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QUALITY OF PUBLIC FINANCES AND ECONOMIC GROWTH

Abstract: Fiscal sustainability is considered as a fundamental requirement of economic growth. The paper studies this topic regarding the EU Member States, especially the new ones. The ageing society of the EU countries results in growing dependency ratio and growing age-related budget expenditure as implicit requirements. All these require the maintenance of the current state debt ratio and a permanent budget adjustment.

The differences among Member States are significant, the country risks are diverse. In certain countries unsustainable public finances –sustainability gap – might evolve.

Sustainable public finances are considered of special importance in the system of the EMU. Due to the lack of exchange rates, risk premia it comes to the spill-over of fiscal sustainability problems.

Besides the reduction in state debt the creation of sustainable public finances requires employment and productivity growth, and the reforms of age-related expenditure.

The quality of public finances requires the joint observance of several dimensions: long-term sustainability, stabilization (demand shocks), adjustment (effects of supply shocks) and the promotion of long-term growth are of outstanding importance.

Main factors of the quality of public finances are the size of government, the level of deficit and state debt, composition of public spending, the structure of the tax system, and the fiscal governance and regulation.

The Economic and Monetary Union itself has not forced out the necessary reforms yet. The fundamental public finance reforms are, however, unavoidable. In the ageing society there is a growing need for forward-looking policies. The integrated structural reforms that could contribute to the promotion of the potential growth might bring permanent solutions.

Keywords: fiscal sustainability, quality of public finances, economic growth, structural reforms.

1. INTRODUCTION

The *European growth potential is getting out of breath*. Trends (simulations based on production functions that assume unchanged – static-policies) suggest that *further significant decrease of potential growth* is unavoidable. Potential growth rate could be halved in two to three decades. (see figure 1 and Halmai – Vásáry, 2008).

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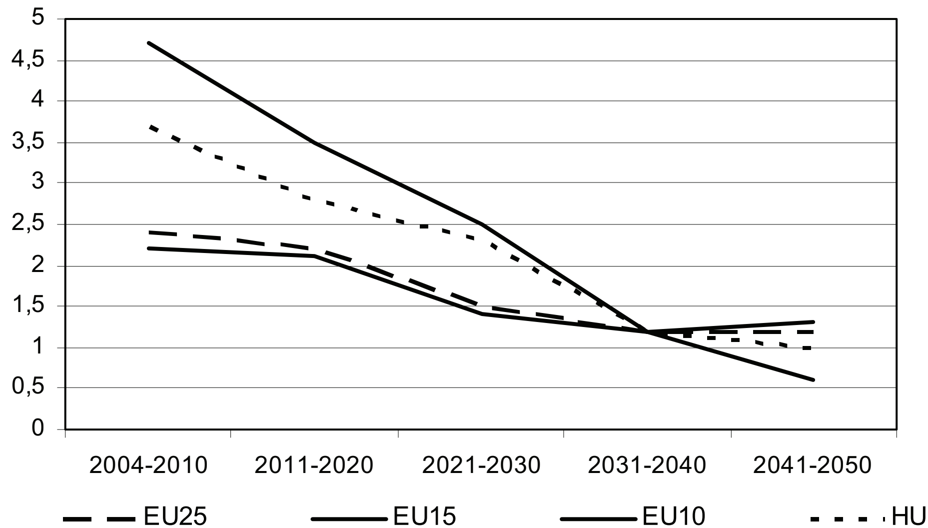

Figure 1. Development of potential growth rate

Source: Halmai – Vásáry, 2008.

The convergence rate of catching up countries might decrease at a rapid pace and it might switch to divergence in about two decades. According to scenarios that can be simulated nowadays the new Member States (NMSs) cannot catch up with the most advanced countries but in the medium-term they form a stagnant ‘convergence club’.

As regards the solution to the European growth problem the *integrated structural reforms* (Lisbon-type reforms) are of significant importance. In the review of the Lisbon Strategy new aspects appeared: the aspect of sustainable *public finances* and the *quality of public finances.* It is fundamentally required that in an environment characterized by more closely integrated markets and stronger global competition the public finances should facilitate the objectives of stable economic growth and higher employment to a greater extent than it used to be done.

Hereinafter the links between the sustainable public finances, the quality of public finances and the economic growth additionally the main lessons that can be drawn for the EU member states (MSs) are outlined.

2. SUSTAINABLE PUBLIC FINANCES

One of the greatest challenges which have to be faced by the European societies and public finances is considered the *ageing society*.

The size and age-structure of the European population will change dramatically over the next decades. (On the one hand due to changes in the national replacement rate, on the other hand because of continuous increase in life expectancy.) Despite the net inward migration inflows the *old age dependency ratio* (that is the ratio of people over 65 compared to people aged 15–64) *will be doubled* by 2050 (it will increase to 53%).

Closely linked to all that the annual average *potential GDP growth* might decrease from an average value of over 2% measured over the past two decades to approximately 1,75% than to 1,25% over the next two decades. As the employment growth is gradually declining (and it will become negative), in the long run productivity will become the only source of growth in the majority of the European countries.

Pursuing the present policies the rate of *age-related expenditure compared to the GDP will increase by 4% until 2050.* (European Commission, 2008, 196. p.) This growth in expenditure is caused mainly by pension and to a lesser extent by health care and long-term care. (European Commission, 2006) At the same time the expenditure related to education and unemployment might decrease but the potential counter effect might be only limited.

In the context of these problems (i.e. the growing budget burdens of ageing) the *sustainability gap indicator* can be created. (European Commission, 2006, 2008) This indicator shows the permanent budget adjustment needed for the maintenance of the state debt ratio expressed as percentage of the GDP in infinite horizon. The indicator is to be divided in two components: on the one hand the impacts of the measures needed to be implemented also without the expenditure growth related to ageing and on the other hand the impacts of measures which take into account these effects.

The sustainability gap is averagely approximately 2,5% of GDP. The impact of the ageing on the sustainability gap is higher than that (approximately 3,5%), but the initial primary fiscal position is large enough to provide an offset of around 1% of GDP.

In a scenario created under circumstances of unchanged policies the state debt in the Eurozone countries might drop below 60% of GDP at the beginning of the period examined. It starts to increase in the middle of 2020s and might reach 120% (!) of GDP (see figure 2).

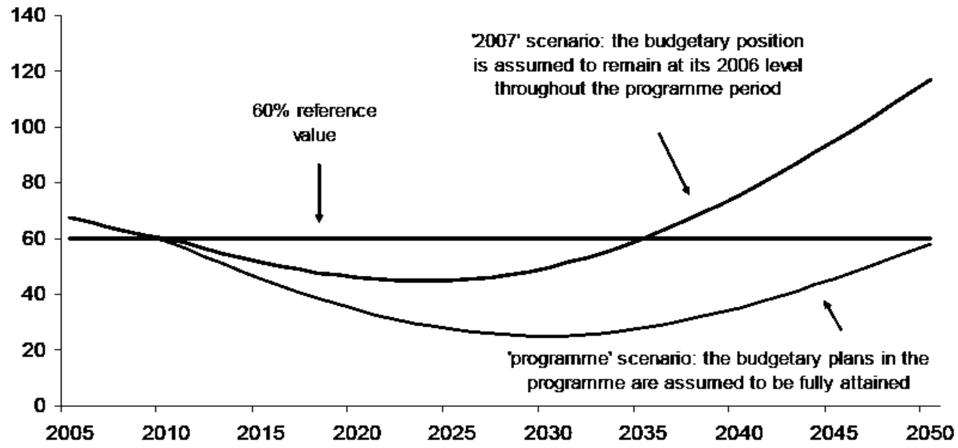

Figure 2. Debt developments in the euro area, 2005–2050

Source: European Commission.

At the same time there is a *great difference among the MSs*. There is a sustainability gap in almost each county in the Eurozone. In certain countries public finances are unsustainable also independently from the long-term budget effects of the ageing society (see figure 3).

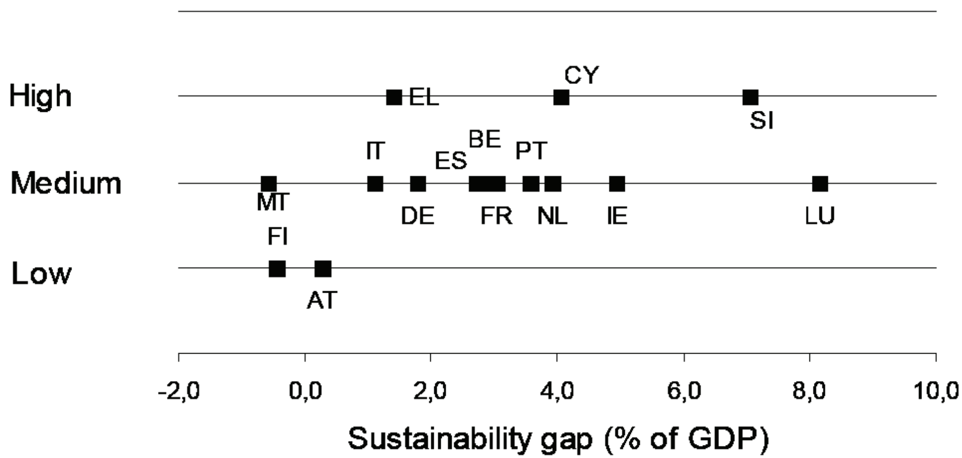

Figure 3. Overall risk classification and the sustainability gap

Source: European Commission.

The fiscal sustainability is of special importance in the Eurozone. In the Monetary Union there are no foreign exchange risk premia. That is why governments are faced with weaker market disciplining effects. At the same time the spillover effects of the fiscal sustainability problems are significant – through the interest rates and exchange rates prevailing in the whole territory – in the framework of the Monetary Union as regards the other countries in the Eurozone. *Sustainable public finances are considered a policy challenge that requires fundamental answers along three main dimensions:* decrease in public debt, employment and productivity growth and age-related expenditure programs. (This three pronged strategy was decided at the Stockholm Summit in March 2001.) The adequate mix of the three approaches is required. It depends on the one hand on the challenge on the other hand on the policy priorities of the countries. The precise policy determination and the fast implementation of these policies is an important prerequisite for the sustainable public finances.

3. THE QUALITY OF PUBLIC FINANCES (QPF)

The quality of public finances is characterized by *various dimensions*: in what way the fiscal policy ensures the long-term sustainability, the stabilization in response to demand shocks, the adjustment in response to supply shocks and the long-term economic growth. (More details on interpretation of QPF see Barrios-Schaechter, 2008, 7–8 pp) These aspects are closely related. E.g. the sustainable public finances are facilitated by a fiscal policy which promotes the long-term economic growth. The Lisbon Strategy puts emphasis on the mutual relation between fiscal sustainability, quality of public finances and the long-term growth. It highlights the need for growth oriented public spending and stresses that the debt structure should strengthen the growth potential. According to the strategy Member States have to ensure that mechanism are in place to assess the links between public spending and the achievement of policy objectives, and have to ensure the overall coherence of reform packages.

The quality of public finances is considered to be much more than the composition of public spending. There are differences not only simply among each public spending item, but partly among the level of the spending and partly among the debt burden: such an effective spending program that is financed through distorting taxes is not growth-enhancing as regards the balance. Furthermore the spending programs and the tax systems are designed not only to achieve macro-economic targets, but also to have policy preferences and dispreferences (poverty, social and cultural cohesion). That's why the latter objectives have to be taken into account during the assessment. These goals are in principle not inconsistent with the macro-economic goals of stabilization, adap-

tation and growth. At the same time the spending programs and the tax systems might result in adverse distortions.

The main determining factors of the quality of public finances are: the government size, the state debt and budget deficit, the composition of public spending, the taxation and the fiscal governance.

3.1. Government size

Big government (public administration) burdens the economy[1] (see figure 4).

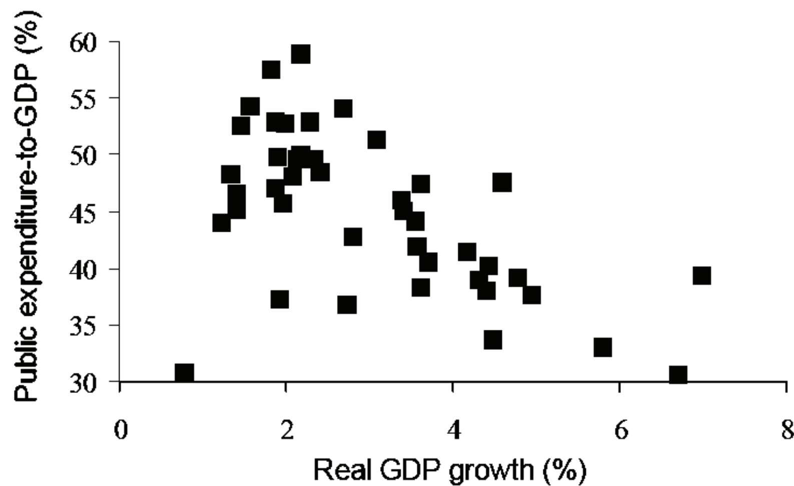

Figure 4. Size of government and real GDP in the euro area averages 1980–1989, 1990–1999, 2000–2007

Source: European Commission.

Also the high level of taxation – that goes hand in hand with the aforementioned – decreases the growth potential. (Afonso et al, 2005; Agell et al, 1997). In principle the big government sector could fill the role of an automatic stabilizer in the Monetary Union. (Especially due to the lack of exchange rate – and national monetary policy.) But the high debt burdens linked to the big governments have a negative impact not only on the growth potential but also on the adjustment capacity of the economy. (Debrun, Pisany-Ferry and Sapir, 2008) According to estimations the automatic stabilizing capacity of the government declines above 40% of the GDP. Beyond this size automatic stabilizers add to

[1] According to the so-called Wagner's law government spending grows faster than economic performance. (see details Arpaia and Turrini (2008), Barrios and Schaechter (2008)

rather than attenuate the inflationary impact of demand shocks and also push down activity after an adverse supply shock. The high taxes and the generous income replacement strengthen the real wage resistance and might trigger inflationary shock. A less costly way of promoting the stabilizing function is the decrease in the share of public sector in the economy. The impacts of the social security systems the labour market institutions and the tax systems have to be consistent with the requirements of the flexible labour- and product markets, the economic adjustment.

3.2. State debat and budget deficit

As a fundamental element of the EMU the need for sustainable fiscal position is considered. Thus the potential negative spill-over effects might be avoidable. At the same time the national fiscal policy is required further on. So during the review of the Stability and Growth Pact (SGP) in 2005 the member states were obliged to define medium-term budget goals. On the one hand the MSs have to create stable starting position and thus they have to stabilize the demand shocks while keeping the budget deficit below the 3% of GDP threshold. On the other hand the level of state debt has to be decreased and public finances should be put on sustainable path in the long run.

3.3. Composition of public spending

The composition of public spending plays an important role also from the point of view of the growth potential and the adjustment to shocks. The government might react in a more flexible way if *the rate of discretionary expenditure* (investment, intermediate consumption spending) in the budget *is high*. (This rate is about 16% on average in the Eurozone and it fluctuates between 11–24% among member states.) The high rate of public sector wages in long-term contracts makes the flexible budget adjustment difficult. (Notably if the adverse supply shocks necessitate a downward adjustment of real wages. (Grenouilleau et al, 2007)) At the same time the high proportion of R&D expenditure and expenditure on education might increase the productivity and enhance the ability to overcome negative shocks.

There is a structural relationship between the non-cyclical component of public expenditure and the potential output (Arpaia and Turrini, 2008).[2] There are different empirical results on the different growth-enhancing expenditure types. Their share in the total expenditure is between 20–45%. (European Com-

[2] At the same time the latest empirical analysis could describe only limited impacts. (Gemmel et al, 2009).

mission, 2003, 2004) In a wide sense (i.e. besides R&D expenditure and expenditure on education the healthcare, the environmental expenditure and the expenditure on public order and security are included) the growth-enhancing spending has been intensifying (see figure 5).

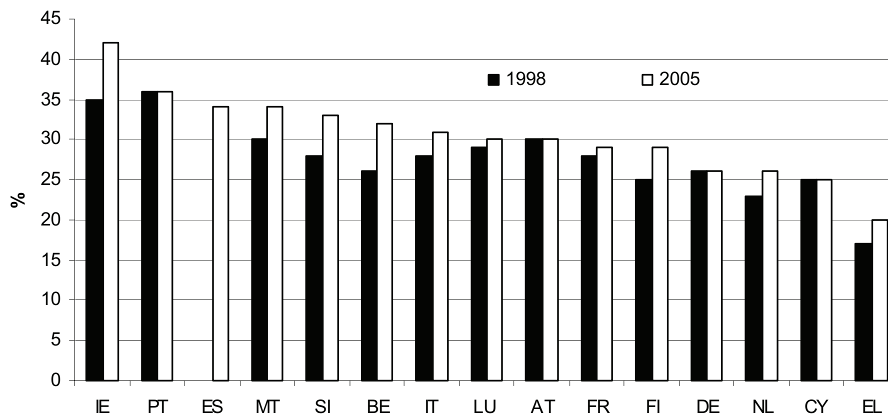

Figure 5. Growth-enhancing public spending (Share in total public spending)
Source: European Commission.

The differences among MSs are, however, significant. As regards the sustainable public finance it is definitely required that the expenditure don't accumulate through increase in pension and other social expenditure (Mandl et al, 2008).

The importance of the *efficiency of spending programs* is growing. The efficiency grows in the case of public spending if the same level of public goods can be provided using less resources (*technical efficiency*) or a better mix of public goods can be provided at the unchanged level of spending (*allocation efficiency*). There are empirical studies especially on public spending on R&D education and health care (e.g. Sutherland et al, 2007; Afonso and St. Aubyn, 2006). The policy options include more result-oriented management, more market-based measures, the use of public private partnership (PPP) and outsourcing.

3.4. Taxation

The level and the mix of taxes have a significant impact on the adjustment capacity of the economies and the long-term growth, first of all through having an impact on the labour and capital allocation. The higher the marginal labour tax wedge (the difference between real labour cost and real take-home pay) –

that might be caused by the strong income tax progressivity – is, the less flexible the labour supply is and the stronger the volatility originating from the supply shock is (Buti et al, 2003).

The relatively high share of indirect taxes might promote higher capital accumulation and faster growth. The direct taxes punish savings and investments (OECD, 2007). The *simple and transparent tax systems* might decrease the administrative costs. In the EMU there is a shift from indirect taxes to direct ones. The direct labour taxes are decreased (Carone et al, 2007; Alworth and Arachi, 2008). *Altogether the tax reform has been limited and point-wise* (European Commission, 2008, 200 p.).

3.5. Fiscal governance

The fiscal governance crosscuts all dimensions of the public finances. The strong regulations with numerical criteria that are widely available improve budget performance. The strong and extended spending rules are accompanied with lower primary spending calculated as percentage of the GDP. According to the fiscal regulation index calculated by the European Commission the assessment of most Eurozone countries has been improved the appraisal scores have been converging.

According to the European Commission (European Commission, 2007) in two thirds of the cases the stability and convergence programs could not facilitate the improvement as regards the general government balance. *It was mainly caused by the exceeded planned spending*. Based on econometric analysis it is to be stated that countries with stronger medium-term fiscal frameworks usually don't do that. The strong medium-term budget system covers the whole government sector, it is well-coordinated between the different levels of government and it has strong executing and monitoring mechanism.

The national fiscal institutions might play an important disciplining role. The governments are sometimes too optimistic while determining macroeconomic assumptions supporting the budget. That is why the independent institutions or agencies might play an important role either as regards macroeconomic forecasts or fiscal performance monitoring and assessment (Jonung and Larch, 2006).

Fiscal governance plays an important role in increasing the spending efficiency. It might contribute to a great extent to the increase in transparency and the abolition of corruption. Budget regulations containing performance information enhance efficiency: they shift the emphasis from input to output and result.

4. FISCAL PERFORMANCE IN THE NEW MEMBER STATES

In most new MSs – the same as in the old ones – there was an *improving nominal budget and structural balance and lower debt-ratio until 2007.* Corrections of excessive deficit have occurred and member states were heading towards medium term budget objectives. (European Commission, 2009)

The budget and structural balance was improved mainly through revenues in Slovakia and Poland but mainly through expenditure in Bulgaria, Check Republic and Slovenia. Consolidation though decreasing spending shows the permanent correction of government deficit. (Alesina and Perotti, 1997)

In most NMSs the *state debt ratio* compared to the GDP has remained at a low level. There is an exception: Hungary with a state debt ratio of over 60%.

In the NMS the majority of fiscal variables improved in the period 2004–2007. The strict EU-rules contributed to that to a great extent. In July 2004 the Council – following the Commission's proposal – initiated *excessive deficit procedure* against six new member states (Hungary, Poland, Check Republic, Slovakia, Cyprus and Malta). These countries could decrease the deficit successfully so in most cases the procedure was cancelled. *But taking into account the present financial crisis it is likely that most of the NMSs will have to face the excessive deficit procedure again*.

During the fiscal performance assessment it is important not only to avoid the excessive deficit procedure but also to make progress as regards the achievement of *medium-term budget objectives*. Through reaching sound fiscal position the excessive deficit might be avoided. At the same time it is of great importance to take into account the implicit liabilities subsequent upon the ageing society.

The medium-term budget objectives are less ambitious in the NMSs than in the old ones: mainly due to the lower debt ratio and higher potential growth. At the same time only certain new MSs could (were allowed to) join the Eurozone or the ERM II system. So their strict rules apply only to certain new MSs.

5. ENSURING MACRO-FINANCIAL BALANCE

Following the transformational crisis (roughly from the middle of 1990s) the CEECs got back on the path to economic growth. Simultaneously significant deflections (e.g. periodical acceleration of inflation) occurred together with the growth process. But the extremely strong cycles of credits, asset prices, current account and real exchange rates endanger the stability. The monetary policy and the banking supervision play a decisive role in regulating these processes.

A rational prudent fiscal policy might contribute significantly to the balance and it can restrain the exaggerated credit expansion. It might react positively to the impacts of the private investments on the external balance (current account). At the same time the additional fiscal headroom might help to manage the present crisis, the almost lost confidence. *If the MSs maintain lower deficit and higher surplus that are included in the Stability and Growth Pact during extended booms then these countries are heading towards sustainable public finances and facilitate the automatic stabilizers to operate*.

The *transparent* and authentic *medium-term budget systems* are of great importance. The overestimation of the potential growth and the excessive distribution based on exaggerated optimistic growth assumptions in the budget have to be avoided. The increase in tax revenue is often temporary e.g. while asset prices grow. (Jaeger and Schuknecht, 2004*) The prudent fiscal policy might result in higher growth even in the short run, mostly through credibility effects* (Rzonca and Cizkowitz, 2005).

The interrelationship between the exchange rate regulation and the fiscal policy is of great importance. As regards the flexible exchange rate system the increase in foreign currency credit needs to be mitigated. (This way the current account deficit might decrease.) In the fixed exchange rate system the spread of instability is even more significant. Therefore the need for prudent fiscal policy is even stronger.

The *fluctuations* in the economies and public finances of the NMSs have been decreasing since EU-accession. It has come especially to the mitigation of fluctuation in the rate of interest, among other factors due to the stabilizing effect of the EU-membership. Under less stable economic conditions the economic and fiscal forecast is particularly complex. (Keereman, 2005) The high variability of the general government revenue and the primary expenditure as percentage of the GDP, the stronger fluctuation in inflation and state debt in the NMS is significant compared to the old MSs.

The Baltic-states, Bulgaria and Romania show an especially high fluctuation in the primary expenditure. Hungary and Romania are very sensitive to the interest changes.

The *effects of the present fiscal crisis* on the public finances cannot be overviewed completely. The budget balance deterioration in the NMS can be considered as a general symptom. (See table 1) All these strengthen the significance of prudent public finances in the medium-term. At the same time the potential budget balance deterioration is related with discretionary measures applied to the crisis management, with the participation in the European Economic Recovery Plan. (The latter burdens also the 2010 budget.) This participation is, however, more moderated in the NMSs. On the one hand in certain NMSs the economic growth hasn't stopped (though it has decreased to a great extent), on the other

hand there is a lack of fiscal latitude in other countries. (Therefore Hungary and Latvia tries to manage the crisis by means of the EU and international financial institutions.) So far the Check Republic, Poland, Malta and Slovenia have launched a fiscal incentive package. At the same time there are no such packages or only packages of negligible size in Bulgaria, Lithuania, Hungary, Romania and Slovakia.

Table 1. Budget balances of EU Member States (% of GDP)

	Budget balance					Structural primary balance			
	2006	2007	2008	2009	2010	2007	2008	2009	2010
CZ	–2.6	–0.6	–1.5	–4.3	–4.9	–1.4	–2.3	–2.9	–2.5
EE	2.9	2.7	–3.0	–3.0	–3.9	–0.7	–3.9	–0.6	–1.4
LV	–0.5	–0.4	–4.0	–11.1	–13.6	–4.1	–4.9	–8.1	–9.2
LT	–0.4	–1.0	–3.2	–5.4	–8.0	–2.1	–4.5	–3.1	–3.9
HU	–9.2	–4.9	–3.4	–3.4	–3.9	–1.5	–0.2	3.1	2.9
PL	–3.9	–1.9	–3.9	–6.6	–7.3	–0.9	–3.1	–3.1	–2.7
RO	–2.2	–2.5	–5.4	–5.1	–5.6	–3.7	–7.2	–3.7	–3.1
SL	–1.3	0.5	–0.9	–5.5	–6.5	–0.4	–1.3	–3.3	–3.4
SK	–3.5	–1.9	–2.2	–4.7	–5.4	2.4	–3.5	–3.7	–3.3
EA-16	–1.3	–0.6	–1.9	–5.3	–6.5	1.1	0.2	–0.9	–1.5
EU-27	–1.4	–0.8	–2.3	–6.0	–7.3	0.7	–0.4	–1.8	–2.5

Source: European Commission, June 2009.

6. QUALITY OF PUBLIC FINANCES IN THE NEW MEMBER STATES

6.1. Public investments and the quality of public finances

Public finances might contribute to the economic growth and the catch-up, first of all through developing infrastructure, R&D and education. *During the period 2004–2008 there was a strong positive correlation between public finances and growth in the new EU member states.* (See figure 6)

Following the EU-accession despite the stricter fiscal rules the *share of public investments compared to the GDP* rose on average around to 4% in the NMSs. (Contrary to the old MSs, where the same rate was 2.5%.)

The fiscal policy might contribute to the potential growth with supply-side effects (Gemell and Kneller, 2001), Afonso et al, 2005). It needs to be clarified to what extent the fiscal policy allows the state to finance investments.

At the same time the high growth performance enhances the debt-bearing capacity of the economy. *In the short-run tension might, however, occur between stability assurance and the priority program financing.* This trade of is

discussed also in the NMSs. According to one approach the growth can be promoted through a budget deficit that is in excess of the former planned values (and the SGP-rules).

The macro-economic stability risks dictate, however, a very cautious fiscal position. Potential trade off has to be taken into account in the analysis of the stabilizing role of the fiscal policy.

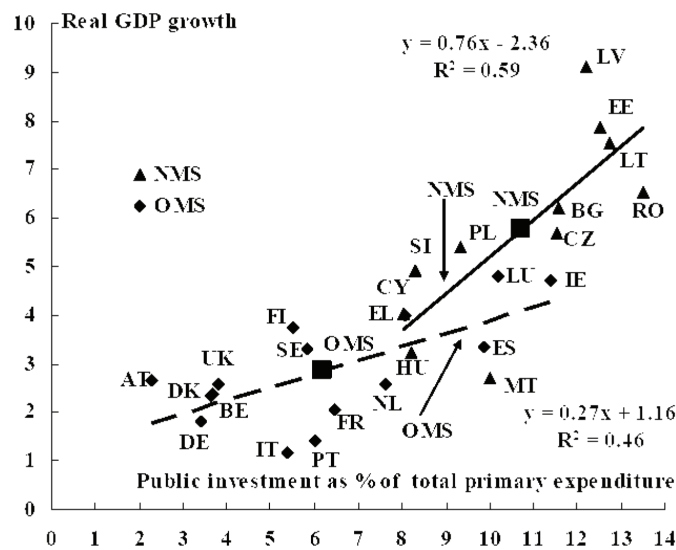

Figure 6. Public investment, 2004–2008

Source: European Commission.

6.2. Improvement in quality of public finances

Further important dimension of the quality of public finances are considered: debt sustainability, composition of spending and fiscal governance. These factors – together with the above-discussed topics – have significant effect on the stable convergence.

6.2.1. Debt sustainability

High state debt and budget deficit have an effect on the saving and investment decisions. Their impact on the economic growth is negative. The increasing credit demand of the budget might increase real interest rates and through that it can crowd out private investments. Economic actors who consider the

current fiscal policy to be unsustainable might increase their savings (and/or might decrease their investments) in order to guard against the future debt growth. (It can result in robust capital outflow.) The tax increase toward debt reduction and the decrease in public investments have a negative impact on the economic growth (Tanzi and Chalk, 2002). These problems are very timely for the NMSs. The greatest pace of economic growth has been reached by countries with the lowest debt level. (see figure 7).

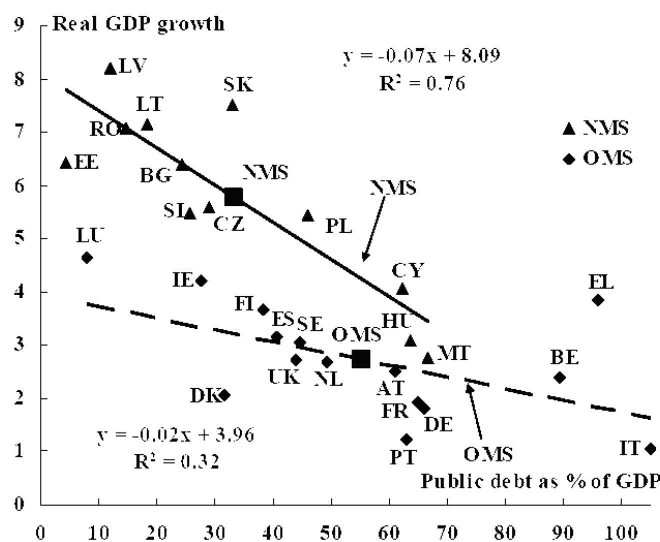

Figure 7. Public debt, 2004–2008

Source: European Commission.

In certain new member states the risk of public spending rises due to the pension and health care spending that are unsustainable in the long run. These risks might have an effect on the long-term growth expectations. (The risk rating of the countries is very different.)

Also due to the abovementioned significant pension and other structural reforms have been launched in the NMSs.

6.2.2. Composition of public spending

The fiscal support of the economic restructuring might help establishing the conditions of the fast growth of the private sector. It has to be explicitly stressed that the distribution tensions have to be managed as it is a growth promoting

condition. At the same time not only the composition but also the efficiency of revenues and expenditures has to be improved. (e.g. Sometimes expenditures can be abolished through abolishing supports or decreasing the administration.)

Comparing the composition of spending among countries it is to be stated that the *rate of investments is higher the rate of consumption is lower in the Baltic-states and south-eastern European countries than in the other NMSs.* It should have an effect on the growth performance.

6.2.3. Fiscal governance

The trade off between budget consolidation and catch-up spending the strengthening fiscal rules and institutions contribute to the improvement in the potential complex choices. Member states having advanced fiscal rules and improving their budget performance (e.g. Baltic-states) have reached a higher growth than the central European countries with less advanced fiscal rules.

7. CONCLUSIONS

The main conclusions based on the analysis can be summarized the following way:

1. *Sound public finances, strong and sustainable budget positions and debt levels are decisive factors of the growth-enhancing fiscal policy.* The high state debt burdens the economy, crowds out the private investments. If the state administration becomes too big it burdens and limits the economic growth, especially if it is linked with high taxes on labour and capital and the ineffective use of state resources.
2. *It is unavoidable to reform the European social model*. A strategy promoting labour utilization and productivity growth is highly required as regards the ageing society. The increasing number of people working at an older age (the intensification of these incentives) has several effects: the stronger incentives for creation of workplaces facilitate – beyond the increase in growth potential – the financing of the welfare systems and decrease the cost of these systems. The shift in growth-enhancing public spending and taxation results in higher value for public money with less distortion than earlier. It concentrates better on capital and infrastructure promotes better the creation of workplaces and employment.
3. The quality of public finances is a multidimensional concept. It provides several possibilities for the fiscal policy management as regards the promotion of economic growth. Different policy-mixes can be outlined. But one has to be chosen. A big public sector can be linked with high economic growth only if

there are sustainable budget positions and debt levels plus the government administration the revenue and spending systems the fiscal institutions are effective.

A more thorough exploration and analysis of the impacts of public finances on economic growth is a fundamental requirement for successful structural reforms. The consequent implementation of these reforms is a crucial factor of the successful catch-up process in the new member states.

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