

***Revisiting a low growth, low interest rate, low inflation world through COVID-19***

Mark Arnold, Chief Investment Officer, Hyperion Asset Management

Jason Orthman, Deputy Chief Investment Officer, Hyperion Asset Management

---

In this white paper series, we examine whether inflation is likely to stay at low levels over the next decade. We also examine how future inflation and overall economic growth rates will impact the attractiveness of the returns Hyperion's global equity strategy is likely to produce in the long run. The main topics covered in this series are addressed in five interrelated papers:

*Executive Summary*

*Part 1 - Why the recent increase in inflation and growth is temporary;*

*Part 2 - Why the rotation to lower quality value stocks will not be sustained;*

*Part 3 - The relationship between growth, inflation, interest rates and valuations;*

*Part 4 - Why high-quality businesses can handle high inflation better than most other investments; and*

*Part 5 - What if our views on inflation turn out to be wrong?*

## **Revisiting a low growth, low interest rate, low inflation world through COVID-19**

### **Executive Summary**

Mark Arnold, Chief Investment Officer, Hyperion Asset Management

Jason Orthman, Deputy Chief Investment Officer, Hyperion Asset Management

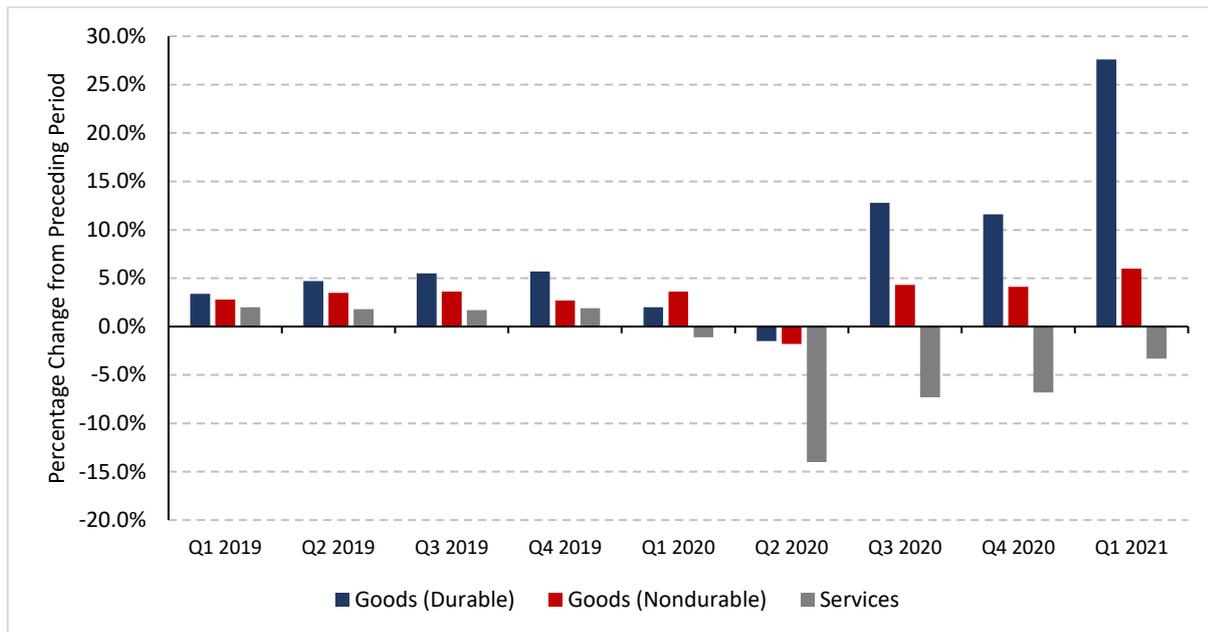
---

Long-dated government bond yields have increased over the past year as the economic outlook has improved and inflation expectations have increased. Recently, the 10-year U.S. government bond yield has risen sharply and is now approximately 136bps compared to a low of 50bps last year. We continue to believe that inflation (and interest rates) will remain lower for longer, with our base assumption of 10-year U.S. bond rates to average 250bps over the next 10 years. It is worth noting that this yield is above the average since the Great Recession of approximately 230bps. **Technology-based innovation and disruption is by its very nature deflationary** because it results in better products at lower prices. In fact, we believe we are at the onset of radical technological disruption, and the cadence of innovative product launches should increase. We anticipate that any meaningful inflation will be transitory and any inflationary influences, including “base effects,” will fade over the next twelve months.

Hyperion believes the world is facing a **very high level of innovation and disruption** over the next decade. Advancements in artificial intelligence (“AI”), machine learning (“ML”) and robots will disrupt human capital markets and reduce the pricing power of labour. Renewable energy technology, distributed power grids, electric vehicles, and autonomous driving software and hardware will make the cost of energy and transportation significantly less expensive. The ongoing influence of the internet, smart phones and e-commerce platforms will also continue to apply downward pressure on profit margins for many businesses and help keep prices low. The effect of ongoing innovation will result in most legacy businesses being forced to discount their products and services in a futile attempt to maintain their market share and sales in the face of superior, more relevant products from innovative companies.

In addition, Hyperion believes **aggregate demand growth is likely to stay subdued in the long term** because of high debt levels, ageing populations, lower population growth rates, rising wealth inequality/hollowing out of the middle class, and environmental constraints and disruption. During the COVID-19 crisis, most consumer-based expenditure has been directed away from services like travel and restaurants towards goods. This is shown below in Figure 1. This reallocation of consumer spending away from services and towards goods is temporary and likely to reverse over the next twelve months as global economies reopen and transfer payments recede.

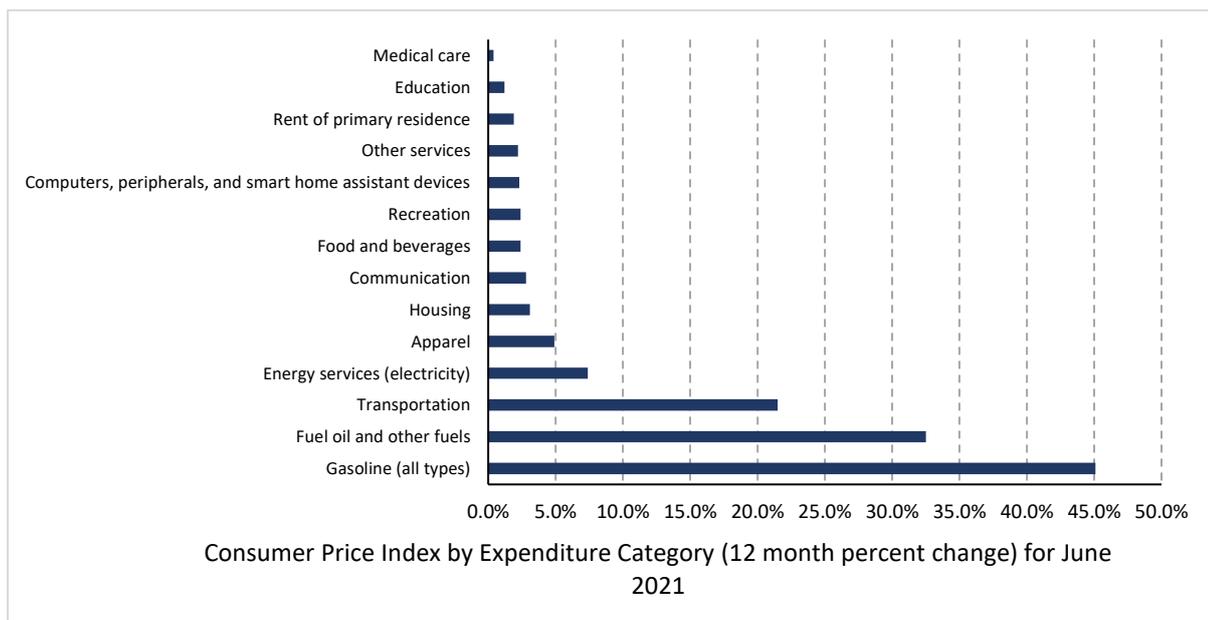
**Figure 1:** Quarterly U.S. personal consumption expenditures percentage change from preceding period



**Source:** U.S. Bureau of Economic Analysis (2021). Note: Q1 2021 is a revised estimate. Data from latest U.S. Bureau of Economic Analysis released on 24 June 2021.

Inflation has picked up in the U.S. over recent months, but this is likely to be temporary because it is being driven by strong demand from the cyclical recovery post the COVID-19 economic downturn. The demand for transportation and travel has gone from very low levels during the worst of the COVID-19 lockdowns to a more normalised level of demand currently. This has contributed to temporary price increases in used cars, gasoline and certain airline tickets.

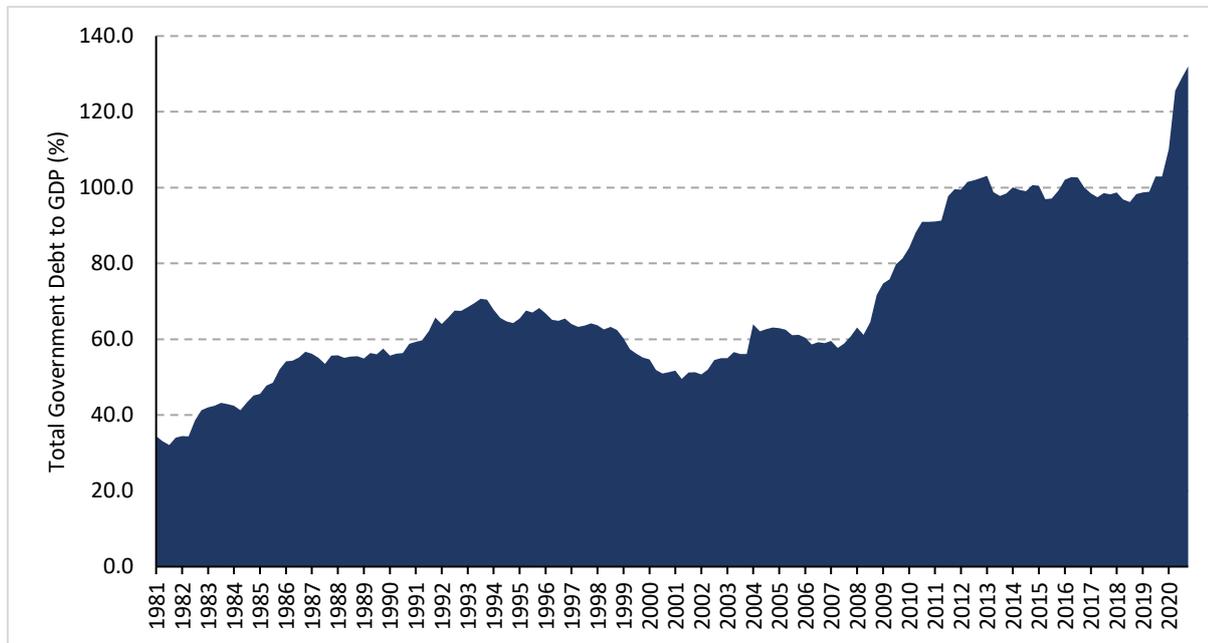
**Figure 2:** Consumer Price Index by expenditure category in the U.S. (12-month percent change) for June 2021



**Source:** U.S. Bureau of Labor Statistics. Data published in July 2021.

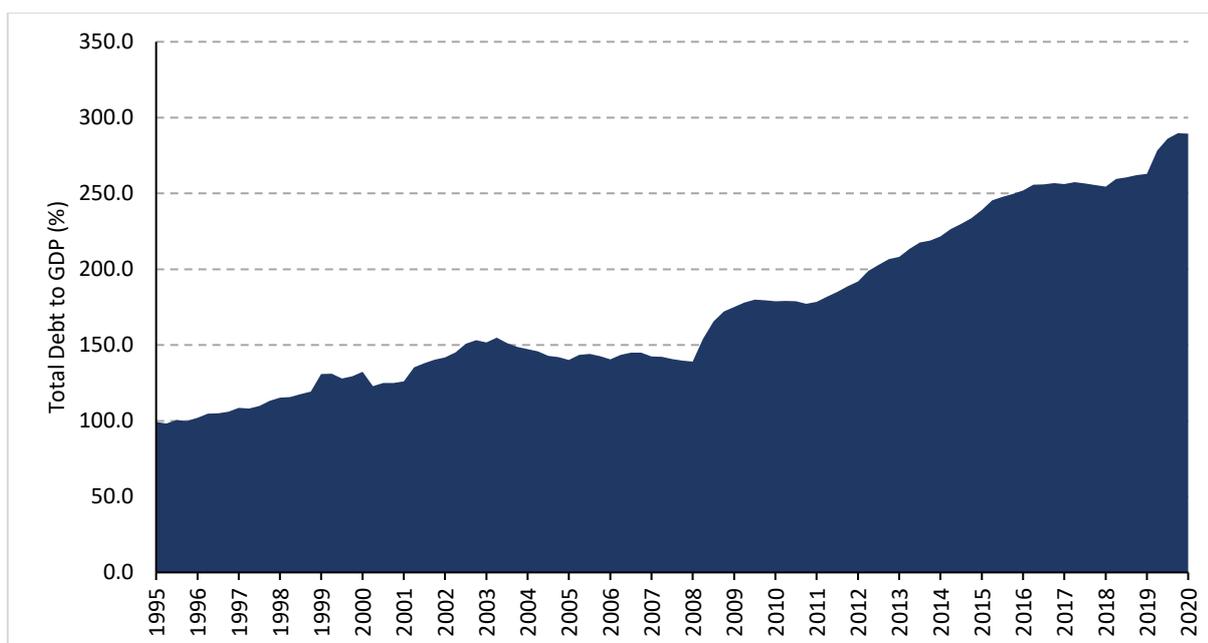
We believe there are **diminishing returns from increasing use of debt**. The financialisation of society over the past half century has accelerated historical economic growth rates. Most major economies have used debt to help boost historical growth rates. In the U.S. total debt to GDP, where debt equates to total credit to the non-financial sector, has increased from 133% in June 1981 to 296% in December 2020. Over the same time period, U.S. government debt to GDP has increased dramatically from 33% to 132%.

**Figure 3: Government debt to GDP - U.S. (%)**



*Source: BIS (2020) United States credit to general government as percentage of GDP (Adjusted for breaks)*

**Figure 4: Total Debt to GDP – China (%)**



*Source: BIS (2020) China credit as percentage of GDP (Adjusted for breaks)*

Stocks that have sustainable business models tend to have longer durations compared to lower quality, less sustainable stocks. That is, they sell on higher short-term price earnings ratios, and therefore, more of their expected future free cash flows are further out in the future. All other things being equal, longer duration assets, including stocks, tend to be more sensitive to changes in long-term bond yields and discount rates. However, the duration of a stock as a measure of its share price sensitivity to changes in interest rates is only valid if the nominal growth rates in the future free cash flows do not change by a similar degree to broadly match the change in long-term bond yields and discount rates.

If our views on higher inflation being transitory turn out to be incorrect, then we believe that allocating capital to high quality businesses that have pricing power and high levels of structural growth will help protect against high inflation levels. We believe most of the companies in our portfolios can pass on cost inflation to their customers, thus enabling them to retain their future earnings and cash flows in “real” (inflation-adjusted) terms. The ability of the stocks in our portfolios to maintain the real value of their future earnings should allow them to minimise the negative impacts of higher inflation over the long term.

In addition, extremely high structural growth stocks are in a better position to handle high levels of inflation compared with stocks with a more modest growth rate. Even if we assume these high-quality stocks are not in a position to increase the nominal value of their future free cash flows and thus retain the real value of those free cash flows, the relative impact on the cash flow is lower.

**In a relative sense, the higher the nominal structural growth rate for a company, the less the real growth rate declines for any given increase in inflation.** A business with a 40% structural growth rate with 10% inflation suffers a 25% decline in real structural growth (compared to a zero-inflation situation). Contrast that with a 20% nominal growth rate company that would suffer a 50% decline in real growth from a move in inflation from 0% to 10%.

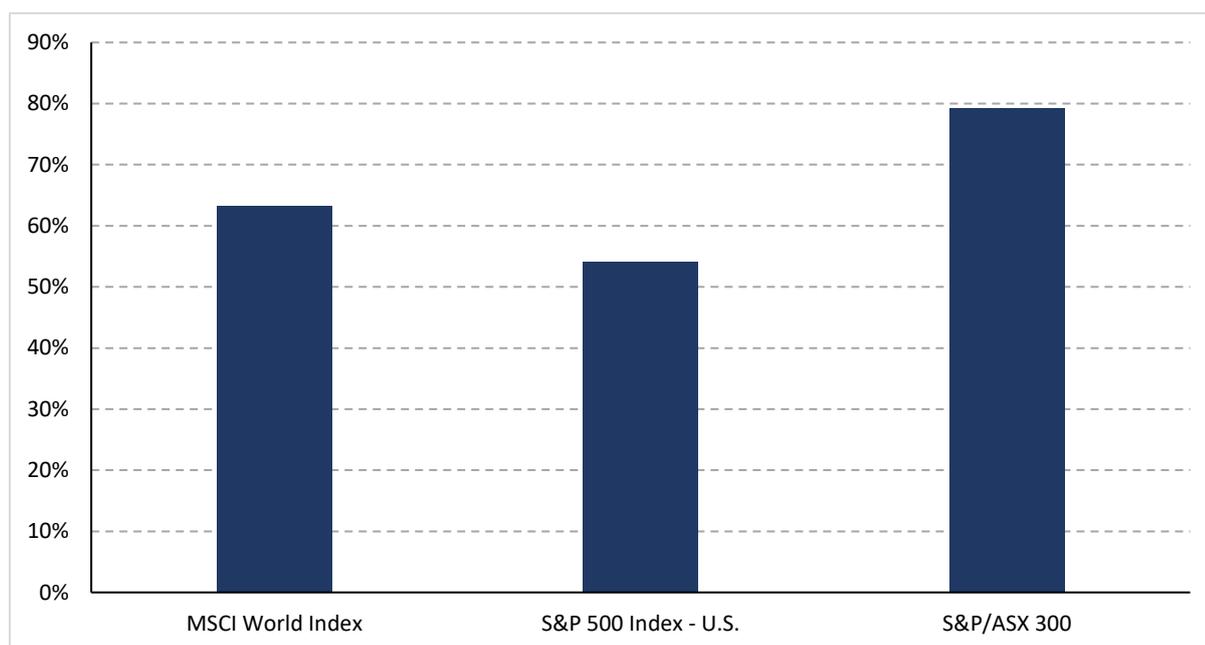
Businesses that can sustain high real growth rates typically have the following attributes:

- 1) strong and sustainable value propositions;
- 2) innovative cultures that actively improve the features and quality of the existing products and create new products over time;
- 3) yet to fully monetise the value of their existing product offering; and
- 4) revenues that are small relative to the size of their total addressable market (“TAM”).

Low quality businesses will suffer the most in a sustained high inflation environment, because many of these businesses will be unable to pass the cost inflation they experience on to their customers. High quality, structural growth companies should perform better in a relative sense than broader equity benchmarks, which are dominated by “old world” businesses. We define old world businesses as those that are no or low growth and/or are being disrupted by a far superior product or service.

Hyperion estimates 79% of the stocks (by index weight) in the Australian S&P/ASX300 Index can be categorised as old world. Outside Australia, 63% of the MSCI World Index and 54% of the U.S. S&P 500 Index have old world characteristics. This means the level of fundamental risk in the main benchmarks globally is high, as they are dominated by low growth businesses that are being disrupted by higher growth, more modern challengers. This disruption is being driven by the stronger value propositions that these modern businesses offer consumers. Over the next decade, we anticipate that there will be significant levels of “creative destruction” as this transition from incumbents to challengers progresses. In this highly competitive environment, it will be difficult for these large, listed businesses to pass on any input cost pressures in the form of higher prices.

**Figure 5:** Proportion of benchmarks that are “old world”

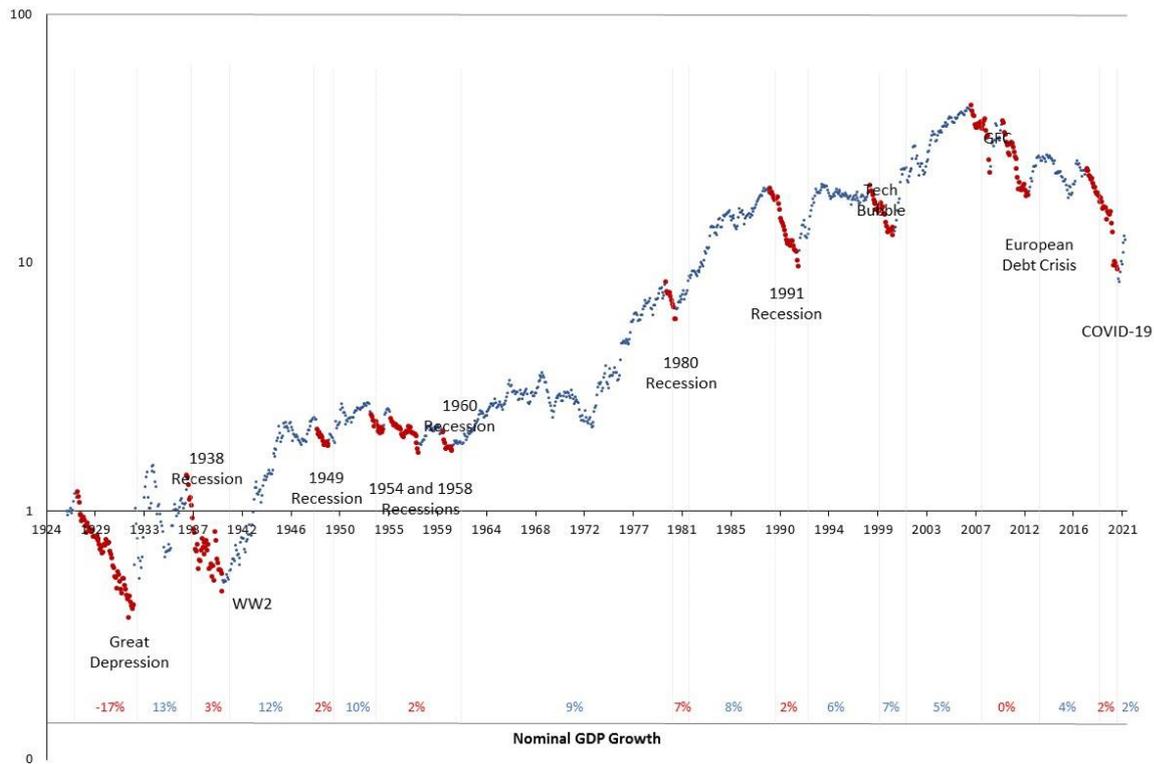


*Source: FactSet, Hyperion. Hyperion has assigned companies with no or low expected EPS growth and/or with risk of permanent business model disruption as old world.*

Historically, some commodities and non-fiat currencies such as gold have been considered good inflation hedges. However, we believe **software companies will be identified as more effective, modern inflation hedges** going forward. These companies typically have software that is absorbed in the workflow of an organisation, which means there are high switching costs. Often the software is under-monetised relative to its value as the focus has been growing its user base and capturing the addressable market opportunity rather than optimising pricing. Companies that have strong market positions with a loyal user base that are paying relatively low monthly subscription fees could substantially increase their prices.

We estimate software represents less than 30% of developed global equities. Information Technology and Communication Services sectors currently have weights of 22% and 9%, respectively, in the MSCI World Index. We believe Hyperion’s portfolio is relatively well positioned as an inflation hedge with strong pricing power and organic growth levers.

**Figure 6:** Fama French HML Index - Value Underperforms in Low Growth, Low Inflation, Low Confidence Environments



**Source:** Kenneth R. French U.S. Research Returns Data (2021) Portfolios Formed on Book-to-Market [http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\\_library.html#Benchmarks](http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html#Benchmarks)

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

July 2021

## ***Revisiting a low growth, low interest rate, low inflation world through COVID-19***

### **Part 1 - Why the recent increase in inflation and growth is temporary**

Mark Arnold, Chief Investment Officer, Hyperion Asset Management

Jason Orthman, Deputy Chief Investment Officer, Hyperion Asset Management

---

We believe higher inflation will be transitory in nature and inflation will remain low in the long term.

There are several reasons that suggest the recent increase in inflation (and economic growth rates) will be short-lived and that these inflationary influences will fade over the next twelve months. Furthermore, once inflation returns to lower levels (likely in 2022), there are several key structural factors that should result in inflation (and economic growth rates) remaining at low levels over longer time periods.

The recent increase in inflation (and associated strong economic growth) has been driven by several transitory factors, including:

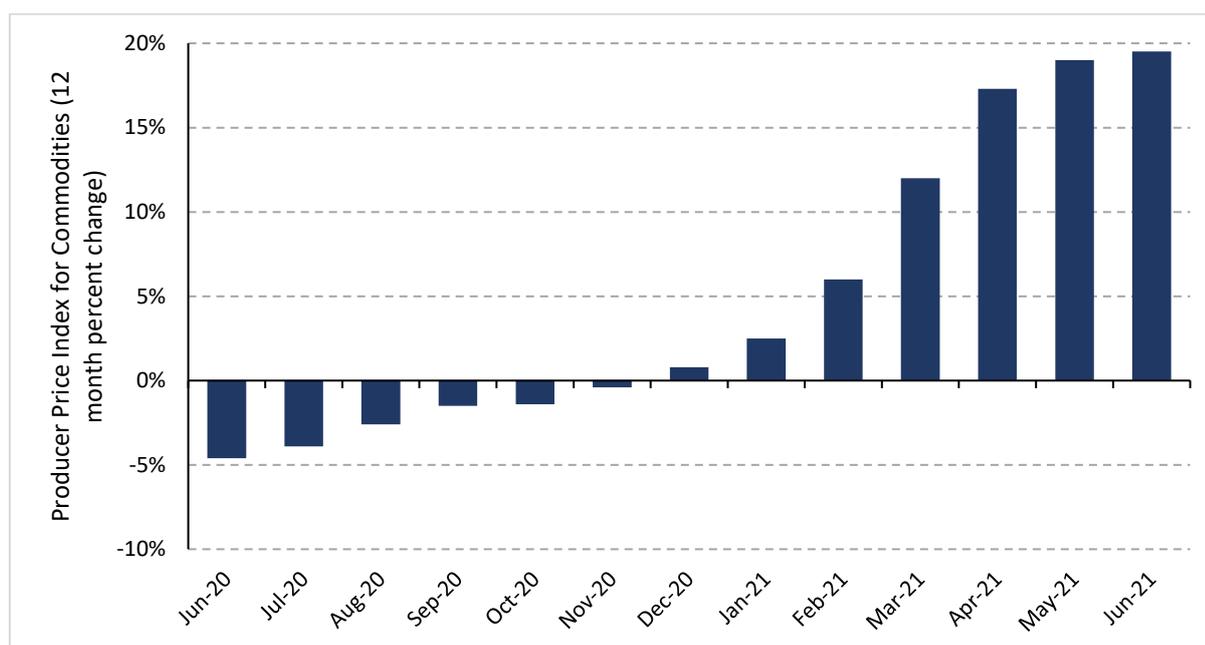
- 1) The “base effect” from depressed commodity and product-related pricing and negative demand growth during the early stages of the COVID-19 crisis;
- 2) The “broken window fallacy”;
- 3) Distortions in consumer spending patterns, during the initial COVID-19 lockdowns, leading to unsustainable increases in demand for durable and non-durable goods;
- 4) Increased government spending on transfer payments boosting short-term consumer expenditures;
- 5) Unsustainably strong credit growth in China; and
- 6) Increased short-term demand and related price increases for transport and travel-related services and products as economies recover from the COVID-19 crisis.

#### ***The “base effect”***

There has been a large increase in commodity prices over the past twelve months as shown in Figure 1.

Part of the year-over-year increase in commodity prices has been influenced by a “base effect.” That is, twelve months ago commodity prices were very depressed because of the initial impact of the COVID-19 crisis.

**Figure 7:** Producer Price Index for commodities in the U.S. (12-month percent change)



**Source:** U.S. Bureau of Labor Statistics. Data published in July 2021. Note: The data is not seasonally adjusted.

The base effect also applies to inflation statistics and reported economic growth figures.

### ***The “broken window fallacy”***

The recent economic growth statistics overstate the real economic improvement over the past twelve months. The “broken window fallacy” states that simply replacing a damaged or destroyed good, service or income with the same or similar quality attributes does not result in true economic growth. Simply replacing the businesses and associated incomes, products and services that were destroyed during the COVID-19 crisis with similar businesses, incomes, products, and services does not equate to true economic progress. The new business and wage incomes and related goods and services are included in the GDP statistics, but these figures overstate the true economic growth since the COVID-19 crisis began. This overstatement of true economic growth is supportive of lower than stated underlying aggregate demand growth. A lower than stated level of true economic growth is less supportive of demand-pull inflationary pressures where “too much money is chasing too few goods.”

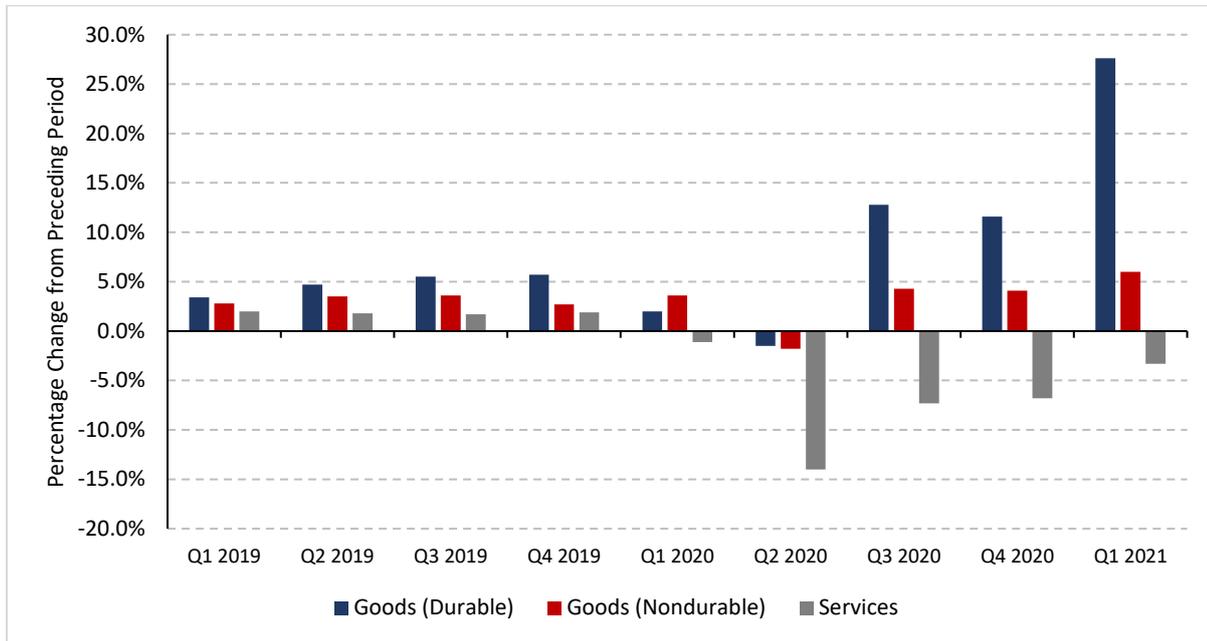
### ***Unsustainably strong demand for durable and non-durable goods***

The single largest component of the U.S. economy is consumer-based personal expenditures. In recent times, total personal expenditures have represented approximately 70% of U.S. GDP. Personal expenditures comprise both services expenditures and goods expenditures.

Prior to the COVID-19 crisis, services-based expenditures represented 44% of GDP. In March 2021, expenditures on services had declined to only 42% of GDP. At the same time goods-based expenditures increased from approximately 26% of GDP prior to the lockdowns to 29% in March 2021. Durable goods expenditures increased by 28% in the twelve months to March 2021 and non-durable goods increased by 6% over the same period. On the other hand, services-based expenditures decreased 3% over the 12 months to March 2021. The large increase in demand for durable and non-durable goods was a direct result of the lockdowns preventing people from being able to spend on services. During the COVID-19 crisis most

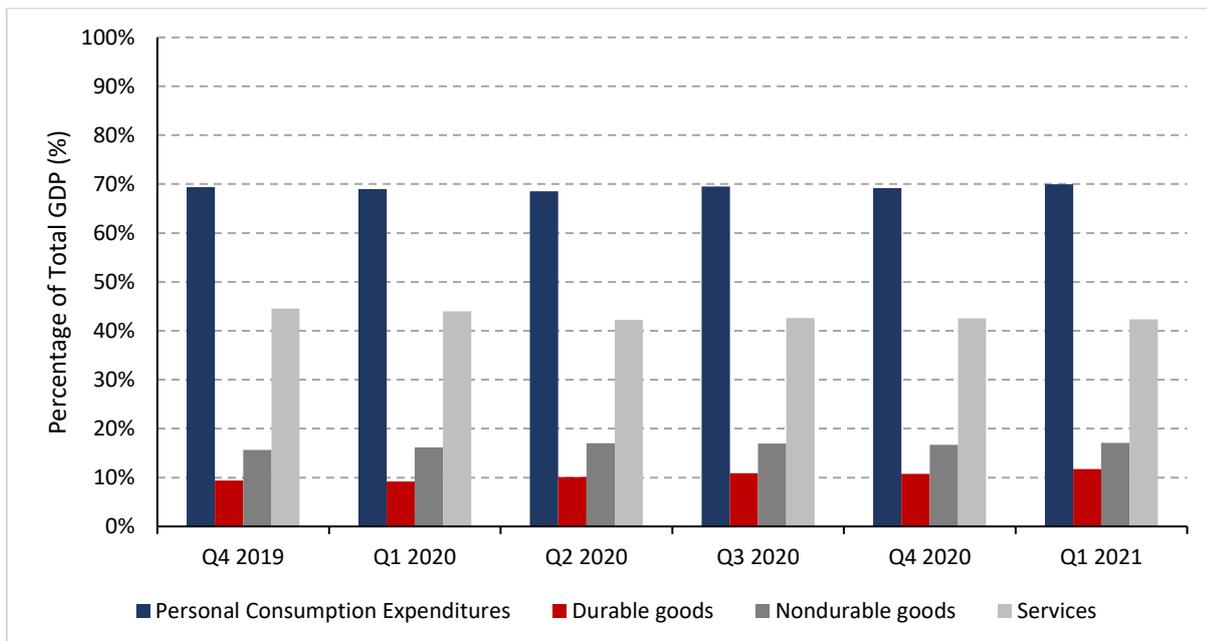
consumer-based expenditure has been directed away from services like travel and restaurants towards goods. This is shown below in Figure 2 and further supported by the tabulated data in Appendix 1.

**Figure 8:** Quarterly U.S. personal consumption expenditures percentage change from preceding period



**Source:** U.S. Bureau of Economic Analysis (2021). Note: Q1 2021 is a revised estimate. Data from latest U.S. Bureau of Economic Analysis released on 24 June 2021. See Appendix 1 for underlying data.

**Figure 9:** Quarterly U.S. personal consumption expenditures proportions of U.S. GDP in billions of chained (2012) U.S. dollars



**Source:** U.S. Bureau of Economic Analysis (2021). Note: Q1 2021 is a revised estimate. Data from latest U.S. Bureau of Economic Analysis released on 24 June 2021. See Appendix 1 for underlying data.

This reallocation of consumer spending away from services and towards goods is temporary and likely to reverse over the next twelve months as global economies reopen and transfer payments recede.

This short-term increase in demand for goods has, in turn, increased demand for the commodities and raw materials used to manufacture those goods. At the same time, global supply chains were disrupted by the COVID-19 crisis, as distributors initially cancelled orders with their suppliers. It has taken time for manufacturers to increase production levels to meet the unexpected increase in demand for physical goods because of the COVID-19 lockdowns.

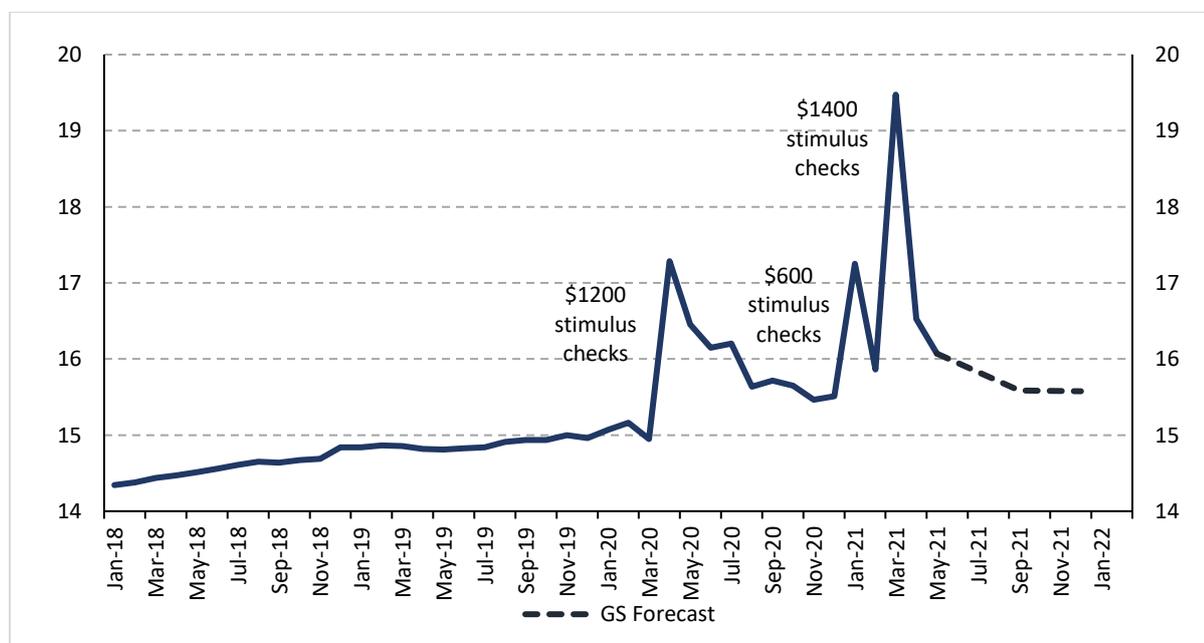
The increased demand for both durable and non-durable goods and the disruption of global manufacturing and distribution networks has caused shortages of many goods. These stock shortages have resulted in buyers of goods in most global supply chains arguably over-ordering to prevent future lost sales from lack of inventory. This over-ordering from distributors and manufacturers has exacerbated the shortages of goods in global supply chains and helped boost current commodity prices.

However, as consumer expenditures start to normalise over the next 6-12 months, because of vaccine rollouts and the ending of lockdowns, consumer demand for both durable and non-durable goods is likely to decline. In fact, manufacturers and distributors of goods that have been over-ordering, are likely to find that they will end up with excess inventories that will be difficult to sell without resorting to price discounting (to clear this surplus stock).

### **Increased Government spending on transfer payments**

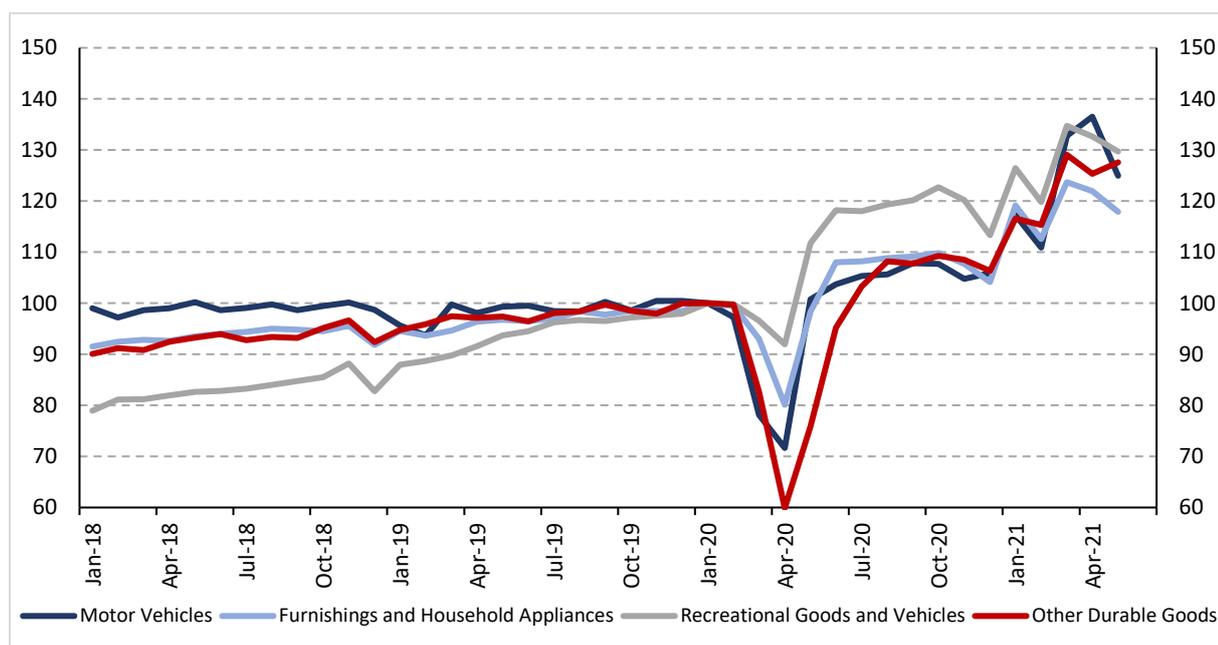
Governments around the world have expended significant additional amounts on welfare and other related transfer payments in reaction to the increase in unemployment and negative economic growth because of the onset of the COVID-19 crisis.

**Figure 10:** U.S. real disposable income has been temporarily boosted by government transfer payments - U.S. real disposable income (Trillions of 2012 U.S. dollars, annualised)



**Source:** Goldman Sachs Global Investment Research, U.S. Department of Commerce, U.S. Bureau of Economic Analysis (BEA) (2021).

**Figure 11:** U.S. real consumer spending index (Index, January 2020 = 100)



**Source:** Goldman Sachs Global Investment Research, U.S. Department of Commerce, U.S. Bureau of Economic Analysis (BEA) (2021). Consumer Spending data indexed from January 2020 (=100).

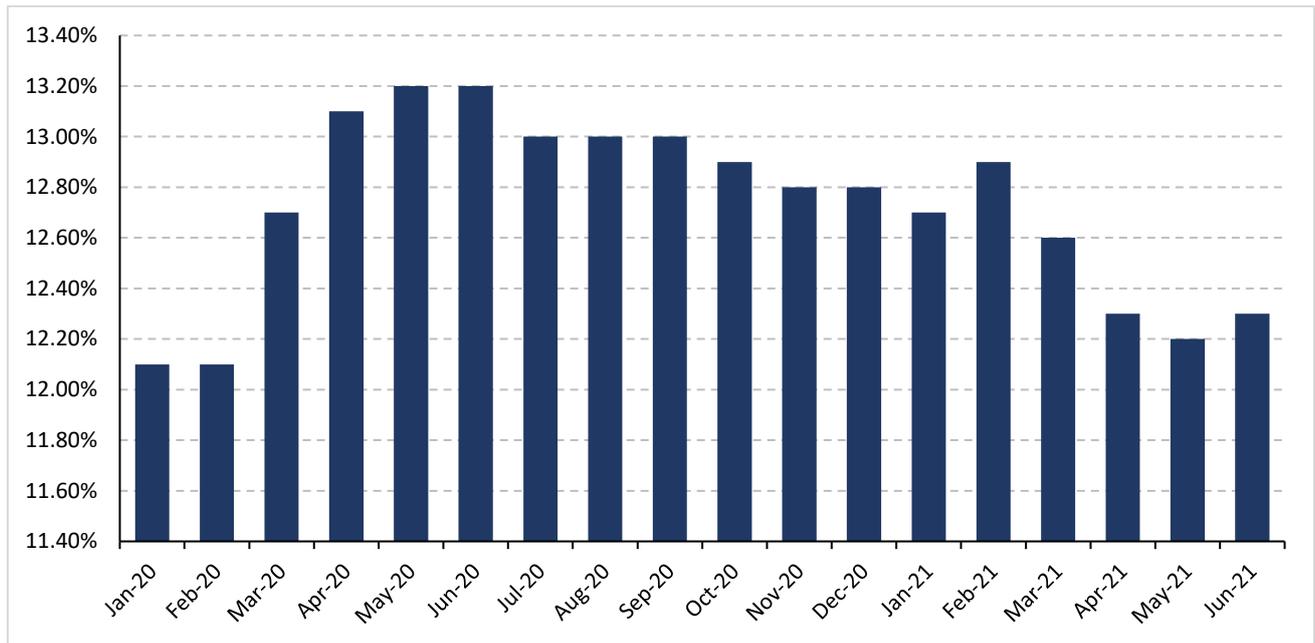
This large amount of additional government spending has been primarily funded by debt. The significantly higher levels of government spending have reduced the short-term negative economic impact of the COVID-19 crisis. This increase in welfare payments has allowed consumers to continue to spend even though many have been made unemployed during the crisis. This government spending has boosted short-term aggregate demand that in turn has temporarily helped to support higher pricing for some goods and services. Most of these additional government transfer payments will end in the next few months. Therefore, Hyperion believe the benefit to aggregate demand from these abnormally large government payments will start to fade in the second half of 2021 and into 2022.

The reduction in the level of welfare payments is likely to lead to lower levels of growth in both real economic activity and inflationary pressures over the next eighteen months.

### **Strong credit growth in China is fading**

China is a key driver of global economic growth and has further stimulated its economy in reaction to the COVID-19 crisis. Credit growth was allowed to accelerate over the past year, and this has helped mitigate the short-term negative impacts of the COVID-19 crisis on the economy. This type of credit impulse has been a common reaction by the Chinese Communist Party to periods of potential low or negative economic growth in the past. There have been a series of these large credit impulses, particularly since the GFC and each of these has been associated with a general increase in commodity prices. As the current credit impulse fades, commodity prices are likely to suffer a period of weakness. Weaker future commodity prices are disinflationary.

**Figure 12:** China outstanding Yuan loan growth

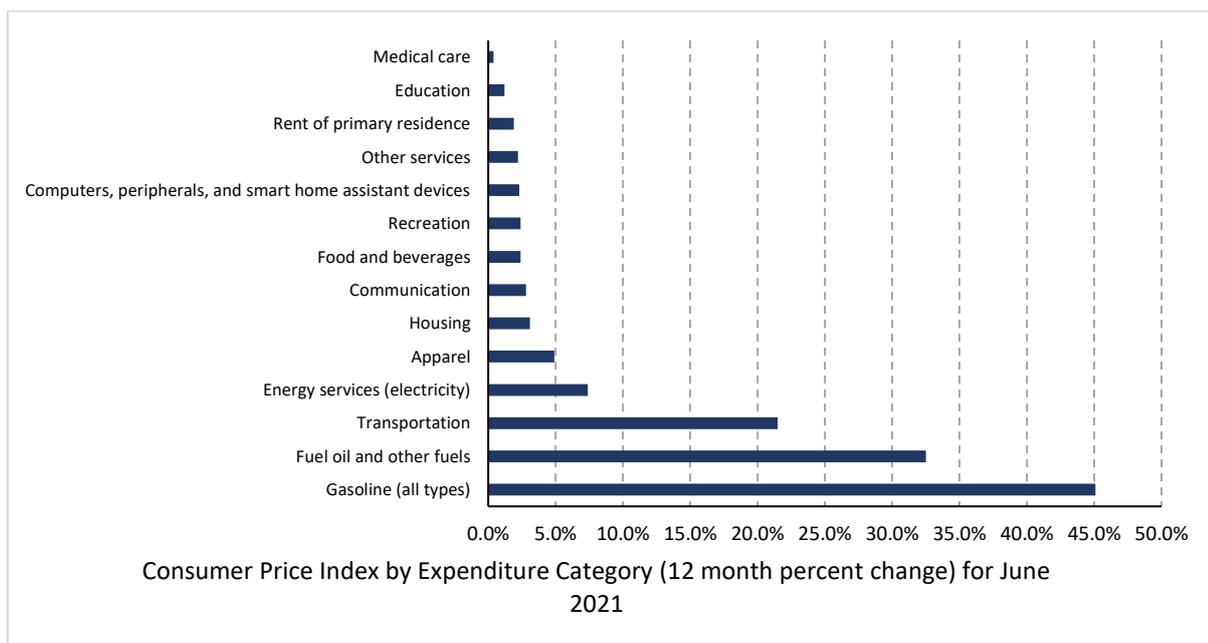


**Source:** People’s Bank of China, Trading Economics (2021)

**Increased demand for transport and travel related services and products**

Finally, another temporary influence on inflation is the fact that demand for transportation and travel has gone from very low levels during the worst of the COVID-19 lockdowns to a more normalised level of demand currently. This has contributed to temporary price increases in used cars, gasoline and certain airline tickets.

**Figure 13:** Consumer price index by expenditure category in the U.S. (12-month percent change) for June 2021



**Source:** U.S. Bureau of Labor Statistics. Data published in July 2021.

In summary, these factors driving the recent increase in inflation are temporary in nature and are likely to recede over the next eighteen months. As the global economy more fully recovers from the COVID-19 crisis, deflationary structural forces will once again start to suppress inflation. Longer term, we believe these structural headwinds will overwhelm any future inflationary pressures.

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

July 2021

## ***Revisiting a low growth, low interest rate, low inflation world through COVID-19***

### **Part 2 - Why the rotation to lower quality value stocks will not be sustained**

Mark Arnold, Chief Investment Officer, Hyperion Asset Management

Jason Orthman, Deputy Chief Investment Officer, Hyperion Asset Management

---

In part 2 of our series, we explain why technology-based deflation, high and rising financialisation of the economic system, and key macro headwinds are impediments to inflation and real growth. This underpins our thesis that any rotation from high quality structural growth stocks to low quality value stocks will be temporary. We believe this is because most value style stocks are highly reliant on expansion in the size of the economy for their sales and profit growth. If the longer term outlook for both economic growth and inflation is poor than the performance of value style stocks is also likely to be poor.

#### ***Key factors that are expected to keep inflation at low levels in the long term***

Since the onset of the GFC, our view has been that we face a low growth, low inflation, and low interest rate world. Each of the above factors are interrelated, positively correlated, and reinforcing over long time periods. Low levels of aggregate demand growth and overall real economic growth are supportive of lower inflationary pressures. That is, demand-pull inflation is less likely in a low aggregate demand growth world where real GDP growth is highly constrained. Low interest rate levels are generally associated with periods of low inflation and low real GDP growth. This is because government bond yields tend to be heavily influenced by the expected level of future nominal GDP growth.

We believe the world is facing **an extended period of technology-based innovation** and disruption. In fact, we believe we are at the onset of radical technological disruption and the cadence of innovative product launches should increase. Technology-based innovation by its very nature is deflationary because it results in better products at lower prices. Better products and services at lower prices result in a good type of deflation, because consumers enjoy an improvement in their standard of living for any given level of income.

This high level of innovation and disruption is likely to result in many “old world,” or legacy, businesses—that have historically dominated major industries suffering from declining sales and profits in the future. Many of these legacy businesses will be eventually forced to merge or go bankrupt. The process of these old world businesses failing economically because of weak and deteriorating value propositions will be deflationary. This is because these legacy businesses will ultimately be forced to discount their products and services in a futile attempt to maintain their market share and sales in the face of superior products from innovative companies.

Examples of innovation-based future deflationary factors include:

- 1) declining technology cost curves in solar, wind and batteries;
- 2) inexpensive transportation from autonomous based electric vehicles;
- 3) low-cost energy from distributed energy networks;
- 4) AI-based software and increasing automation that will reduce the value of human capital, and;
- 5) downward pressure on retail prices through increased transparency from the combination of smart phones and e-commerce.

#### ***Declining cost curves in renewables***

Low-cost energy powered the second Industrial Revolution in the form of coal, oil and gas. Low-cost energy that is readily available forms the basis of modern civilisation and supports the standard of living of billions of people worldwide. Without inexpensive and easily accessible energy, civilisation would collapse into anarchy. The cost of energy is embedded in the price of all goods and services. Lower cost energy is deflationary. The

cost of renewable energy generation is now less expensive than fossil fuel-based energy in most situations. Furthermore, renewable energy generation, primarily solar and wind, will continue to enjoy rapid declines in cost as the underlying technologies improve and the industry benefits from increasing economies of scale. This is a good, technology-based, deflation. In addition, advancements in battery technology and higher levels of scale in battery manufacturing will result in energy storage costs declining at double-digit rates per annum over the next decade. Recent advancements in battery technology include the 4680 battery cells designed by Tesla.

### ***Cheap transportation from autonomous based electric vehicles***

It is becoming increasingly likely that electric vehicle-based autonomous driving technology will be commercially available within the next five years (based on extrapolating current technological progress). Tesla is currently leading the race to full autonomy. Tesla is beta testing AI-based autonomous software, with billions of miles of real-world data from the multiple cameras and related sensors in its fleet of motor vehicles. As the number of Tesla vehicles sold increases, the number of miles driven by the fleet will continue to expand exponentially. The more miles driven, the faster the AI system learns and improves. Removing humans from driving motor vehicles will cause a significant reduction in the cost per mile of road-based transport. In addition, the use of autonomous vehicles will result in fewer road accidents and lower associated insurance costs. The cost of road-based transport for goods will decline as will the cost of ride share services. The use of electric vehicles, compared to combustion engine motor vehicles, will also help reduce the cost of road-based transport over the next decade. Electric vehicles have a lower cost of total ownership because the engine has far less complexity and fewer moving parts, resulting in lower cost of servicing. As the cost of electricity declines from increasing use of renewables in the power grid this will further lower the already material cost advantage that electric vehicles have in terms of cost of fuel. In addition, the economic life is much longer than a combustion engine motor vehicle, resulting in higher relative resale values for electric vehicles.

### ***Low-cost energy from distributed networks***

The cost of energy to households and businesses will also decline in the future as the current centralised power grid is transformed into a distributed power grid. In the long term, most buildings will be capable of generating and storing their own electricity. Most of the retail cost of electricity is from the cost of transporting electricity long distances across a network from a centralised power source.

### ***AI-based software and increasing automation will reduce the value of human capital***

We expect **wage growth to be subdued** over the next decade as human capital unsuccessfully competes with AI-based software and increasing levels of automation.

Historically, high levels of sustained wage growth have been associated with periods of high inflation. In our view, broad-based and sustained wage growth at high levels is unlikely over the next decade. This is because of expected declines in pricing power for human capital primarily from technology-based advancements, weaker aggregate demand growth and lower levels of work force unionisation. Computers and robots will continue to get better over time. Further software and hardware innovation will adversely impact the pricing power of human capital. Historically, cost-push inflation has been primarily driven by higher wage costs. High wage inflation has tended to be associated with periods where organised labour unions had significant influence. The union movement is in a much weaker position today, and this weakness is likely to continue as heavily unionised second industrial revolution industries are disrupted.

The next decade is likely to see massive advancements in AI and machine learning that will result in the creation of smart “thinking machines” that will fundamentally displace human planning and decision making. This will result in lower pricing power for human capital. This situation can be contrasted with the second industrial revolution where “dumb” but powerful machines were combined with human knowledge and

decision making. In the second industrial revolution, human capital still added significant value. Second Industrial revolution technologies destroyed mostly labour-intensive, repetitive, and inefficient jobs but at the same time created more service-based, thinking and decision-making jobs. These new less labour-intensive jobs involved functions and activities beyond the capability of computers and machines at that time.

***Retail discounting from smart phones and globalised e-commerce***

The ongoing increase in globalised competition will continue to keep profit margins low and help keep inflationary expectations low. This globalised competition is primarily the result of the internet and smart phones. With a smart phone (connected to the internet) most people can instantaneously price compare when they are buying a product or service. Smart phones are internet-connected super computers. Internet-connected smart phones place most buyers of products in a strong position of knowledge while global marketplaces provide consumers and businesses with excellent pricing knowledge and choice when making a purchasing decision. This globalised competitive environment is disinflationary, as it facilitates easy pricing comparisons by consumers from many global suppliers. This process forces demand to the lowest cost producers in a globalised marketplace.

***The overuse of debt will reduce long-run growth and inflationary pressures***

Structural economic headwinds (as discussed later in this paper), including high debt levels, will impede future growth in global aggregate demand over the long term. These headwinds will also be a factor in helping to keep growth in the prices of raw materials and commodities subdued.

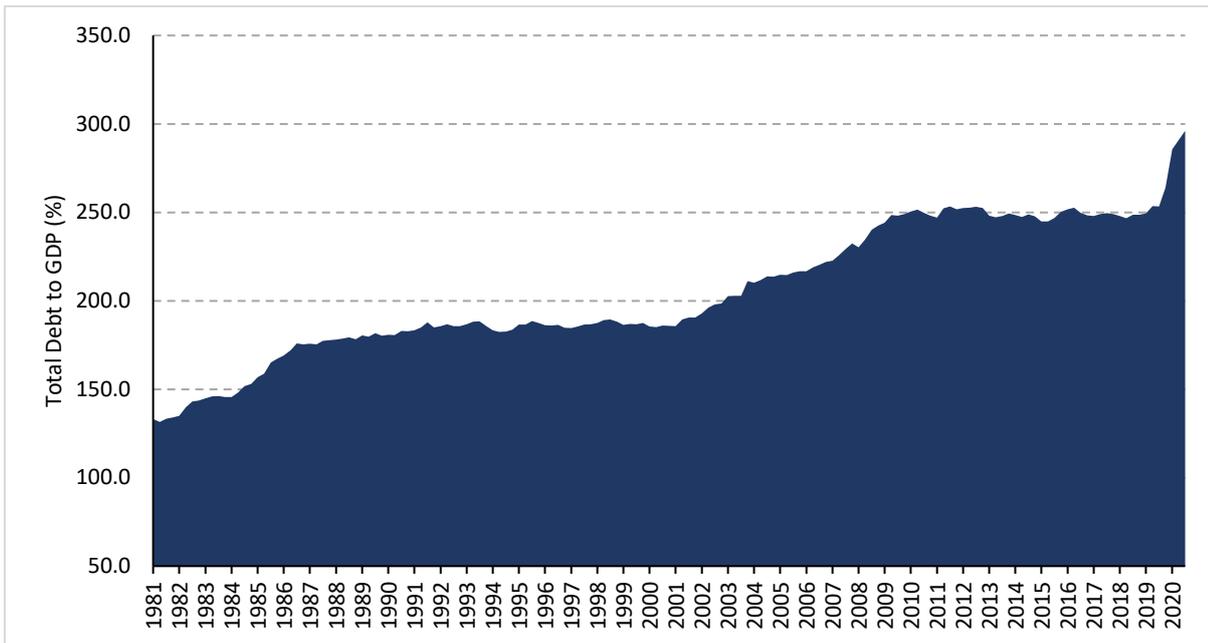
China's strong economic growth rates started to significantly influence both commodity prices and overall global economic growth in the early 2000s. The positive influence of China on commodity prices and global economic growth increased further around the time of the GFC, when large debt funded spending programs were undertaken. A series of large credit impulses from China have been supportive of general commodity prices over the past decade and a half. Each of these credit impulses by China have been progressively less effective than earlier programs in stimulating economic growth. The progressive deterioration in the effectiveness of these large government backed spending programs is likely to continue in the future.

China now has a heavy debt burden that will impede its economic growth rates over the coming years. Thus, we think China's future credit impulses will have less of a positive impact on commodity prices and overall global economic growth over the next decade. Less support for commodity prices from China will be disinflationary.

We believe there are **diminishing returns from increasing use of debt**. The financialisation of society over the past half century has accelerated historical economic growth rates. Most major economies have used debt to help boost historical growth rates. In the U.S., total debt to GDP (where debt equates to total credit to the non-financial sector) has increased from 133% in June 1981 to 296% in December 2020. Over the same time period, U.S. government debt to GDP has increased dramatically from 33% to 132%.

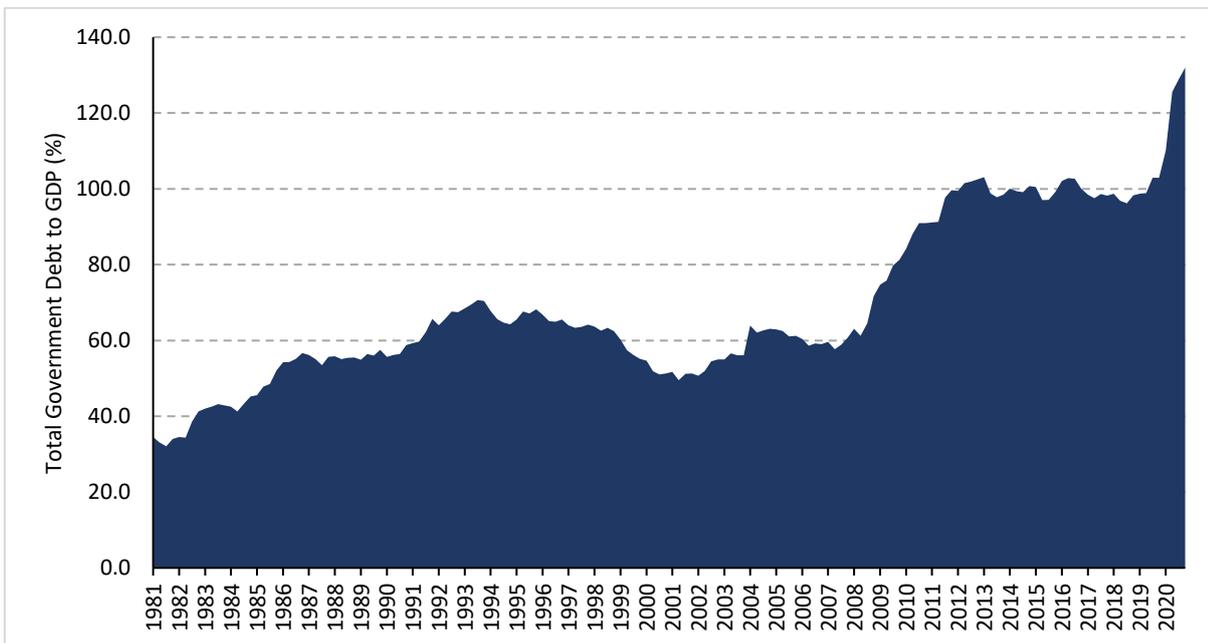
High debt levels impede future economic growth rates. The law of diminishing returns applies regarding the use of excessive levels of debt. Initially borrowing stimulates economic activity and the new debt is put to productive use, but as more debt is borrowed the productivity of that debt tends to decline. The high debt to GDP levels in the U.S., China and the Euro zone will impede future global growth rates. Lower aggregate demand growth and lower levels of economic growth are generally considered disinflationary.

**Figure 14:** Total debt to GDP - U.S. (%)



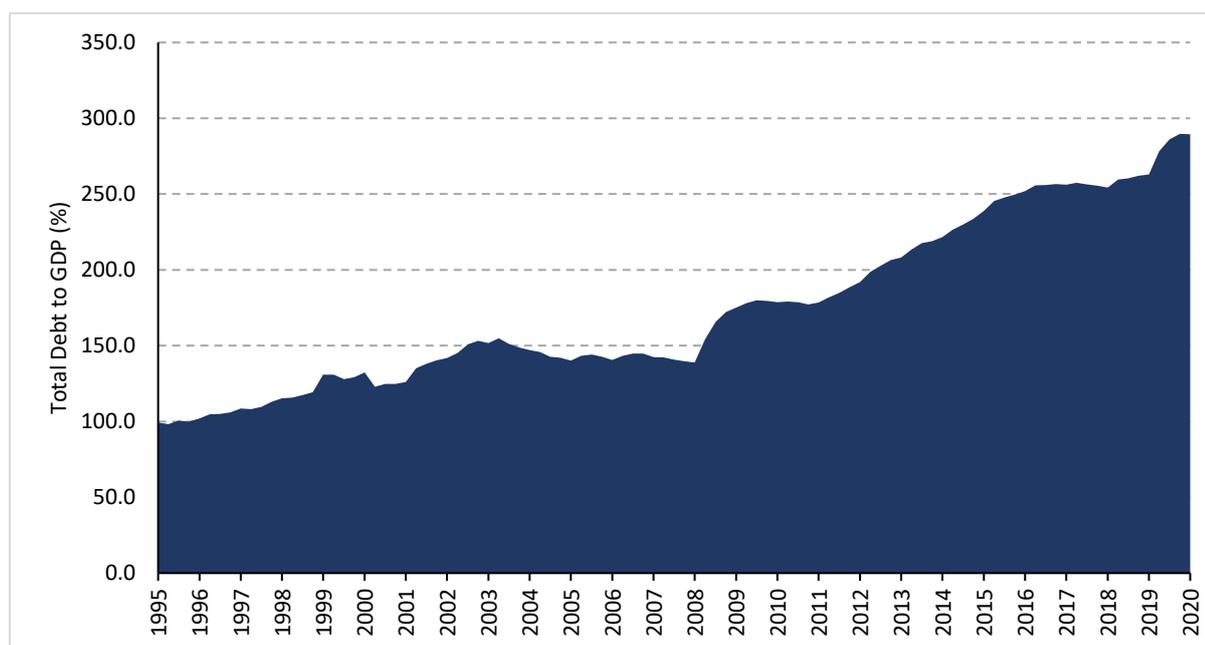
*Source: BIS (2020) United States Credit as percentage of GDP (Adjusted for breaks)*

**Figure 15:** Government debt to GDP - U.S. (%)



*Source: BIS (2020) United States Credit to General Government as percentage of GDP (Adjusted for breaks)*

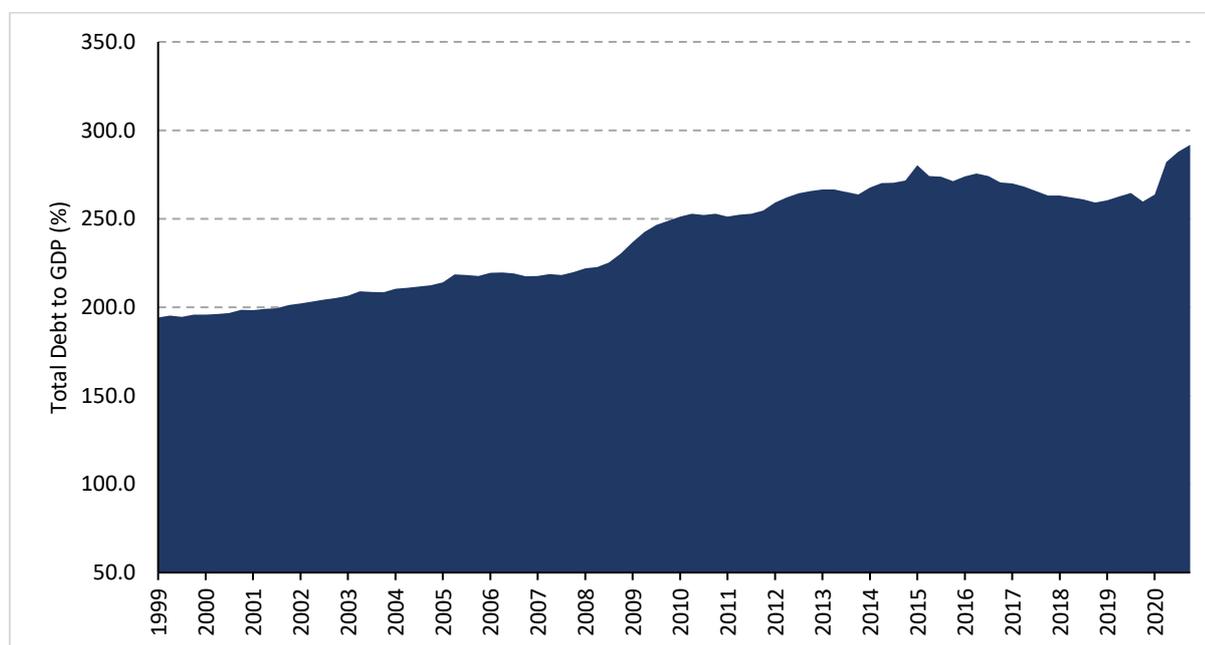
**Figure 16: Total debt to GDP – China (%)**



**Source:** BIS (2020) China Credit as percentage of GDP (Adjusted for breaks)

The countries in the Euro zone have also increased debt to GDP to high levels over the past couple of decades.

**Figure 17: Total debt to GDP – Euro Zone (%)**

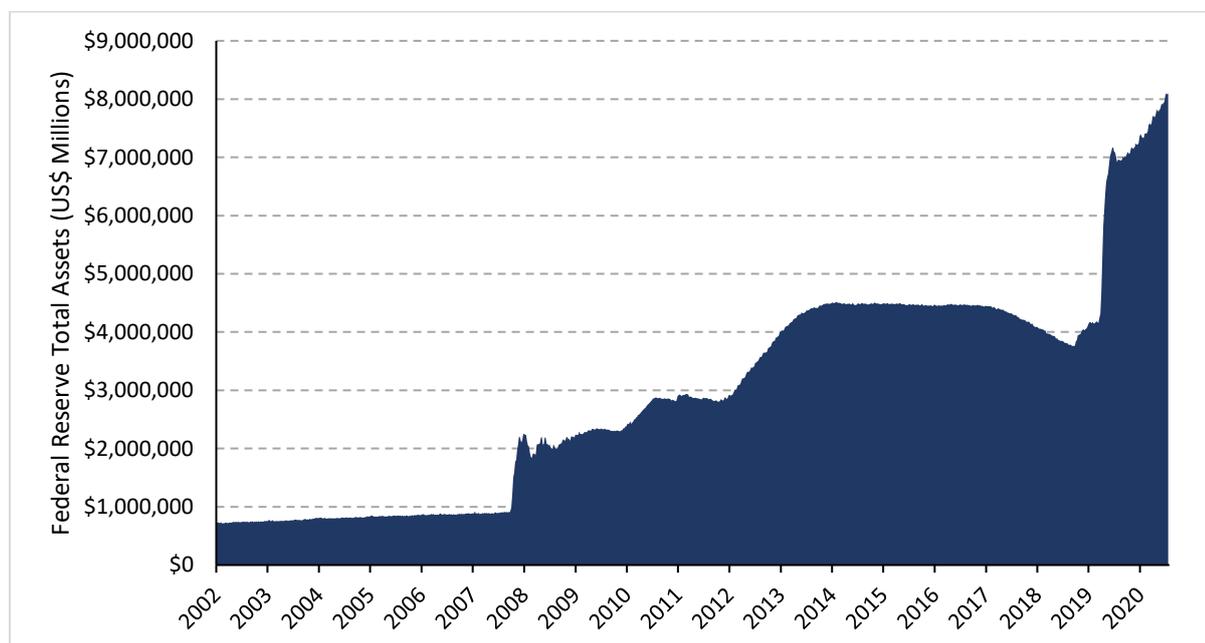


**Source:** BIS (2020) Euro Area Credit as percentage of GDP (Adjusted for breaks)

The law of diminishing returns also applies to the aggressive monetary policies of most central banks in recent times. There has been a marked increase in the use by central banks of quantitative easing since the GFC. Japan was a pioneer in aggressive use of both government debt, to fund large spending programs, and quantitative easing policies. Money supply has been increased substantially in the U.S. and most other major

economies in reaction to the COVID-19 crisis. The U.S. Federal Reserve’s balance sheet has expanded from less than \$1 trillion prior to the GFC to approximately \$8 trillion today.

**Figure 18:** U.S. Federal Reserve balance sheet (US\$ millions)



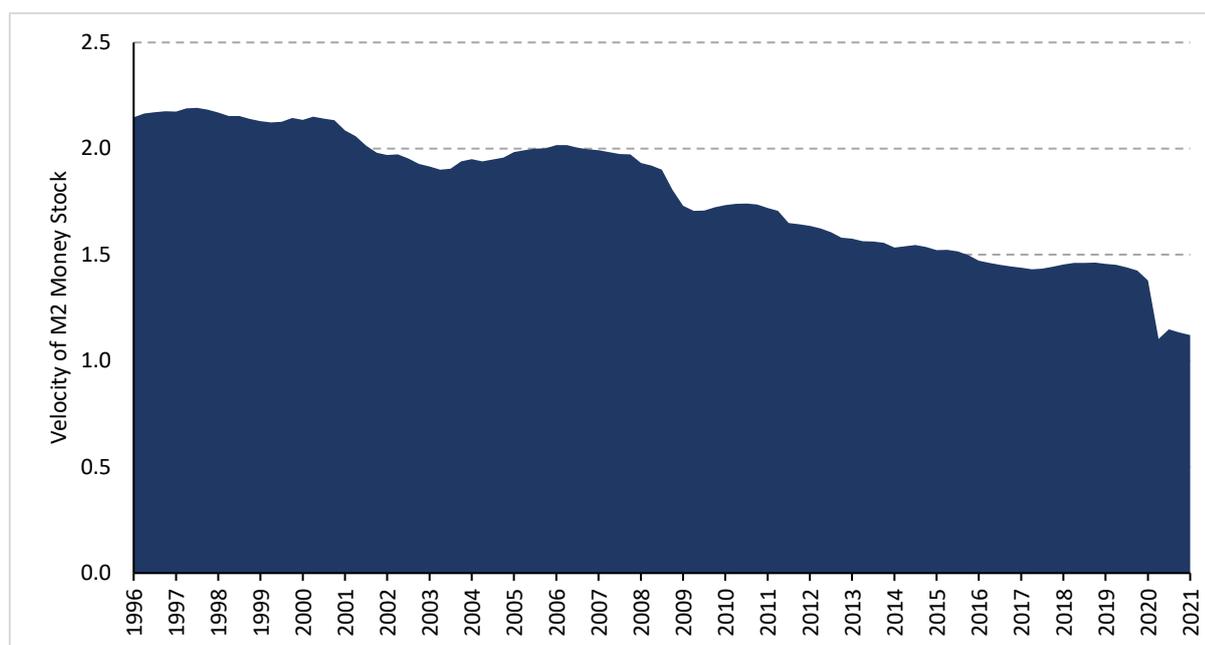
**Source:** Federal Reserve Bank of St Louis (2021) Total Assets (Less Eliminations from Consolidation). Data in Millions of U.S. Dollars.

We believe that the expansion of the Federal Reserve’s balance sheet will not be inflationary because the underlying aggregate demand growth from consumers is likely to be weak over the long term. This can be seen from the consistent trend towards a **lower velocity of money** in the U.S. economy. The velocity of money is a measure of the frequency at which goods and services are purchased in an economy during a certain time. Velocity of money is calculated by dividing nominal GDP data by M2 money stock. A declining velocity of money as shown in Figure 9 below indicates that the increased money supply from quantitative easing is not being spent in the real economy. Thus, the increase in M2 money supply is unlikely to be inflationary while the velocity of money stays at low levels. It would require a massive and sustained increase in aggregate demand to drive the velocity of money significantly higher, and given the substantial economic headwinds the economy is facing, this appears unlikely.

The Federal Reserve’s quantitative easing activities are unlikely to have a material impact on improving the rate of economic growth or to cause higher inflation. This is because the additional money that is created is used to buy financial assets like Government bonds which does not directly influence the real level of economic activity. The sellers of the bonds that the Federal Reserve buys with its printed money are unlikely to spend that money on purchasing real goods and services or capital investment in the real economy. As long as this remains the situation, quantitative easing and the expansion of the supply of money is unlikely to translate into higher levels of economic activity or higher inflation.

In contrast, the U.S. Government’s recent increased spending on welfare payments because of the COVID-19 crisis does have a direct and positive impact on short-term economic activity. However, this money is borrowed, not printed, and there are legal requirements for this money to be repaid. The Government’s borrowing money to fund spending boosts short-term economic growth but adds to the already large debt burden that will impede economic growth and be disinflationary in the long run.

**Figure 19:** Velocity of M2 money stock



**Source:** Federal Reserve Bank of St Louis (2021) Velocity of M2 Money Stock

***Abundant levels of real economic growth will be short lived***

Economic growth rates have been strong in recent times as the global economy recovers from the COVID-19 crisis. This strong growth associated with a cyclical recovery is likely to be short-lived. We believe that once the emergency government transfer payments and the base effect disappears from the short-term data, **the illusion of an abundance of growth will disappear.**

The structural headwinds that will ensure subdued levels of economic growth and low inflation in the medium to long term include the following:

- 1) ageing populations;
- 2) declining population growth rates;
- 3) high debt levels;
- 4) rising wealth inequality and hollowing out of the middle class;
- 5) technology based innovation and disruption; and
- 6) increasing natural resource constraints and disruption.

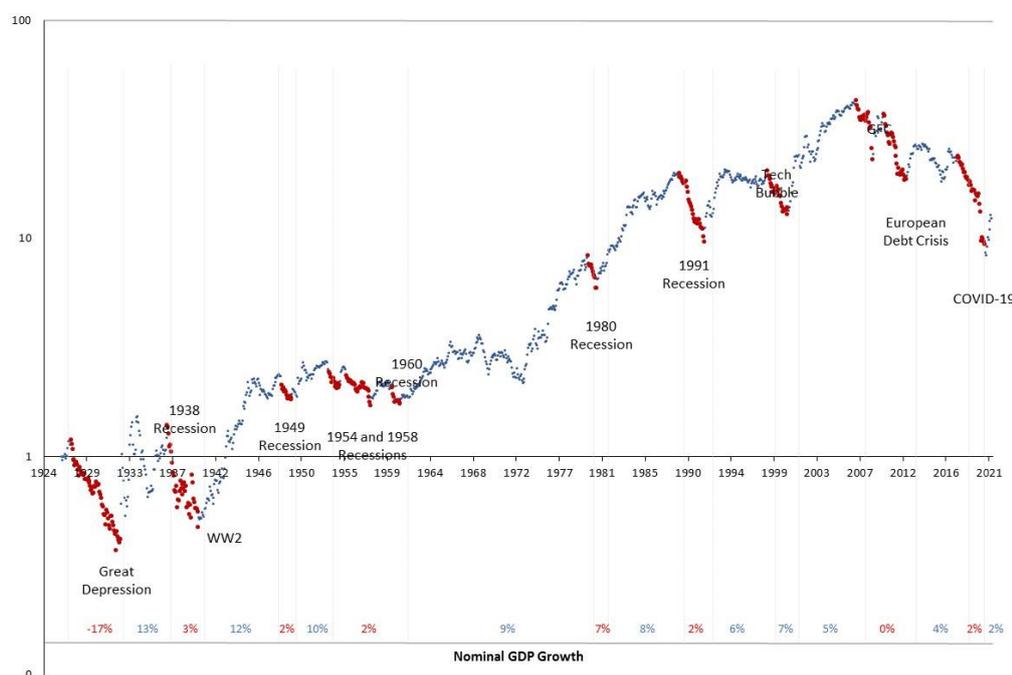
As discussed in depth in previous white papers, demographics dictate that global economic growth rates are likely to remain low over the next decade. Debt levels across the major economies are too high for a rerun of the “Roaring Twenties”. High debt levels will provide an ongoing drag on future rates of economic growth. Ageing populations and slowing population growth rates in most major economic regions will impede future levels of growth. Wealth inequality has been increasing in most major economies. Rising wealth inequality and a gradual hollowing out of the middle class in many countries will be a drag on future long-run economic growth. Technology-based innovation is likely to disrupt human capital markets globally as AI and ML progressively improve and ultimately achieve levels of decision making and planning that is better than humans. This should eventually lead to downward pressure on wage growth, employment growth and lower levels of real growth in aggregate demand. Finally, the adverse impact of climate change and natural resource constraints and disruption is also likely to impede future levels of economic growth. Over the long term,

climate change will lead to more extreme weather events, materially different weather patterns and risk of flooding of major population areas, all of which will be highly disruptive to future economic activity.

**Why the rotation to lower quality value stocks will not be sustained longer term**

Given the poor long-term outlook for economic growth (both real and nominal) and the likely significant disruption from technology-based innovation, the current rotation to lower quality value stocks and away from higher quality growth stocks is unlikely to be sustained. The market has been focused on the cyclical recovery in economic growth and inflation that has occurred over the past eight months. The short-term profit growth of the overall market from this cyclical recovery has made growth temporarily abundant. Recently, momentum based short-term traders have been selling higher quality, structural growth stocks and buying lower quality-stocks. This is because the short-term growth differential for revenue and profit between the high quality and low-quality stocks has narrowed and, in some cases, disappeared. This strong revenue and profit growth for the lower quality old world businesses is unlikely to be sustained beyond the next twelve months. In contrast, the higher growth rates associated with quality businesses are likely to be sustained longer-term because these businesses can grow by taking market share and are less reliant on economic growth for their own sales and profit growth. Also these higher quality stocks tend to be innovative and disruptive and thus less likely to be adversely impacted from future innovation and disruption. Therefore, we believe, the current rotation towards lower quality value stocks will end over the next 6-12 months and funds will be reallocated back to structural growth leaders in 2022 and beyond as growth again becomes scarce.

**Figure 20:** Fama French HML Index - Value Underperforms in Low Growth, Low Inflation, Low Confidence Environments



**Source:** Kenneth R. French U.S. Research Returns Data (2021) Portfolios Formed on Book-to-Market [http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\\_library.html#Benchmarks](http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html#Benchmarks)

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

July 2021

## ***Revisiting a low growth, low interest rate, low inflation world through COVID-19***

### **Part 3 - The relationship between real growth, inflation, interest rates and valuations**

Mark Arnold, Chief Investment Officer, Hyperion Asset Management

Jason Orthman, Deputy Chief Investment Officer, Hyperion Asset Management

---

Real rates of economic growth, inflation, interest rates and valuations are all interrelated.

Long-term government bond yields are largely determined by expectations for economic growth and stability (opportunity costs and associated economic risk) and inflation (reduction in the purchasing power of money). The return from long-dated government bonds represents the rate of return relating to overall economic growth in nominal terms. In other words, there are two key components of a government bond yield: 1) an opportunity cost component that relates to expected economic growth and stability levels that theoretically everyone can enjoy and benefit from, and 2) an inflation compensation component.

Long-dated government bond yields have increased over the past year as the economic outlook has improved and inflation expectations have increased. Recently, the 10-year U.S. government bond yield has risen sharply and is now approximately 136bps, compared to a low of 50bps last year. It is worth noting that this yield is still considerably lower than the average since the GFC of approximately 230bps.

Given the poor outlook for economic demand growth and the technology-based disruption the world faces, we continue to believe that any pickup in inflation over the next year is temporary and unlikely to be sustained over the long term.

High levels of inflation increase uncertainty for both consumers and businesses. High inflation is particularly damaging for holders of long-term bonds. This is because the return of the bond is set in nominal terms at the time of purchase, and a sustained increase in inflation will result in the real (inflation-adjusted) returns declining.

Equity holders are generally in a better position, because businesses have some potential to lift the prices they charge customers to help protect the real value of their future revenue and free cash flows. However, there will be many businesses that cannot pass on the cost of inflation and maintain their revenues and free cash flows in real terms. These stocks are likely to suffer materially from any sustained return to high inflation.

We continue to believe that inflation will remain lower for longer, **with our base assumption of 10-year U.S. bond yields to average 250bps over the next 10 years.**

**Figure 21:** U.S. 10-Year Treasury constant maturity rate over time



**Source:** Federal Reserve Bank of St Louis (2021) 10-Year Treasury Constant Maturity Rate in Percent (Not Seasonally Adjusted)

Discount rates are used to reduce estimated future cash flows to today's value. The higher the discount rate, the lower the current value of any set of future cash flows. The further out the cash flows are into the future, the larger the impact of the discount rate in reducing the present value of the cash flow.

Discount rates are a function of:

- 1) Expected rates of economic growth and associated predictability (general opportunity costs and economic risks);
- 2) Expected long-term rates of inflation (the rate of decline in the value of money); and
- 3) Risk perceptions.

Long-term government bond yields are largely a function of 1) and 2) above. Discount rates that influence stock prices are a function of 1), 2) and 3). If expectations for inflation levels over the long term increase dramatically, this would have a one-off impact on bond yields.

Stocks are attractive relative to bonds, as their future cash flows and intrinsic values can increase. In contrast, bonds have fixed coupons and fixed terminal values with strict time-based payment schedules.

The potential growth in the future cash flows without a maturity date is the most attractive aspect of investing in stocks. Discount rates reduce the present value of future cash flows, whereas future growth rates in free cash flows can increase the present value of a business. Growth in future free cash flows can come from two key areas: 1) sharing in the overall growth of the economy and/or 2) by taking market share from other competitors. As the size of the economic pie grows, businesses share in this growth. In periods of high growth in the economy, sales and profit growth is abundant, because most businesses share in this type of growth. In contrast, growth that comes from taking market share is difficult to obtain organically and is incredibly valuable in a low growth world. This type of growth is not reliant on the overall economy and can be a source of sales and free cash flow growth for a business, even in an economy that is shrinking.

The present value of a stock is potentially negatively impacted if the discount rate increases. All other things being equal, if any of these three factors (outlined above) that comprise the overall discount rate increase, then the present value of the stock will decline. The relevant discount rate is the bridge that connects the expected future free cash flows to the present value.

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

July 2021

## **Revisiting a low growth, low interest rate, low inflation world through COVID-19**

### **Part 4 - Why high-quality businesses can handle high inflation better than most other investments**

Mark Arnold, Chief Investment Officer, Hyperion Asset Management

Jason Orthman, Deputy Chief Investment Officer, Hyperion Asset Management

Stocks that have sustainable business models tend to have longer durations compared to lower quality, less sustainable stocks. That is, they sell on higher short-term price-earnings ratios and, therefore, more of their expected future free cash flows are further out in the future, compared with lower quality, less sustainable businesses. All other things being equal, longer duration assets, including stocks, tend to be more sensitive to changes in long-term bond yields and discount rates.

However, the duration of a stock, as a measure of its share price sensitivity to changes in interest rates, is only valid if the nominal growth rates in the future free cash flows do not change by a similar degree and match the change in long-term bond yields.

If the long-term expectation regarding nominal GDP growth increases by 1% (assuming this increase in economic growth is reflected in a 1% increase in long-term government bond yields) and the expectation for growth in future free cash flows also increases by 1%, then the present value of the stock should remain unchanged. Whereas, if the nominal future free cash flows do not increase or increase by a lower percentage relative to the bond yield increase, then the present value of the stock would decline.

Lower quality businesses tend to have shorter durations, because the market has lower levels of confidence that the business will have predictable free cash flows in the long term. That is, the market treats these businesses as being less robust and less sustainable. This is because lower short-term price-earnings ratios mean the potential future free cash flows are closer in time, and therefore the duration of these stocks is lower than a more sustainable, higher quality business. These lower quality companies tend to sell on lower short-term price-earnings ratios, and thus their market valuations are relatively less impacted by increases in discount rates relating to inflation and economic growth rates. Again, this statement is only true if the business cannot match the increase in interest rates with increased free cash flows.

Some resource and materials stocks have high levels of sensitivity to changes in nominal GDP growth rates. If the prices and/or volumes of the commodities they sell increase at rates above the rise in the relevant discount rate, then the present value of these stocks can increase even in the face of higher discount rates. Therefore, some lower quality stocks would have the ability to benefit from higher inflation. This situation would reduce the relative growth advantage that high quality, structural growth stocks would otherwise enjoy compared to resource and materials stocks.

**As stated above, the duration of a stock only becomes important in assessing the sensitivity of its valuation to changes in bond yields if it cannot change its future growth rates to match those changes in bond yields.**

A stock that cannot pass on its inflation-related costs to its customers will not be able to increase the growth rate of its future free cash flows sufficiently to fully offset increases in bond yields and discount rates. Therefore, its present value will decline in the face of higher bond yields and discount rates. The longer the duration of such a stock, the more sensitive it will be to changes in bond yields and discount rates. Thus, **long duration businesses without pricing power will be more sensitive to any one-off changes in discount rates**, because they are generally valued based on cash flows that stretch out further into the future.

Businesses that have strong pricing power normally can offset any increase in long-term bond yields, because they can adjust their future free cash flows to compensate for the higher discount rate resulting from increased inflation or higher expected real economic growth rates.

The *relative* attractiveness of higher quality, structural growth companies compared with that of lower quality companies declines if expectations regarding future nominal GDP growth rates increase.

At the extreme, if the world could produce sustained high levels of economic growth, and associated profit growth was also strong and widely distributed, then the valuation gap (dispersion) between high quality, structural growth businesses and lower quality businesses would narrow. However, this high growth world has not existed since the GFC and is unlikely to exist in the future. Therefore, in a low growth world, high quality, structural growth businesses are significantly more valuable and therefore will be more highly rated and have longer durations compared with lower quality, low growth businesses.

This expectation of higher levels of overall nominal GDP growth can be driven by higher real economic growth rates and/or higher inflation. Higher rates of real economic growth are more beneficial than expectations of higher rates of inflation for stocks in general.

High quality, structural growth stocks tend to be less reliant on the overall rate of economic growth, compared with lower quality stocks. This is because high quality, structural growth stocks generally can grow their sales and profits through taking market share. Lower quality stocks generally do not have the ability to take market share. Therefore, higher levels of nominal economic growth reduce the growth premium that high quality stocks enjoy when economic growth expectations are more subdued. In other words, a lower gap between the sustainable growth rates of high quality and low quality stocks means that the market valuation differential between them declines. In high growth economic environments, growth becomes abundant (and subsequently less valuable), whereas in low growth economic environments growth becomes scarce (and subsequently more valuable).

All other things being equal, the higher the underlying structural growth of a business, the better its ability to recover from the negative impact of a one-off increase in the discount rate over time. High quality, structural growth businesses can compound their future free cash flows at higher rates that enable them to recoup any adverse change in government bond rates with more certainty.

In addition, high quality businesses tend to have strong value propositions that enable them to pass on higher inflation in their cost base more easily to their customers and thus maintain expected future free cash flows in real (inflation-adjusted) terms. This ability results in a situation where the nominal future free cash flows increase by the same amount as the bond yield, the discount rate, and the inflation rate.

On the other hand, many listed stocks would not have the ability to pass on high levels of inflationary costs onto their customers, so their real future cash flows would decline in the face of higher inflation levels.

### ***Hyperion global equity strategy***

Bonds do not have the ability to pass on increases in inflation and maintain the inflation-adjusted value of their future cash flows. We believe our global equity strategy does have this ability. Theoretically, the interest rate sensitivity of the strategy should be higher than a 10-year zero coupon bond, as its duration would be longer than ten years.

We estimate that a 10-year zero coupon bond would be expected to decline in value by approximately 9% if 10-year government bond yields increased by 100bps because of an increase in inflation.

**However, this longer duration is not relevant if the underlying free cash flows of the portfolio can be maintained in inflation-adjusted terms and fully match any increase in the relevant discount rate.** Therefore,

an increase in long-term government bond yields based on higher inflation should have no material impact on the intrinsic value of the strategy.

It should also be noted that the earnings-per-share growth for the portfolio is estimated to be approximately 20% per annum over the next fifteen years. Therefore, even if we assumed that the portfolio's underlying free cash flows were not able to fully offset a future increase in the long-term bond yield, the rising intrinsic value of the portfolio would be capable of recouping any one-off negative valuation impact from a future increase in the bond yield over time.

The stocks in the strategy should be able to retain their expected future free cash flows in real (after inflation) terms even if inflation levels increased. Therefore, higher levels of inflation, as reflected in higher long-term government bond yields and higher discount rates, would be fully or mostly offset by higher future levels of cash flows. Thus, the present value of the portfolio should remain unchanged from an increase in the discount rate that results from higher expected inflation levels.

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

July 2021

## ***Revisiting a low growth, low interest rate, low inflation world through COVID-19***

### **Part 5 - What if our views on inflation turn out to be wrong**

Mark Arnold, Chief Investment Officer, Hyperion Asset Management

Jason Orthman, Deputy Chief Investment Officer, Hyperion Asset Management

---

We believe higher inflation will be temporary. However, if we are wrong, our companies are much better placed relative to their benchmarks. Our reasoning is that, with strong pricing power, companies can pass on rising input prices to customers in the form of higher prices, without materially affecting their value proposition. High quality, structural growth companies should be considered inflation hedges.

Most companies do not have the ability to pass on rising input costs by increasing the prices charged to customers. This is particularly true in an internet- and smart phone-enabled, world where demand growth has been weak post-GFC, and the consumer is very price sensitive and has an abundance of choice. The world has globalised, competition has intensified, and disruption has accelerated as the world has modernised. All things being equal, businesses that are perceived as inflation hedges should be valued relatively higher by investors and should have higher weights in equity portfolios.

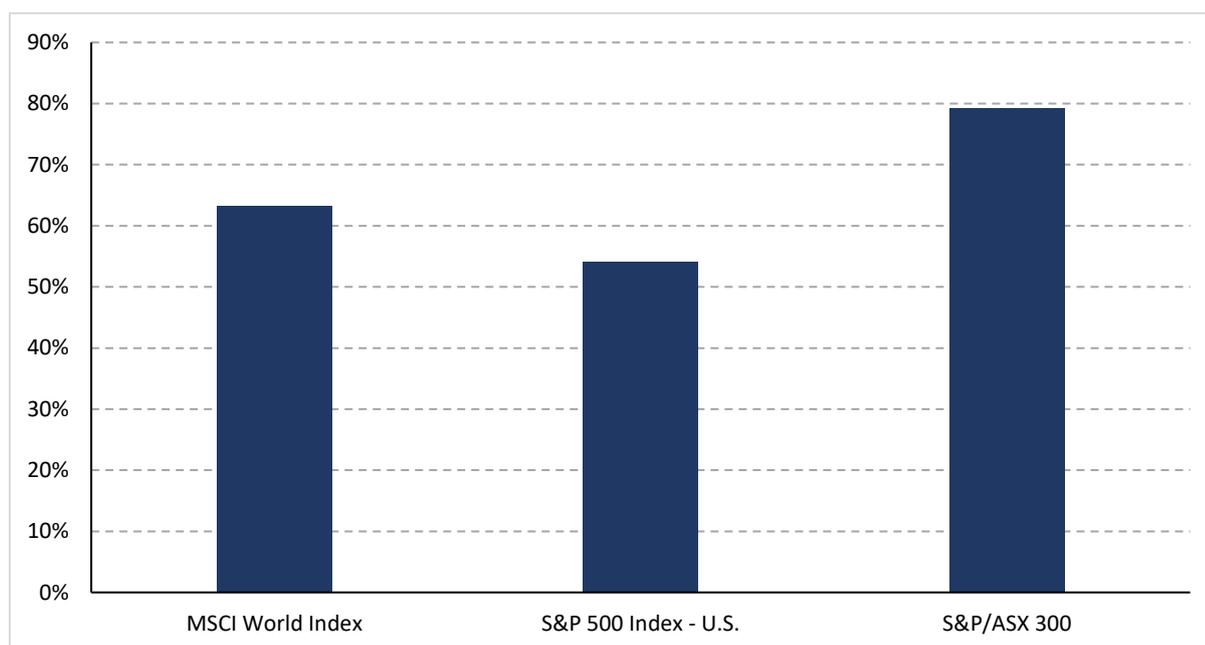
Hyperion has ranked the stocks in our global portfolio by their ability to act as an inflation hedge and believes our global equity strategy has a high degree of pricing power and, thus, defensiveness, in a high inflationary economic environment.

High quality, structural growth companies should perform better in a relative sense than broader equity benchmarks, which are dominated by “old world” businesses, which we define as those that are:

- 1) no or low growth; and/or
- 2) being disrupted by a far superior product or service.

Hyperion estimates 79% of the stocks (by index weight) in the Australian S&P/ASX300 Index can be categorised as old world. Outside Australia, 63% of the MSCI World Index and 54% of the U.S. S&P 500 Index have old world characteristics. This means the level of fundamental risk in the main benchmarks globally is high, as they are dominated by low growth businesses that are being disrupted by higher growth, more modern challengers. This disruption is being driven by the stronger value propositions that these modern businesses offer consumers. Over the next decade, we believe there will be significant levels of “creative destruction” as this transition from incumbents to challengers progresses. In this highly competitive environment, it will be difficult for these large, listed businesses to pass on any input cost pressures in the form of higher prices.

**Figure 22:** Proportion of benchmarks that are “old world”



**Source:** FactSet, Hyperion. Hyperion has assigned companies with no or low expected EPS growth and/or with risk of permanent business model disruption as “old world”.

The largest companies by revenue globally are predominately businesses in traditional industries. The top ten businesses have nearly \$US4 trillion of forecast aggregate revenue, with Amazon and Apple arguably the only modern businesses in this list. The top 20 businesses by forecast revenue (\$US6.6 trillion of aggregate revenue) are dominated by traditional fossil fuel-based energy and automotive companies.

These old-world businesses are highly sensitive to economic activity levels. As the COVID-19 crisis impacted aggregate demand levels, transportation related services and oil and gas producers suffered declines in revenues, and this impacted their rankings in the 2020 year. Other old world companies, including the large auto OEMs, also suffered declines in revenues during the early part of the COVID-19 crisis.

Longer term, traditional fossil fuel-based energy and auto businesses will be disrupted by electric vehicles and renewable energy generation, storage and distribution. This disruption will result in these old world businesses permanently disappearing from the top of global revenue ranking lists. One of the largest beneficiaries of this shift should be Tesla. Overall, we believe trillions of dollars of revenue will be transferred from traditional legacy businesses to new market leaders over the next decade.

**Table 1:** Largest global companies by estimated FY2022 Revenue

Rank	Firm	Forecast Revenue (USD billion) *	Industry	MSCI World Index Weight Rank^	MSCI World Index Weight^	“Old World”	Fossil fuel based
1	Amazon	\$581	Retail, Information Technology	3	2.54%	No	No
2	Walmart	\$567	Retail	32	0.38%	Yes	No
3	State Grid	\$390	Electricity	N/A	N/A	Yes	Yes

4	Saudi Aramco	\$369	Oil and gas	N/A	N/A	Yes	Yes
5	Apple	\$368	Electronics	1	3.97%	No	No
6	China National Petroleum	\$366	Oil and gas	N/A	N/A	Yes	Yes
7	PetroChina	\$358	Oil and gas	N/A	N/A	Yes	Yes
8	Royal Dutch Shell	\$316	Oil and gas	134	0.14%	Yes	Yes
9	Volkswagen Group	\$314	Automotive	261	0.08%	Yes	Yes
10	China State Construction Engineering	\$309	Construction	N/A	N/A	Yes	Yes
11	UnitedHealth Group	\$305	Healthcare	13	0.66%	Yes	No
12	Toyota Motor	\$295	Automotive	48	0.32%	Yes	Yes
13	CVS Health	\$294	Healthcare	98	0.19%	Yes	No
14	Berkshire Hathaway	\$289	Financials	12	0.66%	Yes	No
15	Alphabet	\$275	Information Technology	5	1.28%	No	No
16	ExxonMobil	\$271	Oil and gas	23	0.46%	Yes	Yes
17	Samsung Electronics	\$263	Electronics	297	0.07%	Yes	No
18	McKesson	\$259	Healthcare	428	0.05%	Yes	No
19	BP	\$244	Oil and gas	120	0.15%	Yes	Yes
20	Glencore International	\$231	Commodities	297	0.07%	Yes	Yes

**\*Source:** FactSet, Fortune, Forbes, Hyperion. Forecasts are FY22 FactSet consensus figures converted to USD billions from local currency. Note: State Grid forecast uses Statista 2020 revenue figure converted to USD; China National Petroleum forecast uses 2019 FactSet data. Largest companies sourced from 2021 Fortune 1000 and 2021 Forbes 2000 Global company rankings. MSCI World Index Rank by constituent weight. Data as at 30 June 2021. Hyperion has assigned companies with no or low expected EPS growth and/or with risk of permanent business model disruption as “old world”. Volkswagen Group and Toyota Motor are classified as fossil fuel based due to low proportions of vehicles sold being electric vehicles.

Conversely, we define “new world” businesses as those that are:

- 1) disrupting incumbent businesses through innovation and by creating products that are significantly better and/or cheaper than existing legacy products; and
- 2) likely to be able to produce high sustained relative growth rates in the long run by expanding into large addressable markets and sustaining their innovative cultures.

Listed equity markets are typically dominated by large, incumbent, mature businesses. Furthermore, these businesses (and the corresponding investments in their listed security) were often developed through effectively understanding and targeting the growing baby boomer cohort. Over time, consumer behaviour and corresponding investment decisions will be driven by a younger generation that are digital natives and are better educated and globally aware. We believe changes in behaviour and patterns of consumption will be fundamentally driven and structural.

In terms of U.S. retail spend, Gen X and older is 68% of this spend, with Millennials at 27% and the next generation, Gen Z, at 5%. However, by 2030 this is forecast to shift to Gen X and older at 52%, Millennials at 31% and Gen Z at 17%<sup>1</sup>. Currently, Millennial and Gen Z represent only 31% of total spend and 37% of retail spend despite being 50% of the work force<sup>2</sup>.

The sustainable nominal growth rates of most listed businesses over the next ten years are likely to be weak relative to the past five decades, particularly when compared with the high growth period before the GFC. In a high inflation environment with low rates of real economic growth, the earnings streams (in real terms) of these average quality businesses will be even more challenged.

Businesses that can sustain high real growth rates typically have the following attributes:

- 5) strong and sustainable value propositions;
- 6) innovative cultures that actively improve the features and quality of the existing products and create new products over time;
- 7) yet to fully monetise the value of their existing product offering; and
- 8) revenues that are small relative to the size of their total addressable market (“TAM”).

However, most businesses operate in a competitive industry structure and do not have the value proposition to sustainably increase (relative) prices to consumers. Consumers have been increasingly exposed to more frequent and larger discounting, including specific promotional periods. When product differentiation is low and choice is plentiful, the ability to increase relative prices is poor. We believe this is the typical operating environment most businesses face. It is only the few exceptional businesses that have strong pricing power.

Companies with strong pricing power typically have:

- 1) a perceived scarcity factor through strong branding and heritage;
- 2) controllable or limited product supply;
- 3) an exceptionally strong value proposition relative to competitors; and/or
- 4) limited competition in terms of alternative products (which typically denotes a technological or regulatory advantage).

Hyperion attempts to identify exceptional companies with a compelling value proposition and competitive advantage that offers strong pricing power. These companies are rare, as they tend to have natural monopolistic characteristics such as a network effects or a perceived scarcity factor, such as some global ultra-

<sup>1</sup> Forecasts based on the University of Michigan Panel Study of Income Dynamic 2005-2017, Bureau of Labor Statistics CE Generation Tables, Census Bureau Population projections for United States.

<sup>2</sup> Australian Bureau of Statistics Labour Force Survey, May 2020; Australian Bureau of Statistics Census 2016. HILDA Wave 18 Note: Definition of generations in this report: Gen Z includes individuals born after 1996, Millennials includes individuals born between 1981 - 1996, Gen X are individuals born between 1965 - 1980, Older generation are individuals born before 1965. Retail spend includes clothing and footwear, home repairs, renovation and maintenance, medicines, prescriptions and pharmaceuticals.

luxury brand names. For example, we estimate the price of Hermes' flagship Birkin handbag has compounded at double-digit rates over the past 30 years in the second-hand market. Some rare disorders that are life threatening can cost hundreds of thousands of dollars to treat, including some immunoglobulin products supplied by CSL. We estimate REA Group as the owner of realestate.com.au has increased its prices by high single-digit rates over the past ten years (with revenue growth significantly higher due to the migration of customers onto premium products).

Companies with strong pricing power can offset increases in input costs with higher prices for their services or products without affecting their value proposition. This means real earnings are preserved. Companies with commoditised products may not be able to pass through any meaningful amount of their higher input costs, resulting in declines in their real earnings.

Historically, some commodities and non-fiat currencies such as gold have been considered good inflation hedges. However, we believe **software companies will be identified as more effective, modern inflation hedges** going forward. These companies typically have software that is absorbed in the workflow of an organisation, which means there are high switching costs. Often the software is under-monetised relative to its value, as the focus has been growing its user base and capturing the addressable market opportunity rather than optimising pricing. Companies that have strong market positions and a loyal user base paying relatively low monthly subscription fees could substantially increase their prices. Globally, examples include flagship products from both Salesforce and Atlassian, who charge relatively low monthly subscriptions for access to their software. Domestically, examples include core products from both WiseTech Global ("WiseTech") and Xero. For example, we understand WiseTech through its CargoWise One platform only charges a small amount at the point of value transfer (time of invoice) for each transaction. Based on the complex problems WiseTech helps solve for its customers and the limited cloud based available alternatives, we believe these fees could be increased substantially while retaining its customer base.

Businesses such as Tencent and Alibaba that have large, loyal customer bases but have low take rates and revenue streams from advertising and payments relative to Western peers also should have an ability to increase their take rate in an inflationary environment.

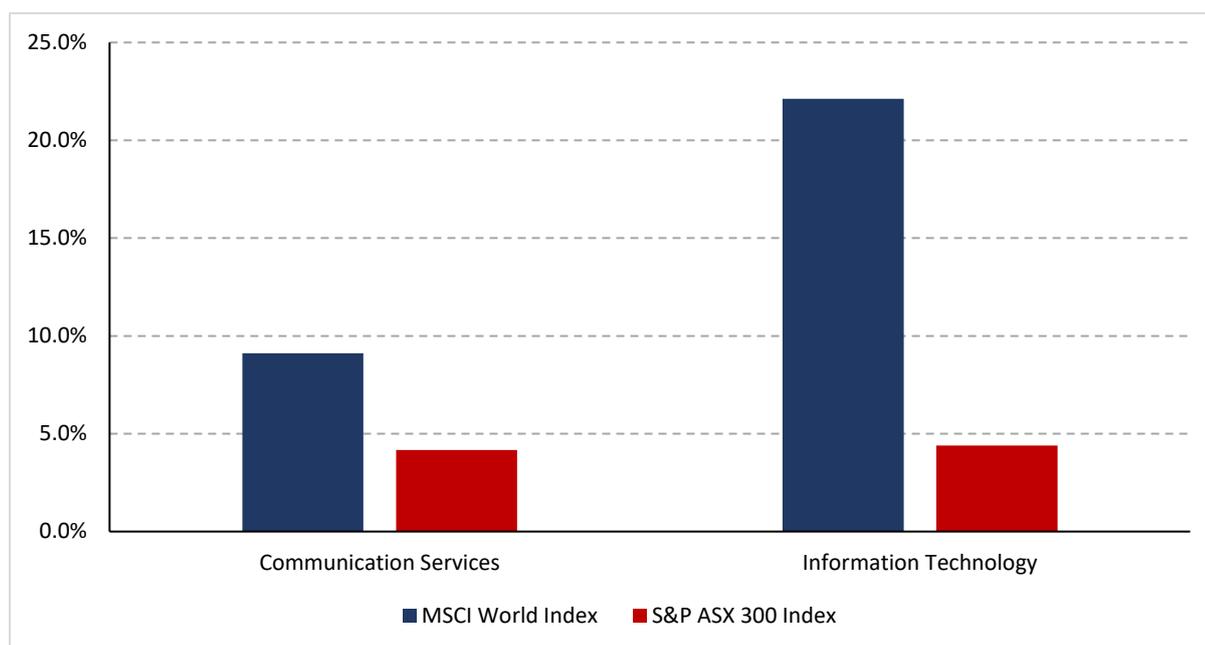
Software has moved from the edges of society and business to the core over the past decade. This trend has accelerated through COVID-19. However, software, as largely represented by the classification of Information Technology and to a lesser extent Communication Services, is still a relatively small percentage of the major equity benchmarks. This contrasts with Hyperion's portfolios, where most of the stocks are innovative and modern businesses that use technology well.

We estimate software represents less than 30% of developed global equities and less than 8% of the Australian listed market. The Information Technology and Communication Services sectors currently have weights of 22% and 9%, respectively, in the MSCI World Index. Furthermore, Information Technology and Communication Services is 4.4% and 4.2%, respectively, of the S&P/ASX300 Index<sup>3</sup>. We believe software is a good segment of the market to discover companies with strong pricing power.

---

<sup>3</sup> GICS Sector weightings as at 30 June 2021. Source: FactSet.

**Figure 23:** MSCI World Index and S&P/ASX 300 Index sector weightings



*Source: FactSet. Data as at 30 June 2021.*

Higher quality businesses have more pricing power and are in a better position to pass on any inflation-based increases in their cost base by lifting the prices they charge their customers. Thus, they are in a good position to retain the “real” (inflation-adjusted) value of their future free cash flows. In this situation, the long duration nature of higher quality stocks is not relevant to their present value. That is, if these businesses can increase the nominal rate of growth in their future free cash flows sufficiently to offset any increase in the discount rate resulting from an increase in inflationary expectations, then the present value remains unchanged.

In addition, extremely high structural growth stocks are in a better position to handle high levels of inflation compared with stocks with a more modest growth rate. Even if we assume these high-quality stocks are not in a position to increase the nominal value of their future free cash flows and thus retain the real value of those free cash flows, the relative impact on the cash flow is lower.

**In a relative sense, the higher the nominal structural growth rate for a company, the less the real growth rate declines for any given increase in inflation.** A business with a 40% structural growth rate with 10% inflation suffers a 25% decline in real structural growth (compared to a zero-inflation situation). Contrast that with a 20% nominal growth rate company that would suffer a 50% decline in real growth from a move in inflation from 0% to 10%.

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

July 2021

## Appendix 1

**Table 2:** U.S Real Gross Domestic Product: Percent Change from Quarter One Year Ago (Billions of U.S. Dollars)

	2019				2020				2021
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1 (r)
<b>Gross Domestic Product (GDP)</b>	2.3	2.0	2.1	2.3	0.3	-9.0	-2.8	-2.4	0.4
<b>Personal Consumption Expenditures (PCE)</b>	2.3	2.4	2.5	2.5	0.2	-10.2	-2.8	-2.7	1.8
<b>Goods</b>	3.0	3.9	4.2	3.7	3.1	-1.7	7.2	6.7	13.2
<b>Durable Goods</b>	3.4	4.7	5.5	5.7	2.0	-1.5	12.8	11.6	27.6
<b>Nondurable Goods</b>	2.8	3.5	3.6	2.7	3.6	-1.8	4.3	4.1	6.0
<b>Services</b>	2.0	1.8	1.7	1.9	-1.1	-14.0	-7.3	-6.8	-3.3

**Source:** U.S. Bureau of Economic Analysis (2021). Note: (r) denotes revised estimates. Data from latest U.S. Bureau of Economic Analysis release on 24 June 2021.

**Table 3:** Expenditure on goods as % of GDP has increased during the COVID-19 crisis

	2019		2020			2021
	Q4	Q1	Q2	Q3	Q4	Q1 (r)
<b>Gross domestic product (GDP)</b>	19,254.0	19,010.8	17,302.5	18,596.5	18,794.4	19,086.4
<b>Personal consumption expenditures</b>	13,353.7	13,118.4	11,860.3	12,924.7	12,999.1	13,353.3
<b>Percentage of Total GDP (%)</b>	69.4%	69.0%	68.5%	69.5%	69.2%	70.0%
<b>Goods</b>	4,811.8	4,812.9	4,677.4	5,152.4	5,134.3	5,446.7
<b>Percentage of Total GDP (%)</b>	25.0%	25.3%	27.0%	27.7%	27.3%	28.5%
<b>Durable goods</b>	1,811.7	1,752.0	1,744.6	2,028.2	2,022.6	2,235.3
<b>Percentage of Total GDP (%)</b>	9.4%	9.2%	10.1%	10.9%	10.8%	11.7%
<b>Nondurable goods</b>	3,018.2	3,070.6	2,947.9	3,154.5	3,142.1	3,255.4
<b>Percentage of Total GDP (%)</b>	15.7%	16.2%	17.0%	17.0%	16.7%	17.1%
<b>Services</b>	8,584.9	8,365.3	7,306.9	7,919.6	8,002.5	8,085.4
<b>Percentage of Total GDP (%)</b>	44.6%	44.0%	42.2%	42.6%	42.6%	42.4%

**Source:** U.S. Bureau of Economic Analysis (2021). Note: (r) denotes revised estimates. Figures presented in Billions of chained (2012) U.S. Dollars, seasonally adjusted at annual rates. Data from latest U.S. Bureau of Economic Analysis release on 24 June 2021.

**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 [investorservices@hyperion.com.au](mailto:investorservices@hyperion.com.au).

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. Past performance is not a reliable indicator of future performance. Any opinions or forecasts reflect the judgment and assumptions of Hyperion and its representatives on the basis of 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.