Active is:
Generating capital income with dividends.

Allianz Global Investors

Further Publications

Hunt for Income

→ Active is: Generating capital income with dividends

→ Combating wealth erosion

→ Heaven for Debtors and Hell for Creditors

→ Helicopter Money

AI & the Second Machine Age

→ AI – Artificial Intelligence Part of everyday life, driving our future

→ Capital Income for the second machine age

Active Management

→ Active Management in Times of Disruption

Strategy and Investment

→ Capital Markets Monthly

Alternatives

→ The Case for Alternatives

→ Liquid alternative strategies as an answer to the low interest rate environment

ESG

→ Added value or a mere marketing tool? What does ESG mean for investments? (part 1)

→ Added value or a mere marketing tool? What does ESG mean for investments? (part 2)

Capital Accumulation – Riskmanagement – Multi Asset

→ Active is: Setting the sails for the winds of change

→ The Ulysses-Strategy of investments (part 1)

→ The Ulysses-Strategy of investments (part 2)

Behavioral Finance

→ Behavioral Finance – outsmart yourself!

→ The 7 habits of successful investors

Asia-Pacific

→ China: The One Belt, One Road Initiative

Content

Allianz Global Investors GmbH
Bockenheimer Landstr. 42 – 44
60323 Frankfurt am Main, Germany

Dr Hans-Jörg Naumer (hjn), Stefan Scheurer (st)

January 2020
Data origin – if not otherwise noted:
Thomson Reuters Datastream

Allianz Global Investors
www.twitter.com/AllianzGI_VIEW

Active is: Generating capital income with dividends.

Bond yields are currently deep in the red. Almost 25 % of all outstanding bonds world-wide carry a negative nominal yield. In Germany, yields are below zero for roughly 90 % of outstanding government bonds. The percentage for the euro area is 60 %. And that is even before considering inflation. The hunt for income is becoming more difficult than ever. For that reason, dividends seem to get more attention. They could help to achieve capital income and stop the drain on wealth.

Figure 1 a: Negative yields are a global phenomenon
Generic government bond rates, in %

	3M	1Y	2Y	3Y	4Y	5Y	6Y	7Y	8Y	9Y	10Y	15Y	20Y	30Y
Germany	–0.66	–0.64	–0.63	–0.66	–0.64	–0.58	–0.56	–0.51	–0.47	–0.40	–0.33	–0.17	–0.03	0.20
France	–0.64	–0.60	–0.60	–0.58	–0.51	–0.39	–0.34	–0.26	–0.22	–0.10	–0.02	0.24	0.35	0.77
Italy	–0.35	–0.17	0.04	0.27	0.44	0.60	0.64	0.95	1.04	1.10	1.28	1.85	2.17	2.41
Netherlands	–0.73		–0.64	–0.64	–0.61	–0.53	–0.46	–0.41	–0.33	–0.27	–0.20			0.20
Belgium	–0.64		–0.63	–0.59	–0.49	–0.40	–0.35	–0.28	–0.18	–0.11	–0.04	0.25	0.47	0.80
Austria		–0.51	–0.58	–0.57	–0.53	–0.44	–0.37	–0.29	–0.24	–0.17	–0.11	0.16		0.48
Finland		–0.58	–0.62	–0.59	–0.53	–0.49	–0.36	–0.31	–0.21		–0.08	0.15		0.41
Switzerland*		–0.79	–0.77	–0.78	–0.77	–0.73	–0.72	–0.69	–0.66	–0.64	–0.62	–0.46	–0.37	–0.29
Sweden*	–0.30		–0.31		–0.34	–0.30		0.04			0.03			
Denmark*	–0.61		–0.67			–0.52					–0.30			
UK*	0.79	0.69	0.57	0.53	0.54	0.55	0.51	0.54	0.58		0.73	0.99	1.16	1.26
US	1.55	1.55	1.57	1.58		1.59		1.70			1.77			2.23
Japan	–0.15	–0.20	–0.16	–0.16	–0.16	–0.15	–0.16	–0.16	–0.14	–0.10	–0.04	0.12	0.28	0.43

*Non-EWU Countries
Generic government rates monitor yield changes for government benchmark bonds.
Past performance is not a reliable indicator of future results. Sources: Bloomberg, AllianzGI Global Capital Markets & Thematic Research, Data as of December 2019

Figure 1 b: The picture worsens when considering real yields

Generic government bond rates, real, in%[1]

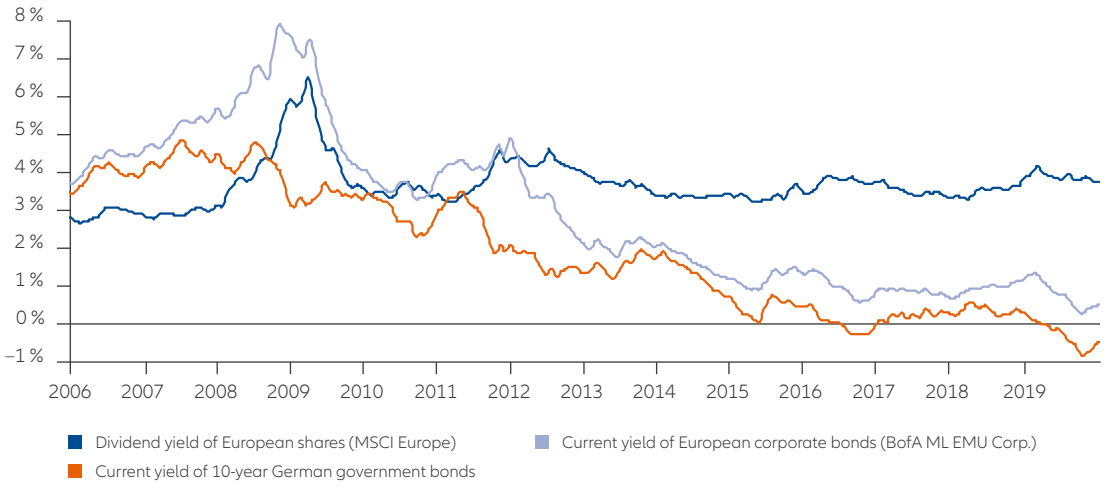
	3M	1Y	2Y	3Y	4Y	5Y	6Y	7Y	8Y	9Y	10Y	15Y	20Y	30Y
Germany	–1.86	–1.84	–1.83	–1.86	–1.84	–1.78	–1.76	–1.71	–1.67	–1.60	–1.53	–1.37	–1.23	–1.00
France	–1.84	–1.80	–1.80	–1.78	–1.71	–1.59	–1.54	–1.46	–1.42	–1.30	–1.22	–0.96	–0.85	–0.43
Italy	–0.75	–0.57	–0.36	–0.13	0.04	0.20	0.24	0.55	0.64	0.70	0.88	1.45	1.77	2.01
Netherlands	–3.33		–3.24	–3.24	–3.21	–3.13	–3.06	–3.01	–2.93	–2.87	–2.80			–2.40
Belgium	–1.04		–1.03	–0.99	–0.89	–0.80	–0.75	–0.68	–0.58	–0.51	–0.44	–0.16	0.07	0.40
Austria		–1.51	–1.58	–1.57	–1.53	–1.44	–1.37	–1.29	–1.24	–1.17	–1.11	–0.84		–0.52
Finland		–1.38	–1.42	–1.39	–1.33	–1.29	–1.16	–1.11	–1.01		–0.88	–0.65		–0.39
Switzerland*		–0.49	–0.47	–0.48	–0.47	–0.43	–0.42	–0.39	–0.36	–0.34	–0.32	–0.16	–0.07	0.01
Sweden*	–1.90		–1.91		–1.94	–1.90		–1.57			–1.57			
Denmark*	–1.21		–1.27			–1.12					–0.90			
UK*	–0.71	–0.81	–0.93	–0.97	–0.96	–0.95	–0.99	–0.96	–0.92		–0.77	–0.51	–0.34	–0.24
US	–0.25	–0.25	–0.23	–0.22		–0.21		–0.10			–0.03			0.43
Japan	–0.35	–0.40	–0.36	–0.36	–0.36	–0.35	–0.36	–0.36	–0.34	–0.30	–0.24	–0.08	0.08	0.23

* Non-EWU Countries
[1] Common approximation of real yields by subtracting respective country-specific realized consumer price inflation.
Past performance is not an indication of future results.
Sources: Bloomberg, AllianzGI Global Capital Markets & Thematic Research, Data as of December 2019

However, dividends alone cannot ensure more stability with equity investments. High-dividend equities in themselves seem to have a less volatile performance than those of companies with lower dividend payouts.

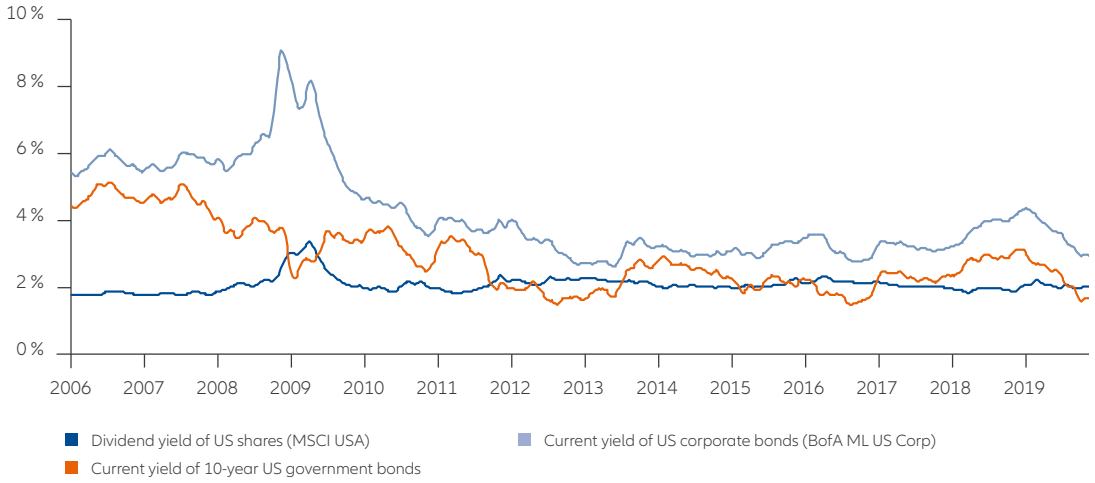
Figure 2 a: European shares offer attractive dividend yields

Dividend yields (MSCI Europe) versus yields of German government (10 year) and European corporate bonds



Past performance is not an indication of future results.
Sources: Datastream, AllianzGI Global Capital Markets & Thematic Research, Data as of December 2019

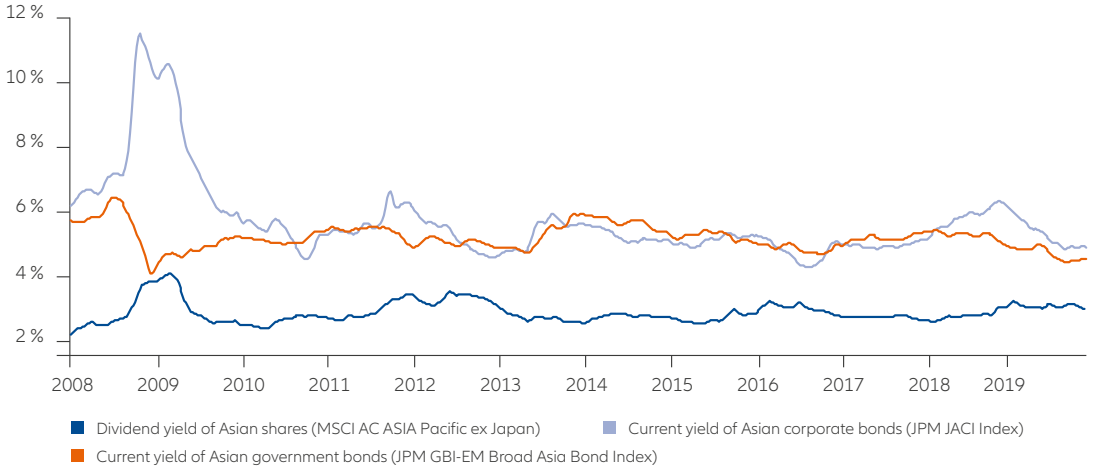
Figure 2 b: Dividend yields of American shares
Dividend yields (MSCI USA) versus yields of US government (10 year) and American corporate bonds



Past performance is not an indication of future results.
Sources: Datastream, AllianzGI Global Capital Markets & Thematic Research, Data as of December 2019

For further information on the negative yield environment please refer to our white-paper **Heaven for Debtors and Hell for Creditors**

Figure 2 c: Dividend yields of Asian shares
Dividend yields (MSCI ASIA ex Japan) versus Asian government and Asian corporate bonds



Past performance is not an indication of future results.
Sources: Datastream, AllianzGI Global Capital Markets & Thematic Research, Data as of December 2019

For investors, there are two key questions that are important to consider before any assertions can be made about the future success of dividend strategies:

1. What advantages can dividend strategies offer the long-term investor?
2. Taking the current market environment as a starting point, what can be expected in terms of the future performance of dividend yields?

As a rule, dividend strategies are characterised by companies that:

1. can be expected to generate an above-average dividend yield on the respective market index,

2. have potential for growing future dividends while simultaneously

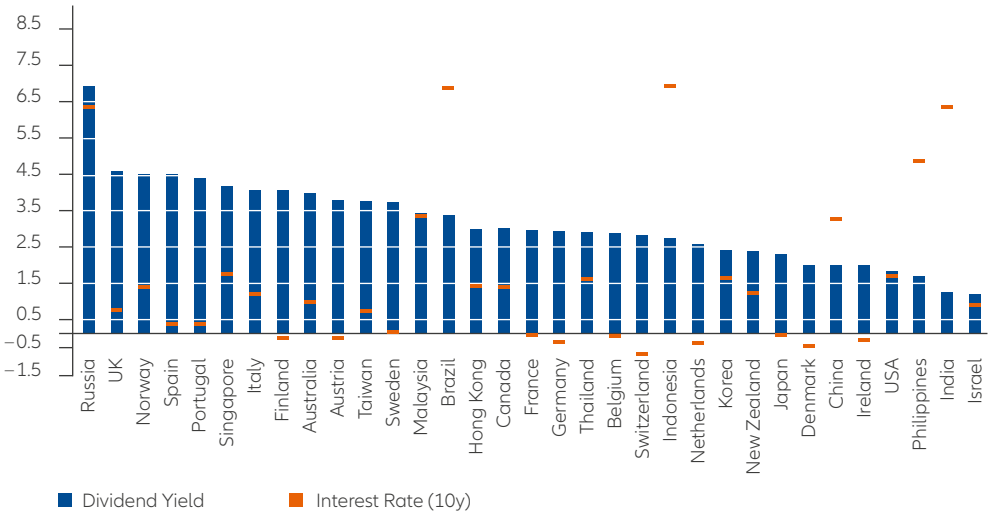
3. providing a reliable dividend policy and dividend track record.

Dividends – a key performance driver in a low-interest and low-yield environment

European companies, in particular, have an investor-friendly dividend policy compared to their international peers. At the beginning of December 2019, their average dividend yield across all market segments was around 3.7 % (basis: MSCI Europe). Focusing on high-dividend stocks helps increase the potential for higher yields within one's investments. However, in some cases the dividend yield in other regions is considerably higher than that on 10-year government bonds, too (see figure 3).

The dividend yield on the MSCI-USA seems positively modest in comparison, although you have to bear in mind that US companies, in contrast to European ones, for instance, have a stronger tendency to launch share buyback schemes than to pay out dividends. Share buyback schemes, though, are nothing other than corporate profits being paid out to a smaller, residual circle of shareholders.

Figure 3: Dividend yields are attractive around the globe
Dividend yield (MSCI Indices) and interest rate of 10 year government bonds in comparison

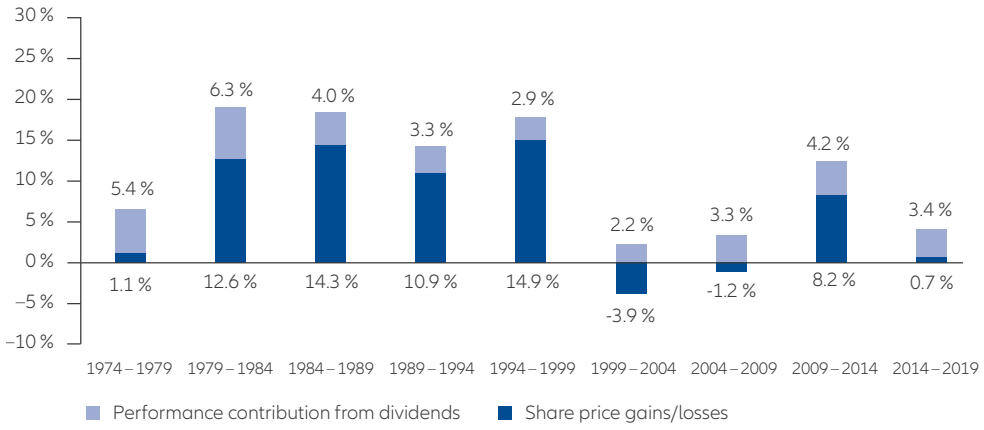


Past performance is not an indication of future results.
Sources: Datastream, AllianzGI Global Capital Markets & Thematic Research, Data as of December 2019

Dividends – seeking stability for the portfolio

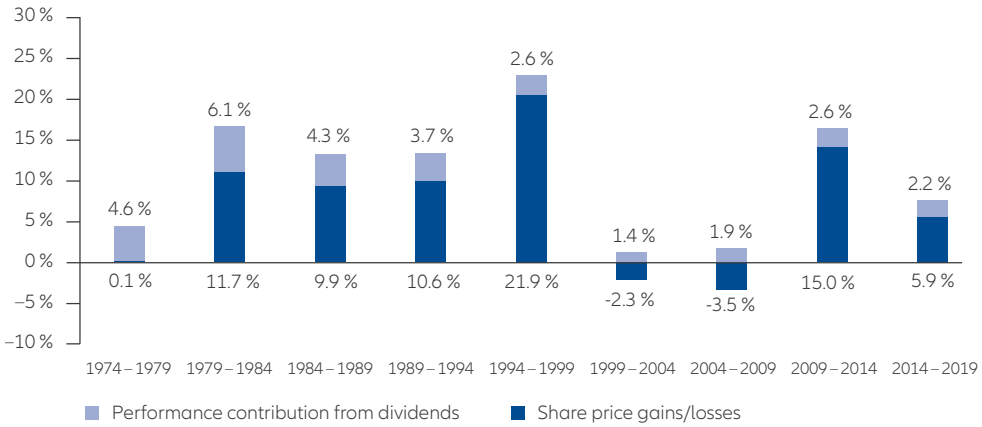
At the same time, what is noticeable is that dividends can help achieve additional stability in the portfolio. In the past, investors in European equities were the main beneficiaries of high dividend payouts that also helped in stabilising the overall performance in years of declining stock prices. Dividends were able to partially or even totally compensate for any price losses (figure 4 a – c). Over the entire period (1974 – 2019), the performance contribution of dividends to the annualised total portfolio return for the MSCI Europe was approximately 38 %. But in other regions, such as North America (MSCI North America) or Asia/Pacific (MSCI Pacific), around a third of overall performance was determined by dividends, albeit the absolute dividend yield was lower here (see figure 4 a – c).

Figure 4 a: Dividends – a stabilising factor for investors
Performance contribution from dividends and MSCI Europe share prices since 1974 in five-year periods (% p. a.)



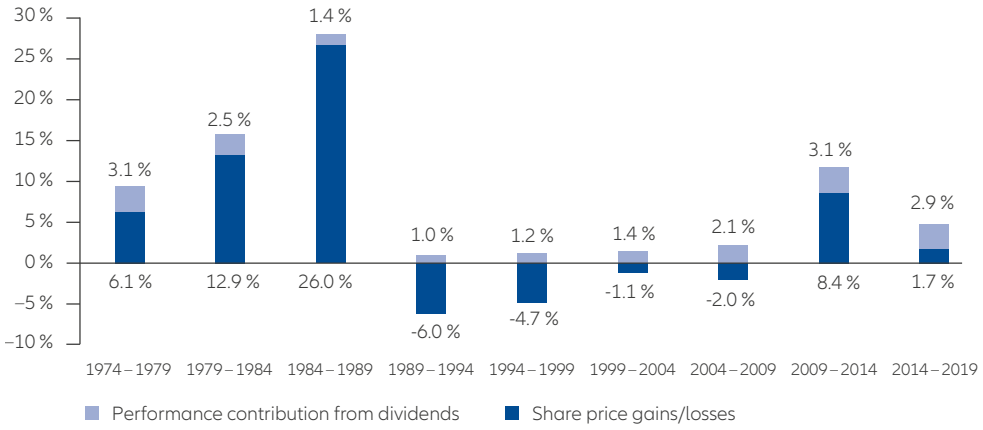
Past performance is not an indication of future results.
Sources: Datastream, AllianzGI Global Capital Markets & Thematic Research, Data as of December 2019

Figure 4 b: Dividends – a stabilising factor for investors
Performance contribution from dividends and MSCI North America share prices since 1974 in five-year periods (% p. a.)



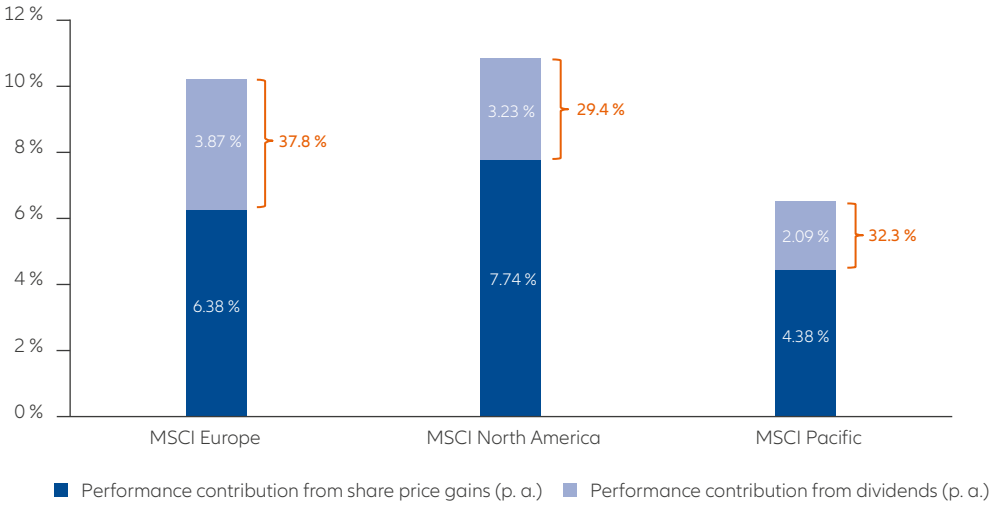
Past performance is not an indication of future results.
Sources: Datastream, AllianzGI Global Capital Markets & Thematic Research, Data as of December 2019

Figure 4c: Dividends – a stabilising factor for investors
Performance contribution from dividends and MSCI AC Asia ex Japan share prices since 1974 in five-year periods (% p. a.)



Past performance is not an indication of future results.
Sources: Datastream, AllianzGI Global Capital Markets & Thematic Research, Data as of December 2019

Figure 5: Shareholder-friendly dividend policies, especially in Europe
Global comparison of how dividends and share price gains contributed to performance between 1974 and December 2019 (annualised)



Past performance is not an indication of future results.
Sources: Datastream, AllianzGI Global Capital Markets & Thematic Research, Data as of December 2019

However, dividends alone cannot ensure more stability with equity investments. High-dividend equities in themselves seem to have a less volatile performance than those of companies with lower dividend payouts.

Reasons for the value and price stability of dividend-bearing equities include, among others:

– Dividend policy is often an active component of a company's strategy. The dividend sends out an extraordinarily strong signal. Reaction on the market to reductions in or the absence of dividend payouts is very negative, since they sow doubts as to the future viability of the company. Consequently, companies go to great lengths to guarantee continuous dividend payments. A comparison of dividends and profits of members of the S&P 500 index since 1959 shows that corporate profits have been subject to far greater volatility than dividends. Particularly in the last 10 years, the volatility of profits has been considerably larger, at 27 % on an annualised basis, than the fluctuation observed in the case of dividends of around 3 % p. a. (see figure 6).

– Higher dividend payouts as well as a desire to reliably and continuously maintain them due to the signal they send out have a tendency to discipline companies. They are forced to manage their financial resources prudently and to use them efficiently. In contrast, share buyback programmes, due to their discretionary nature, neither have a comparative signal effect nor a similarly disciplining impact on the company.

– Companies with high dividend yields usually have sound balance sheet ratios with a relatively high level of equity capital and stable cash flows.

Dividends – the potential for a reliable source of income

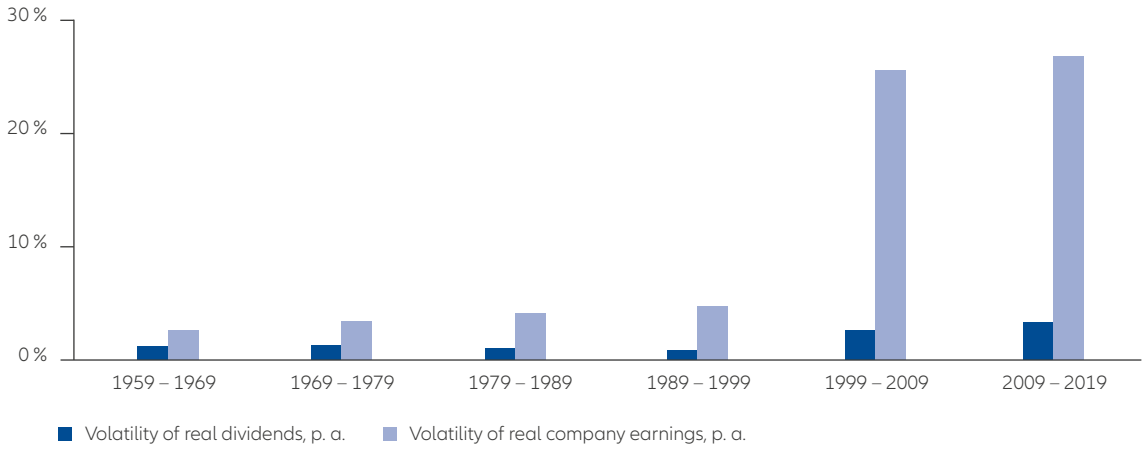
As our calculations show, dividends tend to develop much more reliably than corporate profits and thus would have a stabilising effect on income from equities. The driving force behind this development appears to be company CFOs who tend towards a markedly conservative dividend policy. A 2005 study[1] shows that chief financial officers (CFOs) strive to achieve a long-term payout ratio while avoiding cuts in dividends, as 94 % of them stated in the underlying survey. 65 % of respondents agreed that they would also borrow in order to maintain stable dividend payouts. This is understandable, since 90 % of CFOs anticipate negative consequences for their company's share price in the event of a dividend cut. Decisions on investments and dividends are considered to be of equal importance in two thirds of cases.

In contrast to dividends, share buyback programmes are seen as a much more flexible instrument.

The survey involved managers from 394 US stock corporations, with the sample dominated by dividend payers. The result also reflects our view that dividends – at least in the past – have developed very steadily.

What is also interesting in this regard is a 2011 study[2] by Skinner and Soltes, which examined annual dividend payouts and profits for companies listed on NYSE, AMEX or NASDAQ during the years 1974 to 2005, with the exception of utilities and financial service providers. In their analysis, they come to the conclusion that companies that pay dividends are more consistent in terms of their earnings performance than those that do not. According to them, the amount of the dividends is not even a factor, it only depends on the fact that dividends are paid.

Figure 6: "Exhibited low volatility of dividend payments"
Volatility of company earnings and dividends, S&P 500, from 1959 till December 2019 (% p. a.)



Past performance is not an indication of future results.
Sources: Shiller, R., "U.S. Stock Price Data since 1871"; AllianzGI Global Capital Markets & Thematic Research, Data as of December 2019

[1] cf. Brav, Alon; Graham, John R.; Harvey, Campbell R.; Michaely, Roni; "Payout Policy in the 21st century"; Journal of Financial Economics; Vol. 77; 2005; pp. 483 – 527.
[2] Skinner, Douglas J.; Soltes, Eugene; "What do dividends tell us about earnings quality?"; Revue of Accounting Studies; Vol. 16; pp. 1-28; 2011

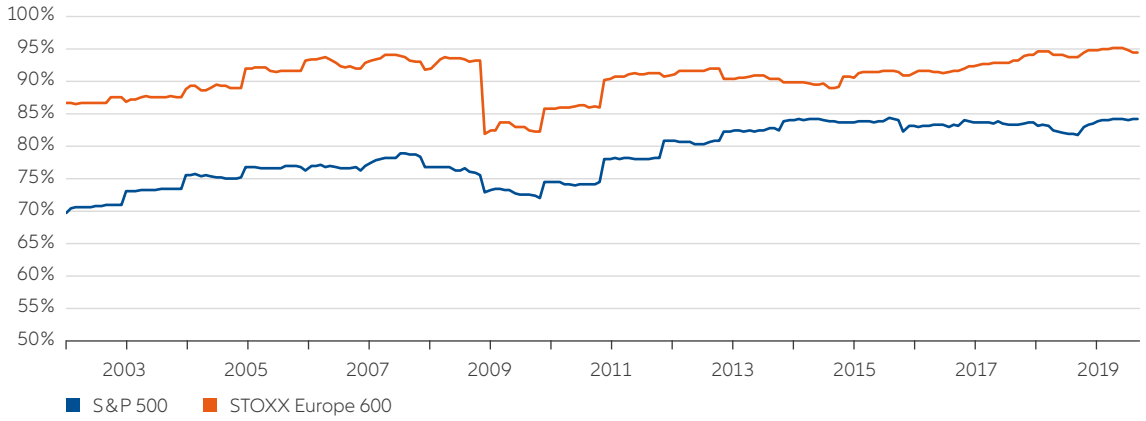
Dividends – an airbag for your portfolio?

The analysis covers both US and European equities. The universe is made up of all companies that were listed in the S&P 500 or the STOXX Europe 600 between 2000 and 2019. All in all, the data includes 850 S&P 500 and 1,143 STOXX companies.

What is noticeable about the ratio of dividend-payers to non-dividend-payers?

- the proportion of dividend-payers is greater in Europe than it is in the United States;
- the proportion of dividend-payers in Europe varies between 85 % and 95 %, with a temporary sharp decline visible in the wake of the crisis year of 2008;
- the proportion of dividend-payers in the S&P 500 has widened almost continuously from 70 % to over 80 %.

Figure 7: Percentage of index members which are dividend payers
In Europe a higher share of index members pays a dividend than in the US



Source: Bloomberg, Global Capital Markets & Thematic Research AllianzGI
As of: December 2019

The interplay of dividends and volatility

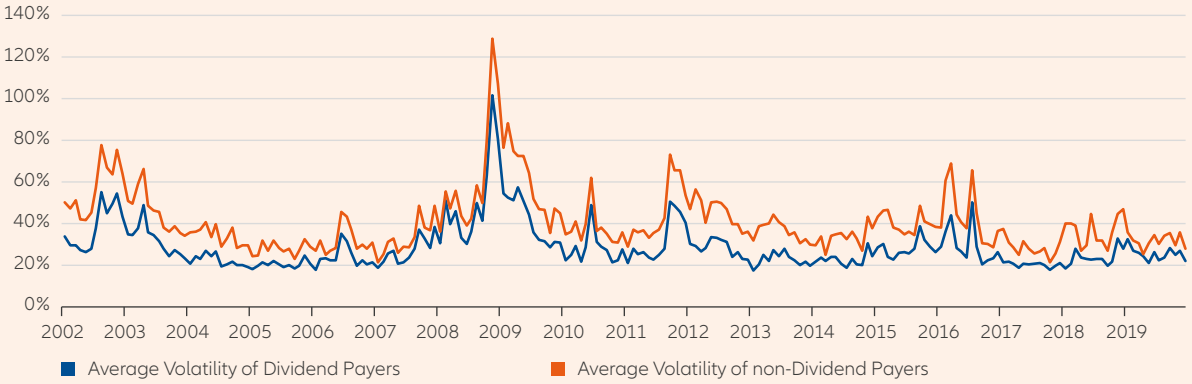
At first glance, Chart 8 a & 8b show that dividend-paying stocks fluctuate less on average (exhibit lower volatility) than non-dividend payers.

To understand the interplay between dividends and volatility even better, we consider the Skinner and Soltes[1] approach.

Skinner and Soltes were able to demonstrate for US shares that the earnings of dividend-paying companies were more persistent over a period from 1974 through 2004, thus showing that "today's" dividends were a positive signal for "tomorrow's" earnings. This correlation is less pronounced with stock repurchases.

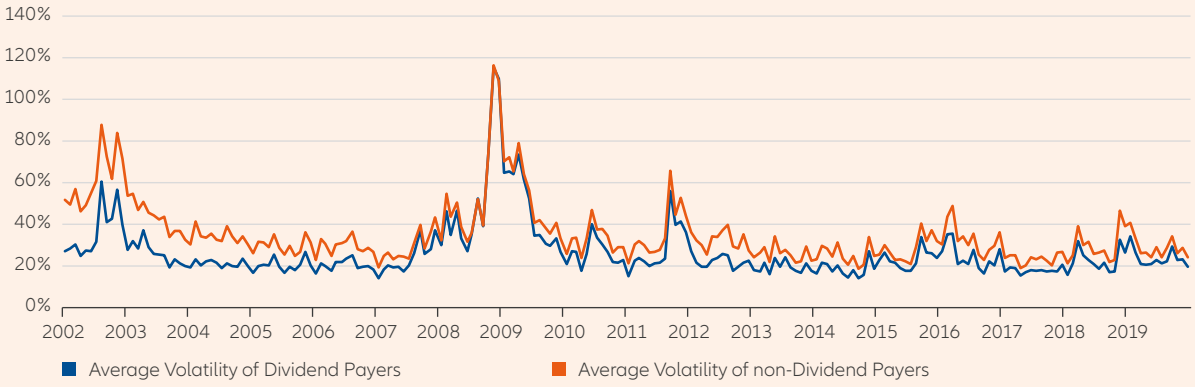
[1] Skinner, Douglas, J; Soltes, Eugene; „What do dividends tell us about earnings quality?"; Revue of Accounting Studies Vol 16; pp. 1–28; 2011.

Figure 8 a: Volatility of dividend payers vs. non-payers – STOXX Europe 600
Non-dividend payers exhibited a higher volatility than dividend payers



Equally weighed 30-Day-Volatility of dividend paying vs. non-dividend paying stocks,
Past performance is no reliable indicator for future performance.
Source: Bloomberg, Global Capital Markets & Thematic Research AllianzGI As of: December 2019

Figure 8b: Volatility of dividend payers vs. non-payers – S&P 500
In the USA dividend-paying stocks had been less volatile as well



Equally weighed 30-Day-Volatility of dividend paying vs. non-dividend paying stocks,
Past performance is no reliable indicator for future performance.
Source: Bloomberg, Global Capital Markets & Thematic Research AllianzGI As of: December 2019

This analysis modifies the Skinner-Soltes model to include volatility:

– Using linear regression ("OLS – ordinary least square regression"), Model 1 regresses the dummy variable for dividend payments, that is to say our dividend indicator ("yes" = 1, "no" = "0"), from the previous period on the volatility of the individual equities in the current period.

– In order to reduce the risk of omitted variable bias, Model 2 factors in the volatility of the prior period and fixed effects for the individual companies. Fixed effects are dummy variables that are assigned to each equity to factor in developments specific to the company in question.

The dependent variable is the volatility of the individual equity during a given year calculated from the average monthly fluctuation.

The same results are obtained for the equities of both regions (Europe and the United States): Regardless of the model, the regressions produce a highly significant and negative coefficient for the dividend indicator. This means that if dividends are distributed in the previous period, the companies paying these dividends exhibit lower volatility in the following year.

Depending on the model, this effect may be between 4 % and 15 % in the case of STOXX Europe 600 equities and between 5 % and 11 % in the case of S&P 500 equities.

Figure 9 a: Regression of dividends on the volatility of stocks in the STOXX Europe 600 Index
Dividend-payers in the STOXX Europe 600 had a significantly lower volatility than non-dividend payers. Data from January 2002 to December 2018[1].

Volatility	Model 1	Model 2
Dividend Indicator Previous Year	**–0.151*****	**–0.037*****
	(0.005)	(0.007)
Volatility Previous Year		**0.384*****
		(0.011)
Constant	**0.445*****	
	(0.005)	
Fixed Effects	No	Yes
Observations	9,027	9,027
R2	0.087	0.165
Adjusted R2	0.087	0.044
F Statistic	858.747*** (df = 1; 9025)	781.420*** (df = 2; 7882)
Note:	*p<0.1; **p<0.05; ***p<0.01	

[1] Latest available data
The dividend indicator is 1 if the company has paid a dividend at least once in the calendar year, otherwise 0. The volatility reflects the price fluctuations of the individual stocks within a year, which result from the averages of the monthly fluctuations.
Source: Bloomberg, Global Capital Markets & Thematic Research AllianzGI

Figure 9b: Regression of dividends on the volatility of stocks in the S&P500
Dividend-payers in the S&P500 had a significantly lower volatility than non-dividend payers. Data from January 2002 to December 2018[1].

Volatility	Model 1	Model 2
Dividend Indicator Previous Year	**–0.114*****	**–0.051*****
	(0.005)	(0.009)
Volatility Previous Year		**0.426*****
		(0.011)
Constant	**0.405*****	
	(0.004)	
Fixed Effects	No	Yes
Observations	7,642	7,642
R2	0.065	0.196
Adjusted R2	0.064	0.096
F Statistic	527.098*** (df = 1; 7640)	829.989*** (df = 2; 6790)
Note:	*p<0.1; **p<0.05; ***p<0.01	

[1] Latest available data
The dividend indicator is 1 if the company has paid a dividend at least once in the calendar year, otherwise 0. The volatility reflects the price fluctuations of the individual stocks within a year, which result from the averages of the monthly fluctuations.
Source: Bloomberg, Global Capital Markets & Thematic Research AllianzGI

Seen in these terms, dividends can act as an "airbag" due to the dampening effect they have on volatility.

Active is: Sharing insights

- In the long run, dividends can deliver added value to the portfolio.
- Stock picking should not be based on the most recent profit distributions, since they may have come from equity capital, but on expected future dividends instead.
- From a historical perspective, dividends make a significant contribution to the total return of equities and have shown steadier performance than corporate profits. This has had a stabilising effect on the portfolio.
- Stocks of dividend-paying companies have proven to be less susceptible to volatility in the past than those of companies that do not pay a dividend.
- A comparison of global bond and dividend yields shows that dividends can be an attractive source of capital income, especially in times of extremely low, even negative bond yields.
- Capital income from dividends could even create an additional "basic income". Example: assuming an investor has 40,000 Euros that s/he invests at a dividend yield of 3 %. If the companies' dividend payouts remain unchanged, s/he can expect a distribution of 1,200 Euros per year – equivalent to 100 Euros a month. It would not mean your pension is in the bag, but it would be a start.

Dr Hans-Jörg Naumer with thanks to Hauke Siemssen and Dennis Nacken

Allianz Global Investors GmbH
Bockenheimer Landstraße 42 – 44
60323 Frankfurt am Main, Germany

Phone +49 (0) 69 24431-4141
Fax +49 (0) 69 24431-4186

info@allianzgi.de
https://de.allianzgi.com

January 2020

The MSCI country and regional indexes (such as the MSCI North America, MSCI USA, MSCI Europe, MSCI AC ASIA Pacific ex-Japan are constituents of the MSCI All Countries World Index (MSCI ACWI). The MSCI ACWI is an unmanaged index and is designed to represent performance of large- and mid-cap stocks across 23 developed and 24 emerging markets.1 As of September 2018, it covers more than 2,700 constituents across 11 sectors and approximately 85 % of the free float-adjusted market capitalization in each market.

The Standard & Poor's 500 Composite Index (S&P 500) is an unmanaged index that is generally representative of the U.S. stock market.

The BofA Merrill Lynch US Corporate Index is an unmanaged index comprised of U.S. dollar denominated investment grade, fixed rate corporate debt securities publicly issued in the U.S. domestic market with at least one year remaining term to final maturity and at least $250 million outstanding.

The JPMorgan Government Bond Index Emerging Markets tracks local currency bonds issues by emerging market governments. There are no minimum-rating requirements or explicit market size limits. Treasury bills and inflation-indexed bonds are not eligible for the index (only fixed-rate nominal bonds). The following 16 countries are included: Brazil, Chile, Colombia, Hungary, Indonesia, Malaysia, Mexico, Nigeria, Peru, Philippines, Poland, Romania, Russia, South Africa, Thailand, and Turkey. The JPMorgan Government Bond Asia Bond Index (JPM GBI-EM Broad Asia Bond Index) covers the subset of the overall index for the Asian countries.

The J.P. Morgan Asia Credit Index (JACI) tracks total return performance of the Asia fixed-rate dollar bond market. JACI is a market cap-weighted index comprising sovereign, quasi-sovereign and corporate bonds and it is partitioned by country, sector and credit rating.

BofA Merrill Lynch EMU Corporate Index tracks the performance of EUR denominated sovereign debt publicly issued by Euro member countries in either the Eurobond market or the issuer's own domestic market. Qualifying countries must be Euro members, have an investment grade foreign currency long-term sovereign debt rating (based on an average of Moody's, S&P and Fitch), and must have at least one readily available, transparent price source for their securities. Qualifying securities must have at least one year remaining term to final maturity, a fixed coupon schedule and a minimum amount outstanding of EUR 1 billion.