

Economic Analysis

U.S. Transitioning To An Environment That Rewards Productivity Over Growth

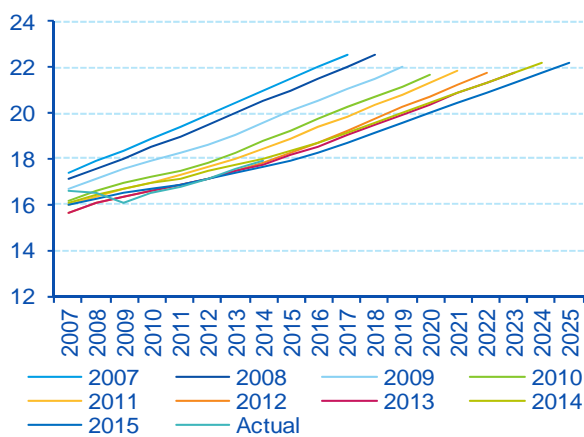
Boyd Nash-Stacey / Nathaniel Karp

- **The slow pace of economic growth since 2009 reflects the severity of the crisis and a structural transformation**
- **Potential GDP growth will be lower based on demographics**
- **Output gap will narrow in an environment of lower equilibrium unemployment, inflation and interest rates**
- **Bold structural reforms are needed to boost potential economic growth**

As a result of the Great Recession economists still debate whether there has been a prolonged economic cycle or a structural shift in the economy. In essence, the discussion tries to answer two key questions: a) Why has the recovery been so slow? b) What is the rate at which the economy will grow in the future? The answers to these questions will explain how far the economy is from full employment and what the policy response should be.

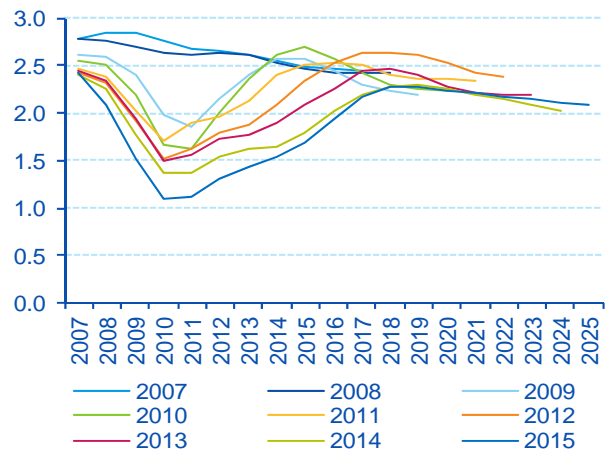
Based on our analysis, the slow pace of growth since 2009 reflects both the severity of the crisis and a structural transformation that preceded the Great Recession. While this view is not unanimous, since 2007, the CBO has persistently revised down its short-term forecasts for potential growth, while keeping a similar rate for the long-term horizon at around 2%, supporting the idea of both cyclical and structural headwinds. Therefore, economic slack has remained high for longer-than-expected, but will nevertheless continue narrowing, and without major structural reforms the economy will converge to a lower pace of growth. This implies that the calls for large fiscal spending and negative real interest rates from the Secular Stagnationist Clan may accelerate the return to full employment but will not reverse the structural forces that lie behind the lower rate of growth.

Chart 1
U.S. Potential GDP, US\$Tr 2014



Source: BBVA Research, CBO & Haver

Chart 2
U.S. Potential GDP Growth, %



Source: BBVA Research, CBO & Haver

Understanding the Adjustment

The slow cyclical recovery reflects the severe damages left by the Great Recession. The economy suffered from a major financial crisis, collapse of the housing market, sharp decline in asset prices, household and financial sector deleverage, tight credit conditions, elevated policy uncertainty, limited fiscal stimulus, a transitory oil price shock, constrained monetary accommodation -i.e. limitations from the zero lower-bound- and global economic recession. As Reinhart and Rogoff (2009) show, severe financial crises tend to be associated with protracted and severe declines in output, employment and house prices. Baker, Bloom and Davis (2013) argue that policy uncertainty was a factor that deepened the crisis. Political brinkmanship, lack of compromise and relying frequently on short-term fixes reduced certainty on the business environment, which in turn resulted in weaker investment and hiring.¹ Other researchers have argued that the economy suffered from lower available talent and inefficiencies created by the crisis. Stock and Watson (2012) claim that it was not one single factor, but the multitude of shocks and their cumulative effects that resulted in a severe, but conventional recession.

While these factors delayed the recovery, the largest constraining element was the significant drop in the labor force. Since there has not been a rebound in labor force participation, one could argue that the economy remains well below full employment, and monetary and fiscal stimulus are still needed to return the economy back to its pre-crisis potential. However, a large portion of the drop in labor force participation and the lower ratio of workers as a share of total population reflect structural changes in U.S. demographics pre-dating the housing bubble and the Great Recession, and in some instances dating back to the 1950s. The retirement of the baby boomers, a slowdown in female participation and the decline in prime-age working males are the most prominent factors. In fact, when adjusting GDP by labor force, average growth in 2009-2015 is similar to the expansions in 1985-2007. That is, after adjusting for the slowdown in labor force growth in the aftermath of the financial crisis and accounting for the structural shift in the age distribution in the U.S., average economic growth is no different than recent expansion episodes. However, this is not case with expansions prior to the 1980s, suggesting that the economy began a structural change in the mid-80s, and not as a result of the Great Recession.

Table 1

U.S. GDP, Investment & Labor Force

Average % change QoQ, SAAR	GDP		GDP/Labor Force		Private Investment		Private Investment/Labor Force	
	Full	Expansions	Full	Expansions	Full	Expansions	Full	Expansions
1950-2015	3.3	4.2	1.9	2.7	4.2	6.3	2.7	4.7
1950-2007	3.6	4.4	2.0	2.8	4.6	6.4	3.0	4.7
1994-2007	3.2	3.4	2.0	2.1	4.7	5.3	3.5	4.0
1950-1984	3.9	5.3	2.1	3.5	5.1	7.8	3.3	5.9
1985-2007	3.1	3.4	1.8	2.0	3.9	4.6	2.5	3.1
2009-2015	2.3	2.3	2.0	2.0	5.1	5.1	4.8	4.8

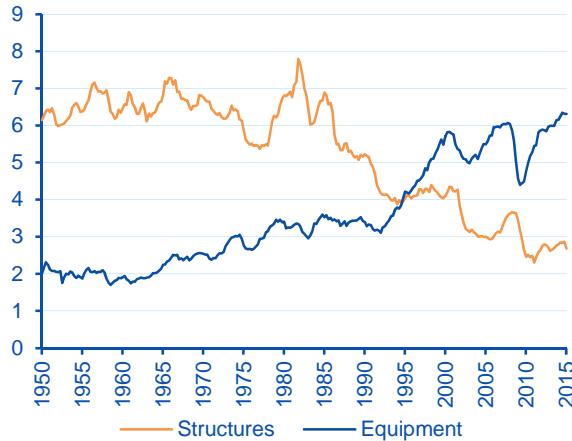
Source: BBVA Research, BEA, Census & Haver

In terms of capital, the argument is similar in the sense that the Great Recession constrained the recovery in private investment. However, from a structural perspective, after adjusting for labor force, capital spending in 2009-2015 recovered at a faster pace than in 1985-2007. For residential investment, the ratio to population is similar to its historical average. Since this average is skewed upwards by the housing bubble, the current level may not imply a significant gap with its long-term equilibrium. In other words, the actual level and pace of residential investment may be at a sustainable level. The most striking feature of private investment is the fact that structures has remained basically flat in constant dollars, but has declined as a share of GDP since the mid-

¹ See for example [BBVA Research, U.S. Outlook 3Q12](#)

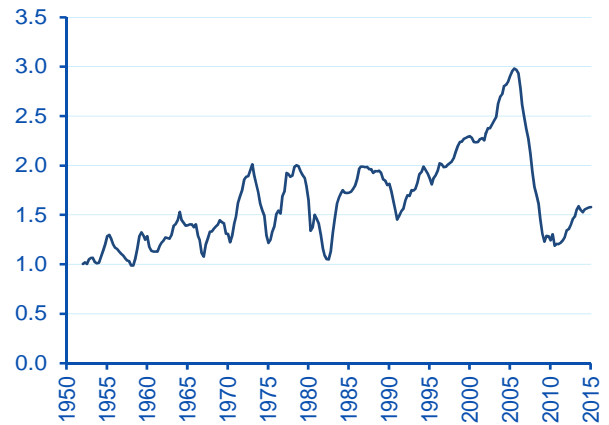
80s. This decline has coincided with persistent gains in software, R&D and communication equipment; taken together these categories account for 57% of the increase in non-residential and non-structure investment since 1985. These trends are consistent with an economy that has been transitioning for decades to high value-added services and industries.

Chart 3
U.S. Investment as % of GDP



Source: BBVA Research, BEA & Haver

Chart 4
U.S. Residential Investment/Population, \$K per capita

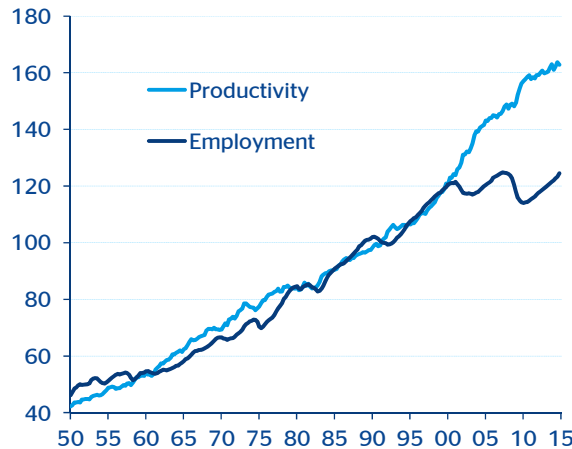


Source: BBVA Research, BEA & Haver

What Lies Ahead for U.S. Growth?

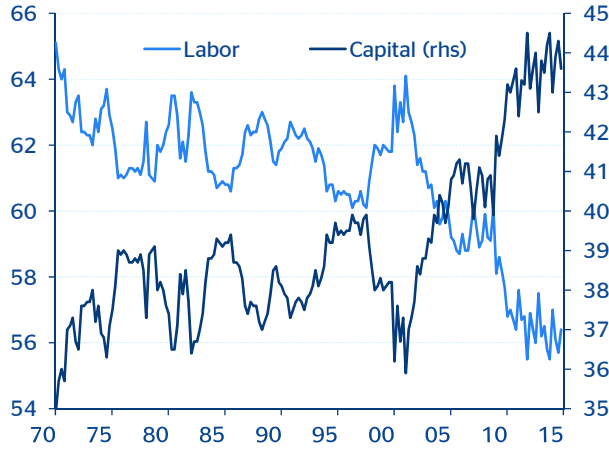
Mainly due to the slowdown in the labor force -aging, declining fertility rates, immigration and lower participation- over the next 20 years, the U.S faces a scenario of lower potential GDP growth.² In this environment, capital will likely grow at a slightly slower pace based on netting effect from reduced incentives to invest (lower rates of return-to-capital) and the advantage of substituting capital for labor (automatization).

Chart 5
U.S. Productivity and Employment, 1980-2000=100



Source: BBVA Research, BLS & Haver

Chart 6
U.S. Share of Labor and Capital, % of Output



Source: BBVA Research, BLS & Haver

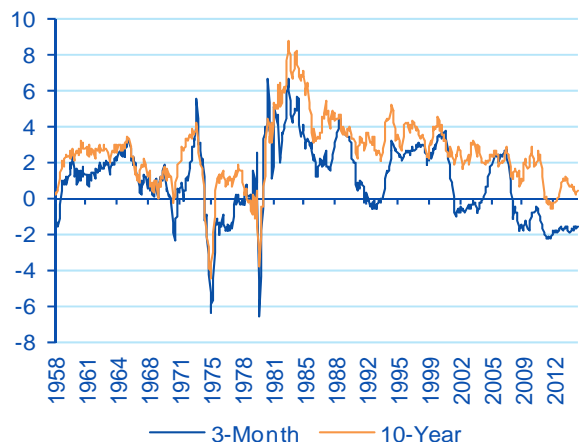
² See for example BBVA Research, [Three Drivers of the U.S. Demographic Makeover](#)

While productivity has been slow to recover from the crisis, it seems reasonable to assume that its growth rate will bounce back to near pre-crisis levels, as the skills mismatch fades and innovation continues to expand the frontier. As a result, this implies lower overall, but higher per capita growth. In the simplest terms, the U.S. is not in a period of secular stagnation, nor is it returning to high-growth years that followed WWII, but rather transitioning to an environment that rewards productivity over growth.

Since potential GDP is lower, the difference between actual GDP and potential –known as the output gap–narrows over time. Under this scenario inflation, unemployment, wage growth and real interest rates converge to a lower equilibrium; this convergence will not reverse rising inequality. Therefore, the norm rather than the exception will be lower real interest rates than in the pre-crisis period.³

Several factors underlie the shift in equilibrium interest rates. Increased life expectancy, lower population growth and early retirement increase overall savings, as people need to smooth a longer life-cycle. In addition, there has been a decline in the issuance of safe assets in tandem with increased demand. New financial regulation also requires holding a greater share of safe assets while issuance of these instruments is lower than the pre-crisis. Finally, the demand for loans is lower in a knowledge-based economy because firms produce and supply goods and services with less need for large investments.

Chart 7
U.S. Real Interest Rates, %



Source: BBVA Research & Haver

Chart 8
U.S. Supply of Safe Assets, % of GDP

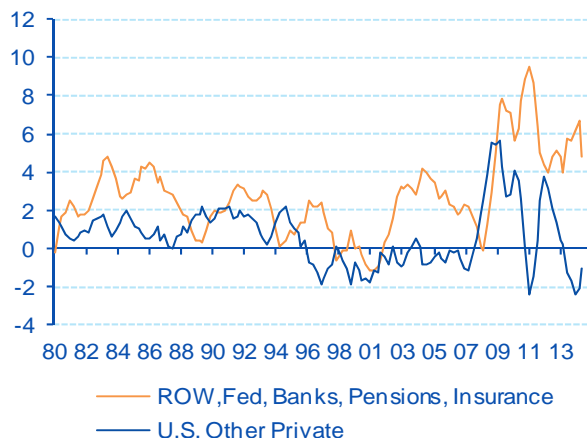


Source: BBVA Research, FRB & Haver

This contrasts with the Stagnationist view that the level of potential GDP has remained similar to the pre-crisis trend but GDP growth is lower than potential. As a result, the low growth environment results in a persistent negative output gap, mainly driven by demand shortage resulting from excessive savings and lack of investment. This would require reducing real interest rates or increasing fiscal spending in order to boost aggregate demand. According to this view, even if the central bank could increase inflation and thus reduce the real interest rate, monetary policy would face a trade-off between keeping interest rates low to boost growth and risk generating financial bubbles, or maintain financial stability at the risk of sluggish permanent growth (Summers, 2013). It follows then that a better response would be massive fiscal spending. The result of lower real interest rates is that savings shift into financial assets which bid up prices and creates rational bubbles.

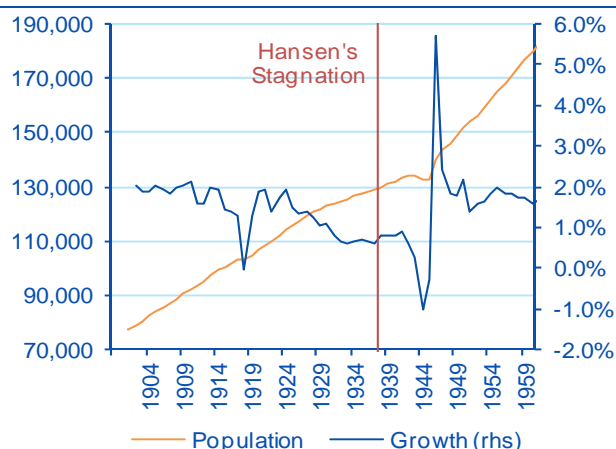
³ See for example BBVA Research, [Are Low Long-Term Rates Here to Stay?](#)

Chart 9
U.S. Quarterly Demand for Treasuries, % of GDP*



Source: BBVA Research, FRB & Haver
*4-quarter moving average

Chart 10
U.S. Population; Level & Growth



Source: BBVA Research, Census & Haver

Nonetheless, history provides an important lesson. In the period that followed Hansen’s original secular stagnation predictions in the 1930s (Hansen, 1939), fertility rates rebounded and productivity underwent a phase of significant gains, discrediting the underlying assumption that population growth and productivity would continue to decline, and that this would lead to low returns-to-capital and incentives to invest. In turn, the hypothesis of secular stagnation was buried until just a couple of years ago. In addition, in a globalized world, excess savings would shift to other parts of the planet where investment opportunities provide greater returns than domestic alternatives;⁴ this undermines the argument for permanent excess savings and low equilibrium interest rates. However, in times of stress, these savings may not flow smoothly and excess savings may remain in the home country allocated in financial assets or vacant real estate properties.

What Needs to be Done to Boost Growth

A scenario of lower potential growth and the closing of the output do not justify aggressive monetary and fiscal policies. Rather, it would make sense for policymakers to focus on increasing productivity and hours worked; for example, improving education, boosting infrastructure investment, increasing alternatives for low-skilled workers to participate in the labor market and, reducing red-tape and easing business conditions. Other alternatives which may be more difficult to implement given the high political costs, but that could provide ample benefits, include reforming immigration policy, modifying the pension and retirement systems, and ease global capital flows.⁵ If secular stagnation is indeed the problem we face in today’s economy, these reforms would help boost demand. However, other policies that may be too costly and inefficient in a non-secular Stagnationist world where there is no substantial shortage of demand include increasing the inflation target as a way to reduce the real interest rate, implementing prolonged countercyclical fiscal policies, changing investment restrictions for institutional investors.

⁴ See for example Bernanke’s speech [The Global Saving Glut and the U.S. Current Account Deficit](#)

⁵ See for example BBVA Research, [Structural Series: The Challenges of Public Education](#) and [Structural Series: Enhancing Growth through Immigration Policy](#)

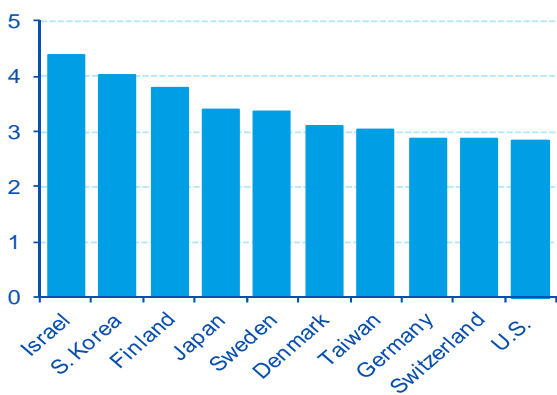
Bottom line

GDP growth in the post-crisis period has averaged lower rates than in the past. However, this is not the case when adjusting for labor force, implying that weaker demographics more than any other factor has been the key feature behind the recent low growth environment. Moreover, when considering only expansion periods, current growth rates are no different than those prevailing after the mid-80s, reflecting a period of higher investment after WWII up until the 80s. This in turn reflects a structural shift in the economy as it moved from an industry-based to a services-oriented platform, primarily impacting the dynamics between structures and equipment.

Going forward, the decline in population and labor force growth, due to lower fertility and immigration rates and the aging process, will lower the pace of potential GDP growth below pre-crisis levels. Other factors that will limit the pace of expansion include the diminishing returns from increased education and greater female labor force participation. In addition, a greater share of fiscal spending will be devoted to interest payments and entitlement programs, rather than infrastructure, R&D and education that have a bigger bang for the buck. Moreover, worsening income distribution and the shrinking of the middle class dampens the upside for growth, while an increase in political polarization reduces the chances of passing major structural reforms. These forces were at play even before the Great Recession and thus while the crisis may have lowered the level of potential GDP, the growth rate was bound to slow down anyway.

Whether this process should be called secular stagnation or something else is less relevant than tackling these challenges through bold structural reforms. These reforms would increase demand and supply and thus address secular stagnation and the prolonged low growth environment. Some are less controversial than others, but a key focus should be on increasing hours worked and productivity, and lowering policy uncertainty, low-skilled labor force participation and barriers to business formation.

Chart 11
R&D as % of GDP



Source: BBVA Research, WEF & NSF

Table 2
Education Rankings, Selected Countries

PISA Scores	Math	Reading	Science
Shanghai	613	570	580
Singapore	573	542	551
Hong Kong	561	545	555
Korea	554	536	538
Japan	536	538	547
Netherlands	523	511	522
Canada	518	523	525
U.K.	494	499	514
Slovak Rep.	482	463	471
U.S.	481	498	497
Lithuania	479	477	496

Source: OECD, Program for International Student Assessment

Although short-term real interest rates have been negative for a long period, this is not unusual from a historical perspective and does not necessarily imply that monetary policy has lost its usefulness. Instead, acknowledging the possibility of a lower potential GDP level and growth rate could mean that the negative output gap could be smaller-than-expected.

This in turn could justify an increase in nominal rates sooner rather than later, as monetary policy should not be viewed as a substitute for structural challenges. In addition, balancing the risks of financial stability should be a top item in monetary policy strategy.

Finally, as much as the outlook seems bleak, it is worth noting that compared to other developed countries, the expectations for the U.S. is significantly better. In this regard, the U.S. will continue to be the leading developed economy and could even provide an example for other developed countries in how to deal with the low growth environment. What is crucial is for policy makers to work together and find common ground to implement efficient policies to keep the American Dream an achievable target for all individuals.

References

- Baker, S., N. Bloom, & S. Davis. 2013. *"Measuring Economic Policy Uncertainty."* Chicago Booth Research Paper No. 13-02. January.
- Bernanke, B.S. 2005. *"The Global Saving Glut and the U.S. Current Account Deficit."* Speech at the Sandridge Lecture, Virginia Association of Economists, Richmond, Virginia. March 10.
- Hansen, A. H. 1939. *"Economic Progress and Declining Population Growth."* American Economic Review, vol. 29(1), pp 1-15, March.
- Reinhart, C. M. & K. S. Rogoff. 2009. *"The Aftermath of Financial Crises."* American Economic Review, vol. 99(2), pp 466-72, May.
- Stock, J. H. & M. W. Watson. 2012. *"Disentangling the Channels of 2009 Recession."* NBER Working Paper 18094. Cambridge, Massachusetts. May.
- Summers, L. H. 2013. Speech at the Fourteenth Jacques Polak Annual Research Conference in Honor of Stanley Fischer. International Monetary Fund. Washington, D.C. November 8.

DISCLAIMER

This document was prepared by Banco Bilbao Vizcaya Argentaria's (BBVA) BBVA Research U.S. on behalf of itself and its affiliated companies (each BBVA Group Company) for distribution in the United States and the rest of the world and is provided for information purposes only. Within the US, BBVA operates primarily through its subsidiary Compass Bank. The information, opinions, estimates and forecasts contained herein refer to the specific date and are subject to changes without notice due to market fluctuations. The information, opinions, estimates and forecasts contained in this document have been gathered or obtained from public sources, believed to be correct by the Company concerning their accuracy, completeness, and/or correctness. This document is not an offer to sell or a solicitation to acquire or dispose of an interest in securities.