Financial and Economic Review, Vol. 14 Issue 4., December 2015, pp. 157–160.

A world of debt*

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Interesting thoughts were expressed regarding the current debt situation in an article published in the Financial Times on 6 January 2015.[1] Below we highlight and review some of these thoughts, and then attempt to raise some further ideas as well.

The article of the Financial Times concludes that state bankruptcy is practically a political notion, and that it occurs when meeting the obligation of debt servicing is a greater loss of prestige for the political leaders than to refuse payment.

Developed countries' debt-to-GDP ratio is above 100% (below 50% in developing countries), but of this, the part denominated in domestic currency can be cleared by money printing (which carries the risk of inflation) or financial repression (local savers and investors may be forced through regulation to finance the debt), unlike in the case of external debt. Reinhardt and Rogoff calculated that the average external debt-to-GDP ratio of countries that defaulted in 1970–2008 was 69.3%.[2] Examining the cases of 176 countries between 1820 and 2013, Tomz and Wright found that on average a sovereign defaults every 140 years on external debt.[3]

The study by Eichengreen and Panizza[4] proves that avoiding bankruptcy is made difficult by the fact that neither inflation nor economic growth is supported by the current international environment. One feature of the euro area is that the domestic currency is actually foreign (and indebtedness is declining in Germany). Therefore, a very high primary surplus-to-GDP ratio should be attained to handle the situation (7.2% in Greece and 4.0% in Spain). On average, 10% of the PIIGS countries' revenues is spent on debt servicing, but this ratio is significant in the case of France, Belgium and the Netherlands as well.

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* The views expressed in this paper are those of the author(s) and do not necessarily reflect the offical view of the Magyar Nemzeti Bank.

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[1] *Robin Wigglesworth: Public finances: A world of debt. http://www.ft.com/intl/cms/s/2/05b14576-958f-11e4-b3a6-00144feabdc0.html#slide0*

[2] *Carmen M. Reinhart and Kenneth S. Rogoff (2010): This Time is Different: Eight Centuries of Financial Folly. Princeton University Press*

[3] *Michael Tomz and Mark L. J. Wright (2013): Empirical Research on Sovereign Debt and Default. NBER Working Paper No. 18855 http://www.nber.org/papers/w18855*

[4] *Barry Eichengreen and Ugo Panizza (2014): A Surplus of Ambition: Can Europe Rely on Large Primary Surpluses to Solve its Debt Problem? CEPR Discussion Paper 10069 http://www.cepr.org/active/publications/discussion_papers/dp.php?dpno=10069*

According to the IMF rule of thumb, the government debt-to-GDP ratio should not be (should not have been) allowed to exceed 85% in the case of developed countries (or 70% for developing ones), because above this level significant tightening reduces economic growth and adds to the debt burden, while, although the increasing of fiscal expenditures facilitates economic growth, debt also continues to increase. In Professor Rogoff's opinion, countries with strong fundamentals are at no risk of debt crisis, but weak ones fail because of the high level of indebtedness.

The article requires further consideration. Why does government debt inevitably grow? The answer lies in Schumpeter's one-hundred-year old model. An economy only grows if there is innovation in the machinery, and an idea becomes an innovation only if the banking sector creates additional purchasing power. Many researchers have measured this correlation in many ways; loan-to-GDP and loan-to-assets ratios are higher in a more developed economy. This means that the percentage growth in loans does not correspond to the growth in assets, but is several times higher. (In 1954, the ratio of debt to total assets of US manufacturing firms was only 35%, but it increased to 60% by 2000.[5]) If this pace of indebtedness had continued, corporate indebtedness would have increased to above 72% by now.

As due to bank regulation provisions the loan-to-assets ratio may not exceed 70%, economic growth would end now, because the required additional liquidity is missing. However, the increase in government debt is able to feed the necessary liquidity into the economy. (Between 2001 and 2014, the government debt-to-GDP ratio increased from 53% to above 100% in the USA.) In brief, if the rise in the loan-to-assets ratio is a precondition for economic growth, it is easy to see that – as saturation sooner or later takes place in the case of private assets – an increase in the indebtedness of the state may create the condition for the missing liquidity. If we rank some two hundred countries of the world according to per capita GDP, with a moving average the result is that indebtedness is higher in the more developed countries.

Consequently, indebtedness will increase, not decrease. It does not mean that the indebtedness of the state is always a response to the narrowing of the possibilities of corporate indebtedness, but at a given stage of development the loan absorption capacity of companies inevitably hits a ceiling, after which only the state is able to become indebted. (According to Duncan, for example, the USA should spend on research in the fields of energy and health.)

[5] *Richard A. Brealey and Stewart C. Myers (2011): Modern vállalati pénzügyek (Principles of corporate finance). Panem Kiadó (Panem Publishing Company).*

The article of the Financial Times considered economic growth and inflation as good means to overcome indebtedness. Inflation (either too low or too high) is not popular, while it is difficult to quantify the damage caused by inflation. Menu costs and shoe leather costs are not too significant compared to the extent of the fight against inflation. Mankiw's observation is that in fact the problem is not the increase in prices, but what it may entail.[6] The problem with the general price level change (both decline and increase) is that the prices of goods and services change to different degrees, and thus the dispersion of prices varies in the case of the different general price changes. Not surprisingly, price dispersion shows a V-shape function where the minimum dispersion occurs when inflation is 2–3%. Moving from it to the right or left on the number line, dispersion is greater everywhere, which means that the optimum production of the given product is possible with a combination of resources that is different than before. (It is necessary to get rid of the stored resources that have become redundant, new resources have to be obtained, and the manufacturing of the product has to be re-planned in line with the new price conditions.)

All of this also raises the issue of forming an opinion on the euro area. The single currency may also mean that Member States in distress are rescued, as in the USA. It is hard to follow the EU logic that as the federal budget is small, they do not help countries that get into trouble, but the country in trouble is deprived of its adequate means (own currency) that could help itself. The German proposal that a country should use its own currency until it is in trouble and could return to the single currency when it has recovered, was not senseless. (A known technique from the currency snake of the 1970s: each participating country tied its currency to the Deutsch Mark until the country found it useful. Some suspended it for a while, then returned to the snake. Temporary exit from the euro area may be considered an updated version of that.)

Finally, there is the issue of debt forgiveness and the reduction of debt service burdens: Over time, the EU will find the service it can request in exchange for cancelling a part of the Greek debt or reducing the debt service burdens. There is a need to step back, and a new actor needs to be involved if two actors are not sufficient for a barter. (Economics usually examines how money is able to intermediate in an exchange; now exactly the opposite is true: a new actor and a new type of service need to be involved for the intermediation of money swap.) The service provided in exchange has to be something that is important for the EU as a whole, but the latter cannot do it for some reason. It could be the far-reaching issue of defence against migration. If a refugee or migrant enters EU territory, he has different rights than in non-EU territory. A part of the territory of Greece (mainland and islands) can be defended at rational cost levels, other

[6] *Gregory N. Mankiw (2005): Makroökonómia (Macroeconomics). Osiris Kiadó (Osiris Publishing Company).*

parts cannot. (In economic terms, the exclusion of free riders, i.e. those who do not want to pay, cannot be solved rationally, because it would be too expensive or too rough.) A possible solution would be if a non-EU Member State – but a state that sympathises with the EU and is rich and/or has a high population – leased the rationally indefensible territories from the Greek state. (It would not mean selling like Russia sold Alaska or leasing for 99 years as England did with Hong Kong, but it would mean leasing for a temporary period.) The state temporarily leasing the rationally indefensible territory would expediently pay an annual fee, the amount of which would prevent the debt service burden on the Greek economy from being excessively heavy, allowing the country to return to a growth path. What could motivate the mysterious lessee state? It depends on the state. Ambitions of a North or South American, perhaps Asian or African state could be different, but there are always large and/or rich states that want something and may submit this imaginary invoice one day.

The EU and aid organisations play a significant role in the provision of migrants and refugees (including school education, adult education and the organisation of medical service). It is necessary to take into account that many of those fleeing from armed conflicts are of military age, who may consider it their duty to participate in the achievement of peace for their homeland in arms as well. It is expedient to provide military training for them and to throw them – with their consent – into battle in the disputed regions. (It can be expected of a trained and armed young Syrian to fight for peace as a member of the land forces with air support.)

In brief: the indebtedness of states is a natural consequence of the fact that in case of development the loan-to-assets ratio becomes saturated sooner or later, and thus the maintenance of liquidity becomes shifted onto government debt (expediently onto activities that serve innovation). Government debt may also become saturated if it is denominated in foreign currency. Accordingly, in the case of the EU, the possibility of a temporary exit from the euro area should be ensured for a country in distress, and a unique service to be provided in exchange should be sought. Purchasing this service would allow the repayment (de facto the write-off) of a part of the debt. At present, the service to be provided in exchange could be related to the handling of the masses of migrants (refugees). Some larger Greek islands that are a long way from the continent may become more valuable, whereas refugees who are able to fight may be expected to fight for the peace of their respective countries.