Strategy and Investment

Equities – the “new safe option” for portfolios?

Allianz Global Investors

Understand. Act.

Content

Imprint

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

Global Capital Markets & Thematic Research
Hans-Jörg Naumer (hjn)
Ann-Katrin Petersen (akp)
Stefan Scheurer (st)

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Allianz Global Investors
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Equities – the "new safe option" for portfolios?

"Not taking risks at all is the biggest risk." This is our motto during these times of financial repression. Perhaps equities are even more "secure" than bonds – it depends on the perspective. This study focuses on the behaviour of equities in the very long run.

More on the topic of "Behavioural Finance" can be found in our study " Outsmart Yourself!" under: www.allianzgi.com/kapitalmarktanalyse

When reading the headlines about new highs in share prices, don't you find yourself wishing you had invested more, or even invested at all? The reasons you hesitated or did not act can probably be explained by the theory of behavioral finance. As a rule, investors are averse to losses and basically do not act in a purely rational manner. Increasing losses weigh more heavily than additional earnings, and many were burned in the crises witnessed so far in this young century as stock market losses reached nearly 50%. As a result, many investors have closed their eyes and maybe do not see the long-term growth story behind equity investments, or that equities can offer more growth potential over an investment period of 30 years than top-rated government bonds, and that going into stocks is still worthwhile for investors with a long-term horizon.

"Equities": a growth story

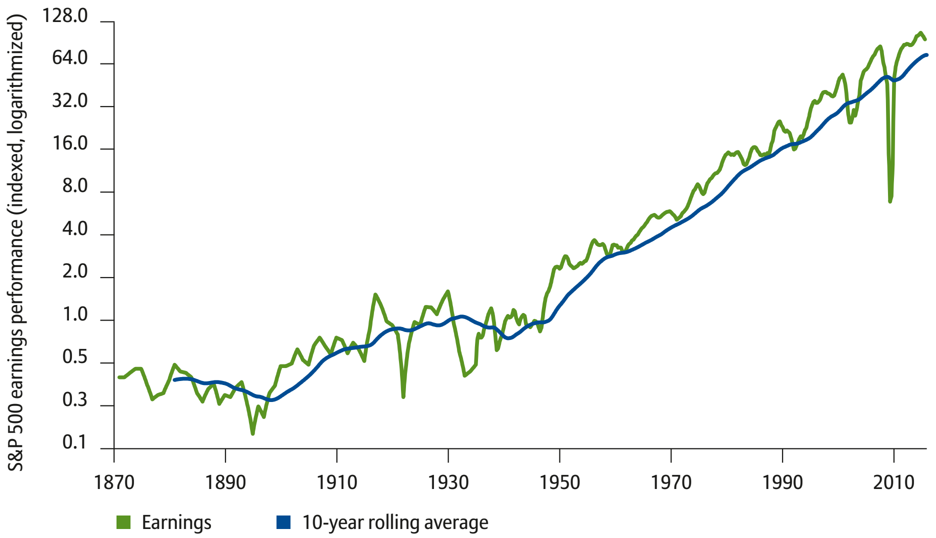
The long-term success of equity investments is actually not that surprising. A look at the foundations – real macroeconomic growth – reveals that mass prosperity has grown enormously over the last 200 years, especially in industrialized countries. Measured in terms of real gross national product (adjusted for inflation), industrialized countries such as the USA, UK or France have seen average growth of 3%, 4% and 3% p.a., and the emerging markets around 4% p.a. since 1800.[1] In the past, shareholders have for the most part benefited from this prosperity as their stocks represent a fraction of equity capital that allows them to participate in the productive assets of a company or, at macroeconomic level, of a country – and there are very few other investments that offer the same opportunity. After all, long-term economic growth usually goes hand in hand with earnings growth, irrespective of whether the latter stems from increased sales or more efficient deployment of labour and/or capital, or whether revenue is generated at home or abroad. Shareholders benefit, provided they hold shares in successful companies.

A look back into the past in the USA – for which the longest historical time series is available but whose lessons learned are, in many cases, equally valid for other regions – shows that company earnings have increased nominally by about 4% p.a. since 1871 in spite of numerous deep recessions (see Chart 1). Indeed, companies have had to overcome several crises over the past two centuries, from the Founders' crisis in 1871 right up to the financial and debt crisis in 2008. No matter how ironic it may sound, the foremost lesson learned from the crises that have occurred – not just in recent years but throughout economic history since the steam engine was invented at the end of the 18th century – is that crises form an integral part of prosperity. They are an expression of "creative destruction" (Joseph Schumpeter), destroying what is old and creating something new.

As US company earnings increased, so did equity prices on the US stock market. Between 01/01/1871 and 31/12/2015, the S&P 500 (Standard & Poor's) price index rose from 4.44 to 2,071.18 points, equivalent to an increase (nominally) of about 4.33% p.a. on average (see Chart 2). Adding in the contribution from reinvested dividends – which yielded about 4.4% on average and accounted for a good half of all performance – translates into a total return (performance index) of more than 1000000 index points, equivalent to historical growth of 8.7% p.a. in the S&P 500. If our great-great-great-grandparents had invested 100 US dollars in an equity portfolio back then, the heirs of today would hold assets worth about 18 million US dollars.

[1] Geometric annual averages from 1800 to end 2013; source: New Maddison Data Project Database, 2013; International Monetary Fund (IMF), World Economic Outlook, 2013; Allianz GI Global Capital Markets and Thematic Research

Chart 1: Earnings Growth Thanks to "Creative Destruction"
S&P 500 company profits since 1871 (indexed, logarithmized)



Past performance is not an indication of future results.
Source: Robert J. Shiller Database, own calculations by Allianz GI Capital Markets & Thematic Research, 31/12/2015

So investing in equities was a success even if it did test the nerves of investors. Over the long term we can, moreover, see that equities actually have provided greater returns than bonds.

"Equities: safer than bonds?"

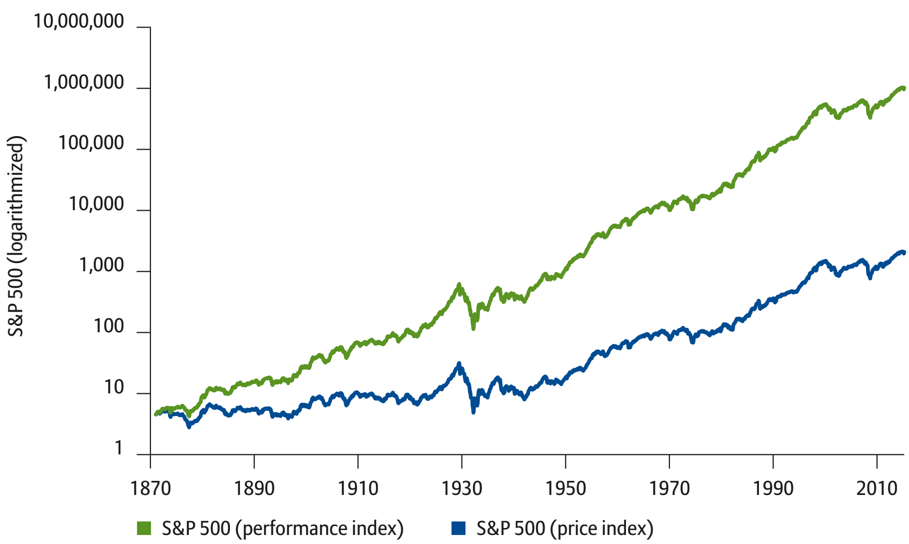
The theory is admittedly provocative. In fact, it all depends on how investors define safety or risk. And on the investment horizon in question. The risk of an asset class is frequently measured in terms of its annual range of fluctuation or volatility. If we take this as the risk benchmark, then equities were indeed in many cases riskier than other forms of investment. Annual fluctuations ranged from –38% (in 1932) to +67% (in 1862, see Chart 3). By contrast, government bonds did not lose quite as much – their biggest loss was –22% over one year (1864); but on the other hand they posted a maximum gain of "only" around +35% (1982). As such, the timing of initial investment was not entirely irrelevant. Surprisingly, inflationary trends even caused short-term money market securities (3-month T-Bills) to generate bigger losses for savers. In this case, yields ranged between around –16% (1948) and about +24% (1801).

Risk cannot be eliminated, but it can be managed. The longer the investment horizon, the less important the timing for investing in equities seems to be. For example, someone who let his savings work for him over a period of five years would have suffered a loss in thirty-six cases over that period during the last 215 years, compared with just sixteen cases over a rolling 10-year period. A sample calculation using US stocks from the S&P 500 makes this clear. Performance was measured from 1800 onward for a rolling period of 5 years (see Chart 3). In the worst case, from 1916 to 1921, an average loss of just over 11% per year was realized, and in the best case just under 27% was earned (1924 – 1929). Interestingly, 10-year government bonds also suffered greater loss periods over five years. The yearly loss in this case even topped 10% on average from 1976 to 1981 and from 1914 to 1919.

Chart 2: Equities – a Growth Story

S&P 500 price and performance indices since 1871

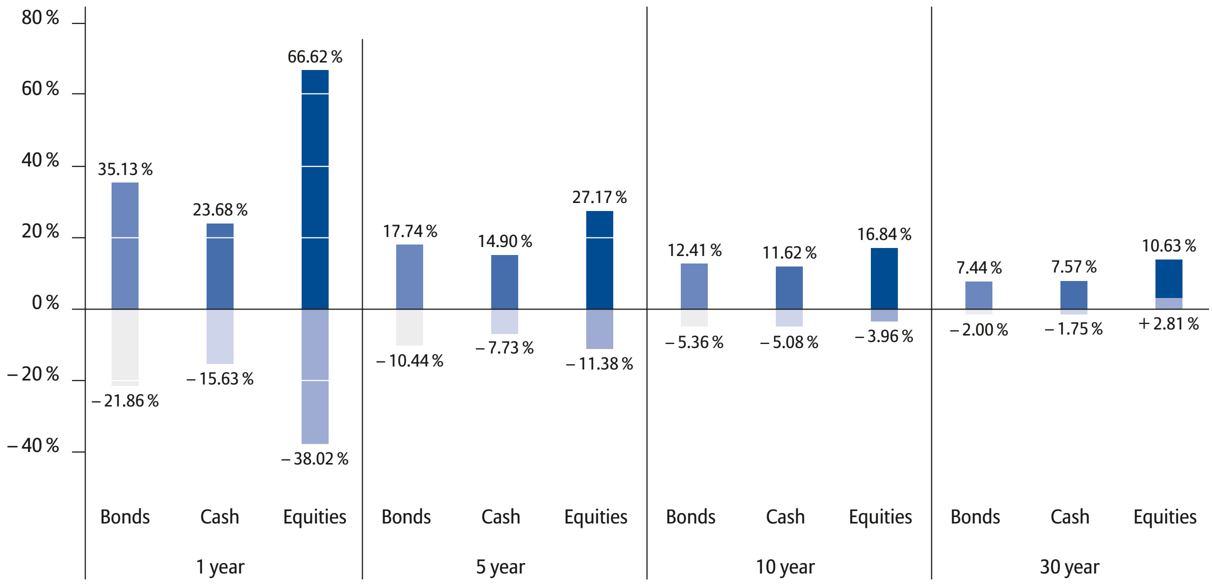
Average yield (incl. dividends): 8.7% p.a.



Past performance is not an indication of future results.
Source: Robert J. Shiller Database, own calculations by Allianz Global Investors Capital Markets & Thematic Research, 31/12/2015

Chart 3: Fluctuation Ranges of different asset classes since 1800

Highest/Lowest value in rolling investment periods of different asset classes measured as real changes p. a. (1800 – 2015)



Benchmarks used: Bonds = US Treasuries 10y (total return); Cash = 3 month T-Bills (total return);
Equities = S&P 500 (total return) less inflation measured by the Consumer Price Index.
Past performance is not an indication of future results. Source: Jeremy Siegel database 1801 – 1900 & Elroy Dimson, Paul Marsh, and Mike Staunton 1900 – 2009, Datastream, Allianz Global Investors Capital Markets & Thematic Research; 31/12/2015

If investors were to define safety in terms of purchasing power preservation (including rising inflation rates) rather than the range of share price fluctuation, equities would actually prove to have been "safer" than bonds historically over a long investment horizon of more than 10 years, as demonstrated by Chart 3. An analysis of the 10-year rolling average yields over the same period of the past 215 years shows that the negative outliers were actually less severe for equities than they were for both short and long-term government bonds. In the peak period between 1949 and 1959, a shareholder could have earned about 17 % p. a. on average in real terms, whereas he would have lost some 4 % p. a. around the First World War from 1911 to 1921 and during the first oil crisis between 1965 and 1975. By contrast, US bond holders would have suffered the larger loss of more than –5 % p. a. in real terms from 1971 to 1981, as inflation increased strongly during this investment period. By comparison, the negative performance of the stock market from 2000 to 2009 was more moderate at –3 % p. a. in the wake of the technology bubble and the financial crisis. In retrospect, 2009 would actually have been a good time to start investing, which just goes to show how true the old stock exchange saying is: buy when there's blood in the streets.

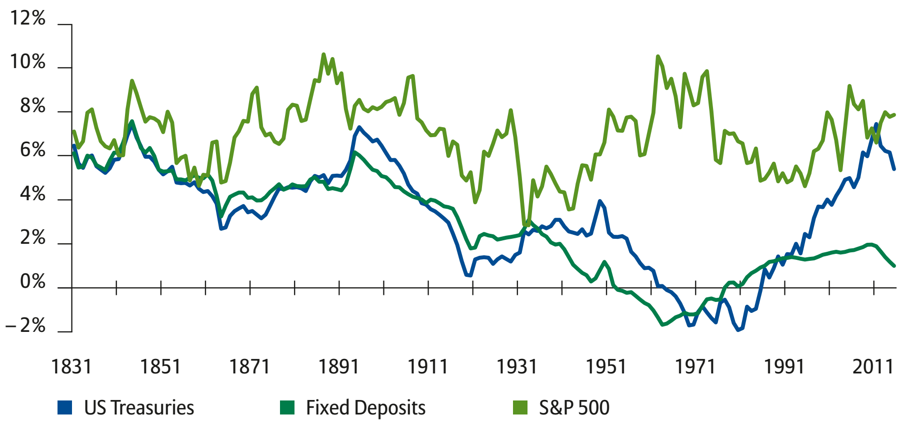
If we extend the investment horizon even further, we can see from analysing rolling 30-year periods over the past 215 years that the real returns generated by equities have always been positive. On average, asset values grew by 6.95 % p. a. after inflation (see Chart 4). The lowest 30-year yield – generated between 1903 and 1933 – was 2.81 % p. a., while the highest was 10.6 % p. a. in the period from 1857 to 1887, both periods admittedly being very long ago. Despite repeated severe turbulence on the capital markets, however, even the most recent 30-year stock market period can hold its own by historical comparison. If a shareholder had bought US stocks in 1985, his assets would have gained some 7.9% p.a. in real terms.

By contrast, the risk of losing wealth in real terms was quite possible with fixed deposits (3-month T-Bills) and government bonds (10-year US Treasuries) in the US. For example, investors who opted for fixed deposits between 1923 and 1953 and the following 30-year periods up to 1980 would have suffered a loss in purchasing power; the same would have been true for holders of US government bonds, albeit during the period from 1934 to 1965 and the subsequent periods up to 1985 – the era of "financial repression". At their peak, fixed deposits would have lost –1.75% p.a. (1933 – 1963) and 10-year treasuries –2.00% p.a. (1950 – 1980). The most a short-term investment on the money market would have earned in real terms was 7.57% p.a. between 1814 and 1844. There is no need to go that far back in history to find the record high for 30-year yields on US government bonds. As the central banks have pursued their policy of zero interest rates, yields have dropped close to their all-time lows in recent years. The result: bond investors would have witnessed the largest real increase in the value of their assets in the 30-year bond boom between 1981 and 2011, gaining 7.44% p.a. on average.

Ergo: you should invest in volatile securities, which can put all of your principal at risk of loss, only if you do not need the invested capital for other purposes in the short term. Over the long term, and bearing in mind that inflation will eat away at purchasing power, the biggest risk facing investors who want to preserve or increase their wealth may lie more in investing in fixed deposits and top-rated government bonds than in equities. In the current environment of low interest rates, this risk may strengthen rather than lessen in the future in light of the long-term expectation of rising interest rates and the threat of price losses. Keep in mind, many fixed deposits and top-rated government bonds may offer a guaranteed rate of return, unlike equity securities.

Chart 4: Over the Long Term, Equities May Be „Safer" Than Bonds or Fixed Deposits Depending on The Analyzed Risk

Real, rolling 30-year yield on US stocks, US treasuries and fixed deposits (in % p.a.)



Past performance is not an indication of future results.
Source: Jeremy Siegel database 1801 – 1900 & Elroy Dimson, Paul Marsh, and Mike Staunton 1900 – 2009, Datastream 2009 – 2013, Allianz Global Investors Capital Markets & Thematic Research; 31/12/2015

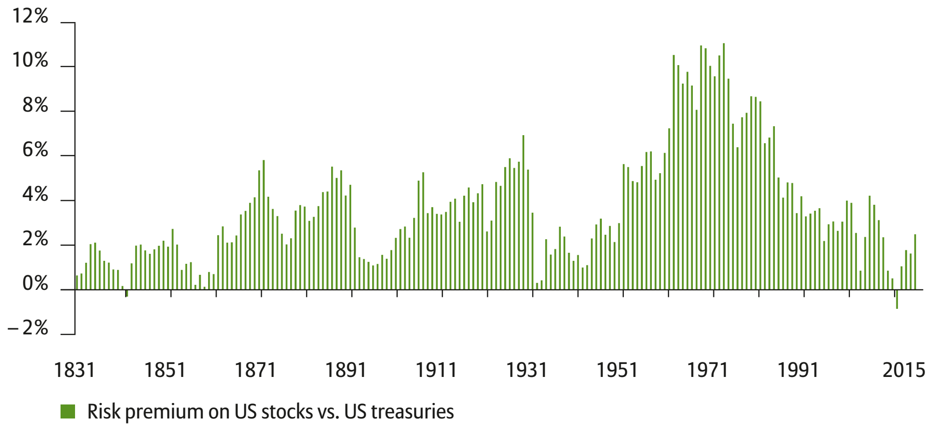
Equity risk premiums and contributions to returns – a look back in time

Closer analysis of the historical time series of rolling 30-year yields for equities reveals even more interesting facts about investing in securities. Such as the ex post risk premiums for equities versus government bonds that a shareholder would have received in consideration, for example, of the higher (short-term) fluctuation or liability risk. The average yield premium over the past 215 years was 3.7 % p. a. in real terms, although it dipped to its lowest level of –0.4 % p. a. between 1981 and 2011. So shareholders were not any better off than bond investors in real terms during this phase, in spite of high levels of volatility. By contrast, the risk premium peaked, at 11 % p. a., during the post-war period (1943 – 1973).

If we break the premium down further and analyse the key drivers of equity market returns, the historically severe risk premium fluctuations prove to be less surprising. The (nominal) long-term stock market risk premium should be made up of the difference between equity return and real risk-free interest rate, inflation, and the time and credit premiums (see Chart 5), variables that did not remain constant over the course of time.

Chart 5: Investors Share in the Risk Premium

Risk premium on US stocks vs. US treasuries (rolling 30-year yields, in % p. a.)



[2] In terms of average, monthly annualized returns; benchmark indices: MSCI

Past performance is not an indication of future results.
Source: Jeremy Siegel database 1801 – 1900 & Elroy Dimson, Paul Marsh, and Mike Staunton 1900 – 2009, Datastream, Allianz Global Investors Capital Markets & Thematic Research; 31/12/2015

Table 1: Worldwide Contributions by Global Equity Markets to Returns since 1970

1970–1979	Global	USA	Europe	Germany	UK
Return p. a.	7.94%	3.86%	10.45%	5.24%	11.21%
Return p. a. (EPS growth)	10.11%	9.17%	10.44%	11.92%	15.14%
Return p. a. (P/E ratio growth)	–5.55%	–7.99%	–3.96%	–10.48%	–8.27%
Return p. a. (dividend yield)	4.13%	4.24%	4.91%	4.38%	5.36%
Return p. a. (residual, unexplained)	–0.75%	–1.56%	–0.94%	–0.58%	–1.03%
1980–1989					
Return p. a.	18.13%	15.75%	15.98%	13.51%	20.00%
Return p. a. (EPS growth)	6.38%	5.08%	7.01%	7.86%	8.89%
Return p. a. (P/E ratio growth)	8.23%	6.37%	4.87%	1.98%	6.66%
Return p. a. (dividend yield)	3.67%	4.48%	4.63%	4.36%	5.02%
Return p. a. (residual, unexplained)	–0.15%	–0.18%	–0.52%	–0.70%	–0.57%
1990–1999					
Return p. a.	10.84%	16.95%	13.59%	13.19%	13.56%
Return p. a. (EPS growth)	3.17%	6.97%	3.15%	5.15%	2.53%
Return p. a. (P/E ratio growth)	5.58%	7.44%	7.77%	6.10%	7.71%
Return p. a. (dividend yield)	2.28%	2.50%	3.16%	2.75%	4.02%
Return p. a. (residual, unexplained)	–0.18%	0.05%	–0.50%	–0.81%	–0.70%
2000–2009					
Return p. a.	1.03%	–0.71%	3.56%	–0.37%	1.59%
Return p. a. (EPS growth)	0.89%	–1.94%	4.73%	–1.08%	4.38%
Return p. a. (P/E ratio growth)	–2.11%	–0.64%	–4.24%	–1.37%	–6.29%
Return p. a. (dividend yield)	2.17%	1.78%	3.00%	2.64%	3.34%
Return p. a. (residual, unexplained)	0.08%	0.09%	0.07%	–0.56%	0.15%
2010–2015					
Return p. a.	8.92%	12.82%	4.56%	11.57%	6.53%
Return p. a. (EPS growth)	12.29%	15.63%	0.71%	19.39%	–1.73%
Return p. a. (P/E ratio growth)	–7.08%	–6.09%	–0.46%	–10.09%	3.72%
Return p. a. (dividend yield)	2.58%	2.04%	3.51%	3.12%	3.60%
Return p. a. (residual, unexplained)	1.13%	1.24%	0.80%	–0.85%	0.93%
1970–2015					
Return p. a.	9.44%	9.81%	10.06%	8.44%	10.93%
Return p. a. (EPS growth)	5.99%	6.20%	5.65%	5.05%	6.48%
Return p. a. (P/E ratio growth)	0.41%	0.39%	0.73%	–0.58%	0.29%
Return p. a. (dividend yield)	2.96%	3.04%	3.82%	3.42%	4.28%
Return p. a. (residual, unexplained)	0.08%	0.17%	–0.14%	0.55%	–0.13%

Benchmarks used: Germany: MSCI Germany TR, USA: MSCI USA TR, Global equities: MSCI World TR, Europe: MSCI Europa TR, UK: MSCI UK TR, France, MSCI France TR, Italy: MSCI Italy TR, Japan: MSCI Japan TR, Pacific: MSCI Pacific TR, Emerging markets: Emerging markets: MSCI EM TR, Asia ex Japan: MSCI Asia ex Japan TR, Latin America: MSCI Latin America TR,; 31/12/2015 *Data only available since 01/01/1996

	France	Italy	Japan	Pacific	Emerging markets*	Asia ex Japan*	Latin America*
	10.37%	–1.43%	14.46%	3.34%			
	1.55%	n.a.	3.05%	8.95%			
	5.29%	n.a.	9.26%	–7.03%			
	5.61%	2.97%	2.57%	2.66%			
	–2.09%	n.a.	–0.41%	–1.25%			
	19.07%	24.61%	20.24%	24.16%			
	16.68%	32.36%	8.81%	13.04%			
	–1.12%	–10.23%	10.22%	9.53%			
	4.83%	2.43%	1.17%	1.52%			
	–1.31%	0.05%	0.05%	0.06%			
						Since 01/01/1996	
	13.41%	11.22%	–4.65%	–0.11%	1.90%	0.50%	9.75%
	1.51%	–4.27%	–33.19%	–20.21%	–11.92%	–13.89%	5.49%
	9.85%	13.82%	27.95%	18.95%	11.55%	11.53%	3.06%
	2.98%	2.32%	0.81%	1.20%	1.82%	2.23%	2.50%
	–0.92%	–0.66%	–0.21%	–0.04%	0.45%	0.63%	–1.31%
	–0.30%	–0.38%	–4.58%	0.37%	10.65%	8.42%	17.76%
	3.04%	2.10%	10.31%	52.69%	10.16%	8.56%	13.73%
	–5.93%	–6.52%	–15.07%	–53.72%	–2.18%	–3.23%	0.80%
	2.93%	3.79%	1.19%	1.81%	2.45%	2.87%	2.97%
	–0.34%	0.25%	–1.01%	–0.40%	0.21%	0.22%	0.26%
	8.88%	3.55%	12.11%	5.39%	0.01%	3.54%	–9.59%
	1.03%	–8.77%	–14.46%	40.51%	5.37%	11.96%	–14.11%
	2.61%	7.43%	24.93%	–39.60%	–8.79%	–12.45%	0.69%
	3.64%	3.90%	2.00%	2.71%	2.60%	2.95%	3.04%
	1.61%	0.98%	–0.37%	1.77%	0.82%	1.08%	0.79%
	9.99%	8.07%	6.95%	9.37%	5.71%	5.37%	7.95%
	5.19%	3.36%	–4.43%	17.74%	4.30%	3.72%	5.07%
	1.61%	1.92%	10.18%	–10.48%	–1.36%	–1.73%	–0.42%
	3.96%	3.03%	1.47%	1.87%	2.45%	2.82%	2.98%
	–0.77%	–0.24%	–0.27%	0.25%	0.31%	0.56%	0.33%

Past performance is not an indication of future results.
Source: Datastream, own calculations by Allianz GI Capital Markets & Thematic Research

History (i.e. "practice") seems to confirm the theory: Those who take risks will benefit from a risk premium in the long run (see also Chart 6 for the theory of risk premiums).

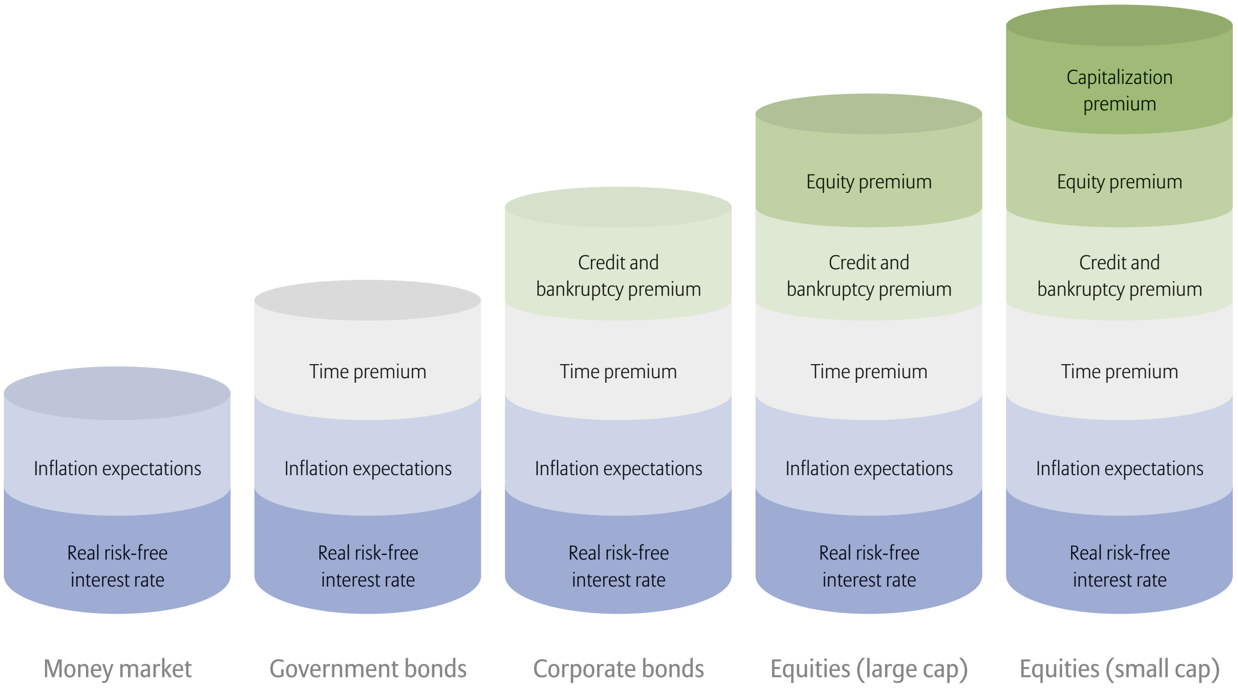
A further approach to historical yield analysis would be to break stock market performance down into contributions to returns. Components resulting from:

- the contributions from dividends,
- company earnings growth, and
- multiple expansion in the stock markets (in terms of price-earnings ratios relative to company earnings of the past 12 months).

Table 1 shows the components of returns over the decades since 1970 (since 1996 in the case of emerging market equities), for which time series for other stock markets and/or regions are also available.[2] To start with, the analysis shows that all shareholders in all investment regions around the world were able to increase their wealth (in nominal terms) in the period between 1970 and the end of 2015. Average annual returns ranged from around 7% (Japan) to more than 11% (UK). Since 1996, emerging markets equities have posted gains of about 6% p.a. Interestingly, the increased returns – to new all-time highs in many regions – were not so much due to multiple expansion but rather and above all to growth in company earnings. Over the past 45 years, for example, earnings per share have risen by 6% p.a. around the globe and accounted for about two-thirds of total performance. The remaining third was contributed by dividends, which yielded about 3% on average relative to market capitalisation. European corporations have proven to be particularly dividend-friendly in the past. Their dividend yield was significantly higher, at around 4%. And this phenomenon continues to this day, with US stock corporations producing a dividend yield as at year end 2015 of about 2% compared to more than 3% from their European peers.

Chart 6: Earning Risk Premiums for the Asset Classes

Exemplary structure of long-term risk premiums on a range of asset classes



Source: Based on Ibbotson and Siegel (1988), Allianz Global Investors. This is for illustrative purposes only.

Understand. Act.

Over the long term, and bearing in mind that inflation will eat away at purchasing power, we believe the biggest risk facing investors who want to preserve or increase their wealth may be not taking any risks. As far as investments in fixed deposits and top-rated government bonds are concerned, this risk will probably strengthen rather than lessen in the current environment of low interest rates and in light of the long-term expectation of rising interest rates and the threat of price losses. By contrast, real assets, such as equities, may continue their historical success, given that the long-term risk premium expectations still appear attractive. Accordingly, investors should consider venturing beyond the current uncertainty when deciding their strategic (long-term) asset allocation and be aware of the long-term potential for equities.

Hans-Jörg Naumer & Dennis Nacken

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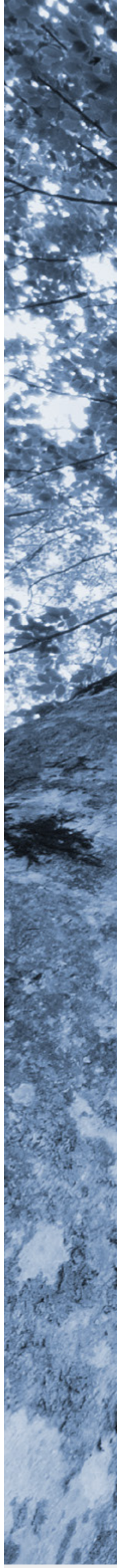

www.allianzglobalinvestors.com

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

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