EFG

Thoughts on long-term investing

JUNE 2022

Cost of outperformance

Secular growth

Company case studies

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HIGHLIGHTED IN THIS PUBLICATION:

GLOBAL STRATEGIC ASSET ALLOCATION

GLOBAL SECURITY SELECTION

REGIONAL ASSET ALLOCATION

REGIONAL PORTFOLIO CONSTRUCTION

THE COST OF OUTPERFORMANCE

Jonathan Rawicz, Senior Portfolio Manager & Matteo Nobile, Senior Quantitative Analyst

Question: If I hired a fund manager with perfect foresight as to which stocks would be the best performers over the next five years, what kind of drawdown[1] would I have to bear in order to get the absolute best possible returns?

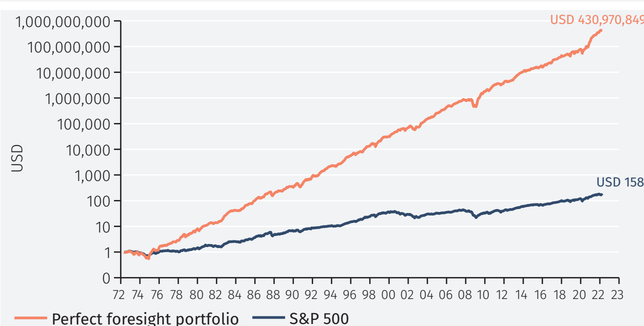
We decided to simulate the performance of such a 'perfect foresight' fund manager to determine the drawdowns relative to the benchmark one may incur if such a strategy was selected.

Our perfect foresight fund manager looked at up to 1,000 of the largest companies listed in the United States in June 1972 (the earliest month for which we have easily available data) and then looked forwards to see which stocks would produce the best return over the next five years. The manager then constructed an equally weighted portfolio of the 50 companies that would produce the top returns over the next five years.

Each quarter our perfect foresight manager would look forward and select companies that would again produce the best performance over the following five years and then rebalance the portfolio back to include these stocks.

Needless to say, the performance from such a fund manager would be astonishing. USD 1 invested in such a portfolio in June 1972 would be worth USD 430,970,849 at the end of April 2022, for a whopping 48.83% return per annum. This compares to investing in the S&P 500 which would have turned USD 1 into USD 158, for a return of 10.67% per annum (see Figure 1).

1. Performance of 'perfect foresight' portfolio relative to S&P 500



For illustrative purposes only. **Past performance is not necessarily a guide to the future.**
Performance results are simulated based on the portfolio metrics used by the 'perfect foresight manager'.
In the above scenario, the performance figures do not represent the results of actual trading but were achieved by means of retroactive application of the portfolio designed with the benefit of hindsight.
There is the potential for loss as well as for profit when given the benefit of retroactive application of this model.
Sources: FactSet and EFGAM calculations. Data as at 17 June 2022.

So how much volatility would one have to bear to turn USD 1 into USD 430,970,849? We analysed the monthly drawdown of such a portfolio against the S&P 500 assuming our manager maintained the discipline of holding onto those 50 best performing companies despite the volatility.

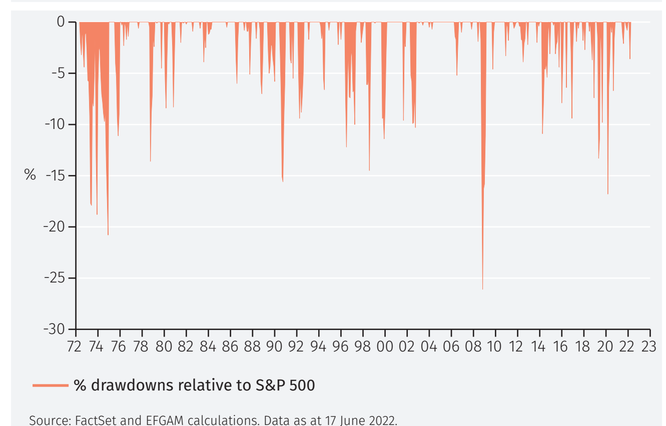
In order the generate this 48.83% return per annum an investor in the fund would need to stomach:

- 92 months where the fund was below the S&P 500 by 5% or more;
- 24 months where the fund was below by 10% or more;
- 11 months where the fund was below by 15% or more;
- 2 months where the fund was below by 20% or more;
- 1 month where the fund was below by 25% or more.

The maximum drawdown relative to the S&P 500 an investor would suffer would be 26.1% which occurred during the 2008 financial crisis. Other recent notable periods would also produce gut wrenching drawdowns. During the Dotcom bust of 2000 the fund would draw down by 11.4%, and during the Covid-19 crisis of 2020, by 16.8% (see Figure 2).

Hiring a fund manager with perfect foresight is of course not possible, but what about hiring one that consistently picks a significant number of stocks that outperform the benchmark?

2. Drawdowns relative to S&P 500



Using a Monte Carlo simulation, we constructed three stylised managers. One constructs a portfolio where just 50% of the stocks outperform over the next 5 years with quarterly rebalancing, another with 60% of the

[1] The peak-to-trough decline, before a new peak is reached

stocks outperforming, and a third with 70% of the stocks outperforming. How do the returns and drawdowns of these managers compare to the perfect foresight manager?

Over the 50-year period, the manager with a 50% 'hit ratio' delivered a 8.06% p.a. return, but with a maximum relative drawdown of 76% - not very attractive compared to the S&P 500 at a 10.67% p.a. The manager with a 60% hit ratio delivered a 11.38% p.a. return, a healthy 71bps of alpha per annum, but you would need to stomach a 49% maximum relative drawdown. The exceptionally good manager with a 70% hit ratio delivered a 14.47% p.a. return, or 407bps of alpha (excess return relative to the S&P 500) per annum, but even with this an investor would need to remain steadfast with a maximum relative drawdown of 34% compared to the benchmark.

In practice, fund managers are often fired for much smaller drawdowns than the ones above and even a perfect foresight fund manager would most likely have been fired many times during their tenure as manager of this fund.

Even a fund managed with perfect foresight would experience many periods of significant relative drawdowns in delivering the best possible portfolio return. The key lesson from this is that if one is invested in an investment process which delivers proven long term returns, one has to be willing to experience significant drawdowns to obtain better than benchmark performance. The key criteria for assessing whether or not to retain a fund manager should not be short periods of underperformance but rather the quality of their underlying investment process and how consistently their process is applied.

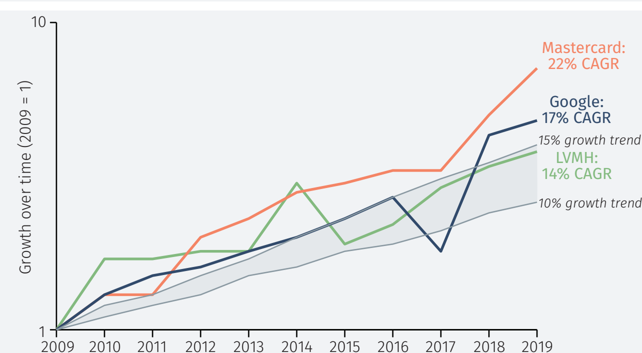
SECULAR GROWTH EXPLAINED

Jonathan Rawicz, Senior Portfolio Manager & Haichuan Yu, Portfolio Manager

Why do we invest in equities? A key reason is that equity investments compound over time. By investing USD 100 in a company that grows 10-15% per year for 20 years, that USD 100 turns into USD 673 at a 10% compound rate, or USD 1637 at a 15% compound rate (see Figure 3). In comparison, a 3% bond would return USD 181 for the same period.

These 10-15% 'compounders' are not as difficult to find as one might think, with many being household names: Google, Mastercard and Louis Vuitton, for example. We call them 'secular growers' – high quality companies with favourable secular trends (digital advertising, cashless payment and luxury democratisation, respectively).

3. Many household companies grew 10-15% per year* over the last decade, thanks to favourable secular growth trends



*Earnings per share (EPS) growth between 2009 and 2019, rebased to 2019. Google's 2017 EPS was impacted by a one-off tax impact. CAGR - Compound annual growth rate.
Past performance is not necessarily a guide to the future. Source: FactSet. Data as at 17 June 2022.

This strategy has served many investors well over the decades. However, as 'growth' stocks have underperformed the broader equity market more recently, one question emerges: is it the end of secular growth investing?

To answer this question, we examine the two main causes for the recent underperformance of growth stocks:

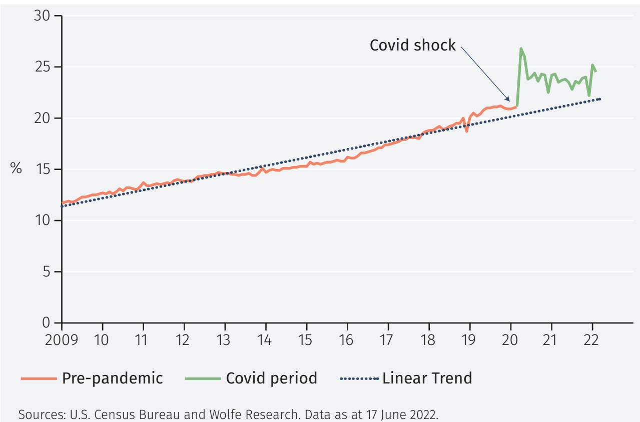
1. Secular growth: paused or broken?

The Covid-19 pandemic accelerated some secular growth trends. One example is e-commerce. Before the pandemic, US e-commerce sales had been growing at over 9% p.a. between 2009 and 2019. E-commerce penetrations (that is, as a percentage of total US retail sales) rose from 12.2% in 2009 to 20.8% by 2019, or roughly a 0.9% increase per year. In 2020, e-commerce penetrations soared due to lockdowns: from 20.9% in December 2019 to 26.8% in April 2020 – pulling forward four years of e-commerce growth in just four months (see Figure 4 overleaf).

Some of the 'pull-forward' effect will stick – for example an octogenarian who learnt how to shop online in 2020 might continue to shop online in future. But, in 2022 so far, there has been some normalisation between online and off-line shopping, as the world has reopened.

Note: The securities referenced above are used for illustrative purposes only and should not be deemed as a recommendation or investment advice to buy, sell or take any other course of action.

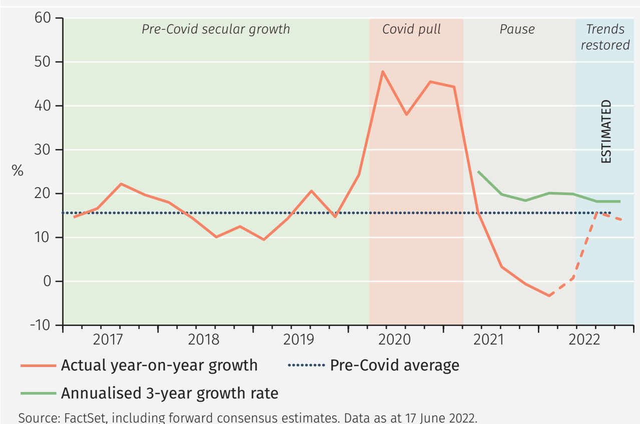
4. US e-commerce penetration was accelerated by Covid



This 'pull-forward and pause' effect was evident in Amazon's financial results. Amazon's online stores sales year-on-year growth rate jumped from 24.3% in Q1 2020 to 47.8% in Q2 2020. The growth rate stayed around 40% for four quarters, before starting to moderate in 2021. Since Q3 2021, Amazon's online sales have barely been growing at all.

We try to look through the Covid boost, by examining the 3-year period between 2019 and 2022. The annualised growth rate over that period is around 20% (the green line in Figure 5), suggesting that secular growth remains healthy. Indeed, Amazon's year-on-year growth rate should recover to 15% by late 2022, according to FactSet consensus estimates, in-line with the long-term secular growth trend.

5. Amazon online sales: year-on-year growth rate



Similar patterns also occurred in connected TV (Netflix and Roku), social media (Facebook and Snapchat) and some software applications (Adobe and Asana). Almost anything with a screen attached.

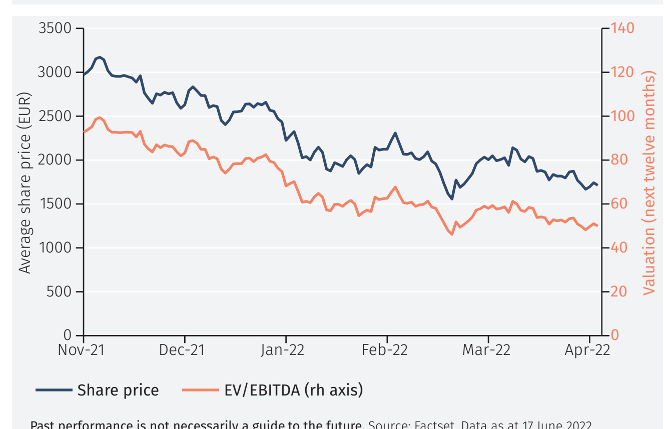
2. Rising bond yields compress equity valuations

Not all secular growth stocks experienced the same Covid impact. For example, we look at Adyen, a modern merchant payment service provider. Adyen's revenue grew 28% in 2020. Despite a strong 2021 when its revenue grew 46%, Adyen is still expected to grow 39% in 2022. Further, consensus 2022 expectations, for revenue and profits (EBITDA – earnings before interest, taxes, depreciation and amortisation), had not changed in the six months between November 2021 and April 2022. Yet, Adyen's share price dropped over -40% over the same period (see Figure 6).

6. Adyen's share price dropped over -40% in the last 6 months, despite maintaining strong growth rate in 2022

What happened? Valuation. Adyen's valuation, in terms of the Enterprise Value (EV)/EBITDA ratio, shrunk -46%, driving down the share price despite no changes to business fundamentals (see Figure 7).

7. Adyen's share price drop was entirely driven by valuations



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8. 100bps increase in Treasury yield compresses growth stocks' valuation far more (-30%) than value stocks' (-15%)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Terminal	Valuation	
November 2021: Discount rate = 2.0% 30-yr US Treasury + 5.5% equity risk premium = 7.5%													
Value stock cash flows (3% growth)	$10	$10	$11	$11	$11	$12	$12	$12	$13	$13	$224	$178.4	
Growth stock cash flows (10% growth)	$10	$11	$12	$13	$15	$16	$18	$19	$21	$24	$1,037	$571.7	
April 2022: Discount rate = 3.0% 30-yr US Treasury + 5.5% equity risk premium = 8.5%													**% fall in value**
Value stock cash flows (3% growth)	$10	$10	$11	$11	$11	$12	$12	$12	$13	$13	$192	$152.0	-14.8%
Growth stock cash flows (10% growth)	$10	$11	$12	$13	$15	$16	$18	$19	$21	$24	$741	$400.2	-30.0%

Source: FactSet, including forward consensus estimates. Data as at 17 June 2022.

In general, inflation concerns have been the the main reason for the valuation compression we have seen recently. Higher than expected inflation triggered fears that central banks would have to raise rates more aggressively than previously anticipated.

Higher rates hurt growth stocks more than value stocks. This is because when we value equities using discounted cash flow techniques, growth stocks' cashflows are further in the future and are therefore more sensitive to changes in discount rates. As illustrated in Figure 8 above, an increase in the 30-year Treasury yield (as occurred between November 2021 and April 2022) cuts growth stocks' valuation by 30% but value stocks' valuation my half that.

In short, the combination of secular growth trends taking a pause and the valuation compression from rising rates, both of which occurred in late 2021/early 2022, caused growth stocks to underperform.

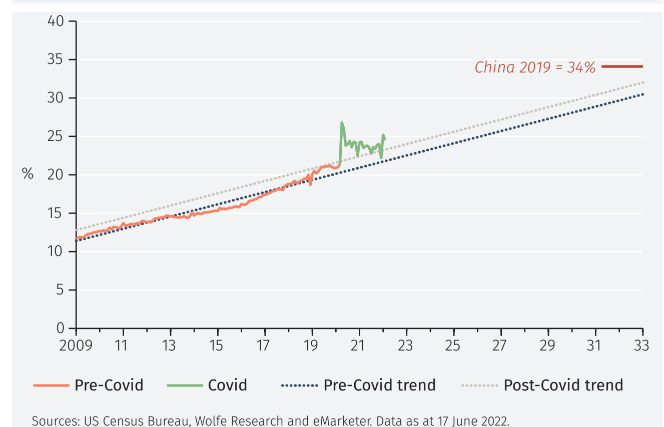
Now, whether this is the end of secular growth investing is down to two factors:

Is the secular growth trend broken?

We must assess each individual secular trend carefully. Some growth trends could sustain (digital cloud adoption), some are taking a pause (e-commerce and connected TV), while some might revert back to 2019 (in-house fitness?).

Staying with our e-commerce example, the US e-commerce penetration was 24.5% in February 2022. In comparison, the Chinese e-commence penetration already reached 34.1% in 2019 and jumped to 52% in 2021, according to eMarketer. The US e-commerce penetration had been rising by 0.9% per year in 2009-2019. If a similar adoption trend continues from 2022, the US e-commerce could continue to grow for at least 10 more years, before reaching China's 2019 levels (see Figure 9).

9. US e-commerce penetration has room to grow for at least another decade



Sources: US Census Bureau, Wolfe Research and eMarketer. Data as at 17 June 2022.

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Is valuation sensible?
It's difficult to be definitive in absolute terms, but relative valuations are certainly becoming interesting.

Solely looking at the numbers in Figure 10 below, most would prefer Company A to Company B, and Company C to Company D. A and C have far superior financial metrics, despite trading at similar valuations to B and D.

Company A is Google, B is Duke Energy (electric utilities), Company C is Microsoft and Company D is General Mills (food staples). In a volatile environment, value stocks, such as Duke Energy and General Mills, are in favour due to safe-haven status. These stocks may deserve some capital allocation currently. But over a longer time-horizon, it's secular growers like Google and Microsoft that deliver strong returns to patient investors.

To conclude, the underperformance of secular growth stocks since November 2021 can be attributed to a combination of 1) secular growth taking a pause to digest Covid gains; and 2) rising bond yields compressing equity valuations. Now, the questions for secular growth investors to figure out are: 1) are long-term secular growth trends intact or broken; and 2) is the valuation reasonable? If both answers are yes, then secular growth investing should continue to deliver long-term gains.

10. Which of the following companies would you prefer to own for 5 years: A or B, and C or D?

	Company A	Company B	Company C	Company D
Pre-Covid earnings growth (2015-2019 annualised)	21.1%	5.4%	36.0%	12.3%
Expected earnings growth (2022-2024 consensus)	17.0%	6.2%	16.5%	8.7%
Operating margin (2021)	30.5%	22.8%	41.6%	19.1%
Return on capital (2021)	29.6%	4.9%	32.9%	17.5%
Leverage (2021 EV/EBITDA)	-1.4 (net cash)	6.2	-0.7 (net cash)	1.9
Valuation (NTM* price /earnings, 30 April 2022)	19.7	19.5	27.0	30.3

Past performance is not necessarily a guide to the future. *NTM= next twelve months. Source: FactSet. Data as at 17 June 2022.

COMPANY CASE STUDIES

Jonathan Rawicz, Senior Portfolio Manager & Haichuan Yu, Portfolio Manager

A common regret we often hear is: "Why didn't I buy Amazon/Netflix/Apple stocks 15 years ago?". A $100 investment in these stocks back in 2005, would turn into USD 18,683 (Netflix), USD 6,384 (Apple) or USD 4,048 (Amazon) 15 years later. The same USD 100 invested in the S&P 500 index would have returned USD 267. (see Figure 11).

11. 15 year growth of a USD 100 investment

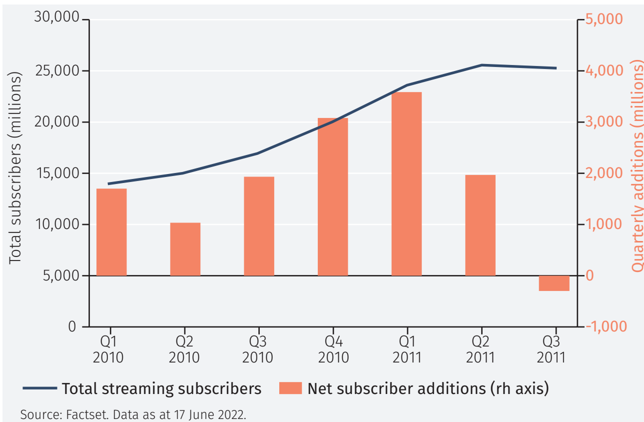
Past performance is not necessarily a guide to the future. Source: FactSet. Data as at 17 June 2022.

Even if you did buy these stocks in 2005, would you have held onto them? These are dominant market players today but their growth trajectory has not always been smooth.

Case study #1: Netflix in 2012
Netflix started as a DVD rental company and launched video streaming in 2007. By 2011, its streaming subscribers exceeded 20 million. In September 2011, Reed Hastings split the streaming business from DVD rental and raised prices. Customers were outraged. Meanwhile, competition was rising from the likes of Hulu and Amazon. Unprofitable international expansion was disliked by the market. Subscriber growth, the most important metric, stalled. Had Netflix run out of growth?

Note: The securities referenced above are used for illustrative purposes only and should not be deemed as a recommendation or investment advice to buy, sell or take any other course of action.

12. Netflix's subscriber growth slowed down drastically in 2011



Source: Factset. Data as at 17 June 2022.

Its share price plunged by almost 80% between July and December 2011 and stagnated for the whole of 2012.

13. Netflix's share price plunged 80% in late 2011

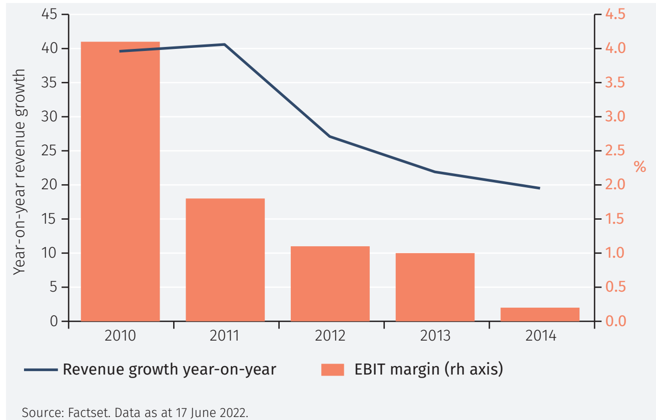
Past performance is not necessarily a guide to the future. Source: FactSet. Data as at 17 June 2022.

Case study #2: Amazon in 2014

In 2014 Amazon's revenue growth was decelerating, while spending heavily on cloud computing, logistics and media. Margins were also declining, leading to questions around the long-term viability of cloud computing, Prime and e-commerce. 2014 financials were disappointing: revenue growth slowed from 40% in 2011 to 19% in 2014, while operating margin dropped from 4% in 2010 to 0.2% in 2014. (see Figure 14). Investors would have wondered whether Amazon was ever going to be profitable.

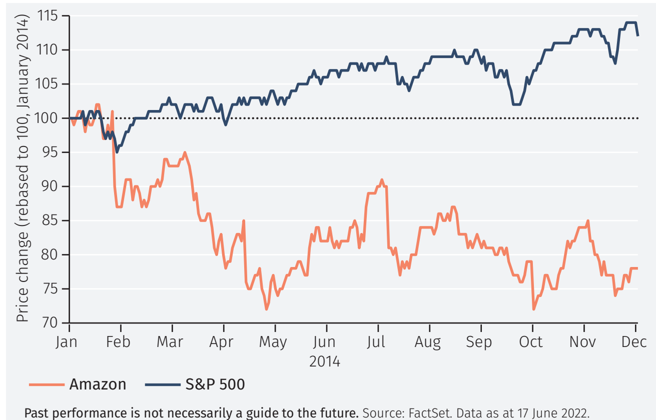
As a result, its share price dropped -22% in 2014, compared to a +12% rise for the S&P 500. (see Figure 15).

14. Amazon revenue growth slowed and profit margin evaporated in 2014



Source: Factset. Data as at 17 June 2022.

15. Amazon share price dropped over 20% in 2014



Past performance is not necessarily a guide to the future. Source: FactSet. Data as at 17 June 2022.

Case Study #3: Apple in 2015

Assume you held onto Apple shares through the 2008 financial crisis and the passing of Steve Jobs. In 2015, Apple was facing problems. The smartphone market began to saturate, replacement cycles lengthened, and competition was rising. Tim Cook was often viewed as lacking innovation. In 2016, iPhone unit sales started to decline (see Figure 16), and no new flagship product was in sight. Where was the growth going to come from? Apple's share price declined -25% between July 2015 and June 2016 (see Figure 17).

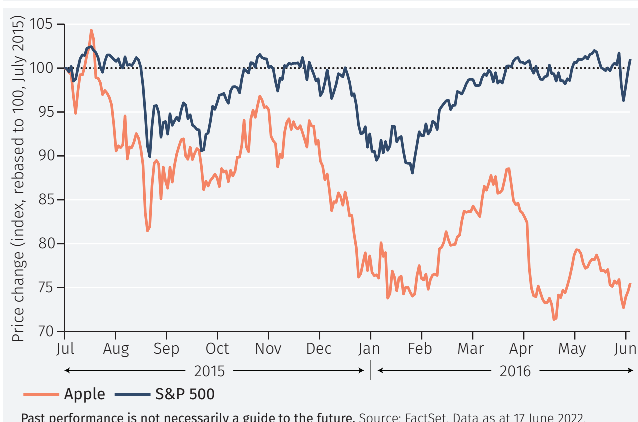
Would you have held onto your Apple stocks having underperformed the S&P 500? One person who went against consensus was Warren Buffett, who began buying Apple shares in 2016.

Note: The securities referenced above are used for illustrative purposes only and should not be deemed as a recommendation or investment advice to buy, sell or take any other course of action.

16. iPhone unit sale declined in 2016, as the market matured

Source: Factset. Data as at 17 June 2022.

17. Apple share price dropped 25% in 2014-2015



Past performance is not necessarily a guide to the future. Source: FactSet. Data as at 17 June 2022.

In conclusion, even for the most successful equity stories, periods of underperformance are inevitable. These periods could last for over a year. That's why long-term investing is easy in theory but difficult in practice.

18. Share prices in the 15 years between 2005-2019

	Netflix	Apple	Amazon
Total return	18270%	6284%	4072%
Annualised return	42%	32%	28%
Maximum drawdown*	-82.0%	-60.9%	-65.3%
Days taken to recover to a prior peak	542	497	504
Number of over -10% daily price drops	17	3	12
Valuation (NTM price /earnings, 30 April 2022)	19.7	19.5	27.0

*The peak-to-trough decline, before a new peak is reached.

Past performance is not necessarily a guide to the future. Source: FactSet. Data as at 17 June 2022.

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