

## FOCUS · US: the baby boomer effect on the cycle and in the long run

After almost eight years of GDP growth, the US is now entering a mature phase of its business cycle. The figures posted during the last eight years have been remarkable. In the current expansionary cycle, US GDP has seen a cumulative growth of 20%. In other words, an annual growth rate of around 2.1% on average. These are not extraordinarily positive figures, particularly compared with the US economy's most recent boom periods. But they are certainly impressive when compared with the trend in other developed countries. The euro area, for instance, has only seen four years of expansion, posting a modest 8% and 1.6% for cumulative and annual growth, respectively.

Many indicators suggest that the US economic cycle is now in a mature phase but the labour market surely provides the most illustrative. One of the key indicators, the unemployment rate, fell to 4.1% in October. Such levels have not been seen since the 2000s when it reached 3.8%, and we have to go back to the 1980s to find a lower figure.

Similar conclusions are provided by the trend in the U-6 rate, the unemployment rate that includes discouraged workers who would like to work but are not actively looking for a job, as well as underemployed workers. This rate is currently 8.3%, not very far from the all-time low of 6.8% reached in 2000 (see the first chart).

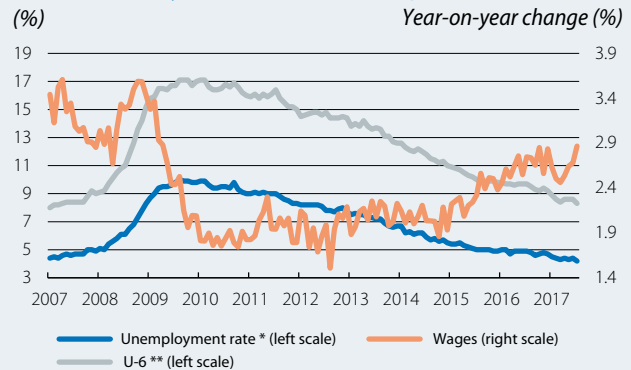
The participation and employment rates are also significant in the US labour market. At first sight, both may appear to be relatively low. However, this is largely due to a demographic factor. As baby boomers<sup>1</sup> approach retirement age and stop working, both indicators naturally fall. However, the underlying trend is revealed when both indicators are adjusted so that they are not affected by changes in the population's structure.<sup>2</sup> As the second chart shows, once adjusted for the population factor, both the participation and employment rate are now close to their pre-crisis levels.

Continuing with labour market indicators, the gradual but persistent upward trend in wage growth also suggests that the US economy is close to full employment (see the first chart).

A more sophisticated way of determining the US economy's point in the cycle is by using the output gap. Although widely used, this indicator must be used with caution, however, as it is notably difficult to estimate.<sup>3</sup> According to the latest IMF estimates, the US closed its

1. People born between 1946 and 1964.  
2. See the note in the second chart.

### US: unemployment rate and wages



Notes: \* Unemployment rate: unemployed / labour force.

\*\* The U-6 rate includes underemployment (unemployed people who are not looking for a job but have done so in the past 12 months, and employees working part-time involuntarily, for economic reasons).

Source: CaixaBank Research, based on data from Thomson Reuters Datastream.

### US: employment and participation rate



Notes: \* Employment rate: employed population / population aged 16+.

\*\* Participation rate: employed and unemployed population (labour force) / population aged 16+.

\*\*\* In adjusting the composition, the share of the population of different age segments has been kept constant, at January 2007.

Source: CaixaBank Research, based on data from Thomson Reuters Datastream.

output gap in 2015 after years of a negative gap (see the third chart). Once again, the figures are markedly different for the euro area, which still has a negative output gap and is not expected to close this until 2019.

In summary, it looks as if cyclical factors will have a diminishing effect on growth over the coming years. Growth in economic activity will no longer be boosted by people who lost their jobs in the crisis rejoining the labour market, or by the reutilisation of idle capacity. As a result, the trend in the US economy will increasingly

3. The output gap is defined as the difference between actual GDP and GDP compatible with stable inflation close to 2%. For more information on this concept, see the Dossier «Potential GDP, a key but diffuse concept» in MR05/2013.

depend on factors determining its long-term growth. Ostensibly, most analysts believe that, although growth rates similar to those achieved in previous expansionary phases will not be reached, neither will they fall much below those observed over the past few years. But are they right?<sup>4</sup>

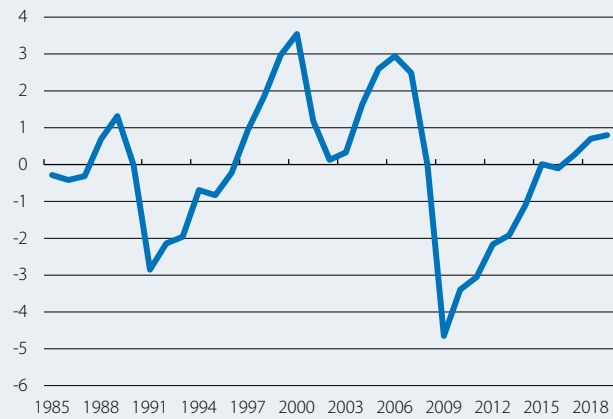
To examine the US economy's long-term growth capacity more thoroughly, we must analyse the situation and outlook for the different underlying factors that determine growth. These can be divided broadly into three: an increase in productivity, in capital and in labour. Upcoming editions of the *Monthly Report* will review the situation of each of these factors in depth. But the aim of this article is to provide an overview of the role played by demographics, and particularly the impact of the ageing US population on the labour factor.

As already mentioned, the effect of the ageing population on the labour market has been noticeable for some years now. The first signs appeared early in the 2000s, when US baby boomers reached an age at which, in general, the labour force participation rate tends to fall. By way of example, in 2005 baby boomers were around 55 years old. The participation rate for individuals aged 25 to 54 is about 82% while for individuals aged between 55 and 64 it falls to 64%.

The decline in the supply of jobs is already having a negative effect on US growth capacity. The long-term trend in the growth rate of the number of hours worked is a clear indicator. Growth in the hours worked has gone from 1.8% on average between 1974 and 1999 to an average of 0.3% since 2000 (see the fifth chart). This trend's impact on GDP cannot be ignored: growth in employment has gone from contributing 1.1 pp to annual GDP growth to just 0.2 pp. This changing growth rate for the number of hours worked could be due to several factors, such as variations in migratory flows or different characteristics of each period's business cycles. Nevertheless, it is estimated that around two thirds is due to the ageing population.

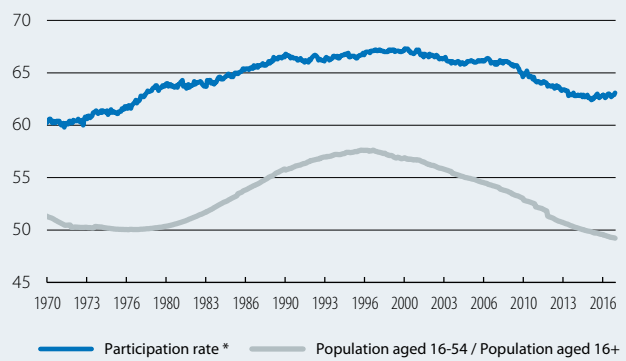
4. In its report of June 2017, the Congressional Budget Office estimates US potential growth at 1.9%, compared with its 2.6% estimate 10 years previously.

### US: output gap (% of potential GDP)



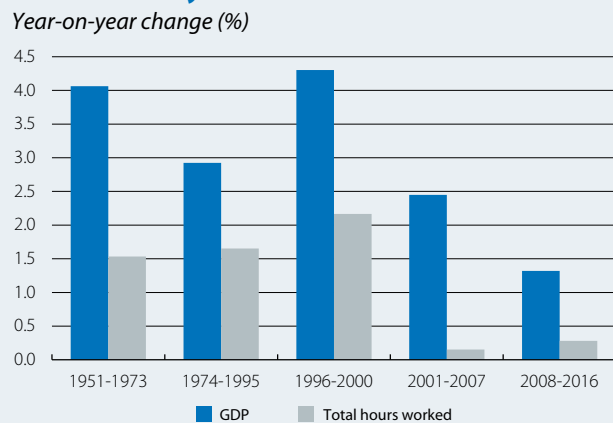
Source: CaixaBank Research, based on data from the IMF (WEO, October 2017).

### US: participation rate and population aged 16-54 (%)



Note: \* Participation rate: employed and unemployed population (labour force) / population aged 16+.  
Source: CaixaBank Research, based on data from Thomson Reuters Datastream.

### US: GDP and total hours worked in the economy



Source: CaixaBank Research, based on data from Thomson Reuters Datastream.