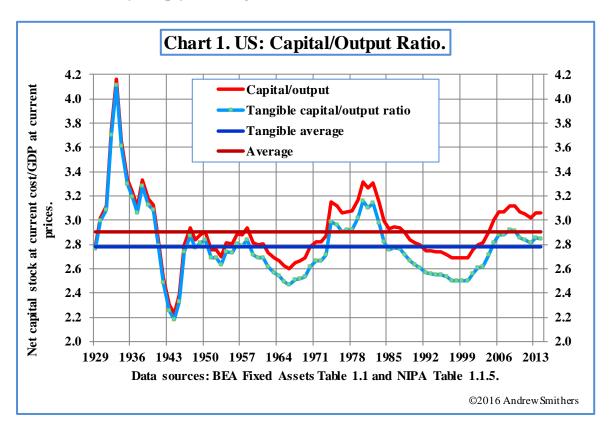
US Economic Policy.

Following the US election we are likely to see a large fiscal stimulus. This has support from many Republicans and many Democrats, but in each case it is based on a different set of expectations. Both groups hope that fiscal stimulus will pay for itself through greater growth, but use different assumptions to reach the same conclusion.

Fiscal stimulus Republicans believe that tax and regulation have constrained the ability of the US economy to grow and that reducing them will have an immediate and sustained beneficial impact, not only on demand but also on supply. Fiscal stimulus Democrats believe that the capacity of the economy to grow is much greater than recent trends and the current level of unemployment suggest. If either group is correct, additional fiscal stimulus could increase demand and lower unemployment without raising inflation.

Both these attitudes seem based on wishes rather than hard headed assessment. They resemble the UK's ill-fated National Plan which, as Mervyn King has pointed out, ¹ failed because it was also based on the hope that growth of the economy could be accelerated by simply boosting demand.



The US economy has grown at 2.1% p.a. since the recovery started in Q1 2010, while unemployment has fallen sharply from 9.8% to 4.9%. The growth of output has

¹ *The End of Alchemy – Money Banking and the Future of the Global Economy* by Mervyn King published by Little Brown (2016).

thus been much faster than the growth of output capacity (aka the trend rate of growth).

Chart 1 shows that output depends on the level of the net capital stock. The ratio of GDP to the net capital stock is stable over time. The chart shows that it is currently only a little above the average ratio around which it rotates. Any significant and sustained improvement in the trend rate of growth is thus likely to require a marked acceleration in the growth of the net capital stock. As unemployment is now below its long-term average growth, above trend growth is unlikely to be possible for long without a rise in inflation.

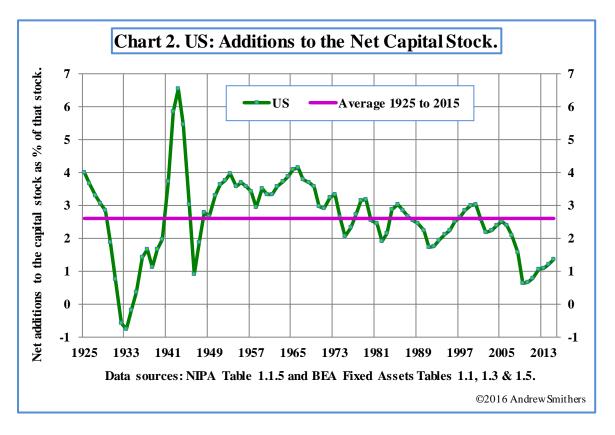
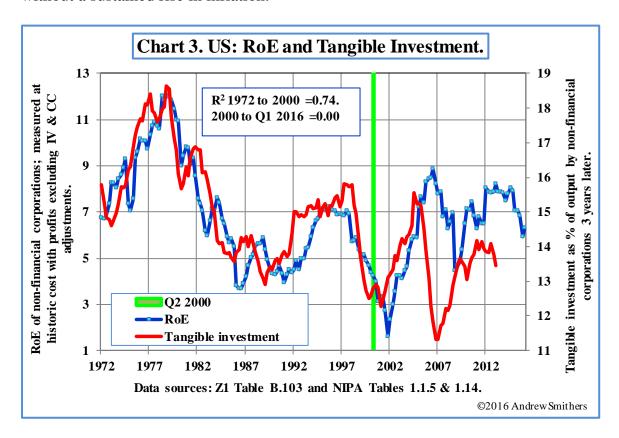


Chart 2 shows that the US capital stock is only growing at 1.3% p.a., which is therefore likely to be the current trend growth rate of the economy. This is below the hopes and wishes of both Republican and Democratic fiscal stimulators, but fits the data on the post-recession growth of the US. As there was a sharp fall in unemployment, trend growth appears to have been way below the actual post-recession rate of 2.1% p.a.

Trend growth should rise if investment increases. But the net capital stock in 2015 grew at only half the growth rate recorded, both since the data series started in 1925 and over the decade before the recession started in 2008. It would therefore take a large and sustained change in the current level of investment to produce a significant improvement in the trend rate.

Fiscal stimulus Republicans seem to assume that cuts in taxes will spur investment and that deregulation will cause a quick improvement in the efficiency and thus the value of the existing capital stock. The combined result would be a rise in demand, quickly met by a non-inflationary increase in supply and in the trend growth rate. Higher investment could then boost growth as it rises as a proportion of GDP, without a sustained rise in inflation.

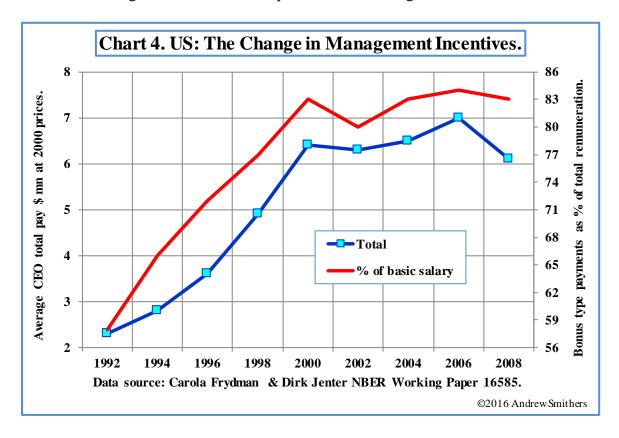


The expectation that investment will be stimulated by cuts in corporation tax would, before 2000, have been reasonable. Cuts in corporation tax raise the return on corporate equity and, as Chart 3 shows, prior to 2000 corporate investment in tangible capital, which almost entirely determines the growth of the net capital stock, was strongly correlated with the return on corporate equity. Unfortunately this relationship then ended, probably as a result of the change in the way senior executives are paid. This changed management incentives and thus corporate behaviour, increasing the preference for buy-backs over investment. Chart 4 shows that the change in management pay from 1992 to 2000 fits with the change in corporate behaviour after 2000 shown in Chart 3. This confirms other evidence for the change in corporate behaviour, about which I have written in the past, such as the exceptional level of profit margins, the increased volatility of quoted company profits and the low level of investment by quoted relative to unquoted companies.²

The lack of correlation between returns on corporate equity and investment does not imply that a rise in returns will not stimulate investment only that, without

² See, for example, *How managerial incentives affect economic performance* World Economics Vol. 17 • No. 1 • January-March 2016.

reform, the impact is likely to be muted and expectations disappointed. Such reform is unlikely under the new administration, which favours decreased regulation while the reform of management incentives requires additional regulation.

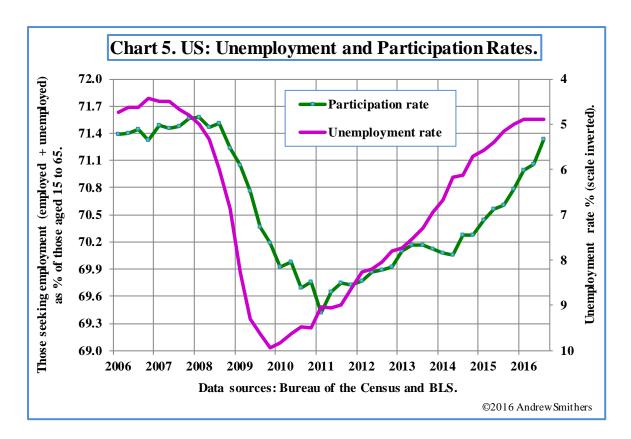


The rather different hopes of fiscal stimulus Democrats are based on the assumption that there is room for a further significant fall in unemployment without causing inflation to rise. This assumption does not only have to be correct in the short-term, but must then be quickly followed by a rise in the trend growth rate.

Hopes for such an improvement are placed on higher investment, a jump in productivity and a sustained improvement in the participation rate.

A large and sustained rise in investment should improve trend growth but this is not consistent with any likely scope for unemployment to fall without inflationary consequences. Without such a sustained rise in investment, there seems no reason to assume that productivity will suddenly jump. Optimistic expectations for a rise in productivity seem based on the belief that it does not depend on the availability of capital arising from past investment, but is either an inherent ability of the economy or arises from changes in technology unsupported by new equipment.

The participation rate, measured in relation to the population of working age, has been improving but, as Chart 5 shows, it has moved closely with unemployment. As the scope for further falls in unemployment are small, it seems more likely that the recent improvement will falter than that it will strengthen.



Productivity and the change in hours worked has determined the growth of GDP and an examination of the outlook for both provides an alternative approach for assessing the trend rate of growth to the one I have used earlier based on the growth of the net capital stock.

Hours worked per person have fallen over the long-term but been stable since the last recession, so the growth of hours worked is likely to be the same as the growth in the workforce, which has slowed sharply since 2007, due mainly to the ageing of the population. The internationally agreed standard is to assume that those between 15 and 65 are of working age. In the US this group was growing at 1% p.a. but is expected over the next decade to grow at only 0.2% p.a. It is helpful to measure participation rates, as I do in Chart 5, by the number of those willing to work (employed plus unemployed) as a proportion of those aged between 15 and 65. This definition allows the impact of retirement to be separated from other changes in the willingness to work, but it also allows for the impact of changes in the numbers of those over 65 who are employed.³

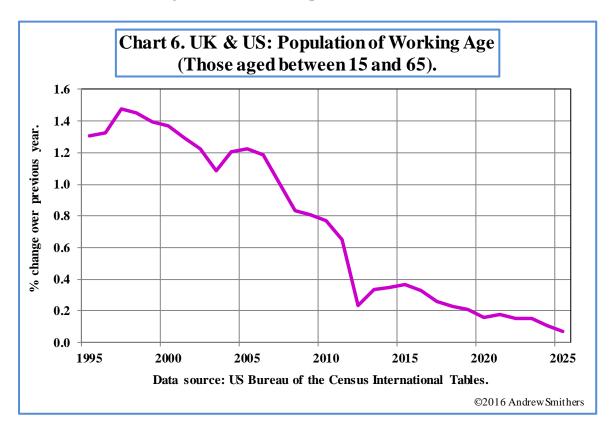
The working age population was growing at 1% p.a. in 2007 and is now expected to grow at only 0.2% from 2017 to 2022. If the improvement in the participation rate shown over the past five years of 0.4% p.a. were to continue, then the workforce will expand at 0.6% p.a. This is not unreasonable, but it does assume

³ The US Bureau of Labour Statistics ("BLS") uses a different definition, which compares those seeking employment with the population, excluding those in jail or otherwise incarcerated, who are more than 15 years old. The BLS definition is unsuitable for estimating trend growth because it excludes the impact of ageing and consequent retirement.

that the improvement in the participation rate will not slow, even if unemployment ceases to continue its decline.

Table 1. Change % p.a. in GDP at constant prices per hour worked. Years to					
Q3 2016.					
(Data sources: NIPA Table 1.1.6 and http://www.bls.gov/lpc/special_requests/tableb10.txt)					
I year	2 years	3 years	4 years	5 years	Average 1 to 5
					years
0.06	0.20	0.41	0.39	0.43	0.30

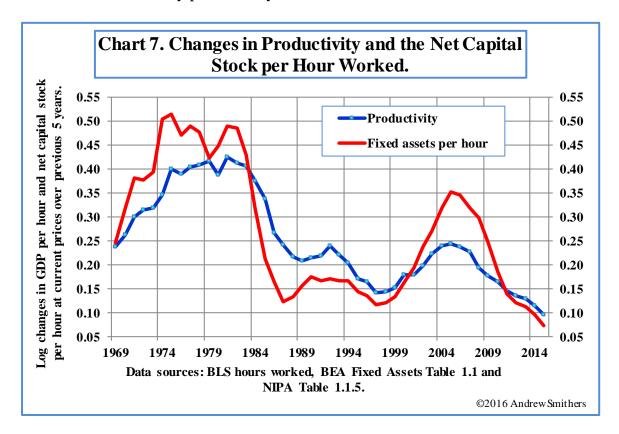
If the workforce expands at 0.6% p.a. and hours worked per person are unchanged, the trend growth rate will then be 1.3% p.a., in line with the recent growth in the net capital stock, if productivity rises at 0.7% p.a. This is, however, considerably faster than the rate of improvement shown over any annual period covering the last one to five years, as Table 1 shows. This alternative approach to estimating the trend growth rate of the US is therefore rather more gloomy than the estimate based on the growth of the net capital stock.



The hope that productivity will suddenly jump is also belied by the relationship between productivity and the net capital stock which I illustrate in Chart 7. Changes in productivity have followed those in the net capital stock with a time lag. This suggests

⁴ The BLS also publish a different quarterly figure for productivity (Id: PRS85006092) which is often quoted. But this is for the non-farm business sector only and thus does not relate to the whole economy. It should therefore not be used for estimates of trend growth rates.

that even if the growth of net capital stock were to improve there will be a delay before this is echoed by productivity.



Although the arguments for fiscal stimulus held among both Republican and Democrat enthusiasts are different, both seem to be based on wishes rather than probability.

Over the past 12 months to Q3 2016 the US economy grew at 1.28%, which is in line with trend growth; over the past quarter the growth was 2.9% p.a. It thus seems likely that growth without fiscal stimulus is above trend and will be even more so afterwards. The Fed is likely to raise interest rates and President Trump's comments before the election indicate that this will be welcome. The administration's expectations for US trend growth seem, however, to be well above its likely level. If fiscal policy causes demand to rise faster than the supply capacity of the economy, the Fed should and probably will restrain it by tightening monetary policy. It is then likely to be blamed for the failure of tax cuts and deregulation to increase trend growth.

It is possible that growth and trend growth will rise to meet the expectations of the new administration, but this is unlikely. It is therefore probable that the Fed and the new administration will be at loggerheads well before the next Presidential election.

Andrew Smithers London November 2016