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In a Nutshell

The "Roaring Twenties." It indeed started with a bang. But the remarkable level of irrational exuberance is built on a shaky foundation. The bullish case for U.S. equities over the past two years are interest rates at zero, and the belief rates will remain lower for longer. From our perspective, the market has been on thin ice for about a year now. By the end of 2020, a record amount of cash had made its way into the economy; it almost felt like a cash grab machine. And all this cash was racing towards empty shelves as suppliers could not keep step, so prices shot up. Above trend inflation was always the outcome, even though the market ignored this and soared to record highs. So, here we are now. Inflation is at the highest level in almost 40 years, and zero percent interest rates, the only bullish case for U.S. equities, is soon to be a thing of the past. Interest rates are a principal input for stock valuations. The more you pay for a stock, the lower the expected return, but investors are willing to pay higher prices when interest rates are zero since any return is better than no return. As interest rates rise, the spread between a stock's expected return and the benchmark interest rate declines, so investors receive less compensation for the risk of investing in stocks. An investor will require a higher expected return to receive adequate compensation for the risk of investing in stocks, meaning they are willing to pay less than when interest rates were at zero. Stocks trading at the highest multiples to earnings, lowest expected return, will experience the most considerable price declines as the anticipation of higher rates becomes priced-in. As inflation runs persistently hot, there is a greater likelihood of more rate hikes in an attempt to cool down price increases. With high valuation stocks and overpriced asset classes like U.S. equities under the most pressure, we will lean on stocks outside the U.S. trading at more favorable valuations.

Feed the Ducks When They Are Quacking

It is somewhat of a headscratcher watching the market react to the inevitable spike in inflation and looming rate hikes. The Federal Government has injected trillions of dollars into the economy, with much of it landing directly into consumers' bank accounts. Since the beginning of 2020, bank deposits have grown by almost $5 trillion or 35.8%. From 1973 through 2019, bank deposits grew an average of 6.8% per year. The 21.5% growth in bank deposits during 2020 and 11.7% growth during 2021 rank among the top two years on record. Anytime you have more money chasing the same or smaller basket of goods, you will see prices rise. Over the past two years, we experienced both extremes; consumers flush with cash and inventory at historically low levels. Not only has the dynamic induced rising prices for goods and services, but also higher asset prices. The past two years have been great for asset owners; the S&P 500 is up 52.4% on a total return basis, used car values are up 67.4%, and U.S. median home prices rose 32.1%. For property owners in the Phoenix metropolitan area, median home prices are up an astounding 45% in just two years.

With a massive boost in wealth and extra cash in the bank, it is easy to see why people have bid up home prices at a blistering pace, how so many unprofitable companies could go public to such great fanfare, and how billions of dollars could end up in cryptocurrency, which is neither a currency nor a productive asset. Leaning on the wisdom of Warren Buffett, "nothing sedates rationality like large doses of effortless money." With easy money and easy gains comes an increased appetite for risk, and anytime investors are salivating, Wall Street is good at ensuring they are satiated. Special Purpose Acquisition Companies (SPACs), companies that raise money through an initial public offering to find a company to bring public, saw their deal value almost double in 2021 and now stand at 12 times the deal value in 2019. SPACs are a speculative investment, representing a blank check for the managers to acquire a business that typically could not go public through the traditional IPO process. And, in some cases, those businesses do not generate revenue or have an actual product to sell. This activity occurred on top of a year in which traditional IPO deal value was up 80%. But wait, there is more. The total value of all cryptocurrencies stood near the $3 trillion mark to finish 2021. In addition, thousands of cryptocurrencies were created in 2021 because the several thousand existing coins were not enough. You can even trade derivatives on cryptocurrencies using leverage. So, you can borrow money and make a bet on which direction the price of a security will move, which has a price tied to a cryptocurrency whose price fluctuates based on what someone may have Tweeted. Cryptocurrencies are like Beanie Babies; they have a limited supply, and everyone is buying them. But how many of you still have Beanie Babies?

So much money has been injected into the economy, enough to prop up an ever-growing supply of risky assets, drive legacy stocks to all-time highs, and on top of that, deliver unprecedented home price appreciation. Perhaps, more consequential is the jarring 7% rise in inflation during 2021, the outcome of adding large sums of money into the system. Importantly is how that will affect consumers' wallets and influence consumer behavior. Since January 2020, expenses have increased 18.3% for transportation, 26.8% for gasoline, and 10.5% for food. Home prices are up 32.1%, and apartment rents are up 15.9% from the start of 2020. The challenge moving forward is regardless of future price increases, prices are not decreasing from their current level. Even if inflation moderates in 2022, everything we buy is already more expensive. And wages are not keeping up. Average hourly earnings were up 4.7% in 2021, while inflation came in at 7%. So, after accounting for inflation, wages decreased 2.3% last year. That does not bode well for consumers and businesses alike. Consumers have less buying power as the cost of living increases faster than income. And companies have higher expenses for everything from raw materials to labor which negatively impacts the bottom line.

Although late, the Federal Reserve has acknowledged it is time to take away the punch bowl and prevent prices from really getting out of control. We have reached an inflection point for the economy with easy money policies set to end and inflation running hotter and more persistent than many anticipated. The Fed has already begun winding down its bond-buying program implemented at the start of the pandemic. The program more than fulfilled its purpose of increasing the money supply and keeping a lid on interest rates. The program flooded the market with $120 billion per month in liquidity by purchasing government bonds in the open market. In conjunction with other Fed measures, they have added more than $4 trillion in liquidity to ensure the proper functioning of the financial system since March of 2020. The Fed announced in November 2021 they would begin tapering the pace of asset purchases, and at the current pace, the program will wrap up in the Spring of 2022. Other comments from the Fed surrounding interest rates have led to a ratcheting up in the expected number of rate hikes in 2022. At the beginning of October 2021, the market was pricing in one rate hike over the following year. The probability has since moved up to four rate hikes by the end of 2022. The financial market must stand on its own two feet again, although not without a lot of kicking and screaming along the way. The sunset of the goldilocks Fed policies means borrowing costs will go up, corporations will have a more difficult time issuing debt, and valuations will matter again.

Valuations Matter

To illustrate the impact of higher interest rates on stocks, we will lean on an alternative measure to the price-to-earnings ratio (P/E), the earnings yield, which is the inverse of the P/E ratio. The P/E ratio is equal to a stock's price per share divided by its earnings per share (P/E = Price / Earnings Per Share), while the earnings yield is equal to a stock's earnings per share divided by its price per share (Earnings Yield = Earnings Per Share / Price). For example, a stock with a $40 price and EPS of $2 has an earnings yield of 5% ($2 / $40 = 5%). For every dollar invested, the company generates five cents in earnings. Both metrics reach the same conclusion and are just two different ways of looking at the same data. The earnings yield is still a valuation measure but provides better comparability with asset classes quoted in yield terms. The P/E ratio, in contrast, does not tell us much when comparing it to a bond yield. Typically, an investor wants a stock with a higher earnings yield, indicating more earnings generated per dollar invested and suggesting the stock is undervalued. Rather than compare the earnings yield to other stocks, it can be more informative to compare against bond yields using the spread between the earnings yield and bond yield to determine if a stock is overvalued or undervalued. The rationale is that stocks are riskier investments than bonds, so investors require a higher yield or risk premium over bonds as compensation for taking on the added risk. If the spread shrinks, investors are compensated less for the level of risk and may not be willing to hold the stock anymore.

We can use the earnings yield to demonstrate intuitively the impact of higher interest rates on stocks trading at high multiples. Let's say we have a high-flying growth company with a current price of $80 and EPS of $2, so the stock is trading at a 40 P/E or a 2.5% earnings yield. When the 10-year Treasury yield is 1%, the stock is trading at a spread of 1.5% (2.5% - 1% = 1.5%). We will assume the 10-year Treasury yield is forecast to rise to 3% over the next year. The same stock with a 2.5% earnings yield is now trading at a spread of -0.5% (2.5% - 3% = -0.5%). An investor would not be willing to purchase the stock at the prevailing price of $80 since their expected earnings yield spread would be negative. For an investor to receive compensation for taking on the risk of stocks compared to bonds, the stock price would need to decrease, which would increase the earnings yield to ensure adequate compensation for the risk. We will assume an investor requires a minimum spread of 1% over the 10-year Treasury yield to invest in the stock. In our example, the stock price would need to fall from $80 to $50, a 37.5% decline, to maintain the 1% spread. At a price of $50 per share and the same EPS of $2, the earnings yield is now 4% ($2 / $50 = 4%), a 1% spread over the expected 10-year Treasury yield of 3% (4% - 3% = 1%). Stocks with an even lower earnings yield, equivalent to a higher P/E ratio, will have even more ground to make up to keep the same spread over the 10-year Treasury yield. And stocks with a higher earnings yield or a lower P/E ratio have less room to fall to retain the same spread over the 10-year Treasury yield. This principle is why we are so valuation conscious. With at least four rate hikes this year and nosebleed valuations from bid-up asset prices, we believe there is tremendous downside risk in the stocks and asset classes with the highest P/E ratios.

Critically, not only are high-flying growth stocks overvalued but U.S. stocks as a whole. Valuations are higher than at any other time over the past 20 years. You need to rewind to the ominous period before the tech bubble burst to find P/E ratios similar to the current level.

Figure 1.

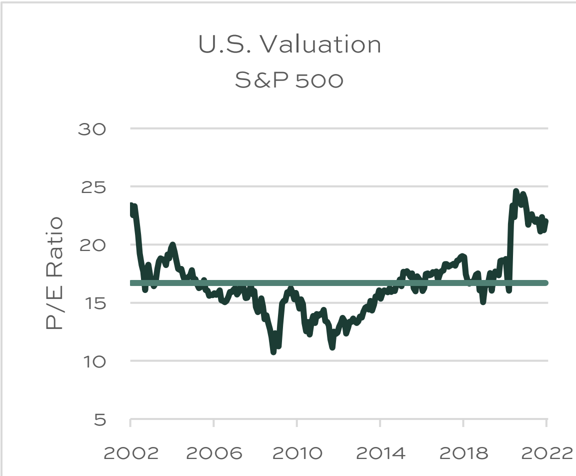
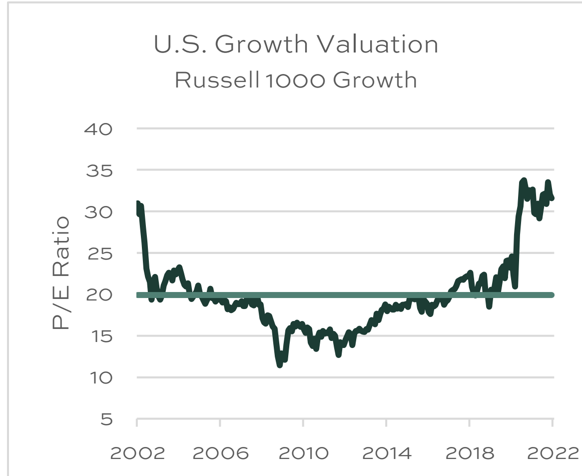


Figure 2.



With U.S. valuations seemingly on another planet, international developed and emerging markets are not only attractive but trading at reasonable valuations. The P/E ratio for both asset classes is currently at the historical average level. As U.S. stocks are sure to be on a collision course with reality soon, we are looking at favorably priced non-U.S. stocks as an opportunity.

Figure 3.

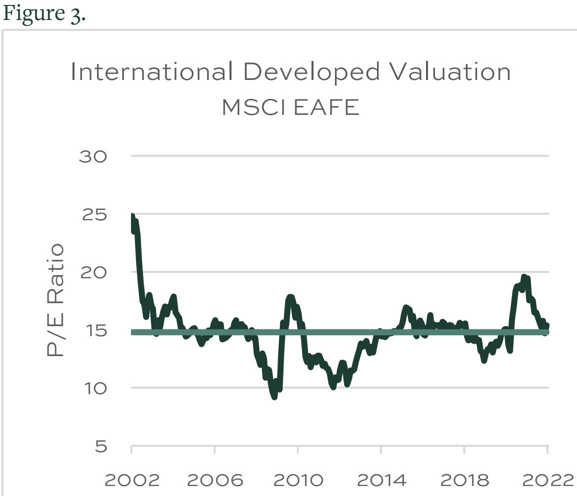
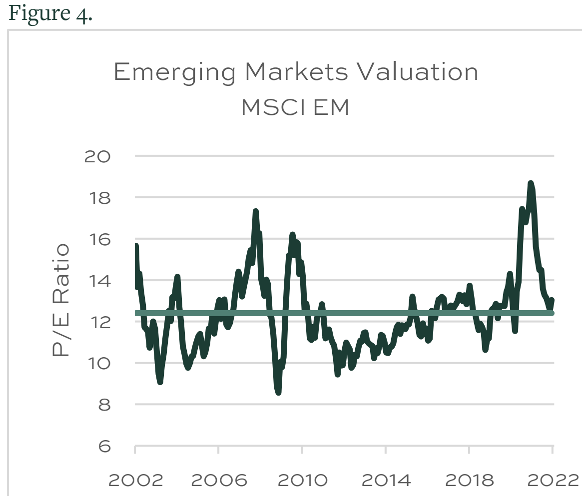


Figure 4.



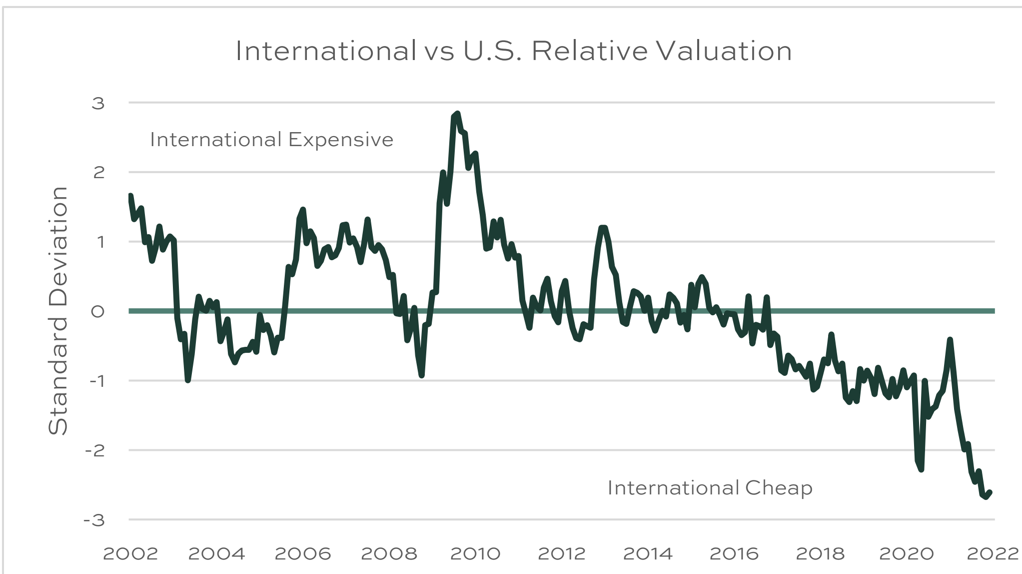
Stocks outside the U.S. are trading at significant discounts relative to their U.S. counterparts. We calculate relative valuation as the P/E ratio of international stocks divided by the P/E ratio of U.S. stocks. International stocks are represented by the MSCI ACWI ex USA Index, covering developed markets and emerging markets outside the U.S., and U.S. stocks are represented by the flagship S&P 500. Historically, international stocks trade at a 14% P/E discount to U.S. stocks. International is trading at a 34% P/E discount today, the biggest since the MSCI ACWI ex USA Index inception in 1994.

Figure 5.

	Current P/E	20-Yr Avg P/E
International	14.6	14.3
United States	22.0	16.7
Intl P/E vs U.S. P/E	-34%	-14%

The below chart illustrates the relationship between the P/E ratios for international and U.S. stocks. The values represent deviations from the historical average of a 14% P/E discount for international. Any value above zero suggests international is expensive versus the historical average, while values below zero imply international is cheap. International is currently more than two standard deviations cheaper than the historical norm. This level of cheapness does not come around often, and we believe it will serve as an immense source of added value moving forward.

Figure 6.



In the second half of 2021, international stocks moved from very cheap to aggressively cheap. Sticking with our high conviction, we reduced the U.S. exposure in our portfolios and increased international in both developed and emerging markets at the end of December. After the changes, our international exposure as a percent of total equity is 53%. And 70% of our U.S. exposure is allocated to value-oriented stocks, those trading at favorable valuations and typically have lower P/E ratios.

There are many risks ahead, from higher interest rates to muted economic growth and several asset bubbles in between. In the meantime, if the market's playbook from the past two years persists, we will use the opportunity to continue reducing our U.S. allocation and buy more international while it is cheap. Timing any inflection point in the market is all but impossible. But, we believe patience will receive justification in spades as our portfolios stand to benefit from a broad repricing in U.S. stocks and a change in leadership to international stocks after 14-years of underperformance.

Figure 1. S&P 500 forward P/E ratio. **Figure 2.** Russell 1000 Growth Index forward P/E ratio. **Figure 3.** MSCI EAFE Index forward P/E ratio. **Figure 4.** MSCI EM Index forward P/E ratio. **Figure 5.** International represented by the MSCI ACWI ex USA Index forward P/E ratio and United States represented by the S&P 500 forward P/E ratio. **Figure 6.** Relative Valuation (RV) is calculated monthly as the MSCI ACWI ex USA Index forward P/E ratio divided by the S&P 500 forward P/E ratio. The dataset is standardized so the values plotted on the chart represent deviations from the mean [RV Deviation = (RV - Average RV) / Standard Deviation of RV].

S&P 500: Measures the performance of U.S. large-cap equities and is comprised of 500 companies across sectors and covers approximately 80% of available market capitalization. **Russell 1000 Growth Index:** Measures the performance of the large-cap growth segment of the U.S. equity universe and includes those Russell 1000 companies with relatively higher price-to-book ratios, higher forecast medium term growth and higher sales per share historical growth. **MSCI ACWI ex USA Index:** Measures the performance of large- and mid-cap equities across 22 developed markets countries (excluding the U.S.) and 25 emerging markets countries and covers approximately 85% of the global opportunity set outside the U.S. **MSCI EAFE Index:** Measures the performance of large- and mid-cap equities across 21 developed markets countries, excluding the U.S. and Canada, and covers approximately 85% of the free float-adjusted market capitalization in each country. **MSCI Emerging Markets Index:** Measures the performance of large- and mid-cap equities across 26 emerging markets countries and covers approximately 85% of the free float-adjusted market capitalization in each country.

Sources: Apartment List, CoinMarketCap, Manheim, Time, Wall Street Journal, WisdomTree, YCharts.