

AUTOMATIC SOCIAL STABILIZERS WHAT THEY ARE AND HOW THEY FUNCTION¹

Alina Georgeta AILINĂ, PhD Candidate*

Abstract

At the global level and especially in Europe, current economic and financial crisis has had a major impact on the economy, on the output and especially on the employment and incomes. As it is known in economy, as a natural process, some elements (e.g. progressive tax system) can help to counter or to mitigate the adverse evolution of the business cycle and the output fluctuation. Normally, in the recession, the collection of taxes decreases in order to support the private income and the aggregate demand and the unemployment compensation is increased. The fast response of the automatic stabilizers is mostly due to the fact that do not require any modification of the laws and any state discretionary action in order to obtain the necessary results, being usually unnoticed by the general public. Considering that social policy can provide important tools to counter the cyclical development of the economy, this article analyses the social security benefits in report to the GDP evolution, in Europe and in Romania and proposes some solutions for the improvement of the stabilization effect of those instruments.

Keywords: automatic social stabilizers, business cycle, output fluctuation

JEL Classification: E32, H24, H31

Introduction

The current economic and financial crisis has left its scars on disposable household incomes, companies' profits, private consumption and employment all over the world and especially in

¹This paper was presented at the Annual International Scientific Conference, 2nd Edition Financial and Monetary Economics – FME 2014, organized by the Centre for Financial and Monetary Research “Victor Slăvescu” – Romanian Academy, October 24, 2014, Bucharest, Romania.

* Scientific Researcher III, “Victor Slăvescu” Centre for Financial and Monetary Research, Romanian Academy, Bucharest

Europe. Thus, in the crisis times it is important to have some automatic, non-discretionary instruments (preferably both on revenue and expenditure side) to counteract output fluctuations and the downturn of economic cycle. This is the case of automatic stabilizers, especially fiscal ones. A part of the automatic fiscal stabilizers (i.e. progressive income taxes) are the automatic social stabilizers (from the sphere of social insurance contributions or social benefits and transfers, as unemployment insurance benefits). In the case of economic downturns, the stabilization effect of an economy is related to the ability of transfers and taxes to damp the adverse movements in aggregate demand and to stabilize incomes, in the sense that taxes net of transfers should act more pronounced in order to make disposable income less affected by the unfavourable business cycle (i.e. in the crisis fewer taxes are collected and more transfers are paid, thus automatic stabilizers sustain consumption and private incomes).

Automatic stabilizers act usually in a silent manner, beginning its compensatory anti-cyclical effect without requiring any new policy decisions. This is why, in the period between 1970s until the late 1990s, were almost unnoticed, until the economic thinking followed real business cycle theory and aggressive anti-inflation policies (Ghilarducci, T., Saad-Lessler, J. and Fisher E., 2011, p.p. 5-6).

The profound recession from 2008, reversed the global tendency to ignore the positive implications of automatic stabilizers on the economies of the world. Thus, social policies, which are often condemned to maintain a low competition on labour market, have quickly regain importance sustaining household consumption even when many employees lost their jobs, wages have stalled or even decreased, and other incomes have vanished. Social transfers, as is the case of unemployment insurance and safety nets programs, seem to be the solution for world economies, and especially for Europe, view shared by Dolls, Fuest, and Peichl (2010a) which have considered that “social transfers, in particular the rather generous systems of unemployment insurance in Europe, play a key role in the stabilization of disposable incomes and explain a large part of the difference in automatic stabilizers between Europe and the US”.

But not only unemployment insurance acts as an efficient automatic stabilizer, Darby and Melitz (2008) argue that expenditures on health, disability and retirement react significantly to economic cycles. Also, in their study, Ghilarducci, T., Saad-Lessler, J. and Fisher E., (2011, p.p 12) find that “The results show that the Social

Security program acts as an automatic stabilizer, as do the disability program, the unemployment compensation program, Medicare, and the income tax (for taxes, as the economy grows, tax collections grow). Among these government programs, the strongest impact comes from taxes, followed by unemployment compensation, Social Security, and disability, respectively". At the same time, according to their analysis, a significant destabilizing effect seem to have any pension plan that is financial market base, as is the case of 401(k) pension plans in United States (US.).

Although, the discretionary fiscal policy has important shortcomings as: implementation lags, irreversibility, inflexibility, crowding out effects, problems in calibrating needed fiscal stimulus at any particular point in time (Swanepoel and Schoeman 2003), and automatic stabilizers have not (Baunsgaard and Symansky 2009), their limited use is due to the lack of sufficient understanding of their functioning mechanism.

Taking into account the above, and agreeing with the views that consider social policy is an important tool to counter the cyclical development of the economy, this article analyzes the social security benefits in report to the GDP evolution, in Europe and especially in Romania.

Description of the problem

In periods of economic growth, public policy behaviour does not seem too important for public or specialists, but in a case of recession or even of economic crisis, the public policy stabilizing effect becomes crucial. Fiscal stimuli or spending cuts are fashionable in the analyses of economists, but is usually neglected the fact that an important part of stabilisation of the demand is achieved without any discretionary policy measures, through the automatic stabilisers. Furthermore, although does not involve additional costs, the role of automatic stabilizers in the economy is often overlooked. In my opinion the design of automatic stabilizers should be done in times of economic growth, while their calibration should be done especially considering their behaviour from the periods of recession or even economic crisis, when their proper functioning is tested.

We can say that, when economy suffers a downturn or is in a deep economic crisis, it affects population directly through the income modification impact on consumption and labour supply by the increase in unemployment rates, and indirectly through wealth effect

on consumption. Also, in a economic contraction, asset prices decrease, interest rates fall, business plans and investments are frozen and many people may intend to delay retirement, or contrary, if their job is insecure (knowing that older job seekers have difficulty finding work) they may intend to retire early (Coile and Levine 2009) and even young employees may find it more difficult to find a job in a limited labour market.

Also, the economic contractions usually affect households asymmetrically, some are more affected (losing their jobs and suffering a sharp decline in income) and some are less affected, their salaries being on short term unaffected. Losing a part of income is an important shock for some households, but being unemployed puts supplementary pressure on the household income drop, thus having a double shock. Also, not always a given shock to gross income translates into a change in disposable income, for example in the case of a progressive income tax the disposable income is less affected. At the same time, it is true that not all the changes of disposable income are translated into a modification of the current demand for goods and services, especially when households can use accumulated savings (including deposits) or can borrow some limited sums of money from banks in the idea that the changes in disposable income are transitory. In this case scenario, there is no need for a stabilization effect or the effect is null, but when the disposable income is affected in a permanent manner then the automatic stabilisers can be efficient.

Although there are many studies that analyze the behaviour of automatic stabilizers in certain parts of the world (especially in Europe and in the United States) and in different periods of time, however their mechanism of operation is still hiding important details that can reopen discussions or even new areas of research. An example can be given by the constraints imposed by the Maastricht criteria and the Stability and Growth Pact in Europe. According to Eichengreen (1996), "Fiscal federalism will not be available to offset recessionary shocks for the foreseeable future. The effects of coordination designed to internalize the cross-border spillovers of fiscal policies are too weak to solve the problems at hand. Freeing up fiscal policy to replace national governments' loss of monetary independence requires, at a minimum, allowing European countries' automatic stabilizers to operate. That in turn requires a flexible application of the Excessive Deficit Procedure and the Stability Pact."

Literature Review

First we should clear out the concept of automatic stabilizers. Thus, according to the Ghilarducci, T., Saad-Lessler, J. and Fisher E. (2011), in Egle (1952) work, he shows three criteria for describing an automatic stabilizer, so the program must be: 1. permanently installed, 2. well-defined in its main provisions and purposes, and 3. reliably linked to cyclically sensitive criteria (indexes) in the sense that the device starts to operate counter-cyclically as soon as these criteria indicate the need for action. Eaton and Rosen (1980) define the automatic stabilizers as those elements of fiscal policy which mitigate output fluctuations without discretionary government action. Also, Eilbott (1966) describes automatic stabilizers as the “fiscal or monetary mechanisms that automatically reduce the flow of income or money to individuals and corporations during periods of expansion and which increase such flows (relative to what they would have been in the mechanisms' absence) in times of recession”.

Dinga and all (2011) describe an automatic (fiscal) stabilizer as “a device of institutional type, of normative origin, with a structural nature, with a sphere of action macroeconomic and countercyclical and with a default (automatic) triggering, having as a final purpose the reduction of macroeconomic output volatility (the GDP volatility)”.

According to van den Noord (2000), when we talk about of intensity of the stabilization effect, it is considered that the stabilizing property to be stronger in a more progressive tax system. In Europe, there is a widespread conception that tax progressivity is higher than in US (i.e. Alesina and Glaeser, 2004 or Piketty and Saez, 2007).

When we talk about the investigation techniques of the automatic stabilizers conduct the literature uses time series techniques and microsimulation models. In the time series approaches, stabilization effects for disposable income ranges from 30 % to 40 % for the US (Sachs and Sala-i-Martin, 1992 and Bayoumi and Masson, 1995), while in studies which use microsimulation models the estimations of the stabilization effects varies between of 32 % to 58 % for the countries of EU-15 (i.e. Mabbett and Schelkle, 2007). Also, some studies use macro data but are a few which use micro data as is the case of Auerbach and Feenberg (2000), Dolls, M., Fuest, C. and Peichl, A. (2010a, b) etc. This kind of approach allows an investigation of the causal effects of different types of shocks on household disposable income and on employment (simulation studies), holding everything else constant (thus avoiding

endogenous problems) (i.e. Bourguignon, F., Spadaro, A., 2006), which is more problematic in the case of using macro data. According to the study of Hofer, Hanappi and Müllbacher (2012), using microsimulation model on automatic stabilizers in Austria, examining the functioning of tax-benefit system in order to cushion macroeconomic shock, the authors conclude that 46 percent of the income shock is absorbed by automatic stabilizers, while in the case of an unemployment shock they find a stabilization coefficient of 68 percent.

In the study of Dolls, M., Fuest, C. and Peichl, A. (2010a), which analyzes the effectiveness of tax transfer systems in Europe and the US, they find that “automatic stabilizers absorb 38% of a proportional income shock and 47% of an idiosyncratic unemployment shock in Europe, compared to 32% and 34% in the US. Thus, the disposable income cushioning leads to demand stabilization of up to 30% in Europe and up to 20% in the US and they find also a great heterogeneity within Europe with stabilization being much lower in Eastern and Southern than in Central and Northern Europe”. One argument can be that unemployment benefits from countries such as Greece, Italy, Portugal, Spain Poland, Slovenia or Estonia are low and their stabilization effect for low income groups is very weak. Another argument, in this authors view, is that the “government size is often positively correlated with per capita incomes, at least in Europe. The stabilization of disposable incomes will therefore be higher in high income countries, just as a side effect of a larger public sector”. Also, according to Blanchard (2000), in the case of automatic stabilizers functioning, output volatility should be smaller in countries with larger governments. The idea is sustain also by the fact that, over the last century, the government size has increased, whereas output volatility has decreased (Romer, 1999). The study of Silgoner et al. (2003) support that idea by examining the smoothing impact of automatic stabilizers on business cycle volatility, for the period of 1970-1999, within a linear and nonlinear framework for a panel of EU countries, concluding that there is a negative relationship between the volatility of output and the government size.

Another important aspect is that the openness of an economy can influence the stabilization effect of the tax and transfer system, according to Rodrik (1998) income stabilization is greater in more open economies. At the same time, the degree of openness of an economy is increasing the spill over effect of discretionary measures between the countries. Maybe, this is why many open economies has

implemented weak stimulus programs and did not take into considerations the automatic stabilizers when fiscal policy is designed.

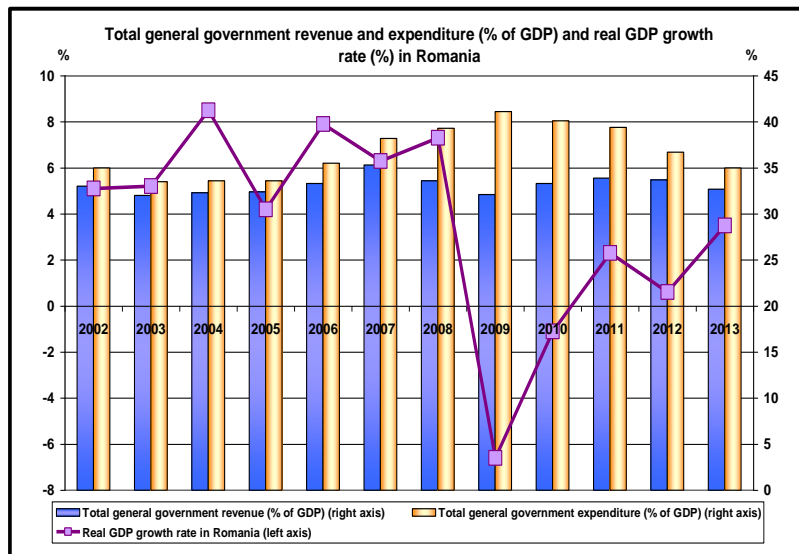
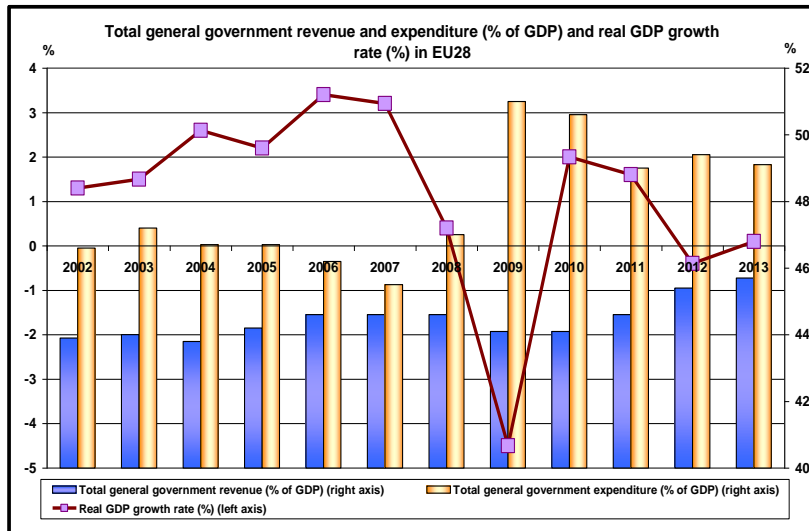
Methodology and data sources

The article is based on a methodology using a logical analysis, in order to clarify some conceptual issues of what automatic stabilizers are and what they do, but at the same time, based on Eurostat data, I tried to show some links between real GDP evolution and social contributions and social benefits (calculated as a percentage of GDP) in Europe and especially in Romania. The present study of the behaviour of automatic stabilizers is not intended to be a rigid or a restrictive one, based only on previous experiences. Though it contains many references from literature, the article aims to have the freedom to share or not the visions of other authors.

Results obtained

As we know, automatic stabilizers may be defined as those elements of revenue and expenditure which adjust automatically to the economic cycle, but when we look at the behaviour of real GDP growth rate and the total general government revenue and expenditure in European Union (with 28 countries) and Romania, for a period from 2002 – 2012, the above affirmations are not so clear all the time (see Fig.1). Mostly expenditures are decreasing with the increase of real GDP growth rate, and are growing when GDP collapses, as it is the case of year 2009 (both for EU28 and Romania), but they still have a series of structural or conjectural rigidities, which don't allow them to react deeply or immediately to changes in economic cycle. Still, higher stiffness can be observed in the case of revenues, they hardly fit to the evolution of real GDP, but it is difficult to say if these realities are due to the discretionary or non-discretionary (automatic) aspects of fiscal-budgetary policy. According to Kennedy et al (2004), revenues are more responsive to variations in output than expenditures, thus tax policy can make automatic stabilizers to have important effects on output.

Figure1 – Total general government revenue and expenditure and the real GDP growth rate in EU28 and in Romania

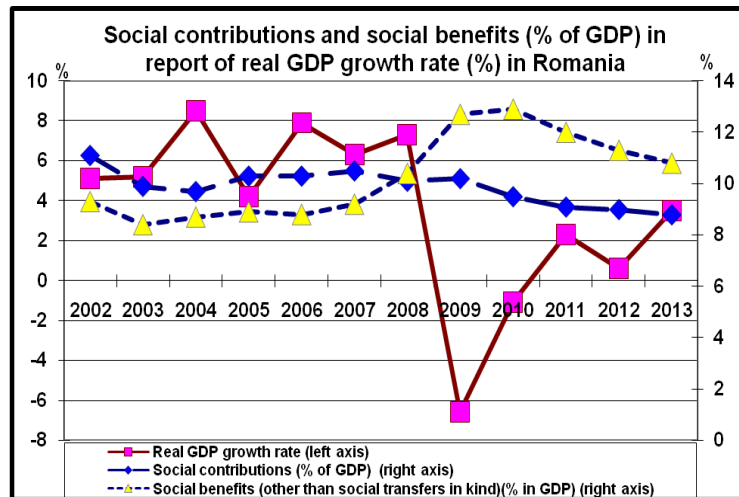
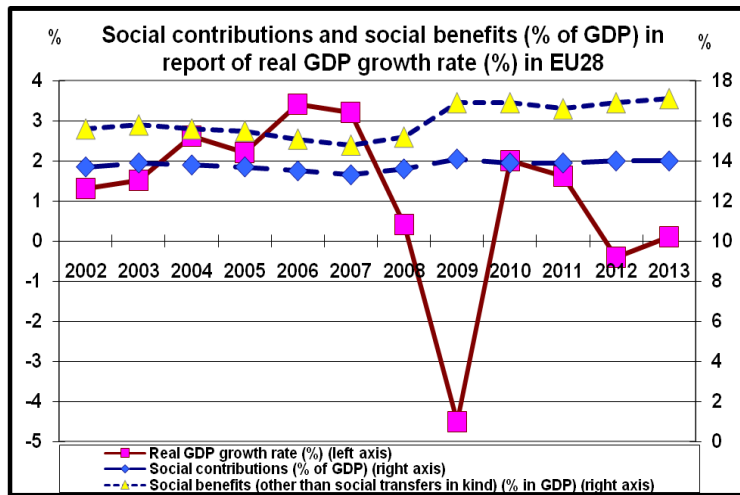


Source: Eurostat data

When we look at the evolution of social contributions and social benefits in report of the real GDP growth rate (see Fig.2), we can see that contributions are pretty stable and have little to do with

GDP evolution, but social benefits act prominently countercyclical, both at EU28 level and in Romania.

Figure 2 – Social contributions and social benefits (% of GDP) in EU28 and in Romania

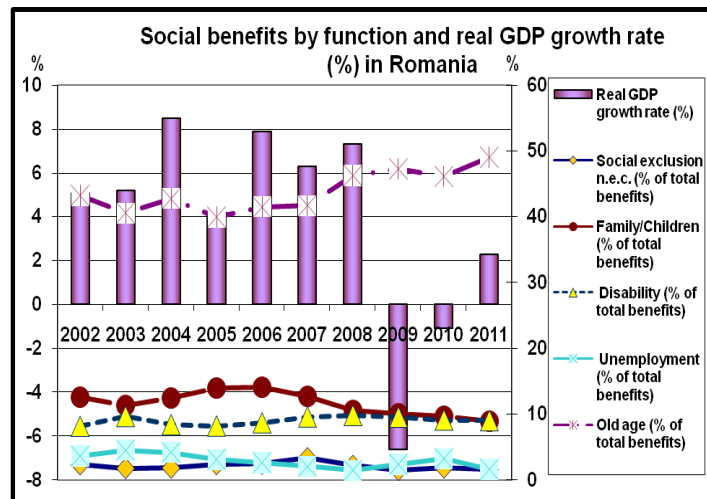
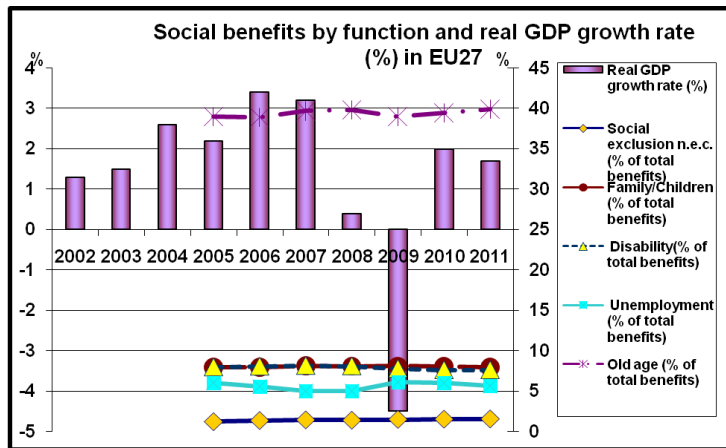


Source: Eurostat data

If we take into consideration the components of social benefits (evaluated as % of total benefits) (see Fig. 3) some of them act rather in the same direction with the economic cycle or they keep

unchanged their trajectory and do not seem to have a negative feedback to the real GDP growth rate as is suppose to have any automatic stabilizer. Thus, it is important to know how much of a component of social benefit system is affected by discretionary policy action.

Figure 3 Social social benefits by function and real GDP growth rate (%) in EU27 and in Romania



Source: Eurostat data

Conclusions

Administrative, legislative and political factors may be important elements in disrupting the normal functioning of macroeconomic policy, argument for which discretionary (fiscal) policies should be avoided as much as possible. Discretionary policies create important costs and implementation lags, irreversibility in an automatic manner according to the needs of economic cycle and they can possibly generate deficits and accumulation of debt. These flaws are not found in automatic (fiscal) stabilizers, which practically offer a quick decision making process. From automatic fiscal stabilizers a particular class of stabilizers can be considered the social. On the side of expenditure, as an important automatic stabilizer it is considered unemployment insurance benefits, but the results from literature and personal findings are rather not so clear, especially considering the particularities of different countries and the evolution over specific moments in time (i.e. crisis periods).

In the context of Stability Growth Pact, which widened the rule-base policies in the sense of imposing tough fiscal rules, the role of automatic stabilizers and stabilization policies became once again important, being numerous voices which are calling for their consolidation in the European Union.

This aspect is reinforced by the discrepancy between the north and south countries of the European Union in terms of managing the social component of the budgetary system. The positive effect is given by the size of state in the Nordic countries and especially of their involvement in providing adequate social protection. Thus, providing a social policy, implicitly a wage policy unitary, consistent, transparent and fair in the EU could better cushion any negative shocks affecting EU countries as a whole.

References

1. Alesina, A., Glaeser, E. (2004), "Fighting Poverty in the U.S. and Europe: A World of Difference", Oxford University Press.
2. Auerbach, A., Feenberg, D. (2000), "The significance of federal taxes as automatic stabilizers", *Journal of Economic Perspectives* 14: 37-56.
3. Bayoumi, T., Masson, P. R. (1995), "Fiscal flows in the United States and Canada: Lessons for monetary union in Europe", *European Economic Review*, 39, 253-274.
4. Baunsgaard, T., Symansky, S.A (2009), "Automatic Fiscal Stabilizers: How Can They Be Enhanced Without Increasing the

- Size of Government?”, IMF Fiscal Affairs Department, September, 28.
5. Blanchard, O. (2000), Commentary, “FRBNY Economic Policy Review”. April 2000, 69-73.
 6. Bourguignon, F., Spadaro, A. (2006), “Microsimulation as a tool for evaluating redistribution policies”, *Journal of Economic Inequality* 4(1): 77-106.
 7. Coile, C., Levine, P.B. (2009), “The Market Crash and Mass Layoffs: How the Current Crisis May Affect Retirement”. National Bureau of Economic Research Working Paper 15395, <http://www.nber.org/papers/w15395>.
 8. Darby, J. and Melitz, J. (2008), “Social spending and automatic stabilizers in the OECD”, *Economic Policy* Volume 23, Issue 56, p. 716-756, Center for Economic Policy Research, Center for Economic Studies, Maison des Sciences de l'Homme.
 9. Dinga and all (2011), coord., “Sustenabilitatea economică prin politici de ajustare în contextual globalizării”, Publishing House of Romanian Academy, Bucharest.
 10. Dolls, M., Fuest, C. and Peichl, A. (2010a), “Social Protection as Automatic Stabilizer”, Paper prepared for the EU Presidency Joint Conference *Assuring Adequate Pensions & Social Benefits for All European Citizens*, Liège, September 7-8, 2010.
 11. Dolls, M., Fuest, C., Peichl, A. (2010b), “Automatic stabilisers and the economic crisis in Europe and the US”, <http://www.voxeu.org/index.php?q=node/5529>.
 12. Eaton, J., Rosen, H. (1980), “Optimal redistributive taxation and uncertainty”, *Quarterly Journal of Economics* 95: 357-364.
 13. Egle, W.G. (1952), “Economic Stabilization”, University of Cincinnati Press.
 14. Eichengreen, B. (1996), “Saving Europe's Automatic Stabilizers”, 12/03/96 Forthcoming: National Institute Economic Review, Berkeley University of California, US. Online at: <http://eml.berkeley.edu/~eichengr/research/c96-82.pdf>.
 15. Eilbott, P. (1966), “The Effectiveness of Automatic Stabilizers”, *The American Economic Review*, Vol. 56, No. 3 pp. 450-465.
 16. Ghilarducci, T., Saad-Lessler, J., Fisher, E. (2011), “RETIREMENT INCOME SECURITY PROJECT SCEPA” *Working Paper 2011-2 The Automatic Stabilizing Effects of Social Security and 401 (k) Plans*, Schwartz Center for Economic Policy Analysis and Department of Economics New School for Social Research, 6 East 16th Street, New York, NY 10003, online at: http://www.economicpolicyresearch.org/images/docs/research/retirement_security/Auto%20Stab%20paper%20FINAL.pdf.
 17. Hofer, H., Hanappi, T., Müllbacher, S. (2012), “A Note on Automatic Stabilizers in Austria: Evidence from ITABENA”, Working Paper No.

- 1203, The Austrian Center for Labor Economics and the Analysis of the Welfare State, JKU Linz Department of Economics, Austria.
18. Kennedy, S., Nghi, L., Morling, S., Yeaman, L., “Fiscal Policy in Australia: Discretionary Policy and Automatic Stabilisers”. Treasury/ANU Macroeconomic Conference, (2004): 1-50. Online at: <http://cama.anu.edu.au/macroworkshop/luke%20yeaman.pdf>
 19. Mabbett, D., Schelkle, W. (2007), “Bringing macroeconomics back into the political economy of reform: the Lisbon Agenda and the ‘fiscal philosophy’ of EMU”, *Journal of common market studies*, 45 (1). pp. 81-103.
 20. Piketty, T., Saez, E. (2007), “How Progressive is the U.S. Federal Tax System? A Historical and International Perspective”, *Journal of Economic Perspectives* 21 (1): 3-24.
 21. Rodrik, D. (1998), “Why Do More Open Economies Have Bigger Governments?”, *Journal of Political Economy* 106: 997-1032.
 22. Romer, C.D. (1999), “Changes in Business Cycles: Evidence and Explanations”, *Journal of Economic Perspectives*. 13: 23-44.
 23. Sachs, J., Sala-i Martin, X. (1992), “Fiscal Federalism and Optimum Currency Areas: Evidence for Europe from the United States” in M. B. Canzoneri, V. Grilli and P. R. Masson (eds.), *Establishing a Central Bank: Issues in Europe and Lessons from the U.S.*
 24. Silgoner, M.A., Gerhard, R., Crespo-Cuaresma, J. (2003), “The Fiscal Smile: The Effectiveness and Limits of Fiscal Stabilizers”, IMF Working Paper, European I Department, September.
 25. Swanepoel, J.A., Schoeman, J.N. (2003), “Countercyclical Fiscal Policy in South Africa: Role and Impact of Automatic Fiscal Stabilisers”, *SAJEMS NS 6*, No. 4, 802-822.
 26. van den Noord, P.(2000), “The size and role of automatic fiscal stabilisers in the 1990s and beyond”, OECD Economics Department Working Papers, No. 230, Paris: OECD.