JOINT INTERNATIONAL CONFERENCES
10TH EDITION EUROPEAN INTEGRATION REALITIES AND PERSPECTIVES
5TH EDITION THE GLOBAL ADVANCEMENT OF UNIVERSITIES AND COLLEGES

An Evaluation of the Sale of Public Assets as Alternative Public Debt Reduction Strategy in European Countries

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Abstract: Against the backdrop of the recent crisis, many European countries have been confronted to high and unsustainable public debts, the issue of conceiving and implementing debt reduction strategies becoming one of great interest to both the scientific community and public policy-makers. Several options have been put forward, some of them (like fiscal consolidation) explored in depth by researchers and already applied in many countries, while others have benefited of less, even minor attention. Thus, our paper aims to evaluate the sale of public (financial and non-financial) assets as possible alternative for restoring public debt sustainability in European countries, contributes to existing literature by providing a more thorough analysis of a usually overlooked alternative. The paper is designed as a case study, mixing qualitative and quantitative evidence on the topics of interest with regard to the situation of 20 European countries, selected on criteria of data availability. The general conclusion is that the sale of public assets should, at least in the most indebted countries, be incorporated into public debt reduction strategies, but in addition to other measures (mainly fiscal consolidation ones) and always on the basis of realistic and extensive cost-benefit analysis.

Keywords: financial assets; non-financial assets; economic crisis; government debt; public policy

JEL Classification: G01; H27; H63; H82

1 Introduction

Not long after the outbreak of the global economic and financial crisis, in late 2009, it became obvious for some European countries that the worst was yet to come, as a new, sovereign debt crisis, was emerging. As a result of the economic recession, but also of the financial support measures aimed at helping banks and other financial institutions in trouble, public debt severely increased in many countries, becoming unsustainable. In just two years, by 2011, the general government gross debt overpassed 100% of GDP in Belgium, Greece, Ireland, Italy and Portugal, but increased substantially in many other European countries. This was adding to preexisting fiscal vulnerabilities, like the large amount of implicit liabilities resulting from unsustainable public pension schemes (Nuta, 2014). As public authorities realized that the issue of high and increasing public debt should be immediately addressed, it became imperative to conceive and implement public debt reduction strategies aimed at restoring debt sustainability. Several policy approaches were considered, namely fiscal consolidation

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(by means of public expenditure cuts and/or increasing taxes), promoting economic growth, the amortization of public debt through inflation, the sale of public assets and even public default.

On this background, our paper aims to evaluate the sale of public assets as possible alternative for restoring public debt sustainability in European countries. In particular, we seek to answer the following questions:

- What is the amount and composition of financial and non-financial assets that European public authorities hold?
- To what extent the sale of public assets could contribute to public debt reduction in Europe?
- What are the pros and cons of this option and how should it be incorporated into the wider public debt reduction strategy?

Our paper is designed as a case study, mixing qualitative and quantitative evidence on the topics of interest with regard to the situation of 20 European countries (19 EU Member States and Norway). The selection of countries to be included in our analysis was mainly driven by data availability. As data sources, we used the databases of the International Monetary Fund (Government Financial Statistics) and the European Commission (Eurostat), as well as several national sources.

2 Short Literature Review

As the sovereign debts of European countries began to visibly grow, against the backdrop of the economic and financial crisis, threating to become unsustainable, the issue of conceiving and implementing public debt reduction strategies has become one of great interest to both the scientific community and public policy-makers. However, a detailed investigation of all the options of indebted public authorities and of the way they could be exploited, in relation to the implications that an alternative or another would entail, but also with the concrete conditions of each country or period, was rarely addressed in the literature. Only a few studies deal with all the alternatives public authorities have to cut down debts (Reinhart & Rogoff, 2010: Bilan, 2014; Kirkegaard et al., 2011). Most of the studies (among the most recent ones those of Sutherland et al., 2012; OECD, 2012b; Cafiso & Cellini, 2014; Antelo & Peon, 2014) focus on the analysis of a single option, namely that of fiscal consolidation, evaluating the size of the consolidation efforts needed to restore public debt's sustainability, the composition and potential effects of different consolidation measures, or assessing the quality of the measures adopted in different countries. With regard to the evaluation of the sale of public assets as alternative to reduce public debt, only a few studies directly address this issue, and some of them only as complementary measure to other options (IMF, 2012; OECD, 2011; OECD, 2012a). The most conclusive study is that of Bova et al. (2013), that analyzes the size and composition of public non-financial assets for 32 countries, mainly advanced G-20 economies. The authors appreciate that, although governments tend to consider relatively small amounts of such assets to be disposable, their sale could prove to be an important part of future public debt reduction strategies. Rawdanowicz et al. (2011) consider that, although the selling of non-financial assets could help reduce public debt and improve fiscal positions, privatization measures aimed only at raising revenues, without regulatory provisions that address potential market failures, are to be avoided. Referring only to Italy's situation, Fabrizio (2008) concludes that the sale of non-financial assets is complicated in practice and might weaken fiscal discipline. Also, Kirkegaard (2012) estimates both public financial and non-financial (fixed) assets and considers the possibility to dispose of the distressed assets acquired by governments during the crisis to reduce public debt.

An overall assessment of recent studies on public debt reduction strategies shows that, although this subject is widely addressed, by both practitioners and researches, such studies almost unanimously focus on fiscal consolidation strategies, aimed at reducing budget deficits and promoting budget surpluses as means of cutting down public debt. Therefore, our paper contributes to existing literature by providing a more thorough analysis of a usually overlooked alternative, that of the sale of available public financial and non-financial assets.

3 Some Evaluations of the Assets Public Authorities Hold in European Countries

There are two kinds of assets public authorities could use to reduce their outstanding debts, namely non-financial and financial assets. Non-financial assets comprise produced assets (such as buildings, roads, machinery, weapons and equipment, intellectual property products (e.g. computer software and databases; entertainment, literary and artistic originals), valuables, inventories) and non-produced assets (such as land, subsoil resources, water resources, licenses and leases). Financial assets comprise both very liquid assets (such as monetary gold and SDRs, currency and deposits) and less liquid assets (such as shares and other securities, or loans). As we can see in Table 1, the amounts of non-financial assets public authorities hold vary substantially across the European countries for which data have been reported, although differences in definitions and methods of valuations, as well as the reporting of incomplete data could, at least in part, explain for this situation. For example, only a few countries report data on all types of non-financial assets (Czech Republic, France, Slovakia), most of them considering only fixed assets (Austria, Finland, Belgium, Hungary, Lithuania, Slovenia, United Kingdom) and sometimes land, as non-produced asset (Germany, Italy). However, even such incomplete data show us that there are countries that have relatively large holdings of non-financial assets, exceeding by far 100% of GDP. It is mostly the case of some Central and Eastern European countries, like Czech Republic, Hungary or Latvia, possibly in relation to their communist legacy. Also, there are countries where public authorities hold quite small amounts of non-financial assets, compared to the former, of about only 30-50% of GDP, like Austria, Belgium, Finland, Ireland or Norway.

Table 1. Non-financial assets held by the general government sector (% of GDP)

Country	*Year*	*Produced assets, out of which:*	*Fixed assets*	*Buildings and structures*	*Machinery and equipment*	*Other fixed assets*	*Inventories*	*Valuables*	*Non-produced assets, out of which:*	*Land*	*Total non-financial assets*
Austria	2012	:	36.5	33.5	2.8	0.3	:	:	:	:	36.5
Belgium	2010	37.9	37.9	36.4	1.3	0.2	:	:	:	:	37.9
Czech Republic	2012	135.5	128.3	124.4	3.6	0.3	7.1	0.07	19.5	19.5	155.0
Finland	2012	:	49.6	46.6	2.7	0.2	:	:	:	:	49.6
France	2012	58.4	57.5	50.1	3.3	4.2	0.8	0.0	38.4	37.7	96.8
Germany	2012	:	47.8	42.1	3.1	2.6	:	:	:	7.4	55.2
Hungary	2011	113.9	113.9	108.6	5.1	0.2	:	:	:	:	113.9
Ireland	2012	:	:	:	:	:	:	:	:	:	33.5
Italy	2008	51.8	51.8	45.6	5.7	0.4	:	:	32.6	32.6	84.4
Latvia	2010	168.8	166.4	161.9	3.9	0.6	2.3	0.05	15.2	:	184.0
Lithuania	2012	:	54.0	50.9	2.7	0.3	:	:	:	:	54.0
Luxembourg	2011	84.7	57.7	55.5	2.1	0.1	:	:	:	:	84.7
Netherlands	2012	:	65.3	62.2	2.7	0.3	0.08	:	35.3	8.2	100.7
Norway	2012	:	:	:	:	:	:	:	:	:	47.1
Slovakia	2012	:	42.2	28.3	8.0	5.8	2.4	0.05	7.8	7.7	52.4
Slovenia	2011	:	52.8	47.7	4.1	1.0	1.1	:	:	:	53.9
United Kingdom	2012	59.9	59.8	46.6	11.2	2.0	0.05	:	:	:	59.9

Notes: For Germany, national authorities report as non-produced assets only the value of land underlying buildings and structures. For Ireland and Norway, IMF reports only the total amount of non-financial assets held by the general government. According to UK's national methodology, the value of land underlying buildings, structures and cultivated biological resources is included in the value of the latter. The total amount of non-financial assets held by the general government sector has been determined as the sum of all available amounts for different non-financial assets categories, thus the total amount may be underestimated for countries that do not report data for all categories

Source: the authors, data from IMF (2012), IMF (2015), European Commission (2015) and national sources (INSEE, 2014; Office for National Statistics, 2015; Federal Statistical Office, 2014; Marini, M., 2011)

Buildings and structures are the main form of non-financial assets, counting for more than 80% of overall fixed assets (with the exception of United Kingdom and Slovakia) and more than 50% of non-financial assets in all countries, even those for which data on all types of such assets are available (80.3% in the Czech Republic, 54.0% in Slovakia and 51.8% in France). As for non-produced assets, they consist mostly of land, counting for more than 90%, with the exception of Netherlands, where subsoil assets are very important, representing more than 75% of non-produced assets. It thus results that a strategy aimed at reducing public debt by the sale of non-financial public assets should focus on two types of assets, namely buildings and land.

A great variability among European countries is also recorded with respect to general government financial assets, for which more complete and comparable datasets are available. It results from Table 2 that some countries (like France or Norway) have significant holdings of such assets, of over 100% of GDP, while the public authorities of others dispose of only a small amount of financial assets, below 30% of GDP (e.g. Belgium, Hungary, Italy, Latvia, Lithuania), some of those countries also having large public debts (namely Belgium and Italy). Although Norway clearly stands out of other European countries, its situation is a particular one, as it disposes of large oil reserves and invests a great part of the proceeds from oil sales in financial market assets (OECD, 2011). The data in Table 2 also show that, shares and other equity generally count for almost 50% and even more of overall non-financial assets, while currency and deposits, the most liquid assets that could be immediately be used to reduce gross debt, do not generally count for more than 25% (with the, although not very noticeable, exception of Czech Republic, Germany and Ireland).

Table 2. Financial assets held by the general government sector (% of GDP)

Country	*Monetary gold and SDRs*	*Currency and deposits*	*Securities other than shares*	*Loans*	*Shares and other equity*	*Insurance technical reserves*	*Other accounts receivable*	*Total financial assets*
Austria	0.0	4.6	2.5	9.6	16.8	0.0	2.5	36.0
Belgium	0.0	4.1	0.3	2.6	11.9	0.0	5.1	24.0
Czech Republic	:	12.9	0.2	1.0	21.3	0.0	8.6	44.2
Finland	0.0	8.4	23.1	15.8	67.3	0.0	4.8	119.4
France	:	2.7	2.2	3.6	20.6	0.1	9.9	39.0
Germany	:	10.4	3.9	6.9	12.5	0.0	4.3	38.0
Greece	0.0	10.7	6.6	0.6	33.9	0.0	12.4	64.2
Hungary	0.0	6.9	1.7	0.7	14.6	0.0	5.0	28.9
Ireland	0.0	14.8	5.9	4.1	14.6	0.0	5.1	44.5
Italy	0.0	4.8	1.7	5.6	8.0	0.1	8.7	29.0
Latvia	0.4	5.8	0.1	2.4	11.5	:	4.1	24.1
Lithuania	:	5.8	0.3	2.3	14.0	0.0	4.5	26.9
Luxembourg	0.0	11.8	0.5	2.3	53.7	0.0	11.9	80.1
Netherlands	0.0	2.3	5.1	9.4	15.3	0.0	8.4	40.5
Norway	:	8.1	52.7	20.8	109.9	:	10.8	202.4
Portugal	0.0	11.6	5.5	3.5	22.8	0.0	6.8	50.2
Slovakia	:	5.4	0.3	3.9	18.1	0.0	3.7	31.4
Slovenia	0.0	12.0	0.6	4.7	29.9	0.0	6.3	53.5
Spain	0.0	8.2	0.5	6.2	13.9	0.0	4.4	33.3
United Kingdom	1.2	6.6	3.1	4.9	14.6	0.0	5.1	35.5

Notes: Consolidated data for 2012
Source: European Commission (2015)

Also, the amount of available public assets considerably varied in time. In France, where data on general government non-financial assets were available for a longer period of time, their value has continuously risen from 2000 to 2012 (with the exception of 2008), so that the assets available in 2012 were more than double the ones in 2000 (INSEE, 2014). Public financial assets followed the same pattern, their value more than doubled (in Belgium, Czech Republic, Ireland, Spain, Portugal, Slovakia, Finland) or even tripled or quadrupled (in Greece, Latvia, Norway) between 2000 and 2012. However, the value of non-financial assets slightly decreased in many countries in the aftermath of the crisis, mainly in 2008 and 2010-2011 (e.g. in Czech Republic, Ireland, Greece, Spain, France, Italy, Latvia, Lithuania, Hungary, etc.) (European Commission, 2015).

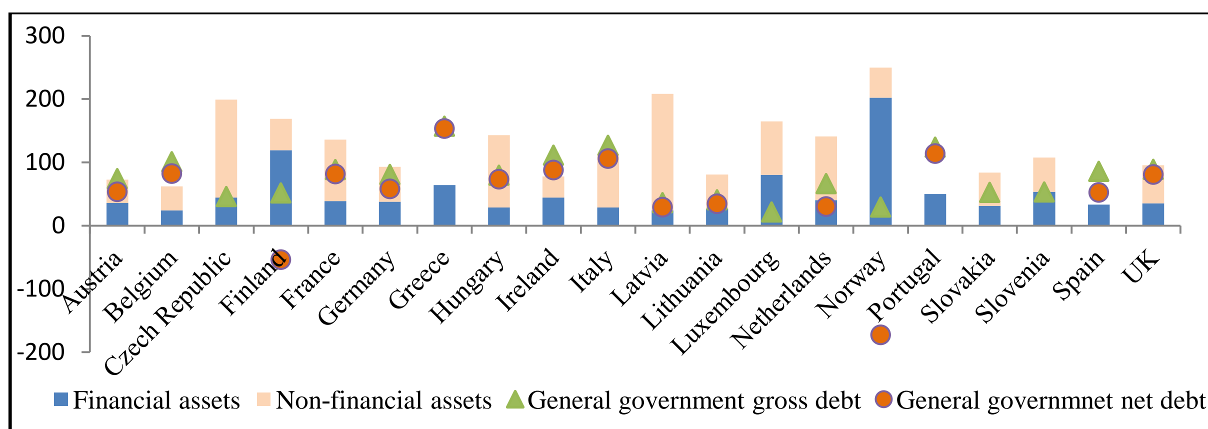
This evolution was mostly determined by the dynamics of real and financial assets prices, that rose in the years preceding the crisis but dropped, sometimes significantly, once the crisis emerged. For financial assets, the drop in prices was, at some extent, compensated by the assets acquired by general governments within their financial sector rescue programs. This proves that, if the sale of public assets is decided to be a good strategy, the moment should be carefully chosen, in order to maximize the revenues raised in this way.

4 The Sale of Public Assets - a "Magical Solution" for Indebted European Countries?

To see if the sale of public assets could have an important contribution to solving the public debt problem in indebted European countries, and if this could be the central pillar of their public debt reduction strategies, a first and simple (though not without shortcomings) approach would be to compare the overall amount of such assets to the consolidated gross debt of the general government sector in each country.

Although such an analysis is highly affected by the lack of data, especially for non-financial assets other than fixed assets, it results from Figure 1 that, for most countries (Czech Republic, France, Finland, Hungary, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Slovakia and Slovenia), the overall value of their public assets exceeds by far the value of their public debt liabilities.

However, these countries are not confronted with very large public debts. In the highly indebted countries, the situation does not appear to be so bright. In Belgium, Ireland, Italy, and also Greece, Portugal and Spain (although in these later cases data for non-financial assets have not been available), even by the sale of all available public assets, public debt could not be liquidated.

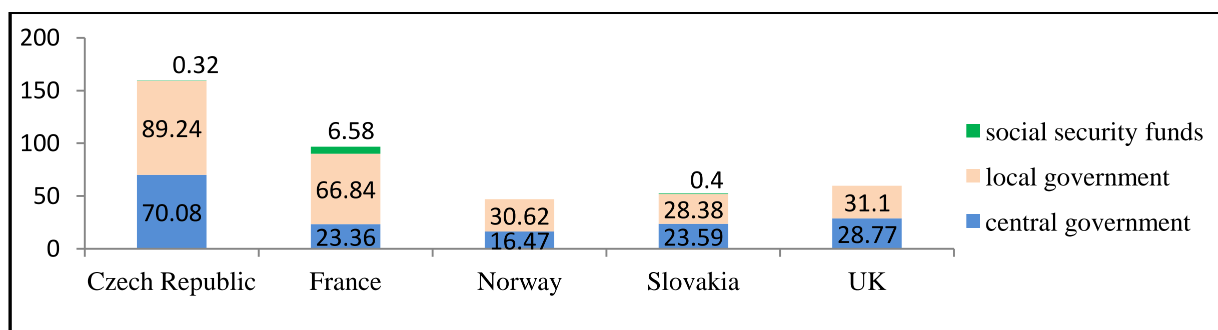


Notes: Data for 2012, with the exception of general government non-financial assets, for which data can be for previous years (see table 1). For Greece, Portugal and Spain data were not available for general government non-financial assets, while for Czech Republic, Luxembourg, Slovakia and Slovenia, data on net debt were not available.

Source: the authors, data from IMF(2012), IMF (2014), IMF(2015), European Commission (2015) and national sources (INSEE, 2014; Office for National Statistics, 2015; Federal Statistical Office, 2014; Marini, M., 2011)

Figure 1. Total amount of financial and non-financial assets of the general government sector and general government gross and net debt (% of GDP)

A more credible strategy would rely mostly on the sale of financial assets, for which data are available for all European countries. A common approach, in this respect, is to compare the value of general government gross debt with the value of financial assets that could, at least in principle, be liquidated in order to repay the former. By subtracting such financial assets from gross debt, a new concept, of net debt arises. A small positive and even negative value of the general government net debt would imply that available financial assets cover, for the most part, existing debt liabilities, and so public debt problem could be, at least apparently, easily dealt with. From this point of view, the situation, as depicted in Figure 1, appears to be even more alarming. With the exception of Finland and Norway, all the countries included in our analysis (for which data on net debt have been reported) have positive general government net debt, exceeding 100% of GDP in Greece, Italy and Portugal, and ranging between 80-100% of GDP in Belgium, France, Ireland and United Kingdom.



Notes: Data for 2012, with the exception of Czech Republic, for which data are for 2010. For Norway and United Kingdom, the non-financial assets of the central government include those of the central social security funds.

Source: the authors, data from IMF (2015) and national sources (Czech Statistical Office, 2012; INSEE, 2014; Office for National Statistics, 2015)

Figure 2. The amount of non-financial assets by levels of government (% of GDP)

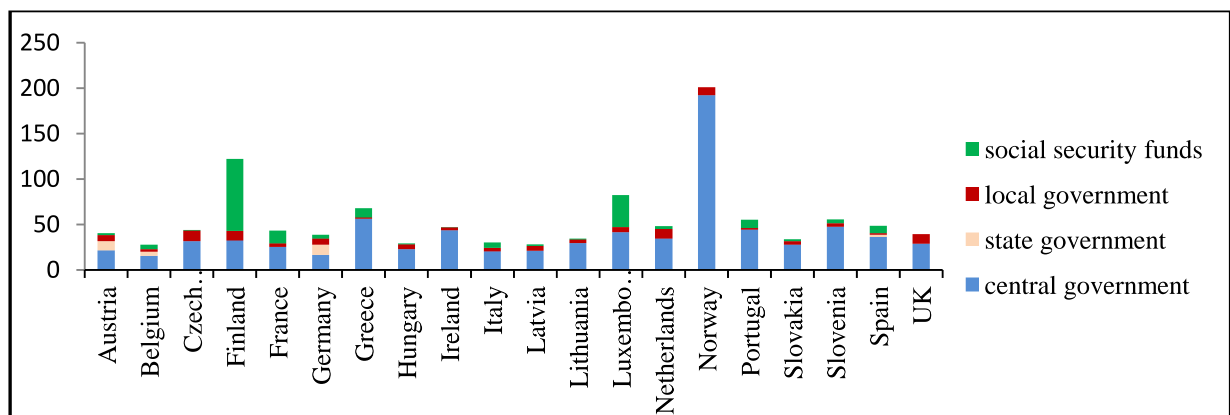
An important issue when evaluating the sale of public assets as an alternative public debt reduction option is that arising from decentralization. In particular, the proceeds resulting from the privatization of public companies or the sale of other public assets should be used by the authorities owning these

assets to repay their debts. In this respect, it becomes relevant to evaluate the amount of public (financial and non-financial) assets and corresponding debt liabilities by levels of government.

Although data on non-financial assets by levels of government are available for only a small number of countries, it results from Figure 2 that real assets are for the most part owned by local governments, while social security authorities hold only small amounts of such assets. Local governments own 55.9% of overall non-financial assets in Czech Republic, 69.1% in France, 65.0% in Norway, 54.2% in Slovakia and 51.9% in United Kingdom.

The situation is quite different with respect to financial assets. It results from Figure 3 that they are held mostly by central authorities, with some exceptions like Finland (where social security funds play an important role) or Germany (where the distribution of financial assets holdings among different levels of government is more even). In countries like Greece, Ireland, Lithuania, Norway, Portugal, Slovakia and Slovenia, central governments hold more than 80% of overall financial public assets.

Considering that local public debt represents only a small part of the overall general government debt in most of the European countries, generally less than 10% (and even much smaller in some highly indebted European countries like Greece – 0.6% and Ireland – 2.5%) (European Commission, 2015), it thus results that the sale of financial assets is expected be the main option for public debt reduction by means of assets selling, when such an alternative is even considered.



Notes: Data for 2012. Data on social security funds' financial assets were not available for Norway and United Kingdom
Source: the authors, data from the European Commission (2015)

Figure 3. The amount of financial assets by levels of government (% of GDP)

At the first sight, the sale of public assets, when large amounts of such assets are available, is an easy way to deal with unsustainable public debts, as it allows public authorities to raise a large amount of resources and in a quite short period of time. No one can argue that it is easier to sell buildings, land and equities than to cut down public expenditures (especially those with the remuneration of public employees and social security ones, leading to strong social reactions) or to increase taxes. However, when deciding to consider such an option as part of public debt reduction strategies, public authorities should carefully assess all economic, social, and even political consequences of such a decision.

However tempting (and highly appreciated by the international community) it may seem, the sale of public assets may entail several negative effects, as follows:

- It might give rise to future revenue losses, if such assets are a source of public income. This is especially important for local governments that rely, on a greater extent, on property revenues.

- Public expenditures may rise in the future, for example when public buildings are sold and alternative space must be leased.
- It might entail the loss of jobs and deterioration of public services, especially to poorer communities (e.g. health care services).
- In some particular cases, like in the railway or energy industry, the few players on the market could lead, once privatization is accomplished, to the creation of a private monopoly or oligopoly, and the prices and tariffs could increase. Consumers are thus affected, although governments could still support them through subsidies.
- Governments may lose control over national resources (land, subsoil resources).
- Some non-financial assets (e.g. works of art) are heritage assets, having important historical value.
- The future creditworthiness of public authorities could be damaged as such assets are a general guarantee of government's ability to repay its debts.
- The political parties responsible for this decision may have to deal with the loss of political capital as such measures are not very popular, frequently been associated with the loss of "national identity and pride".

In some cases, however, the sale of public assets could prove to have additional benefits than the raising of revenues. If bank assets holdings are liquidates, this could help reduce the exposure of government balance sheets do macroeconomic shocks. Also, this could help reduce future costs with the administration of such assets and, when resources are less efficiently administrated by public authorities, this could boost economic efficiency.

In fact, except for the situation when public debt problems are really pressing, one rule of thumb should be to accept such an alternative only if some other goals are aimed at in addition to revenue raising, like increasing economic efficiency. In some cases, like buildings or transport infrastructure, better options are available, like leasing buildings or setting up user fees (e.g. road tolls).

Also, policy-makers should always keep in mind that the sale of public assets gives rise to one-off resources so, if the causes leading to the unsustainable growth of public debt are not temporary ones and adequate corrective measures have not been adopted, it is highly expected that public debt issues will rise again. So, such alternatives should be accompanied by wider reforms and programs aimed at keeping budget deficits low and ensuring the long-term sustainability of public finances.

Finally, as the prices of financial and real assets generally are still low compared to their pre-crisis level (Simionescu & Gherghina, 2014), to wait until financial and real estate markets fully recover, if public debt is not a very pressing issue, would be a good decision, in order to maximize revenue.

5 Conclusions

The general conclusion of our analysis is that, although the sale of public assets (mainly financial ones) should, at least in most indebted countries, be incorporated into public debt reduction strategies, it should not be the core part of such strategies, but come in addition to other measures, mainly fiscal consolidation ones.

On the one hand, even all available (financial and non-financial) public assets do not cover, in some countries with large public debts (like Belgium, Ireland, Italy but possibly even Greece, Spain and

Portugal, for which data on non-financial public assets have not been available), the value of their general government gross debt. On the other hand, this would only temporarily solve the problem, as when the issue of unsustainable budgetary policies is not addressed, the debt problem is very likely to reappear, at least when the economy will once again be confronted with macroeconomic and financial shocks.

The decision to sell public assets, in order to cut down public debts, should rely on realistic cost-benefit analysis, taking into account both positive results (e.g. lower public debt and future interest payments, increasing economic efficiency) and costs (the loss of future revenue sources, higher public expenditures, the loss of control over national natural resources or of political capital), according to the particularities of each country and period. Maybe with the exception of some really serious debt problems, such a decision definitely should not be driven only by the necessity to raise revenue.

6 Acknowledgement

This work was supported by the European Social Fund through Sectoral Operational Programme Human Resources Development 2007–2013, project number POSDRU/159/1.5/S/142115, project title "Performance and Excellence in Doctoral and Postdoctoral Research in Economic Sciences Domain in Romania".

7 References

Antelo, M. & Peon, D. (2014). *Fiscal consolidation and the sustainability of public debt in the GIPSI countries.* Cuadernos de Economia, Vol. 37, Issue 103, pp. 52-71.

Bilan, I. (2014). Policy Options for Restoring Public Debt Sustainability in EU Member States. *Ovidius University Annals. Economic Sciences Series*, Vol. XIV, Issue 1, pp. 99-104.

Bova, E., Dippelsman, R., Rideout, K. & Schaechter, A. (2013). Another Look at Governments' Balance Sheets: The Role of Nonfinancial Assets. *IMF Working Paper 13/95*.

Cafiso, G. & Cellini, R. (2014). Fiscal consolidations and public debt in Europe. *International Tax and Public Finance*, Vol. 21, Issue 4, pp. 624-644.

Czech Statistical Office (2012). *Historical Yearbook of National Accounts 1990-2010.* Retrieved from http://www.czso.cz/csu/2012edicniplan.nsf/engkapitola/5014-12-eng_n_2012-09, date: 22.01.2015.

European Commission (2015). *Eurostat database*. Retrieved from http://ec.europa.eu/eurostat, date: 20.01.2015.

Fabrizio, S. (2008). Should Italy Sell its Nonfinancial Assets to reduce the debt? *IMF Policy Discussion Paper 08/1*.

Federal Statistical Office (2014). *Balance Sheets for Institutional Sectors and the Total Economy 1999-2013*. Retrieved from https://www.destatis.de/EN/Publications/Specialized/Nationalaccounts/BalanceSheetPDF_5816104.pdf?__blob=publicationFile, date: 22.01.2015.

IMF (2015). *Government Finance Statistics database*. Retrieved from http://elibrary-data.imf.org/DataExplorer.aspx, date: 20.01.2015.

IMF (2014). *World Economic Outlook Database (October 2014).* Retrieved from http://www.imf.org/external/pubs/ft/weo/2014/02/weodata/download.aspx, date: 27.01.2015.

IMF (2012). Tacking Stock. A Progress Report on Fiscal Adjustment. *Fiscal Monitor,* October 2012, World Economic and Financial Surveys.

Institut National de la Statistique et de Etudes Economiques – INSEE (2014). *Comptes de patrimoine des secteurs institutionneles*. Retrieved from http://www.insee.fr/fr/themes/theme.asp?theme=16&sous_theme=5.4.2, date 22.01.2015.

Kirkegaard, J.F. (2012). General Government Net Indebtedness: Is There a Role for the Asset Side? *The Transatlantic Relationship in an Era of Growing Economic Multipolarity* (Ed. Kirkegaard, J.F., Veron, N. & Wolff, G.B.), Peterson Institute for International Economics, Special Report 22. Brussels: Bruegel.

Kirkegaard, J.F. , Reinhardt, C. & Sbancia, M. B. (2011). Financial Repression Redux. *Finance and Development*, Vol. 48, No. 1, pp. 22-26.

Marini, M. (2011). Compilation of annual balance sheets for non-financial assets: methodological approach, main outcomes and open issues in the Italian experience. *Conference on Strengthening Sectoral Position and Flow Data in the Macroeconomic Accounts IMF – OECD*, February - March.

Nuta, A. C. (2014). Some comments about the impact of population ageing on fiscal indicators. *Journal of Public Administration, Finance and Law,* Issue 6, pp. 188-194.

Office for National Statistics (2015). *National balance sheet*. Retrieved from http://www.ons.gov.uk/ons/index.html, date: 22.01.2015.

OECD (2012a). Managing government debt and assets after the crisis. *OECD Economics Department Policy Notes,* No. 10, February.

OECD (2012b). What are the Best Policy Instruments for Fiscal Consolidation?. *OECD Economics* Department Policy Notes, No. 12, April.

OECD (2011). Government at a glance 2011. Retrieved from http://dx.doi.org/10.1787/gov_glance-2011-en, date: 8.01.2015.

Reinhart, C.E. & Rogoff, K.S. (2010). Growth in a time of debt. *CEPR Discusión Paper*, no. 7661.

Rawdanowicz, L., Wurzel, E. & Ollivaud, P. (2011). Current Issues in Managing Government Debt and Assets. *OECD Economics Department Working Papers*, No. 923, OECD Publishing.

Simionescu, L. N. & Gherghina, Ș. C. (2014). Corporate social responsibility and corporate performance: empirical evidence from a panel of the Bucharest Stock Exchange listed companies. *Management & Marketing. Challenges for the Knowledge Society,* Vol. 9, No. 4, pp. 439-445.

Sutherland, D., Hoeller, P. & Merola, R. (2012). Fiscal Consolidation: Part 1. How Much is Needed and How to Reduce Debt to a Prudent Level?. *OECD Economics Department Working Papers*, No. 932, January.