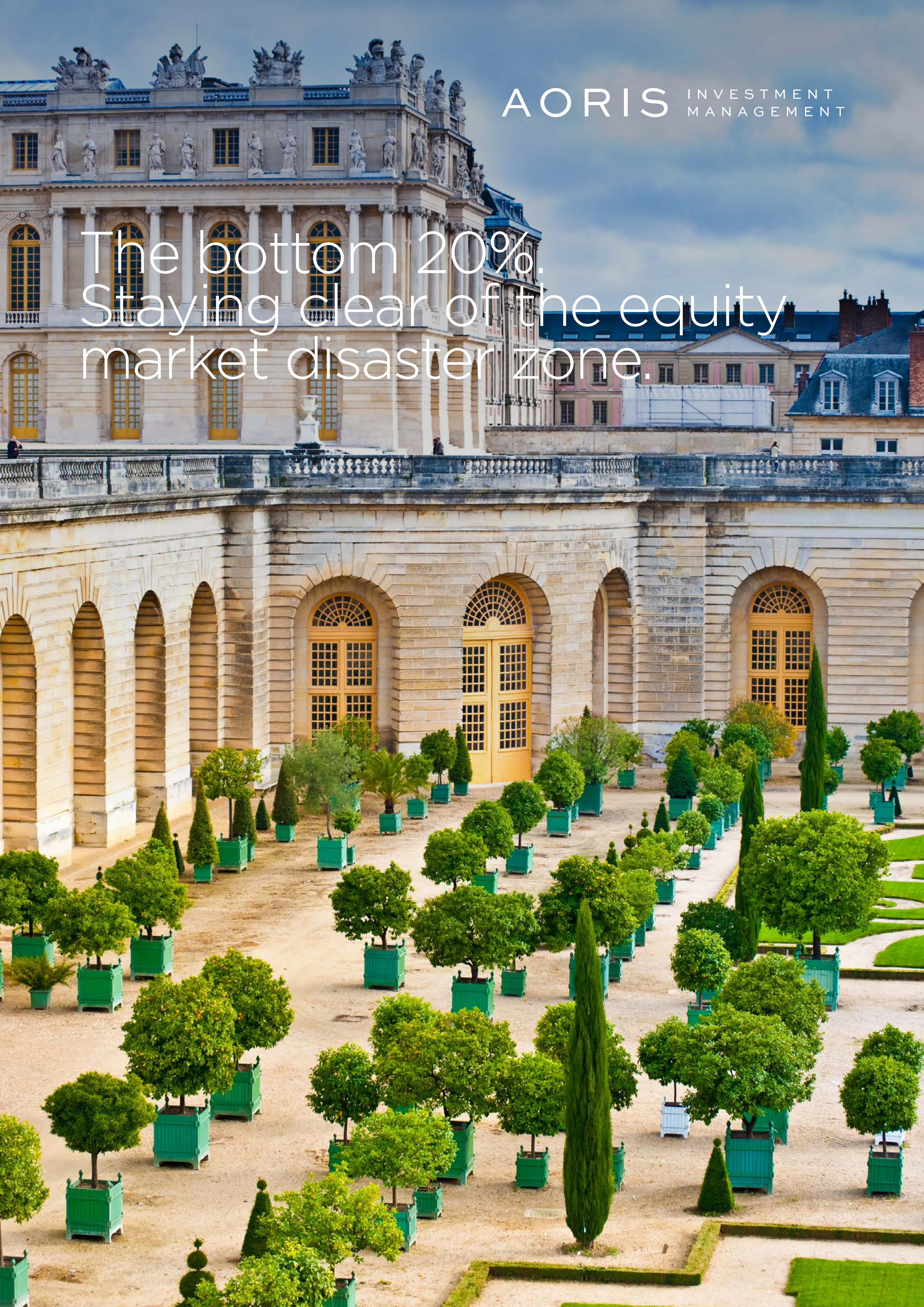
AORIS INVESTMENT MANAGEMENT

The bottom 20%. Staying clear of the equity market disaster zone.



Aoris Investment Management

Aoris is a *specialist* international equity manager founded in 2017.

We are a *focused* business and manage a single international equity portfolio.

Our investment approach is *conservative*, fundamental and evidence-based.

The Aoris International Fund

Our portfolio is long-only and highly *selective*.

We own a maximum of 15 stocks, each of which has considerable breadth or *internal diversification*.

We aim to generate returns of 8–12% p.a. over a market cycle.

Our Quarterly Reports

We are *business owners*, not economists. As such, our reports focus on the performance of our investee companies.

We report on portfolio performance and changes with candour and transparency.

Each quarter, we include a thought piece or feature article on a topic area with direct relevance to our investment approach.

About the cover image – the Palace of Versailles was the principal royal residence of France from 1682, under Louis XIV, until the start of the French Revolution in 1789, under Louis XVI. The 2300-room palace is a UNESCO World Heritage site, notable especially for the ceremonial Hall of Mirrors.

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INTRODUCTION

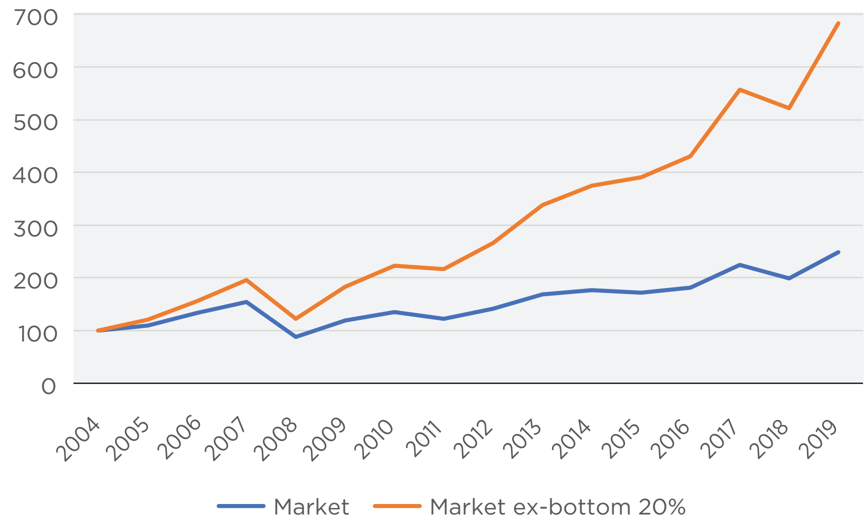
To date, 2020 has been a year of so much action at the winning end of the market that messages around caution and loss avoidance have sounded distinctly dull. Owning the winners is always much more exciting than avoiding the losers. Let's be frank: at a barbecue, no-one talks about the disaster stocks they didn't own. At Aoris, avoiding the worst performing stocks – let's call them the bottom 20% – is core to our investment approach. In this feature article, we discuss some financial metrics that can be helpful in identifying companies which end up in the disaster zone, and just how impactful avoiding such losers is to investment returns.

PAYOFF FROM AVOIDING THE BOTTOM 20%

Simple maths dictates that avoiding the worst performing stocks will provide an investor with an uplift in returns. There's nothing remarkable in that. What is remarkable is the magnitude of the performance uplift. Let's divide the stock market into five groups based on stock price performance for the calendar year, with each group accounting for 20% of all listed companies. If you had done nothing other than avoid owning any stocks in the bottom quintile each year, you would have outperformed the broader market by 7.5% p.a. over the last 15 years. The cumulative impact of this 7.5% p.a. uplift is shown in the chart on the following page. No wonder Warren Buffett calls compounding the eighth wonder of the world.

For a long-term investor, the positive impact on wealth from avoiding the bottom 20% is massive.

The value of avoiding the bottom 20%. Cumulative value of USD100 over 15 years



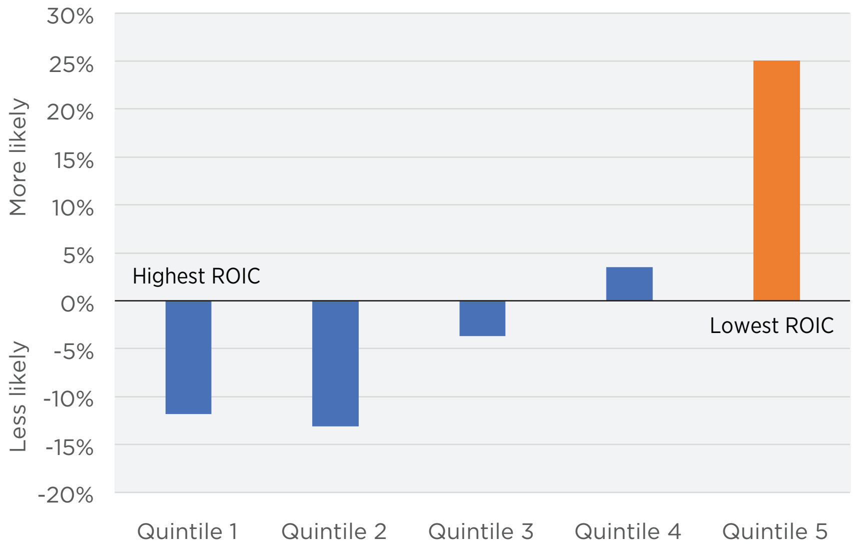
This, of course, is hindsight. What we really want to know is how to avoid the future losers. Below, we test some variables to see if we can identify company characteristics to help us achieve that objective. In conducting this analysis, we have used a global universe of about 6000 companies with a market capitalisation greater than US$2 billion, with all data sourced from FactSet.

Profitability

Profitability can be measured in several ways, but the one we find most useful in capturing the real economics and wealth creation of a company is return on invested capital (ROIC), which we define as profit after tax divided by the sum of debt and equity. Below we look at the relationship between ROIC in one year and the share price performance the following year to see if profitability can tell us something about the likelihood that a stock ends up in the bottom 20%.

The least profitable companies are 25% more likely than average to be in the bottom quintile by share price performance.

Relationship between ROIC quintile and likelihood of being in the bottom 20% of the market



We can see that companies in the two most profitable quintiles are moderately less likely than the rest to be in the worst performing 20% of the equity market. On the other hand, a company drawn from the least profitable quintile is 25% more likely to be in the bottom 20% than is the case for a randomly selected company.

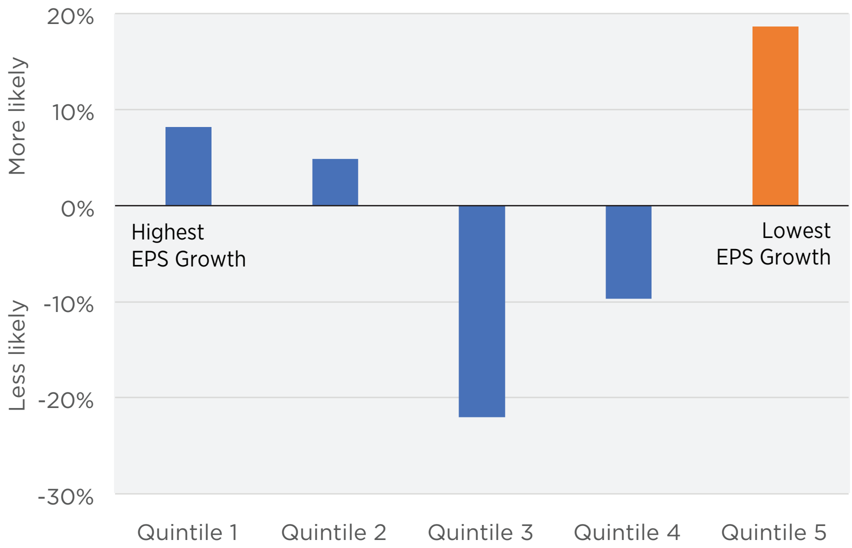
We also tested to see if the fact that a company lost money in the prior year is a useful signal in helping an investor avoid the disaster zone the following year. Indeed, it is. The share price performance of a loss-making company is 33% more likely to be in the bottom 20% of the market than a randomly selected company.

Earnings growth

Does historical earnings growth tell us anything about future bottom 20% participation?

The lowest and the highest growth businesses are more likely to be in the bottom 20%. The sweet spot is moderate growers.

Relationship between EPS growth over 5 years and likelihood of being in the bottom 20% of the market



Companies drawn from the weakest quintile by five-year earnings growth are 19% more likely to be in next year's bottom 20% than an average company. Interestingly, the group with the highest historical rate of EPS growth also has an above-average likelihood of being in the worst performing quintile by share price performance, perhaps reflecting market disappointment as a streak of hot growth peters out or goes into reverse. In recent years companies such as Fitbit, GoPro, Twitter and Groupon have generated a few years of turbo-charged growth, only for that growth to prove fleeting.

Balance sheet growth

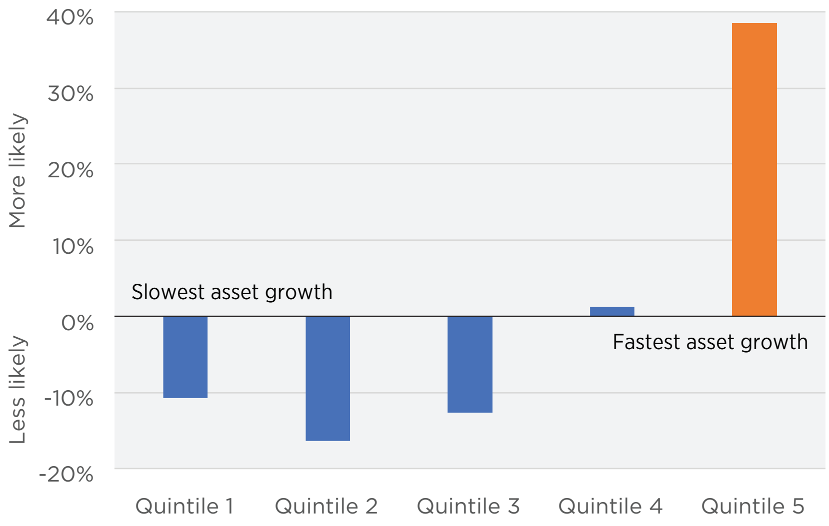
It's no secret that large corporate acquisitions frequently end badly, at least for the acquirer. Typically, the larger the target relative to the acquiring company, the more problematic the combination. Oftentimes, large acquisitions create significant challenges in integrating cultures, accounting and IT systems, and organisational structures. They may take the acquirer into an area well outside their core competency, and the strategic merits, which look compelling in the fancy PowerPoint slides, often prove illusory.

Lastly, the larger the deal value, the more likely a significant price premium will be required to have the bid accepted. It's easier to find an undervalued asset and acquire it without a competitive process when you are spending $50 million than when you outlay $5 billion.

This indeed shows up in the data. Companies whose balance sheet growth over the last five years is in the highest 20% of all companies are 38% more likely than an average company to be in the worst performing quintile by share price performance.

Avoid companies that make large acquisitions to stay out of the bottom 20%.

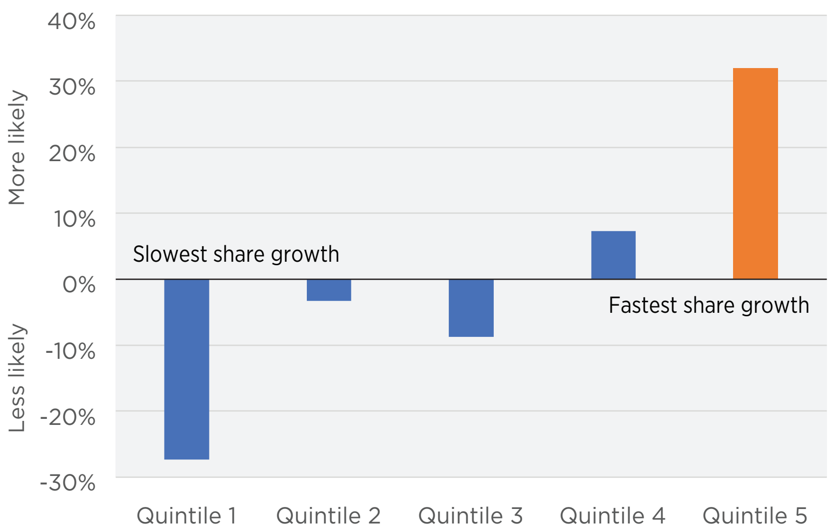
Relationship between growth in total assets and likelihood of being in the bottom 20% of the market



Big deals might be welcomed by investment bankers and celebrated by the selling shareholders, but shareholders of the acquiring company should be fearful. The M&A Hall of Shame includes era-defining deals such as Time Warner's combination of AOL in 2000; Daimler Benz + Chrysler in 1998; Sears + Kmart in 2005; and ABN AMRO's purchase of Royal Bank of Scotland in 2007.

Related to rapid asset growth is rapid growth in the number of shares a company has outstanding. Acquiring companies often fund major deals by issuing equity to the selling company or into the public market, so rapid growth in share count usually goes hand-in-hand with large acquisitions. Some companies grant large amounts of shares to employees as part of compensation schemes. The fact that they often exclude such costs from their 'adjusted earnings' encourages them to profligate in such grants, diluting the ownership of existing shareholders. It can be seen below that the quintile of companies with the fastest share count growth over the prior five years was 32% more likely to end up in the worst 20% of the market by share price performance.

Relationship between growth in issued shares and likelihood of being in the bottom 20% of the market



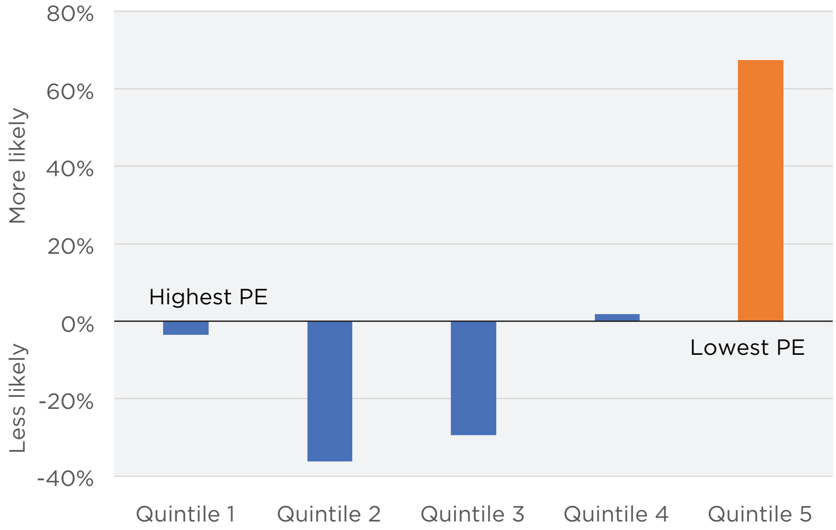
Valuation

We found a strong relationship between outlier price-to-earnings (PE) multiples and representation in the bottom 20%. This is not surprising. What many people will find surprising is the direction of the relationship.

Stocks on the lowest PE multiples are significantly overrepresented in the bottom 20%.

Hardly a margin of safety!

Relationship between starting PE and likelihood of being in the bottom 20% of the market

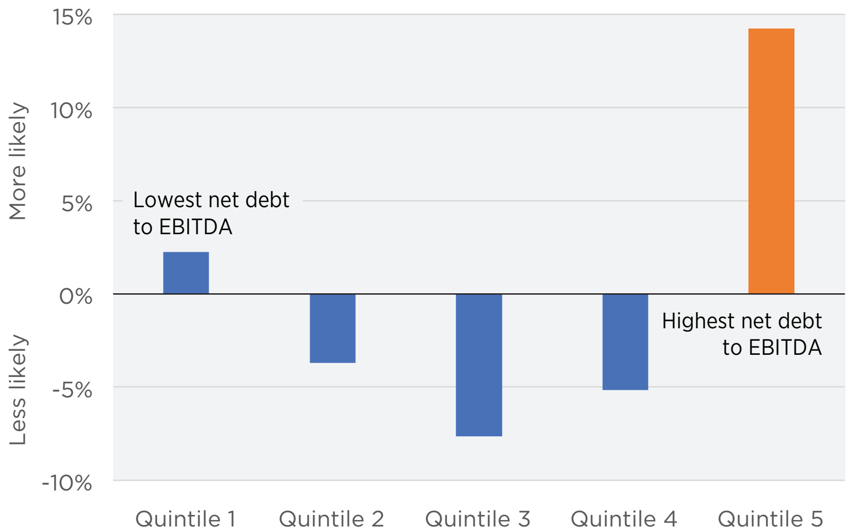


The chart above shows that companies from the lowest ('cheapest') PE quintile are 67% more likely to end up in the bottom 20% of the market by share price performance than an average company. This will strike many people as counterintuitive. It is often thought that a low PE ratio represents a 'margin of safety' and good value. In our last quarterly feature, we showed that low PE companies are, on average, less profitable, have slower earnings growth and are more financially leveraged than the rest of the market. Rather than reducing investment risk, selecting companies based on a low PE multiple is, on average, a source of risk.

Financial leverage

It makes sense that companies with high financial leverage are more likely to experience disastrous share price outcomes. This has indeed proven to be the case, although not to the degree we had expected; perhaps reflecting the benefit to borrowers of abnormally low interest rates over the last decade.

Relationship between net debt to EBITDA ratio and likelihood of being in the bottom 20% of the market



Resource companies and emerging market companies are 30–40% more likely to be in the bottom 20%.

Sectors

We looked to see if there were any sectors of the market that were materially overrepresented in the bottom 20%. We found just one: Resources. The share price performance of a resource company is 33% more likely to be in the bottom 20% of the market than an average company. This is intuitive given that the Resources industry has below-average profitability, as measured by ROIC. Also, as an industry it has produced more than its fair share of large, value-destructive mega-mergers.

Emerging markets

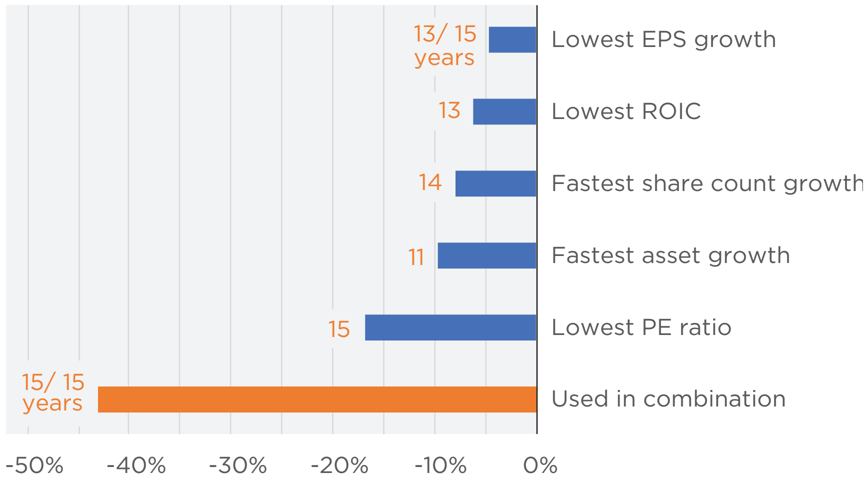
Companies from emerging markets are 38% more likely to be in the bottom 20% of the global equity market than a randomly selected company. This makes sense as emerging market companies are, on average, less profitable than their developed market peers. By composition they also strongly skew to Resources, Heavy Industries and Banks, particularly in the case of Russia and Brazil, with less representation from higher growth industries such as IT, Commercial Services and Health Care. Lastly, they are more subject to political intervention, commodity prices and economic cycles. At Aoris we look at emerging market companies, but we avoid structurally unattractive industries and set a very high bar in terms of governance. So far, we have invested in none.

Putting it all together

We have identified a set of measurable characteristics that we can use to help us avoid owning companies that end up in the bottom 20% of the market. Just how helpful are these measures? The answer is in the chart below.

Together, these five measures reduced the chance of selecting a bottom quintile stock by more than 40%.

Reduction in probability of being in the bottom 20% by excluding quintiles based on:



It is interesting to see that omitting companies drawn from the lowest ('cheapest') PE quintile reduced the odds of owning a stock that performed in the bottom 20% in every one of those 15 years through to 2019 (see numbers shown in orange alongside the blue bars), and had by far the most beneficial impact of the five measures. As mentioned earlier, low PE companies are, on average, less profitable, lower growth and more financially leveraged than the overall market.

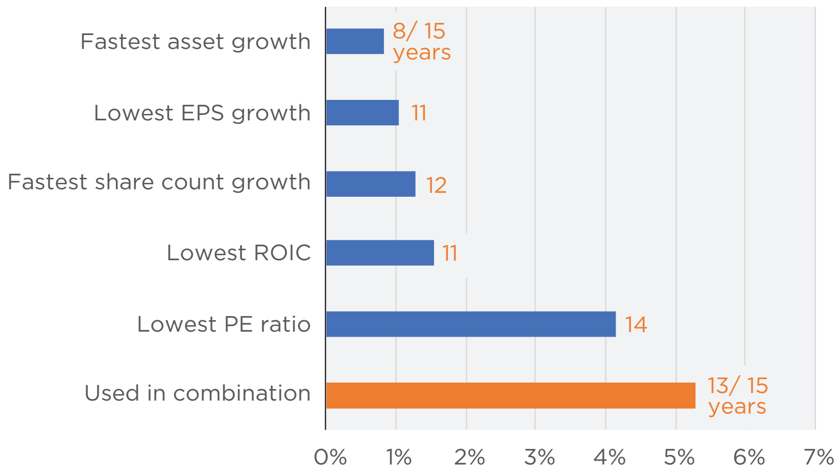
By excluding companies from all five of the above categories, we reduced the probability of participation in the bottom 20% over the 15-year period by an impressive 43%.

Performance payoff

We have shown that excluding businesses with certain characteristics will help us avoid the worst performing part of the equity market, but what if doing so also reduces our participation in the best performing group? It may be that the net effect on investment performance is negative. The chart below shows the annualised performance uplift relative to the market over the last 15 years by applying each of the five exclusions in isolation. Once again, the numbers in orange in the chart below show the numbers of years they had a beneficial impact to returns.

> *Stocks in the lowest PE quintile have underperformed the market in 14 of the last 15 years. Avoiding them would not only have materially improved your likelihood of avoiding the bottom 20%, but would also have increased your return by a remarkable 4.2% p.a.*

Annualised excess return generated from excluding quintiles based on:



The annualised performance uplift from avoiding all five groups of companies was 5.3% p.a. over the last 15 years. It doesn't quite match the 7.5% boost to returns from avoiding the bottom 20% entirely. Still, this would have been enough to put the investor following these simple rules in the top 5% of all international equity funds over that period.

CONCLUSION

Alongside these powerful metrics, sound judgement is also needed to avoid stocks that end up in the disaster zone.

It might not get the heart racing or raise the blood pressure the way that a stock doubling or tripling would, but avoiding the equity market's disaster zone can provide a powerful boost to investment returns. We have shown that a handful of simple financial metrics when used together can reduce by almost half the likelihood that an investor selects a stock that ends up in the market's bottom 20%. However, these quantitative metrics do not provide the whole toolkit to avoiding the disaster zone. Judgement is also required. It helps if an investor is vigilant in looking for signs of a good business on the wane, such as declining pricing power, increasing competition, falling customer retention rates, and slowing growth or an increasing management appetite for large acquisitions.

Since inception of the Aoris International Fund, we have avoided participation in the market's disaster zone. Not one of the 26 stocks we have owned has been in the bottom 20% over the period we have owned it, and this has made a significant positive contribution to the excess returns that we have generated.

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