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Munich Re World Wide Trend Index

Performance engine of ERGO's index-linked life insurance products

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In January 2018, ERGO Vorsorge launched its new index-linked life insurance product. This is a type of annuity where the customer has the option of having the performance of the annuity driven by the performance of an index. For ERGO index products, one of the investment options is derived from the performance of the Munich Re World Wide Trend Index. The index is a consistent implementation of a systematic trend-following investment strategy with a particular focus on diversification, risk management and transparency.

In today's challenging investment environment, there is a need for modern answers, particularly in the area of retirement provision.

Contacts

Munich Re

Stephan Krügel
Munich Re
Markets
Tel.: +49 89 38 91-84 10
skruegel@munichre.com

Dr. Markus Jaeger
Munich Re
Markets
Tel.: +49 89 38 91-23 20
majaeger@munichre.com

ERGO Group

Robin Holle
ERGO Group
Produktmanagement bAV
Tel. : +49 211 477-56 62
robin.holle@ergo.de

René Kahleyss
ERGO Group
Produktmanagement pAV
Tel.: +49 211 477-33 42
rene.kahleyss@ergo.de

Daniel Kühn
ERGO Group
ALM Customer Solutions
Tel. : +49 211 477-52 34
daniel.kuehn@ergo.de

ERGO

Provider	ERGO Vorsorge Lebensversicherung AG
Product name	ERGO Basis-Rente Index, ERGO Betriebs-Rente Index, ERGO Rente Index, ERGO Vermögenspolice Index, ERGO Kidspolice Index
Product category	Index-linked
Product type	Life insurance
Product start	January 2018
Index live date	October 2017

ERGO is one of the largest insurance groups in Germany and the rest of Europe. The group has a presence in about 30 countries around the world, with a focus on Europe and Asia. ERGO offers a comprehensive range of insurance, provision, investments and services. ERGO is one of the leading providers in all lines of business in its home market of Germany.

What is "trend following"?

Trend following is a systematic investment approach, most often implemented fully rule-based. The aim of trend following strategies is to make a profit when the market shows a sustained trend in a particular direction. The direction of the trend is irrelevant. This allows attractive returns to be generated in both up and down markets. Long-term trends are therefore the source of positive returns.

If the underlying market does not move or is range-bound for a prolonged period, the performance of a trend following strategy will be negatively affected – false upside or downside signals will lead to frequent position changes and possibly losses. Frequent smaller losing positions and less frequent large winning positions, which together result in a profitable investment, are typical of overall trend following performance.

Historical performance

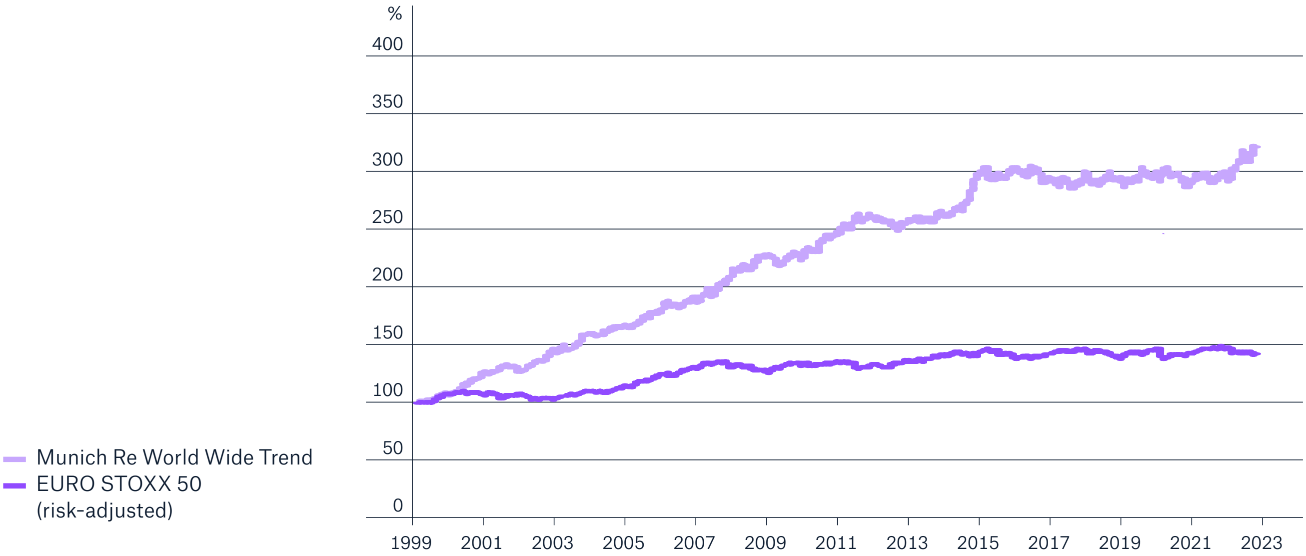


Figure 1
Since the beginning of 1999 (indexed). To compare, the risk-adjusted performance of the EURO STOXX 50 Index is shown.

Source: Munich Re, Bloomberg L.P.

What are the reasons for price trends?

Possible explanations for why prices tend to trend can be found in behavioural economics. Behavioural economics rejects the assumption that people act in a purely rational way. Instead, it argues that an important part of human decision-making is the often distorted processing of information. In fact, this happens in a systematic way and is not a product of chance. This is because, in many cases, we humans rely on rules of thumb ("heuristics") to help us make the best possible decisions as quickly as possible. This usually works well for everyday problems, but it can have undesirable effects when it comes to investment decisions. Cognitive biases are deeply human – and we can all bel victims of them.

For example, when making decisions, we tend to use information that supports our opinion or position. This leads to increased pro-cyclical behaviour (“confirmation bias”, “selective perception”). Another example is the “herd instinct”, which can contribute to the emergence of speculative bubbles: Through social contagion (positive feedback loop), an optimistic narrative or “boom thinking” spreads among market participants - this can lead to an overreaction.

“Conservatism” becomes numerically tangible through the earnings announcement drift (a positive earnings announcement leads to further gradual increases in share prices and vice versa): Although all relevant information is available immediately after the announcement of the results, an adjustment lag can be observed in the price development of exchange-listed companies. Past experience, which forms the “anchor”, shapes the expectations of the market participants. New information is only gradually incorporated (“anchoring and adjustment”). One possible recent example is the slow adjustment of capital markets to the recurrent surprise of high inflation figures in 2021/22.

Besides behavioural aspects, market frictions can also be important. For example, the inflow of investment funds tends to be pro-cyclical in nature. Central banks’ attempts to control currency volatility or support exchange rates can slow price movements towards an asset’s intrinsic value. Investment models used to manage risk tend to reduce their long exposure by unwinding positions when prices fall. This also has the effect of being a trend reinforcer.

Stylised life cycle of a price trend

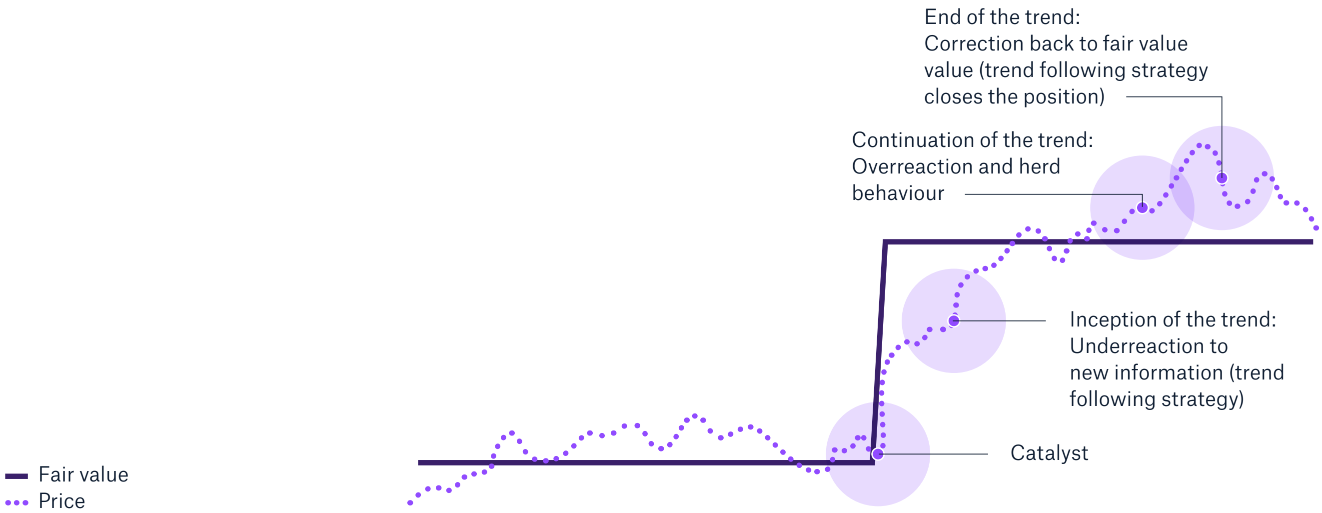


Figure 2:
The graph shows the stylized life cycle of a price trend. New price-relevant information is released, leading to asset revaluation. It turns out that there are many reasons why this new information is only gradually incorporated into market prices. There is rarely an immediate jump in price to a new fair value. This adjustment period is the time when the upward trend is in place. Once fair value is reached, prices tend not to stop rising. Markets have a tendency to continue the positive trend and overshoot. A subsequent correction brings prices close to fair value.

Source: Hurst, B., Ooi, Y.H. & Pedersen, L.H. (2013), “Demystifying Managed Futures”, Journal of Investment Management, Vol. 11, Nr. 3, S. 42–58.

What about the investment universe?

The Munich Re World Wide Trend Index includes 30 highly liquid markets from four asset classes: equities, bonds, commodities and currencies. Table 2 lists these index members. The investment universe itself is already well diversified. The risk profiles of the individual markets are in some cases very different. The diversification of the index portfolio can be further enhanced by long and short positions[1].

#	Index member	Asset class	Currency
1	DAX	Equities	EUR
2	EURO STOXX 50	Equities	EUR
3	FTSE 100	Equities	GBP
4	Hang Seng	Equities	HKD
5	NASDAQ-100	Equities	USD
6	Nikkei 225	Equities	JPY
7	S&P 500	Equities	USD
8	Germany 10Y Govt. Bonds	Bonds	EUR
9	Germany 30Y Govt. Bonds	Bonds	EUR
10	UK 10Y Govt. Bonds	Bonds	GBP
11	Japan 10Y Govt. Bonds	Bonds	JPY
12	Canada 10Y Govt. Bonds	Bonds	CAD
13	USA 10Y Govt. Bonds	Bonds	USD
14	USA 30Y Govt. Bonds	Bonds	USD
15	RBOB Gasoline	Commodities	USD
16	Diesel (ULS NY Harbor)	Commodities	USD
17	Natural Gas	Commodities	USD
18	Gasoil (LS)	Commodities	USD
19	Gold	Commodities	USD
20	Copper	Commodities	USD
21	Platinum	Commodities	USD
22	Crude Oil (Brent)	Commodities	USD
23	Crude Oil (WTI)	Commodities	USD
24	Silver	Commodities	USD
25	AUD/USD	Foreign Exchange	USD
26	CAD/USD	Foreign Exchange	USD
27	CHF/USD	Foreign Exchange	USD
28	EUR/USD	Foreign Exchange	USD
29	GBP/USD	Foreign Exchange	USD
30	JPY/USD	Foreign Exchange	USD

Table 2

Source: Munich Re

[1] This could occur, for example, if stock markets are not all positioned in the same direction due to different trend signals (i.e. some long, some short). This is what happened at the end of 2021, when Hong Kong stocks were already trending down while most other stock markets continued on their record run.

To illustrate the dependency structure of the 30 assets at a given time in a simplified way, a minimum spanning tree can be used. An example of such a tree is shown in Figure 3.

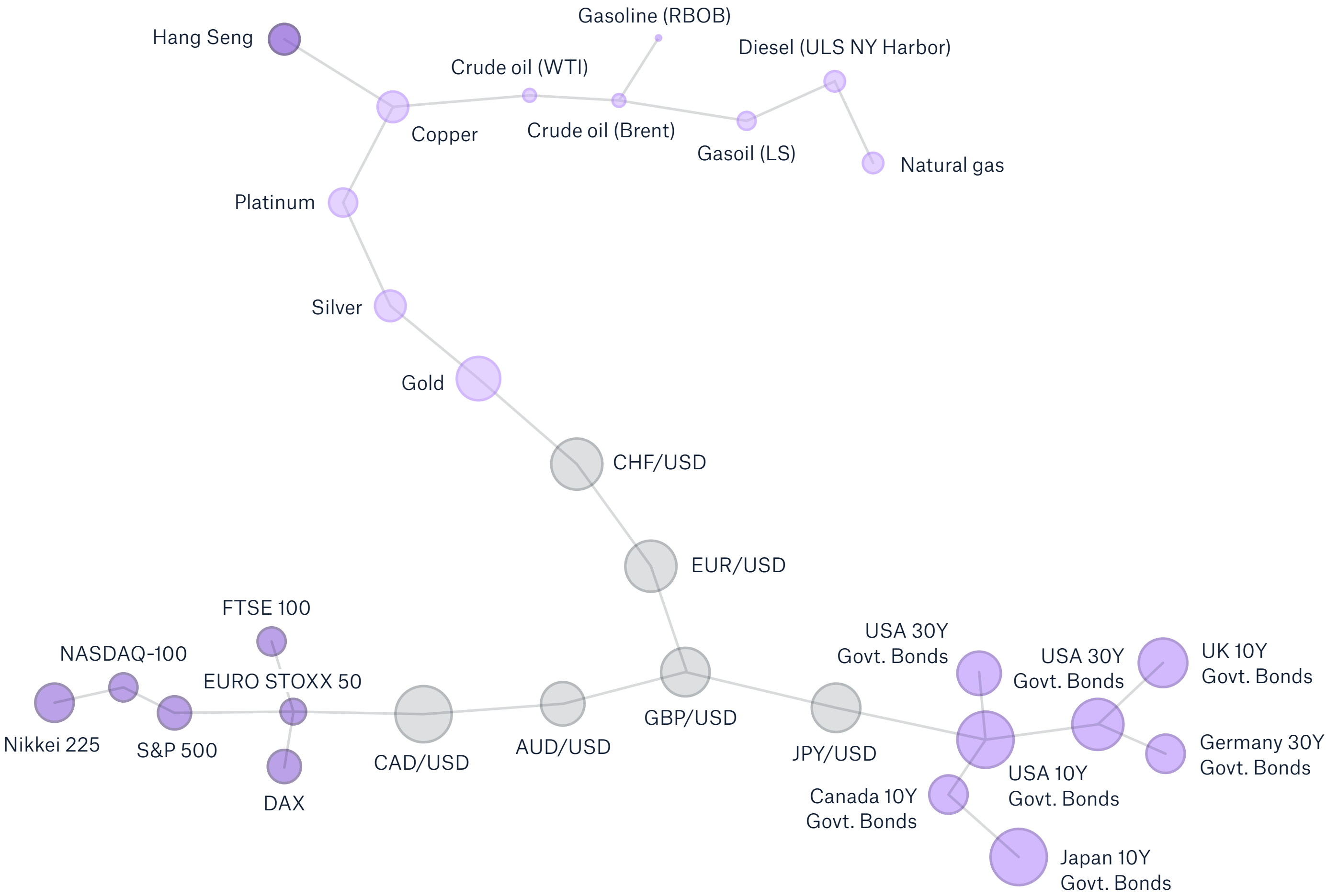


Figure 3
In September 2022, energy commodities and traditional asset classes (stocks and bonds) stand at opposite ends of the tree. This is intuitively understandable in view of the relatively decoupled price movements in 2022 as a result of inflation. The behaviour contrasts with many market phases in recent years when equities and commodities tended to move closer together, with bonds playing a safe-haven role. As equities and bonds have become more correlated, the dependency structure changed. This is because in 2022 bond markets experienced one of their sharpest price corrections on record, at the same time as equities showed weakness. The Hang Seng Index occupies an interesting position in the tree: Unlike most other equity markets, it has been downtrending and decoupled since early 2021, so is not in the equity index cluster. The strong US dollar until September has also affected gold, which is positioned close to the currency pairs. In the lower part, the USD/JPY position is the result of the weakening of the yen against the USD, mainly due to rising US interest rates; yen interest rates were little changed. Of course, the bond markets directly to the right were also driven by interest rate developments - which in many countries were similar to those in the US.

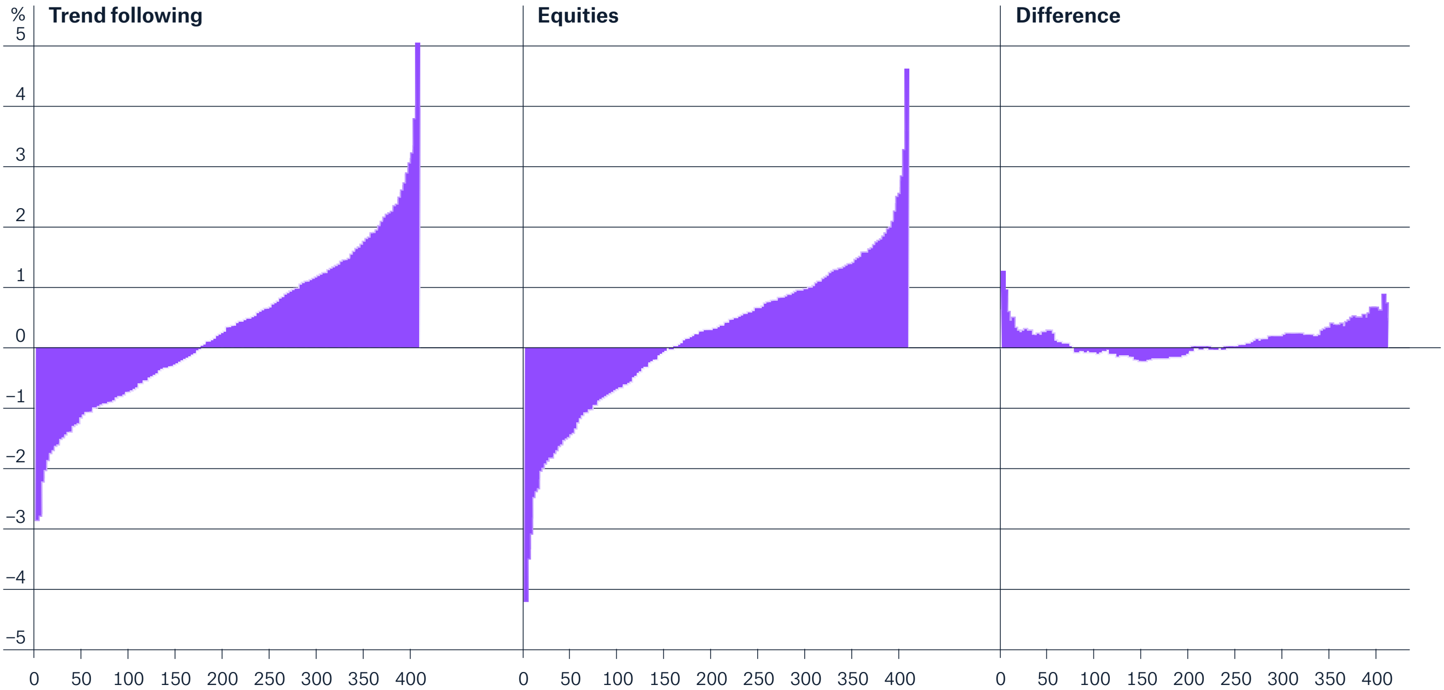
Source: Munich Re, Bloomberg L.P.

Who uses trend following strategies?

The market for professional systematic trend following investments today comprises assets under management of more than USD 388 billion[2] and thus represents an established investment style among institutional investors – which is increasingly coming to the fore in the retail sector as well[3].

Often the investment vehicles, such as funds, require a minimum investment amount of EUR 500,000 or more and may include a fixed management fee as well as profit sharing for the fund manager. The providers are typically specialists in the field of alternative investment products. The clients are, for example, pension funds or family offices. The investment style is also long-established, which is underlined by the fact that well-known trend following benchmarks[4] were launched in the 1980s even before many popular stock indices.

Sorted monthly returns: Trend following vs. equity markets



Sorted monthly returns of the Munich Re World Wide Trend Index (excess return).

Sorted monthly returns of the US equity index S&P 500 (excess return and risk-adjusted).

Difference between the sorted monthly returns of the Munich Re World Wide Trend and the S&P 500. A positive number indicates that trend following has outperformed the US equities in the rank under consideration.

Figure 4
Sorted monthly returns. Ordered monthly returns are a useful way to compare investment strategies by the number of positive and negative months (the point at which the return crosses zero), the size of the positive and negative returns, and the extent of extreme returns. Data is presented from 1988 to 2022. The chart shows that trend following performs particularly well in terms of positive returns, but also in terms of extreme negative returns, while the stock market is superior in the mid-range. All time-series use excess returns. They are calculated with a target volatility of 5%.

Source: Munich Re, Bloomberg L.P.

[2] BarclayHedge (2022), "CTA Industry Assets Under Management", https://www.barclayhedge.com/solutions/assets-undermanagement/cta-assets-under-management/, accessed 25 October 2022.
[3] See e.g. Johnson, S. (2022). "Crash-protection mode helps managed futures ETFs crush rivals", Financial Times, 10.10.2022 or Böschen, M. (2022). "Die Anti-Crash-Strategie für Privatanleger", Manager Magazin, 17 November 2022.
[4] Indices that are aggregating the performance of major trend following funds, such as BTOP50 Index, Barclay CTA Index, SG CTA Index, SG Trend Index, HFRI Trend Following Directional Index.

What makes the Munich Re World Wide Trend Index special?

The index offers clients of ERGO Vorsorge the exclusive opportunity to benefit from the potential of trend following strategies for private and occupational retirement provision.

The index investment universe allows participation in the market performance of the four major asset classes: bonds, equities, commodities and foreign exchange. This avoids concentration risk and ensures a broad diversification of individual positions.

The weighting of the individual components within the index is reviewed and adjusted on a regular basis. Position weights are based on the volatility and trend direction of the underlying markets. Trend detection is based on a mix of trend indicators covering different time-horizons and the signals derived are implemented in dedicated sub-portfolios. This reduces the risk of misinterpreted trend signals. A risk control overlay is used to ensure that the defined and selected risk profile is implemented in an appropriate manner. By limiting the index portfolio’s risk, the aim is to achieve sustainable long-term performance.

All in all, the index offers an attractive ratio between the opportunity for a good performance on a sustained basis and the risk taken.

What other aspects speak in favour of the Munich Re World Wide Trend index?

The performance of the index is largely in line with the overall market of professional trend following funds. According to our own calculations, the Munich Re World Wide Trend Index has correlated between 0.5 and 0.75 with popular trend following benchmarks since its inception on 2 October 2017 and since the start of the historical index time-series on 29 December 1987. The reason for this is the structure of the index. It is based on the same principles as professional trend following funds. As a result, there is a high degree of probability that the index will continue to show a very synchronised behaviour with the institutional market. This makes the index a potential way to gain access to the trend following asset class, which is known for its stable returns over the past few decades.

Within the peer group of professional trend following funds, the index investment strategy belongs to the traditional trend models. These use a very liquid investment universe. Macroeconomic themes such as central bank activity, inflation, (de-)globalisation or the impact of the pandemic are typically the drivers of their performance.

The Munich Re World Wide Trend Index is transparent and comprehensible in terms of investment rules and performance attribution. This is supported by regular analysis and reporting by FIVE. The investment rules are only made more complex where this is really necessary and where it adds value. Diversification and balance are key criteria of the index architecture and have been at the forefront of all steps and areas of the index construction process. For example, all established positions contribute to the index return in the same way through continuously selected appropriate weights. With the Munich Re World Wide Trend Index, risk management therefore goes beyond price risks.

The "trend following smile"

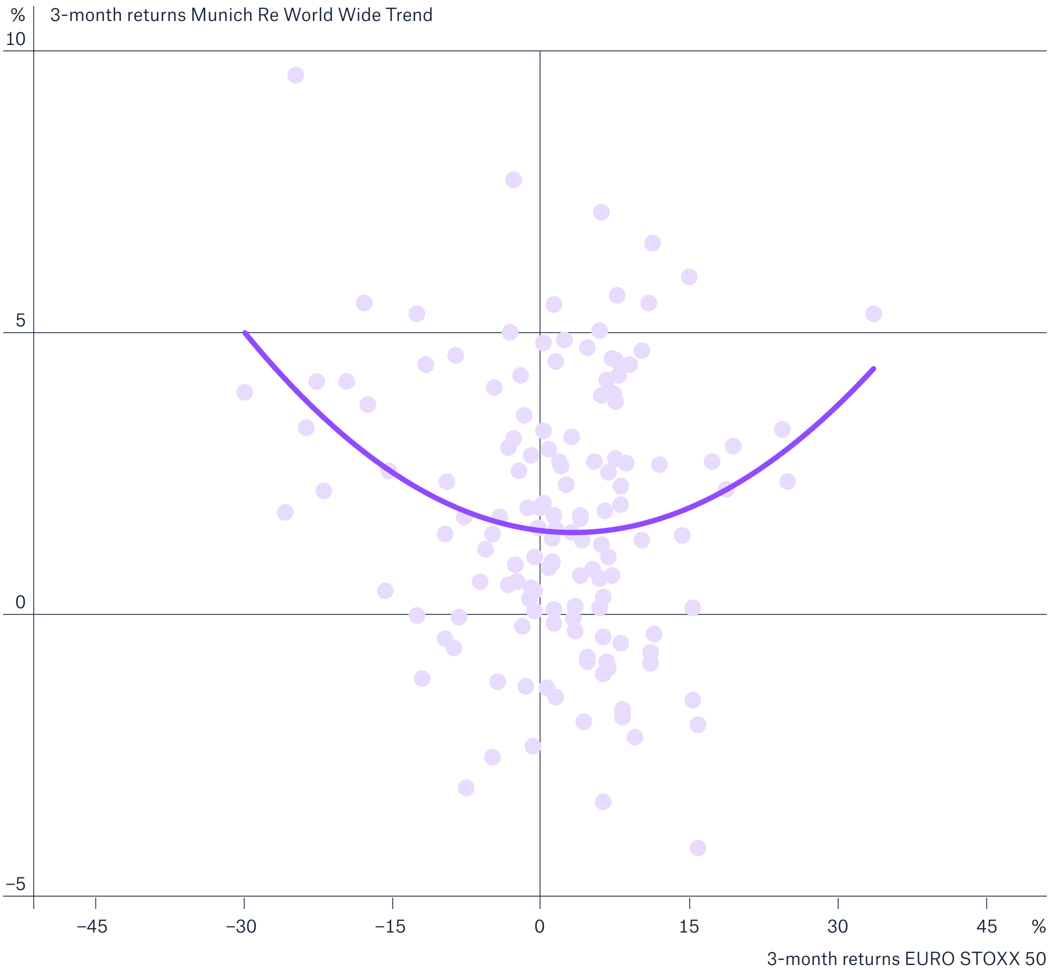


Figure 5
The trend following smile: One point in the scatter plot results from the 3-month return of the Munich Re World Wide Trend Index (y-axis) and the contemporaneous 3-month return of the EURO STOXX 50 Index (x-axis). The line running through the point cloud illustrates its related quadratic fit. It becomes visible that sharper declines in the stock market tend to be associated with positive trend following performance. This pattern, common to all trend following strategies, is often referred to as "crisis alpha". The same is true for stronger equity market quarters. 3-month returns around the origin mostly stem from choppy sideways movements in the equity market, which often come along with a difficult environment for trend followers.

Source: Munich Re, Bloomberg L.P.

What is the typical performance of trend following strategies in times of elevated inflation?

Time periods in which comparatively high inflation prevails are usually advantageous for trend followers. A look at the past shows that higher inflation in financial markets is usually accompanied by larger price fluctuations. This is supported by various studies[5]. The reason is that inflation increases macroeconomic uncertainty, under which central banks and policymakers, for example, must make decisions with an increased error probability. The empirical studies also describe that the following tendencies can be derived for the real returns of various asset classes: for bonds, rising interest rates usually result in falling prices. Stocks also tend to struggle in such an environment. Commodity prices typically benefit more in an inflationary environment.

The Munich Re World Wide Trend Index has been designed with the necessary flexibility to position itself advantageously in such market phases: in each of the individual asset classes equities, bonds, commodities and currencies, the index can establish a long or short position at monthly intervals, depending on the identified trend direction.

This means, for example, that the index is just as capable of profiting from a price decline on the bond markets (and thus participating in rising interest rates) as it is of participating in the positive price development of commodities.

The above-mentioned studies have shown that this flexibility is an important prerequisite for increasing the probability of positive investment results in inflationary periods.

Performance of the Munich Re World Wide Trend Index in periods of elevated inflation

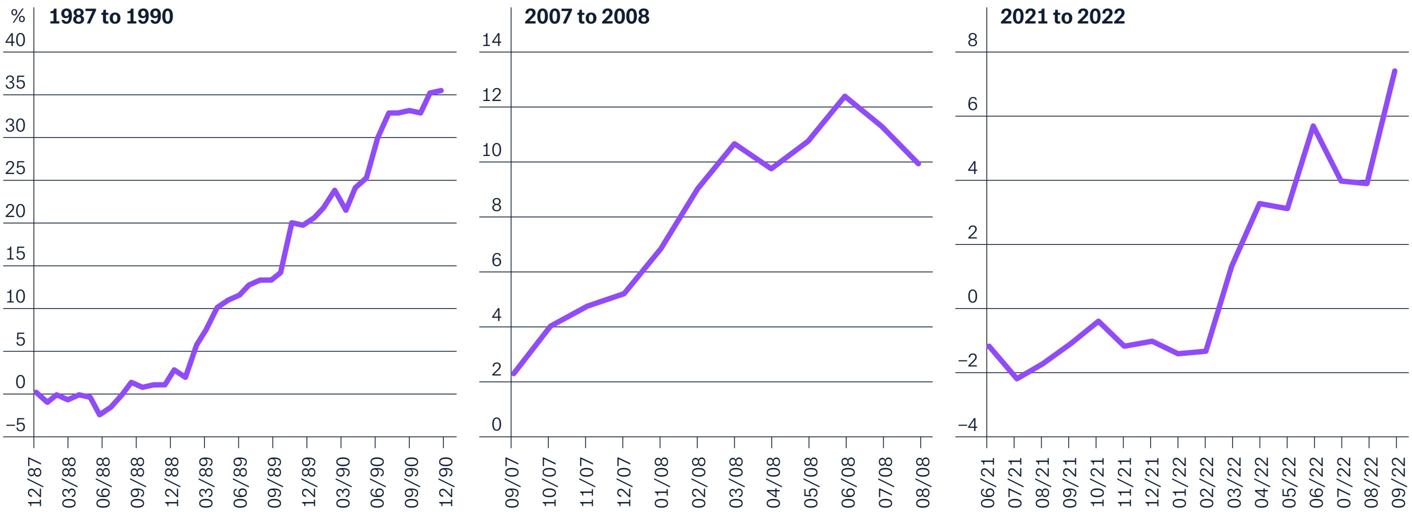


Figure 6
The periods shown since the end of 1987 were identified by replicating the study by Neville et al. (2021): 02/1987 to 11/1990, 09/2007 to 07/2008, and starting in May 2021. The time series are presented on an excess return basis.

Source: Munich Re, Bloomberg L.P.

[5] for example: Neville, H., Draaisma, T., Funnell, B., Harvey, C. R., & Van Hemert, O. (2021). The best strategies for inflationary times. The Journal of Portfolio Management, 47 (8), 8–37.

What suggests that trend following can continue to be worthwhile?

Trend following provides high potential for attractive, steady capital growth.

It is important to be aware that this style of investing is based on the belief that trends in the financial markets (regardless of the direction they take) will continue to exist. What can be arguments for this? The emergence of price trends can for example be explained by various well-documented aspects of behavioural economics. These include herd behaviour and the way of how market participants process information. These aspects are rather timeless and remain valid.

Trend following has historically been one of the most attractive and stable investment styles[6]. From 2015 to 2021, trend following experienced a period of comparatively moderate returns due to the lack of sufficiently clear price trends in most asset classes. Such market environments are typically difficult for trend followers and occur from time to time. However, when looking at the investment style over a longer period of time, its performance profile can be described as robust. Periods of underperformance have always been followed by periods of outperformance. For example, after the challenging years for trend following from 2015 onwards, the rolling 12-month index returns in 2022 were in some cases double-digit.

Trend following is also only partially dependent on the performance of traditional markets (e.g. equity markets). This may mean that good equity years are not necessarily good trend following years. On the other hand, it can be observed that trend following has very often performed positively during prolonged periods of weakness in traditional markets. We see this phenomenon confirmed once again by the positive performance of the index in the challenging investment year 2022.

The return triangle for the index (Figure 7) shows the historically possible investment results for various holding periods and time windows.

[6] See for example Baltussen, G., Swinkels, L., van Vliet, P. (2021). Global Factor Premiums. Journal of Financial Economics, 142 (3), 1128–1154.

20 years 15 years 10 years

Return triangle for the index

Reading example

5.0%

Buying at the end of 2007 and selling at the end of 2011 returned 5.0% p.a. over the period.

Buy \ Sell	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
2021																									+6.8	
2020																								+2.1	+4.4	
2019																							−1.7	+0.2	+2.3	
2018																						+1.3	−0.2	+0.5	+2.1	
2017																					+0.7	+1.0	+0.1	+0.6	+1.8	5 years
2016																				+0.2	+0.5	+0.7	+0.1	+0.5	+1.5	
2015																			−1.4	−0.6	−0.2	+0.2	−0.2	+0.2	+1.1	
2014																		+1.9	+0.2	+0.2	+0.3	+0.5	+0.2	+0.4	+1.2	
2013																	+10.6	+6.1	+3.6	+2.7	+2.3	+2.1	+1.6	+1.6	+2.2	
2012																+4.4	+7.5	+5.6	+3.8	+3.1	+2.7	+2.5	+1.9	+1.9	+2.4	10 years
2011															−2.9	+0.7	+3.9	+3.4	+2.4	+2.0	+1.8	+1.8	+1.4	+1.5	+1.9	
2010														+6.1	+1.5	+2.4	+4.4	+3.9	+3.0	+2.6	+2.4	+2.2	+1.8	+1.9	+2.3	
2009													+7.2	+6.6	+3.4	+3.6	+5.0	+4.4	+3.6	+3.2	+2.9	+2.7	+2.3	+2.3	+2.6	
2008												−0.2	+3.4	+4.3	+2.5	+2.8	+4.1	+3.8	+3.1	+2.8	+2.6	+2.5	+2.1	+2.1	+2.4	
2007											+6.9	+3.3	+4.6	+5.0	+3.3	+3.5	+4.5	+4.2	+3.5	+3.2	+3.0	+2.8	+2.5	+2.4	+2.7	15 years
2006										+4.6	+5.8	+3.7	+4.6	+4.9	+3.5	+3.7	+4.5	+4.2	+3.6	+3.3	+3.1	+3.0	+2.6	+2.6	+2.8	
2005									+2.9	+3.7	+4.8	+3.5	+4.2	+4.5	+3.4	+3.6	+4.3	+4.1	+3.6	+3.3	+3.1	+2.9	+2.6	+2.6	+2.8	
2004								+5.4	+4.1	+4.3	+4.9	+3.9	+4.4	+4.7	+3.7	+3.8	+4.4	+4.2	+3.7	+3.4	+3.2	+3.1	+2.8	+2.8	+3.0	
2003							+4.4	+4.9	+4.2	+4.3	+4.8	+4.0	+4.4	+4.6	+3.8	+3.8	+4.4	+4.2	+3.8	+3.5	+3.3	+3.2	+2.9	+2.9	+3.1	
2002						+8.8	+6.6	+6.2	+5.4	+5.2	+5.5	+4.7	+5.0	+5.1	+4.3	+4.3	+4.8	+4.6	+4.1	+3.9	+3.7	+3.5	+3.2	+3.2	+3.3	20 years
2001					+4.5	+6.6	+5.9	+5.8	+5.2	+5.1	+5.3	+4.6	+4.9	+5.0	+4.3	+4.3	+4.8	+4.6	+4.1	+3.9	+3.7	+3.6	+3.3	+3.2	+3.4	
2000				+4.2	+4.4	+5.8	+5.5	+5.5	+5.0	+5.0	+5.2	+4.6	+4.8	+5.0	+4.3	+4.3	+4.7	+4.5	+4.2	+3.9	+3.7	+3.6	+3.3	+3.3	+3.4	
1999			+8.5	+6.3	+5.7	+6.5	+6.1	+6.0	+5.5	+5.4	+5.6	+5.0	+5.2	+5.2	+4.6	+4.6	+5.0	+4.8	+4.4	+4.2	+4.0	+3.8	+3.6	+3.5	+3.6	
1998		−0.1	+4.1	+4.1	+4.2	+5.1	+5.0	+5.1	+4.8	+4.8	+5.0	+4.5	+4.7	+4.8	+4.2	+4.3	+4.6	+4.5	+4.1	+3.9	+3.8	+3.6	+3.4	+3.3	+3.5	
1997	+8.8	+4.2	+5.6	+5.3	+5.1	+5.7	+5.5	+5.5	+5.2	+5.2	+5.3	+4.8	+5.0	+5.1	+4.5	+4.5	+4.9	+4.7	+4.4	+4.2	+4.0	+3.9	+3.6	+3.6	+3.7	

Chart 7

The chart shows the performance of an investment in the trend following component of the Munich Re World Wide Trend Index over different holding periods (in years) with different starting and ending points (annual, always measured at year-end).

Excess returns are used. What does this mean and why have we chosen to present it this way? The total return of the index is made up of two parts: a) the excess returns generated by the dynamic investment strategy (implemented using listed futures contracts) and b) the returns generated by the money market account (investing available cash). This means that in addition to the performance of the (unfunded) dynamic investment strategy, the index's performance always depends directly on the level of short-term money market rates (total return index). When analyzing the quality of a trend following strategy, it is only the first part - the excess returns - that should be taken into account. The return on the money market account is not an "investment performance" to be compared with in this context.

Sources: Munich Re, Bloomberg L.P.

What are the implications for the index's return prospects?

The index aims to perform in line with trend following industry and offer its potential for attractive, consistent performance at attractive terms.

This is for example done by using only as many parameters as necessary, which is one of the key aspects of a robust systematic investment strategy. Furthermore, these parameters are diversified wherever possible. The result is higher reliability.

So what does all this mean for performance expectations?

Since the Munich Re World Wide Trend Index is designed as a total return index, its performance depends not only on the performance of the dynamic trend following strategy but also directly on the level of short-term Euro money market rates. A return expectation for the index is therefore made up of expectations for the trend following strategy and the money market rate.

Deriving long-term performance expectations based on past performance alone is inherently uncertain. However, we believe that empirical data and the assessment that stable trends can continue to emerge in the financial markets support a positive outlook for the investment style and the specific index. The fact that human behaviour, and thus possibly one of the main drivers of trend following returns, is difficult to change, also argues in favour of continued attractive performance.

Regarding long-term performance expectations (over a period of more than 10 years), we believe the following can be said:

- Historically, the long-term average performance of the Munich Re World Wide Trend Index (total return) was 5.0%[7]. The trend following strategy, which excludes money market interest rates (excess return), has contributed 3.7% to this performance over the same period.

- This compares with an annual return of 1.4% (excess return: 0.1%) on an investment in the EURO STOXX 50 with the same risk profile over the same period[8].

- The money market interest rate averaged around 2.8% in the 2000s. It continued to fall in the 2010s and finally turned negative in 2015. Following the ECB's rate hike in July 2022, the rate returned to non-negative for the first time. The value fluctuated between –0.3% and –0.5% per year from the index launch in October 2017 until June 2022.

- Returns are based on historical data and cannot be used as an indicator for future performance.

[7] The return has been calculated as a CAGR from 01/01/2000 to 01/08/2022. The excess return of the Munich Re World Wide Trend Index was 3.7% per annum. This compares with a risk-adjusted excess return of 0.1% for the EURO STOXX 50 Index over the same period. In total return terms, 5.0% p.a. for the Munich Re World Wide Trend Index compares with 1.4% p.a. for the EURO STOXX 50.

[8] The following index was used as a benchmark: EURO STOXX 50 Risk Control 5% Excess Return Index, ISIN CH0118856167.

How do index and insurance product interact?

The index was developed for and in cooperation with ERGO. It is adapted to the requirements of ERGO's modern pension products.

The policyholder can participate in the performance of the index through the policyholder bonus for the relevant period.

If the index performs well, the policyholder's account will increase by the amount of the positive performance multiplied by the participation rate set at the beginning of the insurance year. If the index goes up during the annual observation period, the customer will receive an attractive rate of return on his or her contract. If the index falls during the annual observation period, the account value remains protected. The client will not be penalized for a negative performance during the year.

FIVE

In close cooperation with our clients, we develop rule-based investment strategies that precisely and cost-efficiently achieve the desired investment objectives. These strategies are primarily designed for the use in savings and retirement products.

As a tailored component of insurance and reinsurance solutions, they create valuable synergies from both risk and cost perspectives. FIVE's investment strategies are based exclusively on proven and quantitatively well documented concepts. Continuous quantitative research ensures that FIVE always has its finger on the pulse of financial markets.

Efficient diversification, robust risk management and efficient implementation form a core part of our approach to robust long-term wealth generation. Munich Re is also invested in FIVE's flagship strategies.

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This brochure is for general information purposes only and does not constitute the basis for an investment decision.

The information contained herein does not relate to financial instruments, but is merely a brief information on the indices presented in this document. For further details on the risks associated with the indices, please refer to the relevant information documents of the corresponding pension or insurance product(s), if available. The indices presented in this brochure have been developed with the aim of being used only in bespoke annuity, insurance and/or reinsurance products and transactions and are therefore not intended to be traded in any form of financial instrument. Consequently, the material presents the index-related information for illustrative purposes only. It does not contain an investment recommendation nor does it constitute a solicitation, offer or invitation to subscribe for or to buy or sell any product or service in connection with the Index.

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