



# Perspectives by Ruth Lea

Economic Adviser to Arbuthnot Banking Group

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**The public finances are shocking – but an ageing population means there is worse to come**

Several recent Perspectives have been devoted to the unfolding fiscal crisis.<sup>1</sup> But an issue we have been barely touched on is the implications for the public finances of the ageing population over the next 40-50 years.

At the time of the party conferences, the Opposition announced that they would be reviewing the state retirement age and conditions attached to public sector pensions, for example, in order to deal with the public deficit as it now stands. But such reforms will not only be needed for plugging the hole in the public finances in the short to medium-term, they will also be required as a longer-term response to the potentially exploding fiscal costs of Britain's ageing population.

Owing to a combination of increased longevity and non-replacement, though rising, fertility rates the population aged 65 and over as a percentage of the total is increasing. In 1970 the ratio was just 13.0%. By 2010 it is expected to be around 16½% and by 2050 nearly 23%. Incidentally these demographic trends are expected in much of the developed world and China. The situation is even more acute in Japan, where over one in three will be aged 65 and over by 2050.<sup>2</sup> These changed demographics will have a profound influence on people's working lives and retirement ages and have major implications for the way in which costs particularly associated with the elderly – pensions, healthcare and long-term care – are to be funded if they are not to place intolerable burdens on future generations of taxpayers.

Both the IMF and the European Commission have recently commented on the fiscal implications of ageing populations. The IMF pointed out that the UK needed to reform both the NHS and the pension system if it is to be able to deal with the next crisis.<sup>3</sup> And the European Commission published a major study on fiscal sustainability that included calculations for ageing-related costs for the EU27 member states.<sup>4</sup> They concluded that Europe could not rely on high growth rates to bring down debt ratios, as in the past. The ageing population had changed the game and this time governments would have to retrench. The Commission's overall assessment of the UK's overall fiscal position was especially harsh.

### *The European Commission's work on fiscal sustainability*

The Commission's latest sustainability report was an update of an earlier study (2006) which had originally analysed the possible impact on the public finances of shifting demographics.<sup>5</sup> In this earlier analysis the Commission explained that there are certain age-related expenses borne by government at both ends of the age pyramid. They can be broadly classified in five separate groups:

- Public pensions, with retirement pensions being the largest and most obvious expense item related to ageing.
- Healthcare, which is more costly for older people on average, with this cohort carrying more of the disease burden.
- Long-term care.
- Education, where most state-funded education occurs early in life and education budgets can be expected to fall.
- Unemployment benefits, which look set to fall if, as expected, employment rates rise.

But even though the costs of two of the age-related categories could fall, the rises in the other three – pensions, healthcare and long-term care – are likely to be greater, much greater, than the falls. The Commission concluded, therefore, that demographic changes would pose major challenges to public finances across the EU.

In the three years since the 2006 study, the financial, economic and fiscal crises have intervened and the 2009 fiscal sustainability study included analysis on the consequent cyclical deterioration in the EU's public finances. Nevertheless the Commission was at pains to point out that, for many EU member states, the projected impact on the public finances of ageing populations is anticipated to easily outweigh the effects of the crises.

Though there is no clear-cut definition of fiscal sustainability, in the first instance it involves a debt level that does not entail interest payments so large that they cannot be paid. A nation in this position could not service its debts and only default or high inflation could relieve the burden. The Commission picks up on this generalised meaning of sustainability and uses the concept of the "inter-temporal budget constraint or solvency condition". This is satisfied if the projected outflows of the government (i.e. current public debt and discounted value of all future expenditure, including the projected increase in age-related expenditure) are covered by the discounted value of all future government revenue. This is equivalent to saying that the government must run sufficiently large primary surpluses (receipts minus spending excluding interest payments) going forward to cover the cost of servicing its debt.

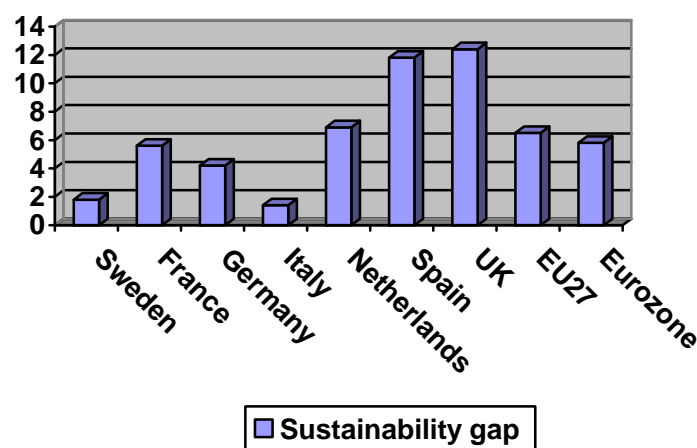
The Commission's sustainability report includes "sustainability gap indicators" for all EU27 member states, calculated on unchanged policies.<sup>6</sup> The key sustainability gap indicator, S2, shows how much EU member states need to tighten their fiscal stance as a % of GDP (in terms of the structural primary balance) for their public finances to return to a sustainable path. The higher this indicator, the greater is the requirement to correct the primary balances in order to achieve fiscal sustainability and avoid the risk of insolvency.

The Commission estimated that the required tightening for EU27 was 6.5% of GDP and of 5.8% of GDP for the euro area, albeit with wide variation between countries. Such was the variation between countries that they were grouped into three categories:

- Low long-term risk: Bulgaria, Denmark, Estonia, Finland and Sweden.
- Medium long-term risk: Austria, Belgium, France, Germany, Hungary, Italy, Luxembourg, Poland and Portugal.
- High long-term risk: Cyprus, Czech Republic, Greece, Ireland, Latvia, Lithuania, Malta, Netherlands, Romania, Slovakia, Slovenia, Spain and the UK.

The detailed figures for all EU27 countries are shown in table 1 in the annex. But the following chart shows the disparities for the EU's major economies.

**Sustainability gap indicator S2, % of GDP, unchanged policies**



Source: European Commission, Economic & Financial Affairs, *Sustainability Report 2009*, October 2009.

The UK's sustainability gap at 12.4% of GDP – some £200bn – is therefore the largest of the EU's major economies and twice the size of the EU27's average. It means Britain needs to tighten its fiscal stance by some £200bn (in terms of the structural primary balance) for the public finances to return to a sustainable path. It is exceeded only by Greece's (14.1%) and Ireland's (15.0%).

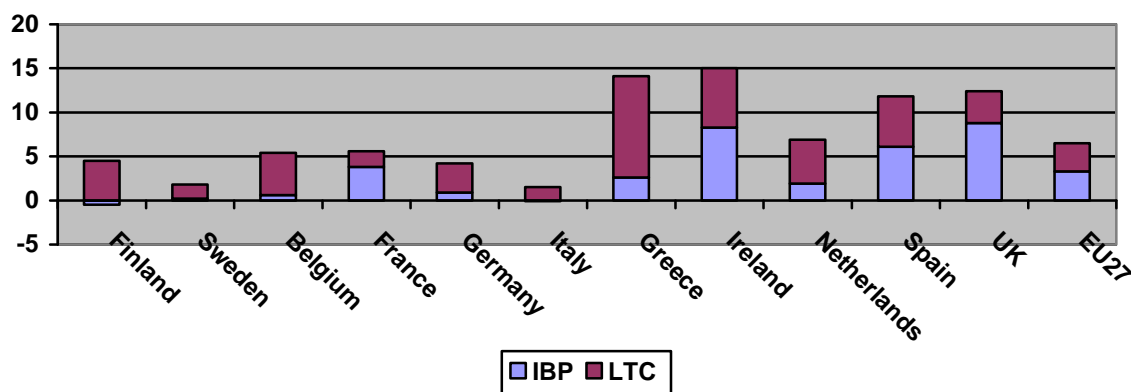
#### *Ageing-related costs*

The Commission breaks down its sustainability gap indicators into the driving components. For S2 the two components are the effects of the initial budget position (IBP) and the long-term change in expenditure associated with ageing populations (LTC). For the EU27 as a whole the contributions of these two components are fairly evenly split: 3.3% for the initial budget position and 3.2% for the long-term change in expenditure. The very significant figure for the LTC component shows just how seriously this aspect of future demands on the public purse should be taken. Member states that ignore the effects of ageing and fail to implement the necessary reforms will only find future generations of taxpayers bearing an increasingly intolerable burden.

The chart below shows how some countries including Sweden, France and Italy have relatively few extra liabilities associated with ageing (low LTCs). Greece, Ireland and Spain are especially vulnerable. (More data are in table1 in the annex.)

The UK's LTC position is worse than the EU average and should be considered significant – although partly overwhelmed by the gaping hole that is its initial budget position. The UK clearly has much to do by way of curbing its current budgetary imbalance as well as tackling the potential costs incurred by an ageing population. The UK is badly placed on both counts.

**Decomposition of sustainability factor S2, % of GDP: initial budget position (IBP) and long-term change (LTC)**



Source: European Commission, Economic & Financial Affairs, *Sustainability Report 2009*, October 2009.

*Commission projections for public debt*

The Commission also extrapolated to 2060 public debt as a % of GDP, on unchanged policies. They emphasised that such an exercise does not, and cannot, actually forecast what will happen in the future – but it does flag up warnings if policy changes are not made. Table 2 in the annex gives the data and shows that the UK is in the “sin bin” of high risk countries along with Greece, Ireland, Latvia, Slovenia and Spain. UK public sector debt as a percentage of GDP was extrapolated to rise to 160% by 2020, 400% by 2040 and 760% by 2060.

Suffice to say, the Commission's figures were greeted by howls of denial by the Treasury which claimed that these projections “had no basis in reality”.<sup>7</sup> And we have little doubt that these projections would never be actualised – policies would simply have to change rather than allow the build-up of such levels of debt. But the projections bring home some very painful truths which are arguably even more painful than the truths we are already coming to grips with. Not merely will future Chancellors have to deal with the horrendous budget deficits currently experienced but will also have to start instituting major changes to the way pensions, healthcare and long-term care are funded over the next 20-30 years.

## References

1. Ruth Lea, "Spending cuts: a necessary and painful debate begins", Arbuthnot Banking Group Perspective, 21 September 2009.
2. United Nations population projections.
3. Mary Bowers, "Reform health and pensions or prepare for the next crisis, IMF warns Britain", *The Times*, 2 October 2009.
4. European Commission, Economic and Financial Affairs Directorate-General, *Sustainability Report 2009*, October 2009, available from [www.ec.europa.eu](http://www.ec.europa.eu)
5. European Commission, Economic and Financial Affairs Directorate-General, *The long-term sustainability of public finances in the EU*, and press release, "Out of the red into the grey", October 2006.
6. Detailed explanations are in the annex, including the other sustainability gap indicators.
7. Ambrose Evans-Pritchard, "Treasury attacks EU report on debt spiral", *Daily Telegraph*, 15 October 2009.

## **Annex**

### **Sustainability gap indicators: explanatory note**

The Commission calculates two versions of sustainability gap indicators: the S1 and S2 indicators. They show the size of the permanent budget adjustment required to ensure that the public budget constraints are met and are expressed as % of GDP.

- The S1 indicator shows the durable adjustment to the current primary budget balance required to reach a target government gross debt of 60% of GDP in 2060, including paying for any additional expenditure arising from an ageing population.
- The S2 indicator shows the durable adjustment to the current primary budget balance required to fulfill the infinite horizon inter-temporal budget constraint, including paying for any additional expenditure arising from an ageing population. They indicate how much member states need to tighten their fiscal stance (in terms of the structural primary balance), as a % of GDP, or adopt structural reforms, for their public finances to return to a sustainable path.
- The difference between S1 and S2, therefore, is the length of the time horizon taken into account when assessing the sustainability of the public finances.
- S1 and S2 can be further decomposed into parts characterising the required adjustment given the initial budget position (IBP) and the long-term change in expenditure (LTC) and, in the case of S1, the effect of the starting level of debt relative to the 60% target for 2060 (DR).
- The required primary balance (RPB) is also used to illustrate the sustainability situation. It indicates the starting budgetary position which, if attained, ensures the sustainability of the public finances under no policy change assumptions. It can be used to compare the actual or planned budgetary strategy with the structural primary balance required for fulfilling the inter-temporal budget constraint.
- Table 1 shows the S1 indicators for each EU member state, with component parts, S2 and the RBP.
- A positive value of the gap indicators like S1 and S2 signifies the permanent adjustment to fiscal policy that is necessary to ensure sustainability.

**Table 1: Sustainability gap indicators (% of GDP), baseline scenario, end year 2060**

	S1	S2 and components			RPB
		Total	Initial budget position (IBP)	Long-term change (LTC)	Required primary balance
EU27	5.4	6.5	3.3	3.2	
Eurozone	4.8	5.8			
<b>Low-risk (5):</b>					
Bulgaria	-0.6	0.9	-0.6	1.5	2.3
Denmark	-0.6	-0.2	-1.6	1.4	1.9
Estonia	0.3	1.0	1.1	-0.1	0.3
Finland	2.6	4.0	-0.5	4.5	5.5
Sweden	0.5	1.8	0.2	1.6	3.1
<b>Medium-risk (9):</b>					
Austria	3.8	4.7	1.6	3.1	4.5
Belgium	4.5	5.3	0.6	4.8	5.9
France	5.5	5.6	3.8	1.8	2.8
Germany	3.1	4.2	0.9	3.3	5.0
Hungary	-1.1	-0.1	-1.6	1.5	3.5
Italy	1.9	1.4	-0.1	1.5	3.4
Luxembourg	6.2	12.5	-0.4	12.9	13.6
Poland	2.9	3.2	4.4	-1.2	1.1
Portugal	4.7	5.5	3.7	1.9	3.0
<b>High-risk (13):</b>					
Cyprus	4.6	8.8	0.5	8.3	8.9
Czech Republic	5.3	7.4	3.7	3.7	4.6
Greece	<b>10.8</b>	<b>14.1</b>	2.6	11.5	12.7
Ireland	<b>12.1</b>	<b>15.0</b>	8.3	6.7	7.2
Latvia	9.4	9.9	8.9	1.0	2.2
Lithuania	5.4	7.1	3.9	3.2	4.2
Malta	4.7	7.0	1.4	5.7	6.3
Netherlands	5.2	6.9	1.9	5.0	6.5
Romania	6.9	9.1	4.3	4.9	5.4
Slovakia	5.7	7.4	4.5	2.9	4.0
Slovenia	<b>9.2</b>	<b>12.2</b>	3.9	8.3	8.4
Spain	<b>9.5</b>	<b>11.8</b>	6.1	5.7	6.4
UK	<b>10.8</b>	<b>12.4</b>	8.8	3.6	4.5

Source: European Commission, Economic & Financial Affairs, *Sustainability Report 2009*, October 2009.

**Table 2: Structural primary balance and public debt, as a % of GDP, unchanged policies**

	Structural primary balance		Public debt				
	2009	2010	2009	2010	2020	2040	2060
<b>Low-risk (5):</b>							
Bulgaria	1.1	2.4	16.0	17.3	3.4	-17.2	9.8
Denmark	2.8	1.2	32.5	33.7	12.2	17.4	18.3
Estonia	-0.6	-1.4	6.8	7.8	19.2	40.1	81.4
Finland	2.1	0.8	39.7	45.7	35.5	111.1	248.7
Sweden	0.9	-0.5	44.0	47.2	31.4	45.7	93.1
<b>Medium-risk (9):</b>							
Austria	-0.2	-0.6	70.4	75.2	84.8	170.4	337.8
Belgium	0.7	0	95.7	100.9	103.1	199.0	372.4
France	-2.7	-2.5	79.7	86.0	122.4	250.5	431.4
Germany	0.6	-0.9	73.4	78.7	77.7	152.1	318.9
Hungary	3.1	2.9	80.8	82.3	54.4	-5.2	-26.3
Italy	2.0	2.0	113.0	116.1	109.9	136.6	205.9
Luxembourg	1.2	0.7	16.0	16.4	6.3	118.2	437.5
Poland	-3.1	-2.8	53.6	59.7	80.4	155.7	318.4
Portugal	-2.4	-1.8	75.4	81.5	113.6	203.9	389.9
<b>High-risk (13):</b>							
Cyprus	0.2	0.1	47.5	47.9	42.6	119.2	335.5
Czech Republic	-2.9	-2.6	33.7	37.9	65.9	192.4	486.7
Greece	-0.9	0.3	103.3	107.9	133.7	360.5	<b>884.0</b>
Ireland	-7.6	<b>-9.0</b>	61.2	79.7	154.7	403.8	<b>848.5</b>
Latvia	-8.1	<b>-9.2</b>	34.1	50.1	122.2	385.9	<b>898.1</b>
Lithuania	-3.1	-3.9	22.6	31.9	61.8	204.3	545.9
Malta	-0.2	0.7	67.0	68.9	85.3	173.7	432.5
Netherlands	0	-1.6	57.0	63.1	75.5	202.2	450.3
Romania	-3.7	-3.1	18.2	22.7	66.3	220.6	633.8
Slovakia	-3.7	-3.3	32.2	36.3	64.9	207.5	561.2
Slovenia	-3.3	-3.4	29.3	34.9	74.0	311.1	<b>831.6</b>
Spain	-5.2	-6.2	50.6	62.3	111.0	320.2	<b>766.6</b>
UK	-7.8	<b>-9.2</b>	68.4	81.7	159.8	406.1	<b>759.2</b>

Notes: the structural primary balance is calculated before interest payments and allows or cyclical effects. Estimates of debt do not net off liquid assets held by the public sector (as in the UK accounts). Source: European Commission, Economic & Financial Affairs, *Sustainability Report 2009*, October 2009.

Ruth Lea, Economic Adviser, Director,  
 Arbuthnot Banking Group,  
[ruthlea@arbuthnot.co.uk](mailto:ruthlea@arbuthnot.co.uk),  
 Tel: 07800 608 674