

### Key takeaways

- We look at the decline in labour supply, in both the US and the Euro area.
- In the US, labour supply is likely to stay markedly below the pre-2008 pace, with risks of an actual fall in Europe
- In Europe, we think structural reforms alone can't do the trick. A major stimulus to work through the slack is then needed.

### No quick fix to lower labour supply in the developed world

Immediately after the Great Recession of 2008 the debate around economic policy focused on how to re-start the business cycle, with comparatively little appetite for discussions around potential growth. This has changed over the last two years, on the realization that the “new normal,” even after years of extraordinary monetary stimulus, and the end of all-out fiscal austerity, was definitely unexciting. In the US, under the influence of Larry Summers, Paul Krugman and Robert Gordon, the discussions usually revolve around lower trend productivity and under-investment (particularly in infrastructures). In Europe, under-investment, in particular in the public sector in the surplus countries usually is the point of focus, together with the rigidities that hamper economic activity. In this note, we take a hard look at one particular angle of the “lower potential growth” question: the decline in labour supply, in both the US and the Euro area.

Our conclusions are not very cheerful: in the US, it is unrealistic to expect a return to the pre-2008 participation rates, and equally difficult to think that the natural rate of unemployment could go further down quickly. Labour supply is likely to stay markedly below the pre-2008 pace, in our view. In Europe, in contrast to the US, until now the deterioration in demographic conditions has been offset by rising participation rates, but we think that some limits have been reached there. Obviously, in Europe contrary to the US there is ample room to take the natural rate of unemployment down, and from this point of view structural reforms are key, but even factoring in what the “best reformers” managed to achieve in the past, the deceleration in labour supply would remain significant. Europe still needs a major stimulus to work through the slack.

#### US: can higher participation rates save the day?

Our starting point here is the demographic situation. We use the United Nations' central scenario for the growth of working age population over the next 10 years<sup>1</sup>. So far, the “Atlantic divide” has been very clear: Europe was facing stagnating and then falling economically active population, while it was still growing in the US. The divide remains, but the slowdown in working age population growth in the US will be significant nonetheless, with only 0.3% p.a. on average between now and 2025, against 1.4% p.a. during the “roaring decade” of 1997/2007 and still 1.0% p.a. in the pitiful 2008/2015 (Chart 1).

<sup>1</sup> In order to be consistent between the various sources (UN, household survey for the US, Eurostat's quarterly labour force survey) everything in the following calculations is based on the same age group, between 20 and 69 years old, for which all the indicators are available across the two regions.

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Economics  
Euro Area

#### Europe Economics

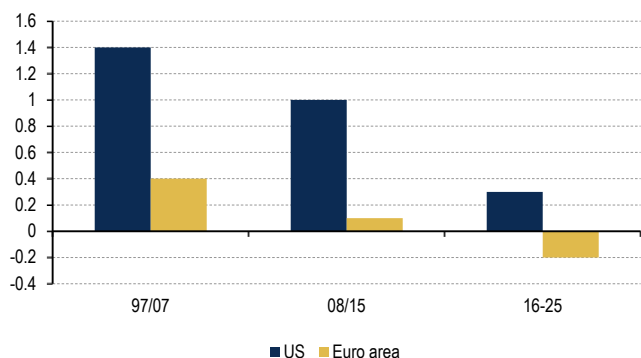
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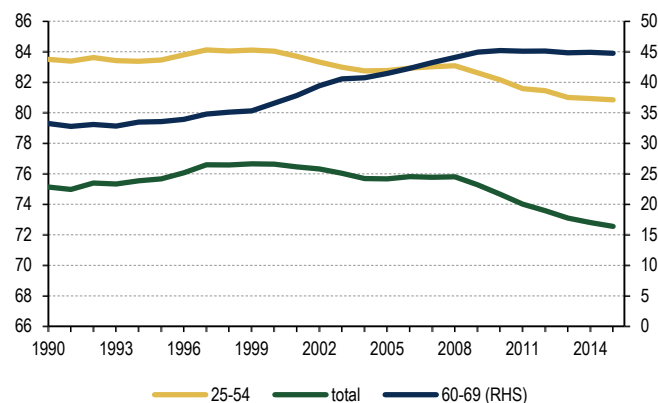
The positive corrective force could come from a higher participation rate (the ratio of those in work or actively looking for work to working age population), but it has actually fallen markedly over the last few years (Chart 2). Actually, if the participation rate merely stagnates to its current level over the coming 10 years, labour supply would be almost on with 2008/2015, bringing in a contribution to GDP growth (with a fixed 2/3 share of labour in national income) of 0.2% p.a. from 0.3%. However, what would obviously be more desirable would be to bring labour supply growth back to the pre-Great Recession pace, when it was yielding a contribution to GDP growth of 0.8% p.a. Unfortunately, we find that within our simple framework this would be next to impossible.

**Chart 1: Working age population growth (average p.a., %)**



Source: BLS, Eurostat, United Nations, BofA Merrill Lynch Global Research  
 Note: Average of GE, FR, IT and SP for the Euro area.

**Chart 2: Participation rate in the US**



Source: BLS' Household survey, BofA Merrill Lynch Global Research

True, a portion of the decline in the participation rate since 2008 was cyclical – discouraged workers responding to the lack of labour demand on account of low expected activity in the productive sectors. Indeed, the drop in participation was significant in the “belly” of the age distribution. But while it started as cyclical, a good chunk of the drop became structural – the US version of hysteresis. Looking ahead, we expect the participation rate to drop very slowly as demographics overwhelm a modest cyclical bounce. However, even a return to the 1997/2007 average, which would take an increase of more than 3.5 percentage point from the current level – an unprecedented feat since the records exist – would merely bring the contribution from labour to GDP to three quarters of what it was pre-recession.

Still, that would be a quite optimistic scenario in our view. Indeed, not all of the decline in the participation rate over the recent period can be attributed to cyclical developments – otherwise by now we should have already seen the beginning of a rebound now that the unemployment rate has fallen markedly. With a more believable recovery in participation to half the 97/07 level, the contribution from labour supply to GDP growth over the next 10 years would reach 0.4% p.a., against 0.8% before 2008 (Table 1).

**Table 1: Contribution from labour supply to GDP growth - US**

US	1997-2007	2008-2015	2016-2025 with unchanged participation	2016-2025 (return to 97-07 participation)	2016-2025 (half-way to 97/07 participation)
Working age population	1.4	1.0	0.3	0.3	0.3
Labour force	1.3	0.4	0.3	0.8	0.6
Employment	1.2	0.4	0.3	0.8	0.6
Contribution from L to GDP	0.8	0.3	0.2	0.6	0.4

Source: BofA Merrill Lynch Global Research

## Is it realistic to expect a major – and quick - drop in the natural unemployment rate in the US?

If the participation rate can't do it, then this leaves reducing the structural unemployment rate as the only option. Is this credible in the US?

First, the natural unemployment rate did not rise in the US in the last few years. According to the OECD, it stood at 5.4% in 2015, its lowest level since the start of the series in 1980. NAIRUs usually fall for two reasons: either because labour market institutions change (i.e. the labour market becomes more flexible) or because the labour force becomes more adapted to the requirement of the economy (less skills mis-match). According to the OECD's harmonized labour market regulations index, the US is already at the bottom of the distribution across developed countries for employment protection. It is unclear what major reform of the labour market could be implemented in the US in the next few years. True, the US could make progress on labour skills (its position on the PISA league table of educational efficiency is mediocre) but this takes time as reforming the school system improves the quality of the flow of workers, not the stock, with a lag of several years.

It is thus unfortunately quite possible that the US economy will "have to do" with a significantly lower contribution from labour inputs for quite some time.

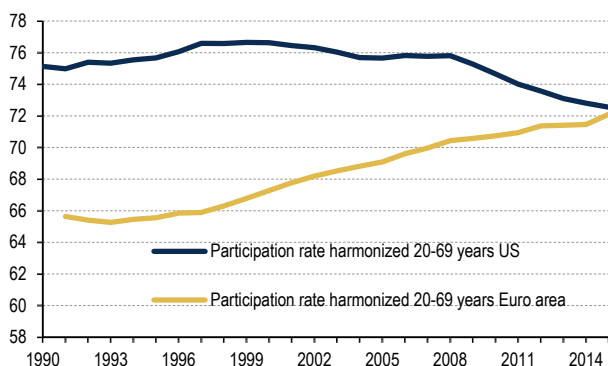
## The Euro area is the mirror image of the US: rising participation, high structural unemployment

The Euro area has exactly the opposite problem: the participation rate has constantly risen since the mid-1990s, to the point that it is now on par with the US (Chart 3). Conversely, there is still quite a lot of room for manoeuvre to reduce the structural unemployment rate there.

## Can participation rise further in the Euro area? We think limits are close

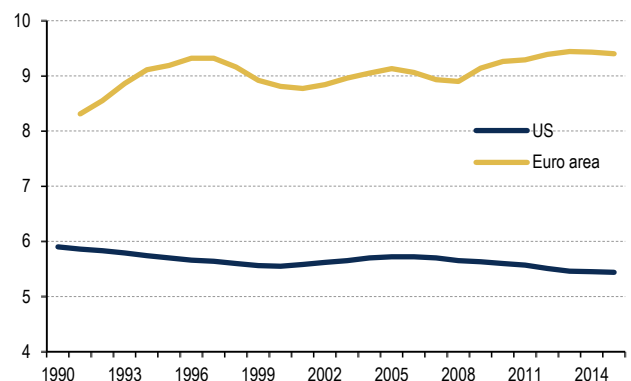
In the Euro area case, the UN expects a decline in working age population of 0.2% p.a. over the next 10 years (average for the region's 4 largest economies). The "easiest" way forward to offset this headwind would be to increase the participation rate as it would merely be the continuation of a now long established trend. The question becomes "how far can we go?" there.

**Chart 3: Participation rate across the US and the Euro area (harmonized to 20-69 years)**



Source: BLS' Household survey and Eurostat, BofA Merrill Lynch Global Research

**Chart 4: Still way to go on Nairu in Europe**



Source: OECD, BofA Merrill Lynch Global Research

Beyond social-cultural explanations pertaining for instance to the evolution in the role of women – in particular in the south of the continent – it is likely that the increase in the European participation rate is a response to the reforms in the public pension system and a general push "from welfare to workfare" at the bottom of the wage distribution as social transfers were made less and less generous.

Is it conceivable that Europe could bring its participation rate to the peak observed in the US in the mid-1990s? We think this would take a further overhaul of the European social system which is very unlikely to happen without major political disturbance. Now, even under this scenario the contribution from labour supply would stand at only slightly more than a quarter of what it was before the recession of 2008.

**Even if structural unemployment falls decisively, labour inputs will decelerate vs. the pre-2008 pace**

So it seems that in Europe as well taking the natural unemployment rate down should be the first port of call, as continuing to increase participation would not suffice. The problem there also is “what’s realistic?”

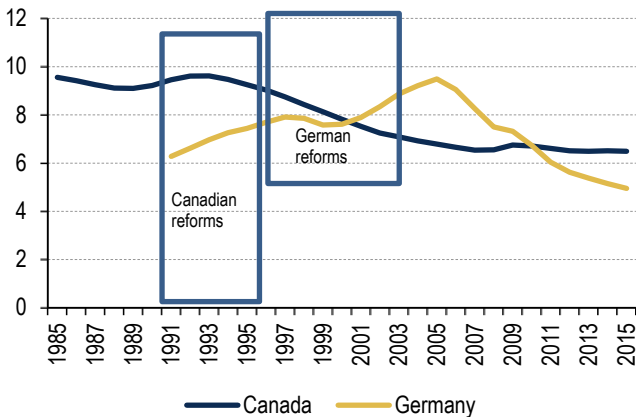
Everyone calls for “structural reforms” in Europe, often without coming up with hard figures on the expected impact. A good benchmark would be the kind of declines in the structural unemployment rates observed in past “successful reformers” whose political and social structures are not too different from those of the Euro area as a whole. Canada in the early 1990s and Germany at the beginning of the following decade are good candidates. In both case, the structural unemployment rate estimated by the OECD dropped by 3 percentage point in the 10 years that followed the implementation of the reforms. In this case – which would stand at the very end of our expectations of what’s politically doable in Europe at the moment – and taking also into account the same further increase in the participation rate, the contribution from labour supply to GDP growth would be only marginally more than a half of what it was before the Great Recession (see last column of Table 2).

**Table 2: Contribution from labour supply to GDP growth – Euro area**

<b>Euro area</b>	<b>1997-2007</b>	<b>2008-2015</b>	<b>2016-2025 no change in participation, no change in NAIRU</b>	<b>2016-2025 (participation to US 97-07 level)</b>	<b>Same scenario with 3 pp drop in NAIRU</b>
Working age population	0.4	0.1	-0.2	-0.2	-0.2
Labour force	1	0.5	-0.2	0.4	0.4
Employment	1.3	-0.2	-0.2	0.4	0.7
Contribution from L to GDP	0.9	-0.15	-0.15	0.25	0.5

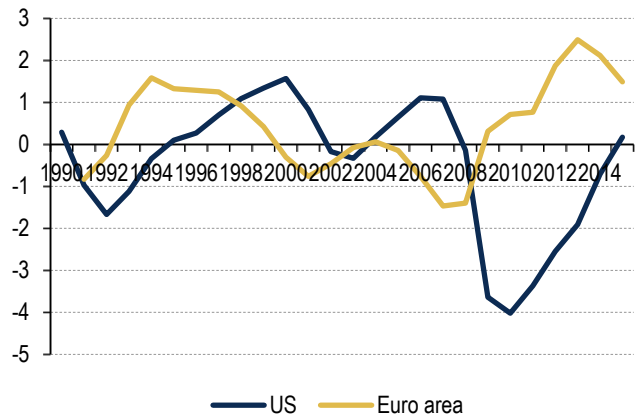
Source: BofA Merrill Lynch Global Research

**Chart 5: Structural unemployment before and after reforms**



Source: OECD

**Chart 6: Still lots of cyclical unemployment in Europe**



Source: OECD, actual unemployment minus nairu

### **In Europe, structural reforms without stimulating demand would fail**

In principle, it would be possible to offset a lower contribution from labour supply by raising productivity, and/or substituting more capital to labour. It is beyond the scope of this note to add to the current debate within the economic profession around the existence or the magnitude of a “secular stagnation” in productivity on the back of less far-reaching innovations. Still, we can point to one potential conflict between the objective of raising both participation and productivity. Indeed, there is now a large and convincing body of literature pointing to a significant, negative relationship between the average age of the workforce and productivity gains. Beyond the demographic argument, the “reserves of participation”, beyond the older generations, probably are with the segment of the adult population which has been the furthest away from employment for a protracted period (e.g. long-term unemployed). It is always possible to change incentives to make this segment move, for instance, “from welfare to workfare”, but the average productivity level of this particular group is lower than that of the overall workforce, so that the net gain on potential GDP might be quite limited in the end.

Substituting capital to labour, in clear, requires a robust pace of investment. So far, this has been a “missing link” in the recovery in the developed world. It is likely that, in spite of an extraordinary level of monetary stimulus, investment remains lagging either because of a preference for deleveraging after the trauma of the Great Recession, or because banks cannot fully pass the stimulus to the non-financial sector, as they are struggling with their own balance sheet issues.

Larry Summers has been vocal on this “slower potential growth” story. In terms of policy recommendations, his views can be summarized as, for the US, re-accelerating public investment should be key, given the difficulty in raising labour supply and his pessimistic outlook on productivity, while in Europe the priority would go to “structural reforms” to boost labour supply. In our simple framework, this would still leave European GDP growth well below the pace seen in the decade before the Great Recession (which in Europe was by the way not that rapid...).

What Europe needs on top of those structural reforms in a powerful stimulus program, which would reduce the significant amount of slack we are still dealing with. This is a key difference between the two regions: while in the US current unemployment probably is not that far away from its structural level, it remains significantly higher in Europe. Indeed, “cyclical unemployment” is the omitted variable in the framework we used in Table 1 and Table 2. This is a valid approach in the US, where the actual unemployment rate is now very close to the natural level. Not in the Euro area (Chart 5).

Focusing exclusively on structural reforms to the detriment of demand management in Europe is both politically unrealistic – as increasingly those reforms are equated in public opinion to “more economic uncertainty” – and economically inept, since this would leave aside the large stock of “cyclical unemployment” we still need to work through.

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