

The Slow Mo Economy

Preparing for Slow US Growth Over the Long Term

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A large, abstract graphic composed of overlapping, semi-transparent geometric shapes in various shades of green and blue. The shapes include triangles, squares, and polygons, creating a complex, layered effect. The colors range from light lime green to dark forest green and deep blue. The graphic is positioned in the lower half of the page, extending from the left edge towards the right.

Executive Summary

Three years into the economic recovery, growth remains elusive. The consumer deleveraging has played a significant role, but other factors are also contributing: a stubbornly high underemployment rate, an aging workforce, an elevated and growing national debt and lackluster productivity.



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Going forward, economic growth is unlikely to accelerate in a meaningful way, although the US expansion should continue into 2013. Moreover, with growth stuck at around 2%, the economy remains vulnerable to exogenous shocks—particularly a large one like the fiscal cliff.

Longer term, some of these headwinds should abate. Once the consumer balance sheet is repaired—probably around 2014 or 2015—we would expect real consumption growth to rise, removing a major economic headwind. We would also expect real wages to rise as labor conditions normalize, though at the current pace this is also likely to take several more years.

That said, even after the consumer returns to a more stable footing, there are several longer term obstacles facing the United States. Demographics are likely to be a drag on growth for the remainder of the decade. Perhaps even more troubling, the ever-expanding federal debt, if left unaddressed, may also exert a significant drag on growth.

To some extent, many of these problems could be mitigated with the right policy mix. Fiscal reform that stabilized and eventually lowered the national debt would remove one significant headwind, and a longer working life and changes to immigration policy another. Finally, any policy that addresses the country's long-term productivity rate—education, energy policy, tax reform—will certainly improve the situation.

In the meantime, investors should build portfolios that are robust to a prolonged period of slow growth. In particular, we see good opportunities in US mega capitalization stocks (mega caps), which remain cheap and are levered to international growth opportunities. Technology is another potential long-term play as it has the highest percentage of international sales of any sector, and is therefore the least exposed to a regime of slow growth in the United States. Conversely, investors should treat small capitalization stocks (small caps) cautiously and avoid overpaying for this style.

The Slow Lane

There can be economy only where there is efficiency.

—Benjamin Disraeli

For most of the secular bull market (1982-2007) investors spent as much time worrying about too much as too little growth. Reports on inflation and money supply were frequent stumbling blocks for stocks. Even in the absence of actual inflation, too robust of an employment report or a particularly strong manufacturing number could send stocks into a tailspin. No more.

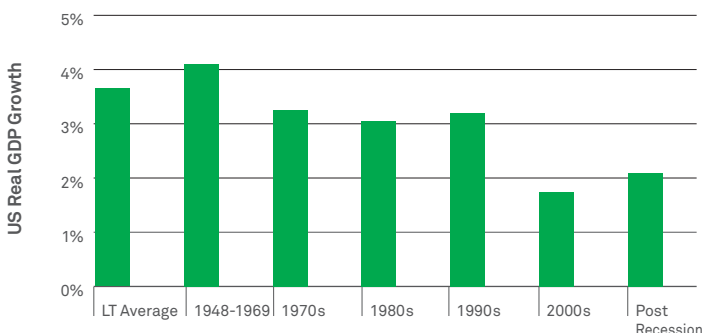
Today, investors may still maintain a vestigial fear of the long-term risks of inflation, but few worry about it in the near term. Soft growth, or no growth at all, remains the proximate threat. We are in an environment where growth seems to perpetually hover just above stall speed, leaving the economy constantly exposed to even modest exogenous shocks.

Since exiting the recession in mid-2009, the United States has averaged around 2% real growth. More disturbingly, since 2000 average growth has been around the same level, well below the long-term average. Since 1947, the US economy has expanded by an average rate of roughly 3.5% after inflation. During the halcyon days of the 1950s and 1960s, growth averaged around 4%. Even more recently, growth rates were much faster than today. The average growth rate in the 1980s and 1990s was still more than 3% (see Figure 1).

The US Consumer: The Big Engine that Couldn't

What caused this slowdown in US growth? As has been well documented, US consumers went on a multi-decade, credit-fueled spending spree that reached its apogee in the housing bubble of the last decade. From 1952 through the second quarter of 2008, consumer debt grew every single quarter, and at an

Figure 1: Average US Real Gross Domestic Product



Source: Bloomberg, as of 9/30/12.

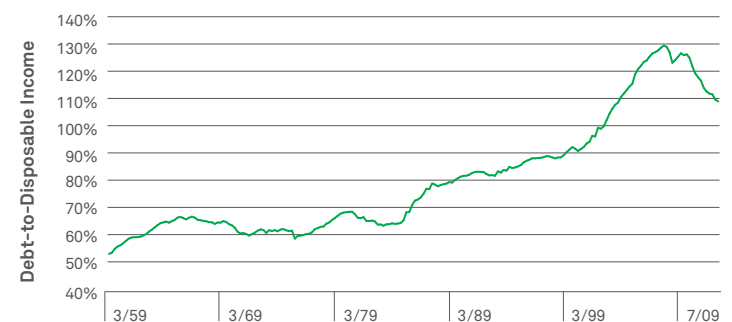
annualized rate of approximately 9%, well ahead of income growth. As a result, debt as a percentage of disposable income climbed from 63% in 1970 to nearly 130% in 2007 (see Figure 2).

Starting in 2008, five decades of credit expansion abruptly reversed. With credit cards at least temporarily put away, and the home equity binge at an end, consumption collapsed. As a result, since third quarter 2009 personal consumption has been growing at an average rate of just 2.1%, compared to a pre-crisis average of nearly 3.6%.

The end of the debt-led expansion was further complicated by the collapse in household net worth. By 2009, not only did consumers have too much debt relative to their income, but their debt had also skyrocketed relative to their net worth. During the 1990s, many commentators rationalized the rise in debt, arguing that household net worth was rising so fast the debt buildup did not matter. This might have been true at the time, but the gains proved fleeting while the debt lingered. Today, the ratio of household net worth to debt is roughly 4.8 to 1. This marks a significant improvement from the 2009 low of 3.76, but it is well below the long-term average of 7 to 1 and the more recent peak of 6.8 to 1. In other words, households still have too much debt relative to both income and wealth.¹

In an economy where personal consumption comprises roughly 70% of all economic activity, the end of the credit-fueled expansion and the collapse of the housing market have been major contributors to the slow growth of the past four years.

Figure 2: US Household Debt/Income (1959 to Present)



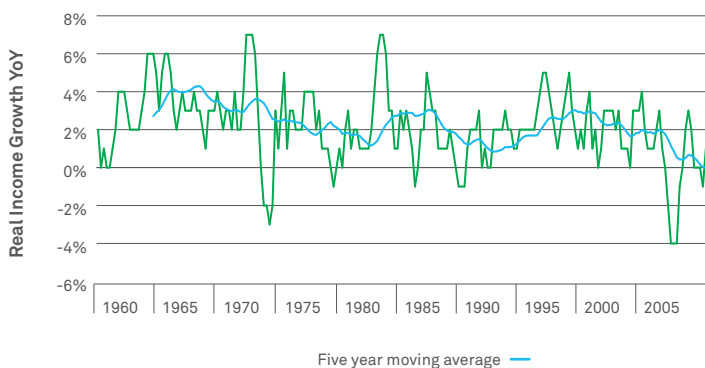
Source: Bloomberg, as of 9/30/12.

¹ Source: Bloomberg.

In addition to excessive debt, the other major consumer headwind has been the lack of any income growth. Real per capita income growth has been between +1% and -1% year-over-year since early 2009. Looking at the last five years, personal income growth has turned negative for the first time since records began in 1960 (see Figure 3).

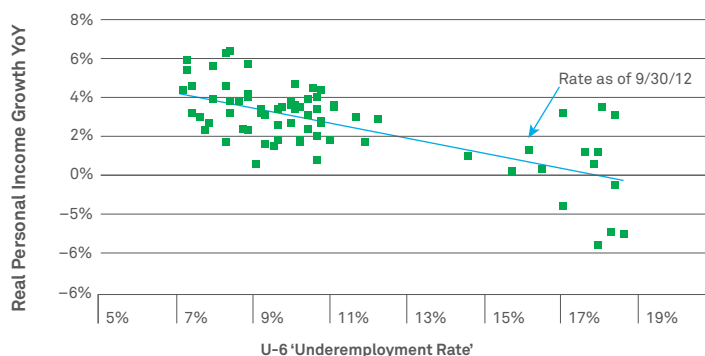
Faltering income growth can be attributed to the weak recovery in the US labor market. While the unemployment rate has fallen steadily since its peak in 2009, it still remains elevated by the standards of the past 60 years. Even worse, the unemployment rate arguably understates the true extent of the problem. When adding in underemployed workers, the broader measure of unemployment known officially as U-6, the slack in the labor market is close to 15%.

Figure 3: US Real Per Capita Income Growth (1960 to Present)



Source: Bloomberg, as of 10/15/12.

Figure 4: Underemployment Rate vs. Real Wage Growth (1994 to Present)



Source: Bloomberg, as of 9/30/12.

The high level of underemployment is critical to understand the recent stagnation in incomes. Historically, the level of U-6 has explained slightly less than half of the variation in real personal income growth (see Figure 4). With the underemployment rate still roughly 4% above its long-term average, wage growth, and therefore consumption, is likely to remain below trend until the jobs recovery is further along.

Even when the job market heals, it is worth noting that the slowdown in wage growth actually predated the financial crisis. Many commentators have discussed the stagnation in middle-class income, which actually dates back to the late 1990s. Part of the explanation lies in the increased global nature of the economy. The uncomfortable truth for Americans is that while wages have been stagnant for most middle-income individuals, they are rising for billions of individuals in emerging markets. Globalization has created a more competitive labor market for many middle-class jobs, and as a result, the stagnation of middle-income wages in the United States is the flip side of rising wages in many emerging markets.

Another longer term issue is demographics. We highlighted this challenge in the June 2012 Market Perspectives, “Not So Golden Years.” To reiterate, long-term growth is ultimately a function of productivity and the growth in the workforce. As the population ages and fewer Americans participate in the work force—a trend in place since 2000—in the absence of a surge in productivity, growth slows. This is exactly what we’ve witnessed over the past dozen years. As stated above, the slowdown in US growth began long before the housing bubble burst and consumers discovered frugality. Since 2000, labor force participation has declined from a peak of around 67% to 63.6%, close to a 31-year low. While other factors have contributed as well, a declining participation rate has arguably been one of the factors contributing to the decelerating growth rate.

Finally, there is the mystery of productivity. The mid-1990s were thought to have ushered in a new age of technology fueled productivity growth. In the decade between 1995 and 2004, US productivity increased at an annualized pace of 2.8%. This rate of improvement was reminiscent of the golden years of US growth in the 1950s and ‘60s. Unfortunately, the surge in productivity did not prove as permanent as the optimists had hoped (see Figure 5).

What to Expect: Near and Long Term

Given the myriad explanations for the slowdown in growth, and probably more than a few that we missed, where does that leave the United States? In the near term, which we'll define as the next year, the answer is probably more of the same. While certain headwinds are abating, most notably the housing market, others are likely to linger for the next year or so. Consumers probably need at least another year to bring their debt levels down to a more sustainable level and we're skeptical—as is the Federal Reserve given its recent pronouncements—that the US labor market will right itself over the next 12 months.

The notion of more slow, but positive growth is confirmed by most of the leading indicators, including our preferred measure, the Chicago Fed National Activity Index (CFNAI). In the past, CFNAI has had one of the strongest correlations of any leading indicator. This quarter's reading explains 45% of the variation in next quarter's GDP (see Figure 6). The CFNAI did improve significantly

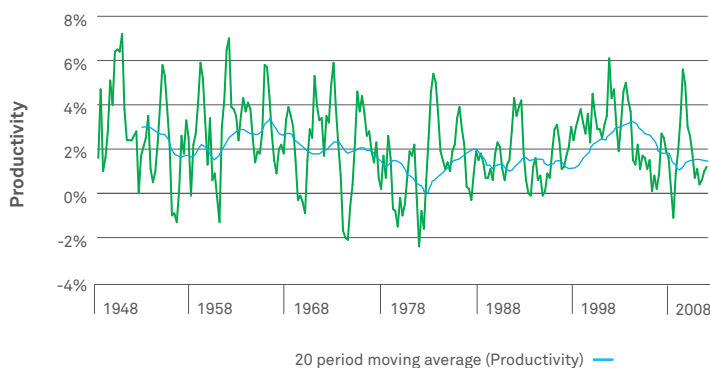
in September (see Figure 7). However, this measure has been extremely volatile for much of the year. Over the past six months, the average reading has been around -0.30. Historically, when the CFNAI has been at this level, growth has been subpar, but positive, at around 2.2%.

Other leading indicators confirm this view. September witnessed a strong rebound in the Conference Board's measure of Leading Economic Indicators, but this metric has been oscillating between positive and negative readings since April. On average, this measure of future economic activity has gained roughly 0.10% a month since the start of 2012. Changes of this magnitude are associated with real economic growth of approximately 2% a year.

Looking beyond leading indicators, with an economy still largely driven by consumption we're skeptical that the United States can return to its long-term growth rate until we see a real consumer revival. As previously described, one obstacle is the still prodigious overhang of consumer debt.

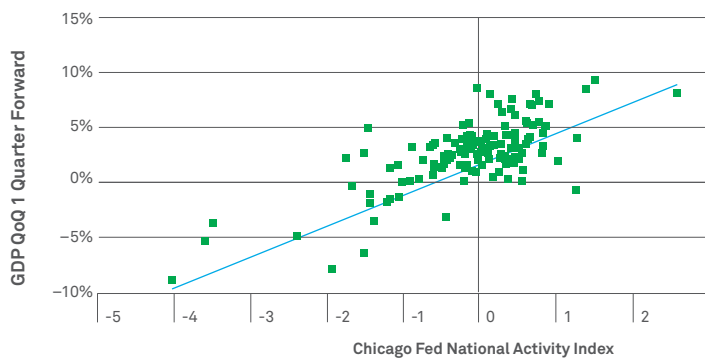
The good news is the consumer—or more accurately the banks on the consumer's behalf—has made considerable progress in whittling down debt levels. Since 2008, overall debt levels have fallen roughly \$1 trillion, from \$13.8 trillion to \$12.9 trillion. As a percentage of disposable income, overall household debt is now down to 109%. That said, we don't believe consumer debt has reached a sustainable level, although the US household sector is clearly in better shape than it was in 2008. Ultra-low interest rates have made servicing that debt easier, but we don't believe the deleveraging will be over until debt-to-disposable income gets back to at least the levels that prevailed in the late 1990s.

Figure 5: US Business Sector Output Per Person (1948 to Present)



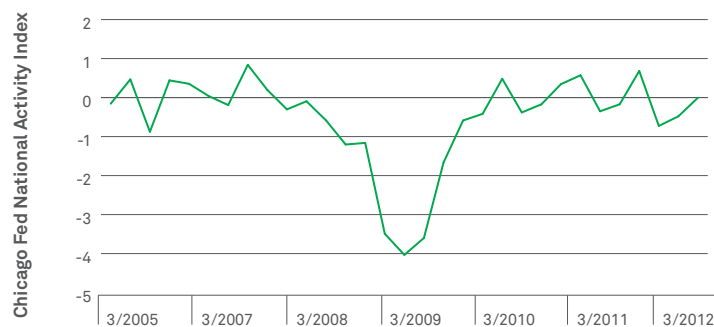
Source: Bloomberg, as of 10/15/12.

Figure 6: Chicago Fed Index vs. Next Quarter's US GDP (1980 to Present)



Source: Bloomberg, as of 10/15/12.

Figure 7: Chicago Fed National Activity Index (2005 to Present)



Source: Bloomberg, as of 9/30/12.

Assuming debt levels drop back to their level of the late 1990s, roughly 93%, this would require another \$1 trillion of deleveraging, assuming modest income growth. Bottom line is the consumer is probably looking at another couple of years of frugality.

“There are several longer term headwinds that may prevent the United States from recapturing its previously healthy growth rate.”

The other major impediment to a quick rebound is the lack of income growth. As discussed above, we are unlikely to see any real acceleration in income growth without a more significant improvement in the labor market. While the unemployment rate has fallen 0.7% year-to-date, other labor market metrics have remained stagnant. The pace of job creation has remained flat in 2012. The economy has produced an average of 146,000 net new jobs a month in 2012, versus an average of 153,000 in 2011. We also see slow progress in bringing down the rate of under-employment. Based on the historical relationship, in order to get real income growth back above the 3% level, you would need to see U-6 down to around 10%. At its current rate of improvement, it would take approximately another two years to reach that level.

Given all of this, for 2013 we would expect the United States to continue to grow at around 2%. Unfortunately, most of the tail risk is to the downside, particularly if the United States inadvertently stumbles into a significant fiscal tightening.

What About the Next Ten Years?

Moving to the longer term, what is a reasonable growth level to expect? Based on the previous analysis, our expectation is that at least two of the headwinds holding back US growth—excess consumer debt and a traumatized labor market—should start to abate by 2014 or 2015. However, there are several longer term headwinds that may prevent the United States from recapturing its previously healthy growth rate. The longer term headwinds include the slowdown in population growth and the accompanying aging of the population, excessive debt levels and lackluster productivity growth.

Starting with demographics, while the United States enjoyed a demographic tailwind for most of the post-World War II period, that tailwind has now turned into a headwind. Based on Census Bureau data, the US population will grow by 0.72% in 2012, the slowest rate since at least 1949 (see Figure 8). Nor is there any sign of an imminent rebound. Due in part to the slowing economy,

2011 marked the fourth straight year in which the fertility rate declined. The US birth rate is now at 1.9 births per woman over a lifetime, below the level necessary to sustain the size of the population without immigration.

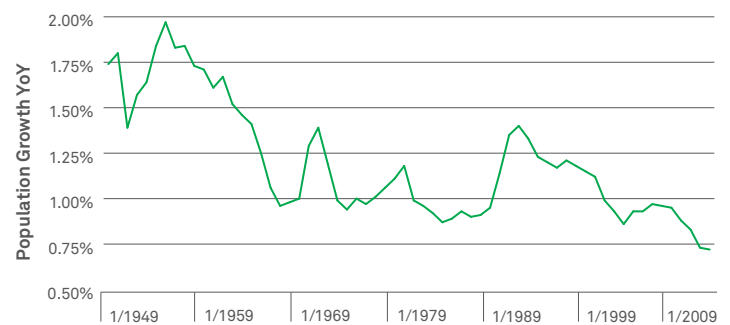
Not only is the population stagnating, it is also aging, which in turn translates into fewer working age adults. The drop in the population will impact growth over the next several decades, but the aging of the workforce will exert a more immediate drag, one that is likely to be felt for at least the remainder of this decade.

As we discussed above, a falling labor participation rate typically translates into modestly slower growth. In the past, changes in the participation rate explain roughly 25% of the variation in real growth. Roughly speaking, a one-tenth drop in the participation rate is equivalent to a 0.25% reduction in GDP. Since 2000, the participation rate has been dropping at roughly 0.25% a year. Assuming this continues, this would subtract roughly 0.6% from annual real GDP (see Figure 9).

The other big long-term headwind is debt. US consumers are probably half way through their deleveraging and the financial sector is mostly done. Despite this, overall US non-financial debt continues to climb. While investors and pundits talk about the US deleveraging, the dirty little secret is that outside of the financial sector, no real deleveraging has occurred.

The household sector has removed roughly \$1 trillion of debt from its balance sheet. Since late 2007, corporate debt has climbed by approximately the same amount. More importantly, the federal sector has been leveraging up at an unprecedented rate. As a result, total US non-financial debt now stands at \$39 trillion, up \$6.5 trillion since the end of 2007. Even when you compare overall debt levels to GDP, it is hard to find the progress. US non-financial debt peaked at 253% of GDP in 2009. Today, it still stands at approximately 251% (see Figure 10). By comparison, the long-term average is 162%, and as recently as 2000 this ratio was below 180%.

Figure 8: US Population Growth (1949 to Present)



Source: Bloomberg, as of 9/30/12.

The significance of all this is that historically debt levels of this magnitude have been associated with a long-term haircut to growth. Research by professors Carmen Reinhart and Kenneth Rogoff suggests that significant debt overhang—defined as sovereign debt above 90% of GDP for at least five years—has in the past been associated with growth rates more than one percent lower than other periods.² More troubling, these episodes of excessive debt and slower growth tend to last for a very long time. Unless the United States takes its fiscal position much more seriously than it has in recent years, current debt levels are likely to compound the already significant drag from an aging population.

The final headwind concerns productivity. We highlighted in the first section the deceleration in productivity growth. The productivity surge in the late 1990s is generally attributed to the successful integration of information technology more fully into the workplace. While economists still debate the exact cause of why it did not last, what is clear is that it did not. Since 2005, productivity has been closer to its average during the 1970s and 1980s, roughly 1.60%, and if anything has been decelerating in recent years.

There is no consensus on why the technology fueled productivity boom of the 1990s did not last. However, a recent paper by Robert Gordon of Northwestern University offers an intriguing explanation.³ Professor Gordon starts by asserting that the big productivity gains of the 1950s and 1960s were a one-time aberration. These outsized gains resulted from the integration of the fruits of the Second Industrial Revolution—electricity, the internal combustion engine, communications, chemicals, petroleum—into modern life. By the 1970s, the benefits from these inventions had been fully integrated and productivity growth started to decline. The brief surge in the 1990s was a result of what he refers to as the Third Industrial Revolution—computers, the web and mobile phones. However, and this is the big difference, he asserts that while recent technology has

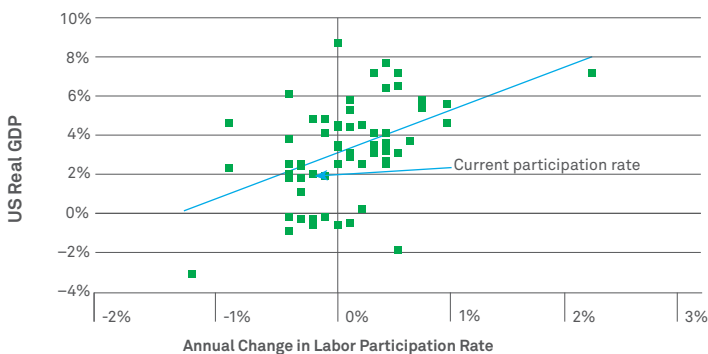
been quite fun and rather entertaining, innovations such as the iPhone are simply not the game changers that were the jet engine and electricity. As a result, the productivity surge of the Third Industrial Revolution has been both shorter and less significant than the previous one.

To summarize, our view is that some of the headwinds surrounding the United States' weak economic performance should start to abate over the next two to three years. Specifically, by 2014 or 2015 we would expect the consumer deleveraging to be less of a drag and enough improvement in the labor market to allow for some acceleration in real wages. These two developments should allow for faster economic growth.

However, there are longer term headwinds that are likely to remain throughout the remainder of the decade. The most persistent of these is likely to be the drag from an aging population. In addition, unless we see evidence of real entitlement and tax reform, debt levels are likely to remain elevated, if not climb, producing a further drag on growth. Finally, our expectation is that productivity growth will resemble the last decade, rather than the temporary surge we witnessed in the 1990s. This suggests that even after the cyclical impact of the last recession finally fades, growth is unlikely to revert back to its long-term average of around 3.5%.

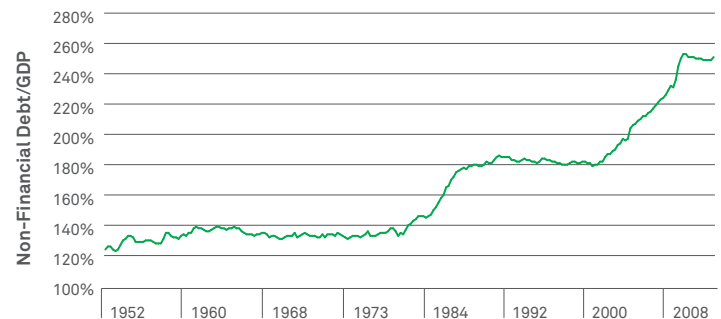
Before moving on, it is worth pointing out that there are policy choices that could improve the outlook. First and foremost would be a credible long-term fiscal plan that stabilized and eventually reduced the debt-to-GDP ratio. Second, revisiting

Figure 9: Labor Force Participation and Economic Growth (1948 to Present)



Source: Bloomberg, as of 9/30/12.

Figure 10: US Non-Financial Debt-to-GDP (1952 to Present)



Source: Bloomberg, as of 9/30/12.

² Carmen M. Reinhart and Kenneth S. Rogoff, "Debt Overhangs: Past and Present," National Bureau of Economic Research, April 2012. Accessed at <http://www.nber.org/papers/w18015.pdf>.

³ Robert J. Gordon, "Is U.S. Economic Growth Over? Faltering Innovation Confronts the Six Headwinds," National Bureau of Economic Research, August 2012. Accessed at <http://www.nber.org/papers/w18315.pdf>.

immigration policies could mitigate the impact of an aging US population. Finally, anything that helps productivity will enhance the long-term growth rate.

What to Consider Owning When Growth is Hard to Find

Assuming the above scenario plays out as described—slow growth of 2% or a bit less for the next few years and then some modest acceleration—how should investors be thinking about their exposure to US markets?

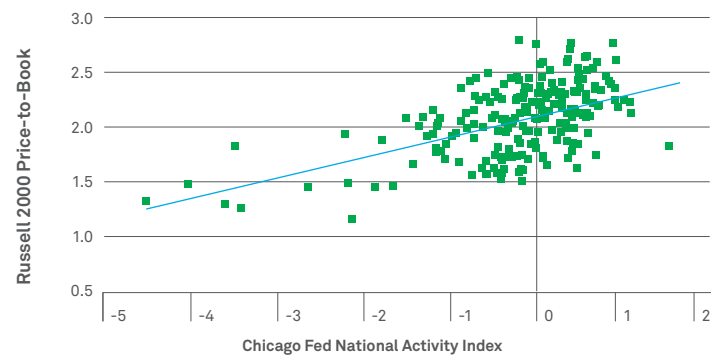
We have previously made the case that investors should consider overweighting emerging markets and smaller developed markets. But what about within the United States? To begin, investors should be aware of how growth impacts different segments of the market. Historically, the pace of expected growth—defined by the relationship between leading economic indicators and valuation—has been modest, but statistically significant for most segments of the US equity market. However, economic growth has a similar impact on valuations regardless of the investment style (i.e., large capitalization (large cap), growth or value). In each case, leading indicators explained roughly 10% of the variation in valuation. There is, however, one segment of the market that is particularly sensitive to the outlook for US growth: small caps, where growth expectations explain 30% of the variation in valuations (see Figure 11). This should not be surprising as small caps derive the overwhelming majority of their sales domestically.

The key takeaway is that investors should perhaps reconsider the traditional premium they were willing to pay for small caps. If growth is likely to be slower, investors should be looking for small caps to trade at lower absolute and relative values. Today, while small caps do trade below their long-term average valuation, they appear expensive relative to other market segments. Based on price-to-earnings, the Russell 2000 is trading at approximately a 45% premium to the S&P 500. The long-term average premium is 22%. The stocks also look expensive, albeit to a lesser extent, based on relative price-to-book. Since 1995, small caps typically traded at around a 30% discount to large cap companies based on this metric. The current discount is around 19%.⁴ Investors with overweight positions in small cap companies should consider whether this premium is justified given the below-trend growth outlook.

The second major takeaway is to gain leverage to faster growing segments of the world, which suggests looking for companies and segments with high international exposure. In the past, we have highlighted mega caps as a play on global growth. As Figure 12 illustrates, mega caps in the MSCI USA Indices get nearly 20% of their exposure from emerging markets. Another related style play is large cap growth.

For those investors who want an even more focused play on the large cap growth theme, consider technology stocks. Of the ten economic sectors, technology has, by a large margin, the most exposure to international sales. More than 60% of computer and hardware sales by US companies are to customers outside of the United States. For semiconductor companies, the percentage is close to 85%.

Figure 11: Leading Indicators and Small Cap Valuations (1995 to Present)



Source: Bloomberg, as of 10/15/12.

Figure 12: Emerging Markets Exposure of MSCI USA Indices

	Index	EM Exposure (%)
1	MSCI USA Large Cap	19.8
2	MSCI USA Mid Cap	13.3
3	MSCI USA Small Cap *	NA
4	MSCI USA Large Cap Growth	22.8
5	MSCI USA Large Cap Value	16.6
6	MSCI USA	18.7

Source: Data as of September 2012. Index level exposures are computed as the sum-product of the securities' weight in the index and its corresponding emerging markets exposure.

* The economic exposures are computed for the universe of large and mid cap companies in the MSCI ACWI.

For the purposes of economic exposure, emerging markets would also include the MSCI Frontier Market countries and other emerging markets not followed by MSCI.

⁴ Source: Bloomberg.

Conclusion

The American Republic will endure until the day Congress discovers that it can bribe the public with the public's money.

—Alexis de Tocqueville

While the recovery has been frustrating, the truth is the slowdown in the United States preceded the recession. Growth has been below its long-term trend since the bursting of the equity bubble in 2000. The initial slowdown was probably driven by the collapse in household wealth and exacerbated by changing demographics, which continue to represent a headwind. However, since the financial crisis, other impediments to faster growth have emerged, such as the deleveraging by the US consumer and stagnating real income growth.

Assuming we avoid the fiscal cliff, we expect the United States to grow by about 2% in 2013, but not much better. Things should start to improve by 2014 or 2015 as household balance sheets reach sustainable levels and the labor market normalizes. However, even then we don't expect the United States to return to its long-term trend of 3.5% growth without significant progress on the US fiscal position and a meaningful acceleration in productivity.

In the meantime, investors who have not already done so should consider adjusting their portfolios for a slow-growth regime. Practically, this means not overpaying for small cap, but instead looking for growth outside the United States and in those segments of the US market levered to greater international sales.

Figure 13: Sector Exposure to Global Sales

Industry Group	US	Asia	Europe	Others	Foreign
Automobiles & Components	46.8%	0.6%	25.7%	26.9%	53.2%
Banks	99.9%	0.0%	0.0%	0.1%	0.1%
Capital Goods	57.3%	12.0%	15.8%	14.9%	42.7%
Commercial & Professional Services	78.0%	4.1%	6.3%	11.5%	22.0%
Consumer Durables & Apparel	57.4%	7.0%	14.6%	21.0%	42.6%
Consumer Services	59.4%	14.5%	15.1%	11.0%	40.6%
Diversified Financials	68.3%	9.3%	13.3%	9.1%	31.7%
Energy	56.8%	1.1%	4.5%	37.6%	43.2%
Food & Staples Retailing	82.5%	0.0%	0.0%	17.5%	17.5%
Food Beverage & Tobacco	51.6%	5.7%	20.6%	22.1%	48.4%
Health Care Equipment & Services	93.3%	1.2%	2.6%	2.9%	6.7%
Household & Personal Products	37.8%	9.2%	9.1%	43.8%	62.2%
Insurance	80.0%	9.9%	2.0%	8.1%	20.0%
Materials	51.4%	11.2%	15.9%	21.5%	48.6%
Media	79.5%	3.6%	9.9%	7.1%	20.5%
Pharmaceuticals Biotechnology & Life Sciences	49.2%	8.4%	22.1%	20.3%	50.8%
Real Estate	85.6%	3.5%	2.9%	8.0%	14.4%
Retailing	87.0%	0.7%	2.3%	9.9%	13.0%
Semiconductors & Semiconductor Equipment	15.6%	61.2%	12.6%	10.6%	84.4%
Software & Services	50.3%	5.2%	6.7%	37.8%	49.7%
Technology Hardware & Equipment	39.6%	15.7%	12.7%	32.0%	60.4%
Telecommunication Services	100.0%	0.0%	0.0%	0.0%	0.0%
Transportation	81.4%	2.0%	0.7%	15.8%	18.6%
Utilities	94.0%	0.2%	0.9%	4.9%	6.0%
S&P 500	67.6%	5.7%	8.0%	18.7%	32.4%

Source: FactSet, Worldscope, Morgan Stanley Research.

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