



INVESTMENT UPDATE

The current thinking on the sluggish US economy is that low energy prices have been keeping inflation low and, along with the strong dollar, have been more of a drag on economic growth than a benefit. Further, depressed commodity prices and a strong US currency are assumed to be transitory, and once they work their way through the global financial system we will see better economic growth here in the US, and along with that, a resumption in inflation.

But there are serious concerns that the normal rules for how things worked in the past don't seem to be holding this time around. After all, the US unemployment rate is down to 5.0%, which is supposed to be at, if not lower than, the level where a tight labor market begins to place pressure on wages, forcing inflation higher. But evidence of inflation is very thin out there in the real world, with the Fed's favored inflation measure—the core PCE—running at just 1.3% on an annual basis, far below its 2% target.

We've touched on this subject before, but the recent reversal of China's 35-year "one child" policy only highlights what we believe is underpinning the seismic shifts in macroeconomic behavior around the globe—namely, that demographics are having a huge impact on global economics.

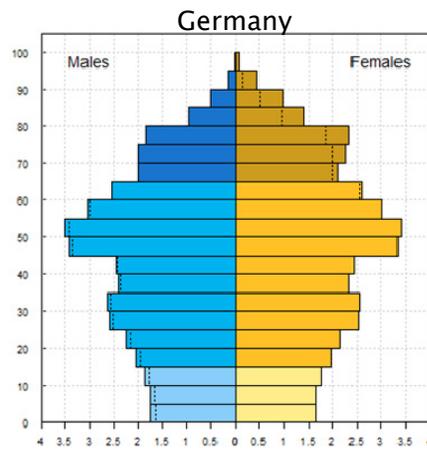
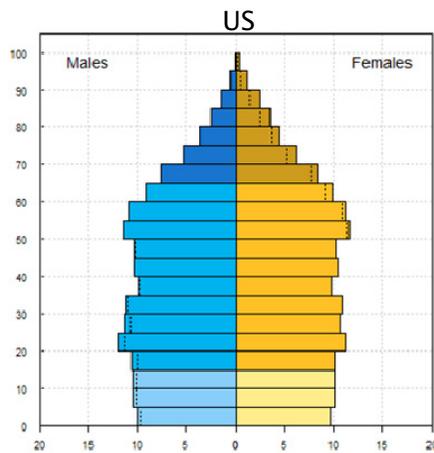
China, with a population of 1.4 billion, was already experiencing a slowdown in birth rates when then-Premier Deng Xiaoping instituted the policy of limiting each family to one child in 1979. This experiment in social engineering has resulted in horrible human costs—forced abortions, sterilizations, heavy fines (or worse) for violators—and that's just the tip of the iceberg. Since Chinese families desire male heirs more than females, selective abortions have resulted in not just fewer children, but fewer females, with a current ratio of 116 males to every 100 females. It is estimated that there are now 25 million males who cannot find a mate, and that figure is expected to grow by another five to ten million over the next decade. We will leave for someone

else to posit how an already male-centric society now characterized by men with little opportunity to marry will function on the world stage; we can easily imagine an increasing level of militarization and international tension.

More interesting to us, however, is how this disastrous policy affects not just the Chinese economy, but how the Chinese experience is really just an extreme example of the effect of low birth rates on the changing global economic landscape, and how policymakers and investors will have to recalibrate their thinking about how things work. Today, essentially every developed economy has a fertility rate (the average number of children a typical woman has during her lifetime) of less than 2.1, the rate which a country needs to have a growing population, excluding any effects of immigration/emigration.

More than 200 years ago, the social economist Thomas Malthus warned that the world would eventually be so overrun with people that it would be unable to supply food to every man woman and child, leading to mass starvation. And while we've seen the horrible effects of food shortages from time to time over the past 20 decades, and acknowledge that millions of people still suffer from malnourishment every day, it must be said that healthy, growing societies have only increased the well-being of the average global citizen. In modern economies, where the elderly and the less fortunate are dependent on social safety nets, a growing population is even more important, as there must be sufficient economic activity (i.e., tax revenue) to pay for those services.

With most developed countries' economies currently suffering from a lack of population growth—and in more than a few instances, outright population declines—we expect significant fiscal difficulties will follow. As mentioned above, with fewer workers and an aging population (with longer life expectancies), not only will there be more retirees dependent on social



services, but the working population, now shrinking, will have the full burden of both supporting themselves as well as a growing group of folks dependent on those services. This is easily seen if we compare population pyramids—the graphical representation of a country's population broken out by age. On the front page we compare the US' (left) and Germany's (right) population pyramids for 2015, showing the distribution of males and females, in millions, by age bracket. With a fertility rate of just 1.4 children per female, Germany's population has already grown top-heavy, and that trend is only getting worse.

We're not picking on Germany; it is very much representative of what most developed economies' population pyramids currently (and prospectively) look like—they are pyramids in name only, and over the next few decades, will become even more dominated by the elderly, with fewer numbers among the younger age groups. Currently, most developed economies have sufficient numbers in the working age population to support retirees. But they

also have a huge glut, relatively speaking, of people in the 45–60 age group who'll be retiring in the next couple of decades, with relatively few new workers entering the workforce—Germany's population is forecast to shrink by nearly 10 million, or 15%, between now and 2050. By contrast, the US' pyramid resem-

bles a church steeple today and will remain somewhat pyramid shaped in the coming decades thanks to a healthier birthrate, currently right at replacement value of 2.0, propelled primarily by our immigrant population (more about this later).

An economy—the total of goods and services generated within a country—must have either a growing working population or increasing productivity among those workers in order show positive “real” (after inflation) GDP growth. For hundreds of years, most economies have had the benefit of both growing working populations and increased productivity, generating a healthy level of real growth. In emerging economies like China, despite slowing population growth, productivity gains have been huge, with workers streaming in from the countryside to work in industrial centers, along with heavy investment in plant, equipment, roads, and other infrastructure. It's allowed them, even with slowing population growth, to show double-digit GDP gains year after year. But productivity gains get increasingly difficult as economies mature, and China and other developing economies are seeing slowing productivity gains, which is translating to slowing GDP growth. Without

economic growth—either from a growing working population or productivity gains, an economy goes into recession, and recessions, as we all know, are associated with all kinds of ills.

Not only is productivity slowing in emerging economies, but it has recently slowed to a snail's pace in developed economies. Productivity has been essentially flat in the UK and most of Europe for five years. Given that working populations are barely growing in these countries, there is no mystery why they have been flirting with recession for years now. As the chart on this page shows, even here in the US, where we wear productivity like a badge of honor, after huge gains in the 1990s the trend has been downward for more than a decade. As in Europe and Japan, we cannot be surprised that economic growth has been well below the pace of previous decades when we examine these numbers.

For the bond market, the implications are clear—demographics play a huge role not just on broader economic factors but on

how households and businesses spend and save. Members of the baby-boom generation, now entering retirement, aren't spending like they did ten or twenty years ago and have little interest in borrowing; they don't need or want a bigger house. Generation X and millennials have different attitudes about spending than their parents, are wary about

debt and are less interested in luxury goods and cars than their parents. They understand—and rightly fear—the burden they'll be asked to shoulder from previous generations. With little demand for debt, interest rates are at historic lows, and the once-laughable idea that a 25 basis point Fed funds rate hike might upset the stock market is now a reality.

Solutions are mostly unpleasant; policymakers will be forced to select from an unhappy list of alternatives, including the extension of retirement ages, the “needs-testing” if not outright elimination of some retirement benefits, higher taxes, and a more welcoming attitude towards immigrants, who can provide the young, dynamic workforce that is not being supplied in sufficient numbers through “native” births. One needs to look no further than German Chancellor Angela Merkel's surprisingly open-armed policy towards Syrian refugees over recent months, or the recent split in the Republican Presidential candidates' proposals on immigration reforms. The immigration issue is even more difficult in insular cultures like Japan and China than it is in the US and Europe, making the challenge of future economic growth even more problematic for them.

