European handling of explicit and implicit state debt, as a barrier to pension reform

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The PAYG-type pension systems are in crisis - all around the World

This crisis come from mainly: disadvantageous demographic trends

These demographic trends do not affect funded pension systems (which systems are not particularly prevalent Worldwide) → a possible solution to this problem: (partial) funding of the pension system
Funding pension systems

The essence of funding: paying back (or, at least, printing...) the state debt. For this, the following has to be true:

\[
\frac{i}{a_t} - \frac{s}{a_t} < r
\]

Where:
a: ratio of the state debt in GDP
r: the real growth rate of GDP
i: the real interest rate of the state debt
s: the prime (i.e.: without interest payments) balance of the state budget in GDP (negative in the case of a deficit).
**Time necessary to pay back the state debt**

In years, if the starting value is 80% of GDP

<table>
<thead>
<tr>
<th>Balance (s)</th>
<th>0%</th>
<th>1.5%</th>
<th>3%</th>
<th>4.5%</th>
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</thead>
<tbody>
<tr>
<td>Interest rate (i)</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>0%</td>
</tr>
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</tr>
<tr>
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<tr>
<td>3%</td>
<td>172</td>
<td>*</td>
<td>*</td>
<td>20</td>
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<tr>
<td>4%</td>
<td>130</td>
<td>174</td>
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<tr>
<td>5%</td>
<td>105</td>
<td>131</td>
<td>176</td>
<td>18</td>
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</table>
## Time necessary to pay back the state debt

In years, if the starting value is 300% of GDP

<table>
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<tbody>
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<td>2%</td>
<td>0%</td>
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<td>0%</td>
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<tr>
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<td>70</td>
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<td>*</td>
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<td>56</td>
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<tr>
<td>3%</td>
<td>217</td>
<td>*</td>
<td>*</td>
<td>47</td>
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<td>4%</td>
<td>164</td>
<td>219</td>
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Growth (r)

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Consequently: funding will be a time-consuming process → in the foreseeable future only partial funding is a realistic aim

An example of this: the (World Bank suggested) Hungarian reform of 1998

(After a voluntary-entering campaign) it was mandatory for new entrants into the job market to pay \( \frac{1}{4} \) of their contribution into an individual account; also, their pensions went down to \( \frac{3}{4} \) of the original – the remaining part of it would come from an annuity bought out of the individual account.
With a growing population, the implicit state debt in the pension system was also growing: more new debt was coming than disappearing.

In other words: here, the contribution is bigger than the benefit → there is no need for government intervention (budget supplement).

If given a declining population, the situation is different:
The implicit state debt and the net cash-flow in a PAYG system from its inception

Background – implicit state debt in the case of a declining population
The meaning of the Hungarian reform

I.e.: because of the demographic trends, after that generation has gone into retirement (baby-boom echo), which could not reproduce itself, the implicit state debt will start to show a major reduction →

The benefits will surpass contributions →

The deficit of the pension system will have to be supplemented by the state →

High state budget deficit … then!
The meaning of the Hungarian reform

The Hungarian reform intended to smoothe away this now high deficit … by its gradually being anticipated.

The Hungarian reform thus supposed that:

- The anticipated deficit will be "worked out" now →
- The government follows a disciplined, low-deficit budget policy - and, in general: debt-cutting.

What really happened was totally different! → the Hungarian reform became fragile!
Wrong prioritization: the short term state debt should be worked out first - instead of the long-term, implicit one

State debt was not worked out at all - instead: growing indebtedness – furthermore: started to convert the long-term, implicit state debt into a short-term, explicit one

Putting the above problems aside: the policy of partial funding itself was a good policy - should have been continued.
The reversal of Hungarian reform here had short-term advantages and long-term disadvantages.

Advantages:
• smaller current deficit (because of not having to anticipate the deficit later)
• a one-shot reduction of the explicit state debt

Disadvantages:
• anticipation/smoothing of the recent big deficit ended
• Increases in the implicit state debt were higher than the reductions in the explicit one
The Hungarian government’s (in the company of other governments) first attempt was to try to loosen the deficit rules. Only after a failure to do this did they put an end to funding reform.

Loosening the deficit rules would have been a bad move – though this doesn’t mean that the EU rules are good.
The Stability and Growth Pact (SGP) sets a maximum of two values for GDP:
- the annual deficit can be max. 3%
- the all – explicit – state debt can be max. 60%

The meaning of these rules:
- To prevent the excessive indebtedness of member states
- To slow down moves towards indebtedness

The advantage of these rules: their simplicity.
The problems of SGP

Setting a maximum for the deficit – it isn’t a problem!

The imperfection of the rules:

- They cover only a smaller part of the all-state debt: the explicit one
- They don’t take into account the sustainability of the debt, namely
  - structure of the expiration
  - interest rate
  - origin
The problems of SGP

The problems have come from these imperfections:

- It is false to think that similar debt-rates for two countries will show similar problems. E.g. Japan’s 200% state debt with a 0.5% interest rate in local currency, with long-term expiration in the hands of loyal citizens causes almost no problems – in contrast with the (e.g.) Hungarian one, where all the parameters above are the opposite. In a formal sense - according to SGP - Japan’s situation is more acute!
Further problems:
• It makes it rational to increase the all-state debt if this reduces the explicit one →
• It is a serious obstacle of the opposite move XXX?: to reduce the all-state debt if it causes an increase in the explicit state debt
→ this is an obstacle as regards funding reforms!
The proposed reform of SGP

XXXOK?

Have to:

- extend it to all (explicit and implicit) state debt
  → need to reveal the implicit state debt
- set a new, higher ceiling for the all-(explicit + implicit) state debt
- Take into consideration also the expiration structure (the majority of the implicit state debt is a very long-term one)
Objections

The implicit state debt is
1. Hard to estimate
2. "Soft" debt, because it can be reduced by discretionary measures

Contra-objections:
1. Hard to estimate only if the rules of the pension system are ambiguous - yet to make these rules unambiguous is important, and this reform would encourage this.
2. The more unambiguous the rules, the less soft the implicit state debt.
Thank you for your attention!