International Relations Multidisciplinary Doctoral School

THESIS COLLECTION

Notes on the PhD thesis of

Viktor Asztalos

The Maastricht deficit index in the era of global crisis

Supervisor:

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University professor

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Department of World Economy

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The reason behind, and the goal of this study

The world economy's problems are clearly not limited to Europe. Nonetheless, the European Community, with its advocacy of fiscal discipline, was particularly unprepared for the evolving crisis. The obvious absence of any coordinated global management mechanism threw a spotlight on the, until then concealed, absence of preparations. The relationship between monetary and fiscal policy, and the shapers of economic policy, has undergone a reassessment of late – something that has been in the focus of multiple professional commentaries and written reports, while a good number of scientific analyses and comparisons have focused on the vulnerability issue. Not enough time has elapsed to be able to offer a thorough analysis of every aspect of the external shock of 2008. The exact depth of the crisis is still not truly known, for it has resulted in large scale changes on both micro and macro levels. Given the lack of historical experience, we are now sailing through uncharted waters. Given these factors, there is no doubt that all regional and global events deserve attention.

This paper seeks to investigate the relationship between the Maastricht deficit index and the global crisis of 2008. The author seeks to approach a variegated subject through a special lens: it is centering on five crises that took place within the European Union. The external shock affected the Latvian, Swedish, Polish, Hungarian, and French economies in different ways albeit a number of hitherto unknown risks surfaced in all. However, this study does not include either to Greek or the Spanish crises, among others for the simple reason that the author has had to set limits.

The study is essentially divided into two main parts. One spotlights the 2008 global crisis and the crisis management of the countries listed, which generated a plethora of debates in both professional and general public opinion. The brutality and the speed with which it spread was merciless in demonstrating that the laws of economics cannot be ignored for long periods without a backlash. Massive budget deficits, low growth potential, high, and growing foreign debt are all red flags, and all ended up as victims of the unrelenting crisis. It also became clear that the various fiscal specifications and in particular the Maastricht deficit criterion did not offer full protection. Despite the best of intentions, the economy cannot be managed akin to precision engineering. There always will be (loop)holes in the fabric, leading to instability. We might mention the Latvian economy at this point, where prior to the outbreak of global crisis the course of development appeared to be monumental if we choose to discount the high rate of foreign disequilibrium. To make things clear however, the one matter this study has very deliberately avoided is as follows. Numerous alternatives for crisis management have been suggested, and these suggestions have often contained worthy elements. So, why did government officials fail to commit to rapid crisis management? Was restoration of the head-over-heels budget equilibrium achieved at the lowest possible cost? These are obviously exciting issues but we have chosen to leave them alone because it is very hard to draw a line that separates the various alternatives. The actions of market players are far too complex to allow the various theoretical models to describe reality with the kind of precision that includes all details.

In principle, fiscal specifications help to ascertain the merits of the budget flows. In addition to the various economic concepts and theories it is also necessary to consider the innovations affecting the budget system if the system is to be carefully studied. At all times, the risks of instability are anxiety boosters and one of these risk factors is the increase in activities that are off the balance sheets, that run counter to the long term interests of the Community (Allan-Parry [2003], Daflon-Rossi [1999]) and Alesina-Perotti [1996a]). Preventive measures were introduced including steady expansions in data required to be made public, new international accounting guidelines aimed at reducing “creative” accounting, and upgrading the fiscal institutions that guarantee transparency (Wyplosz [2002], Manasse [2006], Debrun-Kumar [2007], and Kopits [2007]). However, fiscal discipline has also been vulnerable to attacks from the private sector. On the one hand, borrowers tend to overestimate the limits to their repayment abilities and on the other, lenders may build their futures on excessively favorable expectations (Lamfalussy [2008]). In hindsight, neglecting to regulate the financial sphere was a major contributor to the bombshell that hit the global financial system. The study goes into greater detail on these issues later on. However it does not try to offer any opinions of the currently evolving international financial architecture, nor has it designed any proposals on management of budget-specification related problems.

This latter point is exceedingly sensitive from both the methodology and fiscal policy theory considerations. Methodology issues cover not only the operative shortcomings in the accounting system, ensurance of the flow of information, increased transparency, and better coordination of the macroeconomic policies of different countries and/or regions. Budget flows can be evaluated along the lines of multiple considerations and time horizons, which are reflected in the indices that measure the budget (Hoffmann-P. Kiss [2010]): cash flow, structural, and profit-oriented deficit indices. Since the challenges of financial globalization are exceedingly complex, all balance indices are needed to be able to conduct a realistic evaluation of the fiscal and economic flows of a given country. Put another way, no one method is able to produce a relevant fiscal index that covers all details (Blanchard [1990], Brunilla et al [1999]). Two interlinked subsections of this study offers details on these issues and the most significant views and evaluations of them. The Maastricht deficit index has also recently undergone a major methodology revamp. The relaxation of Community fiscal deficit specifications between 2003 and 2007 obviously contributed to the dulling down of attention but the rise in vulnerability cannot be blamed on this one factor. The main source of the problems is the absence of a sense of responsibility on the part of government officials. The eruption of the global crisis was proof that the risk was way more than could be ignored. This was the most serious crisis to shake up the world economy since 1929. After 2008, the parties hit by the crisis recognized the negative impact of the relaxation of the Maastricht deficit criterion and the need to reform the regulation of the financial sector given that these were the channels through which regional crises can infect the global financial system.

Actually carrying out fiscal adjustments is exceedingly delicate politically. It would be an oversimplification to say that expenditure-related budget consolidation is certain to meet major public resistance that could lead to losing the next election, and therefore, is unacceptable politically. The second part of this study focuses on fiscal adjustments made by 14 European countries between 1980 and 2014. Since the market turbulence of the autumn of 2008 dragged down many countries with high deficits, some budget consolidation became necessary. Stock prices plummeted, the monetary authorities began cutting interest rates, and the flow of capital was towards countries with solid macroeconomic foundations (such as the Nordic states). At this time economic policy opportunities were limited because the countries hit by the crisis all went underwater at the same time (Blanchard-Leigh [2013]) and the "creative" accounting techniques of the time leading up to the collapse surfaced (Kopits-Craig [1998]; Koen-van den Noord [2005]). The fiscal adjustments undoubtedly had a significant positive impact on the world economy, leading to concrete measures and favorable macroeconomic outcomes. Budgets tended to approach sustainability requirements. The question becomes whether developments in the near future verify the politically neutral affects of the consolidation.

This study is an attempt to help understand European economic flows and through that, to allow domestic authorities to prepare for harder times to come. It makes no attempt to support or criticize analyses made to date but to add information on some essential considerations that have not received the attention they deserve.

Methodology

This study offers an overview of the crisis management of five European countries during the period of the external shock of 2008. It analyzes the most important characteristics of the adjustments, in particular with respect to the vulnerability of the individual economies as reflected by the Maastricht deficit criterion. The first two sections within this topic are dominated by analyses and comparisons. The source material was the country reports regularly published by IMF. Although the paper has not intended to elaborate the five crises at the depth required by historical analysis, historical references and parallels became necessary to support the conclusions.

When discussing the Maastricht deficit criterion the author has concentrated on the economic aspects of the concept, not the legal ones. He relies on terms such as asymmetric information, flight to quality, deficit bias, and moral hazard. The theoretical outlook is fundamentally analytic in nature. These parts of the study cover the following areas: methodology issues of various balance indices, evaluation of fiscal policy, and characteristics of fiscal specifications. The author also presents information from various professional analyses to help process the subject. There are, however, two areas of budget policy that the author has not included. One concerns the role of institutional reforms and the other involves procedural methods that are important to the discussion of budget planning. Since these issues go beyond the framework of this study, the author has merely cited them, because of their importance.

The second part of the study investigates the relationship between expenditure controlled budget consolidation and political continuity. In doing so, it offers an overview of the fiscal adjustments made by 14 European countries between 1980 and 2014. Clearly, the economic aspects of the question need to be studied carefully as must the relevant conclusions of an empiric analysis of the budgetary and political boundary conditions.

The study was written between 2012 and 2015. It is important to underline this because various economic policy events need to be re-evaluated over time, and many conclusions need to be readjusted or amended. For instance, the Internet bubble in the early 2000s was initially thought to be a correction in stock prices, but it was later evaluated as the first major manifestation of the global crisis.

Finally, one comment on sources. The paper has relied on relevant professional studies and, to a great degree, on IMF reports and statistics. On the one hand, the annual country reports provide detailed information on the economic and fiscal flows of the crisis-stricken countries. On the other, thanks to methodology standardization, there are no longer any significant differences between IMF and various other international institutions regarding the quantitative evaluation of the budgets and macroeconomic courses of the various countries. This guarantees the consistency and comparability of the data.

Summary of conclusions

This paper has studied the crisis management of 2008 in the light of the Maastricht deficit criterion which serves as the embodiment of budget discipline. Prior to the global crisis, budget discipline was viewed as the central point of economic policy debates throughout the world. It appeared as though conservative fiscal policies would be sufficient to avoid “major” crises. The dominant opinion was that deficits in current account balances were only significant if they were the outcome of public sector deficits (Lamfalussy [2008]). However, the five crisis-stricken countries are an excellent example of the intensity with which formerly undervalued risks can surface. The study argued that

ad1) only on rare occasions would the starting point of the crises be found in irresponsible economic management. It was far more common for the trouble to start off in the dysfunctional operation of areas far from the central budget that also had the power to upset fiscal equilibrium. It is the responsibility of financial authorities to offer useful guidelines in the process of a sober-minded risk analysis and prevent the evolvement of various asset price bubbles.

ad2) budget instability is not necessarily a concomitant of a drastic deterioration in a foreign financing position. In fact, there might even be a sizable tax revenue inflow as the outcome of an overheated economy. However, the chain of causation operates in the opposite direction, too. If the shock comes from the outside, given the unsecured debts of the economic actors, the government may find itself in dire straits because of real economic impacts, and that will play a serious role in the loss of fiscal discipline

ad3) the rapid growth in the vulnerability of the financial sector to the exposed regions can also result in serious problems and heighten the susceptibility of the domestic economy. The activities of the national financial authorities need to be better coordinated to avert deeper crises. If several countries find themselves in trouble at the same time the potentialities of economic policy become quite limited because the crisis will have deeper-reaching affects (Blanchard-Leigh [2013]).

ad4) excessive fear of crises can make decision-makers overreact. It is not necessary to protect the economy from smaller recessions, because intervention in market flows can lead to a loss of “real pricing” among business actors. Over-management of smaller ills can lead to global crisis (Rostowski [2010]).

ad5) in the final analysis, the parties shaping economic policy should not be narrow-minded. They need to keep an eye on not only fiscal discipline but on the regulatory practices of the financial sector and on other macroeconomic indicators as well – in other words they need to approach the whole of the economy in a responsible manner.

In addition to the common pattern, there were a number of individual, specific factors paving the way for the crisis. In Latvia the factor was the need for the external financing of the economy, which fluctuated at around 15-20 percent of GDP; in Hungary it was an excessively lax budgetary policy; in France and Sweden it was the vulnerability of the commercial banks to fragile regions; and in Poland it was the advance of the government’s quasi-fiscal activity. However, none of these factors would have intensified had it not been for the euphoric attitudes of the given countries. During the period of debt accumulation, neither creditors nor borrowers bothered to pay sufficient attention to conservative risk evaluation or to consider the serious impact of high leverage on the real economy.

In all countries except Sweden, the crisis played a significant role in damaging fiscal performance. In Poland and France the direct trigger of the escalating deficit, which in turn increased fragility over time, was the effort to alleviate the economic downturn and to prevent the recession from becoming worse. The deficit in the domestic budget combined with the need for major financing from abroad led to a huge volume of debt accumulation. The Latvian economy found itself in trouble because of the unjustified optimism of the private sector when borrowing. By bailing out the troubled private sector the government seriously damaged its own budget balance. The situation was fraught with the hazards of a drastically soaring public and private debt, unchecked economic events, political and social instability, and it put an end to the convergence process for a long time to come. They needed an IMF rescue package to give them time to consolidate their position. The deterioration in their budget status was nearly 9 percent of GDP, something that was considered inconceivable in the months before crisis hit. The situation of the Hungarian economy was different, but just as bad if not worse. There had been serious doubts about the country's economic situation well before the events of October 2008, for the government had run up a huge deficit from 2002 to 2006. To make things worse, the economy was stagnating, thanks to an inflow-centric adjustment in August and September of 2006. The outcome was that the public debt soared and the foreign debt grew at a worrisome rate.

From 2010 to 2013 all four counties under discussion began cutting their budget deficits albeit their timing and intensity varied significantly. As a result, Latvian, Polish, and Hungarian crisis management is more or less complete, while France has not managed to come up with a convincing course of fiscal development.

In all of these countries the Maastricht deficit criterion had been supplemented by domestic fiscal specifications prior to the external shock of 2008. These domestic rules were quite heterogenic, just as the attitudes of the responsible authorities varied broadly. In Latvia, the excessive risk-taking of the private sector eroded the budget regulations, playing a major role in the loss of fiscal discipline. In Sweden, events of 1992 and 1993 led to major concerns by domestic authorities and economic actors regarding equilibrium. The outcome was to typically maintain a budget surplus. Thus, the budget specifications did not have a serious impact on national fiscal policy. Although fiscal discipline was a priority issue for Polish government officials, the government's quasi-fiscal actions were nevertheless a driving force of economic growth. The higher investment rate was financed primarily by increasing the foreign debt, only part of which appeared in official deficit and debt indices. Hungarian economic policy almost completely ignored Community budget rules, but paid a measure of homage to the less stringent national regulations. The soaring deficit jacked up interest rates because of the state's growing need for resources, which suctioned off (crowded out) the resources, away from private sector investments. To add to the problems, the market players had a volatile accumulation of debt. With France, domestic macroeconomic errors combined with the rapid and significant increase in the vulnerability of the financial sector heightened its fragility vis-à-vis the southern nations. During the period of the global crisis, a significant portion of these risks hit home, leading to a budget deficit and the swelling of the national debt on the one hand, and contributing to violation of fiscal specifications on the other.

Community fiscal specifications played a moderate role in limiting the actions of the parties shaping economic policy in Poland and France, while in Sweden, Latvia, and Hungary, they acted as less of a restrictive force for different reasons. In the latter two countries, the situation was rendered even more serious by investors, who for a rather long time falsely believed that there was no reason for real concern in the financial area. In fact the oversimplification of economic policy became the point of departure of the process leading to the trouble. This conclusion is not very distant from the hypothesis theorized by this paper.

In seeking additional confirmation and a more detailed affirmation of the conclusion it became necessary to focus on the methodologies of the various balance indices. These included evaluations of budget policies and exploration of the specific features of the fiscal specifications.

Fiscal trends can be evaluated using a variety of considerations and multiple time horizons (Hoffmann-P. Kiss [2010]). For fragile countries and regions, the role of securing liquidity is valued particularly highly, particularly during periods of financial turbulence. In the autumn of 2008 Latvian and Hungarian government officials would have been unable to cover the large amount of debts coming due and to stabilize their countries' finances without help from the IMF. At the same time, the quality of economic policy is determined not by momentary difficulties but by long term trends. Given that evaluating fiscal flows is extremely complicated and that government actors have a tendency to suggest that their countries' economies are a bit brighter than they really are, it is difficult to imagine what an economically perfect index might look like (Blanchard [1990], Brunilla et al [1999]). Still, much the same as the cash flow balance is a liquidity indicator, accrual-based and structural balances offer comparatively real and reliable pictures of longer term flows (P. Kiss-Szemere [2009]).

Economic policy measures are connected to the content side of fiscal policy. When discussing the specifics of the fiscal balance the paper cited the importance of specialized areas (such as health care and the pension system). We need to identify the internal components of the budget that allow us to gauge how useful the interventions have been. The theoretical response is to use the allocation functions of fiscal policy (Musgrave [1959]), but practical considerations tend to choose the functional breakdown of the expenditure side of the budget as a more suitable framework for analysis. Following the outbreak of global crisis, budget structures changed significantly in the countries that found themselves in trouble (such as the Baltic nations and Hungary), where government interest-expenditure increased and wage type expenditure went down. The flow also illustrated the fact that when macroeconomic disequilibrium is reduced by the disciplinary force of the market instead of on the initiative of the designers of economic policy, the outcome is generally a sharper decline in welfare expenditure.

The significant portion of the West European countries have had to face weighty budgetary problems starting with the 1970s (Roubini-Sachs [1989]) and the process contributed significantly to the growing popularity of fiscal specifications (Prammer [2004]). As time went by, the rules were forced to operate amidst increasingly complex conditions. Improvements can be found in the following areas: increasingly responsible budgetary policy; greater transparency and flow of information; deeper-reaching evaluation of fiscal flows; and an approximation to one another of the national accounting systems. However, an emphasis on budget policy did not mean that the intensity of the given crisis was lowered or that it became a cornerstone on the road to increasingly severe crises. The process is to a far greater degree related to globalization and evolvement and maintenance of interdependency among countries and regions, markets, and the various components of the financial sphere (Lamfalussy [2008]).

To sum up, five major conclusions can be drawn from the first section of the paper, conclusions that include addenda to hypotheses that may possibly disprove some of them. Analysis of five crises and the theoretical components of the crises offers a reliable foundation for evaluating the hypotheses.

ad1) In only one of the five countries (Hungary) was irresponsible economic management at the core of the crisis. The primary reason behind the outbreak of crisis was the excessive debt of the private sector and the irresponsible provision of credit. The unsatisfactory operation of the financial authority played a main role in the process.

ad2) Prior to the outbreak of the global crisis, the economy was overheated, creating a more favorable budget situation. When hit by external shock, in most cases the real economy sank into serious recession, which played a major role in the loss of fiscal discipline.

ad3) Irresponsible domestic lending was not the only source of the problem for the serious vulnerability of the domestic commercial banks to fragile regions was just as much of a problem. A significant number of crisis-stricken countries were connected to the process of globalization, and later on in the process, this was what limited economic policy opportunity (Blanchard-Leigh [2013]). Better coordination of the actions of the national financial authorities is a contributor to risk reduction.

ad4) Crises are inherent concomitants of the market economy (Lamfalussy [2008]). Prior to the external shock of the 2008 crisis, government efforts tried too hard to avert crisis which led to the loss of “real pricing” among market players. This is what eventually led to true worldwide crisis (Rostowski [2010]).

ad5) The Maastricht deficit criterion (and fiscal specifications in general) left investors with the illusion that there was no particular cause for worry in the area of finances. The disillusionment was all the greater. Still, it does not necessarily mean that the Maastrcht deficit criterion has shifted to the negative side of the cost/benefit ratio or that it might shift at some future date. After the external shock the people shaping EU and national economic policy are paying much more attention to other macroeconomic indices as well as to budget flows, and are more concerned with the regulation of the financial sphere.

The second section of the paper sought to find out whether expenditure-controlled budget adjustments have any negative effects on political continuity. On the one hand, the deficit bias of governments is an ever-present problem. Decision makers tend to increase demands for a rise in welfare expenditure in connection with political events (such as elections) which in turn cause the budget deficit to swell. Errors in economic policy stemming from irrational investments by the authorities for development projects, irresponsible tax policy measures, and the insufficiency of information when making decisions are all economic policy errors that upset equilibrium. This section of the paper offers a detailed discussion of the effects of fiscal consolidation on the whole of the economy and on political change. The analytic conclusions cited above were not influenced by the conclusions of the section.

The first part offered an overview of the economic aspects of the expenditure-led fiscal consolidation of 14 European countries between 1980 and 2014. Most of the budget adjustments were in the Western and South European countries in the 1980s and 1990s. Fiscal specifications on Community level as well as the disciplinary power of the market were behind them. Reducing risk was a foremost interest of the countries involved, for market crises hurt fragile countries the most. Since traditions and initial points of departure differed, the crisis management strategies of the countries we are looking at took differing forms. We can also notice differences by checking to see whether various creative accounting techniques were behind the improvements in budget balances (Kopits-Craig [1998]; Koen-van den Noord [2005]). At any rate, the adjustments led to growth but with low inflation, declining jobless rates, improvements in needs for external financing, and the reduced willingness of the countries in question to take risks. The problem is that these economic outcomes are politically tough to achieve.

The second part focused on the political aspects of the budgetary adjustments. The most obvious development noticeable in analyzing the consolidation was that the successful fiscal adjustments did not trigger upsets in political continuity. In other words, the adjustments, which seriously impacted the expenditure side of the budgets, were not necessarily followed by political restructuring. This conclusion raises a number of issues that are worth thinking about. How can a successful adjustment be conducted while maintaining political stability? Was the consolidation being achieved at the lowest possible social cost? What were the effects of the adjustments on social inequalities? These issues require responses that are so complex (and complicated) that they go beyond the framework of this paper. However, it is definitely worth keeping them in mind since this is where the Maastricht deficit criterion exerts its influence.

The paper studied the connections between the Maastricht deficit criterion and the global crisis of 2008. Quite a number of risks that had not been identified earlier surfaced when the Latvian, Swedish, Polish, Hungarian, and French crisis management effort got underway. This paper deemed it most important to verify the hypothesis that economic policy-makers need to pay close attention not only to fiscal flows and the fiscal indices that describe them, but also to other macroeconomic indices and to the regulation of the financial sphere. Judging the worth of an economic policy is a highly complex task and a vast number of issues have to be considered when evaluating risk. But even if it proves possible to do so successfully, it will be a fatally insufficient effort if the national authorities do not have a sufficiently strong sense of responsibility.

Primary references

Alesina, A.–Perotti, R. [1996a]: Budget deficits and budget institutions. NBER Working Paper. No. 5556.
http://dx.doi.org/10.3386/w5556

Alesina, A.–Perotti, R. [1996b]: Fiscal adjustments in OECD countries: composition and macroeconomic effects. NBER Working Paper. No. 5730.
http://dx.doi.org/10.3386/w5730

Allan, W.–Parry, T. [2003]: Fiscal Transparency in EU Accession Countries: Progress and Future Challenges. IMF Working Paper.
http://dx.doi.org/10.5089/9781451857955.001

Blanchard, O. [1990]: Suggestions for a New Set of Fiscal Indicators. OECD Working Papers. No. 79.
http://dx.doi.org/10.1787/435618162862

Blanchard, O.–Leigh, D. [2013]: Growth Forecast Errors and Fiscal Multipliers. IMF Working Paper.
http://dx.doi.org/10.5089/9781475576443.001

Briotti, M. G. [2004]: Fiscal adjustment between 1991 and 2002: stylised facts and policy implications. Occasional Paper Series. No. 9. Frankfurt: European Central Bank.

Brunila, A.–Hukkinen, J.–Tujula, M. [1999]: Indicators of the Cyclically Adjusted Budget Balance: The Bank of Finland's Experience. Bank of Finland Discussion Paper. No. 1.

Central European Management Intelligence [2006]: Makro egyensúly és gazdasági növekedés. [In Hungarian: Macroeconomic equilibrium and economic growth] Budapest: CEMI Publication.

Daflon, B.–Rossi, S. [1999]: Public accounting fudges towards EMU: A first empirical survey and some public choice considerations. Public Choice. p. 59-84.

Debrun, X.–Kumar, S. M. [2007]: The Discipline-Enhancing Role of Fiscal Institutions: Theory and Empirical Evidence. IMF Working Paper.
http://dx.doi.org/10.5089/9781451867350.001

European Commission, The Directorate-General for Economic and Financial Affairs (DG ECFIN) [2012]: Fiscal frameworks across Member States: Commission services country fiches from the 2011 EPC peer review. Brussels: European Commission.

Fatás, A.–Doménech, R.–Andrés, J. [2004]: The Stabilizing Role of Government Size. CEPR Discussion Papers. No. 4384.

Forni, L.–Momigliano, S. [2004]: Cyclical sensitivity of fiscal policies based on real-time data. Applied Economics Quarterly. No. 3.

Giudice, G.–Turrini A.–Veld, J. [2003]: Can fiscal consolidations be expansionary in the EU? Ex-post evidence and ex-ante analysis. Brussels: European Commission.

Gokhale, J.–Kotlikoff, L. J. [1998]: Medicare from the perspective of generational accounting. NBER Working Papers. No. 6596. http://dx.doi.org/10.3386/w6596

Gupta, S.–Verhoeven, M.–Tiongson, E. [1999]: Does higher government spending buy better results in education and health care? IMF Working Paper. No. 21. http://dx.doi.org/10.5089/9781451843897.001

Hoffmann, M–P. Kiss G. [2010]: A statisztikai deficittől az átmeneti hatásoktól megtisztított államháztartási egyenlegig. [In Hungarian. From statistical deficit to a general budget balance stripped of transitional effects] MNB-szemle. 7-16.

Kármán, A. [2008]: A magyar költségvetés kiadási szerkezete nemzetközi összevetésben. [In Hungarian. The expenditure structure of the Hungarian budget shown in an international comparison] Hitelintézeti Szemle, **7**/6 p. 665-677.

Koen, V.–van den Noord, P. [2005]: Fiscal Gimmickry in Europe; one-off measures and creative accounting. OECD Working Papers. No. 417. http://dx.doi.org/10.1787/237714513517

Kopits, G. [2001]: Fiscal Rules: Useful Policy Framework or Unnecessary Ornament? IMF Working Paper. No. 145. http://dx.doi.org/10.5089/9781451856545.001

Kopits, G. [2007]: A költségvetési felelősség keretrendszere – nemzetközi tapasztalatok és magyarországi tanulságok. [In Hungarian. The framework of budget responsibility – international experience and Hungarian lessons] General Auditing Office Pénzügyi Szemle. **52/**2 197-216.

Kopits, G.–Craig, J. [1998]: Transparency in Government Operations. IMF Occasional Paper. No. 158. http://dx.doi.org/10.5089/9781557756978.084

Lámfalussy Sándor [2008]: Pénzügyi válságok a fejlődő országokban. Budapest: Akadémia Kiadó.

National Bank of Hungary [2006]: Elemzés a konvergencia-folyamatokról [In Hungarian. Analysis on convergence flows] Budapest: National Bank.

Manasse, P. [2006]: Procyclical Fiscal Policy: Shocks, Rules, and Institutions—A View From MARS. IMF Working Paper. http://dx.doi.org/10.5089/9781451862874.001

McDermott, C. J. –Wescott R. F. [1996]: An empirical analysis of fiscal adjustments. IMF Working Paper. http://dx.doi.org/10.5089/9781451965957.001

Milesi-Feretti, G. M. [1997]: Fiscal rules and the budget process. Giornale degli Economisti e Annali di Economia. Nuova Serie. No. 1/2. p. 5-40.

Musgrave, R. A. [1959]: The Theory of Public Finance: The Study in Public Economy. New York: McGraw-Hill Book Company.

Nohlen, D.–Stöver, P. [2010]: Elections in Europe: A Data Handbook. Baden-Baden: Nomos

http://dx.doi.org/10.5771/9783845223414

Ódor, L–P. Kiss, G. [2011]: Kivétel erősíti? Fiskális szabályok a visegrádi országokban. [In Hungarian. Does the exception prove...? Fiscal rules in the Visegrad countries] MNB-szemle. 25-38.

P. Kiss, G. [2011]: Mozgó célpont? Fiskális mutatók jegybanki szemszögből [In Hungarian. Moving target? Fiscal indices from the central bank point of view] MNB-tanulmányok 92.

P. Kiss, G. [2010]: Hiteles önkorlátozást! [In Hungarian. Authentic self-restriction]. Portfolio.hu

P. Kiss, G.–Szemere R. [2009]: Almát körtével? Mérlegen a visegrádi országok állami kiadása [In Hungarian. Apples to oranges? Visegrad countries' public spending compared] . MNB-szemle. 33-44.

Perotti, R. [1996]: Fiscal Consolidation in Europe: Composition Matters. American Economic Review, vol. 86. p. 105-110.

Prammer, D. [2004]: Expansionary Fiscal Consolidations? An Appraisal of the Literature on Non-Keynesian Effects of Fiscal Policy and a Case Study for Austria. Monetary policy and Economy. 3rdQ

Rostowski, J. [2010]: Intolerance of small crises led to big one. Financial Times (January).

Roubini, N.–Sachs, J. [1989]: Government spending and budget deficits in the industrial countries. Economic Policy. No. 8, 100-132.

Tanzi, V. [1995]: Government role and the efficiency of policy instruments. IMF Working Paper.
http://dx.doi.org/10.5089/9781451852349.001

Uctum, M.–Wickens, M. [1999]: Debt and deficit ceilings, and sustainability of fiscal policies: an intertemporal analysis. Federal Reserve Bank of New York Research Paper. No. 9615.
http://dx.doi.org/10.5089/9781455210879.001

Von Hagen, J. [1992]: Budgeting Procedures and Fiscal Performance in the European Communities. European Commission. Economic Papers. No. 96.

Von Hagen, J.–Hallet, A. H.–Strauch, R. [2001]: Budgetary consolidation in EMU. European Communities, Economic Papers. No. 148.

Wyplosz, C. [2002]: Fiscal Policy: Rules or Institutions?. CEPR Discussion Paper. No. 3238

Author's publications

Referenced periodicals

Asztalos, Viktor [2015]: A globális válság hatása a közép-kelet-európai országokban [In Hungarian. The impact of global crisis on the Central and East European countries] Közgazdaság. 10/4. 29-43.

Asztalos, Viktor [2015]: Politikai változások a költségvetési kiigazítások tükrében.[In Hungarian. Political change in the light of budget corrections] Közgazdasági Szemle. 62. 1196–1210.

Asztalos, Viktor [2015]: The Fiscal Tools of Crisis Management – A Comparative Analysis. State Audit Office of Hungary. Public Finance Quarterly. 60/4. 462-481.

Periodical editing

Asztalos, Viktor – Benczes, István [2015]: Köz-gazdaság. 50/4. Budapest: Budapest. Corvinus University

Other professional publications

Asztalos, Viktor [2010]: A költségvetési gyeplői - milyen is a magyar szabály? [In Hungarian. Reining in the budget – What is the Hungarian rule?] Portfolio.hu. 5 Oct. 2010.

Asztalos, Viktor [2010]: A költségvetési gyeplői - mi legyen a magyar fiskális szabállyal? [In Hungarian. Reining in the budget – What to do with Hungarian fiscal regulations?] Portfolio.hu. 23 Sept 2010.

Asztalos, Viktor [2010]: A költségvetési gyeplői - a svéd sikersztori. [In Hungarian Reining in the budget – Sweden's success story] Portfolio.hu. 23 Sept. 2010.

Asztalos, Viktor [2010]: A költségvetési gyeplői - Új-Zélandon minden más. [In Hungarian Reining in the budget – Everything's different in New Zealand] Portfolio.hu. 22 Sept. 2010

Asztalos, Viktor [2010]: A költségvetési gyeplői - a lengyel adósságszabály.[In Hungarian, Reining in the budget – Poland's rule on debt] Portfolio.hu. 22 Sept. 2010

Asztalos, Viktor [2010]: A költségvetési gyeplői - brazil fiskális előírás.[In Hungarian. Reining in the budget – Brazil's fiscal specifications] Portfolio.hu. 21 Sept. 2010