

DEMOGRAPHIC CHALLENGES

Demographic Shock and Implicit Public Debt: Closing the Sustainability Gap

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The implicit public debt: General context and specific challenges

Implicit public debt (or liabilities, IPL) refers to uncovered future government expenditures grounded in promises to pay pensions, offer medical treatment to the insured, and to provide long-term care to the elderly. What if a nation's current and future spending on health, pensions and care for the elderly is not covered by the revenues of the health care, pension and long-term care insurance? There will be a revenue-expenditure gap, a sustainability gap. Adding up all gaps to infinity yields the total IPL. A consequence of this phenomenon is that the longer the debt service is postponed the higher the macroeconomic cost – the present value of the scheduled amortisation will decline, meaning that a larger amount of money (at present value) will be required. IPL also implies an intergenerational overlapping, which calls for intergenerational justice: a timid response to the IPL causes the burden to shift to the disadvantage of future generations.

Table 1 | Implicit public liabilities (IPL) as a percentage of 2009 GDP

Country	IPL	Country	IPL	Country	IPL
Luxembourg	860	Finland	300	France	120
Greece	575	Slovakia	290	Sweden	107
Slovenia	553	Spain	285	Italy	100
Cyprus	490	United Kingdom	240	Denmark	93
Romania	380	Germany	220	Latvia	50
Malta	370	Austria	207	Estonia	-10
Czech Republic	335	Lithuania	160	Poland	-120
Ireland	285	Bulgaria	150	EU-27	211
Netherlands	333	Hungary	150	€-Area	232
Belgium	320	Portugal	127		

Own calculations. Source: EU Commission; DG Research

Current status and fiscal room for manoeuvre

Usually, a government would try to repay its debt by either extending its revenues or cutting other expenditures to free money for the debt service. The countries in the upper part of Table 1 would have great difficulty trying to achieve large primary budget surpluses. Better would be to raise the nation's tax ratio – the share of taxes and social security contributions in Gross Domestic Product (GDP). The required tax ratio is IPL divided by the present value of all future taxes and contributions. A new, larger tax ratio, especially in the heavily indebted countries, will be needed.

A raised tax ratio expands the government's room for fiscal manoeuvre without putting a strain on other spending. The disadvantage is that if the tax ratio is already large, a further increase will be hard to achieve. Table 3 demonstrates this. Other things being equal, Greece, a deeply indebted country, will remain relatively well-off. Athens will have to achieve a new tax ratio (48.5% of GDP) that is still less than the current figure in many Member States (mostly in Northern Europe) and that will remain less than the figure in some Western European Member States or in Slovenia (Table 2).

Table 2 | 2009 tax ratios, required tax ratios to repay the implicit public liabilities, and growth rate of tax ratios (% of GDP)

Country	2009 tax ratio	New tax ratio	Required permanent adjustment of the tax ratio, %	Country	2009 tax ratio	New tax ratio	Required permanent adjustment of the tax ratio, %
Luxembourg	39.4	52.3	32.7	Germany	42.9	46.2	7.7
Greece	37.0	48.5	31.1	Austria	47.1	50.2	6.6
Ireland	33.8	40.5	19.8	Portugal	43.3	45.2	4.4
Cyprus	42.1	50.4	19.7	Bulgaria	38.4	39.9	3.9
Slovenia	42.9	51.2	19.3	France	47.1	48.9	3.8
Spain	36.0	41.7	15.8	Hungary	45.1	46.6	3.3
Romania	32.0	36.9	15.3	Italy	45.4	46.9	3.3
Malta	42.0	47.7	13.6	Sweden	52.0	53.6	3.1
Netherlands	45.1	50.1	11.1	Latvia	32.9	33.9	3.0
Belgium	48.2	53.0	10.0	Denmark	53.0	54.4	2.6
Slovakia	31.4	34.3	9.2	Estonia	42.4	42.3	-0.2
United Kingdom	39.4	43.0	9.1	Poland	38.3	37.1	-3.1
Czech Republic	40.9	44.6	9.0	EU 27	43.2	46.4	7.4
Finland	50.6	55.1	8.9	€-Area	43.8	47.3	8.0
Lithuania	36.3	39.5	8.8				

Own calculations. Source: EU Commission

Intergenerational justice

What might the overall cost of tardiness be? Postponing decisions to restore balance will be more costly than an immediate policy change. The numbers in Table 2 consider the necessary increase in taxes borne by both current and future generations to keep public finances sustainable. If current generations were exempted from the debt service, only the not-yet-born would deal with the debt. The longer the debt repayment is postponed, the heavier the economic (fiscal) load on future generations.

Table 3 provides an scenario based on the assumption that Europe's governments have decided to wait ten years, until 2020, before beginning to service the IPL. For instance, Luxembourg and Greece would have to raise their 2009 tax ratio even more: not 32.7 and 31.1%, respectively, but 38 and 37.9%.

Table 3 | Required increase in tax ratios (%) if the implicit debt service is postponed by ten years

Country	Change, %	Country	Change, %	Country	Change, %
Luxembourg	38.0	Lithuania	10.7	Italy	3.8
Greece	37.9	United Kingdom	10.6	Latvia	3.7
Ireland	24.2	Finland	10.3	Hungary	3.7
Cyprus	22.9	Slovakia	10.2	Sweden	3.6
Slovenia	22.5	Czech Republic	10.0	Denmark	3.1
Spain	19.3	Germany	8.9	Estonia	-0.3
Romania	16.9	Austria	7.6	Poland	-3.5
Malta	15.8	Portugal	5.1	EU-27	8.5
Netherlands	12.9	France	4.4	€-Area	9.2
Belgium	11.6	Bulgaria	4.3		

Own calculation. Source: EU Commission

As far as burden-sharing between present and future generations is desired, a deferral of the start of debt service will cause a higher cost to the not-yet-born and benefit the currently living generations. The cost can be expressed as a percentage of GDP (Table 4): future taxpayers in Luxembourg and Greece would feel the greatest pressure because the additional cost of delayed reforms is 15% and 14% of their present GDP, respectively. Others would face additional fiscal pressure, as well. Unless these countries implemented debt reduction mechanisms soon, the financial burden would increase.

But, for Estonia and Poland, Eurostat projects a growing net wealth in their public social security system (PSS). If the baseline assumptions held, the Estonian and Polish PSS will accumulate assets (unlike the rest of the countries struggling with growing liabilities). Enjoying assets is advantageous as they allow for the absorption of unforeseen shocks – economic crises, technological shifts, trade wars, etc.

Table 4 | Cost borne by future generations if debt reduction is delayed by 10 years (% of present GDP)

Country	Macroeconomic cost	Country	Macroeconomic cost	Country	Macroeconomic cost
Luxembourg	14.7	Finland	5.1	Italy	1.7
Greece	13.7	United Kingdom	4.1	Bulgaria	1.6
Slovenia	9.5	Czech Republic	4.0	Hungary	1.6
Cyprus	9.5	Lithuania	3.8	Denmark	1.6
Ireland	8.0	Germany	3.8	Latvia	1.2
Spain	6.8	Austria	3.5	Estonia	-0.1
Malta	6.5	Slovakia	3.2	Poland	-1.3
Netherlands	5.7	Portugal	2.2	EU-27	3.6
Belgium	5.5	France	2.1	€-Area	4.0
Romania	5.4	Sweden	1.8		

Own calculations. Source: EU Commission

Recommendations – what should the Trio Presidency do?

The Spain-Belgium-Hungary Trio did not pay attention to the implicit debt question. But with the economic crisis coming to an end, long-term fiscal sustainability should become a prime issue of concern to the next Presidency Trio. Because Poland and Denmark feature sound long-term finances, they should initiate a monitoring and statistical report of each country's implicit fiscal position, on a par with the explicit one. Here, the newly established European Semester, a six-month period of macroeconomic policy coordination of the Member States, may be helpful. However, it would mean broadening the focus of the Stability and Growth Pact (SGP) and the Broad Economic Guidelines to ensure that the Member States' sustainability gap is closed over time. This sort of fiscal responsibility must be encouraged by defining requirements for national age-related fiscal frameworks and by monitoring and correcting deviations from the established sustainability path. To implement these measures the Trio should approach all major stakeholders, starting with the Commission and the Van Rompuy Task Force on Economic Governance. The Council, Commission and the European Parliament have agreed that the reinforced provisions of the SGP should be "fast-tracked" and adopted by summer 2011. They will be part of the new governance cycle which coincides with the Polish Presidency. The Trio member at the helm of the Council is hence supposed to insist on a long-term fiscal sustainability programme. It should become part of the regular Commission reports that summarize the recommended economic policy actions to be undertaken by the Member States. Fortunately the reports pay major attention to employment and fiscal soundness.

But reducing IPL relying on fiscal measures alone would not deliver. Rather, a variety of policies must be drawn up to close the sustainability gap. The Presidency is expected to

encourage policies other than fiscal austerity to deal with the implicit debt, as explained below. The endeavour may be facilitated by the newly adopted Euro-Pus Pact, provisions of which complement those of other instruments already in place, foremost the European Economic Semester, Europe 2020, the Stability and Growth Pact and the National Reform Programme.

With regard to IPL, the new Pact suggests measures to be taken in order to make public finances sustainable in the medium-run, working on the basis of the same sustainability gap indicators used in this study.

In the first place, countries should work faster in bringing pension and health care systems in accordance with national demographic trends. The Trio Presidency should support all moves that align the effective retirement age with life expectancy, especially by limiting early retirement schemes. But also, steps to reduce unemployment and rise employment rates, such as increasing participation shares and using tailored incentives to employ older workers (in the age group above 55), should be pursued by the Trio Presidency.

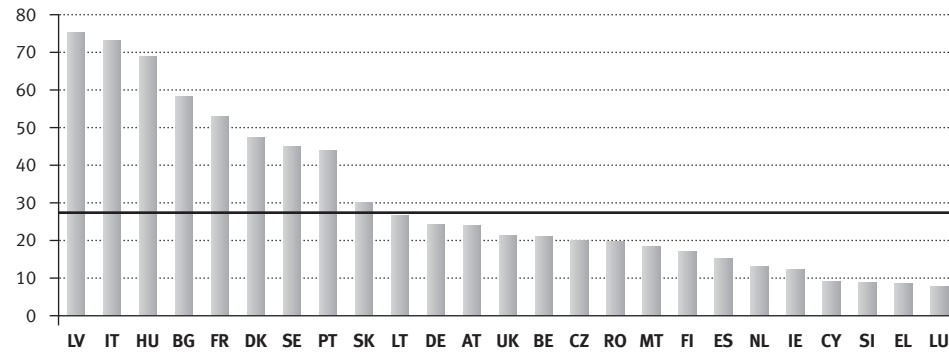
Also, the Trio Presidency should vigorously pursue the important goal of narrowing the competitiveness gap and reducing trade imbalances, as quoted in the Pact. This would translate into higher saving rates and less financial constrain in a number of deficit economies. The Presidency is called upon to back the Commission in playing a more important role in the handling of excessive imbalances and deficits *vis-à-vis* the Council in order to avoid a watering down of decisions. Overcoming imbalances is the best way to cut the implicit debt. In a practical sense, the Trio Presidency should insist on a few urgent steps in the same order as those outlined below.

Extension of retirement age

Given increasing life expectancy, longer working lives are a chance to get implicit debt under control. When retirement age is pushed up, the old-age and economic old-age ratios would improve, as a longer working life translates into a larger active population.

As a first step, retirement would take place at the age of 64, up from the age of 60 at present. After this, another extension by 5% – alongside increasing longevity – is assumed to take place. That would bring the average retirement age to 66.2 years. Further steps are not considered. This is consistent with recent trends: in a number of Member States' legislation for retirement at age 67 has passed. It is likely that, by around 2035, the average working life would be 46.2 years, with as a result that the sustainability gap at the EU level will be reduced by some 27%. But for individual Member States, the outcome would be significantly better: in Latvia, Italy, Hungary or Bulgaria this measure would be sufficient to almost close the sustainability gap (Graph 1).

Graph 1 Raising retirement age to 66.2 years by 2035: contribution to closing the sustainability gap (in %)



Own calculations. Source: EU Commission

The proposal to raise the retirement age is often criticized on the grounds that older people working longer would make it harder for the young to find appropriate jobs. This critique is known as the *lump of labour fallacy*. In reality, workers are not perfect substitutes, so younger employees usually would replace the old only at high cost. Early retirement as a job machine is an idea that has never been supported by serious statistics. Rather, experiments in this domain – especially in France in the 1990s, but also in Germany and other countries – failed to deliver and these countries soon returned to higher retirement ages. Germany has even taken the lead by introducing the so called “Pension at 67”.

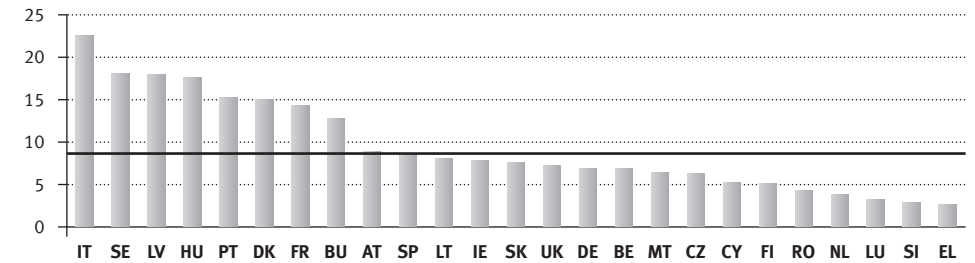
Immigration from the rest of the world: modelling assuming constant net migration ratios

Immigration tends to counterbalance the disadvantages of the demographic shock, as it causes labour supply to increase.¹ The total dependency ratio (the number of young and old people as a percentage of population aged 15-64) would fall.² While the Commission projects declining net immigration in the EU as a whole and by most Member States, the following considerations are based upon the idea that migration would stay constant over time (meaning that it would contribute more to lowering the sustainability gap). If the EU pursued a policy of keeping the net immigration ratio in the coming decades at the 2008 level of 0.34% of total population, the effect would be a sustainability gap that is 8.7% smaller (Graph 2). This is two percentage points better than the result based on the Commission’s projection of declining net immigration (a 6.9% cut of the sustainability gap). In practically all new Member States the implicit

1. To keep the analysis realistic, calculations assume that only half of all immigrants enter the labour market – a quite conservative assessment
2. Of course, immigration does not come for free, but rather at a given social cost. But, it is widely accepted that its economic effect is positive

debt would decline. The reverse applies to the Club Med countries (save Greece) plus Ireland, though: they would be losers since their current net immigration ratios are higher than 0.34%.

Graph 2 Constant net immigration around 0.34% of total population: contribution to closing the sustainability gap (in %)



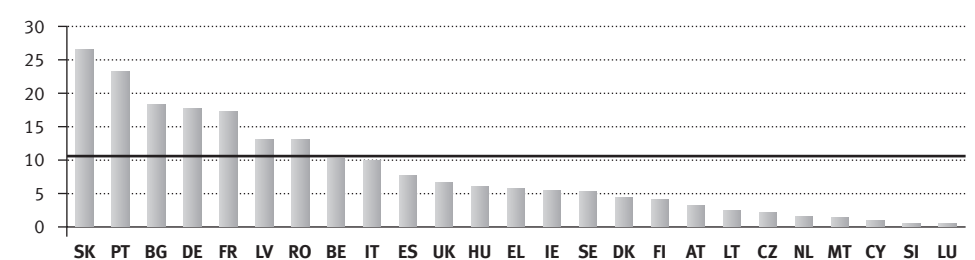
Own calculations. Source: EU Commission

Reducing unemployment/raising employment rate

Unemployment is not just a social issue; it also affects the handling of the IPL. Fewer unemployed and more people working translate into better revenue for the PSS. Because the social security contributions as a share of the gross wage are assumed to be the same, revenue would catch up with expenditure. A reduction by two percentage points of the current unemployment rate would reduce the sustainability gap by roughly 11%. There are more effects though: the old-age dependency ratio would fall in the long run.

Calculations by Member States show that Slovakia, Portugal, Bulgaria and Germany might enjoy the largest gains. In particular, all countries with an already narrow sustainability gap would clearly benefit. But in countries with a very large sustainability gap even a much better labour-market situation would be less helpful – in Greece and Romania, for example. A reduced unemployment rate does not play a role in Luxembourg at all, as that country’s gap is very large and more cuts in its already minimal unemployment rate are not likely (Graph 3).

Graph 3 Reduced unemployment rate from 8.5% to 6.5% till 2030: contribution to closing the sustainability gap (in %)



Own calculations. Source: EU Commission

To sum up, three factors are more or less sufficient to close the sustainability gap in most countries: retirement age extension, reduction in unemployment and more generous immigration. In this paper, the factor analysis was conducted by changing one indicator while keeping all other indicators constant. In reality this is of course not the case: the overall result might be even better if the respective policies happened simultaneously. Politicians might hope for a trick to escape the debt service of the implicit debt. Yet this is impossible: implicit debt puts the same burden on the economy as the explicit one, because the two concepts are economically equivalent.