

How large damage can Hungary's rising public debt inflict on growth?

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By Zombor Berezhvai and Dávid Szebeni

How much does one country's national debt set back its growth? In this respect, what OECD-countries does Hungary resemble the most? Is it worth setting the lowering of the national debt as goal of the Hungarian government? The DEWIL research group was trying to find answers to these questions.

DEWIL-index, a new method to measure national debt

A new study made by Herndon and his co-authors tampered with the formerly deemed connection between national debt and economic growth (namely, that if the national debt/GDP ratio reaches 90%, then the rate of the GDP growth will fall back significantly). Analyzing post-World War II data from 20 developed countries, they have not found any substantive relation between the rate of economic growth and the magnitude of national debt. Furthermore, the results differ in time, so they are not independent from the currently examined time period.

However, it is worth taking a step backward and thinking about what kind of index the authors of this article used to measure a country's national debt. The problems of the often applied GDP-proportionate index include that it does not take into consideration many of the real economy variables. Probably the most outstanding thing is that it disregards the differences in the purchasing power of each country. The wages of the employees are also important, as a citizen's income is one of the foundations of their accumulation of wealth.

This is the reason why this research group established the DEWIL-index (Debt-Wage Index of Liberty). This index deals with the formerly mentioned problems, and it shows, while reviewing all data on the purchasing-parity, that how much monthly super-gross income of the employees is equivalent to the national debt in a given country. As the DEWIL research group reported it in its article of [August 31, 2011](#), Hungary ranked third on the 27 EU-member state list behind Greece and Italy in 2010.

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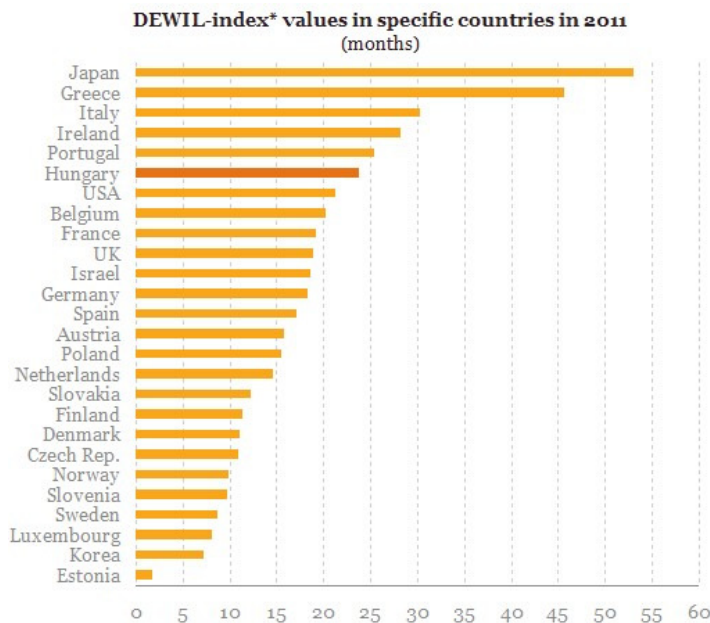

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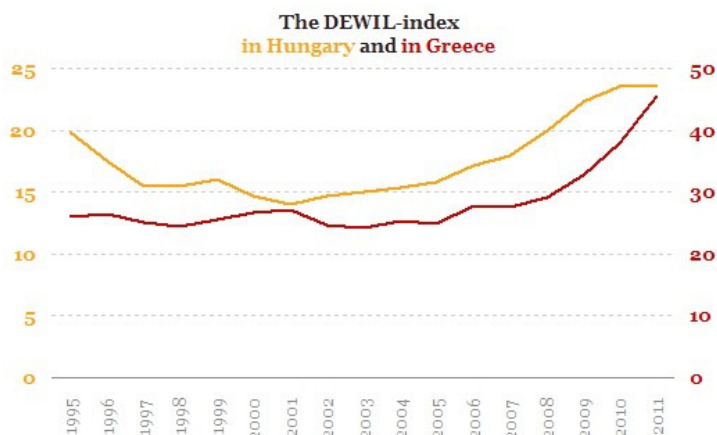
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*The DEWIL index is actually a ratio. It shows - while reviewing all data on the purchasing-parity - how much monthly super-gross income of the employees is equivalent to the national debt in a given country.
Source: own estimate based on OECD and IMF data

The connection between national debt and economic growth can also be measured with the DEWIL-index. During their research, the economists dealt with a so-called partial alignment model. They assumed that an ideal economic growth level (which can be diverse in each country) is connected to each debt level (DEWIL-rate), therefore the debt rate determines the rate of economic growth. However, this overlaps the data in the most rare cases in real life, as various distortion and one-time impact can come into play but on the long run, the growth acts on the expected growth rate.

By using OECD, Eurostat and IMF data from between 1994 and 2010, the authors evaluated a model for most OECD-member states. In a large measure, the results support Herndon and his co-authors's claim that there is a weak connection between national debt and GDP growth; in the cases of most countries the model did not provide any convincing results. However, there came two outstanding exceptions, namely Hungary and Greece.



Source: own calculation based on OECD, Eurostat and IMF data

What is common in Hungary and Greece?

Overspending and overtaxing countries - we can see the signs of these in case of Hungary and Greece. It can be clearly seen on the attached diagrams that correlating to the average of the countries (Bulgaria, Cyprus, the Czech Republic, Estonia, Greece, Latvia, Lithuania, Hungary, Malta, Poland, Portugal, Romania, Slovakia, Slovenia) whose state of development does not reach the EU-average, the national expenses are significantly bigger in Hungary and Greece. Moreover, the expenses are also significantly bigger than the income in most years. No wonder that the budget deficit of these two countries was the worst in the EU from the middle of the 2000s until the outbreak of the economic crisis.

The badly utilized budget margin arises as the true problem. We can see from the diagrams that

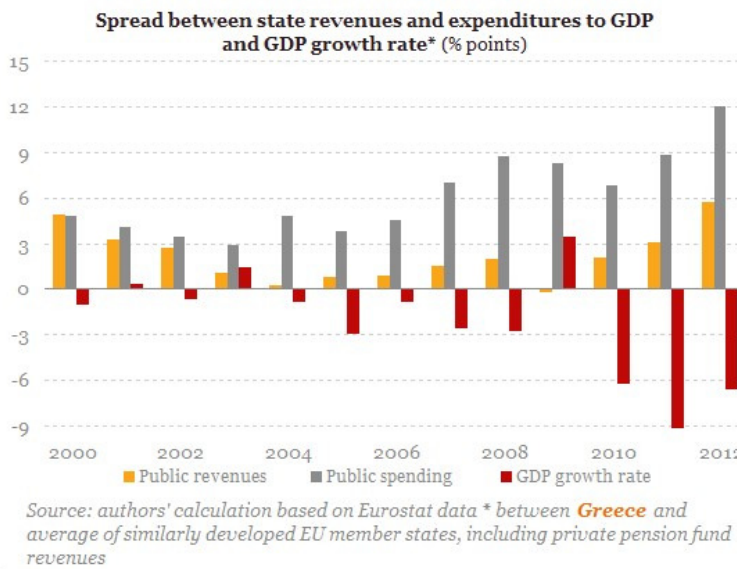
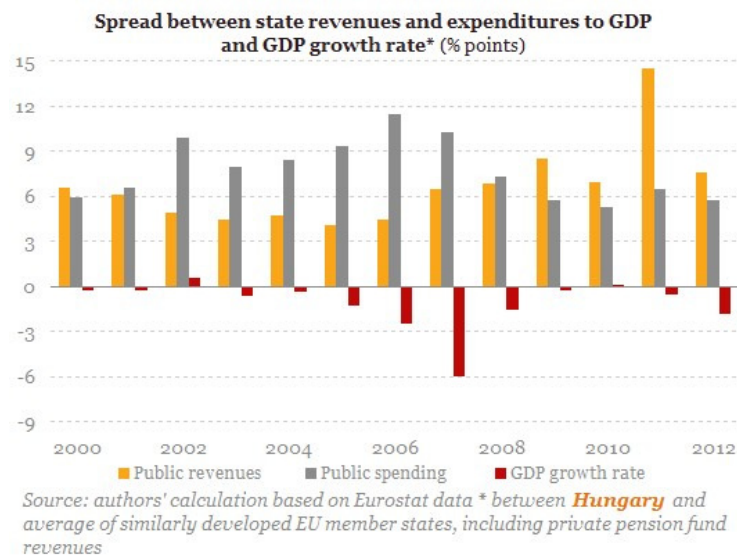
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overspending did not appear as a surplus in economic growth, the annual GDP growth rate was mostly below the average in the last decade.

The following two diagrams display the situation in Hungary and Greece:



The results of the model grasp the tendency, which could be picked out from the data, more plastically. There was not a substantive connection between the level of debt and the GDP growth in the case of the predominant majority of OECD member states. This implies that the national trust uptake alone did not ruin the economic growth. Although, the two detached countries depleted their reserved resources, and when they had to repay the loans and their interests, they could not finance them from the excess of economic growth. In this way, the resources available for the economy had to be curtailed (e.g. in the form of rising taxes).

According to the research group's estimations based on this model, the reduction of the DEWIL-index by 1 month is expected to increase the annual GDP growth rate by a percentage point of 0.73 in the case of Hungary. (In the case of Greece, a 0.86 percentage point increase is expected.)

The connection between national debt and growth in Hungary

The truly great question is that how can the Hungarian economic growth be accelerated, and what kind of role would the reduction of the national debt play in this. Although there is no clear and general proof that the national debt has an impact on GDP growth, a relatively strong connection can be shown between them in Hungary based on the researcher's findings.

One of the ways to set the economy on the right path to increase could be the reduction of the national debt. Although the DEWIL-index points out that the increase in employment and the raising of salary levels can also help boost the increase rate. It is important to note that salary growth driven by

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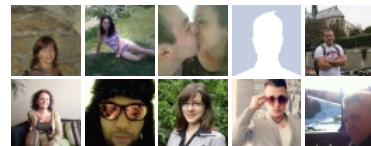
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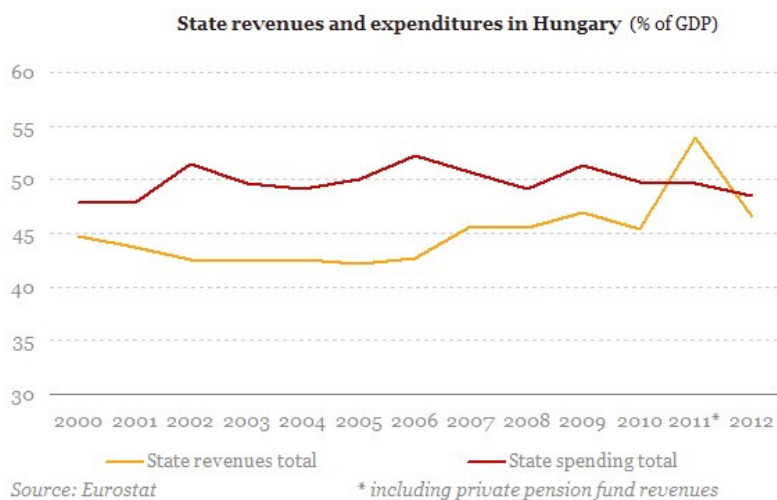


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productivity alone is a promising thing, the centrally assessed increase in salaries namely weakens the competitiveness of companies thus it can have a damaging impact on the long run.

Therefore, the commitment to the reduction of national debt is fundamentally a good direction but not the only way to national development. The main problem is that the reigning government would like to moderate the debt by rising taxes and increasing revenue. The diagram clearly points out that while the revenue was characterized by an increasing trend in the past years, the level of expenses rather stagnated than reduced. Based on international examples, this kind of correction is proven to fail in most cases on the long run.



Another possible way is to support the employment by reducing the taxes and contributions incriminating live labor. However, all of this must be achieved in a way that the debt should not increase - thus it should be paired with the reduction of expenses. In the researcher's opinion, this method can be really successful in Hungary.

If we could reduce the rate of national debt according to the DEWIL-index from the current 24 months to about 16 (hence the national debt would be equivalent to ca. 16 months worth of super-gross wage labor), the researchers estimate that the economic growth could easily top 3 percent as well. This goal is not unreal or unachievable, as for example in 2011, the DEWIL-index of Spain was 17 months, while Poland had 15, and Slovakia had 12 months.

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