

INTELLECTUAL AMMUNITION

The Demographics Myth

Monday, March 20, 2017

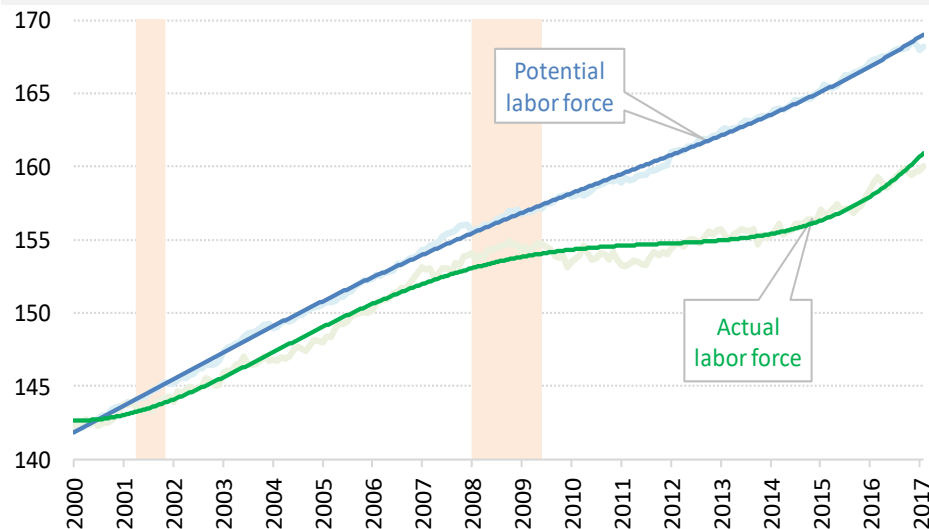
Donald Luskin

The greying of America doesn't explain "secular stagnation," and won't restrain recovery.

As we talk with clients about our outlook for a global "turning" from the era of "secular stagnation" (see ["2017: It's Bigger than The Donald"](#) December 30, 2016), we are often asked whether better output growth is really possible. There is widespread concern that there is little potential for the necessary job growth with the unemployment rate at 4.7%, especially considering the inexorable demographic weight of an aging workforce.

- We disagree. We think that the US labor force, currently at 160.1 million, could expand by as much as 8.4 million, at today's population level and with today's demographics. All else equal, this would add 5.2% to GDP (please see the chart below).
- This is based on our estimate that the labor force participation rate – the share of the adult population in the labor force, whether or not employed – could be as high as 66.3%. That's still a little off from the all-time high of 67.3% in Q1-2000, but far higher than the present reading of 63.0%.
- This view stands in opposition to often-heard demographic arguments such as [that of Fed chair Janet Yellen](#), who sees the falling participation rate as "stemming largely from the aging of the US population."

US labor force Millions, trend on seasonally adjusted data ■ Recession



Source: BLS, TrendMacro calculations

Update to strategic view

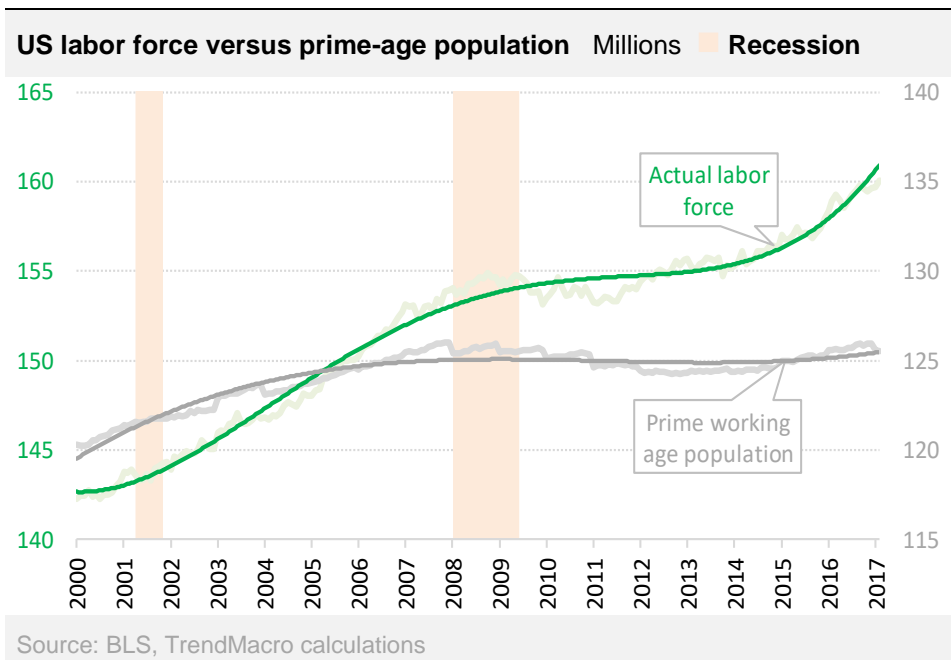
US MACRO: The demographics of aging will not be a barrier to faster growth in the "turning" to a new generational epoch of greater risk-tolerance and faster growth. The data show both that aging is itself an incomplete explanation for the "new normal" and "secular stagnation," and that it is offset by growth in educational attainment. Moreover, the worst of the aging effect is behind us in the US. Our alternative explanation for "secular stagnation" is a "turning" toward risk-aversion driven by trade and oil shocks. They fell against a backdrop of fear and cognitive dissonance triggered by the terror attacks of September 2001, a new clash of civilizations when the global culture had believed we had reached "the end of history." We now face a new "turning" toward risk tolerance and better growth. Because demographics are shown to be irrelevant, they won't be a barrier.

[\[Strategy dashboard\]](#)

- The US population is indeed aging. The prime working age population has grown at an anemic 0.2% annual rate since the peak of the labor force participation rate in Q1-2000, which we see as the moment of the prior global economic “turning” – to the “new normal” and “secular stagnation.” In the prior period of the same length up to Q1-2000, the prime-age population grew at a 1.8% annual rate. The difference of 1.5% would seem to explain two-thirds of the drop in per annum real GDP growth over those same periods, falling from 3.9% to 1.7%.

This is a classic case of “correlation does not imply causation.” That’s a polite way of saying it’s just plain wrong. Well, at least it’s woefully incomplete.

- Some flaws in the aging argument veritably jump out of the data.
- Most obviously, the labor force has grown by 4.9 million since Q4-2013 (see "[A Major Upgrade to our Strategic Outlook](#)" September 12, 2013). But less than a quarter of that is explained by the mere 1.2 million increase in the prime working age population (please see the chart below). *America keeps on aging – so how come the labor force started growing again?*



- *The answer is: participation. It doesn’t only matter how many prime-age people there are – it also matters how much those people participate.*
- Again, the US labor force participation rate has been in decline since Q1-2000. *But we are about to show that this can’t be blamed on the demographics of aging – which means it can be reversed, even if aging itself cannot.*
- Right off the bat, aging can’t be a comprehensive explanation because while America has kept on aging, the labor force participation stopped declining after Q4-2013. On a trend basis,

**Contact
TrendMacro**

On the web at trendmacro.com

Follow us on Twitter at twitter.com/TweetMacro

Donald Luskin
Chicago IL
312 273 6766
don@trendmacro.com

Thomas Demas
Charlotte NC
704 552 3625
tdemas@trendmacro.com

Michael Warren
Houston TX
713 893 1377
mike@trendmacro.energy

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**Recommended
Reading**

[How to Repair ObamaCare’s Fiscal Damage](#)
Charles Blahous
Wall Street Journal
March 17, 2017

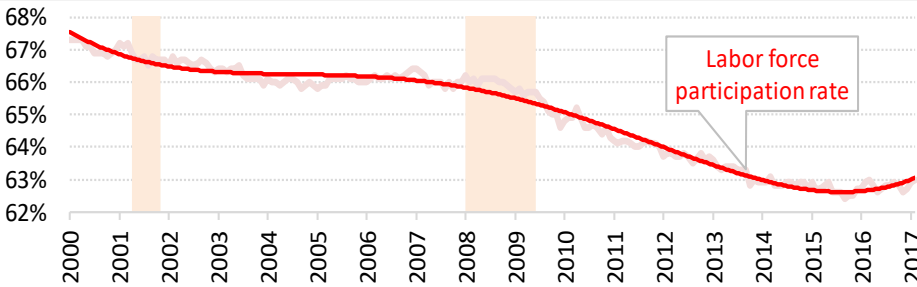
[Our Miserable 21st Century](#)
Nicholas N. Eberstadt
Commentary
February 15, 2017

[American Health Care Act Cost Estimate](#)
Congressional Budget Office
March 13, 2017

[Magnetic hard drives go atomic](#)
Elizabeth Gibney
Nature
March 8, 2017

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US labor force participation rate ■ Recession

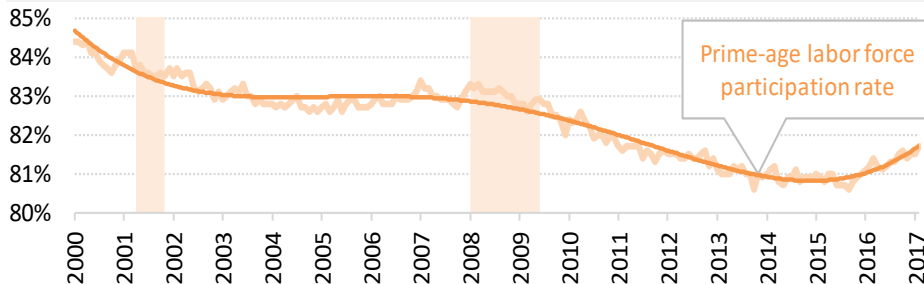


Source: BLS, TrendMacro calculations

after a dip in mid-2015, it appears to be in something of an upswing (please see the chart above).

- Whatever factors explain what is hopefully an upswing now, a closer look at the data shows that aging wasn't responsible for the prior downswing.
- The aging argument rests on the single superficial factoid that the prime working age population has grown only 5.2 million since the peak of labor force participation in Q1-2000, falling from a 57% share of the US population to a 49% share.
- This ignores the fact that labor force participation has fallen sharply even within the prime-age population itself (please see the chart below). By definition, that population hasn't functionally gotten any older – it's been "prime working age" the whole time – yet its participation fell, pretty much by the same amount as the overall population.

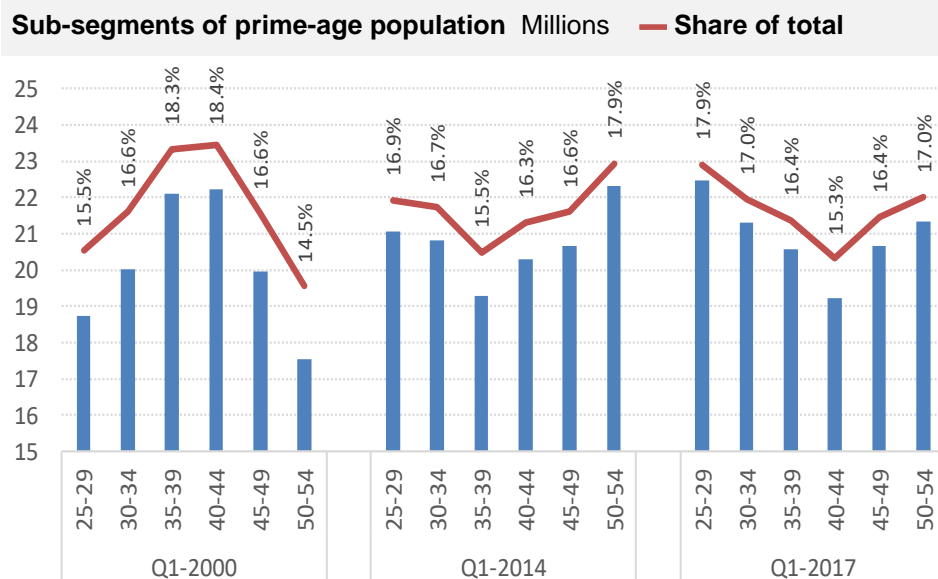
US labor force participation rate ■ Recession



Source: BLS, TrendMacro calculations

- For that matter, the prime-age population hasn't functionally gotten younger over the last couple years either, yet its labor force participation has begun to revive (again, please see the chart below).
- But what about *internal* age changes *within* the prime-age population? Such changes have indeed occurred, but they have been trivial. The average age of the prime-age population increased only 3 months during the decline in participation from 2000 to 2013, and only decreased by 4 months after 2013. These small internal shifts only move the prime-age participation rate by a few basis points.

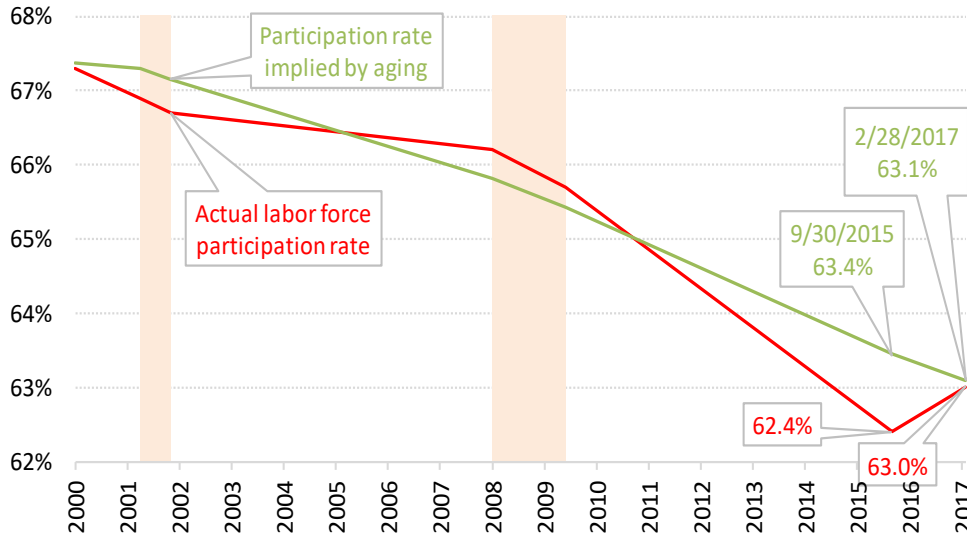
- While these are trivial changes that have only created minor demographic headwinds against growth, the good news is that the worst appears to be over. The internals of the prime-age population have reversed for the better. The relatively large older cohorts within the prime-age population have now aged out, and are being replaced by smaller middle-aged cohorts becoming older cohorts, and larger young cohorts becoming middle-aged cohorts (please see the chart below).



Source: BLS, TrendMacro calculations

- This demographic reversal is welcome, but let's not lose sight of our main point – that the demography of aging has been a trivial factor in explaining “secular stagnation.” It will be equally trivial in explaining recovery from it.
- To be sure, we can selectively present data in such a way as to make aging seem very important. If we go through the simple arithmetic exercise of holding all demographic considerations equal other than aging, then aging seems to largely explain the labor force participation rate (please see the chart at the top of the following page).
- But note that while aging would imply a constant decline in participation, actual participation has varied considerably. In the prior business cycle, actual participation outperformed aging-implied participation as the expansion matured. It looks like it is doing the same thing this time. It is clear to us from this evidence that even when all else is held equal – to give aging maximum importance – there is still considerable cyclical deviation, for better and for worse, from what is strictly implied by aging alone.
- Now let us look at the real world, in which aging isn't the only factor to be considered. There are other demographic factors as well – the ones on which data are available are: race, gender and educational attainment.
- It turns out that race makes no difference at all. Since the peak in

US labor force participation rate ■ Recession

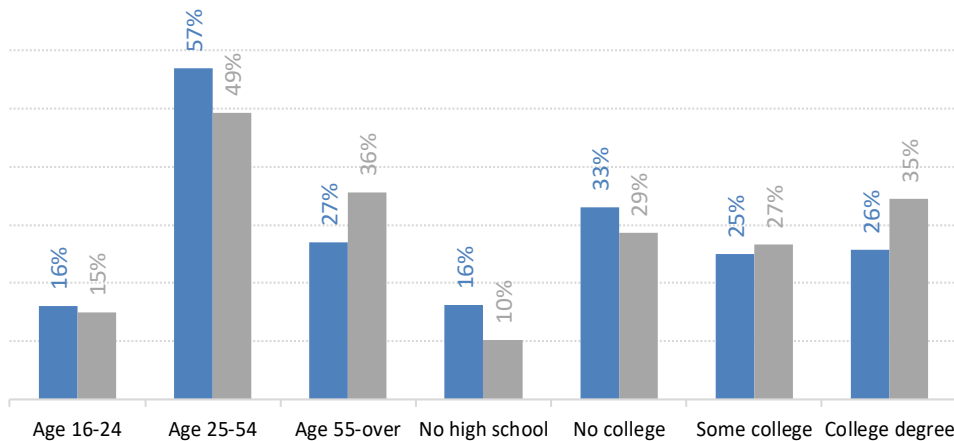


Source: BLS, TrendMacro calculations

the labor force participation rate in Q1-2000, the only notable racial change has been a shift in US population-share from white to Hispanic. Because there is very little difference between white and Hispanic labor force participation, this shift in racial demographics has had no effect.

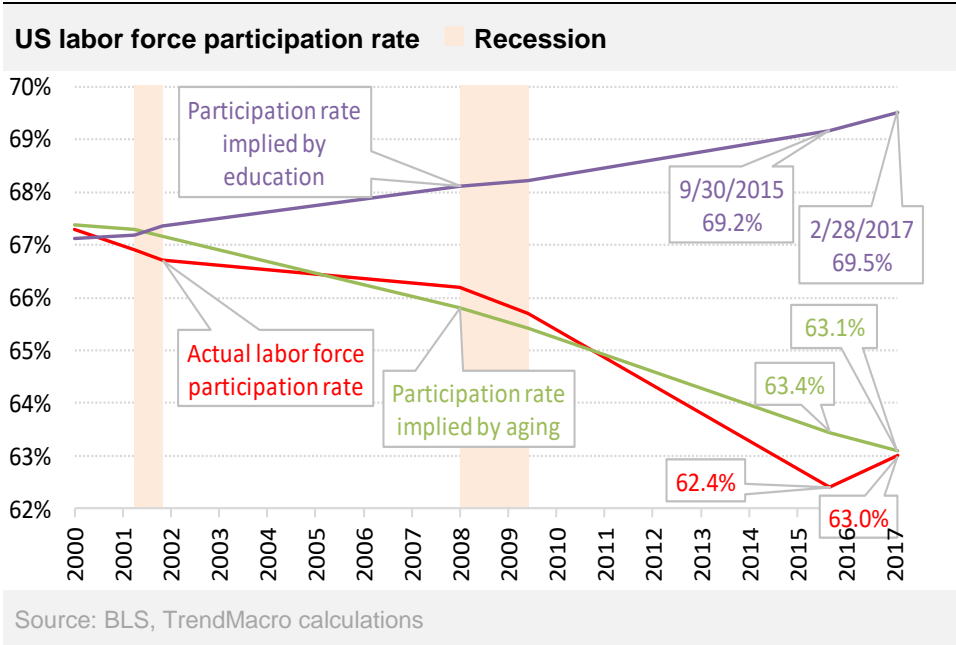
- *Gender makes no difference either*, because there has been no change in the US population-share between male and female.
- *But hiding in plain sight, it seems to us, has been a seismic shift in the demographics of educational attainment. As the same time as the US population has aged, it has become for more educated. The share without a high school diploma has fallen by 6%, and the share with a college degree has risen by 9%* (please see the chart below).

US population share by age and education ■ Jan 2000 ■ Feb 2017

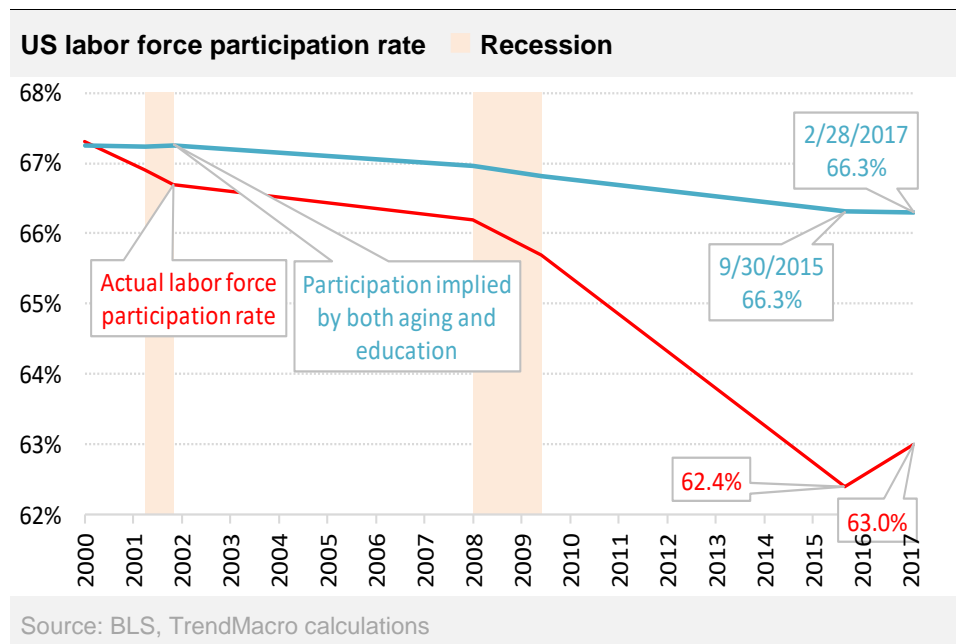


Source: BLS, TrendMacro calculations

- This rise in educational attainment cuts the opposite way as the rise in aging. Older people tend to participate less in the labor force, but better educated people tend to participate more. For example, participation of people without a high school diploma is presently 46.1%, while of people with a college degree it is 73.5%.
- So if we go through the same all-else-equal exercise for educational attainment that we did for aging, we find that the labor force participation rate should have risen from Q1-2001 to present, not fallen – as aging had implied (please see the chart below).

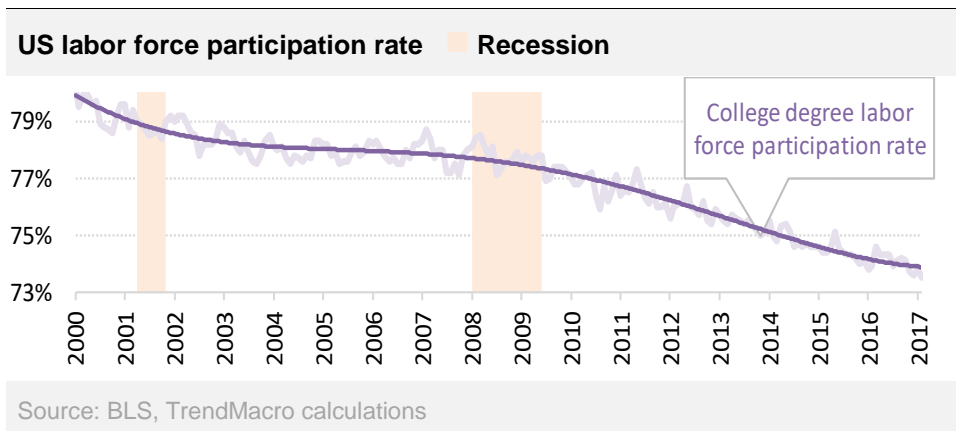


- Now let's put it all together with a final all-else-equal exercise. When we control for *both* aging *and* education, we see that the implied labor force participation rate did indeed fall from the peak in Q1-2000 (please see the chart below). But not by much – not by



the vast distance that the actual labor force participation rate has fallen.

- So aging does outweigh education – slightly. But broadly they offset each other. One is a headwind, the other a tailwind. So when fully specified, demographics – including aging and education both – really don't explain much about the labor force.
- Indeed, the decline in participation in light of the increase in educational attainment only raises more questions.
- Note also that participation has fallen among the most highly educated Americans, who typically have very high participation rates (please see the chart below). This is as much a mystery as why participation among the prime-age population has fallen (please again see the chart on page 3).



- Even more of a mystery is why participation among the most highly educated has not increased at all over the last year or so, while it has done so for the prime-age population overall.

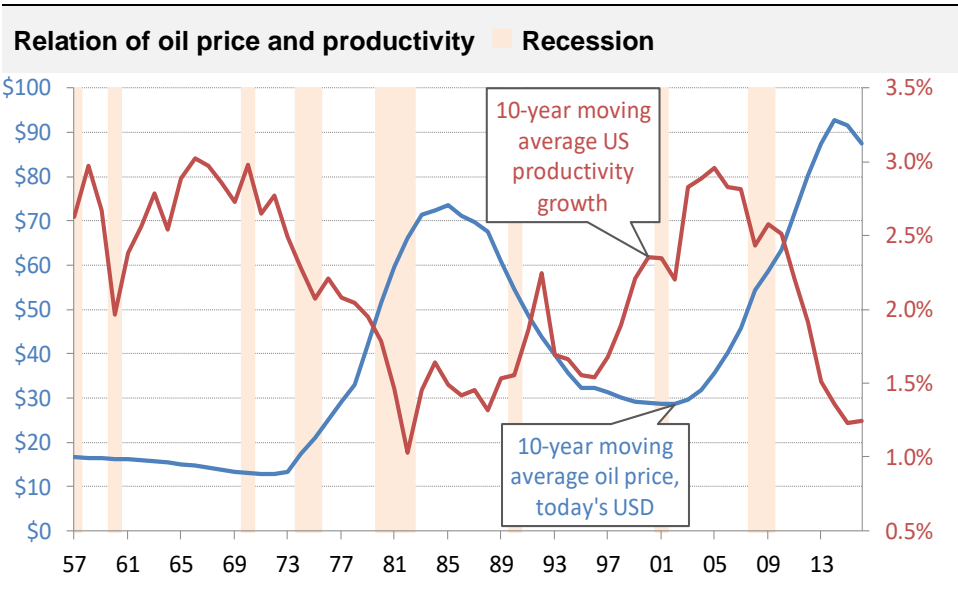
So far our discussion has been data-driven and theory-free. Indeed, we've used the data to impeach the conventional theories. Now we'll turn to our own theories – for which, of necessity, we have to depart from the hard science of data to the soft science of strategic interpretation. While our speculations will be of necessity speculative, at least they will offer something more interesting than the [tautological explanation for “secular stagnation” offered by Lawrence Summers](#) – that it is due to insufficient “aggregate demand.”

Our thoughts will be guided by the need to make *two* explanations for *two* phenomena – not just a non-demographic explanation for the “turning” to the age of the “new normal” and “secular stagnation,” but also a non-demographic explanation for what we believe is a new “turning” toward an epoch of better growth.

- We believe that economics are an expression of culture – as John Maynard Keynes implied [in his 1936 masterwork](#) when he wrote of [“animal spirits.”](#) We believe the global culture was primed in 2000 for a “turning” from a generational era of exuberant risk-tolerance to a new one of despondent risk-aversion. In a general way this comports with the ideas in the 1997 book [The Fourth Turning](#),

which has been recommended to us many times by many clients – a fascinating read if you don't take it too literally. For better or worse, it's enjoying a come-back thanks to the fact that it has [reportedly inspired Donald J. Trump's controversial advisor Steve Bannon](#).

- One way in which our [classical-liberal](#) views intersect with Bannon's nationalistic ones is our belief that the "turning" toward risk aversion was, in part, triggered by a global "trade shock" after China joined the World Trade Organization in December 2001.
- We don't deny that trade globalization has created many superlative opportunities. But there have been both winners and losers – on a massive scale, and compressed into a short time-period (see ["Trump's Pro-Growth Path to Victory"](#) June 21, 2016). Such a shock and its attendant disorientations and uncertainties have surely contributed to an era of risk-aversion.
- As with any shock, as time passes the losers gradually adapt. Obviously, one adaptation has been the election of a new US president who is very skeptical about trade. We are relying on the belief that the Trump administration or the GOP Congress won't make any [dangerously stupid](#) protectionist moves (see ["The Border Adjustment Tax and Its Victims"](#) February 10, 2017). But we think it will be salutary to have a political environment that taps the brakes a little bit on what has been an overdose of globalization, to buy a little more time to adapt to the shock.
- Over the same period as the trade shock, the global economy was also subjected to an old-fashioned oil shock, with the price of crude oil rising (in inflation-adjusted terms) from near all-time lows in 2000 to all-time highs in 2008 – with real prices staying higher for longer than during the 1970s when there were line at gas stations (see ["Oilmageddon"](#) December 16, 2014). For the life of the data, the trend oil price has been strongly inversely correlated with trend productivity growth (please see the chart below) – so it should be



Source: BEA, Bloomberg, TrendMacro calculations

no surprise that, with the trend oil price at all-time highs, trend productivity has fallen to near all-time lows.

- We understand that the global economy has learned to produce more units of output per unit of oil since the first oil shock in 1973. But that has come at a cost – the intellectual and financial capital that were dedicated to energy conservation might have otherwise cured cancer by now.
- But more deeply, there is no evidence that it now takes any fewer units of oil to produce a unit of output *growth* than it did in 1973. After all – productivity growth is not determined by the level of output, but rather by output *growth*.
- We think the decline in oil prices that began in June 2014 will usher in a period of relief, in which productivity growth can begin to recover – it already has, a little (again, please see the chart on the previous page). This is a very different view than the conventional one – again, we'll use [Yellen as an example](#) – that “surprisingly sluggish productivity growth” is now a permanent reality.
- But in the short-term, the crash that began that decline was itself another shock – a “reverse oil shock” to capex and credit markets (see [“The Recession Caused by Low Oil Prices”](#) January 8, 2016) – resulting in a near-recession in Q4-2015 and Q1-2016 from which the economy is now smartly recovering (see [“Have We Suffered Enough?”](#) February 26, 2016).
- More subjectively – but no less sincerely – we think the trade shock and the oil shock fell upon a global economy already beginning its “turning” toward risk-aversion after the shock of the terror attacks of September 11 2001. Does that seem silly to say? It's all so long ago, and by an unspoken cultural agreement it seems the horrific images of it are largely mostly gone from public view. But remember how you felt when you woke up that morning. Remember the depth and extent of the cognitive dissonance it induced for a world that had been lulled into a decade-plus of complacency in the faith that the successful end of the Cold War meant [the end of history](#) – and was now facing a new and intractable clash of civilizations.
- We haven't even mentioned the global financial crisis and its associated Great Recession. They were certainly shocks, too, and they make up the core of all the [standard narratives of the “new normal” such as that of Mohamed El-Erian](#).
- Shocks they certainly were, and we are not diminishing their importance in our considerations. But we do think they were more effect than cause. The underlying housing and mortgage-credit bubble could not have occurred without a flight-to-quality, driven by risk-aversion, into the crowded safety-trade of residential real estate.
- All these shocks are behind us. The proof of a new “turning” toward a generational era of risk-tolerance is the risk-embracing global revolution toward the politics of the devolution of central authority – seen in the “Brexit” referendum and the Trump election – at the same time as market-implied measures of risk and risk-aversion are visibly contracting (see [“From Executive Orders to Spontaneous Order”](#) February 17, 2017).

- Maybe after we've been in that new generational epoch for four or five years, Summers and El-Erian will identify it and give it a catchy name.

In our explanation of the “new normal” and “secular stagnation” – a generational “turning” toward risk aversion stimulated by multiple economic shocks – there is no mention of demographics at all. We simply don't think it's important. As we have demonstrated with the data, the negative demographics of aging and are almost perfectly offset by the positive demographics of educational attainment.

Just as demographics were not the root cause of the problems of the previous generational epoch, they won't be a barrier to a “turning” to a new epoch of greater risk-tolerance and faster growth.

Bottom line

The demographics of aging will not be a barrier to faster growth in the “turning” to a new generational epoch of greater risk-tolerance and faster growth. The data show both that aging is itself an incomplete explanation for the “new normal” and “secular stagnation,” and that it is offset by growth in educational attainment. Moreover, the worst of the aging effect is behind us in the US. Our alternative explanation for “secular stagnation” is a “turning” toward risk-aversion driven by trade and oil shocks. They fell against a backdrop of fear and cognitive dissonance triggered by the terror attacks of September 2001, a new clash of civilizations when the global culture had believed we had reached “the end of history.” We now face a new “turning” toward risk tolerance and better growth. Because demographics are shown to be irrelevant, they won't be a barrier. ▶