MAKENA STRATEGY INSIGHTS NOTE

NOT YOUR PARENTS' GDP GROWTH

Q1 2017

Why growth?

Hardly a week can go by without the popular press covering some aspects of weak productivity or weak growth in the developed economies. The tone of these articles is usually one of worry and hand wringing. In this brief note, we will try to place GDP growth and productivity growth in perspective. Indeed, it seems people often lose sight of why we should care about growth. The answer, put simply, is that GDP growth has become a proxy for standard of living, with stronger growth implying improving living standards for people across the income distribution. For this reason, a 2% number elicits considerable angst, as it pales in comparison to 3-4% growth rates enjoyed in the 1980s and 1990s. However, if we focus on the more important fundamental of living standards, slowing population growth in the developed world (and indeed in some emerging markets such as China) should reorient our conception of GDP growth. Why? Because even with low GDP growth rates we can achieve improving living standards across the world. At the extreme, living standards in Japan will improve with zero GDP growth given the country's declining population, while Europe is not far behind. The United States, thanks to its slightly higher population growth rate compared to the rest of the developed world, requires a higher growth rate in order to keep living standards stable or increasing. Seen from this perspective, the United States' higher growth rate is not necessarily "better" than the rest of the developed world. Figure 2 below shows the above 65 share of population in three major developed countries. Note how the US share of above 65 is accelerating rapidly whereas in Japan the increase in the share of above 65-year-olds is slowing.

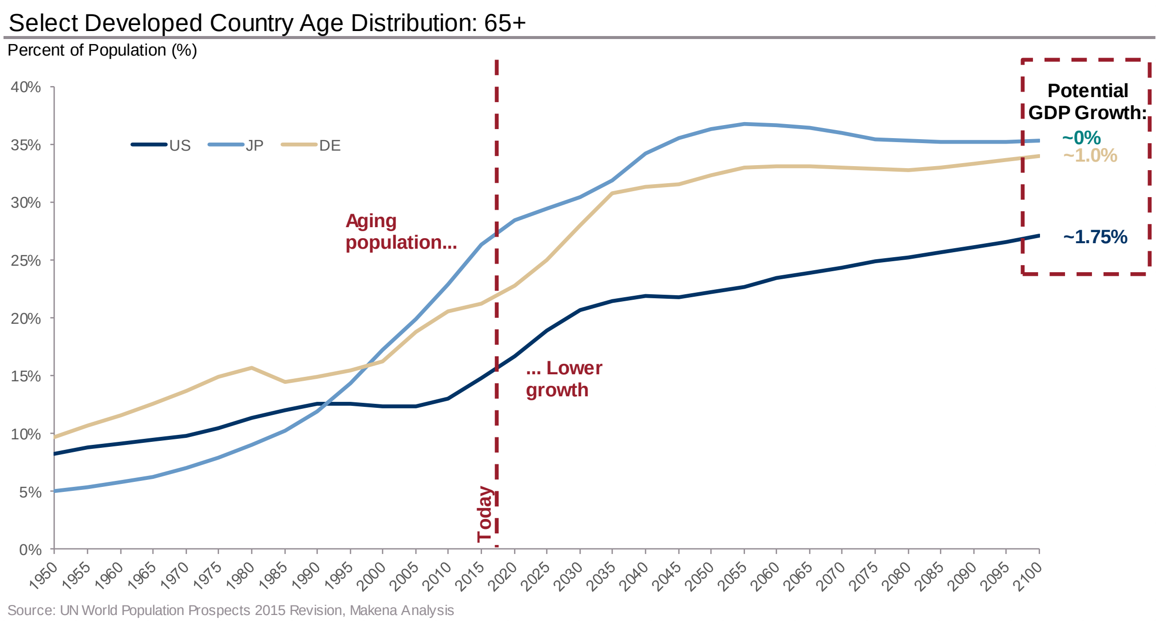

Figure 1: Aging Populations Drive Reduced Potential Growth

At its core, GDP = (number of people working) x (hours worked per person) x (value generated per hour). Therefore, as a population ages, the amount of aggregate labor available to generate income decreases, leading to reduced potential growth rates. Said differently, younger populations facilitate stronger growth rates. Not surprisingly, if we look at GDP growth in the US by decade, a clear downward trend mirrors the aging population as shown in figure 3 below. This trend is visible in most developed nations, and we should expect to see a similar trend in emerging market countries as their populations begin to age (with China in particular starting to face this issue).

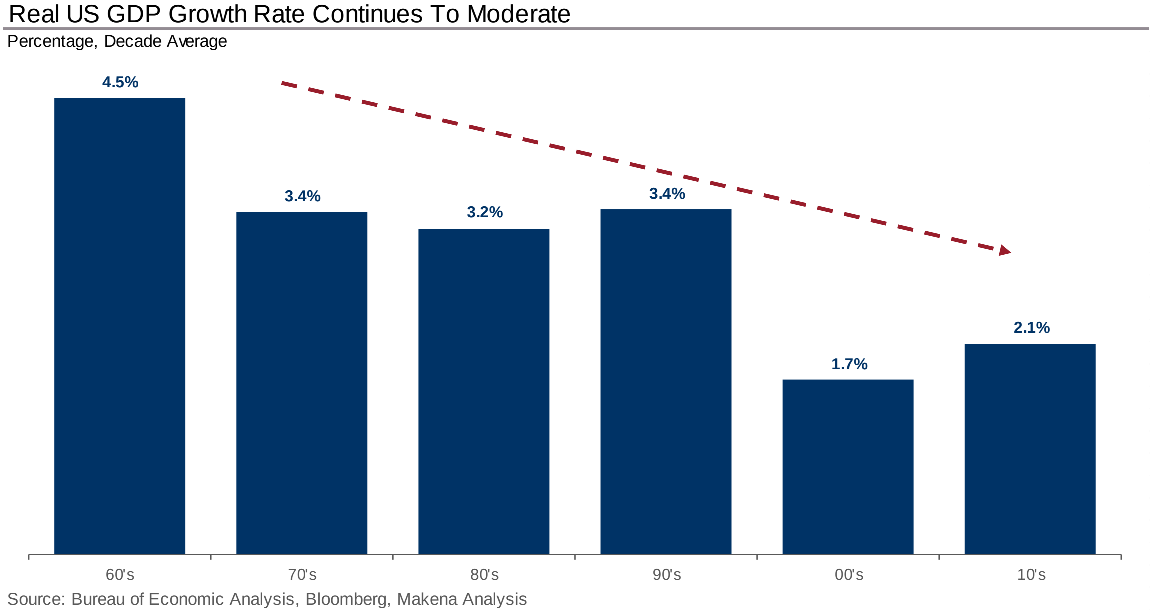

Figure 3: Not Your Parents' GDP Growth

New signposts

The difficulty in grasping and internalizing a change as broad as the one we are experiencing with slowing population growth makes it difficult to contextualize its implications. All historically based analyses will highlight that current growth—hovering around 2%--looks "weak" relative to previous economic expansions. However, as we have demonstrated in previous letters, the United States potential growth rate is now somewhere between 1.5% and 1.75%. Therefore, growth of ~2% is as much as 33% higher than trend – the indication of a booming economy. Looking back at the 80's, when potential was ~3%, a similarly strong expansion would clock in at ~4%. This is why we have all been subjected to various analyses showing how this recovery is the weakest on record, with many experts furiously concocting scenarios under which they hope growth will recover back to earlier levels. One of the scenarios often described is where productivity could increase enough to offset the decline in working population. Recall our simplistic GDP expression, GDP = number of people working x hours worked per person x value generated per hour. If the number of people working is decreasing, and if there are only a fixed number of hours per day where people can work, then the only other variable that could offset an aging population would be to increase the value generated per hour. This is where productivity comes in.

Productivity

Productivity and productivity growth are notoriously difficult to measure, in part because they are highly volatile time series. This volatility is naturally inherent in the business cycle: as the economy starts to cool off, core employees are kept in corporations and ancillary or less productive employees are fired. As a result, productivity often counterintuitively spikes in a recession, before dropping once the recovery is underway and less skilled employees are reentering the workforce. Figure 4 below highlights this phenomenon, with the gray bars showing the recession induced jumps in productivity. At the current point in time, given that we are essentially at full employment, it is not surprising that recent productivity data points have been particularly low. Excluding the noise introduced by the recession–recovery dynamic, we can calculate an average productivity growth of approximately 1.1%. The red line in figure 4 below illustrates the productivity growth required to offset the aging population and return to historic levels of growth. In the 35 years of data we show below, there is not a single data point outside of the recession-recovery dynamic that has productivity growth meeting the requirement of the red line. Said differently, improvements in productivity are unlikely to push us out of this low growth world. Of course there is always the hope that a technological revolution could come about and pull us out of our slow growth reality. We will not opine in these pages on whether or not we are at the cusp of some revolutionary technology. Certainly our venture capital partners continue to deploy capital in these areas, so should a technological shift occur we would most likely benefit handsomely.

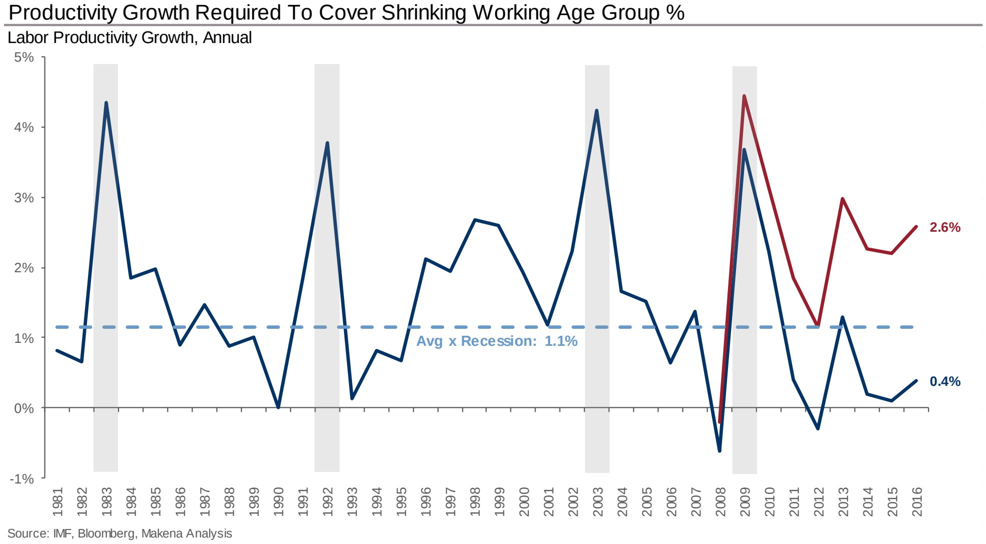

Figure 4: Productivity Well Below Required Levels To Offset Demographic Trends

Pondering the future

Governments and policymakers have yet to internalize the profound implications of the developed world's slower growth future. Most importantly, lower growth implies lower likelihood of excess inflation and lower growth of tax revenues, which in turn means governments can no longer rely on time to erode the real value of debt burdens. As a result, governments and policymakers will (i) continually try to boost inflation in the system as much as possible, and (ii) continue to increase taxation as an offset to weaker growth and inflation. In other words, *unusual policy intervention is here to stay* and we must therefore ponder what potential actions might be taken by policymakers to deal with this new reality. For instance, there is a growing group of pundits who are calling for the Fed to *increase* its inflation target. Since it has been so difficult to reach current inflation targets of around 2% in most developed economies, an increase in the target may seem counterintuitive. However, the implication is that with a higher target, economies would require even more intervention than the recent past, in an effort to reach a new (and likely understood to be unrealistic) higher target. Furthermore, notice how the latest conversation around balance sheet reduction from the Fed has been artfully communicated - the casual observer would be excused for thinking that the Fed is selling assets from its balance sheet when in fact the Fed will simply be reducing the rate at which it reinvests maturing securities. In other words the Fed will continue to stimulate and be an active participant in the purchase of newly issued securities on a go forward basis. That is a far cry from not participating in those primary auctions, let alone selling the existing stock of these securities. The key take away as we have discussed in our previous letters is that peak rates will be lower relative to history at the end of the hiking cycle (i.e. it will be unlikely that the 10 year treasury will yield anywhere near 5%), and that equity multiples will remain higher than long-term history implies (i.e. a trough P/E ratio may be 13-15x vs 10x or less in the past).

One final topic we have written about in our Q1 2016 letter is income inequality. As a large and growing proportion of the population "under consumes" relative to "reasonable" middle-class norms, income and wealth inequality acts as a headwind to growth. Redistributing income to the bottom quartile of the economy could actually stimulate aggregate growth even accounting for the losses created by the act of collecting taxes. Again, the panacea of inflation acting over time to reduce wealth inequalities is weaker than historically. Hence, it may not be surprising to see dramatically higher tax rates, including wealth taxes, increase across the developed world. In essence, we are witnessing an enormous intergenerational wealth transfer from the young to the old, which will lead to more political uncertainty and manifest itself in surprise referendum or election results. Again, the take away for an investor is that the new norm is that there is no norm any longer.

Summary of Investment Strategy

In our Q4 2016 letter, we outlined a series of investment recommendations. Many of those themes remain unchanged, though we introduce some new themes based on an expectation of higher inflation going forward.

i. *Caution over growth companies during the run-up to and immediate aftermath of Fed rate hikes*
Growth companies will likely exhibit sensitivity to the effects of a rate hike via the P/E multiple. However, in a world of scarce growth, they may be able to attract and sustain higher valuation multiples than they have attracted historically, suggesting that re-rating risk is perhaps somewhat muted.

ii. *Similar to (i) above, buy into long-term growth via EM equities*
Growth *countries* will also likely exhibit heightened sensitivity to the effects of a rate hike. Indeed, many EM markets seem to have already priced-in the effect of rate rises. Moreover, in a world of scarce growth, they should be able to attract and sustain higher valuation multiples than they have historically. Said differently, some EM countries currently represent "growth at a reasonable price."

iii. *Buy real assets and commodities*
Many real assets and commodities respond with positive beta to inflation and to surprise inflation, making them helpful investments to protect the buying power of a portfolio. The implicit assumption is that real rates do not rise significantly from here, which given the growth outlook, seems reasonable.

iv. *Longer duration vs. shorter duration in Fixed Income portfolios*
Uncertainty over the timing and pace of the Fed hiking cycle is likely to continue to generate substantial volatility in the short end of the curve and potentially less volatility in the longer end. Additionally, should market expectations price a lower growth rate and a lower inflation outlook following a rate hike, we could actually see a rally in the long end.

v. *Neutral positioning for US dollar in currency portfolios*
Real rate rises would push a currency upward due to improved carry dynamics. However, the current outlook appears more inflationary, which has a mixed impact on currency: carry improves but the buying power for the currency is reduced.

vi. *US small and medium enterprises (including Private Equity) vs. large-caps*
With a strong dollar and weaker commodity prices, the US consumer has more disposable income, thereby favoring smaller domestically-oriented services companies. Potential tax code changes will only accentuate our preference for smaller capitalization domestically-oriented companies.

vii. *Long Europe exporters and periphery intra-Europe exporters*
Thanks to internal deflation across most of Europe, European exporters should see margins continuing to improve. The weak Euro will continue to bolster exports to outside the Eurozone and imports from peripheral Europe to the core as a substitute for imports from outside the Eurozone.

viii. *Long EM reformers vs. laggards (across asset classes)*
Some countries have embraced reforms since the last few crises, implementing flexible exchange rates, minimizing interventions in their domestic economies, and in general fostering an environment where private industry can thrive. These countries should be able to navigate volatility driven by exchange rates and the Fed's moves more successfully than the laggards that have not reformed.

As always, we are thankful for your continued trust and support.

The Partners of Makena Capital Management

Analysis by Michel Del Buono, Global Investment Strategist

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