

DIVIDEND STUDY, 12TH EDITION

Stability in an era of disruption

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Further publications can be found in the appendix on page 18.

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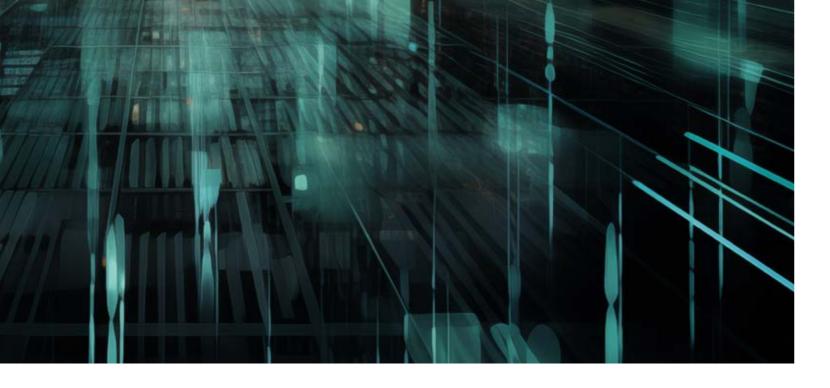
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Stability in an era of disruption

Be it deglobalisation, digitalisation, demographics or decarbonisation, disruption is in full swing wherever you look. It is also a long-term, structural phenomenon. These drivers of transformation are also likely to have an impact in 2024. Then there are the current (geo)political, macroeconomic and monetary policy developments. Taken together, this makes the question as to how equities can provide stability in a portfolio all the more pressing.

When considering relative performance, investors in dividend stocks should not compare bond coupons and dividend yields* but, instead, the expected total return in the context of equity market risk.

Dr Hans-Jörg Naumer Director Global Capital Markets & Thematic Research

The dimensions of disruption

From a long-term perspective, the drivers of these disruptive trends are likely to generate additional growth. However, this development is expected to be accompanied by elevated inflation rates. The only driver that should have a moderating effect on inflation is digitalisation, as it can help by, for instance, replacing increasingly scarce labour with smart machines or enabling workers to become more productive.

You can learn more about the "dimensions of disruption" in separate studies on deglobalisation, digitalisation, demographics and decarbonisation in our series of the same name.

Total return is what counts

In 2023, equities have put in a solid performance. The question now is what is going to happen in 2024 and what can help to stabilise returns.

Lately, I have occasionally been asked whether dividends are already past their heyday. Why? Well, negative yields are gone and bonds are paying coupons again. At the same time, government bond yields, such as those of German bunds, have returned and are remarkably close to the dividend yield when taking the MSCI Europe as the benchmark. In many countries, they are already higher. Bonds from heavyweight corporate issuers in the EU analysed by the Bank of America (BofA) have meanwhile even exceeded

dividend yields (cf. figure 1). So, it is understandable that investors are posing this question. However, there are a number of reasons why it obscures the bigger picture:

- · The prolonged phase of low and, for a time, even negative bond vields has fuelled a perception that dividend yields are typically higher than bond yields.
- However, this is not the case on the contrary. In fact, this inversion did not occur until the end of 2010 and beginning of 2011. Until then, the opposite was true, i.e. dividend yields were lower than bond yields.
- Today, just as in the past, this does not have any bearing on the attractiveness of bonds or yields.
- It is important to consider that a bond yield is based on its price and coupon over the entire maturity period. The dividend yield, however, is simply a snapshot of the most

Figure 1: A comparison of European dividend yields with government and corporate bond yields



Source: LSEG Datastream, AllianzGI Global Capital Markets & Themativ Research 12.12.2023.

recent dividend payout (past value) in relation to the current share price (current value). The extent to which it reflects any expected growth in profits, the dividend yield only reflects the dividend yield itself, but not the (expected) share price performance

- What counts is the total return for both bonds and equities. While the price is factored into the bond yield, the dividend yield is simply that - the dividend yield.
- Consequently, a direct comparison falls short of the mark. What investors need to ask themselves is: what do they expect in terms of price performance?
- Therefore, when considering relative performance, investors in dividend stocks should not compare bond coupons and dividend yields but, instead, the expected total return in the context of equity market risk.

Deep Dive: Bonds, equities and the "risk premium"



Greater risk is the price to be paid for a risk premium.

Dr Hans-Jörg Naumer Director Global Capital Markets & Thematic Research

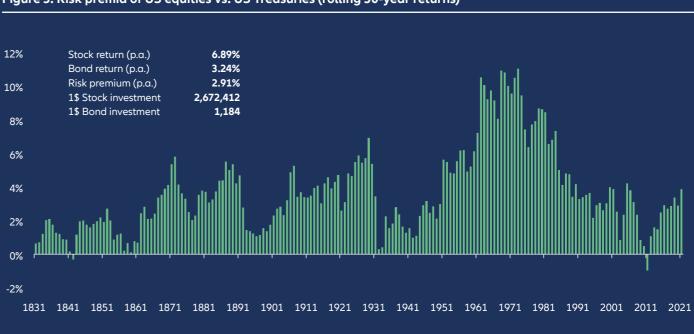
So much for the theory. But what does real life tell us?

Historical time series over a long period for the US equity market show that expectations of a risk premium were met, even though it was not equally rewarding to invest in US equities over all time periods. The longest data series for the US bond

and equity markets available to me when writing this study extended as far back as 1801. If somebody's ancestor had invested one US dollar in US government bonds back then, s/he would have 1,184 US dollars today. Alternatively, if that ancestor had invested instead in US equities, his or her descendant would have more than 260,000 US dollars today³. The contrast could hardly be greater. The average return on bonds over this period was 3.24% p.a., for equities it was 6.89% p.a. That results in an equity risk premium of 2.91%.

Obviously, these are only historical figures and cannot be used to make any future projections. Nonetheless, they are at least an illustration of what potential returns can be achieved over long periods of time from risk premia and from compound

Figure 3: Risk premia of US equities vs. US Treasuries (rolling 30-year returns)



Past performance does not predict future returns.

Source: Jeremy Siegel database 1801–1900 & Elroy Dimson, Paul Marsh, and Mike Staunton 1900–2009, Datastream, Allianz Global Investors Capital Markets & Thematic Research; December 2023.

Higher returns mean accepting more risk

The principal distinction between bonds and equities is that bonds have a pre-determined redemption price and date, which is not the case with equities.¹ The latter have an unlimited duration and their value fluctuates depending on a company's expected earnings as well as the commercial risks and opportunities to which it is exposed. By implication, anyone investing in equities must

be prepared to accept a higher risk of price losses. And investors will only take this risk if they can expect to receive a higher return - known as an equity risk premium.

Ibbotson and Chen² have explored

this connection and found evidence

of its validity. The risk premium is

return that exceeds the risk-free

rate of return, compensation for

expected inflation and a reward

risk premium as components of

the overall risk premium, which

also provides compensation for

ex-post risk and which investors in

bonds and equities can expect to

benefit from in equal measure.

for consuming less for a particular

period of time. As shown in figure 2,

a distinction can be made between a

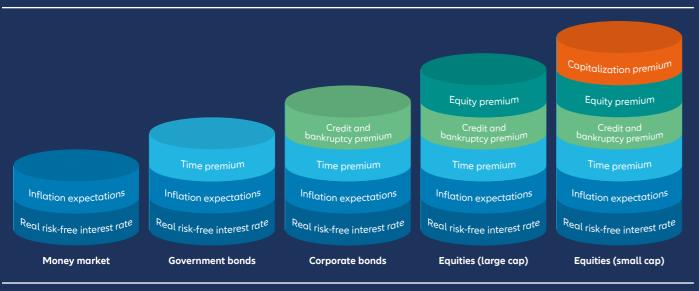
credit risk premium and a bankruptcy

considered to be the portion of the

The return would be the same for all securities and the premium would only differ according to a security's duration if there were no risks involved or if the risks were the same for all types of investment.

A principle of capital market theory holds that investors can expect a reward for the risk they take. Recently, Fama and French as well as

Figure 2: Theory relating to the structure of long-term risk premia for a wide range of asset classes



Source: Ibbotson & Siegel (1988); Allianz Global Investors Capital Markets & Thematic Research.

interest by reinvesting. Admittedly, nobody can invest for that long and that is why, in the next step, we analysed 30-year investment horizons. 30 years would, for instance, represent a period of time to save for retirement. Figure 3 shows the risk premia over these 30-year periods.

Over the entire timeframe analysed, the risk premia were positive for the respective holding periods - with only two exceptions. In other words, investing in bonds would have been more profitable than equities for these two periods. In the case of equities, the worst performance over 30 years was from 1981 to 2011, which would have resulted in an average risk premium of -0.85 percentage points. The most profitable return, with a risk premium of 11 percentage points, was generated from 1943 to 1973.⁴

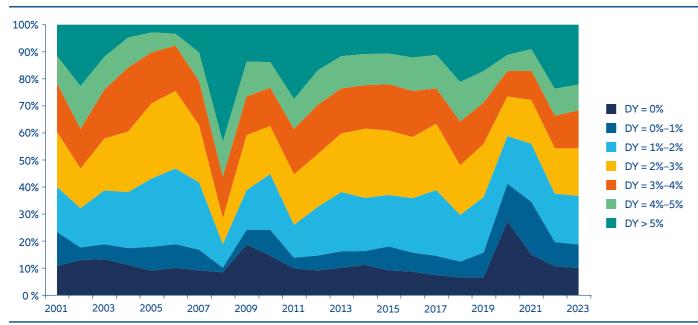
Dividends: Earnings and ...

When viewed in a wider context, it is clear what contribution dividends

can make to the stability of an equity investment and to the total return of a portfolio. As illustrated in figures 4a to 4c, the dividend yields of the respective stocks that the indices include are distributed very widely in relation to the average dividend

yield of the benchmark. It is not uncommon for dividend yields to even exceed 5%, although the yield clusters vary depending on the benchmark or region.

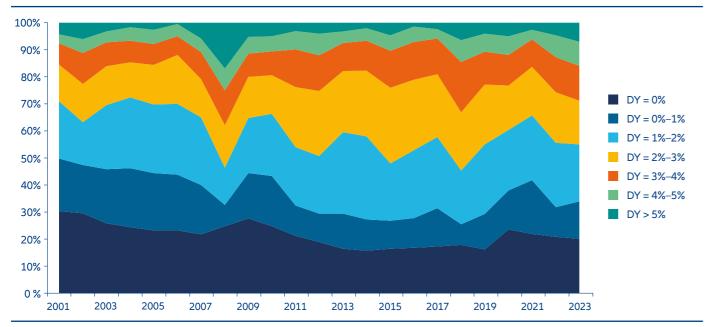
Figure 4a: Dividend yields over time, broken down by amount – Euro STOXX 600



Past performance does not predict future returns.

Source: Datastream, Allianz Global Investors Global Capital Markets & Thematic Research. Data as of December 2023.

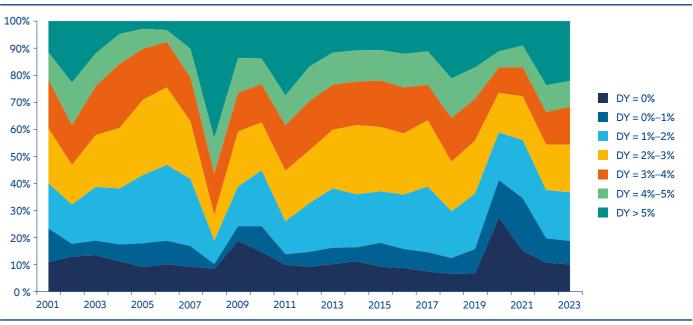
Figure 4b: Dividend yields over time, broken down by amount – S&P 500



Past performance does not predict future returns.

Source: Datastream, Allianz Global Investors Global Capital Markets & Thematic Research. Data as of December 2023.

Figure 4c: Dividend yields over time, broken down by amount – Asia ex Japan



Past performance does not predict future returns. Source: Datastream, Allianz Global Investors Global Capital Markets & Thematic Research. Data as of December 2023.

2023 has seen a sustained recovery in dividend Depending on the country, the situation in Europe is more payouts since the pandemic-stricken year of 2020 and, nuanced. However, in general our analysis reveals that this as a regional breakdown shows (figure 5), they have year represents a further step on the road to normality. meanwhile largely returned to their pre-COVID levels.

Figure 5: Proportion of dividend-paying companies from 2001 to 2023



Past performance does not predict future returns.

Source: Datastream, Allianz Global Investors Global Capital Markets & Thematic Research. Data as of December 2023.



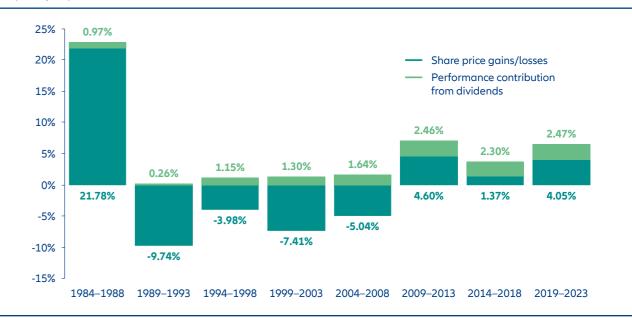
... stability

Despite the fact that the past never repeats itself, it still provides us with a number of extremely valuable lessons. Namely, that dividends can add more stability to a portfolio as companies tend to maintain a consistent level of dividend payments (excluding years of crisis, such as 2009, the year following the outbreak of the Global Financial Crises (GFC), or indeed 2020).

In the past, investors in European equities have been the main

beneficiaries of high dividend payouts. These have played a part in helping to stabilise the total performance during years in which equity markets have fallen, as can be seen by looking at 5-year investment horizons from 1984 to the end of 2023 (cf. figures 6a to 6c).

Figures 6c: Contribution to performance of dividends and ec periods (in % p.a.)

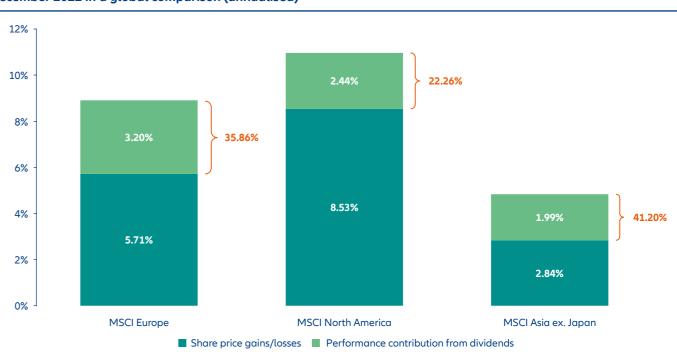


Past performance does not predict future returns.

Source: Datastream, Allianz Global Investors Global Capital Markets & Thematic Research. Data as of December 2023.

Almost 36% of the annualised total return of an
equity investment across the entire previous 40
years for the MSCI Europe was attributable to the
performance contribution of dividends. In North

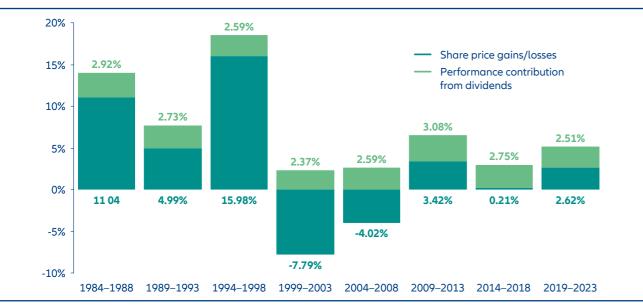
Figure 6d: Proportion of annual total performance of dividends and equity price gains from 1978 to the end of December 2022 in a global comparison (annualised)



Past performance does not predict future returns.

Source: Datastream, Allianz Global Investors Global Capital Markets & Thematic Research. Data as of December 2023.

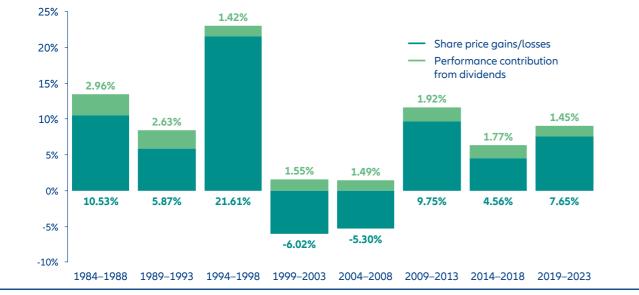




Past performance does not predict future returns.

Source: Datastream, Allianz Global Investors Global Capital Markets & Thematic Research. Data as of December 2023.

Figures 6b: Contribution to performance of dividends and equities in MSCI North America over five-year periods (in % p.a.)



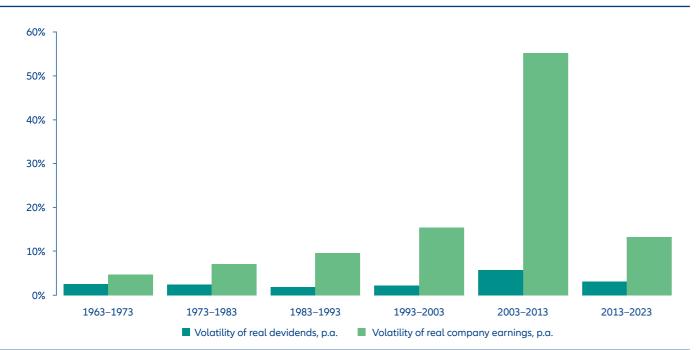
Past performance does not predict future returns.

Source: Datastream, Allianz Global Investors Global Capital Markets & Thematic Research. Data as of December 2023.



America (MSCI North America) and Asia-Pacific (MSCI Pacific), just over 22% and nearly 41%, respectively, was accounted for by dividends (see figure 6d). However, dividends are not the only factor that may provide equity investments with more stable returns. As a rule, dividends themselves are less volatile than corporate profits, which is demonstrated by our analysis based on data from Robert Shiller.⁵ When comparing dividends and earnings of companies in the S&P 500 index from 1963 to the end of 2023, it is evident that corporate profits were subject to considerably more volatility than dividends (Figure 7).

Figure 7: Volatility of corporate earnings and dividends (adjusted for inflation) of S&P 500 members from 1963 to December 2023 (in % p.a.)



Past performance does not predict future returns

Source: Shiller, R., "U.S.Stock Price Data since 1871"; AllianzGI Capital Markets & Thematic Research. As of: December 2023.

A steadyas-she-goes dividend policy

The following motives may explain the consistency of companies' dividend policies:

• A company's dividend policy is frequently an integral aspect of its corporate strategy and dividend payouts have an exceptionally powerful signalling effect. Cutting or suspending dividend payouts is viewed negatively by the market, since it raises doubts about the future viability of the company.

As a consequence, corporations are anxious to ensure consistent dividend payments.

- Many (but not all!) companies that generate high dividend yields boast healthy balance sheet metrics with a relatively strong capital base and stable cash flows.
- Paying high dividends to shareholders - and striving to do so reliably and consistently due to the signalling effect this sends out - tends to encourage greater discipline among companies. They are forced to manage their financial resources prudently and deploy them efficiently. In contrast, as they are discretionary, share buyback programmes neither have a comparable signalling effect

on analysts nor do they promote a similar level of discipline in companies.

The above considerations have been corroborated by academic research. A study from 2005⁶ revealed that 94% of the Chief Financial Officers (CFOs) at companies surveyed aimed to achieve a stable dividend payout ratio over the long term while avoiding any cuts in dividends. 65% of respondents stated that they would even be prepared to take on debt in order to maintain a consistent level of dividend payments. This is not surprising, as 90% of the CFOs in the study expected negative ramifications for their company's share price if they reduced the level of dividends. Furthermore,

the study found that decisions on capital expenditure and dividend payments were regarded as equally important in two thirds of cases unlike share buyback programmes, which were considered a far more flexible instrument than dividends.

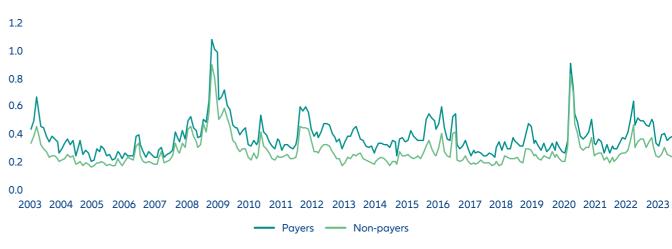
The researchers asked managers from 394 US listed companies, with the sample predominantly including dividend-paying firms. The results - at least in the past - support the aforementioned observation of a very consistent pattern in dividend payments.

Another study that provides some valuable insights here is that by Skinner and Soltes in 2011⁷, who analysed the annual dividend

payments and earnings of companies that were listed on the NYSE, AMEX or the US tech exchange NASDAQ between 1974 and 2005 (excluding utilities and financial services). Their findings show that the earnings performance of dividend payers was more consistent than that of non-dividend paying companies. In fact, according to their study, it did not even depend on the level of dividends paid - simply on whether they paid dividends to shareholders or not.

Michaely et al.⁸ found that when dividend payments increased, this indicated a less volatile development in future cash flows and hence in a company's results - and vice versa. Whenever companies take the unpopular step of reducing dividends,

Figure 8a: Volatility of dividend payers vs. non-payers – STOXX Europe 600



Equally weighted 30-day volatility of dividend payers and non-payers, respectively. Past performance does not predict future returns.

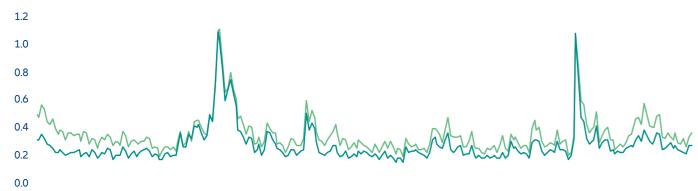
Source: Refinitiv Data Stream, AllianzGI Capital Markets & Thematic Research. As of: December 2023.

this may also be interpreted as a harbinger of less stable cash flows in the future. A corollary of these findings is that they also help to understand the previously cited study by Brav, which indicates that increases in dividend payments make it less likely that they will be reduced in future as they foreshadow expectations of more stable cash flows.

As depicted in figures 8a and 8c, the equity prices of dividend payers fluctuated to a lesser extent on average (i.e. had a lower volatility) than those of non-payers. It should be noted, however, that there was a trend for the proportion of non-payers in the indices analysed to decrease over time.

---- Non-payers

Figure 8b: Volatility of dividend payers vs. non-payers – S&P 500



2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

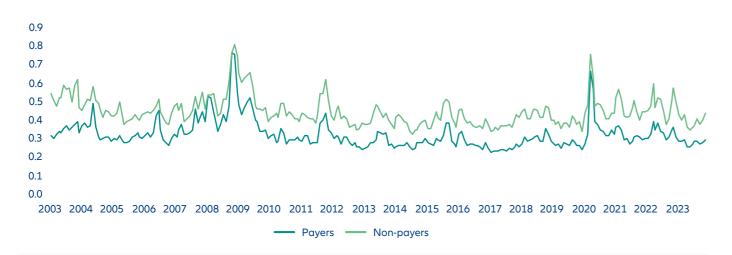
— Pavers — Non-pavers

Equally weighted 30-day volatility of dividend payers and non-payers, respectively.

Past performance does not predict future returns

Source: Refinitiv Data Stream, AllianzGI Capital Markets & Thematic Research. As of: December 2023.

Figure 8c: Volatility of dividend payers vs. non-payers – Refinitiv Asia ex Japan Universe



Equally weighted 30-day volatility of dividend payers and non-payers, respectively. Past performance does not predict future returns.

Source: Refinitiv Data Stream, AllianzGI Capital Markets & Thematic Research. As of: December 2023.



The rule of thumb here is that corporate earnings fluctuate to a lesser extent than equity prices and dividends fluctuate to a lesser extent than corporate profits.

Dr Hans-Jörg Naumer Director Global Capital Markets & Thematic Research

Dividends and self-delusion

From an investor's perspective, benefiting consistently from the distribution of corporate profits has another advantage in terms of behavioural psychology. On the one hand, additional capital income is useful, especially towards providing for old age. On the other, it has a positive behavioural economic effect in that any declines in equity prices that are perceived as a "loss" are less painful for investors as they also receive interim payments in the form of dividends. Our brain's reward centre, the mesolimbic pathway, is in fact trained to seek instant satisfaction. As they could not expect to live 80 years or longer, the prehistoric ancestors of modern humans wanted to consume immediately. This explains why money that is invested is perceived as a "loss" since it is (at least

On the subject of self-delusion, a **savings plan** is one temporarily) not available for consumption. That is why possible way of helping to mitigate volatility on the dividends act as a kind of "reward". Another important capital markets by using the cost-averaging effect while aspect to bear in mind is that the consistency with which still benefiting from a risk premium. Figure 9 illustrates dividends are paid out helps to stabilise a portfolio. As a the potential return that can be generated based on the result, the overall performance of an equity investment example of saving 25 euros a month (increased every 10 years by 5 euros a month) in the STOXX Europe 600 exhibits less volatility than equity prices alone and this addresses a human's innate aversion to loss. over 10, 20, 30 and 40 years (see figure 9). Clearly, even a savings plan is not a magic formula against losses: If However, the dividend payouts themselves may lead to an markets decline over a prolonged period, it will not deliver investor to underestimate the earnings and overestimate any positive returns either. However, in the longer term, it is the volatility of their equity investments. The reason is that reasonable to hope that the higher risk of equities will be they analyse their investments within a too narrow frame reflected in higher returns – as risk is rewarded.

Figure 9: "Prosperity for everyone" is achievable - even with small amounts

100,000€					0	Depo	sited				
90,000€				years			000€				
80,000€				years years			500€ 300€				
70,000€		Las	st 40	years	5	16,	140€				
60,000€											
50,000€											
40,000€											
30,000€											
20,000€											
10,000€									_		
€_0	1978 -	1980 -	1982 -	1984 -	1986 -	1988 -	1990 -	1992 -	1994 -	1996 -	1998 -

Assumptions: Start with 25 euros/month, dynamisation by 5 euros/month every 10 years, reinvestment of dividends, dividends tax-free, withdrawal on retirement, unemployed persons without savings contributions. Due to the insufficient history of the Stoxx 600, a switch was made to the MSCI Europe for the 30 and 40-year periods

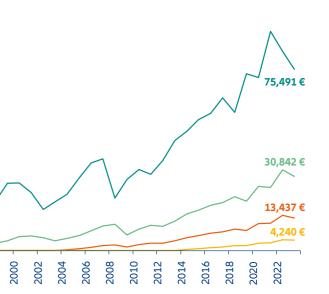
Source: AllianzGI Global Capital Markets & Thematic Research. Past performance does not predict future returns. As at: December 2023.



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of reference, i.e. they only see the changes in equity prices while ignoring the additional dividend payouts. From the perspective of behavioural economics, this has an overly marked effect on loss aversion.







Dividends can provide stability in an era of disruption.

Dr Hans-Jörg Naumer **Director Global Capital Markets** & Thematic Research

Stability in an era of disruption

Even if the past cannot be easily extrapolated into the future, there are still a number of useful lessons that can be learned from dividends.

- Within an environment driven by the disruptors of "deglobalisation", "digitalisation", "demographics" and "decarbonisation", it is likely that the resulting growth will provide a tailwind for corporate profits and thus for dividends. At the same time, the anticipated elevated rates of inflation are likely to necessitate investments in real assets that can at least offset inflationary effects, or ideally overcompensate for them. • Our analysis here suggests that
- dividends have, historically, made a significant contribution to the total return generated by equity investments.
- Dividends have delivered a more consistent performance than corporate earnings.

- In other words, companies display a tendency to adhere to a dividend policy once it has been adopted and are more likely to raise the level of dividend payouts rather than lower them, even if their earnings performance declines.
- · Furthermore, equities from dividend-payers have proven to be less prone to volatility in the past than equities from non-payers; that is at least what our analysis has found.
- Dividends may help investors to outsmart themselves by providing them with a constant stream of "rewards" that reduce the feeling of "loss" associated with an investment in securities.
- Having said that, investors should not (only) look at the dividend yield, which is merely a snapshot. What is more important are the expected future earnings that, in the best case scenario, should grow without eroding the underlying economic substance of a company.
- This is where the active selection of equities comes into play - the domain of active management.
- Overall, what holds true is: Dividends can provide stability in an era of disruption.

Investors should not (only) look at the dividend yield, which is merely a snapshot. What is more important are the expected future earnings that, in the best case scenario, should grow without eroding the underlying economic substance of a company.

Dr Hans-Jörg Naumer Director Global Capital Markets & Thematic Research

Further publications



Tactical Asset Allocation

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- ${\mathscr P}~$ Using the 7 habits of successful investors





Dimensions of Disruption

- Ø Dimensions of Disruption: Deglobalization
- Dimensions of Disruption: Digitization
- Dimensions of Disruption: Decarbonization
- Dimensionen der Disruption: Demography

The dividend study, 12th edition

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- * The dividend yield is equivalent to expected dividend payments divided by the actual share price and is expressed as a percentage. (eDiv/share price), with eDiv = product of the last dividend payment and the number of expected dividend payments per year (for example, the expected dividend for a share with quarterly dividend payments is equivalent to the dividend paid for the past quarter times four). The dividend yield depends on both the dividend amount and the current share price, with both of these factors constantly changing. The dividend yield is only a transitory variable, which is based on the current dividend amount and the current share price. Therefore, it does not predict the future returns of an equity fund.
- ¹ The analysis here relates to top-rated government bonds, which is why credit risks can be disregarded.
- ² Ibbotson, Roger G.; Chen, P. (2003): "Long-Run Stock Returns: Participating in the Real Economy"; Financial Analyst Journal, Volume 59, Issue 1.
 ³ Any applicable taxes are omitted from this analysis nolens volens.
- ⁴ cf. also: Naumer, Hans-Jörg (2016): "Capital in the Twenty-First Century: An Answer to Piketty"; Wirtschaftsdienst, Volume 96, pp. 179–184, March 2016; Naumer, Hans-Jörg (2018): "Zwischen Arm und Reich – die Risikoprämie als vergessene Größe in der Verteilungsdebatte" in Beyer, Heinrich and Naumer, Hans-Jörg: "CSR und Mitarbeiterbeteiligung", pp. 83–90, Springer Gabler, Wiesbaden.
- ⁵ Shiller, Robert: "U.S. Stock Markets 1871–Present and CAPE Ratio"; http://www.econ.yale.edu/~shiller/data.htm; zuletzt geprüft am 6. Dezember 2023.
- ⁶ cf. Brav, Alon; Graham, John R.; Harvey, Campbell R.; Michaely, Roni: "Payout Policy in the 21st Century"; Journal of Financial Economics, Vol. 77, pp. 483–527, 2005.
- ⁷ Skinner, Douglas J.; Soltes, Eugene: "What do dividends tell us about earnings quality?"; Review of Accounting Studies, Vol. 16, S. 1–28, 2011.
- ⁸ Michaely, Roni; Rossi, Stefano; Weber, Michael: "The Information Content of Dividends: Safer Profits, No Higher Profits"; CESifo, Working Paper No. 6751, 2017.

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