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DWS Long View - Q2 2020 update

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Within this report, we present the DWS long term capital market assumptions[1] as of the end of June 2020 for major asset classes.

Back in April we published a report analyzing the impact of the COVID-19 pandemic on long-term return forecasts. Given the level of uncertainty, we presented three potential scenarios: *status-quo*, *2009-repeat*, and *three-sigma*. Over the past quarter, it has become clear that while the COVID-19 crisis is a three sigma type event from an economic perspective, the impact on fundamentals for listed equities and corporate credit is likely to be comparable to those witnessed in 2009. This is due to a combination of prompt actions from governments and central banks (this was not the case in 2009), better capitalisation in certain sectors (financials), and a higher level of 'sponginess' by listed companies, as highlighted in the report we wrote in April (*History lesson II: Estimating the dilution from a COVID -19 recession for equity investors*). **Therefore the assumptions in *2009-repeat* scenario are our base case.**

Investor sentiment has rebounded quickly in Q2. Several key equity market benchmarks are now close to their beginning-of-year levels with the NASDAQ 100 index at record levels. Some investors may find this irrational, but as highlighted in our March report (*History Lessons – why do markets sell-off and then rebound*), absent a credit crisis, a 50% loss of earnings for 2 years would require only a 5% fall in prices, assuming at a constant discount rate. Still, this leaves investors with an underwhelming expectation of real and nominal returns over the next decade.

At an aggregate level, we estimate the forecasted rate of return on a diversified portfolio of assets is now 4.9%, down from 5.7% at the end of Q1. Attractive opportunities exist within equities and alternative asset classes. This outlook is consistent with a 'square root' shaped economic recovery.

A 'W' or 'U' shaped economic recovery would put further pressure on forecasted returns. In this *three-sigma* scenario, equity returns would be lower by about 0.4-0.8% across regions compared to the *2009-repeat* scenario. REITs, Infrastructure, US High Yield have significantly lower forecasted returns under this scenario.

FIGURE 1. DWS TEN YEARS ANNUAL FORECASTED RETURNS

	As at 30 June '20	∆ since March '20
S&P 500	5.5%	-1.1 pp
MSCI Europe	4.6%	-1.9 pp
MSCI UK	6.8%	-2.0 pp
MSCI Germany	4.0%	-2.1 pp
MSCI Japan	3.6%	-0.6 pp
MSCI World	5.0%	-1.4 pp
MSCI EM	5.9%	-1.5 pp
MSCI ACWI	5.1%	-1.4 pp
US Treasuries	0.7%	-0.1 pp
Euro Agg Treasuries	-0.2%	-0.2 pp
US Corporates	1.6%	-1.6 pp
Euro Agg Corporates	0.5%	-0.9 pp
US High Yield	4.5%	-2.0 pp
EM Sovereigns	5.6%	-3.5 pp
Developed REITs	6.5%	NA
US REITs	7.8%	NA
Global Infrastructure	6.2%	NA
Americas Infrastructure	6.8%	NA

Source: DWS Investments UK Limited. Forecasts from of 30 June 2020 to 30 June 2030.

[1] Long-term forecasts are based on 10-year models and should not be compared with 12-month forecasts published in the DWS CIO View

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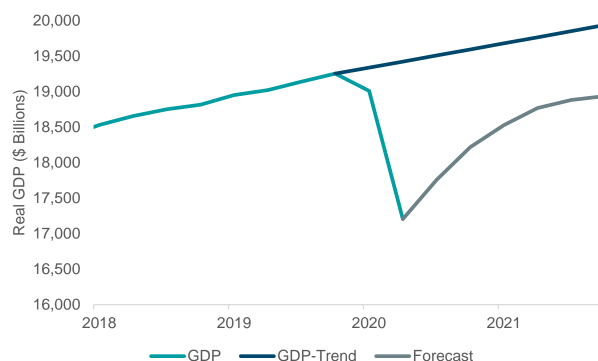
A three sigma economic event with a 'square root' shaped economic recovery

The coronavirus pandemic has sent the global economy into its deepest recession since World War II. By our estimates, the global economy will shrink by 5% this year. In April, when most of the advanced economies were in a lockdown, production came to a literal standstill. This led to a decline in the second-quarter GDP of roughly 10% Q/Q in most industrialized countries.

Governments have implemented fiscal packages in unprecedented size to keep the global economy from sliding into a depression. Loan programs were implemented in March to keep companies solvent and employees on their payrolls. Later, when the lockdown measures were eased, various fiscal stimulus packages were launched to restart the economy. **These measures in aggregate were roughly 10% of GDP in many countries and, including loans, even rose to 40% of GDP in some cases.** Central banks also stepped in and expanded their balance sheets in an unprecedented manner. **Using its various tools, the Fed is likely to double the size of its balance sheet by the end of 2020 while the ECB's balance sheet will increase by at least EUR 1,350 bn from the Pandemic Emergency Purchase Programme**. These measures helped to increase the liquidity at commercial banks and—especially the various large bond-buying programs—kept interest rates low at the long end of the maturity curve, improving the affordability of the various government programs through lower interest expenses. That has helped economies to recover quickly from the trough of the recession and to avoid a depression-type scenario. We forecast growth to turn positive in the third quarter in most advanced economies.

Despite this sharp short-term recovery, the economy will take time, possibly into 2023, to recover back to 2019 levels. Recovering to full employment will take even longer. Until a viable vaccine or treatment becomes available, new outbreaks of the virus are likely, disrupting supply chains and dragging on economic activity. We also think that Covid-19 will leave longer-term scars with lower productivity growth than pre-pandemic levels. Many restrictions on goods production may remain, with production diversified to more locations at the cost of some economies of scale. Just-in-time production may also give way to more inventory buildups. Therefore, we expect the shape of the recovery to look like a 'square root', as shown in Figure 2 for the US.

FIGURE 2. US GDP FORECAST VS PRE-COVID TREND



Source: DWS Investments UK Limited. Data as of 30 June 2020.

How COVID-19 has impacted long term return potential, a scenario based analysis

To estimate the impact of such crisis on asset classes, the DWS Research Institute has published a number of research papers since March (see bibliography). In April we published a report *DWS Long View: The impact of COVID-19 pandemic on long-term return forecasts.* Back then, given the high level of uncertainty, we presented three potential scenarios based on downside risks to economic growth, dividends, and credit default losses: the *status-quo*, *2009-repeat*, and *three-sigma*, outlined in Figure 3.

FIGURE 3. ASSUMPTIONS FOR EACH SCENARIO

Scenario	Assumptions
Status-Quo	Assumes fundamentals will be unaffected by COVID-19. Return forecasts are improved based on market repricing in Q1.
2009-Repeat	**Utilizes long-term inputs observed in 2009. Dividends fall and normalize over a 5-year window. Corporate credit experiences modest negative ratings migration and default losses while sovereign bonds perform modestly better than in the status-quo.**
Three-Sigma	Dividend cuts are more severe and take the full 10-year period to normalize. Credit migration and losses are more severe, based upon observation in only 2009. Sovereign bonds experience a synthetic shock scenario that embeds asymmetric default and downgrade probabilities.

Source: DWS

Over the past quarter, it has become clear that whilst this is *three-sigma* event from an economic perspective, the impact on fundamentals is more comparable to what we saw in 2009. This is possibly due to a combination of prompt actions from governments and central banks, which was not the case in 2009, better capitalisation in certain sectors (financials) and a higher level of 'sponginess' by listed companies as highlighted in the report we wrote in April (*History lesson II:*

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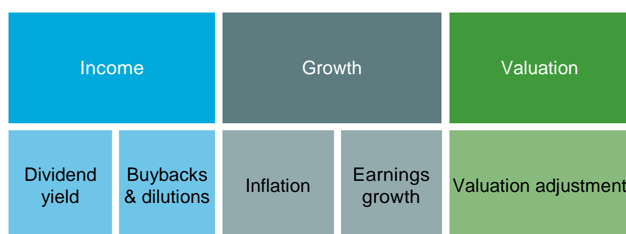
Estimating the dilution from a COVID -19 recession for equity investors).

While some fundamental uncertainty still exists, additional clarity around the general trajectory of the global economic recovery as well as a sharp rebound across global risk markets allows us to update our return forecasts for the main asset classes

Equity Forecasts

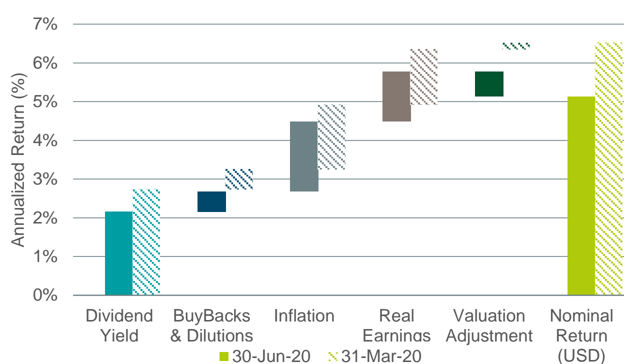
For our equity return forecasts, Figure 4 and Figure 5 illustrate the changes to our return pillars for 1-year MSCI All Country World forecast. While the sharp rally in equities (and associated re-rating higher in P/E multiples) led to a decline in the contribution of the valuation pillar from positive 0.2% to -0.6%, dividend cuts across regions, especially for sectors such as Energy and Financials, also detract from the contribution of dividend yield to forecasted returns from 2.7% to 2.2%.

FIGURE 4. PILLAR DECOMPOSITION FOR EQUITIES



Source: DWS Investments UK Limited. Data as of 30 June 2020.

FIGURE 5. MSCI ALL COUNTRY WORLD: CONTRIBUTION TO 10 YEAR FORECASTED HYPOTHETICAL ANNUALIZED RETURNS FOR 2009-REPEAT SCENARIO

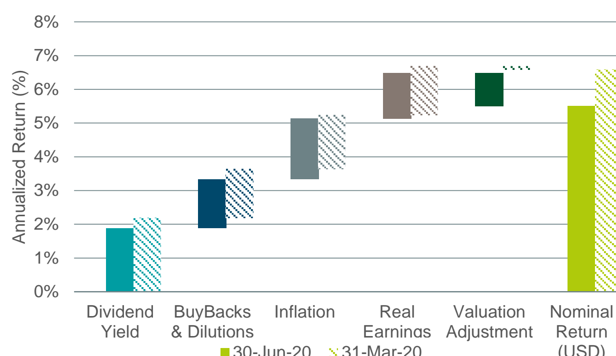


Source: DWS Investments UK Limited. Data as of 30 June 2020.

Europe is more affected by dividend cuts while lower US returns are mainly because of higher valuations

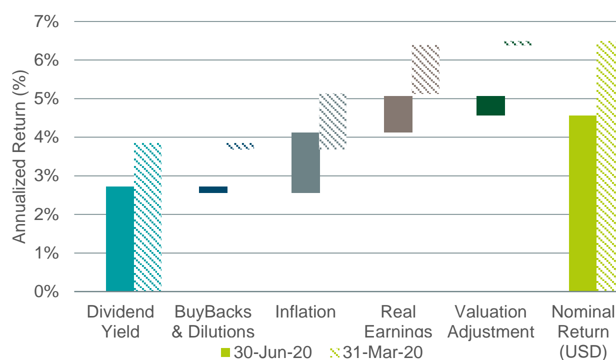
At the regional level, the valuation adjustment and income pillars have affected the returns differently. While valuation adjustment had a bigger role in the US (Figure 6), reducing the forecasted return from the S&P 500 by 87bps (versus MSCI Europe 59bps as shown in Figure 7, the lower returns in Europe are mainly due to additional dividend cuts, which are more severe in the Energy and Financials sectors. These cuts have reduced the S&P 500 and MSCI Europe forecasted returns by 30 bps and 113 bps respectively.

FIGURE 6. S&P 500: CONTRIBUTION TO 10 YEAR FORECASTED HYPOTHETICAL ANNUALIZED RETURNS FOR 2009-REPEAT SCENARIO



Source: DWS Investments UK Limited. Data as of 30 June 2020.

FIGURE 7. MSCI EUROPE: CONTRIBUTION TO 10 YEAR FORECASTED HYPOTHETICAL ANNUALIZED RETURNS



Source: DWS Investments UK Limited. Data as of 30 June 2020.

Low dilution risk in equities

Banks were badly affected during the financial crisis, raising, in aggregate, USD 650 billion to repair their balance sheets and to meet the new capital requirements that regulators had imposed on them to prevent a similar crisis in the future. This strengthening of balance sheets has placed the industry in a position of strength with banks only required to suspend their dividends and share buybacks this time to maintain their capital at the minimum levels specified by the regulators.

DWS recently published a report analysing dilution risk in US banks (see bibliography), highlighting that the banks may lose USD 430 billion if loan losses were to increase to 8.2% as the Federal Reserve (Fed) has modelled for its v-shaped economic recovery scenario. For comparison, the worst loss rate that US banks have experienced in any year since the 1930s was 3.5% in 2009, and the cumulative three-year loss between 2008 and 2010 was 8.02%. Under a more stressed scenario, with the shape of the recovery looking like a "U"

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rather than a "V", the Fed believes the loan losses could increase to 10.3%. At this higher loss rate, US banks may lose USD 590 billion[2].

The Tier 1 (core) capital ratio under this more stressed scenario would fall to 8.1% (from 13.1% in 2019), above the acceptable minimum capital limit, assuming that banks suspend their dividends and share buybacks. In this scenario US banks would only take about four years to rebuild their capital, assuming they continue to earn USD 150 billion annually, their average net income since 2012.

FIGURE 8. U.S. BANKS' PROFITABILITY UNDER VARIOUS SCENARIOS

(USD billion)	Severely Adverse	Alternative Scenarios V	U	W
Leverage (Tangible Assets / Tangible Equity)	11x	11x	11x	11x
Earnings before provisions (% of Tangible Assets)	1.45%	1.45%	1.45%	1.45%
Provisions for loan losses (% of Gross Loans)	6.3%	8.2%	10.3%	9.9%
Nominal Return on Tangible Equity (ROE)	-19.1%	-28.6%	-39.2%	-37.2%
Net Loss	287	431	589	559

Source: U.S. Federal Deposit and Insurance Corporation (FDIC) data for commercial banks, The US Federal Reserve, DWS and CROCI. The nominal ROE is calculated using the beginning of the year tangible equity balances. Data as available on 2 July 2020. For Illustrative purposes only. Due to various risks, uncertainties, and assumptions made in our analysis, actual events or results or the actual performance of the markets covered may differ materially from those described.

Real Estate/Infrastructure

Included in the Q2 forecasts is our outlook for liquid alternatives, specifically REITs and Infrastructure. While REITs and Infrastructure both leverage very similar pillars to equities (see Figure 9), returns are derived largely from income via dividend distributions as shown in Figure 10.

Across liquid real assets, our return forecasts in the 2009-repeat scenario indicate a somewhat more constructive outlook. While valuations remain stretched in traditional equities, REIT dividend yields remain modestly above longer term averages. This provides both advantageous levels on income contribution but also indicates a potential tailwind in terms of compression in valuations. Similarly, infrastructure returns embed a favorable income stream.

The risk to REITs and Infrastructure are linked to further materialization in the severity of dividend cuts, but on a short term and on a more structural basis as a result of Covid-19 related fundamental corporate issues. This will be further highlighted in the *three-sigma* scenario later on in this paper.

FIGURE 9. PILLAR DECOMPOSITION FOR REITS AND INFRASTRUCTURE

Asset Class	Income	Growth		Valuation
Listed real estate equity	Dividend yield	Inflation	Earnings growth	Valuation adjustment
Listed infrastructure	Dividend yield	Inflation	Earnings growth	Valuation adjustment

Source: DWS Investments UK Limited. Data as of 30 June 2020.

FIGURE 10. GLOBAL INFRASTRUCTURE INDEX AND GLOBAL REITS: CONTRIBUTION TO 10 YEAR FORECASTED HYPOTHETICAL ANNUALIZED RETURNS

Local Currency	Income	Growth	Valuation	Return (%)
Developed REITs	3.9%	1.7%	0.9%	6.5%
US REITs	4.1%	1.8%	1.9%	7.8%
Americas Infra	3.9%	2.5%	0.5%	6.8%
Global Infra	3.6%	2.4%	0.2%	6.2%

Source: DWS Investments UK Limited. Data as of 30 June 2020.

Fixed Income

The fundamental return outlook across fixed income looks challenged for the next 10 years. The combination of low starting yields, increasing government deficits, and persistent fundamental risk across corporates detract from the pillars of return contribution we utilize in Figure 11.

FIGURE 11. PILLAR DECOMPOSITION FOR FIXED INCOME

Income	Growth	Valuation		
Yield	Roll return	Valuation adj.	Credit migration	Credit default

Source: DWS Investments UK Limited. Data as of 30 June 2020.

[1] For testing bank resilience, DWS analysis assumes loan losses accrue within the first year of the crisis instead of nine-quarters used in the Fed's analysis

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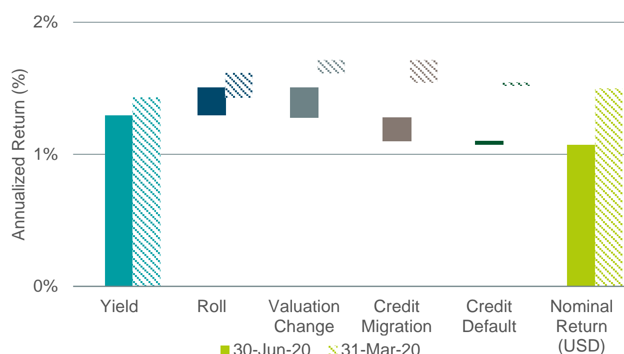
Lower returns in government securities

Government bonds and other safe haven fixed income assets saw yields rally modestly in Q2. The yield on the Barclays US Agg Treasury Index fell from 0.58% to 0.50% from the end of March to the end of June. Spreads for other traditionally low-risk fixed income such as agency MBS and high quality investment grade corporates rallied significantly from technical wide levels the end of Q1. This leaves US Agg investors with low nominal and real return potential for the next decade.

FIGURE 12. US AGGREGATE BOND INDEX : CONTRIBUTION TO 10 YEAR FORECASTED HYPOTHETICAL ANNUALIZED RETURNS

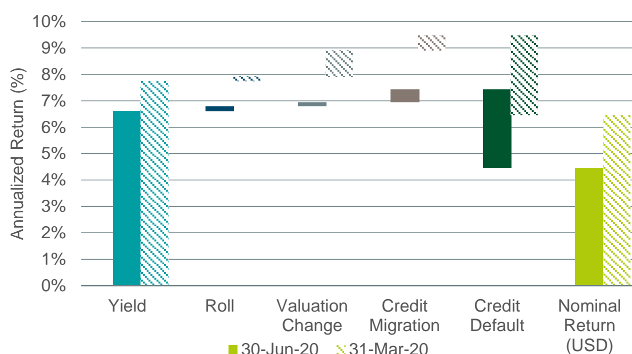


Source: DWS Investments UK Limited. Data as of 30 June 2020.

Compressed credit spreads while default risks remain

Forecasted returns for High Yield bonds and other speculative credit asset classes have declined significantly over the course of Q2. For the Barclays US High Yield Index, starting yield levels fell from 9.44% to 6.87%, with the vast majority of the rally being driven by compression in credit spreads. A supportive technical environment, the aid of fiscal stimulus, and unprecedented corporate bond buying from the Federal Reserve were all contributing factors for this strong rally. Credit default loss forecasts remain at nearly -3%, signifying continued fundamental weakness against the strong technical backdrop.

FIGURE 13. US HIGH YIELD BOND INDEX : CONTRIBUTION TO 10 YEAR FORECASTED HYPOTHETICAL ANNUALIZED RETURNS



Source: DWS Investments UK Limited. Data as of 30 June 2020.

Three-Sigma Scenario

Investors with an anticipation of a deeper and/or more protracted economic recession should look at the return forecasts under the *three-sigma* scenario. This scenario is consistent with a "U" or "W" shaped economic recovery with deeper dividend cuts and more severe credit migrations and losses than what is modelled in the *2009-repeat* scenario. The net implication (Figure 14) is that equity returns are lower by about 0.4-0.8% across regions compared to the *2009-repeat* scenario. REITs and Infrastructure have a significantly lower forecasted return under this scenario as a consequence of dividend impairment disproportionately impacting these income-heavy asset classes. Within Fixed Income, US High Yield is most affected with a forecasted 1.5% 10-year return compared to 4.5% under the *2009-repeat* scenario.

FIGURE 14. 10-YEAR FORECASTED HYPOTHETICAL ANNUALIZED LOCAL CURRENCY RETURNS ACROSS EQUITY AND FIXED INCOME MARKETS FOR OUR 2009-REPEAT AND THREE-SIGMA SCENARIOS

Local Currency	2009-Repeat	Three-Sigma	Difference
S&P 500	5.5%	5.1%	-0.4 pp
MSCI Europe	4.6%	4.1%	-0.5 pp
MSCI EM	5.9%	5.2%	-0.7 pp
MSCI ACWI	5.1%	4.6%	-0.5 pp
US Treasuries	0.7%	0.3%	-0.4 pp
US Corporates	1.6%	1.2%	-0.4 pp
US High Yield	4.5%	1.5%	-3.0 pp
EM Sovereigns	5.6%	4.6%	-1.0 pp
Developed REITs	6.5%	3.2%	-3.3 pp
Global Infrastructure	6.2%	4.3%	-1.9 pp

Source: DWS Investments UK Limited. Data as of 30 June 2020.

Conclusion

As we witnessed a sharp rebound across risk markets in Q2, combined with a more moderate global economic recovery, we examine the forecasted return outlook of our *2009-repeat* scenario as our new base case. Figure 15 shows how richer equity valuations, tighter credit spreads, and comparable starting levels of developed market sovereign yields impact a moderate strategic asset allocation. The result leaves a challenge return outlook for investors as risk premia have compressed to correspond with historically dovish central policy. And while economic fundamentals have recovery rather quickly, the potential for persistent economic drag and credit risk resulting from the Covid-19 crisis further dampen return potential.

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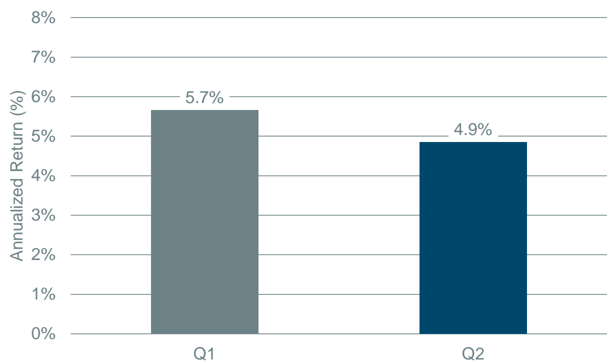
FIGURE 15. 10-YEAR FORECASTED HYPOTHETICAL ANNUALIZED RETURNS OF MODERATE STRATEGIC ASSET ALLOCATION FOR 2009-REPEAT SCENARIO



Source: DWS Investments UK Limited. Data as of 30 June 2020.

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Curto, Francesco and Agarwal, Sarvesh (2020). *History lesson II: Estimating the dilution from a COVID -19 recession for equity investors*

Curto, Francesco and Agarwal, Sarvesh (2020). *Dilution Risk in the US Banks*.

Appendix

Representative indices

TABLE 1: EACH ASSET CLASS IN THIS PUBLICATION IS FORECASTED AS PER ITS CORRESPONDING REPRESENTATIVE INDEX*

Broad Asset Class	Asset Class	Representative Index
Equities	S&P 500	S&P 500
Equities	Euro Stoxx 50	Euro Stoxx 50
Equities	MSCI Europe	MSCI Europe
Equities	MSCI UK	MSCI United Kingdom
Equities	MSCI Germany	MSCI Germany
Equities	MSCI Switzerland	MSCI Switzerland
Equities	MSCI Japan	MSCI Japan
Equities	MSCI World	MSCI World
Equities	MSCI EM	MSCI Emerging Markets
Equities	MSCI ACWI	MSCI All Country World Index
Fixed Income	US Treasuries	Bbg Barclays US Treasury
Fixed Income	Euro Agg Treasuries	Bbg Barclays Euro Treasury
Fixed Income	Sterling Gilts	Bbg Barclays Sterling Gilts
Fixed Income	US Corporate	Bbg Barclays US Corporate
Fixed Income	Euro Agg Corporates	Bbg Barclays Euro Aggregate Corporate
Fixed Income	US High Yield	Bbg Barclays US High Yield
Fixed Income	EM Sovereigns	Bbg Barclays Emerging Markets USD Sovereign

Source: Bloomberg Finance L.P., DWS Investments UK Limited. As of 7/31/20.

APPENDIX 1. PERFORMANCE OVER THE PAST FIVE YEARS (12-MONTH PERIODS)

	6/15-6/16	6/16-6/17	6/17-6/18	6/18-6/19	6/19-6/20
S&P 500	4.0%	17.9%	14.4%	10.4%	7.5%
MSCI Europe	-10.4%	18.6%	3.4%	5.1%	-5.0%
MSCI UK	3.4%	16.7%	8.2%	1.6%	-15.2%
MSCI Germany	-10.7%	26.2%	0.9%	-0.6%	-0.7%
MSCI Japan	-23.4%	31.0%	9.3%	-6.5%	3.6%
MSCI World	-2.2%	18.9%	11.7%	7.0%	3.4%
MSCI EM	-11.7%	24.4%	8.6%	1.6%	-3.1%
MSCI ACWI	-3.1%	19.5%	11.3%	6.4%	2.7%
US Treasuries	6.2%	-2.3%	-0.6%	7.2%	10.4%
Euro Agg Treasuries	8.9%	-3.3%	1.7%	6.4%	2.8%
Sterling Gilts	14.2%	-1.0%	2.0%	5.3%	11.9%
US Corporates	7.9%	2.3%	-0.8%	10.7%	9.5%
Euro Agg Corporates	5.2%	1.3%	1.1%	4.8%	-0.4%
US High Yield	1.6%	12.7%	2.6%	7.5%	0.0%
EM Sovereigns	10.5%	4.9%	-2.4%	12.3%	0.3%
Developed REITs	18.5%	-1.5%	5.7%	10.3%	-14.5%
US REITs	23.7%	-2.3%	3.6%	10.8%	-12.9%
Global Infrastructure	3.2%	8.0%	2.5%	12.7%	-6.0%
Americas Infrastructure	4.1%	8.9%	1.6%	15.6%	-5.0%

Source: DWS Investments UK Limited. Forecasts from of 30 June 2015 to 30 June 2020.

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