

### The Death of the Value Anomaly revisited for COVID-19

Mark Arnold, Chief Investment Officer, Hyperion Asset Management Jason Orthman, Deputy Chief Investment Officer, Hyperion Asset Management

In this white paper we revisit the topic of the Value Anomaly and why it disappeared after the GFC. We also review the underperformance of traditional value style investing ("Value") in Japan post the GFC. We have updated our predictions for the likely success of value investing in a COVID-19 and post COVID-19 world.

The last 13 years have been extremely difficult for traditional value style investors but none of this underperformance should be surprising given Value's consistent poor performance during difficult economic and corporate profit conditions going back almost one hundred years. Importantly in this white paper, we explain why Value is also unlikely to produce sustained attractive returns in the future.

The following chart is an updated version of the one that was presented at the Portfolio Construction Forum in Sydney in August 2019. The latest version of the chart clearly shows the negative impact that the COVID-19 crisis has had on the performance of Value over the past few months. The dramatic underperformance is what we expected from Value during an economic downturn. As we outlined in our previous white papers on the Value Anomaly, **Value as an investment style does not protect investors when they need it most, during difficult economic conditions.** Value is a fair-weather investment style that is poorly suited to the low growth, internet-enabled and disrupted world we are likely to face over the next decade and beyond.



### Figure 1: Fama French HML Index updated for COVID-19

Source: Kenneth R. French, Hyperion Asset Management



The red dots in Figure 1 show the periods associated with weak nominal GDP growth and weak aggregate corporate profit growth in the U.S. In periods of low nominal GDP and aggregate corporate profit growth, Value has underperformed. Starting with the Great Depression in late 1929 and the early 1930s, Value underperformed; in the recession in 1937-1938, Value underperformed. This underperformance was repeated in the recessions of 1949, 1953, 1958 and 1960, right through to the GFC in 2008 and beyond.

Only in one recession did Value perform well, this was in the recession of 1973-1974. The reason for this was that nominal GDP and aggregate corporate profit growth were still strong. During this period inflation increased to double-digit levels because of the U.S. abandoning the gold standard and the OPEC oil embargo dramatically increasing oil prices. Average and below average quality businesses performed relatively well during this period because their sales and profit growth (in nominal terms) were strong. In addition, value stocks were less impacted by the material increase in bond yields that occurred during 1974 compared with growth stocks. Value tends to perform poorly in recessionary conditions unless these conditions are associated with strong aggregate profit growth, high levels of inflation and higher interest rates.

Value style investing is not defensive, and it is unlikely to protect capital in difficult economic circumstances. It is an investment style that does very well in accelerating and high growth economic environments when confidence levels are high and competition levels are low and declining. Conversely, Value performs very poorly in decelerating and low growth economic environments when competition and disruption levels are high and increasing.

Key factors determining Value's relative performance:

- 1) aggregate demand growth;
- 2) levels of competition and disruption;
- 3) aggregate profit growth;
- 4) nominal GDP growth (comprising real GDP growth and inflation);
- 5) the distribution of aggregate profits and profit growth;
- 6) confidence in future aggregate profit growth;
- 7) confidence in future aggregate demand growth; and
- 8) confidence in future nominal GDP growth.

### Value stocks performed well pre-GFC due to significant economic tailwinds

In the "economic growth bubble" of 1950 to 2007, average quality companies grew revenues at high rates (in-line with nominal GDP) as they shared in the strong growth of the economy. The average rate of nominal GDP growth during this extraordinary period was above 8% p.a. for the global economy and approximately 7% p.a. for the U.S. economy.





Figure 2: U.S. corporate profits and U.S. nominal GDP (indexed from 1947)

Correlation between U.S. Corporate Profits vs. U.S. Nominal GDP

Source: U.S. Bureau of Economic Analysis 2020, Hyperion Asset Management

Corporate sector revenues tend to grow in line with nominal GDP over time. For businesses there are two potential sources of revenue growth: 1) sharing in the growth of the overall economy; and 2) taking market share. Average quality businesses have limited ability to organically increase market share, therefore, they are normally highly reliant on economic growth to be able to grow their sales. Thus, during the "economic growth bubble" period, average quality businesses could grow their revenues organically at attractive, high single digit rates merely because the overall economy grew at these high rates.

The fundamental performance of average quality businesses was further enhanced by the natural inverse relationship between the rate of economic growth and the level of competition. Average businesses benefited relatively more than high quality businesses because of greater sensitivity to competition levels. High quality businesses deal better with higher levels of competition because of stronger value propositions and competitive advantages. Thus, high quality businesses benefited less in a relative sense during the high growth, less competitive decades leading up to the GFC as it was easier for all businesses to get a share of the growing economic pie. Further, disruption levels were low during the "economic growth bubble" period, with most major established industries enjoying extended periods of competitive stability.

**Economic tailwinds** prior to the GFC included:

- 1) strong global population growth and young populations;
- 2) the financialisation of society, which allowed people to spend more than they earned and brought forward aggregate demand growth;
- 3) expansion of a robust middle-class, at least up until the 1970s, which boosted levels of economic growth;

Note: between 1947-2007 the annualised CAGR of U.S. Corporate Profits and U.S. Nominal GDP was 6.9% and 6.9% respectively. Whilst the annualised CAGR of U.S. Corporate Profits and U.S. Nominal GDP between 2008-2020 was only 2.2% and 3.3% respectively.



- unwavering confidence that the economic outlook was bright partly because of recency bias, momentum-based feedback loops, and a general belief that central banks and governments had the power to ensure that future economic growth rates would be strong;
- 5) the development and commercialisation of powerful machines driven by cheap fossil fuelbased energy;
- 6) a general belief that there were abundant natural resources that would always be available to fuel strong economic growth; and
- 7) lower levels of competition and disruption.

These tailwinds were considered normal and permanent at the time.

However, we believe that these tailwinds were unique to this phase of economic development and when viewed in the context of the history of civilisation were temporary and one-off in nature.

The tailwinds outlined above have been replaced with headwinds including:

- 1) declining global population growth rates and ageing populations;
- 2) high debt levels in most major economies;
- 3) rising wealth and income inequality and the gradual hollowing out of the middle class;
- 4) increasing natural resource constraints and disruptions including climate change; and
- 5) technology based disruption of human capital markets, energy markets and the deflationary impact of new innovative products.

Figure 3: Global population growth has been declining for many decades



### Average Annual World Rate of Population Growth

Source: United Nations Population Division, Hyperion Asset Management





Figure 4: Global nominal GDP growth has been low post the GFC

Source: The World Bank Group, Hyperion Asset Management

# The impact of COVID-19 will impede future long-term rates of economic growth

Many of the factors that we identified as being detrimental to value investing have been accentuated by the pandemic. COVID-19 has fast-forwarded the impact of our long-standing predictions for a low growth, disrupted world. Higher debt levels and the accelerated loss of middle-income jobs will act to reinforce and strengthen the economic headwinds the global economy faces over the coming decade.

Debt levels for most economies will increase significantly as a result of the COVID-19 crisis. Many governments have undertaken large spending programs that have been used to reduce the negative impact of the lockdowns and social distancing measures on short-term economic activity. Government debt has increased significantly in most economies as a result of the COVID-19 crisis.



Figure 5: U.S. Government debt levels are estimated to have moved higher during the COVID-19 crisis

Source: IMF, Hyperion Asset Management



Corporate debt as a percentage of GDP has been increasing in the U.S. over the past 7 decades as part of the financialization of society. The COVID-19 crisis has caused a further spike in corporate debt levels in the U.S.





Source: Federal Reserve Bank of St. Louis, Hyperion Asset Management

Higher debt levels will impede future long-term economic growth rates. High debt levels make businesses and households more fragile and less likely to consume, invest and take risks.

## COVID-19 gives the world a glimpse into the long-term future

We believe a new economic environment is disrupting traditional investment models of most incumbent asset managers. Investment frameworks that rely on traditional investing models such as Value will not work in this economic environment.

The outperformance of Value is associated with the following:

- 1) strong growth in aggregate corporate profits and nominal GDP;
- 2) periodic short-term economic downturns followed by extended strong recoveries;
- 3) structural stability and low levels of competition and disruption;
- 4) mean reversion in financial performance factors; and
- 5) average quality businesses sharing and benefiting from high levels of aggregate demand growth.

**Traditional value investment** focuses primarily on historical accounting-based data and short-term forecasts to direct investment decisions. This style of investor uses metrics that are **short-term** in nature and primarily based on **backward looking** accounting data. Value investors **emphasize mean reversion** to average values based on historical company, industry and economic data. Traditional value investors assume that historical financial data is relevant to the future by trying to identify "bargains" based on short-term financial metrics such as below average P/E, P/B, EV/Sales Ratios and/or above average dividend yields. These types of stocks have usually experienced below average short-term growth rates compared with other similar companies or compared with their own historical growth rates. These stocks are expected to mean-revert to higher growth rates over time.



Traditional value investing relies on both EPS growth and P/E Ratio expansion during the holding period to produce attractive returns. P/E Ratio expansion is reliant on the expectation of future EPS growth. A stock's P/E Ratio is unlikely to increase during the holding period unless the market believes the EPS growth outlook is good and improving.

### Recent dispersion between Growth and Value to continue

Value investors talk about Growth outperforming Value since the GFC and argue that there should be a recovery or mean reversion where Value will recoup its underperformance over the past 13 years. This is the extreme **dispersion gap** argument that growth stocks are too high and value stocks are too low relative to historical averages.

We do not believe there will be mean reversion in this situation given that the economic environment has structurally changed from a high aggregate profit growth world to a much lower growth world. Any sustained mean reversion is unlikely because the economic conditions that drove the outperformance of Value prior to the GFC no longer exist in the world we face over the next decade.

Also, the mean reversion argument changes dramatically depending on when you start calculating the average from. If you go back to the 1920s then it is Value that is still overstretched and still needs to suffer further underperformance, to get back to a more balanced position relative to Growth. A low growth economic environment is likely to allow growth to continue to outperform Value and reduce the dispersion gap that opened during the "economic growth bubble" period from 1950 to 2007.

The dispersion between Value and Growth has been narrowing over the past 13 years since the GFC. We believe this underperformance of Value will continue as many low P/E Ratio stocks continue to suffer from ongoing disruption and low levels of demand growth over the next decade. On the other hand, high-quality structural growth businesses that are less sensitive to economic conditions and possess an ability to grow their revenues and profits organically are relatively more valuable because in a low growth competitive world, growth is scarce and valuable.



Figure 7: Fama French Value and Growth – Value looks stretched relative to Growth

Source: Kenneth R. French, Hyperion Asset Management



In the future there will still be periods of accelerating growth in aggregate demand and associated periods of improved profit growth that will provide a temporary tailwind to Value but a sustained high growth world seems very unlikely over the next decade. Therefore, we believe that Value will continue to underperform Growth over the long term. We believe cyclical rotations from Growth to Value will get smaller and shorter as investors begin to accept the new economic framework we have identified.

The difficult economic conditions associated with the COVID-19 crisis will eventually end and there will be a period of growth to bring the economy back to a more normalized level of economic activity. However, once the normalized level of economic activity is reached, **we should then revert to a low growth or no growth economic environment.** We are very unlikely to return to a sustained period of strong economic growth.

### Value investors bet against innovation and progress

Traditional value investing had success in the high growth world of the past, where there were low levels of disruption and organically driven structural market share changes were less frequent. Growth slowdowns or profit declines for many companies were temporary in nature because the overall economic pie was rapidly expanding. Also, organically derived market share changes tended to be temporary and even if they were sustained, they were relatively less important to overall sales growth because of the high level of aggregate demand growth. During this period, there were relatively low levels of differentiation between competitors and average quality businesses could still enjoy reasonable growth because of long periods of strong aggregate demand growth. Recessions were short-lived and a company selling on a low P/E Ratio had a reasonable probability of producing a recovery in sales growth rates and profits once the economy recovered or it was able to stabilise and reverse market declines against fairly similar competitors.

Stocks that have weak value propositions or low levels of innovation are less likely to be able to reverse their market share losses in a disrupted world, where there are large network effects and disruptive value propositions. In fact, market share losses for many average quality businesses are likely to continue in the long term and result in ongoing declines in sales and EPS with no sustained recovery.

Value investors tend to bet against structural change, innovation, and progress. They rely on high levels of strong aggregate corporate profit growth. They need change to be temporary and mean reverting for their style of investing to add value.

The companies that value investors own are normally sensitive to overall rates of aggregate profit growth. Aggregate profit growth is, in turn, dependent on aggregate demand growth and low levels of competition, innovation and disruption. Value investors are attracted to cyclical and mature industries and businesses such as traditional banks, traditional retail, commodity businesses, capital intensive industrial businesses, auto, energy, utilities, and traditional manufacturing businesses. These types of businesses do well in a high demand growth economic environment but very poorly in a low growth disrupted environment.

Value investors depend on two main types of **mean reversion**. First, mean reversion caused by regular economic cycles with longer periods of strong economic and aggregate profit growth followed by shorter recessionary periods. Second, mean reversion caused by temporary market share loss or other financial underperformance that is transitory in nature and which is followed by a recovery. Traditional value investors can be said to be "buying straw hats in winter" because winter is temporary, and summer will inevitably follow.



Value style investors believe that change is temporary and mean reverting, a reasonable thesis when the economy experiences high levels of growth and structural stability but not for the world we face over the next decade and beyond. In this newly disrupted, low growth, competitive, internet-enabled world - mean reversion of growth rates for businesses has been replaced with dispersion; and betting against change has been replaced with betting on progress.

### Value investing is reliant on average quality businesses growing at attractive rates

In a low growth world, traditional value stocks such as the banks and retailers are unlikely to produce attractive returns. This is because the tailwind of strong levels of credit demand from the financialisaton of society has been replaced by headwinds that will hinder future long-term growth. Without a sustained period of future strong EPS growth then P/E Ratios are also unlikely to mean revert to higher levels.

In a low growth, disrupted economic environment where most average quality businesses cannot grow their sales and EPS, these stocks become value traps. The only long-term winners in a disrupted low growth world are the disruptors themselves. The average quality "old world" businesses with weak value propositions and legacy technology will suffer permanent declines in revenues and profits and most will ultimately have zero intrinsic value.

In a low growth economic environment, most businesses suffer because profit growth is heavily dependent on the growth in the level of overall demand. If the rate of growth in aggregate demand is weak, this tends to naturally increase the level of competitive tension as market participants try to expand sales in the face of weak demand growth. If that lower level of demand growth is combined with a high level of disruption, then a situation arises where most businesses have stagnant or declining revenues, declining profit margins and declining returns on capital. If these businesses have debt, then financial leverage will magnify declining intrinsic values. We believe most businesses are losing market share to a few emerging elite businesses with very strong value propositions.

### Morningstar Survey – Value versus Growth

According to the June 2020 Morningstar Australian Institutional Sector Survey, the average growth manager has outperformed its Value counterparts in Global Equities by 1140 bps p.a. and 570 bps p.a. over 5 and 10 years, respectively. The average growth manager has outperformed its value counterparts in Australian Equities by 380 bps p.a. and 200 bps p.a. over 5 and 10 years, respectively.

	Global Equities			Australian Equities		
	Growth	Value	Excess Return	Growth	Value	Excess Return
1 Month	-0.4%	-1.8%	1.4%	2.4%	1.6%	0.8%
3 Months	10.7%	3.0%	7.7%	18.6%	16.3%	2.3%
FYTD	20.1%	-3.6%	23.7%	-3.0%	-15.1%	12.1%
1 Year	20.1%	-3.6%	23.7%	-3.0%	-15.1%	12.1%
3 Years (pa)	19.4%	3.4%	16.0%	8.1%	1.8%	6.3%
5 Years (pa)	15.6%	4.2%	11.4%	8.5%	4.7%	3.8%
10 Years (pa)	15.1%	9.4%	5.7%	9.6%	7.6%	2.0%

#### Table 1: Excess returns from growth style managers

*Source:* Morningstar, Hyperion Asset Management

Returns: The table uses median manager returns; excess return illustrates Growth median Outperformance/Underperformance relative to Value



### Pre-GFC data and relationships are not relevant in the new economic environment we face

We believe that high levels of economic growth are not normal or sustainable over long periods of time. Prior to the first and second industrial revolutions, **economic growth rates were generally very low for thousands of years.** Most of the 20<sup>th</sup> Century (particularly the second half) was a period of strong economic growth. This strong growth was driven by powerful machines and other related technology developed and commercialised as part of the second industrial revolution and the discovery of cheap fossil fuel-based energy, primarily oil. This was a unique period in history that is unlikely to be repeated over the next decade.



Figure 8: Real global GDP growth over the past 2000 years

Source: The World Bank Group, Angus Maddison

## Aggregate corporate profit growth rates and nominal GDP growth rates

The six-decade period up until the GFC was a period of strong economic growth, with low levels of disruption producing an economic environment that was ideal for value style investors. Figure 9 illustrates the relationship between nominal GDP, corporate profits and the Value Anomaly in the U.S. in the 12 years prior to the GFC and the 13 years after the GFC. The period before the GFC was a strong period of growth in both nominal GDP and corporate profits in the U.S. During this period of strong economic and profit growth, Value produced strong outperformance. However, in the years after the GFC, nominal GDP and corporate profit growth been much weaker than the pre-GFC period and during this period Value has performed poorly.





#### Figure 9: Weak corporate profit growth in the U.S. after the GFC

Source: U.S. Bureau of Economic Analysis, Kenneth R. French, Hyperion Asset Management

### Japan shows the importance of strong aggregate profit growth to the Value Anomaly

Even though nominal GDP growth in Japan has been weak since the mid-1990s, aggregate corporate profit growth was strong over the period from the mid-1990s to the GFC. The strong aggregate corporate profit growth during the period up until the GFC is shown in Figure 10. After the GFC aggregate corporate profit growth has been weak.



Figure 10: Japan - strong aggregate corporate profit growth before the GFC

*Source:* Ministry of Finance Japan, MSCI, Bloomberg, Goldman Sachs Global Investment Research, Hyperion Asset Management



The strong aggregate profit growth in Japan prior to the GFC enabled value style investing to perform well, despite the low level of nominal GDP growth during this period. However, post the GFC aggregate profit growth in Japan has been weak and this has resulted in the significant underperformance of Value. The performance of the value style of investing in Japan is illustrated in Figure 11.



Figure 11: Value has under-performed Growth in Japan post GFC

Source: MSCI, Bloomberg, Data compiled by Goldman Sachs Global Investment Research.

### Structural growth investing performs well in a low growth economic environment

In this low growth economic environment, we believe **Quality factors also become more relevant**. This means investors need to emphasise business analysis over trading ideas and long-term holding periods over "renting" stocks short term. Investing is about looking forward and forecasting future free cash flows. Quality structural growth portfolios are likely to out-perform in a low growth environment because the underlying businesses in these portfolios have the ability to grow their sales organically by taking market share. Other Quality factors include superior financial strength from a strong balance sheet that reduces a business' vulnerability to an economic crisis. The benefits of a Quality growth portfolio were demonstrated through COVID-19 where modern businesses outperformed those with higher fundamental risk such as traditional value and cyclical stocks.

## Conclusion

In a low growth world, most businesses suffer more because they are highly reliant on economic growth for their own growth. This has become very clear through COVID-19. In a low growth economy, average quality businesses can only grow their revenues organically in line with nominal rates of economic growth. Only superior businesses, that can take market share, can produce organic revenue growth materially above nominal GDP growth levels on a sustained basis. In a low growth world, competition will increase, the intrinsic value of average businesses is likely to decline, and value traps will become more widespread. The Value Anomaly is dead.

- Mark Arnold (CIO) and Jason Orthman (Deputy CIO)



**Disclaimer** –Hyperion Asset Management Limited ('Hyperion') ABN 80 080 135 897, AFSL 238 380 is the investment manager of the Funds. Please read the Product Disclosure Statement ('PDS') in its entirety before making an investment decision in the Funds. You can obtain a copy of the latest PDS of the Funds by contacting Hyperion at 1300 497 374 or via email to <u>investorservices@hyperion.com.au</u>.

Hyperion and Pinnacle Fund Services Limited believes the information contained in this communication is reliable, however no warranty is given as to its accuracy and persons relying on this information do so at their own risk.

Any opinions or forecasts reflect the judgment and assumptions of Hyperion and its representatives based on information at the date of publication and may later change without notice. The information is not intended as a securities recommendation or statement of opinion intended to influence a person or persons in making a decision in relation to investment. This communication is for general information only. It has been prepared without taking account of any person's objectives, financial situation or needs. Any person relying on this information should obtain professional advice before doing so. To the extent permitted by law, Hyperion disclaim all liability to any person relying on the information in respect of any loss or damage (including consequential loss or damage) however caused, which may be suffered or arise directly or indirectly in respect of such information contained in this communication.