COMMENTARY

May 26, 2017

Dear clients and colleagues,

In the last few weeks, a number of our clients have expressed concerns about equity market valuations. The bull market is now in its 99th month, the second longest in history, and most equity markets around the world are reaching new all-time highs almost daily. Valuations have also reached peak multiples and the price-to-cash-flow ratio is at an all-time high.

Is global growth about to accelerate in a sustainable way? Have investors become more risk tolerant? Is there a lack of better asset choices? Or is it just "irrational exuberance"?

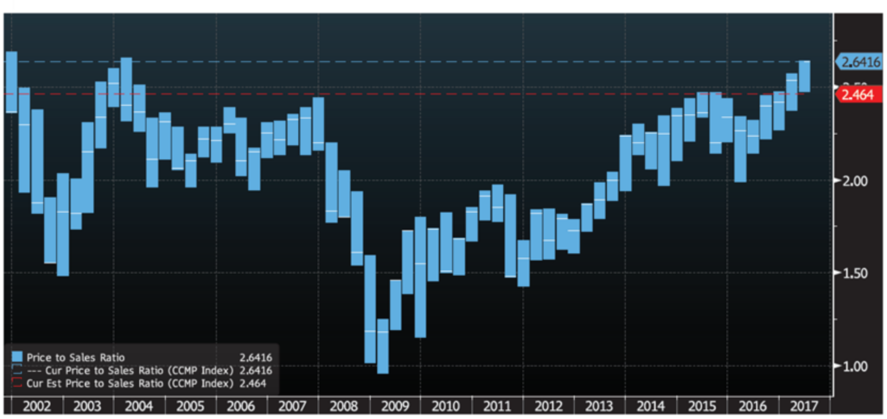
In the last few quarters, mega cap tech companies have been leading the markets higher.

As we write this commentary, the five largest companies in the US are all technology companies: Apple, with a market value of US$804B, Google at US$676B, Microsoft at US$536B, Amazon at US$477B and Facebook at US$440B. Together they have a market value of US$2.9T. In the last year they added over US$1T in value, and today alone they added more than the value of Ford or Estee Lauder.

To put these numbers into perspective, the value of these five companies exceeds the combined market value of the 2,000 companies in the Russell 2000 index, the main US small cap index which has a value of US$2.3T.

These five companies had combined sales of US$573B and combined profits of US$97B. In other words, investors are paying more than 5x sales and 30x the last 12 months' earnings. And if you exclude Apple, these numbers would be over 6x sales and 42x profits.

Looking at the Nasdaq, we are at an all-time high in terms of price-to-sales ratios.



Source: Bloomberg

Are we in a bubble?

Many analysts and technology bulls would explain how it is different this time, how these companies have come to dominate in very large markets, how their dominant competitive position makes them hugely profitable.

Are we witnessing the creation of new monopolies? Remember what happened at the turn of the 20th century when companies like Alcoa, US Steel and Standard Oil were broken up, or in the late 1980s when the same happened to AT&T. Governments, especially the European Union, are currently scrutinizing the market dominance of these companies.

But are they really dominating? Apple's market share of the smartphone market has been declining for the last few quarters and is now less than 15%. Its revenue growth has slowed to less than 5% in the last year.

Amazon has yet to prove it can generate profits from its new retail model. In the last year, Wal-Mart's e-commerce sales growth was more than twice that of Amazon's. Is Amazon a better retailer, or are they simply willing to take lower margins—something other retailers can certainly imitate in a race to 0.

In the case of Facebook, with close to 2 billion users, the question is: How many new users can they add? China, where Facebook is not allowed, has WeChat, with more than 800 million users who are unlikely to switch to Facebook even if they could. That leaves less than 1 billion potential new users, assuming every current internet user joins Facebook.

Another issue faced by these companies is the low tax rates they pay due to very aggressive and controversial planning. Facebook's tax rate is around 13%, far lower that the US 35% statutory rate or even the new 15% rate proposed by President Trump.

Is it different this time around, or have we heard this all before? We can predict what the final outcome will be, we just can't predict when it will happen.

In 2000, the Tech Bubble imploded. That same year the Nasdaq lost 37%, and it took until 2015 to recover the losses.

On March 10, 2000, Microsoft's market cap was US$525B, today it is US$536B. It had US$23B in sales in 2000, US$88B today. What went wrong?

It's the same for Cisco. In 2000 it had a US$466B market cap, today it's US$156B, down two-thirds in the last 16 years. Was it a decline in sales? No! Sales went from US$18B to US$49B. Profits decreased? Again no, net income went from US$2.7B to over US$10B. What about Intel, it went from US $400B to US$171B today.

And we have not discussed Nortel, which had a market cap US$285B in 2000 but is bankrupt today. Or JDS Uniphase, another "horseman of the internet", valued at over US$70B in 2000 but now it is in our small cap universe at US$2.5B.

Again, we can safely state that the technology sector, especially the mega caps, are overvalued and may experience a significant correction. We just do not know when.

What could be the trigger? Just like in 2000, or in any other bubble that is deflating, a change in future growth assumptions would suffice. For Amazon, at 149x this year's expected profit per share, just a few changes in growth rate assumptions could make a huge change in the price objective.

To illustrate our example, we used the DDM function in Bloomberg. In the first table, we did not change any assumptions currently in Bloomberg, which are derived from sell-side analysts covering Amazon.

GRAB

AMZN US Equity — Dividend Discount Model — Amazon.com Inc

Model assumptions

		Risk Premium Country	United States
Earnings Per Share FY1	12.549	Bond Rate	2.252 %
Earnings Per Share FY2	18.526	Country Premium	7.328 %
Earnings Per Share FY3	26.241	Beta	1.149
Dividends Per Share FY1	0.000	1) Risk Premium	8.422 %
Growth Years	5.000	Payout during Growth yrs	0.000 %
Transitional Years	12.000	Payout at Maturity	45.000 %
Long Term Growth Rate	34.403 %	Growth Rate at Maturity	5.870 %
Closing Price	997.390	Currency	USD

Computed values

Theoretical Price	1366.442
Percentage Change from Close	37.002 %
Internal Rate of Return	11.683 %
Expected Return	29.509 %
Implied Growth Rate	30.351 %

Australia 61 2 9777 8600 Brazil 5511 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2017 Bloomberg Finance L.P.
SN 200912 H016-4103-0 25-May-17 14:46:49 EDT GMT-4:00

Source: Bloomberg

This first model assumes that Amazon's earnings per share would go from $5.33 in the last 12 months to $26.24 in 2020. It assumes an annualized earnings growth of 34.4% for 5 years, then declining linearly for 12 years to 5.87% growth, which is the expected growth rate at perpetuity. In this model, Amazon would be worth US$1,366.44, 37% higher than the current price.

GRAB

AMZN US Equity — Dividend Discount Model

Amazon.com Inc

Model assumptions

		Risk Premium Country	United States
Earnings Per Share FY1	12.549	Bond Rate	2.252 %
Earnings Per Share FY2	18.526	Country Premium	7.328 %
Earnings Per Share FY3	26.241	Beta	1.149
Dividends Per Share FY1	0.000	1) Risk Premium	8.422 %
Growth Years	5.000	Payout during Growth yrs	0.000 %
Transitional Years	12.000	Payout at Maturity	45.000 %
Long Term Growth Rate	20.000 %	Growth Rate at Maturity	4.000 %
Closing Price	997.230	Currency	USD

Computed values

Theoretical Price	304.259
Percentage Change from Close	-69.490 %
Internal Rate of Return	7.130 %
Expected Return	-44.100 %
Implied Growth Rate	34.899 %

Australia 61 2 9777 8600 Brazil 5511 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2017 Bloomberg Finance L.P.
SN 200912 H016-4103-0 25-May-17 14:56:14 EDT GMT-4:00

Source: Bloomberg

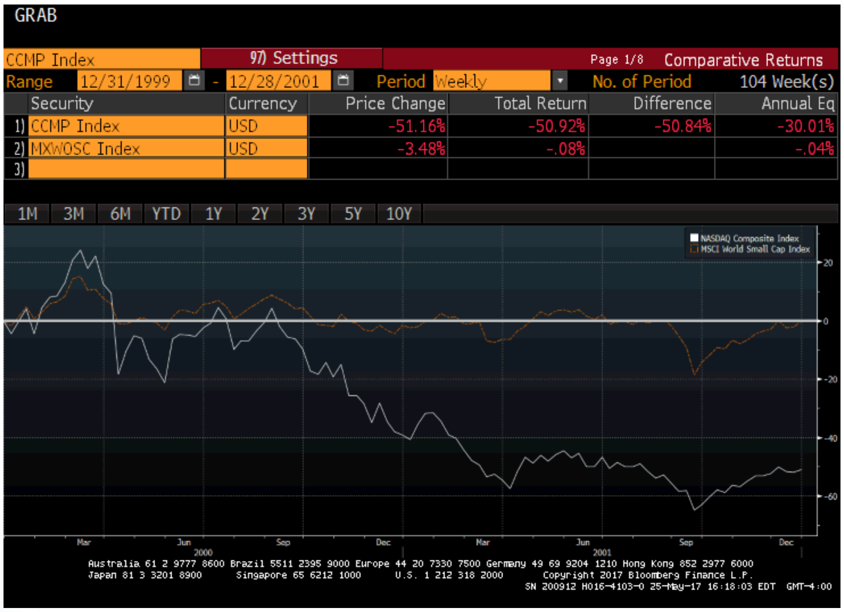
This second table (above) is almost identical to the first one. We changed two numbers: the expected growth rate in earnings for the next 5 years goes to 20% from 34%, still a healthy forecast especially since EPS grew at 8% in the last 12 months. We then changed the growth rate at perpetuity from 5.87% to 4%. The outcome: a stock overvalued by 70%.

So, what is an investor to do?

At the beginning of this commentary we highlighted five companies and noted that together they were worth more than the Russell 2000, which is comprised of 2,000 US small cap stocks with 3.2x the sales of those same five companies. Despite some frothiness in certain sectors of the market, a good 20% of the Russell 2000 is in a bear market (more than a 20% correction).

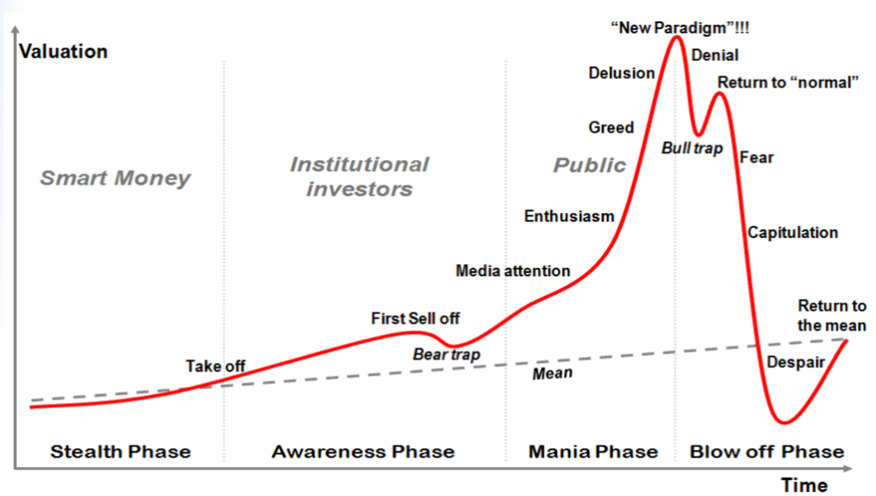
Or we could buy close to the entire EAFE small cap index, 2,209 companies in developed markets outside the US that sell for a price-to-sales ratio of 0.9x and a price/earnings ratio of 17x.

Half of the companies in the S&P 500 today have been added since 2000. These companies came from the small cap universe. With more than 10,000 companies to choose from and no pressure to hold a large weight of one company in benchmarks, an international/global small cap portfolio manager can avoid companies with extreme valuations. The following chart shows the performance of the MSCI Global Small Cap Index in 2000-2001 compared to the Nasdaq Index.



Source: Bloomberg

We will leave you with this interesting chart. You may make your own decision as to where we are on this chart.



Have a good weekend.

The Global Alpha team