapsed in the early seventies following president Nixon's suspension of the gold convertibility in August 1971. The dollar was no longer suitable as the sole international currency at a time when it was under severe pressure from increasing US budget and trade deficits.

The following decades have seen foreign exchange trading develop into the largest global market by far. Restrictions on capital flows have been removed in most countries, leaving the market forces free to adjust foreign exchange rates according to their perceived values.

But the idea of fixed exchange rates has by no means died. The EEC introduced a new system of fixed exchange rates in 1979, the European Monetary System. This attempt to fix exchange rates met with near extinction in 1992-93, when pent-up economic pressures forced devaluations of a number of weak European currencies. Nevertheless, the quest for currency stability has continued in Europe with the renewed attempt to not only fix currencies but actually replace many of them with the Euro back in 2001.

The lack of sustainability in fixed foreign exchange rates gained new relevance with the events in South East Asia in the latter part of 1997, where currency after currency was devalued against the US dollar, leaving other fixed exchange rates, in particular in South America, looking very vulnerable. While commercial companies have had to face a much more volatile currency environment in recent years, investors and financial institutions have found a new playground. The size of foreign exchange markets now dwarfs any other investment market by a large factor. It is estimated that more than 3.2 Trillions is traded every day, far more than the world's stock and bond markets combined times 100!

## *Market Participants*

### **Banks**

The interbank market caters for both the majority of commercial turnover as well as enormous amounts of speculative trading every day. It is not uncommon for a large bank to trade billions of dollars on a daily basis. Some of this trading activity is undertaken on behalf of customers, but a large amount of trading is also conducted by proprietary desks, where dealers trade to make the bank profits.

The interbank market has become increasingly competitive in the last couple of years. A large part of interbank trading takes place on electronic broking systems. There are dozens of interbanks.

### ***Interbank Brokers***

Until recently, foreign exchange brokers were doing large amounts of business, facilitating interbank trading and matching anonymous counterparts for comparatively small fees. Today brokers are profiting from playing the role of market maker as well by taking the opposite side of their clients trades.

### ***Customer Brokers***

For many commercial and private clients, there is a need to receive specialized foreign exchange services. There is a fair number of non-banks offering dealing services to such clients. Many banks do not undertake trading for private clients at all, and do not have the necessary resources or inclination to support medium sized commercial clients adequately. The services of such brokers are more similar in nature to other investment brokers and typically provide a service-oriented approach to their clients.

### ***Central Banks***

The national central banks play an important role in the foreign exchange markets. Ultimately, the central banks seek to control money supply and often have official or unofficial target rates for their currencies. As many central banks have very substantial foreign exchange reserves, the intervention power is significant. Among the most important responsibilities of a central bank is the restoration of an orderly market in times of excessive exchange rate volatility and the control of the inflationary impact of a weakening currency.

Frequently, the mere expectation of central bank intervention is sufficient to stabilize a currency, but in the event of aggressive intervention, the actual impact on the short-term supply/demand balance can lead to the desired moves in exchange rates.

### ***Hedge Funds***

Hedge funds have gained a reputation for aggressive currency speculation. There is no doubt that with the increasing amount of money some of these investment vehicles have under management, the size and liquidity of foreign exchange markets is very appealing. The leverage available in these markets allow such funds to speculate with tens of billions of dollars at a time. Hedge funds actually perform a beneficial service by exploiting and exposing unsustainable financial weaknesses, forcing realignment to more realistic levels.

### ***Commercial Companies***

The international trade exposure of commercial companies is the backbone of foreign exchange markets. Protection against unfavorable moves is an important reason why these markets are in existence, although it sometimes appears to be a chicken and egg situation?

Commercial companies often trade in sizes that are insignificant to short-term market moves as the main currency markets can quite easily absorb hundreds of millions of dollars without any impact. One of the decisive factors determining the long-term direction of a currency's exchange rate is the overall trade flow. Some multinational companies can have an unpredictable impact when very large positions are covered due to exposures that are not commonly known to the majority of market participants.

### ***Investors and Speculators ( That's us )***

As in all other efficient markets, the speculator takes over the risks that commercial participants do not wish to be exposed to. The boundaries of this type of speculation are unclear as many of the above-mentioned participants also have speculative interests. (Even some of the central banks.)

The foreign exchange markets are popular with beginning investors due to the large amount of leverage that can be obtained and the ease with which positions can be entered and exited 24 hours a day. Currency trading as presented by forex brokers is easier than investing in other markets since the platform is simple to understand and the amount of tradable instruments is limited.

## *Main FX Markets*

The majority of all foreign exchange trades involves the US dollar against another currency. This has historical reasons as well being due to the fact that the US economy is the largest in the world and the global leader and benchmark. Many commodity markets are denominated in US dollars leading to additional need for US dollar trading.

Traditionally, the German mark and the Japanese yen have been the basis of a lot of trading as well, with sterling and the Swiss franc trailing a little behind the three main currencies. Each of these markets has very distinct features. The German mark has for all practical purposes been replaced by the Euro. The dollar has suffered violent swings as the credibility of US economic policy has been questioned on many occasions.

The German mark was a tower of strength over the past thirty years, due to the widespread respect the German central bank - the Bundesbank . The traditional role of the Bundesbank as the world's most dedicated inflation fighter was undermined after unification with the former East Germany and has now been replaced as the most influential central bank in Europe by the European Central Bank.

The yen has been highly volatile, initially strengthening throughout the early nineties, then relieved by US support to the dollar. In October 1998, the most dramatic currency move in many years was seen as the dollar fell some 15% in just a few days against the Japanese currency. Japanese interest rates seem to be stuck at rock-bottom levels.

The Swiss franc serves, as does the dollar from time to time, as a "safe haven". This is due to the isolation of the Swiss economy, its independent and neutral political stance and the secrecy of Switzerland's banking system. The attractions of this combination have led to a relentless inflow of funds into Swiss francs in times of trouble and a resulting very low level of interest rates.

The pound is a big part of foreign exchange markets and the first currency to be traded actively against the US dollar via the transatlantic cables. ("cable"), The pound will remain an interesting currency as one of the few key European currencies.

### ***European Currencies***

European currencies have gained in importance in the last twenty years and have suffered some major crises due to the continued attempt to peg exchange rates to each other. Playing the interest rate spreads between high and low interest rates provided easy profits for speculators. (Interest Rate Differential trading)

The key to Continental European currencies has been the German mark-French franc Axis that was seen as the backbone of the common currency. The Benelux countries have benefited from long-term stability as well, whereas most Mediterranean and Scandinavian currencies have fluctuated wildly against this European core. The introduction of a common currency in 2001 spelled big changes to foreign exchange trading in Europe. As early as 1998, the participating currencies were fixed against each other and this has forced many European banks to reconsider many of their trading activities. Overall, we do not consider the introduction of the Euro to be particularly detrimental to foreign exchange markets.

A weaker Euro has taken the place of the mark and non-participating European currencies will become

more volatile and more vulnerable to speculative attacks.

## Emerging Markets

Exotic currencies have offered enormous profit potential and substantial risks. The most noticeable approach has been to single out weak, but fixed currencies for brutal speculative attacks, leading to large devaluations and extensive economic problems for the countries involved. The reason that many emerging currencies are pegged to the US dollar or other currencies is normally to force local monetary authorities to act with more discipline and to reassure holders of the currency against the risk of depreciation. It has proven nearly impossible for most emerging countries to maintain the necessary discipline to justify stable currency levels and the result is nearly always a dramatic devaluation. In leveraged trading, such devaluations offer big profit potential, but in the intermediate periods where the currency is stable, high interest rates will benefit investors with the nerve to hold onto the currency. This makes the emerging markets very tricky to trade and while nobody should trade any foreign exchange market without a solid grasp of the technical aspects, this is even more true in emerging markets. Seen from a commercial company's point of view, failure to protect against the risks in such markets can be fatal. Predominantly, interest focuses on South East Asia and South America, but both the African Continent and Eastern Europe provide interesting markets.

# Forex Basics

## Margin Trading

Foreign exchange trading is normally undertaken on the basis of margin trading. A relatively small deposit is required to control much larger positions in the market. For major FX currency crosses a trader typically requires a 1 % margin deposit for the first USD 10,000 invested.

## Base Currency and Price

When you trade, you will always trade a combination of two currencies. For example, you will buy US dollars and sell Canadian dollars. Or buy Euro-dollars and sell Japanese yen. There is always a long (bought) and a short (sold) side to a trade, which means that you are speculating on the prospect of one of the currencies strengthening and one of them weakening. This is called spread trading.

The base currency is normally the currency with the highest value and is stated as the first part of a pair. (eg. Pound-dollar in GBPUSD) The normal way to trade is buying or selling a fixed amount of US dollars, i.e. USD1,000,000.

## Dealing Spread

When trading foreign exchange, you are quoted a *dealing spread* offering you a buying and a selling level for your trade. Once you accept the offered price and receive confirmation from the broker, the trade is done. There is no need to call an exchange floor.

## Spot trading

When you trade foreign exchange you are normally quoted a **spot** price.

## Interest Rate Differentials

Different currencies pay different interest rates. This is one of the main driving forces behind foreign exchange trends. It is inherently attractive to be a buyer of a currency that pays a high interest rate

while being short a currency that has a low interest rate. Although such interest rate differentials may not appeal to large institutions who do not operate using leverage, the significance to smaller players is much greater.

## **Speculation**

Speculative investment is the most common investment type in international foreign exchange markets. Many different participants ranging from the largest financial institutions to individual investors undertake this type of investment. Where the interbank market is often traded by high-earning dealers for tiny exchange rate movements intra-day, some of the big hedge funds may take up enormous leveraged positions with a longer term strategic target. The risks involved mean that strict trading discipline should be adhered to and that the implications should be considered carefully whenever entering into a transaction of a commercial or speculative nature.

## **Commercial Hedging**

Some clients have commercial interests in foreign exchange markets. As global currency markets have become more volatile and international trade is increasing, most medium and large companies are in some way exposed to currency movements. Whether a company has income or expenses in foreign currencies, they are incurring substantial risks. This has resulted in large companies developing full internal trading operations with substantial expertise and advanced technology. The most professional of these internal departments are actually similar to full-scale brokers, and companies like Daimler-Benz and Ikea are important participants in the world's financial markets.

## **Investment Hedging**

Hedging of foreign investments is in many ways similar to normal commercial hedging. In both cases, the currency exposure is an often unwanted additional exposure aside from the underlying investment or commercial activity. Of course, an investment in a particular foreign stock may also be an investment in the expectation of an appreciating currency, but in most cases this will not be the primary reason. The interest rate differential may often be an important consideration when entering a longer term hedge and may sometimes also represent a significant advantage when this differential is positive.

## **Technical Analysis**

Technical Analysis is the study of past price and activity history in order to predict future price movements. The basic premise of technical analysis is that the price discounts all information available in the market and that patterns in price movements tend to repeat themselves. Another important foundation of technical analysis is that price movements are not random, but tend to trend in some direction most of the time. Although this seems an obvious fact to anybody that has ever looked at a chart, it is in fact a hotly disputed idea in certain academic circles.

# ***Fundamental Analysis***

Fundamental analysis deals with the factual influences on the market and the trader will aim to predict economic developments and the impact on the direction of foreign exchange rates. Frequently, there is an almost hostile atmosphere between technical and fundamental traders, disrespecting the other's approach.

Many aspects are taken into consideration when applying fundamental analysis. The monthly

and quarterly economic statistics give good indications of the strength of the economy. This indicates probable future changes in short and long-term interest rates that are of great significance to foreign exchange trends. Generally, high short-term interest rates will be supportive for a currency, unless confidence is undermined by fears of strong inflationary pressures.

**International trade and investment flows** are followed closely to assess the implications for the relative strength of buying and selling for commercial and cash transactions. Political events, such as elections or cabinet appointments can often have significant impact on foreign exchange markets, depending on the perceived policy impact on the economy.

**Monetary policy** is also followed very closely, including the indicators shaping such policy decisions. Money supply, central bank interventions and short-term interest rates are all significant factors for fundamental analysts. Trading currencies is probably the purest way of taking a view of a country's overall economic situation. Events in South East Asia in the second half of 1997 clearly showed the consequences when confidence in a local economy collapses and the most efficient way to profit from such expectations is shorting the currency involved. The overall stronger economic situation in the US compared to Continental Europe likewise resulted in a substantial appreciation in the US currency during 1997.

# *Economic Statistics*

## **Trade Balance**

The trade balance is a measure of the difference between imports and exports of tangible goods and services. The level of the trade balance and changes in exports and imports are widely followed by foreign exchange markets.

The trade balance is a major indicator of foreign exchange trends. Seen in isolation, measures of imports and exports are important indicators of overall economic activity in the economy. It is often of interest to examine the trend growth rates for exports and imports separately.

Trends in export activities reflect the competitive position of the country in question, but also the strength of economic activity abroad. Trends in import activity reflect the strength of domestic economic activity. Typically, a nation that runs a substantial trade balance deficit has a weak currency due to the continued commercial selling of the currency. This can, however, be offset by financial investment flows for extended periods of time.

## **Gross Domestic Product**

The Gross Domestic Product (GDP) is the broadest measure of aggregate economic activity available. Reported quarterly, GDP growth is widely followed as the primary indicator of the strength of economic activity. GDP represents the total value of a country's production during the period and consists of the purchases of domestically produced goods and services by individuals, businesses, foreigners and the government. GDP reports come in quarter-to-quarter revisions. A high GDP figure is often associated with the expectations of higher interest rates, which is frequently positive, at least in the short term, for the currency involved, unless expectations of increased inflation pressure is concurrently undermining confidence in the currency.

## **Consumer Price Index**

The Consumer Price Index (CPI) is a measure of the average level of prices of a fixed basket of goods and services purchased by consumers. The monthly reported changes in CPI are widely followed as an inflation indicator. The CPI is a primary inflation indicator because consumer spending accounts for nearly two-thirds of economic activity. Often, the important number excludes the price of food and energy as these items are generally much more volatile than the rest of the CPI and can obscure the more important underlying trend.

Rising consumer price inflation is normally associated with the expectation of higher short term interest rates and may therefore be supportive for a currency in the short term. Nevertheless, a longer term inflation problem will eventually undermine confidence in the currency and weakness will follow.

## **Producer Price Index**

The Producer Price Index (PPI) is a measure of the average level of prices of a fixed basket of goods received in primary markets by producers. The monthly PPI reports are widely followed as an indication of commodity inflation. The PPI is considered important because it accounts for price changes throughout the manufacturing sector. The "core" PPI is often followed which excludes the food and energy components as these items are normally much more volatile than the rest of the PPI and can therefore obscure the more important underlying trend.

Studying the PPI allows consideration of inflationary pressures that may be accumulating or receding, but have not yet filtered through to the finished goods prices. A rising PPI is normally expected to lead to higher consumer price inflation and thereby to potentially higher short-term interest rates. Higher rates will often have a short term positive impact on a currency, although significant inflationary pressure will often lead to an undermining of the confidence in the currency involved.

## **Payroll Employment**

Payroll employment is a measure of the number of people being paid as employees by non-farm business establishments and units of government. Monthly changes in payroll employment reflect the net number of new jobs created or lost during the month and changes are widely followed as an important indicator of economic activity. Payroll employment is one of the primary monthly indicators of aggregate economic activity because it encompasses every major sector of the economy. It is also useful to examine trends in job creation in several industry categories because the aggregate data can mask significant deviations in underlying industry trends.

Large increases in payroll employment are seen as signs of strong economic activity that could eventually lead to higher interest rates that are supportive of the currency at least in the short term. If, however, inflationary pressures are seen as building, this may undermine the longer-term confidence in the currency.

## **Durable Goods Orders**

Durable Goods Orders are a measure of the new orders placed with domestic manufacturers for immediate and future delivery of factory hard goods. Monthly percent changes reflect the rate of change of such orders. Levels of, and changes in, durable goods order are widely followed as an indicator of factory sector momentum. Durable Goods Orders are a major indicator of manufacturing sector trends because most industrial production is done to order. Often, the indicator is followed but excludes Defence and Transportation orders because these are generally much more volatile than the rest of the orders and can obscure the more important underlying trend.

Durable Goods Orders are measured in nominal terms and therefore include the effects of inflation. Therefore the Durable Goods Orders should be compared to the trend growth rate in PPI to arrive at the

real, inflation-adjusted Durable Goods Orders. Rising Durable Goods Orders are normally associated with stronger economic activity and can therefore lead to higher short-term interest rates that are often supportive to a currency at least in the short term.

### **Retail Sales**

Retail Sales are a measure of the total receipts of retail stores. Monthly percentage changes reflect the rate of change of such sales and are widely followed as an indicator of consumer spending.

Retail Sales are a major indicator of consumer spending because they account for nearly one-half of total consumer spending and approximately one-third of aggregate economic activity.

Often, Retail Sales are followed less auto sales because these are generally much more volatile than the rest of the Retail Sales and can therefore obscure the more important underlying trend.

Retail Sales are measured in nominal terms and therefore include the effects of inflation. Rising Retail Sales are often associated with a strong economy and therefore an expectation of higher short-term interest rates that are often supportive to a currency at least in the short term.

### **Housing Starts**

Housing Starts are a measure of the number of residential units on which construction is begun each month and the level of housing starts is widely followed as an indicator of residential construction activity. The indicator is followed to assess the commitment of builders to new construction activity. High construction activity is usually associated with increased economic activity and confidence, and is therefore considered a harbinger of higher short-term interest rates that can be supportive of the involved currency at least in the short term.

### **Quote**

The current price offered or asked for a financial instrument.

### **Pip**

The smallest amount, or simply, the increment, by which the quote for a FX cross can change. For example, if the quote for AUDUSD changed from 58.65 to 58.91, it will have risen 26 pips. For 100,000 AUDUSD, these 26 pips would represent 260 US Dollars. FX options are also quoted in pips.

### **Speculate**

Buying or selling something purely for profit rather than for some fundamental business or other need.

### **Spot**

In foreign-exchange, the spot market is the market for buying and selling for immediate delivery. A spot position is a position purchased in the spot market and the spot price is the price for an instrument for immediate delivery, as opposed to a forward price, which is for delivery at a specific later date.

### **Stop**

A buy stop is an order to buy at a specific price higher than the current market price and a sell stop is a stop to sell at a specific price below the current market price. Traders often refer to "stop-loss" orders. These are stops that are placed below the market when the trader is long and above the

market when the trader is short. These orders are triggered when the market price hits them to prevent further losses in the trader's position.

## **Volatility**

There are two types of volatility:

- 1) Historical volatility is actual volatility based on volatility realized in past movements in the market.
- 2) Implied volatility is the volatility interpreted from the price of options. So, the implied volatility is the expected spread of movement of an underlying asset's price predicted over the term of the option derived from the known prices of options and the other parameters used in the calculation of those prices.