

Asset Allocation

A Research Publication by DZ BANK AG

Basic Principles

Asset allocation methodology, DZ BANK sample portfolio

Asset allocation, or portfolio structuring, is the diversification of an asset into various asset classes, e.g. bonds, equities, property, currencies, commodities and cash. Splitting investment capital into safe and risky investments makes it possible to manage the target return of the portfolio by managing the risk. In this way, there can be a dual focus on both the return target and on risk optimization. In addition to risk/return expectations for individual asset classes, the interaction between individual asset classes can also play a key role in the diversification under certain market conditions.

In this monthly publication in our "Asset Allocation" series we start by combining the results produced by the DZ BANK Research departments on economic performance, and the bond, equity and commodities markets, with the aim of producing comprehensive analysis which covers all asset classes. This monthly publication appears in two forms, a comprehensive (Asset Strategies in Focus) version for eligible counterparties as well as professional clients and an abridged version for private clients, having the appropriate knowledge and experience to understand and evaluate the relevant risks of Asset Allocation.

In a second stage we develop a strategic asset allocation derived from the aggregated results of the individual DZ BANK Research departments, taking account of general political and societal conditions. The basis for this is the work done by the "Investment Strategy" research unit/group.

The DZ BANK research unit "Investment Strategy" uses all the quantitative and qualitative assessments produced by the DZ BANK analysts, other publicly available information, and a risk/opportunity asset evaluation to make a respective asset allocation, and in order to invest flexibly in different assets.

We apply these basic concepts to our DZ BANK sample portfolio. We follow a total return approach and target an annual performance of 4-5% p.a. for this sample portfolio. This performance target certainly seems achievable in phases when the equity markets are performing well. If, contrary to expectations, the equity markets should weaken, our objective remains to achieve a positive portfolio return over the whole economic cycle. Individual years of negative performance cannot therefore be ruled out.

The inclusion or removal of an investment object to or from the DZ BANK example portfolio is made exclusively on the basis of the respective portfolio aspect and does not represent an isolated fundamental investment recommendation for the investment object. This involves an isolated evaluation of this aspect which takes place prior to any fundamental investment recommendation / decision.

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INVESTMENT STRATEGY

Asset allocation approach

In the monthly publications in our "Asset Allocation" series we start by combining the results produced by the DZ BANK Research departments on economic performance, and the bond, equity and commodities markets, with the aim of producing comprehensive analysis which covers all asset classes.

In a second stage we develop a strategic asset allocation derived from the aggregated results of the individual DZ BANK Research departments, taking account of general political and societal conditions. The basis for this is the work done by the "Investment Strategy" research unit/group.

The DZ BANK research unit "Investment Strategy" uses all the quantitative and qualitative assessments produced by the DZ BANK analysts, other publicly available information, and a risk/opportunity asset evaluation to make a respective asset allocation, and in order to invest flexibly in different assets.

DZ BANK sample portfolio

We apply these basic concepts to our DZ BANK portfolio. Trading in our DZ BANK portfolio is performed with a short to medium term investment horizon. We follow a total return approach and target an annual performance for the sample portfolio of 4-5% p.a. This performance target certainly seems achievable in phases when the equity markets are performing well. If, contrary to expectations, the equity markets should weaken, our objective remains to achieve a positive portfolio return over the whole economic cycle. Individual years of negative performance can certainly not be ruled out.

In order to achieve a positive medium-term return for the sample portfolio, the focus of our approach is initially defensive, with the intention of largely preserving capital. In a second stage we focus on investing in assets with a very promising risk/opportunity evaluation. This is based on the objective of every position being fundamentally justified at all times. This approach is broadly in line with a value approach, whose exponents seek to conserve capital plus achieve a positive annual return with low portfolio volatility, and to move away from a relative performance approach. Risk management plays an extremely important role in this approach. Since the DZ BANK sample portfolio does not include derivatives, the "cash" component is crucial for portfolio management as a strategic asset for the defensive work.

Total return approach
Target annual performance of 4-5% p.a.

Focus on defensive work represents most important aspect

Concentration on investment in assets with a promising risk/return ratio

Theoretical basis

Asset allocation, or portfolio structuring, is the diversification of an asset into various asset classes, e.g. bonds, equities, property, currencies, commodities and cash. Splitting investment capital into safe and risky investments makes it possible to manage the target return of the portfolio by managing the risk. In this way, there can be a dual focus on both the return target and on risk optimisation. Diversification also plays a key role, since individual asset classes react to different market situations and events in terms of market price.

Since not all investors share the same expectations of risk and return, asset allocations should be produced individually based on risk tolerance and investment horizon. Asset allocations differ in their composition, i.e. in terms of the ratios of the individual asset classes in the portfolio mix.

In theory and in financial literature, asset allocation strategies are frequently based purely quantitatively on historical risk and return parameters and on the interaction of individual asset classes.

Important: The DZ BANK asset allocation approach is not based on any purely quantitative method controlled by key figures or computer systems.

A distinction is made between strategic and tactical asset allocations. In strategic asset allocation, regular transactions ensure that the sample portfolio also reflects the desired asset structure on a sustained basis. This is necessary since changes in the value of individual asset classes may also lead to a shift in ratios within the sample portfolio. In terms of tactical asset allocation, we attempt to benefit from current market trends and movements by changing the percentage weighting of individual asset classes within the sample portfolio.

Sources: data, studies, information

The DZ BANK research unit "Investment Strategy" uses all the quantitative and qualitative assessments produced by the DZ BANK analysts, other publicly available information, and a risk/opportunity asset evaluation to make a respective asset allocation, and in order to invest flexibly in different assets.

Asset Allocation analysts therefore use a broad range of data and information. Since Asset Allocation represents a form of analysis which transcends individual asset classes, it is first of all necessary to evaluate the risk and return expectations for individual investment classes and how they interact with each other. To this end we use the results of the individual DZ BANK Research departments on economic performance, and the bond, equity and commodities markets. **For an explanation of the methods used by individual departments, please see the Basic Principles reports of the individual research departments of DZ BANK.**

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Issuers of shares and bonds are analysed on the basis of predefined **sustainability factors** and classified in isolation as '**sustainable**' or '**non-sustainable**'. For sovereigns, a classification as '**transformation state**' can be made that lies between these two classifications.

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The assessment of an investment in a **currency area** is geared to the aggregate return expected from an investment in that **currency area**. As a rule, this aggregate return is primarily derived from the forecast change in the exchange rates. Aspects such as the general interest rate level and changes in the yield level of bonds on the relevant bond market that are possibly to be taken into consideration are also included in the assessment. "**Attractive**" refers to the expectation that an investment in a currency area can deliver an above-average and positive return over a horizon of six to twelve months.

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"**Neutral weighting**" refers to the expectation that a sub-segment will not deliver any significant performance differences compared with all the sub-segments as a whole.

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For derivatives (**Bund futures, Bobl futures, treasury futures, Buxl futures**) the **arrows (↑)(↓)(↔)** **merely indicate the trend direction** and **do not contain any investment recommendation**. The trend direction is derived solely from the use of generally recognised technical analysis indicators **without reflecting an analyst's own assessment**.

4.7 Commodities

"**Upward arrow (↑)**" means that the absolute price increase expected in the next twelve months is greater than 10%.

"**Downward arrow (↓)**" means that the absolute price decline expected in the next twelve months is greater than 10%.

"Arrow pointing to the right (➔)" means that the absolute price change expected in the next twelve months will lie between +10% and -10%.

4.8 Credit Trend Issuers

Based on the assessment of the rating development of the agencies and the DZ BANK CRESTA-SCORE forecast model, the following classifications apply:

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"Stable" is given if the agencies S&P, Moody's and Fitch are expected to leave their ratings unchanged in the next twelve months

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5.3 The **validity periods** for **Other Research Information** are as follows:

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Credit trend issuers	twelve months
Share indices (fundamental):	three months
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Share indices (technical daily):	publicationday
Currency areas:	six to twelve months
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Country weightings for covered bonds:	six months
Derivatives	
(Bund futures, Bobl futures, treasury futures, Buxl futures):	one month
Commodities:	one month

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