The Big Picture

Vaccination Progresses Around the World

Over the second quarter, equities rose as vaccination campaigns continued to accelerate in most developed economies, especially in Europe, which is now catching up with the UK and the US. Emerging economies continued to lag on the vaccination front but cases remain very low in China and seem to have peaked in India.

Economic Re-Openings Have Led to Acceleration in Growth

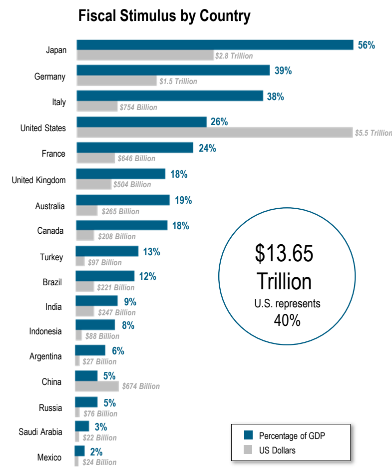
Governments in most developed markets continued to ease Covid-related mobility restrictions and activity levels picked up. Economic data over the last three months has generally been very strong, especially in the US, which posted an annualized growth rate of 6.4% in the first quarter. Although the eurozone economy contracted by 0.6% in the first quarter, leading economic indicators, such as purchasing managers' index (PMI) business surveys, have reached multi-year highs in many regions. These indicators point to a strong economic rebound having taken place in Europe in the second quarter. Global growth is likely to remain strong in the second half of the year.

Inflation Concerns Impact Fed Outlook

The reopening of economies and the quick rebound in activity that has followed has fueled inflation in some countries. In May, the US consumer price index increased by 5.0% year on year, although some of the underlying details suggest that there are temporary factors at play, such as the rise in used car prices. While the Federal Reserve continues to see this inflation increase as transitory, it has become slightly more hawkish, acknowledging that tapering is being discussed. The median Federal Open Mark Committee participant also now expects two rate hikes sometime in 2023, up from no rate hikes just three months ago.

Global Equities Continue Marching Higher

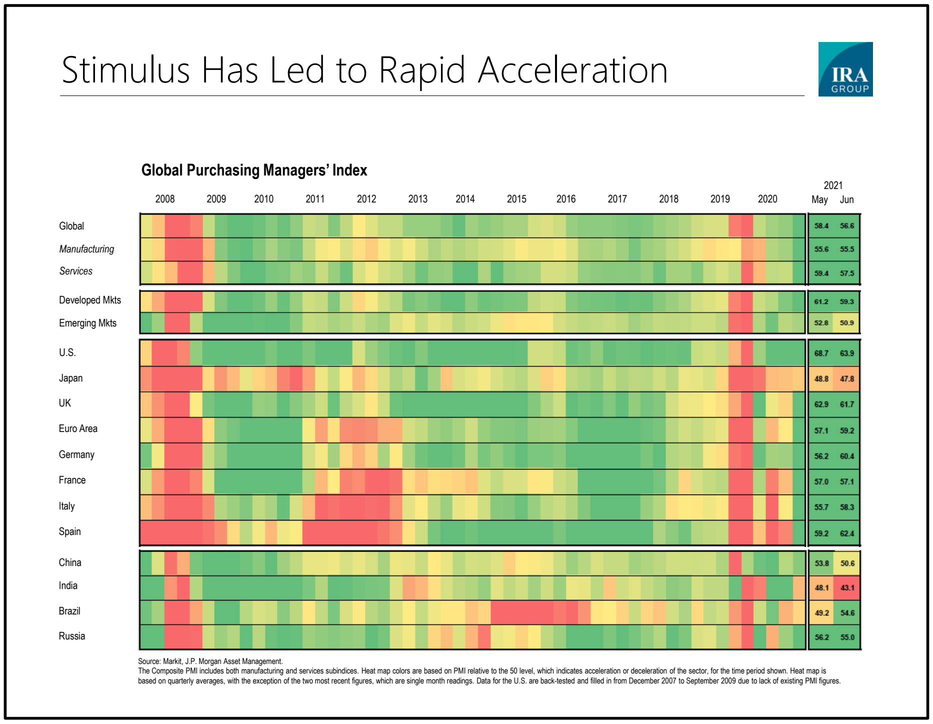
The S&P 500 delivered the best return (+8.5%) last quarter, thanks to the rebound of growth stocks, strong first-quarter earnings growth (47% y/y), and the prospect of more fiscal stimulus as Biden reached a bipartisan deal to boost infrastructure spending by $600 billion. European stocks followed closely (+7.1%), supported by the reopening of regional economies and strong global goods demand.



Source: Statista

As vaccination distribution expands and countries continue to relax social distancing policies and re-open their economies, global growth is accelerating. Coupling the release of COVID-induced pent-up consumer demand and the introduction of an extraordinary amount of fiscal stimulus throughout major economies around the world, consumers are flush with cash and ready to spend.

The most stimulative economy has been Japan, introducing fiscal stimulus at a staggering level of 56% of GDP. However, in absolute US dollar terms, the United States leads the way with $5.5 trillion in spending. This level of currency "float" could have ramifications in the future with US dollar valuation and domestic inflation.

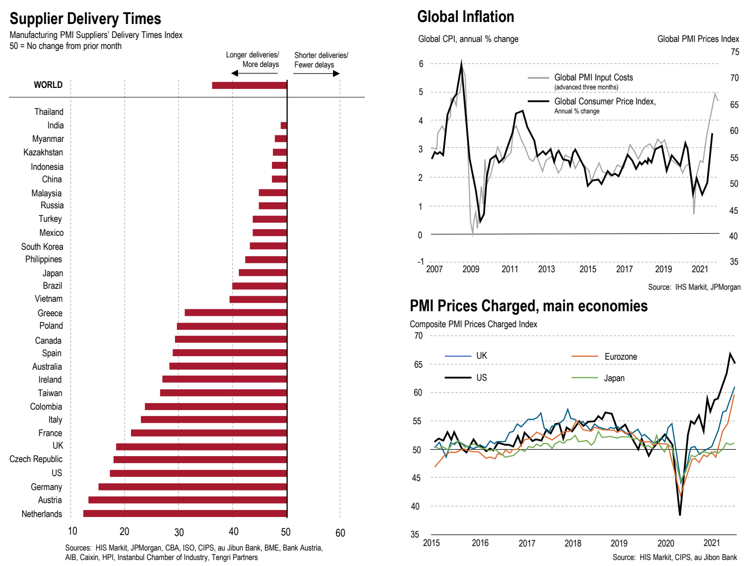


With outsized stimulus, both fiscal and monetary, and high consumer demand, it is not surprising to see accelerating global growth. The Global Purchasing Managers' Index (PMI) is an index of the prevailing ***direction*** of economic trends in the manufacturing and service sectors. A measurement above 50 suggests economic expansion while below 50 implies contraction. The degree to which the value is above or below the 50 level gives an indication of relative strength.

As the PMI chart shows, most major economies with the exception of Japan and India, are in expansion territory. The surprising aspect is the immediacy and degree of improvement. Note the global economy (top row) only showing declines (red) in 3Q19 and 4Q19 followed by a rapid reversal over the subsequent four quarters. Typically, declines last for 3-4 quarters (see 2008-2009) with a gradual improvement over time.

Also, a measurement between 50-55 represents a normal growth trajectory. Yet, on the heels of a global pandemic, the current global measurement is 56.6 and the U.S., the worlds largest economy, is leading the way at 63.9. Not surprisingly, there is a direct correlation between a country's PMI measurement and the economic re-opening process…notice the difference in May and June PMI measurements between Developed Markets and Emerging Markets. This might suggest a likelihood of accelerating growth in Emerging Markets prospectively as those populations are vaccinated and the economies re-open.

Which Has Impacted Supply & Pricing



With the sharp increase in consumer demand coupled with the liquidity created by fiscal stimulus, it is not surprising that disruptions have materialized along the supply chain. Using the PMI methodology (+/- 50) for supplier delivery times (left chart), it is evident that demand currently outstrips supply which has led to a sharp uptick in inflation during the first half of 2021. However, as the charts on the right indicate, US inflation appears to be abating over the last month. This would be consistent with the Fed's view of transitory inflation as we exit pandemic-induced spending and the economy normalizes over the longer-term.

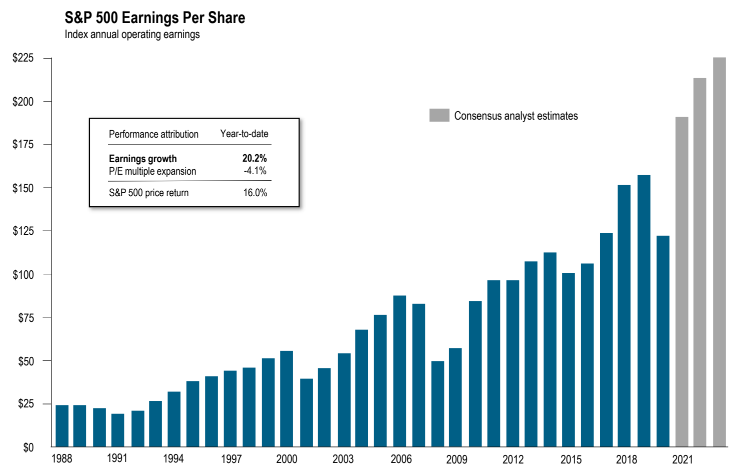
Uneven Inflation Across Sectors / Industries

	Seasonally-Adjusted Change from Prior Month							Unadjusted	
	Dec 2020	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021	12-Mos Ending June 2021	
All Items	0.2	0.3	0.4	0.6	0.8	0.6	0.9		**5.4%**
Food	0.3	0.1	0.2	0.1	0.4	0.4	0.8		2.4%
Food at home	0.3	-0.1	0.3	0.1	0.4	0.4	0.8	0.9%	
Food away from home	0.4	0.3	0.1	0.1	0.3	0.6	0.7	4.2%	
Energy									24.5%
Gasoline (all types)	5.2	7.4	6.4	9.1	-1.4	-0.7	2.5	45.1%	
Fuel oil	10.2	5.4	9.9	3.2	-3.2	2.1	2.9	44.5%	
Electricity	0.4	-0.2	0.7	0.0	1.2	0.3	-0.3	3.8%	
Utility gas	-0.4	-0.4	1.6	2.5	2.4	1.7	1.7	15.6%	
All Items Less Food & Energy	0.0	0.0	0.1	0.3	0.9	0.7	0.9		**4.5%**
Commodities	0.1	0.1	-0.2	0.1	2.0	1.8	2.2	8.7%	
New vehicles	0.4	-0.5	0.0	0.0	0.5	1.6	2.0	5.3%	
Used cars & trucks	-0.9	-0.9	-0.9	0.5	10.0	7.3	10.5	45.2%	
Apparel	0.9	2.2	-0.7	0.1	0.6	0.0	-0.4	4.9%	
Medical care commodities	-0.2	-0.1	-0.7	0.1	0.6	0.0	-0.4	-2.2%	
Services	0.0	0.0	0.2	0.4	0.5	0.4	0.4	3.1%	
Shelter	0.1	0.1	0.2	0.3	0.4	0.3	0.5	2.6%	
Transportation	-0.6	-0.3	-0.1	1.8	2.9	1.5	1.5	10.4%	
Medical care services	-0.1	0.5	0.5	0.1	0.0	-0.1	0.0	1.0%	

While headline inflation in June was reported at 5.4%, removing the volatile food and energy sectors results in a core inflation level of 4.5%. This was expected as a resurgence in demand coupled with supply constraints pushes prices higher. As demand normalizes at lower levels and supply increases, prices are projected to moderate at the Fed's 2.0 – 2.5% target longer-term.

Of particular interest are the significant price increases in the Commodities, Used Car & Trucks, and Transportation sectors which appear to have accelerated starting in April as the removal of social distancing restrictions began. Commodities can be explained by supply constraints associated with a surge in consumer demand. Transportation can be explained by increasing consumer demand coupled with reduced flight schedules because of COVID. At the time of this writing, we cannot offer plausible rationale for the increase in Used Car and Truck Prices.

Leading to Earnings Improvement and…



Source: FactSet, Compustat, Standard & Poor's, J.P. Morgan Asset Management. Historical EPS levels are based on annual operating earnings per share. Earnings estimates are based on estimates from Standard & Poor's and FactSet Market Aggregates. Past performance is not indicative of future returns.

The robust economic environment and higher prices have led to rosy earnings projections over the next several quarters for the companies that comprise the S&P 500 Index. Interestingly, while the year-to-date price return for the Index is +16.0%, it is all attributable to earnings growth. The P/E ratio for the market, while still elevated, has actually declined since the beginning of the year which has resulted in a negative contribution to overall S&P performance.

Asset Class Returns

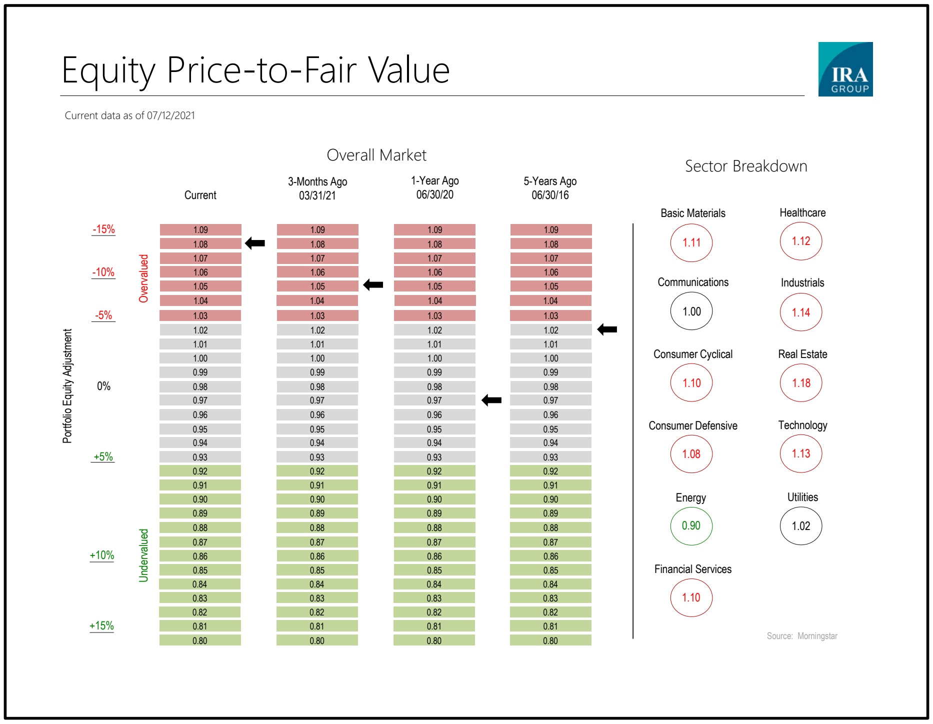
Data as of 06/30/2021

	Value	3 Month	Growth	Value	1 Year	Growth	Annualized Total Return % 3 Year	5 Year	10 Year
Stable Principal									
Cash Equivalents		0.01			0.07		1.23	1.15	0.61
90-Day U.S. Treasury Bills									
Fixed Income									
High Grade Bonds		1.83			-0.33		5.44	3.07	3.44
BBgBarc US Aggregate Bond Index									
High Yield Bonds		2.51			15.69		6.77	7.17	6.37
Credit Suisse High Yield Bond Index									
International Bonds		0.45			3.06		2.81	1.28	0.79
FTSE Citigroup World Gov't Bond Index									
Equity									
Large Cap Stocks	4.99	8.55	11.93	39.54	40.79	41.36	18.67	17.65	14.84
S&P 500 Index									
Mid Cap Stocks	5.66	7.50	11.07	53.06	49.80	43.77	16.45	15.62	13.24
Russell Mid Cap Index									
Small Cap Stocks	4.56	4.29	3.92	73.28	62.03	51.36	13.52	16.47	12.34
Russell 2000 Index									
International Stocks	3.01	5.17	7.42	33.50	32.35	30.97	8.27	10.28	5.89
MSCI EAFE Index									
Other									
Commodities		15.72			57.37		-2.72	1.73	-6.48
S&P GSCI Index									
Real Estate		11.68			32.26		11.60	8.20	9.70
Dow Jones US Real Estate Index									

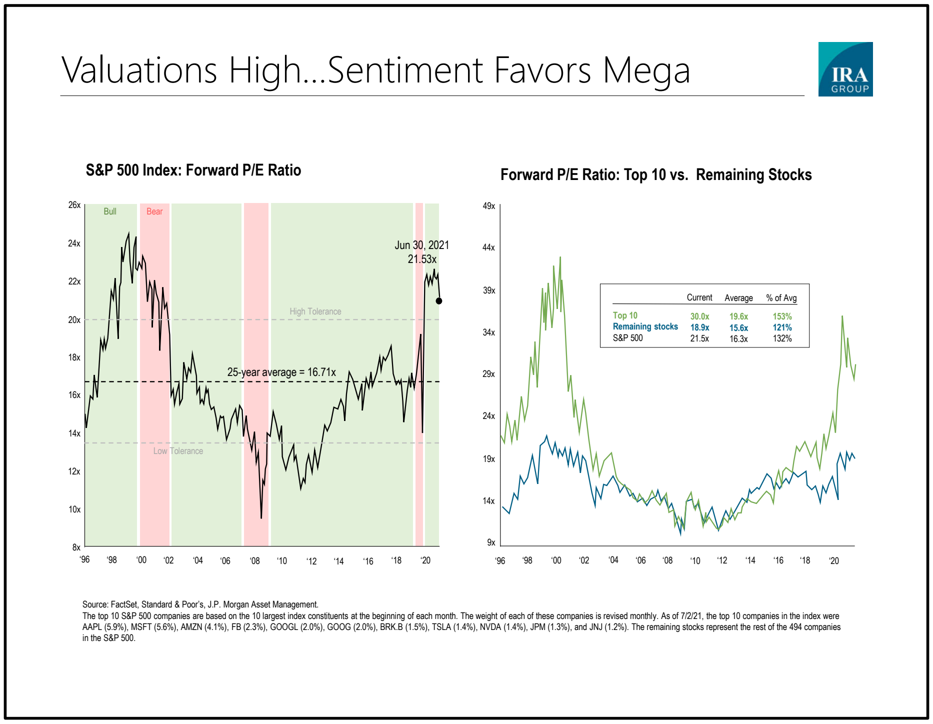
Source: Morningstar. Indices are not actively managed, and investors cannot invest directly in indices. Past performance is no guarantee of future results.

With the favorable economic backdrop and forecasts of significant corporate earnings growth, the markets have responded favorably with all major asset classes posting positive returns during the quarter. What's more, the positive earnings growth projections led to growth stocks taking the lead over value stocks once again during the quarter.

Of note is the improvement in the returns of commodities during the quarter and trailing 12 months. This can be attributable to supply chain pressures and rising prices for raw materials.



Using our price-to-fair value methodology, equity prices remain elevated at 1.08 (suggesting 8% overpricing). With the outperformance of Growth stocks during the latest quarter, the Growth sectors (Consumer Cyclical, Healthcare, Industrials, and Technology) are among the most overvalued in our opinion.



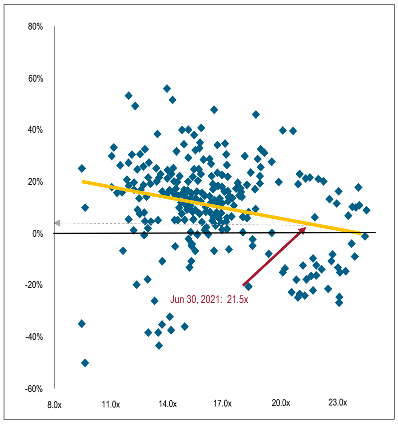
The price-to-fair value view of overpricing appears to be confirmed by the relative P/E methodology. The chart on the left indicates that the P/E ratio of the market at 21.53x forward earnings remains quite high by historical standards and is outside of the high tolerance zone (one standard deviation from the mean). We view elevated P/Es to be acceptable in the current low interest rate environment since a lower discount rate (because of low interest rates) is being applied to calculate the present value of future earnings leading to a higher values. However, the degree to which the market P/E exceeds historical averages is concerning.

Interestingly, the overall market P/E is heavily influenced by mega cap stocks. The 10 largest stocks in the S&P 500 Index (listed below) trade at an average 30.0x P/E ratio while the remaining stocks average 18.9x – well within the high-end tolerance band. This provides a level of comfort that the market overvaluation as measured by P/E is not broad-based.

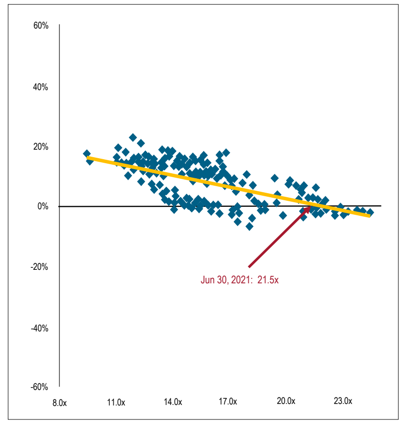
Apple	27x
Microsoft	33x
Amazon	62x
Facebook	29x
Alphabet A	32x
Alphabet C	32x
Berkshire Hathaway B	26x
Tesla	169x
Nvidia	53x
JP Morgan	13x
Johnson & Johnson	18x

U.S. Valuations Could Affect Future Gains

S&P 500 Forward P/E & Subsequent 1-Year Returns

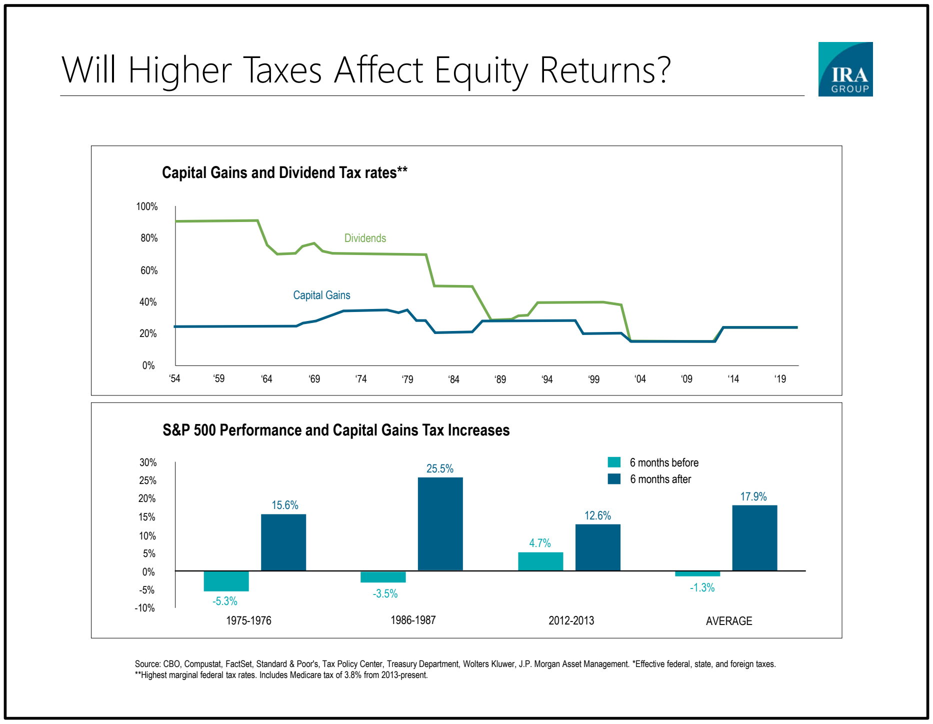


S&P 500 Forward P/E & Subsequent 5-Year Returns



Source: FactSet, Standard & Poor's, Thomson Reuters, J.P. Morgan Asset Management.
Returns are 12-month and 60-month annualized total returns, measured monthly, beginning 5/31/96. Price-to-earnings is price divided by consensus analyst estimates of earnings per share for the next 12 months as provided by IBES since June 1996, and J.P. Morgan Asset Management for July 7, 2021.

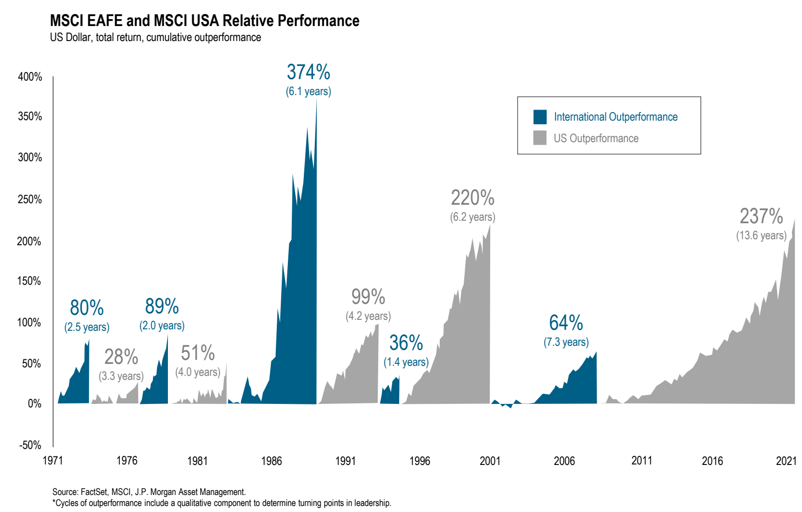
Over longer periods of time, there appears to be a direct correlation between equity valuations and future returns. In other words, when equities trade at high levels (as measured by P/E), future returns are likely to be lower as valuations normalize. This suggests that, while corporate earnings are expected to continue growing, stock prices may not follow as P/E compression offsets gains attributable to earnings. Year-to date, earnings growth has contributed 20.2% to the index return while P/E compression has subtracted -4.1% (slide 4). If earnings growth moderates and P/E compression continues, overall returns could be muted.



In light of Washington's proposal to increase the capital gains tax rate to as high as 39.6% (from 20%), a common concern is the potential impact this might have on future equity returns. As the bottom chart shows, historically this has not had an impact on performance. In fact, returns after a capital gains tax hike have far exceeded returns before the hike. However, a plausible explanation may be that investors have realized capital gains before the new tax rate takes effect which can result in a downward influence on equity pricing. Immediate repurchases after the new rate goes into effect puts upward pressure on pricing leading to higher performance – not to mention a higher cost basis.

The current proposal eliminates strategic timing. If the legislation is passed, realized capital gains after May 2021 would be subject to the new rules.

Does the Cycle Favor International?



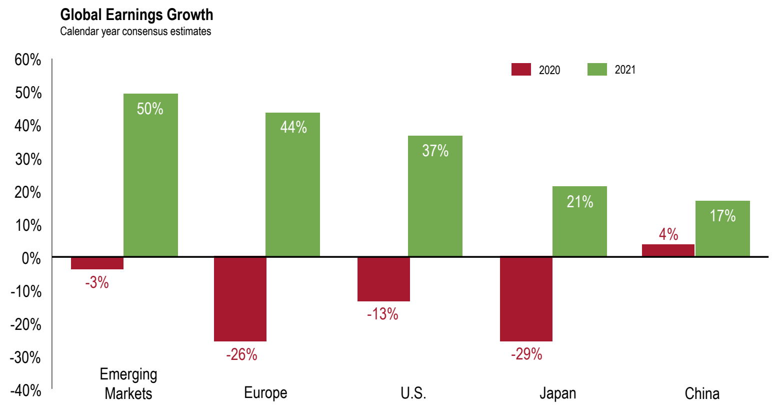
Concluding that current US equity valuations are high amidst a backdrop of potentially slower domestic growth as the effect of stimulus fades, we analyzed potential opportunities overseas on the basis of three factors:

- Cyclicality
- Earnings
- Valuation

As the chart shows, we have experienced a prolonged cycle of US equity outperformance (vs. international) when compared to prior cycles. The average cycle prior to the recent has been 4 years with outperformance averaging 116% on either side. The current cycle favoring US stocks has extended to 13.6 years with outperformance double that of the historical average.

Interestingly, we have experienced two global economic shocks during this time period (Financial Crisis 2008, Pandemic 2020). In both instances, the US led the way with both fiscal and monetary stimulus which resulted in expedited economic recovery domestically. However, there could be a future cost in the form of more muted economic growth due to stimulus costs.

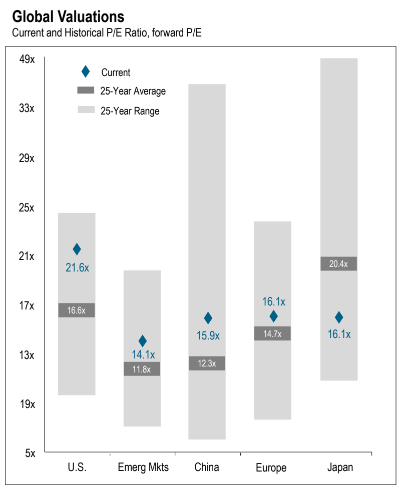
Do Earnings Favor International?

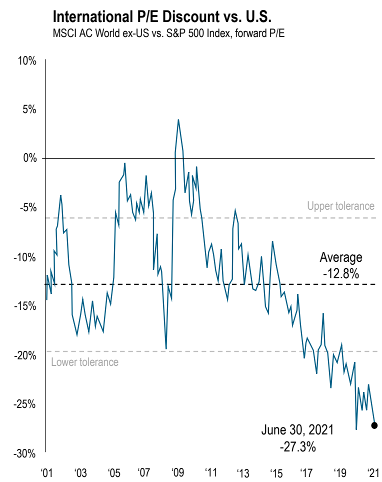


Source: FactSet, MSCI, Standard & Poor's, Thomson Reuters, J.P. Morgan Asset Management.
Valuation and earnings charts use MSCI indices for all regions/countries, except for the U.S., which is the S&P 500. All indices use IBES aggregate earnings estimates, which may differ from earnings estimates used elsewhere in the book. MSCI Europe includes the Eurozone as well as countries not in the currency bloc, such as Norway, Sweden, Switzerland and the UK (which collectively make up 44% of the overall index). Past performance is not a reliable indicator of current and future results.

Earnings growth appears to favor Emerging Market and European economies going forward. Interestingly, while China did not experience the economic decline of the rest of the world during the pandemic in 2020, their projected growth rate during the global economic recovery in 2021 is subdued on a relative basis.

Does Valuation Favor International?





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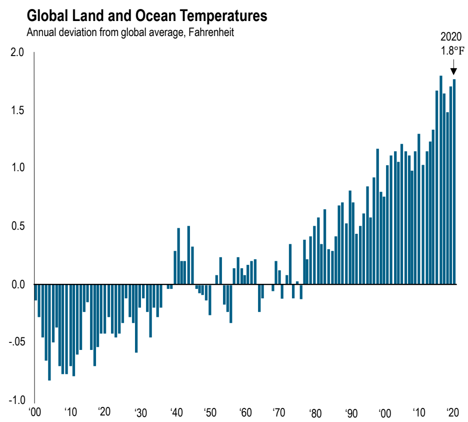
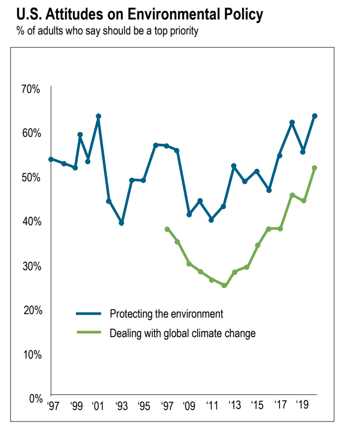
As the chart on the left indicates, valuations for international stocks as measured by forward P/E ratio are above long-term averages with the exception of Japan. However, we believe that P/Es should be elevated because of the low interest rate environment. It is more a question of relative P/Es.

As the chart on the right shows, international stocks have historically traded at lower P/E ratios than US stocks with the average margin at -12.8%. Example: If US stocks have traded at a 20x multiple historically, international stocks have traded at 17.4x (12.8% less). Currently, international P/E ratios are -27.3% lower than US P/E ratios.

With a combination of the cyclicality influence, projected earnings growth and relative valuation discounts, international stocks may represent an opportunity prospectively.

SEC, DOL & Socially Responsible Investing

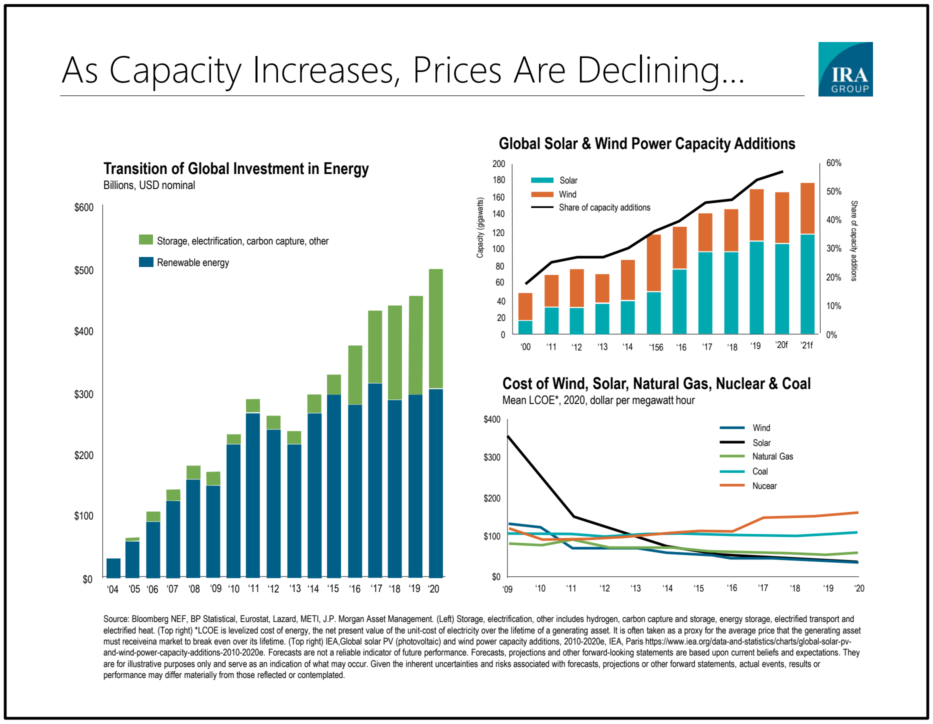




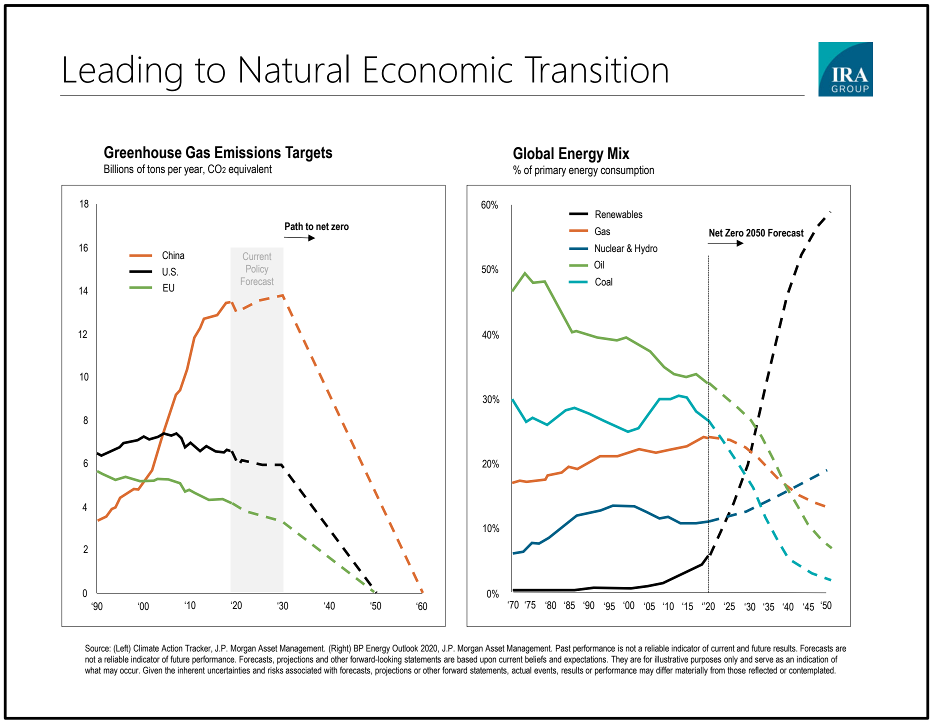
Source: NOAA National Centers for Environmental Information, Pew Research Center, J.P. Morgan Asset Management. (Left) Climateat a Glance: Global Time Series, published February 2021, retrieved on 3/2/21 fromhttps://www.ncdc.noaa.gov/cag/. (Right) Percent of U.S. adults who say this climate issue should be a top priority for the president and Congress. In 2014 and earlier, respondents were asked about "global warming" rather than "global climate change." Survey was conducted 1/8/20 through 1/13/20. From "As Economic Concerns Recede, Environmental Protection Rises on Public's Policy Agenda."

There has been a lot of discussion about socially responsible (ESG) investing lately. With the change in political leadership in Washington, there has been a renewed focus by the SEC and DOL on this issue. The SEC is stepping up efforts to increase corporate disclosures on environmental efforts and scrutinizing investment advisers' ESG marketing claims. The DOL is revisiting guidelines for selecting / using ESG investments in group retirement plans.

As the chart on the right shows, there is an increasing interest in the US about environmental policy. So, we wanted to analyze the changing global landscape in energy sourcing as this is likely to affect investment decision-making.



The chart on the left shows a moderation in the growth of renewable energy sources with a sharper emphasis on storage, electrification and carbon capture over the last few years. In the upper right, note that solar and wind power now garner more than 50% of new capacity. This significant increase in supply has resulted in lower pricing for alternative energy sources (bottom right) with the most significant cost reduction in solar. With the exception of nuclear power, all alternative energy sources are now cheaper than coal…



…Which has led to reductions in greenhouse gas emissions in the US and EU with a policy forecast of zero emissions by the year 2050. China, with its more recent shift to an industrialized economy based on consumption, lags behind by 10 years.

Interestingly, as the chart on the right indicates, the overwhelming majority of energy consumption by the year 2050 is projected to be in renewables, with coal declining to almost 0% by then.

Conclusion: While the current focus on ESG is necessary to continue facilitating the transition to alternative energy sources over time, it is unlikely that this will be a major corporate or investment differentiator over the long, long-term as society adopts alternative energy sources as the standard.