

- US GDP rose by 2.5% (annualized rate) in the March quarter. Underlying trend is modest growth.
- We are forecasting GDP growth of 2.1% in 2013 and 2.9% in 2014. While GDP growth will likely moderate in the current quarter it should strengthen in the second half of the year.
- The potential growth rate of the U.S. economy has slowed down, and this lower growth rate is expected to be maintained into the future.

As anticipated, GDP growth rebounded from its weak December quarter result in the March quarter. GDP in the March quarter grew by 0.6% qoq or at an annualised rate of 2.5% well up from 0.4% annualised rate in the previous quarter. The stronger growth largely reflected a pick-up in consumption expenditure, as well as a faster rate of inventory accumulation (mainly, but not solely, due to the farm sector as the affects of the drought start to wane). While weaker than in the previous quarter, housing investment continues to grow rapidly and business investment is also rising.

Overall, the GDP results suggest an economy growing at a modest pace; GDP has been volatile recently but has averaged 0.5% qoq over the last three quarters.

We expect GDP growth will soften a little in the June quarter. Households are still adjusting to the higher taxes that kicked in at the start of the year, although they are getting some respite from lower petrol prices which have fallen over 10% (seasonally adjusted) since February). Moreover, while we don't expect to see an inventory 'correction', growth in inventories is unlikely to pick-up further which will mean that the contribution to growth from this source in the March quarter will not be repeated.



Sources: ISM, Bureau of Labor Statistics

This softer (but still positive) outlook for the quarter is consistent with the weak tone of March month data. There is little data available for April, although auto sales declined 2.3% mom consistent with the expected softening in consumption. Moreover,

the ISM manufacturing and non-manufacturing surveys softened further in April. However, if maintained at their current level they are still consistent with modest growth.

The issue is whether this softening is the start of a downward trend or temporary with the recent soft data simply a correction to the noticeably stronger data in previous months. Supporting the latter, labour market data for April were more positive, suggesting that there is has been no sudden loss in business confidence and associated cut backs. Non-farm employment increased by 165,000 and the March outcome was revised upwards from a weak 88,000 to a more respectable 138,000. The unemployment rate declined for the third month in a row to 7.5% (and this time there was no help from a lower participation rate). Initial jobless claim data also continue to trend down.

Beyond the current quarter, the impact of the tax cuts at the start of the year will begin to fade, and consumption will also be supported by the continued growth in household wealth and employment, as well as low interest rates from the Fed's ultraloose monetary policy.

Moreover, the Fed is likely to continue easing monetary policy over the rest of 2013 through its asset purchase (QE) program. Our expectation has been that the QE program will finish at the end of this year (with some tapering of the program beforehand). It is interesting to note that average non-farm employment gains over the last six months have averaged above 200,000, a benchmark suggested by some (dovish) Fed members for ending the program. That said, Fed members will be looking at a broader range of indicators as well, and given the recent softness in some data (including inflation), and the expected moderation in GDP growth in the June quarter, the risk is greater that the QE program will run for longer than we expect rather than that it will end sooner.

The transmission of the Fed's monetary policy into the real economy is also being assisted by an easing in lending standards by banks, particularly to businesses. The Federal Reserve's latest Senior Loan Officer Opinion Survey (released earlier this week) continues to show an easing in lending standards for business; both for small/medium businesses as well as large ones. Business investment will also be supported by the high levels of corporate profits, which continued to rise at the end of 2012. Lending standards for consumer loans also continue to be eased at a modest pace, and there are some tentative signs of easing for prime mortgage loans (although standards still remain high by historical standards).

Lending standards continue ease, supporting activity



Source: Federal Reserve

The rapid growth in housing construction is also expected to continue. New home sales increased by over 10% in the March quarter, and the continuing recovery in the labour market will further encourage household formation and in turn activity. This will also be supported by low mortgage interest rates. With the inventory of new-homes (and existing homes on the market) low this will translate into additional construction.

The world economy is likely to improve in the second half of 2013 and into 2014 supporting exports, notwithstanding the recent appreciation in the US dollar.

Federal fiscal policy, however, will be a drag on growth for some time to come. With the suspension of the debt limit scheduled to end this month, attention will soon turn to how policy makers will deal with this issue (which won't come to a head until around August). A risk to our forecast is that the debt limit is not addressed in a timely or orderly manner, leading to a repeat of the confidence sapping debt limit debate of 2011.

In summary, we expect that the drawn-out recovery seen to-date will continue. While GDP growth will likely moderate in the current quarter it should strengthen in the second half of the year. As a result GDP growth is forecast to be 2.1% in 2013 and 2.9% in 2014.

Long-run growth potential

Turning away from the vagaries of the monthly data flow, an issue for the U.S. is how fast it will be able to grow over the next decade and beyond. This is important for a number of reasons. This not only includes the prospects for standard of living improvements but also for fiscal management – faster growth will make managing down the currently high federal government debt levels easier. While still years away, it may also affect the level at which interest rates settle once monetary policy moves from being ultraeasy to more neutral.

While most economic commentary in the press tends to be about 'demand' – budget cuts and tax increases, consumer and business spending – and measures to stimulate demand (low interest rates, QE) an economy's long-term growth is more about supply. That is, the productive capacity of a nation. A simple way to think about it is that supply will depend on the number of people working (and how long they work in the day), the amount of capital they use (computers, machinery, factories etc), and how effectively the capital and labour is used (productivity). A potentially pessimistic long-term scenario for productivity was put-forward in a paper by Robert Gordon last year. Gordon argued that future growth is not assured, and that the rapid progress in the last 250 years might turn out to be a unique event rather than a permanent feature. According to Gordon, key drivers of productivity over this period were two industrial revolutions (1750-1830 steam engines, rail roads, cotton spinning; 1870-1900, electricity, internal combustion engine and running water/indoor plumbing) and, less importantly, an IT revolution. According to Gordon the full pass through of the industrial revolutions took around 100 years. After 1970 productivity slowed because most of the ideas had been largely implemented. He sees the computer and internet revolution as occurring from 1960 to the late 1990s and that its contribution to productivity improvement has already started to 'wither away'. More recent IT developments are discounted on the grounds they are focussed on entertainment/communications rather than productivity.

As a result, while he sees ongoing innovation as continuing its impact on productivity will be smaller. Moreover, he identifies a number of headwinds which will worsen the underlying problem. These include demography, rising inequality, outsourcing of jobs overseas, problems with the education system, environmental regulations and taxes and the overhang of consumer and government debt.

The bottom line of this story is shown in the chart below – GDP per capita has been declining since the 1950s and if it continues along this trajectory it could be as low as 0.2%.

Future US Growth Slowdown?



Source: Gordon R.J., Is US economic growth over? Faltering innovation confronts the six headwinds, CPER Policy Insight No. 63

Not surprisingly, Gordon's thesis has generated a lot of discussion, including many dissenting views. For example, one alternative view is that the most important event was the invention of the printing press by Gutenberg which facilitated the spread of ideas and their incorporation into the economy and that the internet has taken this another step¹.

GDP per capita is a poor measure of productivity as it is distorted by demographic affects. The chart below compares GDP per capita with non-farm business labour productivity since the 1950s. While growth in GDP per capita has been falling since the 1960s, productivity improved over the last two decades.

¹ Cochrane, J., Gordon on Growth, 29 August 2012 (http://johnhcochrane.blogspot.com.au/2012/08/gordon-on-growth.html)

Labour productivity has improved in recent decades



Source: BEA, BLS. Note the '2000s' period covers 2000 to 2012.

While the recent improvement in productivity may be attributable to the IT revolution – and it is unclear how much longer this will run - there is something almost Malthusian about the Gordon view. Rather than running out of food we are running out of (big) ideas for improvement. In advance it is hard to tell what the next big idea will be (nanotechnology, 3d printing?) but this doesn't mean there won't be one.

Moreover, it also discounts the cumulative benefits of lots of 'small' ideas. For example, developments in horizontal drilling and hydraulic fracturing have allowed the development of shale gas fields that were previously uneconomical to produce². The resulting increase in energy production has lowered natural gas prices in the United States. As a result, not only has there been a boost to the states where the exploration and drilling activity is occurring but energy-intensive sectors of the economy are also benefiting. Actually, hydraulic fracturing itself is not new at all, as it was first used by Stanolind Oil in the late 1940s³; suggesting that writing-off the benefits of the still underway IT revolution as already over is highly speculative.

While we think the Gordon scenario is unduly pessimistic, it serves as a useful warning that future growth should not be taken for granted. Moreover, for different reasons, it is clear that there has been a slowdown in U.S. growth potential. The key factors behind this are firstly demographic changes (which will persist) as well as a slowdown in capital accumulation (which will likely be more temporary).

Population growth in the last few years has declined to a rate (0.7% per annum) not seen since the 1930s. Of course, the slow growth in the 1930s likely reflected the impact of the Great Depression, and the recent slowdown in population growth may similarly reflect the impact of the recent recession and still high unemployment. Nevertheless, population projections by the Census Bureau suggest that population growth has likely moved to a permanently lower level.

Moreover, changes in the composition of the population have major implications for potential growth in the labour force. From the 1960s through to the 1980s, the working age population (15 years and older) increased at a noticeably faster rate than the total population. However, this differential has narrowed in recent decades.

Major demographic and workforce changes over time



Source: Bureau of Labor Statistics, Bureau of Economic Analysis, Census Bureau

From the late 1960s through to the 1990s there was also an increase in the participation rate, reflecting the significant increase in female participation over this period. The participation rate measures the proportion of the working age population in work or looking for work. This process came to an end in the late 1990s, and since then overall participation has trended down. Reasons for this include an increasing proportion of young adults studying and population aging (as workers 55 or more years old have the lowest participation rate) and an end to the trend rise in female participation. Some of the recent deterioration in the participation rate reflects the lingering impact of the recession, as those unable to get a job get discouraged and stop looking. Nevertheless, the underlying trend is for a decline in the participation rate.

To illustrate the implications of these demographic and workforce participation trends, we have projected future labor force growth using Census Bureau population projections (by age) and assuming the participation rate for each age group in the future will equal an average of the end 2006 and end 2012 participation rates⁴. Projections prepared using these assumptions show that over the next decade or so the labour force growth rate will continue to slow.

Labour force growth is on a downward trend



Sources: Census Bureau, Bureau of Labor Statistics, NAB

The other factor that is currently a headwind to potential growth is the slowdown in the capital stock. The reductions in business investment and housing construction that accompanied the recession lowered growth in private sector fixed asset capital stock to its lowest level since WWII (when resources were moved

⁶ http://www.eia.gov/energy_in_brief/article/about_shale_gas.cfm ³ Montgomery C., Smith B., Hydraulic Fracturing, History of Enduring Technology, JPT, December 2010

⁴ This is an attempt to remove some of the cyclical or recession induced decline from the current participation rate.

out of the private sector and into government). Data are only available to 2011 but growth in fixed asset investment in 2012 suggests that the capital stock growth rate recovered further in that year, and this is projected to continue over coming years.

Recession induced slowdown in capital stock



One of the most widely used estimates of US potential growth is that produced by the Congressional Budget Office (CBO). Its latest projection is for potential GDP growth of 2.2% p.a. over the next ten years similar to that of the preceding decade but down on the 3% potential growth rates over the 1970s to 1990s. Factors contributing to the slowdown over the next ten years can be seen in its decomposition of the non-farm business sector's potential growth (which is higher than the overall GDP expectation). For this sector, the major factor pushing potential growth down (relative to past experience) is a decline in the labour force (measured by total hours worked), with a smaller decline in capital inputs. In contrast, productivity growth is broadly unchanged (measured by total factor productivity or TFP).

CBO estimates of potential business sector GDP have fallen



Source: Congressional Budget Office

To sum up, the potential growth rate of the U.S. economy has slowed down, and this lower growth rate is expected to be maintained into the future. A major factor contributing to this is demographic change, although the impact of the recession on capital investment has also had an effect. Of course, in the shortterm the economy can grow at a faster rate than 'potential' as there is a lot of spare capacity (illustrated by a still high unemployment rate).

	Year A	Quarterly Chng %												
					2012		2013				2014			
	2011	2012	2013	2014	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
US GDP and Components														
Household Consumption	2.5	1.9	2.3	2.6	0.4	0.5	0.8	0.5	0.6	0.6	0.7	0.7	0.7	0.7
Private fixed investment	6.6	8.7	7.5	9.0	0.2	3.3	1.0	2.3	2.4	2.3	2.2	2.1	2.0	2.0
Government Spending	-3.1	-1.7	-2.6	-0.7	1.0	-1.8	-1.0	-0.6	-0.4	-0.2	-0.1	-0.1	-0.1	-0.1
Inventories*	-0.2	0.1	0.1	0.0	0.1	-0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Exports*	0.1	0.1	0.0	-0.1	0.1	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Real GDP	1.8	2.2	2.1	2.9	0.8	0.1	0.6	0.5	0.7	0.7	0.7	0.7	0.7	0.7
US Other Key Indicators (end of	f period)													
PCE deflator-headline	(yoy%)													
Headline	2.5	1.6	0.9	1.7	0.4	0.4	0.2	0.1	0.2	0.3	0.4	0.4	0.4	0.5
Core	1.7	1.5	1.2	1.8	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.5
Unemployment Rate (%)	8.7	7.8	7.4	6.9	8.0	7.8	7.7	7.6	7.5	7.4	7.2	7.1	7.0	6.9
US Key Interest Rates (end of p	eriod)													
Fed Funds Rate	0.25	0.25	0.25	0.3	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
10-year Bond Rate	1.98	1.72	2.50	3.25	1.72	1.72	1.96	1.90	2.25	2.50	2.50	2.75	3.00	3.25

Source: NAB Group Economics

*Contribution to real GDP

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