The concept of innovative fiscal policy: theory and empirical evidence [1]

Olivér Kovács[2]

**Abstract**

*This contribution addresses the question of what are the main constituents of an innovative fiscal policy in the context of sustainability. We apply the concept of sustaining and disruptive innovation to fiscal policy. On the one hand, innovative fiscal policy is able to be sustaining whereby public finance will incrementally improve without leaving its decisive structure. On the other hand, innovative fiscal policy should be disruptive as well in the context of long term sustainability, whereby the structure of public finances can be profoundly restructured as a reaction to future challenges. By using the Finnish recovery in the early 1990s, we can refine our argument about the use and necessity of the mixture of fiscal rules and independent institutions in favour of fiscal sustainability. We also shed light on the key sources of the expansionary consolidation that emerged in the aftermath of the fiscal adjustment in the early 1990s. We emphasise that innovative fiscal policy with a mixture of legislated fiscal rules and independent fiscal anchor is more likely to be associated with sustainability if the economy has weaker growth potential which does not provide enough social trust towards the consolidation efforts of the government.*

JEL Classification: E61, E62, Q01

[1] This paper is a significantly revised and reformulated version of a paper prepared for the conference entitled: "Trends and Future of Sustainable Development", 8-10 June 2011, Tampere, Finland.

[2] Olivér Kovács is research fellow at ICEG European Center and PhD-student at the Doctoral School of Economics, University of Debrecen Faculty of Economics and Business Administration. Contact: olko.ktk@gmail.com

## Introduction

Recent economic history has pointed out that modern society has been contributing to the growing deterioration of the natural environment, including climate safety and urbanisation problems, as well as the gradual decay of biodiversity (MEA, 2005). It is hardly by chance that the issue of sustainability has been incrementally naturalized in the *economics of sustainability* by using the building blocks of ecological, environmental as well as of resource economics. The concept of sustainability encapsulates sustainability as an ethically-based, integrated and interdisciplinary approach with the aim of guaranteeing the fundamental needs of the current generation without endangering the ecological system or the chances of future generations.

One of the major conclusions that can be drawn from the achievements of behavioural economics is that human nature requires sustainability. Kahneman and Tversky (1979) pinpointed that people are more sensitive to losses and pain than to foregone gains. *As a consequence, the aspiration to minimize losses can be ranked with the basic needs of human nature, and the most expedient way to achieve this is the establishment of sustainable systems.* If we take into consideration that numerous environmental problems can be seen as manifestations of the cumulative effect of private contributions, we can arrive at the conclusion reached by the behavioural and social sciences which interpret this phenomenon as the so-called *common pool resource* problem, alluding to the fact that societies/individuals are competing with each other for natural resources. *The negative environmental effects as a collective outcome of a complex set of behaviours can only be dampened through strong and consistent incentives/rules aiming at modifying behaviour.* Let us add that credible rules are needed when there is no time to wait until the evolutionary development of preferences because waiting would entail too many costs.[3] Additionally, rules are credible only if people are completely aware of the fact that the consequences of being without them would be much worse. Nonetheless, having too strict rules likely hampers the necessary correction and learning processes. The state should therefore actively underpin its role as an *informant on sustainability* during the sequential behaviour-modification.

Our article addresses the question of what kind of fiscal policy could properly contribute to the requirements of fiscal sustainability which is a major constituent of sustainable development, as well. After outlining the economic justification for fiscal sustainability we intend to conceptualise the innovative fiscal policy complementing it with a short review of Finland. The Finnish case may

[3] This is the case when it comes to considering sovereign indebtedness from the perspective of fiscal sustainability; indebtedness will not be wound up without interventions, i.e. implemented fiscal consolidation and/or stipulated fiscal rules, established independent fiscal institutions in favour of prevention.

offer empirical support, and at the same time, its example gives us an opportunity to refine our argument on the institutional conditions required by fiscal sustainability.

**The economic justification of fiscal sustainability**

One of the research directions of the *economics of sustainability* is inclined to address the question of what kind of institutional, political and governmental mixture is able to serve the objectives of sustainability. The relevance of this research area is originated in the theory of sustainable development which also implies the sustainability of the whole economy in which the dimension of fiscal sustainability is of great importance. Therefore maintaining a sustainable fiscal policy can be treated as a movement towards *governance for sustainable development.*

We can by no means claim that any increase in debt level is totally harmful for economic development, because each debt item is ultimately a capital resource, thus the real question is what the deficit has been spent on. While exploring what public debt level seems to be unsustainable is a complex set of issues; fiscal policy can be regarded as sustainable when the maintenance of its current condition – without any considerable revenue or expenditure side correction – ensures the state's solvency in the future as well. The *conditio sine qua non* of this is the strict definition of a fixed debt/GDP ratio, and the rate of economic growth should be at least as high as the real interest rate paid on debt. *Accordingly, the real emerging burden of public debts is the interest payment, which might have a strongly negative impact on the potential growth of an economy.* The eclipse of the real interest payment could entail debt reduction due to the positive primary balance (Afonso – Hauptmeier, 2009). However the permanent and substantial structural deficit cannot be overcome without any treatment, thus it is able to cause serious damage within the lifetime of the current generation. Moreover, it may also exacerbate the life of the next generation through the crowding-out effect. Governments have to set a target of an optimal level of debt which guarantees sustainability over a longer time horizon, and as such, also provides an extremely safe way of repayment even in times of serious economic and social shocks (e.g. demographic challenges). In developing countries, this level of debt is around the average debt rate of advanced economies, but the past records of repayments ought to be treated as a determinative factor (Reinhart et al. 2003). Besides the future consequences of indebtedness, it also has immediate negative effects (slack economic growth, increasing inflation, higher debt service, a rising likelihood of a potential debt crisis).

Having a balanced fiscal policy also means that public finance does not endanger the intergenerational solidarity in the concept of sustainable development, furthermore, sustainable fiscal policy serves as a buttress to develop and utilise human capabilities by grounding a solid financial background. Fiscal sustainability also implies a higher flexibility of public finance and significantly improved efficiency of automatic stabilisers and *a fortiori* healthier capability to adaptive strategic planning.

**A concept of innovative fiscal policy within the sustainability framework**

We argue that fiscal sustainability is one of the most crucial prerequisites for broadly defined sustainability, and what is more we underline the importance of innovative fiscal policy, i.e. the implementation of an intelligent and holistic fiscal policy in order to furnish the long term sustainability of public finance.

More precisely, defining a rule about the quasi maintainable fixed debt-to-GDP ratio – or deficit level – by relying mostly on the contemporary situation does not seem to be sufficient. Rather more efficient would be the kind of planning whose dynamic view pervades both the revenue and expenditure sides by envisaging future challenges, especially higher level social, environmental and economic objectives. This establishes a claim for a fiscal policy which is able to intelligently manoeuvre, to provide the necessary fiscal latitude and to assure much more realistic expectations via more credible fiscal practice. By intelligent manoeuvring we mean that fiscal policy *is able to recognise* – due to the permanent monitoring of the budget – those worthwhile fields which are more likely to have stronger positive outcomes in the future if the government focused on them rather than on other fields. Accordingly, fiscal policy aspires *to intelligently allocate and/or combine* between revenues and expenditures through its discretionary ability within the framework of targeted deficit and debt levels. This also assumes that the fiscal policy has a *holistic character* as well, i.e. it has an integrated approach embracing both the environmental and societal dimensions. This type of fiscal policy behaviour can be regarded as *innovative.*

The economics of sustainability implicitly requires two characteristics from the aforementioned innovative fiscal policy. On the one hand, there is obviously a need for a *"sustaining"* character so that the fiscal policy could continuously guarantee the sustainability of sub-systems through intelligent allocations and/or combinations without leaving the decisive structure of public finance. On the other hand, long term sustainability postulates the kind of fiscal policy which is adaptive to the epochal environmental, and to societal and economic changes even if it entails radical structural transformations. The latter can be seen as a *"disruptive" character* of innovative fiscal policy whereby public finance is profoundly re-aligned to accommodate the changed market structure.[4] Apparently, the intellectual stream of the broadly defined sustainability demands a more emphatically disruptive character of fiscal policy. This is very important because the core internal presumption of sustainability is the system's ability to properly modify its operation according to the environmental changes and constraints, in which the role of innovative fiscal policy is undisputedly highly significant.

The concept of innovative fiscal policy also ascribes great significance to human nature – in terms of its present bias either on the level of social behaviour or on the level of political measures – behind the development of indebtedness. The currently increasing deficit and debt in proportion to GDP is no more than a choice of a basket containing short term pleasure and long term pain. The mitigation of indebtedness and the achievement of fiscal sustainability rely mainly on fiscal consolidations and institutional reforms. Maintaining the dominant view that the *planned fiscal adjustment and reform will provide opportunity for compensation – rather than merely inducing losses – for the current sacrifices is particularly strongly conducive to fiscal sustainability.*

From the point of view of traditional economics, human beings are rational; therefore decisions are made in support of self-interest and of maximising personal utility. Rationality also holds at the level of fiscal policy decision making, when, as the public choice theory demonstrates, policymakers tend to follow their personal interest by attempting to obtain as abundant budget resources as possible in order to maximise their self-interest without circumspectly internalising the cost-related consequences of this behaviour (*Alesina–Perotti 1996*). Thus they are to a high degree assisting in the eventually suboptimal budgetary policy. Myriads of studies have shed light on the limited rationality of voters, but this is also true in the case of fiscal policymakers. Perhaps even more importantly, there is uncertainty over to what extent the voters are able to comprehensively understand the non-linear processes, thus they can be manipulated with regard to the real fiscal landscape (*Buchanan et al. 1986*). As a result of this uncertainty, the significant and necessary changes can easily be stymied.

From the perspective of the current analysis, the fiscal adjustment can be seen as *experience goods*, i.e. voters judge the adjustment on its repercussion. And presumably, fiscal consolidations can also be classified in the group of *credence goods*. It is hardly by chance that successful fiscal

[4] The sustaining and disruptive model of innovation was described by Christensen (1997) who emphasised that sustaining innovation aims at maintaining the well functioning structures, which in turn assumes a more radical innovation which leaves the main features of existing structures behind and establishes an outcome with much better adaptation to the changed circumstances. *Christensen (1997)* demonstrated such radical innovation in the info-communication industry; accordingly, technological development has a crucial role. For example, one can think of the kind of fiscal policy changes potentially induced by technological revolutions documented by *Perez (2002).* After the rise of a new techno-economic paradigm – replacing the era of mass production – the state's role was stressed much more especially from the side of fiscal policy in support of R&D and innovation.

adjustments occur more frequently in a high-trust environment. There is a high degree of confidence in the broad conclusions of fiscal adjustment-related studies that fiscal consolidations and institutional reforms will induce a long term beneficial impact. However, there is a need for time even if the consolidation can be viewed as a Kaldor-Hicksian adjustment. We argue that this type of adjustment has a short term non-Keynesian effect, i.e. a short term expansionary effect, which gives an *opportunity* for the government to compensate the losses induced by the adjustment.[5] Since experiencing and judging the effects of a fiscal adjustment always demand time, fiscal adjustment by its very nature poses uncertainties for the voters regarding the fiscal outlooks due to limited rationality as indicated earlier. Subsequently, fiscal consolidation requires social capital (e.g. trust) whereby the necessary positive expectations could emerge. The short term expansionary effect serves as a trust builder- and maintainer channel by constituting a vital element of the innovative fiscal policy. Let us add immediately that each European fiscal consolidation can be regarded as a unique phenomenon, and therefore it is particularly difficult to achieve the standard and optimal rule for the expansionary fiscal consolidation. There is a massive identification problem due to the complexity of impacts. Firstly, fiscal institutions exert influence on fiscal outcomes and *vice versa*. Secondly, the evolution of fiscal institutions also has effects on various factors which also influence the fiscal outcomes. The empirical evidence suggests that the government has to be genuinely committed to an expenditure-side consolidation, which focuses primarily on the public sector wages/salaries, transfers, and social contributions in accordance with the suggestions of empirical results. The persistent and significant consolidation should be constituted under the consideration of the initial conditions. Further core factors of the potential expansionary effect are the institutionalization of fiscal policy (i.e. the establishment of the rules-based fiscal framework), the structural reforms and the optimistic expectations of the private sector on future incomes as well.

It is entirely reasonable that the innovative fiscal policy ought not to neglect the *institutional settings* either. As soon as a country has reached fiscal sustainability, the question of what extent of flexibility would be needed for fiscal policy arises. This question is not irrelevant because the ageing population and the depletion of natural resources *per se* call for a more adaptive fiscal policy. *Institutions invoked to serve the sustainable fiscal policy should be developed in terms of*

[5] An economic decision (e.g. fiscal adjustment) can be viewed as Kaldor-Hicks efficient when the winners have the opportunity to compensate the losers (Kaldor 1939; Hicks, 1939). Many authors judged the success of an adjustment on the basis on changes in deficit and debt-to-GDP ratio as well as in cyclically adjusted primary balance. See: Alesina and Ardagna (1998). Our approach encompasses the growth dimension as well.

*values which are completely in accordance with the social and environmental conditions of the given economy.*

In an effort to meet the requirement of sustainability regarding the aspiration to loss-minimizing, fiscal policy should resort to institutionalisations that dampen the risk of indebtedness even further. Hereby the ultimate objectives are on the one hand to capture the recognitions of political economics[6], on the other hand, to promote the acclimatisation of a long term view spanning over government cycles, to foster credibility and, last but not least to build trust. The latter objectives can be facilitated not only by the introduction of a rules-based fiscal policy (numerical fiscal rules and/or procedural rules) but also by politically independent and unbiased fiscal institutions (agencies, councils) complementing the rules that can often be extremely strict or lax. The mixture of rules and independent institutions can stimulate the necessary flexibility, which is required for greater discretionary function, and fiscal transparency, as well.[7] Nevertheless, since the deficit and debt levels can be regarded as social value orientations within a democratic framework, policymakers should refrain from giving extended authority to the independent fiscal institutions (e.g. giving political and legal responsibility, as well). Accordingly, these independent institutions should be rather consulting than decision making bodies with the opportunity to address how existing fiscal rules relate to "higher level" social and economic objectives as well.

We argue that innovative fiscal policy should represent a fiscal responsibility framework which includes both the fiscal rules and the independent fiscal institutions. If for no other reason than because the innovative fiscal policy always requires the capacity to intervene in a discretionary way, especially at a time of (global) shocks, in favour of good fiscal performance. According to Kopits (2004), fiscal rules should cover the whole public sector with the stipulated requirement of surpluses in the structural balance. In addition, politically independent and unbiased fiscal institutions should be set up to credibly represent a more disciplinarian fiscal policy. Since independent fiscal bodies are often responsible for monitoring the long term sustainability of public finance, they stand sentinel to provide analyses with due diligence on short term fiscal latitude, thus enhancing the *informant role of the state on sustainability by offering better transparency.*

[6] Numerous political economics studies have shed light on the short-term bias arising with parties during the electoral competition, which is more likely to lead to Pareto-inferior states and political budgetary cycles. One of the most pertinent insights on this topic was written by *Nordhaus (1975).*

[7] National fiscal institutions are independent bodies (e.g. councils), other than the central bank, tax office, government or parliament, that prepare macroeconomic forecasts for the budget, monitor fiscal performance and/or advise the government on fiscal policy issues. Fiscal rules bring rigidity into the system and thus restrict the opportunities of distributional coalitions, whilst the independent fiscal body brings the necessary flexibility into the system at the same time.

**Fiscal sustainability in the European Union – a shattered dream?**

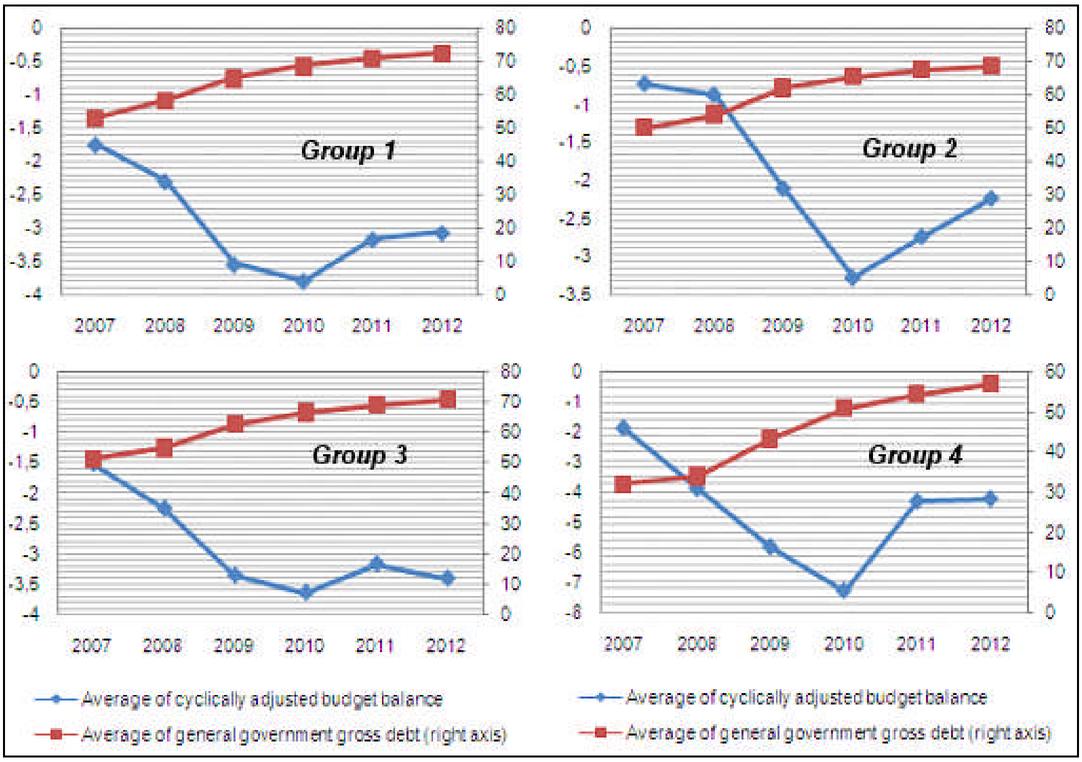
By now, the fact that the deficits – and ultimately debt-to-GDP ratios – have been permanently rising in most developed countries since the 1970s has become a commonplace. Moreover, the financial crisis which erupted in 2007 shed light on the great importance of the requirements for more disciplinarian fiscal policy. Recent trends in fiscal performances in the developed world suggest that the era of great moderation – when the cyclical fluctuations showed significant dampening – and thus the complacency regarding the exposure to fiscal challenges, have ended. More and more European countries faced serious liquidity problems (e.g. Hungary, Latvia and Romania in 2008) and even threats of sovereign debt crisis (Italy, Spain, Ireland, Greece and Portugal in 2010). Importantly, *Reinhart and Rogoff (2011:4)* already considers the period 2007-2018 as a decade of debt.

As a corollary, the question of fiscal institutions tailored towards fiscal sustainability is still relevant in the European Union, where the Stability and Growth Pact has not been able to promote fiscal discipline throughout the Member States. The inefficiency of the Stability and Growth Pact (SGP) was already manifested in its leniency concerning the sanctions on non-complying countries such as Germany and France. Still, aims to strengthen the SGP suffer from the lack of empirical evidence collected by many who convey the message that internal fiscal commitment is more likely to be effective than the external anchoring role of the EU. It seems that SGP with an extended authority (e.g. with explicit debt rule) would have a deleterious effect on the democratic system if it wants to directly influence the given taxation and spending constellation of a country. From this perspective, the strengthened SGP will surely pose problems with regard to the transfer of sovereignty of nations. As a consequence, another way to improve the national fiscal policy is the fiscal institutionalisation at a national level. Independent fiscal bodies, as complements of fiscal rules, are more likely to help the more sufficient transfer of sovereignty by providing flexibility for countries as to how they want to impose tax and spending on different fields with consideration for prudent and sustainable debt management (*Wyplosz 2010*).

While many countries have by now introduced such institutions, we can make a distinction among them according to the authorities and tasks they have. Therefore we rank the countries using fiscal councils into 4 groups in order to decipher the councils' potential contribution to the improving fiscal discipline by the end of 2000s: *Group 1,* where the fiscal council's tasks imply the preparation of binding macro forecasts for the budget; *Group 2,* where the councils are preparing nonbinding macro forecasts for the state budget; and *Group 3* where the council is responsible for monitoring the budget performance. In an effort to have a more comprehensive picture on the performance of countries establishing councils we also contemplate *Group 4*, countries without such fiscal institutions.[8] Chart 1 suggests that *Group 4* countries seem to be in much worse fiscal conditions both in terms of the trajectory of the cyclically adjusted budget balance and general government gross debt ratio.

Although Finland can be classified in *Group 4*, its fiscal performance was by far the best, even among *Group 1-2-3* countries, not only in the period displayed above, but also in the last two decades.[9] This is *per se* puzzling especially if we take into account that most empirical analyses emphasised that the rules and institutions positively affect the development of public finance (*Debrun et al. 2008*). Accordingly, the mixture of rules and independent bodies may not serve as a prescription in each case and in every economic situation.

**Chart 1. Fiscal positions of the four groups (% of GDP)**




*Source:* data and estimations for the period 2010-2012 are provided by the European Commission (2010).

---

[8] *Group 1*: Austria, Belgium, The Netherlands and Slovenia. *Group 2*: Denmark, Germany, France, Italy, Luxembourg, Sweden and United Kingdom. *Group 3*: Belgium, Denmark, Germany, Estonia, France, Italy, Lithuania, The Netherlands, Portugal and Sweden. *Group 4*: Bulgaria, Cyprus, Czech Republic, Finland, Ireland, Latvia, Malta, Poland, Romania, Slovakia.

[9] The debt-to-GDP ratio was 42.8% on average in the period 2000-2011; moreover, the cyclically adjusted total revenues were higher than that of expenditures by almost 2 percentage points on average; centralisation as well as the unemployment rate have dampened over the period and the real GDP growth hovered around 3.5% on average. Despite the recent financial crisis, only 2009 can be considered as a year of recession.

The Finnish case suggests that there must be exceptional cases where countries reached fiscal discipline without using any legislated fiscal rules and institutions at the same time. *A contrario*, there must also be such cases where the rules and institutions did not prove to be as efficient as one would have expected.[10] This *per se* calls on economists to always devote attention to the local context of the given country in assessing its fiscal performance or the impacts of an institutionalisation. To this end, we briefly review the case of Finland by concentrating on its fiscal performance with special attention to the crisis experienced in the early 1990s. The Finnish case may provide, to a certain extent, ammunition to our concept about innovative fiscal policy and also help to address the question of when the mixture of rules and independent fiscal institutions could be effective or necessary.

**The case of Finland – crisis and revival**

Finland's crisis anatomy can be broken into three phases with significantly different characteristics: (i) the era of the financial liberalisation and the economic boom within the period 1985-1990, which culminated in an overheated economic situation; (ii) the second phase (1990-1993) was dominated by the financial crisis and its infiltration into various industries which was accompanied by the implosion of the Soviet Union further worsening the economic potential; (iii) the third was the phase of recovery which was pervaded by intelligent fiscal policy practice covering the period 1993-2000. The recovery period may have important messages for fiscal sustainability and fiscal consolidation-related theoretical and empirical literature; therefore we tend the focus on that particular phase.

Finland seems to be inconsistent with the conventional wisdom of the new political economy – namely, that a coalition government reacts to a fiscal shock with hysteria, leading to a much worse fiscal performance due to the distributional conflicts that occur among coalition parties when they want to decide whose voters should bear the brunt of the burden of the consolidation. Moreover, the Finnish case does not fit the experience of past decades on the evolution and use of fiscal rules and independent fiscal institutions, either.

Overheating was to a large extent a result of the financial deregulation leading to the escalation of credit lending, which *inter alia* unfolded in rising asset prices, in the permanent and intensified increase in consumption and investment as well as in capital inflow. These straightforwardly led to impaired international competitiveness and to speculative attacks against

[10] For example, Portugal has an independent fiscal institution; however, Portuguese fiscal policy has been unable to conduct disciplinarian fiscal policy over the last two decades. Furthermore, the recent financial and economic crisis casts a shadow on the prospects of its public finance as well.

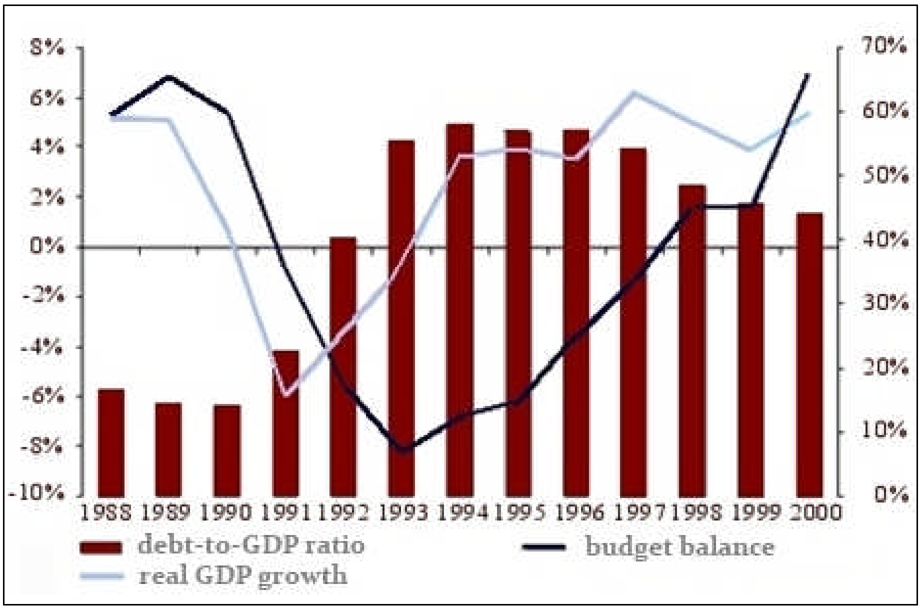
the fixed exchange rate. The pre-crisis period showed financial vulnerability as demonstrated by the soaring deficit level and debt-to-GDP ratio.

Processes assisting each other created a *descending negative spiral,* resulting in a significant increase in unemployment which was mainly caused by the substantial jump in real interest rates, the deflation of asset prices and the immature character of the financial system as well as the uncontrollability of the deficit and debt-to-GDP ratio.

The recovery period exemplified that a coalition government – contrary to the conventional message of new political economy – is able to intervene in time if it recognises areas that are more likely to have a positive effect on the economy due to more dedicated fiscal concentration without endangering social trust. Subsequently, the negative spiral can be converted into a *self-sustaining virtuous circle*, and fiscal sustainability can be a genuine prospect.

Without forgetting the fact that the comprehensive structural reform had a pivotal role in the recovery, we emphasise that the crisis disclosed the kind of suboptimal economic policies which were sheltered by business cycles in time of peace. In this regard, the *capability of government* to correct or select out those policies, and perhaps to incorporate new priorities, was potentially one of the crucial elements in the recovery.

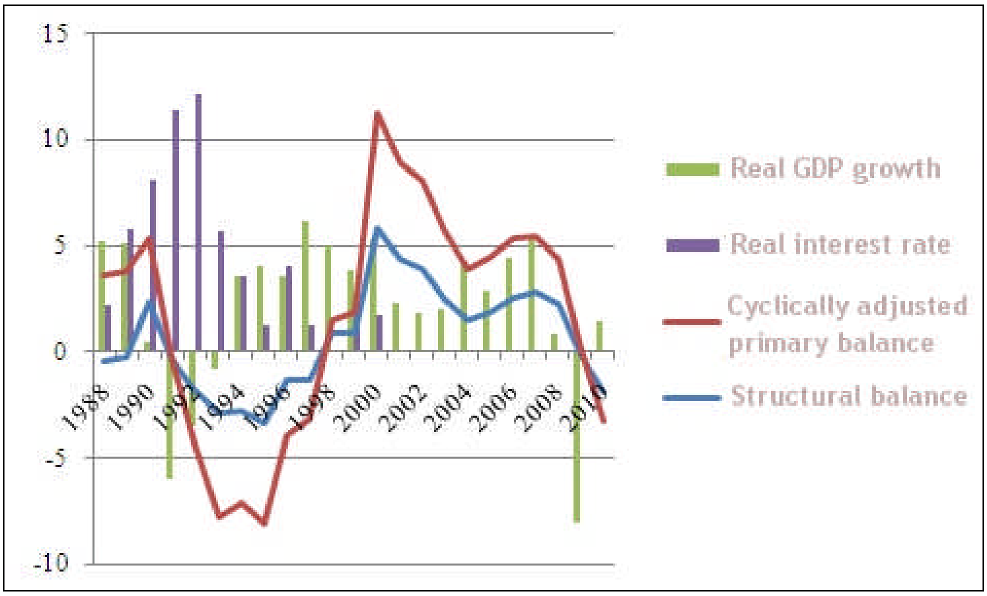
**Chart 2. Finland's fiscal position (% of GDP) (1988-2000)**
**(left axis: real GDP growth, budget balance; right axis: debt-to-GDP ratio)**




*Source:* European Commission, Statistics Finland

The discretionary measures, such as tax rises and spending cuts implemented in the first half of the 1990s – dominated by tall interest rates[11] –, still did not lead to perceivable consolidation. Spending cuts did not have spectacular and extenuating effects on deficits due to the general consequences of tax rises which induced lower tax revenues – because of the demand shrinkage and the increased unemployment rate – making the government unable to safely finance the expenditures which persistently exceeded the expected volumes. *Nonetheless, the emergence of the decrease in the interest rate appreciated the value of formerly started measures aimed at limiting the expenditures leading to improved fiscal latitude, and at the same time, revenues exceeded their expected volumes.*

**Chart 3. Structural and cyclically adjusted primary balance in Finland (GDP %)**




*Source:* European Commission, Statistics Finland

The international climate, characterised by moderating interest rates, did not threaten the occurrence of the kind of precisely coordinated fiscal policy which could be circumscribed by restrictive and also expansive features.[12] One of the major antecedents of the coordinated expansionary mechanism was the crisis, which shed light on those policies that proved to be unsustainable. The coalition government intended to correct them, and what is more, it focused on R&D and innovation, and so the intensified fiscal concentration brought anti-cyclical features into the expenditure structure of

[11] Since the German reunification led to soaring deficits and inflation, the Bundesbank raised the interest rates and thus the European rates also showed an upward trend up to 1992.

[12] By coordination we mean that the coalition government heightened the expenditure level in fields that have long been already treated as priorities such as innovation and R&D.

Finnish fiscal policy.[13] This kind of governmental strategy accelerated the transformation of Finnish society into a knowledge-based information society (*Benner 2003*). The fiscal consolidation, begun in the first half of the decade, went through a significant *character change* and thus the coalition governments' efforts were crowned with success. The consolidation became predominantly expenditure-sided. As a corollary, the deficit was converted into a surplus (1.3% and 7% of GDP in 1998 and 2000, respectively). Meanwhile, government was able to keep the proportion of revenues to GDP remarkably stable. And what is even more important, the level of revenues overcompensated that of the expenditures in the aftermath of 1997. As we indicated earlier, expenditure reductions *inter alia* were perceivable in the fields of education and the health sector, as well. Since these sectors performed relatively well, they served as safeguards behind the reduction. Not to mention the fact that the financial basis of these sectors was very good (local governments were much better financial position than the central government).

Actually, the new coalition government, which came into power in the mid 1990s, followed the line of consolidation initiated by the former government. This can be emphasised with reasonable certainty because the deficit- and debt reduction, the significant rationalisation of expenditures as well as the improvement in international competitiveness were of key importance on the agenda of both coalition governments. The first coalition government, which came into power in 1991, was not inclined to resort to a strategic game which would eventually deteriorate the fiscal latitude of the subsequent "rainbow coalition" government. And what is more, the first coalition government of the 1990s intended to build up and maintain the level of trust towards the state through austere behaviour. Almost 110 thousand public servants were dismissed between 1988 and 1998 (Fregert, 2009) – which offered a helping hand for the following cabinet. And perhaps more importantly, governments always stressed that preserving the social market economy is a fundamental objective, which also nourished the level of trust. Consequently, the *descending negative spiral* (vicious circle) was converted into a *virtuous circle* in which fiscal policy played a pivotal role.[14]

As far as fiscal conditions are concerned, it seems that fiscal consolidation was accompanied by a short term expansionary effect in terms of economic growth (GDP started its revival in 1991).

[13] Actually, the innovation policy can be regarded as anti-cyclical; however, it was achieved through fiscal policy. R&D and innovation expenditures were incrementally increased as a proportion of GDP (1993: 1.25% of GDP; 1996: 1.67% of GDP (*Eurostat 2010*).

[14] It is also worth noting that the changing governmental practice in the science and technology policy – making the system much more market oriented – also had a significant role in the process beyond fiscal policy. See more: *Pelkonen (2008)*.

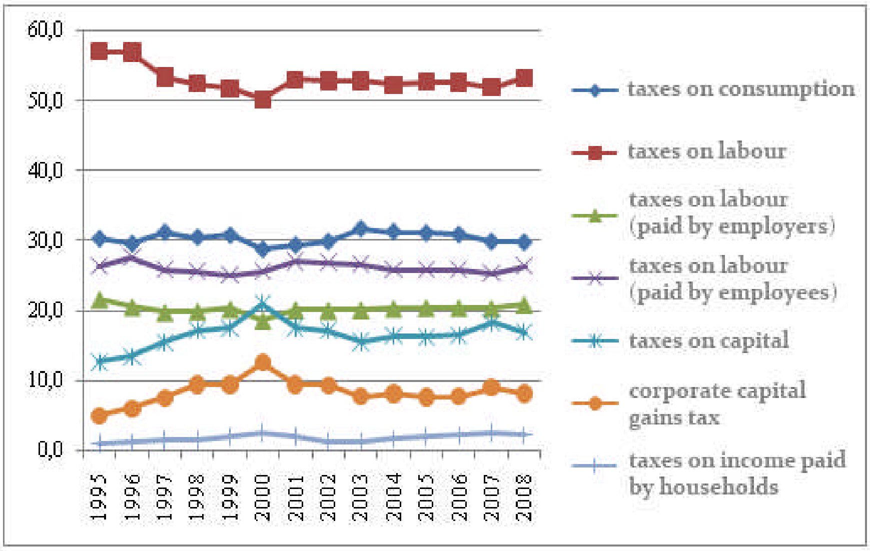
As regards the fiscal consolidation, a remarkable reduction in cyclically adjusted expenditure and revenue can be observed (*Chart 3*).

**Chart 3. Cyclically adjusted expenditures and revenues (% of GDP) (1985-2005)**


*Source:* European Commission, AMECO database

Additionally, if we take just a glimpse at the evolution of the revenue side, we can conclude that labour taxes were significantly reduced at the expense of capital taxes and capital gains taxes (*Chart 4*).

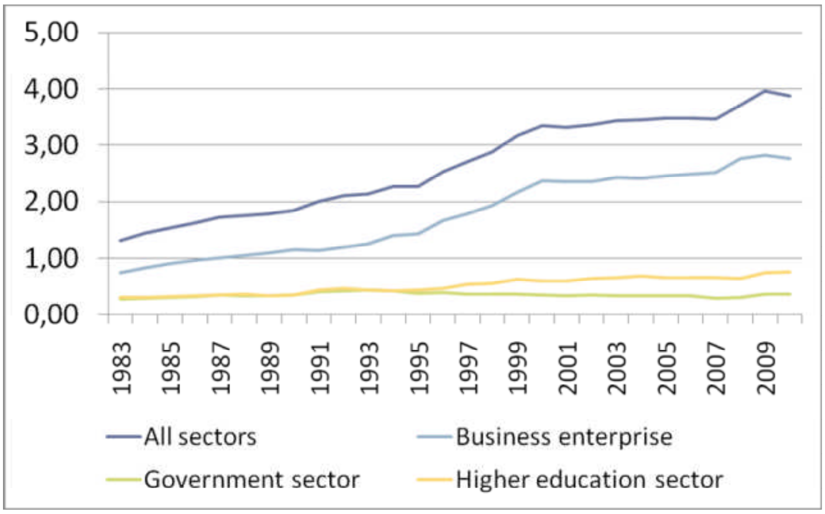
**Chart 4. Functional breakdown of revenues (in % of total taxation)**




*Source:* Eurostat

The expenditure-side fiscal consolidation contributed to the emergence of a virtuous circle from at least two sides. On one hand, with the coordinated use of created fiscal latitude the Finnish coalition government intended to foster R&D and innovation activities, and thus to trigger the enhancement of a knowledge-based economy and the birth of a mature information society in parallel. The increased volume of financial support to SMEs through larger portfolios was reflected in the development of the total intramural R&D expenditures by various sectors (*Chart 5*).

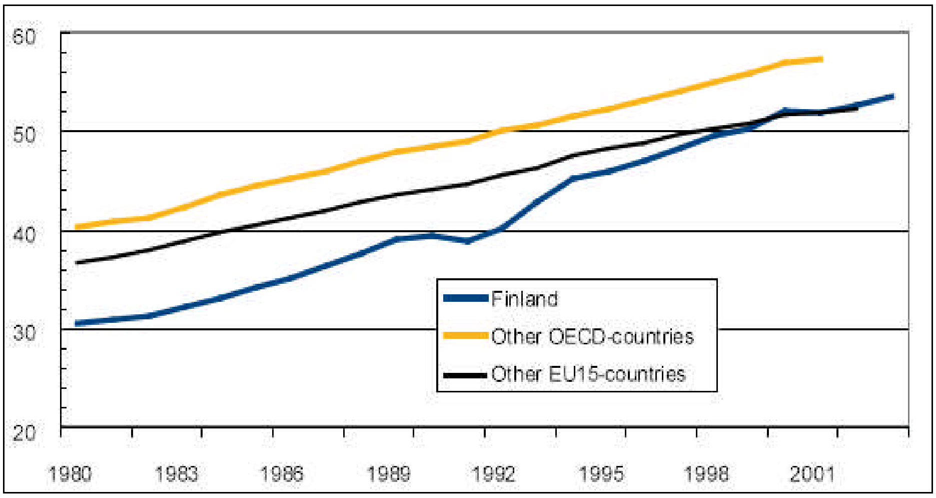
**Chart 5. Total intramural R&D expenditure (GERD) by sectors of performance**




*Source:* Eurostat

It is also worth mentioning that this discretionary governmental intervention implicitly relied mostly on broad social trust – which was traditionally the case in the field of science- and technology policy – towards both the coalition cabinet and state institutions. On the other hand, the sustainability of the welfare state's main features seemed to be guaranteed (Jonung et al., 2008). The information economy and the welfare state together constituted a virtuous circle at the same time. Due to the stabilised economic growth being far beyond the preliminary expectations, the government was able to finance the welfare services which – beside its social protection function – have traditionally endowed the economy with a skilled labour force as a prerequisite for further innovation, and, overall, of the maturation of the information economy. Owing to these conditions, coordinated fiscal consolidation had a positive impetus on the productivity level, as well (*Chart 6.*).

**Chart 6. Labour productivity of the total economy (1980-2003)**




*Note:* Value added per employed person, thousand 2002 euro, PPP
*Source:* OECD/STAN, *Kaitila et al. (2006)*

As regards fiscal institutionalisation, since it is closely related to fiscal consolidation it is one of the core constituents of innovative and sustainable public finances. The Finnish government succeeded in strengthening its role as an *informant on sustainability* by improving transparency. Public administration reform, announced in 1992, strove to stimulate transparency as well. The budgetary items were halved, which *per se* presumes that a sound state budgetary cadastre was to a certain extent established. Government intended to trigger the flexibility of the budget; i.e. to increase the number of revenue and expenditure items that can be rapidly changed, so that the discretionary power of fiscal policy improved substantially and the incremental character of budgetary practice became outdated. The voluntarily introduced and naturalised, but not legislated, institution of an expenditure ceiling also contributed to the transparency. It was also amplified by the direction towards medium planning in a more emphatic way, emphasising the essential role of long lasting results since 1996. Although an independent fiscal institution which would make proposals or permanent analyses on the interaction between rules and targets and complement it with technical projections has not yet been established in Finland, fiscal policy was still able to manoeuvre within not too strict rules without endangering growth performance. It also assumes that Finland mainly had (and has) a solid background for economic growth in terms of regulation, the business environment, a skilled labour force etc. One can conclude that the realistic targeting and the *ex post facto* investigations prepared by the State Audit Office and the Prime Minister's Office were good substitutes for such fiscal institutions. Nonetheless, one should also recognise that the direct impact of fiscal rules on economic growth cannot be unambiguously identified. What we can claim with reasonable certainty is that the use of fiscal rules facilitated the regeneration of fiscal discipline without being legislated from the onset. As for the reasons behind the success of the unlegislated fiscal rule – an expenditure ceiling rule was voluntarily used by coalition governments – the theoretical and empirical literature gives us some insights. Kennedy and Robbins (2001) pointed out that fiscal rules cannot be treated as a panacea; furthermore, unlegislated fiscal rules can also be conducive to fiscal discipline. What is rather interesting in the Finnish success is the lack of an independent fiscal institution. One can interpret the major findings of Schick (2003), *Corbacho and Schwartz (2007)* in the case of Finland as follows; fiscal rules could perform well without the establishment of further fiscal institutions due to realistic deficit targets and the political commitment to fiscal discipline based on broad consensus, as well as the efficient evaluation mechanism. And what is even more important is the fact that Finland's economic background provided a promising growth perspective through innovation by fending off the evaporation of social trust towards governmental institutions.[15]

The consolidation was shortly followed by a significant increase in real GDP growth; still, deciphering what particular factors played a key role in the emergence of a non-Keynesian short-term expansionary effect is extremely difficult. Regarding the short-term recovery, we refrain from giving credit to an argument that considers the short-term expansionary effect as a direct repercussion of the implemented fiscal consolidation. Instead, we emphasise that this effect was an indirect rather than a direct one and was sparked by some anti-cyclical behaviour raising the level of specific items of expenditure. The expenditure-side fiscal adjustment served as an engine for the recuperation by providing ammunition for the national innovation and technology policy which directed its supportive focus towards higher education, higher-level vocational training, and R&D as well as on the renewal of industrial specifications. In this sense it can be ascertained that the Finnish coalition government intelligently recognised fields that are worth concentrating on. To a high degree the fiscal policy bore the stamp of disruptivity, its transformative power contributed to the industrial restructuring, i.e. to leaving the resource based economic paradigm behind. This transformation was accompanied by the structural adaptation of the Finnish public finances to the new circumstances.

[15] According to *Kornai (2010)*, the major prerequisites of an impulsive innovation process in capitalism are the following: decentralised initiation; high rewards; competition; opportunity for wide experiments and flexibility of financing. Decentralised initiation means that every business actor (e.g. SMEs) can determine for themselves what they want to invest in. Ultimately, the most successful innovations are accompanied by an enormous amount of financial reward including long-lasting reputation. The success of the innovation relies to a large extent on the available financial resources and the absorption capacity of the society. While the financial flexibility was provided by the consolidation, the latter offered a wide arena for extensive experimenting, which was to a large degree the case in Nokia's success.

## Concluding remarks

Although the mature discipline of sustainability economics cannot be clearly seen yet, it can be claimed that the need for sustainability can originate in human nature, whose specific features call on the enhancement of the state's role as an *informant of sustainability*. We argue that there is increasingly a need for policies with longer perspectives. Innovative fiscal policy pervaded by a holistic view should integrate the volatility of environmental, social as well as economic processes in order to have the capabilities both to sustain (*sustaining character*) and to change (*disruptive character*) the structure in the long run. This implies that the innovative fiscal policy is neither purely pro-cyclical nor anti-cyclical. That they exist beside each other is a core constituent of innovative fiscal policy. Beyond trust and positive expectations – which to a large extent influence the emergence of Kaldor-Hicksian expansionary fiscal consolidation –, the above mentioned are essential for a holistically designed and intelligently focused fiscal policy to have a better opportunity to *allocate and/or combine* between revenues and expenditures through its discretionary ability within the framework of targeted deficit and debt levels. The mixture of fiscal rules and independent fiscal institutions – as trust builder channels – seems to support the discretionary ability if they are *introduced on a consensual basis.*

The example of Finland was used in order to lend support to the conceptual findings of innovative fiscal policy within the framework of sustainable public finance. As Finland demonstrated, the transformative power of fiscal policy stems mainly from its innovativeness. The ability of coalition governments to continue the consolidation efforts already started without significant hysteria – in diametrical opposition to the conventional wisdom of new political economics – was the *conditio sine qua non* of the Finnish success. It also exemplified that innovative fiscal policy assumes that the *commitment to fiscal discipline has to be autochthonic. With substantial focus on the evolutionarily developed and mature fields and by preserving the social market economy* the government was able to enjoy the necessary broad social trust. The coalition government carried out a concentrated adjustment whereby it pursued the consolidation results achieved by the former government, so the focus on R&D and innovation fields with adequate framework conditions became much more intensified. *Pro- and anti-cyclical fiscal policies were in tandem* and thus provided financial resources primarily through a perceptible reduction in public sector wages and transfers as well as social expenditures. Additional resources streaming towards the above mentioned fields had a catalysing impact on economic growth, thus the consolidation can be portrayed as Kaldor-Hicksian expansionary adjustment which offered opportunity for indirect compensation contrary to the conventional considerations on expenditure side fiscal adjustments which call attention to the recessionary effect of expenditure based interventions. Disengaged financial resources were allocated towards fields that were more likely to facilitate the recovery and the road to the knowledge-based economy.

After contemplating the Finnish case, we can refine our argument about the use and necessity of the mixture of fiscal rules and independent institutions working in favour of fiscal sustainability. The mixture seems to support discretionary ability if it is introduced on a consensual basis in a country with serious transparency and trust problems and where the conditions for economic growth are weak. Strong economic performance is associated with higher levels of trust towards governmental institutions, whilst worse economic performance is more likely to entail low levels of trust leading to a vicious circle, and thus, to the need for trust building via fiscal institutionalisations.

*References*

Afonso, A. – Hauptmeier, S. (2009): Fiscal behaviour in the European Union: rules, fiscal decentralization and government indebtedness. *ECB Working Paper* No. 1054

Alesina, A. – Ardagna, S. (1998): Tales of fiscal adjustment. *Economic Policy*, Vol. 13 No. 27. pp. 489-545.

Alesina, A. – Perotti, R. (1996): Budget deficits and budget institutions. *NBER Working Paper* Serises, No. 5556

Benner, M. (2003): The Scandinavian challenge: the future of advanced welfare states in the knowledge economy. *Acta Sociologica* Vol. 46. No. 2. pp. 132–149.

Buchanan, J. – Rowley, C. – Tollison, R. (1986): Deficits. Borrie Blackwell, Oxford.

Christensen, C.M. (1997): The Innovator’s Dilemma: when new technologies cause great firms to fail, Harvard Business School Press, Boston, Massachusetts.

Corbacho, A. – Schwartz, G. (2007): Fiscal Responsibility Laws in Promoting Fiscal Discipline. Washington: IMF.

Debrun, X. – Moulin, L. – Turrini, A. – Ayuso-i-Casals, J. – Kumar, M. S. (2008): Tied to the mast? National fiscal rules in the European Union. *Economic Policy*, CEPR, CES, MSH, Vol. 23. No. 4. pp. 297-362.

Fregert, K. (2009): Causes of structural unemployment in Finland and Sweden 1990-2004. Jaakko Pehkonen, Department of Economics, University of Jyväskylä.

Hicks, J. (1939): The Foundations of Welfare Economics. *Economic Journal* Vol. 49. No. 196, pp. 696–712.

Jonung, L. – Kiander, J. – Vartia, P. (2008): The great financial crisis in Finland and Sweden. The dynamics of boom, bust and recovery, 1985-2000. European Economy, Economic Papers 367. Brussels: European Commission.

Kahneman, D. – Tversky, A. (1979): Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, Vol. 47, pp. 263-291.

Kaitila, V. (2006): Productivity, Hours Worked, and Tax/Benefit Systems in Europe and Beyond. *Discussion Papers* No. 1015, The Research Institute of the Finnish Economy.

Kaldor, N. (1939): “Welfare Propositions in Economics and Interpersonal Comparisons of Utility”. *Economic Journal* Vol. 49. No. 195, pp. 549–552.

Kennedy, S. – Robins, J. (2001): The Role of Fiscal Rules in Determining Fiscal Performance. *Canadian Department of Finance Working Paper* No. 16.

Kopits, G. – Barnhill, T. (2003): Assessing Fiscal Sustainability under Uncertainty. IMF Working Paper No. 79, pp. 34

Kornai, J. (2010): Innovation and Dynamism. Interaction between systems and technical progress. *Economics of Transition* Vol. 18. No. 4, pp. 629–670.

MEA (2005): Millennium Ecosystem Assessment Synthesis Report. Available: www.millenniumassessment.org.

Nordhaus (1975): The Political Business Cycle. *Review of Economic Studies*, Vol. 42, No. 2, pp. 169-190.

Pelkonen, A. (2008): Reconsidering the Finnish model – information society policy and modes of governance. *TRAMES*, Vol. 12. No. 62/57. pp. 400–420.

Perez, C. (2002): Technological revolutions and financial capital: The Dynamics of Bubbles and Golden Ages. Edward Elgar.

Reinhart, C. M. – Rogoff, K. S. – Savastano, M. A. (2003): Debt intolerance. *NBER Working Papers* No. 9908

Reinhart , C. M. – Rogoff, K. (2011): A Decade of Debt. *NBER Working Paper* No. 16827

Schick, A. (2003): The Role of Fiscal Rules in Budgeting. *OECD Journal of Budgeting*, Vol. 3. No. 3. pp. 7-35.

Wyplosz, C. (2010): Eurozone reform: Not yet fiscal discipline, but a good start. Available: http://voxeu.org/index.php?q=node/5610 Downloaded: 04.03.2011