Narrowing the Sustainability Gap of EU and US Health Care Spending

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In the European Union as well as in the United States, governments are struggling to reduce burgeoning public deficits and debt. A key factor for improving public finances will be slowing the excess growth in health care spending, i.e., the growth in health care spending per capita in excess of per capita GDP growth. This brief analysis attempts to identify the implicit debt of the health care system for several EU countries and the US, and investigates various policy options for narrowing the health care sustainability gap.

The following analysis uses recent OECD data to calculate the ‘health care fiscal sustainability gap’, defined here as the real annual growth in per capita health spending (over the period 2000-2008) minus the real annual growth in per capita GDP. All of the countries considered (European Union OECD member countries and the US) have a positive health care sustainability gap, meaning that each year (on average) they devote more of their GDP to health care (Graph 1).

Graph 1: Sustainability gap* of the HCS by country, percent of GDP

A simple model based on Deutsche Bank Research projections for long-term interest rates and potential GDP growth is used to calculate the “implicit debt of the health care system”, which is the sum of all discounted future health care sustainability gaps over an infinite period. In these calculations, we assume that the health care sustainability gap remains stable (i.e., that per capita growth of health care spending in excess of per capita GDP growth continues at about the same rate over the next years). In order to make cross-country comparisons and weigh a set of possible policy responses and their potential to slow the unsustainable trajectory of health care spending, the model holds all other factors constant while looking at the effect of a given factor. For the 25-year time horizon considered here, we deem demographic factors a lesser driver of higher health care spending than other factors, chief among them advances in medicine and medical technology. At the same time, we believe ageing is providing new opportunities to deal with the implicit
debt, more specifically by extending work life. In the EU as well as in the US, the implicit debt of the health care system is contributing to the strain on public finances. In Europe, with its mainly publicly funded health care systems, the health sustainability gap and implicit debt translate directly into greater public debt, with the implicit health care debt alone of most European countries exceeding the Maastricht limit of 60 percent of GDP (Graph 2). In the United States, where only about half of health care spending is publicly financed in the United States and the other half privately funded (through employers and individuals), the excess growth in health care spending still presents the greatest threat to the sustainability of public finances (see A. Medearis, “Cost Versus Coverage: The US Health Care Reform in Perspective”, Deutsch Bank Research publication, May 20, 2010).

Graph 2: Implicit Debt of the HCS by country, percent of GDP

The calculations show a large range in the sustainability gaps and implicit debts, with some countries facing much higher future liabilities from the health care sector (e.g., Luxembourg, Slovakia, Ireland,) and some countries facing health-care driven fiscal problems of a smaller degree (e.g., Hungary, Germany, Austria). Some countries have managed to keep health care spending growth fairly contained, while it has accelerated rapidly in other countries. For some countries, higher growth rates have helped contain the health care sustainability gap despite rising health care spending, while lower long-term potential growth rates for some countries raise the implicit health care debt even for countries with relatively lower rates of growth in health care spending. Yet while the results indicate that some countries face greater health care liabilities than others, health care spending in excess of GDP growth presents a fiscal challenge for all the countries considered, and health care system and other long-term structural reforms must be undertaken to confront this challenge.

Own calculations. Source: OECD, Eurostat.
How to narrow the implicit debt of the HCS?

Trimming health care spending

Eliminating the implicit health care debt within a reasonable period of time by simply increasing health care contributions or reducing health care coverage (and thus outlays), or both, is not a realistic option for most countries considered. For example, in order to reduce the implicit health care debt to 60% of GDP within 10 years, Poland would have to cut its health care debt by 15% of GDP per year, which translates into a reduction of health care spending well over three times what the country spends on health care as a percentage of GDP per year. Using a similar calculation, the US would have to cut its health care debt by 12% of GDP per year, which would translate into a reduction of 72% of annual health care spending – much less but also quite unrealistic (see estimates by country in Annex). Such draconian measures, if implemented over the short term, are politically unlikely, particularly in the current environment of tepid economic recovery and fiscal consolidation in other areas of the budget.

Certainly, some reductions in benefits and increases in contributions to the public health care system will be an inevitable part of the solution to reducing the sustainability gap. But considering the political difficulty associated with such changes, other measures must be pursued. An intelligent approach that includes a sequence of policies and that even takes advantage of the ageing process in Europe and America is necessary.

Within the health care system, efforts should be made to slow rising costs by introducing programs and system changes designed to compare the effectiveness of various medical treatments and tests, and to reward health providers for quality rather than quantity of care. Cost growth in the United States in particular could be trimmed by moving to a ‘pay for performance’ system and away from a ‘pay for service’ system as currently exists. These and other measures designed to slow the growth in health care costs were considered in the recent US health care reform debate, though the ultimate legislation passed in March 2010 fell short in terms of “bending” the health care cost curve, and more needs to be done in this area. European countries should also work to introduce greater cost-effectiveness in their largely public health care systems, as the discovery and adoption of new medical technologies is likely to put increasing upward pressure on health care costs, as has been the trend in the US.

Age-related measures

Rising life expectancies afford an opportunity to extend working years to improve the fiscal stance of health care on both sides of the Atlantic. In the EU, raising the retirement age would result – ceteris paribus – in higher net employment rates, increased contributions to the health care system, and a substantial narrowing of the sustainability gap. The effect would emerge over several periods over the next 25 years (i.e., by about 2035). We calculate that an increase in the retirement age in the form of an exten-
ension of work life by 5% (about 2 years) in two steps - each in the first and second periods (approximately 5 and 10 years from now, respectively) would, ceteris paribus, result in an increased financial contribution to the health care system and a subsequent reduction of the health care sustainability gap by 20.2% in the EU and 18.7% in the US by 2035 (Graph 3).

Raising the retirement age yields the largest reductions in health care sustainability gaps of all the policy measures modelled in this study. The wide variation across countries results both from the initial size of the sustainability gap, with countries with wider gaps seeing smaller reductions on a percentage basis, and from the initial retirement ages. Countries with lower retirement ages currently will see a bigger effect from the same increase.

Graph 3: Raising retirement age: contribution to closing the HCS sustainability gap in % after 4 periods

![Graph 3](image)

Own calculations. Source: OECD, Eurostat.

**Labor market policies**

High unemployment is a pressing concern for many European countries. In Europe, society bears the cost of foregone tax revenue and payroll payments into the health care system when people lose their jobs. (This is also the case in the US, where health insurance is mainly employer-based.) A lower unemployment rate of some 6.5% in 2035 as projected by the European Commission, other things left unchanged, would result in higher employment, higher total wage income, and hence greater contributions to public health care programs. The average effect of lowering unemployment rates by the end of the 25-year time frame would be a reduction of the sustainability gap of roughly 6.6% in Europe. For comparative purposes, reducing the unemployment rate to a similar level in the US (6.5% by 2035) would yield a slightly smaller calculated effect on the sustainability gap of 4.8%, since the total reduction in the US unemployment rate would be smaller than that in the EU (Graph 4).

Lowering unemployment rates yields more modest reductions in sustainability gaps on average, again with much cross-country variation. Countries with higher structural unemployment (e.g., Germany, Belgium)
see greater reductions in their health care sustainability gaps as a result of the same reduction in the unemployment rate as countries with traditionally lower unemployment rates (Luxembourg, Denmark). The starting point of the sustainability gap also plays a role, with countries with smaller initial gaps benefitting more from the policy change than countries with larger initial gaps.

Graph 4: Lowering the unemployment rate: contribution to closing the sustainability gap in % after 4 periods

![Graph 4: Lowering the unemployment rate: contribution to closing the sustainability gap in % after 4 periods](image)

Own calculations. Source: OECD, Eurostat.

**Migration versus ageing**

Lower fertility rates and increasing longevity are expected to change European society dramatically in the coming decades. On balance, the EU population is projected to be barely larger in 2060 than currently. However, there are wide differences in long-term population trends across Member States, with total population projected to decrease in about half of the EU Member States, among them Germany, Italy, and Greece, and virtually all new EU member states. The US population is projected to grow steadily, thanks mainly to expected positive net immigration. But here, too, ageing will shift the cohort structure towards those cohorts around the age of 40. Against that background, continued inward net migration to the EU and US would – other things being equal - facilitate the fiscal stability of the health care system. This is particularly true because of the age structure of immigrants: they are usually younger and empirically (in Europe) at least half of them would participate in the workforce. In the US, with its less generous social welfare system, the share is higher – though many immigrants hold jobs that do not pay contributions to the pension and health care systems.

In the EU as a whole, according to Eurostat estimates, net immigration is projected to decline and will thus make only a very small contribution to closing the sustainability gap of the health care system. But in the US, (as well as in some European countries) expected increased net immigra-
tion results in a larger contribution to closing the health care sustainability gap of over twice the average for Europe. The “status quo” of net immigration as projected by Eurostat and the US Census Bureau yields a relatively modest reduction in the health care sustainability gap of 4.3% on average in the EU by 2035. Hungary and Austria have larger reductions due to their smaller sustainability gap. The effect is larger in the US (an 8.3% reduction), but not as large as might be expected given the US’ relatively high expected net immigration, on account of the relatively big US sustainability gap (Graph 5).

Graph 5: Actual immigration: contribution to closing the HCS sustainability gap in % after 4 periods

![Graph 5: Actual immigration: contribution to closing the HCS sustainability gap in % after 4 periods](image)

Own calculations. Source: OECD, Eurostat.

Alternatively, we consider policies to encourage immigration that would change the projected scenario for those countries with expected declining immigration to an alternative scenario of a constant (based on 2008 net immigration figures) net immigration of 0.34% of population per year over the 25-year period considered. The resulting effect - ceteris paribus and independent of the social debate regarding immigration - would be on average a slightly greater contribution to closing the health care sustainability gap in the EU (on the order of 5.4%). Larger reductions in the health care sustainability gap are yielded for select countries (Hungary, Austria, Germany) whose net immigration is projected to decline. However, the outlook for the US, Spain and Italy would worsen compared to the “status quo” scenario, as their expected net immigration is higher than 0.34% of GDP (Graph 6).
Graph 6: Constant immigration rate: Contribution to closing the HCS sustainability gap in % after 4 periods

Own calculations. Source: OECD, Eurostat.

Conclusion

Health care expenditures in the EU and the US are on a fiscally unsustainable path, with spending growing faster than GDP in all countries. In response, governments need to apply a sequence of measures to ‘bend’ their countries’ health care cost curves by introducing reforms to the health care system, as well as broader labour market and immigration reforms to encourage growth in the workforce and trim longer-term health care liabilities. Labour market and aging-related reforms will be particularly important as the demographic factor takes effect and the implicit health care deficit widens further. That issue is controversial in some continental EU member states, but some countries have already raised their retirement ages. The findings of this study demonstrate that longer work life is an important source of revenue for the health care system and a (mathematically) efficient way to close the sustainability gap. (In the US, this might be combined with an increase in the age of eligibility of Medicare, the public health insurance for all Americans over age 65). Other policies designed to reduce unemployment, such as greater labour market flexibility, better skill matching and training would help reduce the relatively high NAIRU in many EU member states. In the US, short-term active labour market policies may be necessary to bring the unemployment rate down from its currently high rate (9.5%) closer to its much lower NAIRU. Immigration could also contribute to the fiscal health of the health care system in Europe, as immigrants are mainly younger and of working age. Given the fact that Europe’s population is projected to remain unchanged, there is a justification for more, not less, immigration. Policies encouraging immigration would contribute to narrowing the sustainability gap. In the US, where net immigration is projected to continue to increase, policies should help encourage rather than discour-
age inward migration. Measures must also be undertaken to improve efficiency and cost-effectiveness in health care delivery and payment systems. In the US, policymakers must build on the recently-passed health care reform to adopt measures to reduce costs. In this respect, both the US and the EU, despite great variation in health care systems and their projected sustainability, face similar challenges and potential solutions in terms of policies to help narrow their health care sustainability gaps and thus improve the outlook for the overall sustainability of public finances.

Annex

Table 1: Reducing the debt to 60 percent of GDP within 10 years: Required surplus, percent of GDP and percent of total health care spending in 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Implicit debt of HCS, % GDP</th>
<th>Required cuts p.a., % GDP</th>
<th>Cuts as a share of HC spending in 2010</th>
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<tr>
<td>PL</td>
<td>320</td>
<td>15%</td>
<td>376%</td>
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<td>SK</td>
<td>480</td>
<td>19%</td>
<td>361%</td>
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<td>Lux</td>
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<td>328%</td>
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<td>Irl</td>
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<td>19%</td>
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<td>Fin</td>
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<td>NL</td>
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<td>14%</td>
<td>285%</td>
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<tr>
<td>Spa</td>
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<td>14%</td>
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<td>GR</td>
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<td>340</td>
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<tr>
<td>Hun</td>
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<td>-6%</td>
<td>-106%</td>
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Own calculations. Source: OECD, Eurostat.