

Edited by
Massimo Florio

Public Investment, Growth and Fiscal Constraints

Challenges for the EU New Member States

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POTENTIAL

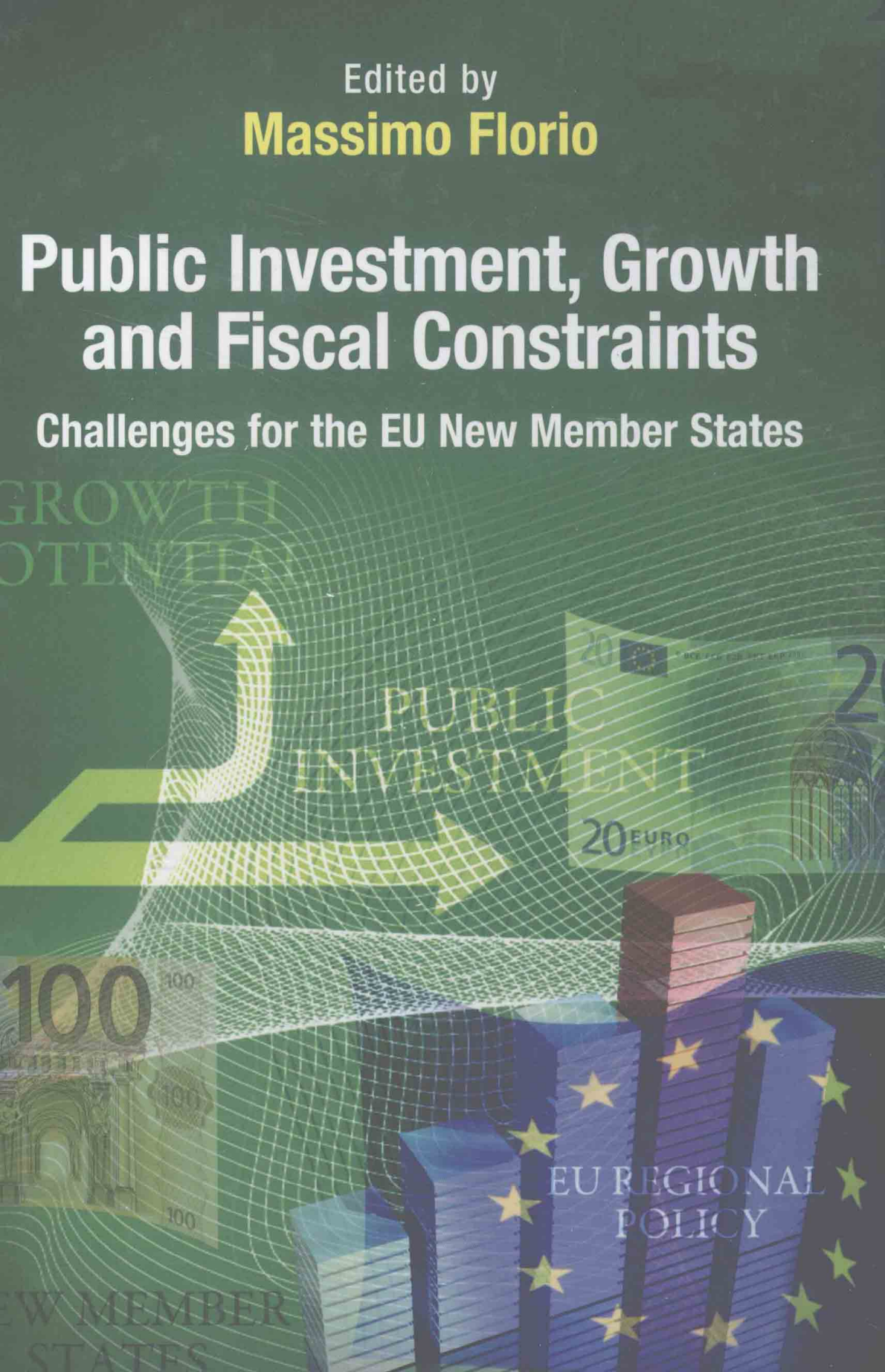
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EU REGIONAL
POLICY

NEW MEMBER
STATES



Public Investment, Growth and Fiscal Constraints

Challenges for the EU New Member States

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Massimo Florio

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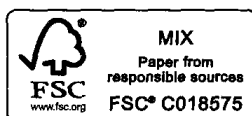
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Abbreviations

ANOVA	Analysis of Variance
CA	Current Account
CEE	Central and Eastern European
CERGE-EI	Centre for Economic Research and Graduate Education – Economics Institute
CEPA	Classification of Environmental Protection Activities
CF	Cohesion Fund
COFOG	Classification of the Functions of Government
CPI	Consumer Price Index
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EERP	European Economic Recovery Program
EIB	European Investment Bank
EMU	Economic and Monetary Union
ERDF	European Regional Development Fund
ESF	European Social Fund
ESPN	European Observation Network, Territorial Development and Cohesion
EU	European Union
EUR	Euro Code
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GNP	Gross National Product
HICP	Harmonized Index of Consumer Prices
ICT	Information and Communication Technology
IMF	International Monetary Fund
NAIRU	Non-Accelerating Inflation Rate of Unemployment
NMS	New Member States
NPG	No Ponzi Game
NUTS	Nomenclature of Territorial Units for Statistics
OECD	Organisation for Economic Co-operation and Development
OMS	Old Member States
PPI	Producer Price Index

PPS	Purchase Power Standards
PSFNW	Public Sector Net Financial Worth
PWT	Penn World Tables
R&D	Research and Development
RTDI	Research Technology, Development and Innovation
SCF	Structural and Cohesion Fund
SERIEE	Système Européen de Rassemblement de l'Information Economique sur l'Environnement (European System of Collection of Economic Information on the Environment)
SGP	Stability and Growth Pact
SME	Small and Medium Enterprises
TFA	Tangible Fixed Assets
TEN	Trans-European Network
TEN-T	Trans-European Transport Network
TRT	Trasporti e Territorio
UK	United Kingdom
US	United States of America
USD	United States dollar
VAR	Vector Autoregressive
VAT	Value Added Tax

Introduction: public investment, growth and fiscal constraints in the EU

Massimo Florio

The European project, after the recent global financial crisis, faces a difficult challenge. In order to achieve real convergence and sustained growth of the 27 EU Member States, substantial resources should be devoted to investment, particularly in the recently accessed countries. The banking sector, however, is currently not in the position to offer the amount of credit needed by firms. These in turn are facing a weak demand, and have dramatically cut fixed capital formation. At the same time, public finances are under stress because of the sudden increase of government expenditures committed to support private banks, manufacturing firms, and households facing unemployment. This does not look like a favourable scenario for a grand public investment design. Yet, this is still needed, and in fact it was duly planned in ordinary times by the EU governments, as part of their long-term growth strategies. The situation in Europe is perhaps more complex than elsewhere because of the lack of a proper federal budget, the pending rules of the Stability and Growth Pact, the necessity to avoid a loss of confidence in the solidity of the euro, the not yet fully implemented provisions of the Treaty (hence a cumbersome governance of policy making), and the persisting gap between the ‘Old’ and the ‘New’ members. The latter were set on a relatively high growth path before the crisis of 2008, with average per capita GDP growth approximately two times higher than in the EU15. In fact, the objective of convergence in Europe depends upon achieving this gap in the long term. The European Commission is right in targeting the Structural Funds (around 350 billion Euro in the programming period 2007–2013) to sustain a positive growth differential in regions and countries that are lagging behind.

What is the potential role of public investment in this context? How is it possible to finance capital accumulation in the present and future conditions of mounting public sector debt? It seems time to re-open a serious discussion on public expenditure as a tool for economic policy making, after perhaps a certain neglect of attention in some quarters because of an excessive confidence in financial markets, public-private partnerships and in

general private initiatives. This book offers a selection of papers presented at the Milan European Economy Workshop 2009, and further reviewed after a lively discussion there and in the following months. The Workshop itself was part of a wide research project at the DEAS, Department of Economics, Business and Statistics, University of Milan, sponsored by the European Investment Bank (EIBURS programme). Other material related to the project is available as DEAS working papers at www.economia.unimi.it/, and in a special issue of *Transition Studies Review*, (Florio, 2010).

The book contains nine chapters, assembled in three parts. The first part is more general in scope, and deals with the conceptual issues involved in the role of public expenditure in a growth perspective. It contains three chapters: one by Malcolm Sawyer (Leeds University), who draws from his keynote presentation in Milan; Chiara Del Bo (Università degli Studi di Milano) reviews recent advances in the literature, while Massimo Cingolani (EIB) offers a post-Keynesian viewpoint on the topic. The second part focuses on public investment and fiscal constraints in the NMS. The three chapters included in it offer a sweeping overview of the current fiscal conditions and growth trends in the EU: Ángel Catalina Rubianes (European Commission) looks at the EU scenario as a whole; Giuseppe Bognetti (Università degli Studi di Milano) and Giorgio Ragazzi (Bergamo University) focus on public sector accounts; Jan Hanousek and Evžen Kočenda (Charles University and CERGE-EI, Prague) offer a detailed review of the situation in the NMS, country by country. Finally, the third part looks at the industry-specific and regional dimensions of structural change and public intervention: Aleksandra Parteka (Gdansk University) looks at the determinants of productivity growth in the New Member States (NMS); Luigi Moretti (University of Florence) considers the role of Structural Funds in supporting business growth at the regional level; Emanuela Sirtori and Silvia Vignetti (CSIL Centre for Industrial Studies, Milan) review the evidence on infrastructure needs in the NMS regions. In the rest of this introduction I briefly discuss the issues raised by these contributions. I frame the discussion around three questions: Does public investment matter for growth? Are fiscal conditions in the EU and particularly in the NMS favourable to public investment? What is the role of regional policy?

DOES PUBLIC INVESTMENT MATTER FOR GROWTH?

After two decades of decline of public investment and of decrease of confidence in the government, this is still a simple, but important question.

One consequence of the crisis of confidence has been the return of fiscal rules that have the pre-Keynesian flavour of balanced budget accounting dogmas. Malcolm Sawyer's contribution explains the conceptual underpinnings of the controversy. He identifies two traditions in macroeconomic analysis with regard to budget deficits, that of 'fiscal consolidation and Ricardian equivalence' and the 'functional finance' approach, rooted in Keynes's and Lerner's early ideas. He argues that the deficit/debt position should be approached in terms of 'functional finance', which sets the budget position to be compatible with the highest achievable and sustainable level of economic activity, against an alternative 'rule' for the 'balanced budget over the cycle'. The chapter points to the focus on the size of the public debt, and argues that the government's capital account balance sheet should be viewed in terms of assets and liabilities and not liabilities alone. It also argues that there is no merit in the adoption of a 'golden rule'. Clearly, if we agree with Sawyer, the fiscal framework for public spending is more flexible than the various versions of the balanced budget rules. Moreover, I would also submit the view that savers after the global crisis have suddenly rediscovered worldwide why public debt is different from private debt, for example allowing the US Treasury to pay an extremely limited risk premium on its issues, in face of a huge increase of federal debt and deficit. The same leniency did not apply, of course, to bonds issued for example by Greece, and this shows that the scale of government operations and possibly the institutional quality are also important in shaping governments' credibility.

Do these ideas find support in academic literature? The aim of Chiara Del Bo's chapter is to review to what extent public investment, public capital and fiscal policy in general affect growth, and through which channels this impact is working, according to recent contributions. The first part examines the positive relation between public expenditure and capital on economic growth, highlighting trends and the role of different categories of expenditure. The chapter also surveys a recent and promising research avenue in the explicit analysis of distributional and inequality-reducing effects of increases in productive public investment. The second part focuses instead on fiscal policy, taking into account both the revenue and expenditure side. The role played by fiscal consolidation rules and adjustments is examined and the link between public investment, fiscal consolidation and growth is stressed. The picture here is more nuanced, as the controversy is still open and wide and the chapter concludes with some directions for future research.

Massimo Cingolani offers a 'disequilibrium' view of public finance. Cingolani suggests that, as governments around the world realized in the recent crisis, the standard neoclassical view of macroeconomic equilibrium

optimum cannot be the only reference for economic policy. It is argued that the model of the monetary circuit, put into the more general perspective of post-Keynesian analysis, is useful to illustrate policy choices in disequilibrium situations, characterized by underemployment of the labour force and a sub-optimal utilization of the productive capacity. This type of disequilibrium also implies that investment causes savings. According to the 'circuit' view, if the state budget is restricted to previously accumulated savings for financing its expenditures, governments deprive themselves of an important instrument for planning long-term budgetary policies that could stabilize the economy by anchoring the diverging expectations of the private sector. It also gives support to the idea of coordinating European fiscal policy at the continental level through the collective management of investment and other public expenditure. In my view the latter point is particularly important. Going back to my earlier comment, the fact that the US government is able to incur its debt with a strong federal backing is a clear advantage. As a counterfactual, one can think of the fiscal credibility of the US if most of its public debt were issued by its 50 states.

Overall, the three chapters suggest that there are good theoretical and empirical reasons to view productive public expenditure as a leverage mechanism for growth, both in the short run and in the longer term. It seems that the earlier preoccupations about the crowding-out effects of public expenditure were misplaced or exaggerated, because of the overly abstract assumptions needed to support them. This does not amount, of course, to saying that any public investment project is good *per se*. Or that permanent and unsustainable deficit is good. Or that credibility of governments does not play a role. Careful evaluation is needed at the micro level, see below, but at the more macro level there is room for a more optimistic view of the role of public finance in supporting accumulation of fixed or human capital, when private finance is not adequate in meeting the aggregate demand.

DO FISCAL CONDITIONS IN THE EUROPEAN UNION AND IN THE NMS SUPPORT INVESTMENT?

The second part of the book looks into the actual fiscal situation in Europe from the angle of public investment. Ángel Catalina Rubianes' chapter assesses to what extent the budgetary restrictions to which the NMS were and are confronted with are having a negative impact on public expenditure and particularly public investment. Catalina also looks at the composition of total public expenditure and in which functional areas lies the difference between the old EU15 and NMS in public expenditure

in terms of gross domestic product (GDP). He observes that the NMS have been confronted in the last decade with a tight restriction of public financial resources compared to their GDP. While public expenditure accounted for more than 52 per cent of GDP in 1999, it was just about 41 per cent in 2007. As a result, total public expenditure in the NMS is about 5 percentage points lower than in the old EU15 countries. The reduction, however, was not in general made at the expense of public investment. While the total expenditure dropped by more than 11 percentage points of GDP, public investment decreased by only 0.4 percentage points of GDP. Moreover, public investment in physical capital is substantially higher in NMS relative to GDP. In the EU at large, public investment seems to appear a determinant for growth and 'catching-up' over the period 1999–2007.

The European cohesion policy supports a very significant part of the public investments made in the NMS. In the area of environmental protection, for example, it accounts on average for about 75 per cent of the total investments in this field. Thus, I would comment that without the Structural Funds probably the working of the EU accession mechanisms would have imposed serious damage on capital accumulation in the NMS. Hence, after all, there is a lesson to be learned here for the future: without substantial capital transfers by the EU to the NMS their investment pattern and growth would be at risk. Moreover, a revision of the Stability and Growth Pact should reconsider the integration with Cohesion Policy (that is, the 'growth' side of the story).

Accounting rules and fiscal guidelines are not as simple and transparent as one would think or wish. Some controversial issues concerning the definition and measurement of deficits and public debt are discussed by Giuseppe Bognetti and Giorgio Ragazzi. The rationality of the two Maastricht targets for public finance is also critically analysed. The economies of six NMS are then considered, from 2003 onwards. All of them experienced a high and steady rate of growth, but also a relatively high rate of inflation, accelerating after 2006. In spite of a high investment ratio by the public sector, national budget deficits were generally low and below the 3 per cent target. Thanks to the rapid expansion of nominal GNP, the public sector debt ratio declined in all countries, with the exception of Hungary.

Moreover, most of them have a positive net financial position. Thus Bognetti and Ragazzi conclude that these countries (except Hungary) have met the convergence criteria for public sector accounts and have followed prudent fiscal policies: the causes for external imbalances and excessive inflation are to be found (with some exception like the Czech Republic) in lax monetary policies and in the large inflow of foreign capital, primarily

for direct investment but also on account of bank lending to the private sector.

A closer view of fiscal conditions in each of the NMS is given in Jan Hanousek and Evžen Kočenda's chapter. The overall macroeconomic situation, fiscal reforms and public finance developments are discussed for each Member State with a focus on the developments in growing public investments. Sectors that benefited most are transport systems, general government services, housing and education. Earlier favourable developments in the NMS have been hampered, however, by the recent crisis as external demand for exports fell and capital inflows into the region were reduced, coupled with a lower domestic demand. The crisis has affected all new EU members with a varying impact due to different magnitudes of earlier macroeconomic imbalances as well as differences in the degree of economic integration with the rest of the EU. The future convergence and economic development of the new EU members will depend mainly on maintaining financial stability to regain the credibility of the foreign investors, rational fiscal policies with the support of growth-enhancing public investments and the social networks, and the economic situation in the region's major economic partners.

The common message from the three chapters is that, overall, the NMS have been taking advantage of their economic integration in the EU, and that in spite of cuts in general public expenditure they have been able until now to couple sustained public investment and growth with fiscal consolidation. To this end, capital transfers from the EU were crucial. There are, however, still problems in terms of the speed of change, inflation and specific country imbalances. When compared, however, with earlier pre-occupations about the impact of the enlargement shock in former transition economies, the overall assessment is rather optimistic. The recent financial crisis may disturb this development path, but the overall discussion shows that it would be wise to avoid excessive corrections that may cut public investment. It also shows that the Cohesion Policy and the Structural Funds must remain for at least one decade in order to counterbalance the impact of fiscal consolidation on other public expenditure items. This issue is discussed from a different perspective in the next chapters.

WHAT CAN REGIONAL POLICY DO FOR STRUCTURAL CHANGE AND INFRASTRUCTURE NEEDS?

Growth is not an abstract idea; its ingredients are output/input change, industry by industry. This question requires a more detailed look into

productivity growth in the NMS. This is done by Aleksandra Parteka, who focuses on the ten NMS (NMS-10) that joined the EU in 2004 and analyses the productivity dynamics of their labour structures between the years 1995 and 2005 in a comparative setting versus EU15 economies. NMS-10 have gone through a rapid process of economic restructuring and its speed has been positively related to economic development. However, shift-share analysis of productivity growth indicates that changes in value added per hour worked were due mainly to positive developments (rising productivity) within single sectors and only to a lower extent to the shift towards higher productivity sectors. The process of a structural change and productivity growth has been characterized by a 'beta' convergence-type mechanism, with public spending (especially on education, social protection, public order and safety) and trade (in particular with more advanced EU15 countries) promoting overall and intra-industry productivity upgrading.

Some answers to the question of how the EU can influence this pattern are given in the last two chapters. Luigi Moretti looks into the capital grants to firms under the Structural and Cohesion Funds (SCF) in the NMS, given their importance (as also discussed by Catalina). These funds are substantial not only as a share of total SCF expenditure but also as a share of GDP. Thus it is particularly important to understand the real effects of SCF business support and its impact on the reallocation of resources and activities across industries. In a related paper, Florio and Moretti (2009) show that the SCF business support to GDP ratio does not have significant average effects on employment growth in manufacturing industries, but the effects are positive and statistically significant for smaller sized and 'higher growth opportunity' industries. Using the estimated coefficients of the relationships between the ratio of SCF business support to GDP and employment growth in manufacturing industries obtained in that study for a sample of German, Italian and Spanish regions, Moretti presents a sensitivity analysis for the effects of SCF business support on employment growth in New Member States. In particular, given the structure and specialization of the regions' manufacturing industries, he shows which regions, country and industries would benefit most from higher SCF business support expenditure.

Finally, Emanuela Sirtori and Silvia Vignetti provide a review of the infrastructural gaps in EU transition economies at the national and, as far as possible, regional level for some infrastructure sectors: transport, telecommunication, environment and energy. These gaps are still substantial, and a continued investment effort is needed for at least one decade or two. While infrastructure support should indeed be promoted to foster regional growth as a key priority in the framework of the EU Cohesion Policy, an

effort should be made by policy makers to understand how to tailor the features and options of infrastructural policy to regional characteristics and actual long-term needs.

The three chapters remind us that one issue is the macroeconomic environment, but a quite different issue is the actual arena where public intervention can achieve its targets or fall short of them. Specific regions and industries respond differently to EU assistance and to government capital expenditure. This broad message suggests that a combination of flexible and co-ordinated European fiscal policy and of national and EU regional and industrial policies are needed to extract the growth potential for each Euro spent in sustaining capital accumulation in the NMS.

I would close this Introduction with a more personal view about the policy implications of the research contributions offered in this book. There have been wide oscillations in the economic profession about the role of public investment and public expenditure in general. While in the post-war years of the last century there has been perhaps a degree of over-optimism about what governments could do by investment planning, particularly in developing countries, the mood since the 1980s was too pessimistic. At the same time, in the last two decades there was a lot of enthusiasm about the self-regulatory and progressive features of financial markets. After all, if energy, water, schooling, transport, telecoms, hospitals and other important services are needed, why can't private demand simply be matched by private investments, financed by private savings?

This is still a core and controversial issue in economic policy. Do we really need *public* investment? The recent history of the NMS of the EU (as well the possibly more remote and forgotten history of post-war Western Europe) offers a possible answer. The answer is quite positive. In spite of a wide mobilization of private resources in the NMS, including foreign investment, there is a wealth of opportunities that went unexploited by private investors. We cannot ask financial markets to do more than what they are able to do. After all, when most of the dividend of physical and human capital accumulation cannot be efficiently appropriated by private owners, and spills over to the society at large in the form of aggregate growth, markets do fail and governments do have a chance to play a positive role. In fact, there are often strong externalities in any investment, as modern endogenous growth theory has convincingly clarified. Good private finance will offer funds to projects that ensure an adequate return to the investors. Bad private finance will waste resources in betting on unsustainable games.

Public finance of investment can do a similar job. When it is good, it will channel savings towards projects that offer an adequate social dividend, even when there are externalities. If public finance is bad, however, it will