The following publications are part of the series Berenberg Funds and Solutions:

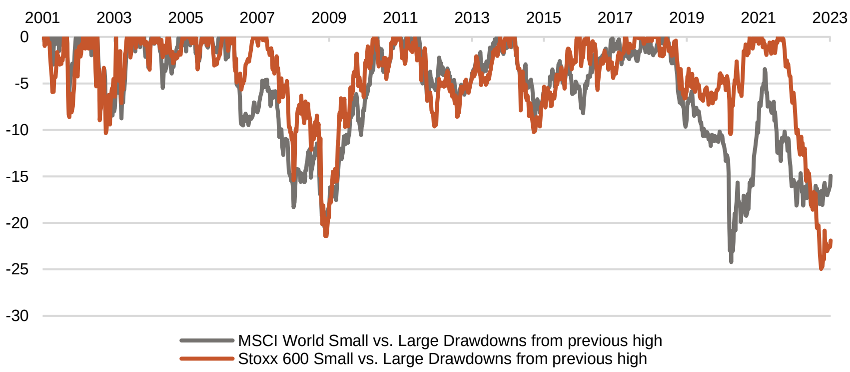
***Spotlight** offers insights into the Berenberg product universe and highlights key topics related to current market developments.*

Big opportunities with small companies

Sharply rising inflation rates, restrictive central bank policies, recession fears, the war in Ukraine, and a possible energy crisis led to (in some cases significant) losses for most asset classes in the calendar year 2022. Within equity markets, high-quality growth companies as well as small and micro caps were hit over-proportionally. Relative to the overall market and to large public companies, small and micro caps experienced historic losses – in fact, the heaviest losses since the turn of the millennium. Taking Europe as an example, European small caps underperformed large caps by more than 20 percentage points (time period: 31st December, 2021 – 30th December, 2022) – a drawdown more severe than during the 2008 financial crisis. But also globally small caps came under considerably more pressure than their large cap counterparts – in some geographies this phenomenon set in even earlier than in Europe.

In this Spotlight, we put this drawdown of small caps and their valuation into historical context and highlight the long-term benefits of an allocation to small caps. We take a look at the past and show that small and micro cap performance regularly preludes the business cycle. Investors should not wait too long to enter the market after major setbacks, as when the economy is starting to improve again, the market has long since priced in the better outlook.

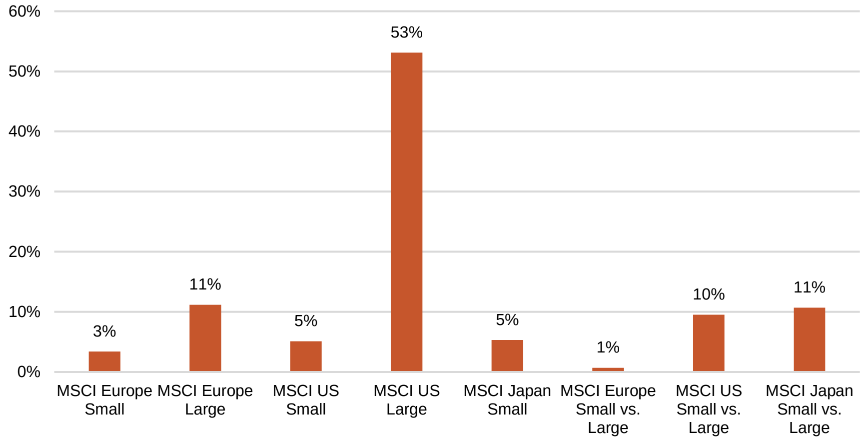
Fig. 1: Small caps with historical drawdowns relative to large caps



Source: Berenberg, MSCI, Stoxx, Total return indices in each case; 01/01/2001 – 12/01/2023.

As a result of the sharp sell-off, valuations for small caps fell significantly. On a P/E basis, European small caps, for example, are now trading at the bottom end (3rd percentile) of their own history over the past 10 years.

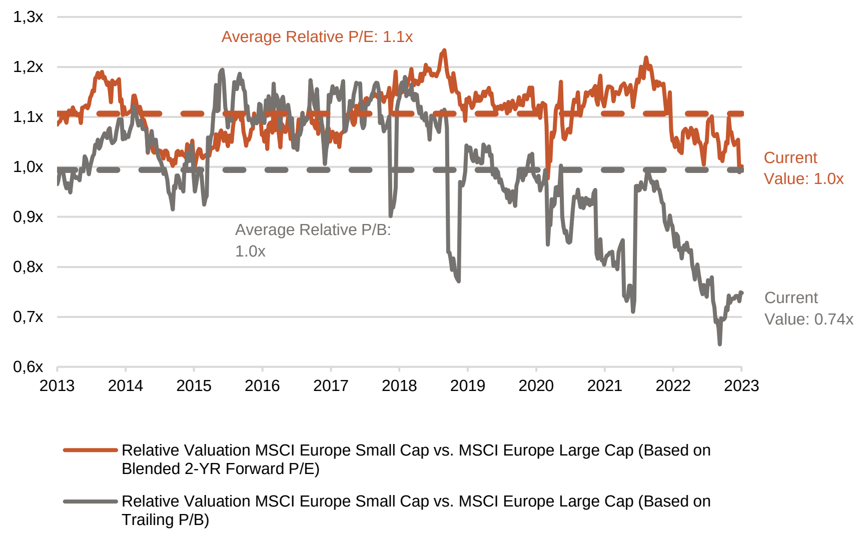
Fig. 2: Small cap valuations and premiums versus large caps at historical lows (I)



Source: Berenberg, MSCI, Bloomberg; percentiles in valuation versus own 10-year history, based on blended 1-year forward P/E ratios; 10/01/2013 – 10/01/2023.

Valuations have also fallen sharply relative to large caps – the valuation gap has fallen to its lowest level in 10 years and was lower only 1% of the time. Similar levels can also be observed in the US and Japan.

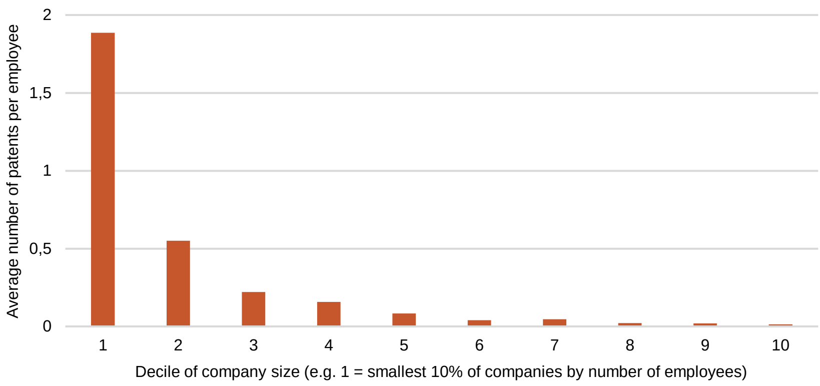
Fig. 3: Small cap valuations and premiums versus large caps at historical lows (II)



Source: Berenberg, MSCI, Bloomberg; 12/01/2013 – 19/01/2023.

There are many reasons for the long-term outperformance of small caps, which Nobel Prize winners Eugene Fama and Kenneth French, among others, coined the "size factor" back in 1993. We have already highlighted many of these arguments in other publications.* Benefits of small caps include their above-average growth and margin profile, higher innovative strength and greater entrepreneurial spirit, also thanks to the often large equity stakes held by management in the company. The lower susceptibility to regulatory pressure, a stronger local presence in times of near-shoring and a higher takeover probability by other companies are also supportive.

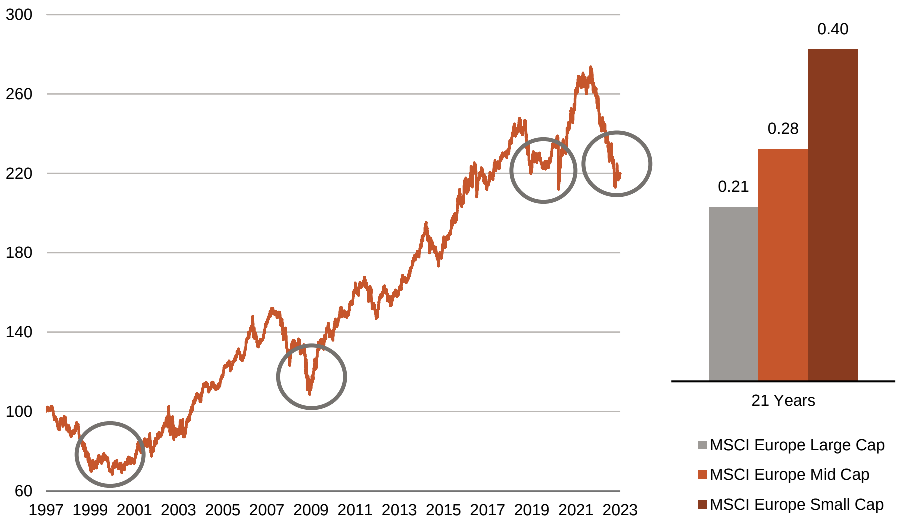
Fig. 4: The smallest 10% of companies register significantly more patents per employee than the largest companies



Source: Breitzman, Anthony and Hicks, Diana, "An Analysis of Small Business Patents by Industry and Firm Size." Rowan University. Based on 1,293 US firms with more than 15 US patents pending between 2002 and 2006.

In the past, however, the long-term outperformance of small caps versus large caps has not been linear, but has been temporarily slowed down in various phases. Especially in general market downturns small caps came under pressure, which is partly due to the tendency of small caps being more cyclical at the index level. Nevertheless, historically, major setbacks have always presented excellent buying opportunities.

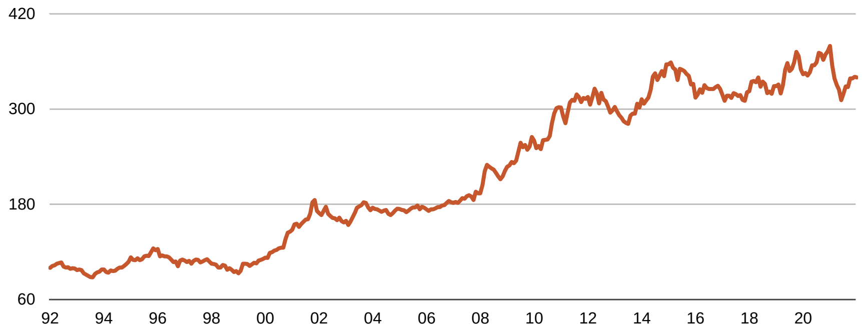
Fig. 5: MSCI Europe Small Cap relative to MSCI Europe Large Cap (left chart) and risk-adjusted returns (right chart)



Source (lhs): MSCI; BofAML European Equity & Quant Strategy; 31/12/1996 – 30/12/2022. *Risk-adjusted returns based on the respective net total return indices. Defined as average annualized weekly log returns divided by annualized volatility based on weekly log returns.
Source (rhs): Berenberg, Bloomberg, December 2001 (start of data series for MSCI Europe Mid Cap) – December 2022.

If (like us) one consistently focuses on the best-quality innovation leaders with outstanding profitability and financial strength as well as double-digit earnings growth rates, one should also be able to achieve an attractive excess return over the broad small cap indices in the medium term.

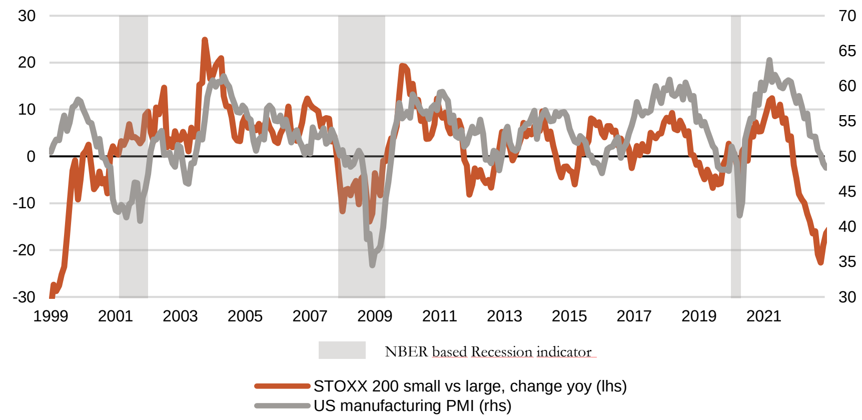
Fig. 6: Relative Performance - High vs. Low Quality for European Small Caps



Source: Factset, MSCI, IBES, BofAML European Quant Strategy; as of 30/12/2022.
Quality: Equally weighted combination of various factors – return on assets, return on capital, return on equity, 5yr return on equity, leverage.
Universe: MSCI Europe IMI Index, MSCI size classification, 75% of the largest companies of the MSCI Europe Small cap Index.

Small cap stocks are traditionally a good leading indicator of the economy and accordingly often start falling before the first signs of economic distress and historically regularly recover before economic data bottoms out.

Fig. 7: Small caps often "anticipate" an economic upturn - months before real data follow along



Source: Berenberg, Stoxx, Federal Reserve Bank of St. Louis; 15/01/1998 – 30/12/2022.

Following sharp market downturns triggered by economic concerns, small caps therefore often significantly outperformed their large cap counterparts.

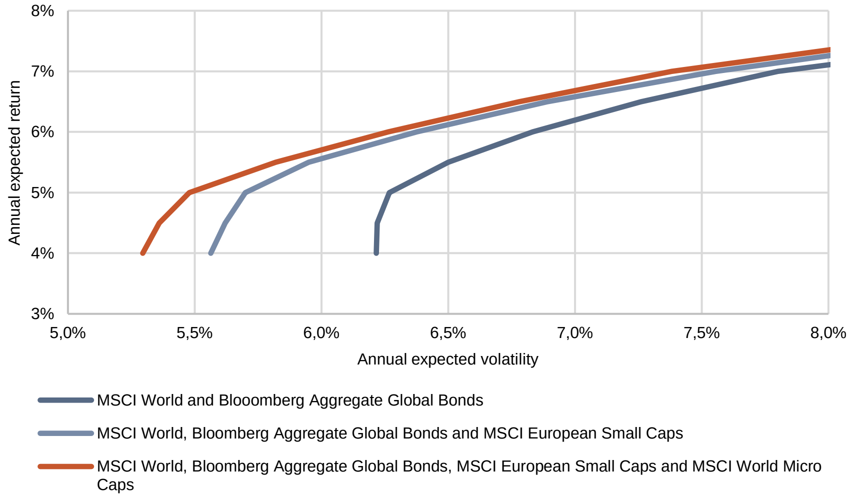
Fig. 8: Small caps generally recovered much more strongly than large caps after major corrections (here US small caps due to longer history)

Market Bottom	Small Caps	Large Caps	Difference
May 1932	316%	112%	204%
March 1938	20%	36%	-17%
April 1942	154%	57%	96%
May 1947	35%	22%	14%
June 1970	54%	40%	14%
September 1974	47%	37%	10%
November 1987	25%	24%	2%
October 1990	52%	34%	18%
September 2002	64%	23%	41%
February 2009	82%	51%	31%
March 2020	146%	59%	87%

Source: Berenberg, Kenneth French website. 1-year performance since the respective large cap market low. Small (large) cap return defined here as value-weighted performance of the 20% smallest (largest) NYSE-listed companies by market capitalization. Monthly data.

In addition to the better absolute performance of small caps in the long term, investors also benefit from diversification effects of adding small caps to a portfolio. Fig. 9 illustrates this with a theoretic example based on historic data. With a fixed annual return target of 5%, for instance, adding European small caps and global micro caps to an existing MSCI World and Aggregate Global Bond portfolio has in the past reduced annual volatility from around 6.3% to around 5.5%, i.e. by almost 15%. The reverse observation is also possible: With an annual volatility target of 7%, the annual return could be increased by 0.4 percentage points per year through the addition of small caps: from 6.2% to 6.6% p.a. – after 30 years, this makes a performance difference of 73 percentage points due to the compounding effect.

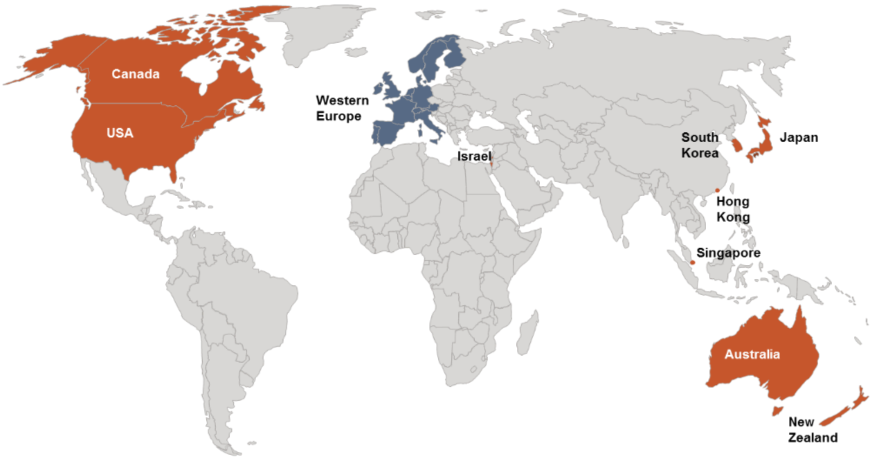
Fig. 9: Adding small caps allows for lower volatility while maintaining the same return targets (selected Markowitz efficiency frontiers)



Source: Berenberg, MSCI, Bloomberg. Based on annualized weekly returns and estimated correlations between 01/2009 – 01/2023. Total return indices respectively; as of 10/01/2023.

A global portfolio of small caps in developed markets can be represented by a combination of our European small cap funds (Berenberg European Small Cap, Berenberg European Micro Cap) and our international micro cap product (Berenberg International Micro Cap). The latter was explicitly designed to exclude Europe in order to provide a diversifying access to small caps in regions whose economic and geopolitical drivers (e.g. industrial focus, economic growth, inflation and monetary policy) are sometimes very different from the European market. The comparatively low correlation between the Berenberg European Small Caps and the Berenberg International Micro Cap of 0.63 over the last year is attributable to this. However, Germany also offers exciting investment opportunities in the small cap segment – the focus of Berenberg Aktien Mittelstand is on established niche companies that have strong market positions with their business models in their home market and globally.

Fig. 10: Together, the Berenberg European Small Cap and the Berenberg European Micro Cap (blue) and the Berenberg International Micro Cap (orange) cover all developed markets



Source: Berenberg; as of 30/12/2022.

What will the investment year of 2023 have in store? The new year is likely to be a better year than the previous one – although not necessarily an easy one. But leaving aside the current latent crises, the picture for the coming months is more promising: The inflation hump seems to have been overcome and there is likely to be an end to interest rate hikes – in the US, there could even be interest rate cuts in the second half of 2023. Our economists also expect the economy in Europe to recover, and perhaps there will even be positive news from Ukraine and China. In addition, the sentiment and expectations among investors and banks in the beginning of the year are more cautious than they have been for a long time – typically a good contrarian indicator.

This should lead to inflation and interest rates fading out as the main driver of equity markets and instead the focus returning to the fundamentals of individual companies. That said, we do not expect a broad-based recovery which is why the right stock-picking will be crucial: Which companies have already completed their earnings revisions? Which have pricing power? Which can demonstrate structural growth? Which exhibit attractive valuations after the sharp sell-off?

In this context, the small cap segment should experience a particular boost. The world of small caps is filled with high-quality growth companies, many of which are global market leaders in their respective segment. Particularly exciting are sectors that are benefiting from megatrends such as digitization in healthcare or the technology sector, progress in medical technology, or the increasing demands regarding energy efficiency. Regulatory issues also play a role, as shown for example, by greenhouse gas regulation or EU renovation strategies in the construction sector.

To summarize, a lot of factors suggest that an entry into the best small caps is likely to pay off for long-term investors. Small and medium-sized enterprises traditionally grow more strongly than large companies – however, in times of crisis they are also temporarily impacted more significantly – as could be impressively observed in 2022. This presents an excellent buying opportunity. After the extreme downturn movement last year, it could even be the best opportunity since the financial crisis of 2008 for investors to make a targeted investment in this segment. If the portfolio includes companies that are growing highly profitably at an annual rate of 15 to 20 per cent, the headwinds from interest rates should not play the dominant role in the medium term. Many small companies sitting on high cash holdings are even benefiting from the current higher interest rates. In our opinion, the time is therefore right to invest in small caps for the long term.

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