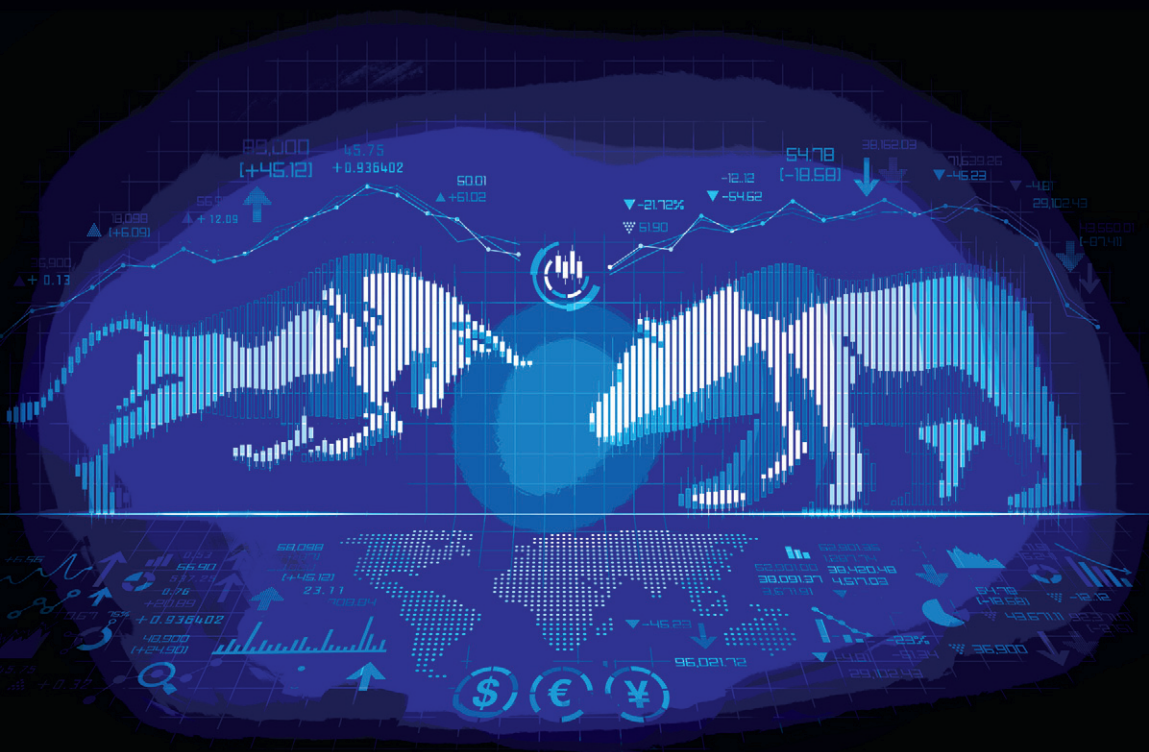


USING ECONOMIC INDICATORS IN ANALYSING FINANCIAL MARKETS



Bernd Krampen

Using Economic Indicators in Analysing Financial Markets

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Using Economic Indicators in Analysing Financial Markets

BY

BERND KRAMPEN



United Kingdom – North America – Japan – India – Malaysia – China

Emerald Publishing Limited
Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2023

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British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-1-80455-325-1 (Print)

ISBN: 978-1-80455-324-4 (Online)

ISBN: 978-1-80455-326-8 (Epub)



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ISO 14001



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About the Author



Bernd Krampen has studied economics at the universities of Kiel (Germany) and Swansea (United Kingdom). Since 1997 he has worked as financial analyst and economist for Norddeutsche Landesbank in Hanover (Germany). He is responsible for assessing and forecasting economic activity, inflation, interest rates and exchange rates for various countries. His focus lies on fundamental economic analysis, but he also examines behavioural aspects. He also has gained some relevant experience teaching financial economics in educational institutions (e.g. Sparkassenakademie Niedersachsen). His publications include contributions to peer-reviewed journals such as the *German Journal of Risk and Insurance*. He lives in Barsinghausen near Hanover with his wife Sandra and their daughters Alessia and Noelia.

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Preface

Research is formalized curiosity. It is poking and prying with a purpose.

(Zora Neale Hurston)

Imagination is the highest form of research.

(Albert Einstein)

Where are the economy and the financial markets heading? What is the outlook for growth, and what are the growth drivers? What does this mean for the expected trends on the financial markets? These questions, which at first glance seem rather academic, can mean hard cash – with the right investments on the financial markets. After all, economic developments have a significant influence on financial market variables such as interest rates, exchange rates and shares. Correct positioning on the financial markets can actually generate profits for one's own investments when macroeconomic trends materialise. In this respect, the question of the economy is not merely an academic-sporting exercise, but creates advantages for one's own wallet.

More than 2 ½ decades of working as an economist in a bank have provided a wealth of experience on how capital markets work and how they can react to new news. Which moods of people, impulses from politics and other (unexpected) influences cause which market movements? Such a wealth of experience is accumulated quasi incidentally over time. Theories and models learned at University have to be compared with experienced reality again and again and can then be considered useful or less useful. Obviously, some of the experiences and insights gained are of interest and of added value.

The main point of this book is to recognise that business cycle analysis is firstly complex, secondly affected by many interdependencies, and thirdly that a forecast of future development should not be overrated. For although there are a large number of indicators that show good tendencies, one problem of analysis is that they often go in different directions. This also explains the differing opinions of economists and analysts when it comes to the future. The weighing of the different indicators is decisive. Unfortunately, however, there is not even agreement on the effects and developments either to the present or the past. One of the intentions of this book is to make readers pause, question, reflect and look critically at many things when connections are all too clear. Things are not always as they –

simplistically – appear. Business cycle analysis and economics are not sciences, but applied theories that are supposed to describe the summed actions of many people as a result.

The first step in the analysis to assess the economic development and the implications for the financial markets should be to correctly evaluate the new news flying in every day. It is important to be able to classify the publications of economic data. What do the indicators contain, which are relevant to the market, how to forecast them? Part II deals with the most market-relevant indicators from the major regions.

Analysts want to get an assessment for the coming months to several years. The tools that can be used for this are discussed in Part III. Basically, the aim is to identify the trends for GDP growth and inflation in the next quarters with the help of the economic data available on a monthly basis. The focus is on growth contributions, leading indicators and forecasting recessions. The good forecast properties of sentiment indicators, the NAHB index as an example for the real estate market and an introduction into psychology in analysing financial markets will be discussed in Part IV.

Part I
On the Pulse of the Economy – Listen to the
Signals!

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Chapter 1

Procedure for the Economic Cycle Analysis

The curious mind embraces science; the gifted and sensitive, the arts; the practical, business; the leftover becomes an economist.
(Nassim Nicholas Taleb)

Economics is extremely useful as a form of employment for economists.

(John Kenneth Galbraith)

Cognitive Problems in Economics

The national economy is a complex construct. Basically, it is the result of the quadrillions of decisions made by billions of people, by around 83 million people in Germany, by over 500 million in Europe and 7.9 billion people worldwide. These decisions range from simple purchasing decisions by private households (or non-purchases, such as refraining from, postponing, renting, or borrowing) to investment decisions by companies to government decisions to introduce, increase, reduce or abolish taxes, levies, customs duties, or key interest rates. These measures in turn have an effect on other economic entities, which (can) react to them with further measures. Through an almost infinite number of feedback loops, the results of these decisions are naturally difficult to predict. But prediction is desirable! Basically, economists and analysts use the simple method of drawing on correlations, chains of effects, regularities of the past days, months, years in order to predict trends for the future. For that is precisely the task of economists: to predict the future under given current circumstances – taking into account the interrelationships of the past. From time to time, however, the critical question must be answered whether this time is different. This can indeed sometimes be the case, but is only correct in rare special phases such as recessions or extreme booms. In special professions such as governments or economic research institutes, economists are also required to state which course of action is the ‘better’ policy (normative policy). This is then to be clearly distinguished from the ‘normal observing’ economists (positive policy). Although these economists also (usually) have their own opinions on the ‘better’ policy, they should ultimately point out the most probable scenarios for further economic development – without taking into account the subjectively considered supposedly ‘better’ policy.

Shortcomings in Research

In the course of the last decades, economists and analysts have discovered a wealth of correlations and regularities in the economy and also in the financial markets. The first step was to make observations and comparisons in order to subsequently show the relationships between various facts. Theories were developed to explain why individual developments follow from others. The rapid development of mathematics in recent decades has also led to the construction of models from these findings – according to the principle: small, practical, good. For a long time, models were able to summarise entire theories about the inter-relationships of effects – and were defended almost like a religion by their adherents. Economics received a healthy boost with the improved means of econometrics. This branch offered the meaningful possibility of confirming or rejecting the theories of the models via the data (time series) collected in reality. Only the theory that could not be rejected via hypothesis tests was to hold (for the time being). A large number of econometricians (some of them also pseudo-econometricians) set about rejecting models via tests and finding new ones.

Unfortunately, the conditions for the hypothesis tests were often neglected, so that incorrectly conducted tests rejected or confirmed theories. Some ‘researchers’ even disregarded the precondition of the existence of stationary time series and instead calculated with time series integrated of grade 1 (I1 variables). The choice of data (time period) also has an important influence on the results. In the end, a multitude of different results was often the consequence, so that the previously partly quite clear correlations appeared more confused. In addition, models and tests were ‘trimmed’ in the sense of one’s own theory and political opinion in order to confirm one’s own argumentation and to weaken the position of the opposing side. Additionally, always remember that acting intelligently means not only recognising right patterns, but ignoring wrong ones. In any case, the instrument of econometrics should be handled with care, so that it should again be used more in the ‘search for truth’.

Sense and Purpose of Market Analysis

Market analysis attempts to correctly assess the economic development and to obtain a correct economic picture for the future in order to correctly predict the trends on the capital markets. Sometimes, however, this approach can lead to difficulties that result in an incorrect prediction.

First of all, there is a correct assessment of the economic situation from the past to the present. This requires macroeconomic data, which are now available in large quantities, at least for the most important economies. The choice of data can play an important role in the assessment. Sometimes, however, there are distortions, such as natural conditions (hurricanes, heat, cold), political influence (tax changes, customs policy, elections), entrepreneurial factors (large companies develop new products or come under pressure), human influences (terrorist attacks, wars), or even holiday dates (Easter in March or April; New Year in

China), which (may) have affected the observed time series both at certain points in the past and until today. From 2020 onwards, the massive disruptions in the course of the spread of COVID-19 had to be considered, from 2022 onwards the implications of a war between Russia and the Ukraine. These special influences must be taken into account accordingly in order to reduce errors in the interpretation of the data.

Starting from a 'correct' picture of the situation to aim for, speculation arises as to how the economic development could continue. The possibilities are of course immense, ranging from a long-lasting depression or recession to a sustained 'never-ending' boom phase. Mostly, however, such extremes exclude each other, so that a 'normal' development emerges as an average idea. In this way, one should have a scenario in mind that can be regarded as the most probable. There are of course alternative scenarios floating around in one's mind, which (can) gradually call the basic scenario into question as new data are published from time to time. The difficulty for economists is to choose the right time when to make adjustments to the baseline scenario or when to proclaim a completely new scenario as the most likely scenario. Sometimes one reacts too late in the adjustment, sometimes too early. Rarely is one exactly (always) right. The fine art is to keep (forecast) errors to a minimum, while at the same time making adjustments as infrequently as necessary, because frequent changes do not necessarily increase the credibility of one's statements. A certain consistency of the forecast is therefore to be aimed for – but the highest probability for a forecast is of course even more important.

A further step essential for market analysis must be taken if this compiled economic scenario is to be transferred to developments on the financial markets. What might these expected economic developments mean for the stock markets, the bond markets, commodities and exchange rates? Here, too, it is important to get a correct picture of the current situation and past developments. Why are stocks, bonds and exchange rates at the current levels, what has led them there? Depending on political attitudes and one's own theory, analysts may have different views on this. Is the movement of the past justified or exaggerated, are certain issues and influencing factors not priced in at all, already partially or even completely? The answers are largely subjective, as the available indicators in their diversity usually do not (or cannot) give clear answers. The weighting of certain topics is therefore decisive for the current state of the market – recognising this weighting by the totality of market participants from the respective economist or analyst is the essential crux.

Based on this assessment and the expectation of a certain economic scenario, an assessment of the further development on the individual markets can now be build up. Once again, it depends on how the current and potential market issues are weighted. Since the dominant theme in the market should already be priced in, the future themes must therefore be identified. Which market theme will gain importance in the future, and which should then have what implications for market development? It is not only important to guess what the dominant themes will be, but also what people expect, which themes will become decisive. Only then can one guess how prices will change – before they do. Guessing this mood can lead to the right prediction. That this is not quite easy is obvious.

Notes on Forecasts

Making correct statements about the past is already an important and difficult task and activity. More important, however, and thus a real challenge, is to correctly predict future developments. If the forecasts actually come true as expected and one has positioned oneself accordingly on the capital markets, one can certainly earn money (provided the correlations work as expected). In this respect, forecasts are considered the supreme discipline of analysis.

Making a forecast alone is not great art. Ultimately, however, the forecast must firstly be well justified, fit into the overall argumentation and be consistent in itself. The forecasts must be seen as realistic. That is the first major prerequisite for acceptance of the statements. Secondly, the forecasts should also come true – at least in the majority of cases. If the forecasts are accurate by well over 50%, one can theoretically speak of good forecasts. If, on the other hand, the success rate is only half of that, there is no added value to the forecasts in the sense of generating profits on the markets. If, on the other hand, the success rate of the forecasts is significantly below 50%, one cannot speak of good forecasts, but at least of usable forecasts, since they can be used as a contra-indicator.

In addition, forecasters must ask themselves whether they want to make forecasts that are primarily realistic from a subjective point of view and thus probably lie on the consensus forecast in most cases, or whether they want to attract a little public attention and stand out clearly from the consensus estimates. In this case, their forecasts can generate so much interest in the media, for example, that the forecasts themselves can become the subject of discussion. However, this approach usually also increases the risk of a wrong forecast. Too often, deviations from the outcomes are no longer convincing. The choice of forecasts is thus a constant balancing act for analysts who aim to stand out a little.

Nothing on the financial markets is constant, but subject to constant change. Prices of various financial products move every second, updated economic data are published (almost) daily worldwide, various companies report on a quarterly basis or are forced to make ad-hoc announcements, politicians intervene verbally (with speeches or tweets) more and more in events (both governments, fiscal policy and monetary policy) and the media spread the topics 24 hours a day, 7 days a week. This means that the situation can change constantly, and with it the outlook and assessments. Here, too, economists and analysts are confronted with the difficulty of reassessing or revising forecasts at the right moment: not too early, so that they can be accused of fickleness and lack of consistency – not too late, so that they can be accused of rigidity or laziness. The big question in this context is: ‘Noise in the Data or a Shift in the Trend?’ Mistakes are made – but minimising these mistakes is always the motivation for economists and analysts.

There is another point to mention about forecasts: Consensus estimates are usually taken as the benchmark. This is usually the median or average of the values that economists and analysts report to news agencies such as Bloomberg or Reuters. Consensus estimates are compared with the own estimates. Firstly, one’s own forecasts can also be the average of the expected scenarios in one’s own mind (often weighted in each case with the subjective probabilities). Secondly, however,

the subjectively most probable scenario can be taken as the own forecast. This is usually the case. If consensus estimates are compared with one's own estimates, there are usually discrepancies, which is due to the fact that one is an average opinion of the respondents and the other is one's own most probable scenario.

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