

EFFECTS OF ECONOMICS INDICATORS ON FINANCIAL MARKETS

Martin Svoboda

In recent years, the general public has become increasingly aware of economic activities, aided and abetted by the growing involvement of private individuals in the stock market. As decisions in financial markets have become no longer a matter of luck but based on structured decisions, the investor or adviser has been left with two options. First, decisions can be based on technical indicators or charts. This is the field of technical analysis, whose importance has steadily increased in recent times. In addition, there is fundamental analysis, which boasts a far longer history, although considered 'elitist' for a long time, whereby national economic indicators are calculated and their importance and effect explained in a somewhat cryptic form. Any investors basing their decision to some extent on economic performance should therefore have at least some idea of what individual economic indicators mean and their relation to other indicators.

The effects of economic values on financial markets of fixed income markets are therefore comparatively simple. References to strong (weak) economic growth and therefore related to higher (lower) inflation have a mainly negative (positive) impact on these financial markets, as they imply higher (lower) interest and therefore lower (higher) market rates. This apparently simple link is no longer so easy to identify in relation to other financial markets. High economic growth frequently produces high inflation, which in turn prompts the central bank to tighten monetary policy more by raising interest. This, however, makes company lending more expensive, thereby narrowing the profit margin. At the same time, the higher economic growth also means that companies can sell more because demand rises. Due to the increase in demand they also probably have greater scope to increase prices. In this respect higher economic growth positively influences company profits. The question therefore remains as to the overall effect on a company and on the trend on the stock markets. The situation in the currency markets is different again. High interest rates tend to suppress economic growth. Falling growth rates adversely affect the exchange rate of a currency. High interest rates make investment in this country attractive, boosting capital inflows, thereby in principle positively affecting the exchange rate.

It is not the aim of this article to explain the fundamental factors of performance and their interdependencies within the financial markets. Instead, it aims to form a basis for appreciating the fundamentals in the USA and the Eurozone, the European Monetary Union (EMU) region. This can then be taken as the starting point for fundamental analysis of these national economies and their effects on the financial markets.

The importance of a national economic indicator ultimately depends on a number of factors:

1. Time of publication

The importance of an indicator depends on how up-to-date the information is. If economic figures are published after several months' delay, the underlying information can be estimated in advance with the help of the other indicators, thereby reducing the importance of the indicator itself.

Example

One of the reasons why so much notice is taken of the ISM Purchasing Managers' Index for Manufacturing Business is that it is published on the first working day of the month and provides one of the earliest bits of information on the economic situation in the preceding month.

2. Scope of new information

Information is partly published in the form of a number of statistics and individual information can be estimated on the basis of other statistics. The importance of an indicator therefore directly increases as more new information is published with this indicator.

Example

One of the most important publications of US economic indicators is the Labor Market Report. With the help of this report, conclusions can be drawn about economic growth, inflation pressure, the profit situation of companies and international competition. As a result the Labor Market Report (in conjunction with producer prices and consumer prices) is given top priority among US statistics.

Nevertheless, little notice is taken of the statistics on housing completions in the USA as the situation in this market sector can be assessed with adequate accuracy using other indicators already published for the construction sector.

3. Accuracy of statistics

Indicators fluctuate over time and are also often subsequently adjusted. The more volatile an indicator, the more difficult is its use to identify economic trends. At the same time, adjustments can cause the picture produced by the indicator to become unsustainable. Consequently, the importance of an indicator becomes greater, the more the economic situation is portrayed clearly and the number of false signals lowered, reducing the need for subsequent revisions.

Example

Retail sales normally provide a good summary of consumer demand in a national economy. In Germany, the significance of this statistic is, however, limited by the fact that it fluctuates dramatically from month to month and that there are frequent adjustments.

4. Importance for economic policy decisions

The more weight economic policy decision makers attach to an indicator, the more significant this indicator is to the financial markets. It is worth noting, however, that this significance is not independent of the aforementioned points. Indicators, which frequently provide false signals, are only given minor weighting in economic policy decision-making. The significance of an indicator also depends on how closely it is linked to the respective target value. However, as this link can change over time, it inevitably follows that the relative significance of indicators can also change over time. Moreover, indicators in different countries do not all have the same significance.

Example

Since the mid-1970s monetarism has become so well established in economic policy practice that most central banks responded to monetary trends with monetary policy regulation. The Deutsche Bundesbank played a pioneering role in this, and this still characterizes their

significance inside the European Central Bank (ECB) even today. In recent years the significance of these indicators has suffered as a result of financial innovations. The Federal Reserve, for example, has since largely begun to focus on actual trends rather than specific targets. In addition, individual central banks have switched to direct inflation targeting so that the money supply is now only one indicator with equal weight in a whole series of indicators. The importance of indicators can therefore change over time and also differ between nations.

With regard to fundamentals in particular there is the problem of the data being extremely difficult to assess accurately. Market operators are frequently surprised by data releases. In the forefront of such vital statistics market operators and high street bank economists are questioned about their expectations. The results are then published in the form of a market consensus. The markets frequently clearly anticipate certain results in advance; that is, they act on expectations. The more important an indicator is for the financial markets, the greater the false expectation is in a publication and the stronger the market response is to the data published. Therefore, the chance of achieving profits via the respective positioning in terms of the market consensus increases and also the results published can be estimated more accurately.

The importance of knowing how indicators are constructed to forecast economic developments can be seen in a publication from the International Monetary Fund (IMF). The private organization, Consensus Forecast, publishes each month an overview of forecasts made by large banks on GDP growth, inflation unemployment and so on for all the major countries. While evaluating the performance of Consensus Forecast of GDP growth for industrialized and developing countries from 1989 to 1998, it was found that from 60 recessions, only two had been forecast in the year before they happened. Looking at the average forecast, it is still worse. All forecasts had been too optimistic. In the year before a recession, the forecast growth exceeded actual growth in all cases.

In principle, the analysis of economic data involves providing answers to the following questions:

- How high is economic growth?
- How high is inflation?

And consequently:

- What impact will these have on interest rates, stock prices and currency markets?

The most comprehensive measurement of economic performance and thereby economic growth is the GDP. In simple terms, GDP can be taken as the sum of consumption, investment, government purchases and net exports. As publication of the GDP is subject to relatively long delays in most countries, it is helpful to estimate sections of the individual components which have already been published in advance and economic growth can be approximated with the help of these. The most important component is consumer demand, which accounts for over 70 per cent of the GDP in some nations. Consumer demand is only subject to slight fluctuation. However, with its share of the GDP this slight fluctuation is clearly noticeable in terms of economic growth. Key indicators for assessing consumer demand include retail sales, consumer confidence surveys, income trends and the demand for consumer credit. The demand for investment is far more volatile in comparison to consumer demand, so that the largest

proportion of fluctuations in economic growth can be attributed to this smaller component. This figure is estimated with the aid of data on production of investment goods, inventories and construction activity. Finally, data on the balance of trade and balance of payments are particularly essential for the analysis of international demand.

The aforementioned division of the GDP into components considers economic performance in terms of the consumer. At the same time it is also useful to analyze the production side. Here, data on industrial production are particularly relevant as fluctuations in industrial production tend to have the greatest impact on fluctuations in economic performance. In addition, industrial production trends are strongly influenced by exchange rate fluctuations and relative price trends in the respective individual nations. This means that this sector is of great importance for the analysis of global economic growth.

Apart from the 'standard' data on economic performance, company surveys can also provide information on the economic situation. Surveys have an advantage over production data in that they reflect people's attitudes, which can trigger a response to developments far earlier than production plans. In addition, short-term distortions, such as extreme weather conditions or differences in the number of working days are short-lived or not reflected at all in surveys.

The labour market data need to be considered between the data from the production side and the consumer side. On the one hand, they are affected by the economic position of the enterprises, and on the other, the labour market situation affects demand for goods and services in turn. In addition, labour market data can provide information on rising inflation pressure.

Finally, inflation can be measured using a number of methods. Apart from the GDP price deflator, which represents the broadest measure of price trends, these primarily include producer and consumer prices. Nevertheless, for policy-making and market trends it is important not only to be informed about the current inflation rate but also (and at least as important) to assess the inflationary pressure that may be building.

According to monetarist theory, inflationary trends can only develop in the long term when the central bank fails to keep a tight enough grip on monetary trends. This is why monetary aggregates have been so important for financial markets in the past. As was explained in the above example, the importance of monetary aggregates for inflation trends in the past has been somewhat reduced by the introduction of financial innovations. In spite of this, these numbers continue to play an important role in monetary policy and still serve as a guide on potential interest rate decisions by the central banks.

It has already been intimated that individual indicators can provide early forecasts of trends for other indices or economic performance in general. Some indicators largely change direction in line with cyclical trends, whereas others only change direction after the turning point of an economic cycle. Such indicators are called leading indicators, coincident indicators or lagging indicators. Leading indicators are characterized by the fact that they reflect turning points in economic cycles before these turning points are actually visible. As expectations have great influence on market trends in financial markets, leading indicators are therefore of great importance. These include, amongst others:

- New orders
- Building permits
- Information on overtime
- Monetary trends
- Consumer expectations
- Business climate indices

By contrast, coincident indicators are characterized by the fact that they develop mostly parallel to the economic cycle. They make it possible to assess economic cycles more accurately as national accounting data is normally subject to time delays and only published quarterly. These include, amongst others:

- Labour market figures
- Information on available income
- Data on industrial production
- Sales figures at various production levels and in the retail sector

Lagging indicators, on the other hand, usually only supply information on changes in the cyclical situation after the situation has changed. They therefore normally change direction after the coincident indicators. They can be used to check whether the coincident indicators have given the correct signal. On the other hand, they also act as a guide as to whether major structural imbalance is to be expected within a national economy, which could be averted via economic policy measures. Lagging indicators include, among others:

- Average period of unemployment
- Inventory to sales ratio
- Ratio of consumer installment credit outstanding to personal income

In addition to the leading indicators on the business cycle there are also indices for assessing inflationary pressure. On the one hand, it should be noted that inflationary trends often occur in waves through all levels of the production process. As a result, price increases in crude materials, for example, are initially reflected in the crude material price index, then in the producer price indices for intermediate products and finally in the producer price indices for finished products. Only then does a price change affect consumer prices for goods, thereby finally also affecting prices for services.

To what extent price changes affect the individual stages depends on the scope within the company for passing on price increases. In a sector with marked competition between companies there is far less potential than, for example, in a sector with only a few highly specialized companies. On the other hand, price trends are also affected by cost factors occurring within the production stages such as wages, individual taxes and profit margins. The following are some of the leading indicators for consumer price trends:

- Unit labour costs
- Labour market figures
- Capacity utilization
- Commodity prices
- Producer prices

- Purchasing power of currencies
- Surveys on expected price trends

Referents

- [1] CLARK, Peter at al. *Exchange Rates and Economic Fundamentals*. International Monetary Fund Occasional Paper, Washington, DC, 115, December 1994.
- [2] FLEMING, Michael J.; REMOLONA, Eli M. 'What Moves the Bond Market?' in Federal Reserve Bank of New York. In *Economic Policy Review*, December 1997, pp. 31-50.
- [3] FLEMING, Michael J.; REMOLONA, Eli M. *The Term Structure of Announcement Effects*, Bank for International Settlements, BIS Working Paper No. 71, Basel, June 1999.
- [4] GALATI, Gabriele; HO, Corinne. *Macroeconomic news and the euro/dollar exchange rate*. Bank for International Settlements, BIS Working Paper No. 105, Basel, December 2001.
- [5] LOUNGANI, Prakash. *How Accurate are Private Sector Forecast? Cross-Country Evidence from Consensus Forecast of Output Growth*. IMF Working Paper No. WP/00/77, April 2000.
- [6] MOERSCH, Mathias. "Predicting Market Movers : A Closer Look at Consensus Estimates." In *Business Economics*. April 2001, pp. 24-9.
- [7] SCHRÖDER, Michael; DORNAU, Robert. "What's on their Mind: Do Exchange Rate Forecasters Stick to Theoretical Models?" Zentrum für Europäische Wirtschaftsforschung, *ZEW Discussion Paper No. 99-08*, Mannheim, 1999.
- [8] THOMAS, Lloyd B. Jr.; Grant, Alan P. „Forecasting Inflation – Surveys versus other Forecasts.” In *Business Economics*, July 2000, pp. 9-18.

Summary

V současné době každý investor při svém rozhodování o budoucích investičních krocích musí brát v úvahu hospodářský vývoj. Základními ekonomickými veličinami ovlivňujícími finanční trhy jsou především ekonomický růst, inflace, úrokové míry a sazby peněžního trhu. Vliv těchto indikátorů se zdá být na první pohled jasný a lze je většinou velmi lehce předpovídat. V praxi ale význam jednotlivých ekonomických ukazatelů závisí na dalších faktorech. Proto je nezbytné znát konstrukci jednotlivých indikátorů a jejich vypovídající schopnost. Tento příspěvek se snaží odpovědět na otázku popsat druhy základních ekonomických indikátorů, na které je nutné brát ohled při investičním rozhodování.