



FISCAL SPACE FOR PUBLIC INVESTMENT: TOWARDS A HUMAN DEVELOPMENT APPROACH

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FISCAL SPACE FOR PUBLIC INVESTMENT: TOWARDS A HUMAN DEVELOPMENT APPROACH¹

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EXECUTIVE SUMMARY

1. A development transformation requires a major scaling up in public investment. Yet current fiscal rules used to assess fiscal solvency and sustainability limit the scope for such a scaling up. This paper examines the basis for this argument and explores the analytical and policy possibilities to create an enabling fiscal framework for such development transformations. This issue is of the first importance with international agreement on a set of quantified time bound indicators – the Millennium Development Goals (MDGs) — as key international development objectives.
2. Public investment spending has been declining since the 1980s (as a share of GDP). Declines are even more striking in the specific case of public investment in infrastructure. Several, related, reasons are identified in the policy literature to explain these trends in public investment spending. These include the fiscal consolidation that was part of the implementation of Structural Adjustment Programs, controversies about infrastructure project aid, and misplaced theoretical assumptions about compensating private investment, and about ‘crowding-out’.
3. There is inconclusive evidence on whether or not public investment in infrastructure has a significant positive impact on growth. However, there is a strong consensus on the positive effect of infrastructure investment on productivity and output in different regional and sectoral settings. This suggests that well designed public investments, including infrastructure, do have a direct positive impact on the MDGs.
4. Given the above we feel that the argument to specifically exclude infrastructure investments, as opposed to public investments that positively impact on human development from public expenditure ceilings is self-limiting.
5. The Bretton Woods Institutions’ approach to fiscal policy suffers from three serious shortcomings: (1) it ignores the positive impact of public investment on competitiveness and the quality of growth; (2) the use of overall fiscal balance and public debt as the main empirical indicators of ‘sound’ fiscal policy is of limited relevance in the long-term; (3) the reliance on conditionality-based programmes negatively affects public investment.
6. International partners – including the Bretton Woods Institutions (BWIs)- have increasingly recognized the central role of fiscal policy in financing the provision of public goods needed to achieve the MDGs within a longer time horizon such as that embodied in the Millennium Declaration. However the proposed fiscal policy framework is not significantly different from that used for short-term fiscal assessments by both Bretton Woods Institutions. The framework is of limited relevance to assess the *developmental* (as opposed to *fiduciary*) implications of increasing fiscal space.
7. There have been several suggestions for alternative fiscal rules - and associated institutional arrangements - that would foster an enabling reform environment for scaled up public investments. All these aim to allow borrowing by the government for the sole purpose of financing net public investments.

8. While there are arguments for rules that treat infrastructure investments differently from other public investments, the reasons for doing so are principally fiduciary in nature. This may be problematic in a development context.
9. There are sound economic reasons for treating current and capital expenditures separately, and also for governments to aim for balanced current budgets.
10. Moving to a fiscal framework that is development centered from one that is grounded in a purely fiduciary logic raises several analytical issues. The most important is what we term the “*fiscal space conjecture*” which explains why there continues to be a tension between fiduciary and developmental outcomes.
11. The fiscal space conjecture does not deny the possibility that a harmonious solution exists in which fiscal paybacks and development paybacks are simultaneously secured.
12. There have been very few systematic attempts to calculate the development payback of a scaled up public investment programme. This is so not because such a payback is difficult to calculate, but due to a paradigmatic dogmatism that views the role of public finance as being essentially prudential.
13. Changing this would require a broader mandate for the IMF or an institutional arrangement in which long-term development payback assessments conducted by United Nations Development Agencies inform IMF technical and surveillance work – particularly Article IV activities - on a mandatory basis.
14. Development is a risky business and it is important to devise instruments to mitigate risk and uncertainty. A good example is the proposed “Stability and Social Investment Facility for High Debt Countries”.
15. Fiscal sustainability in the long-term would ultimately require “closure” - that the development payback deliver (within a defined time frame) a level of productive activity and savings mobilization that is compatible with long-term fiduciary sustainability. New instruments and indicators need to be defined for this purpose.
16. A collaborative effort involving the BWIs’ expertise on fiduciary instruments and the UN system expertise in demonstrating the long-term human development payback from well designed public investment programmes, in equal partnership with other development partners and developing country grouping is therefore a matter of pressing urgency.

Introduction

A development transformation requires a sustained period of increased investment spending to support economic growth and deliver the basic services necessary to achieve human development. While both public and private investments have a key role to play in this context, the State, and therefore public investment has a key role to play in kickstarting growth, poverty reduction and providing the capital goods and investments needed to secure human development objectives. In short, a development transformation requires a major scaling up in public investment.

Yet current fiscal rules used to assess fiscal solvency and sustainability limit the scope for such a scaling up. This has important human development implications. This paper examines the basis for this argument and explores the analytical and policy possibilities that can be used to create a fiscal framework that enables countries to engage in development transformations that require public investment led scaling up.

This issue is of first importance with international agreement on a set of quantified time bound indicators - the Millennium Development Goals (MDGs) - that were agreed as key international development objectives (United Nations, 2000). The international community re-emphasized its commitment to the MDGs at the 2005 Global Summit which calls developing countries “to adopt, by 2006, and implement comprehensive national development strategies to achieve the internationally agreed development goals and objectives, including the Millennium Development Goals” (United Nations, 2005, paragraph 22a).

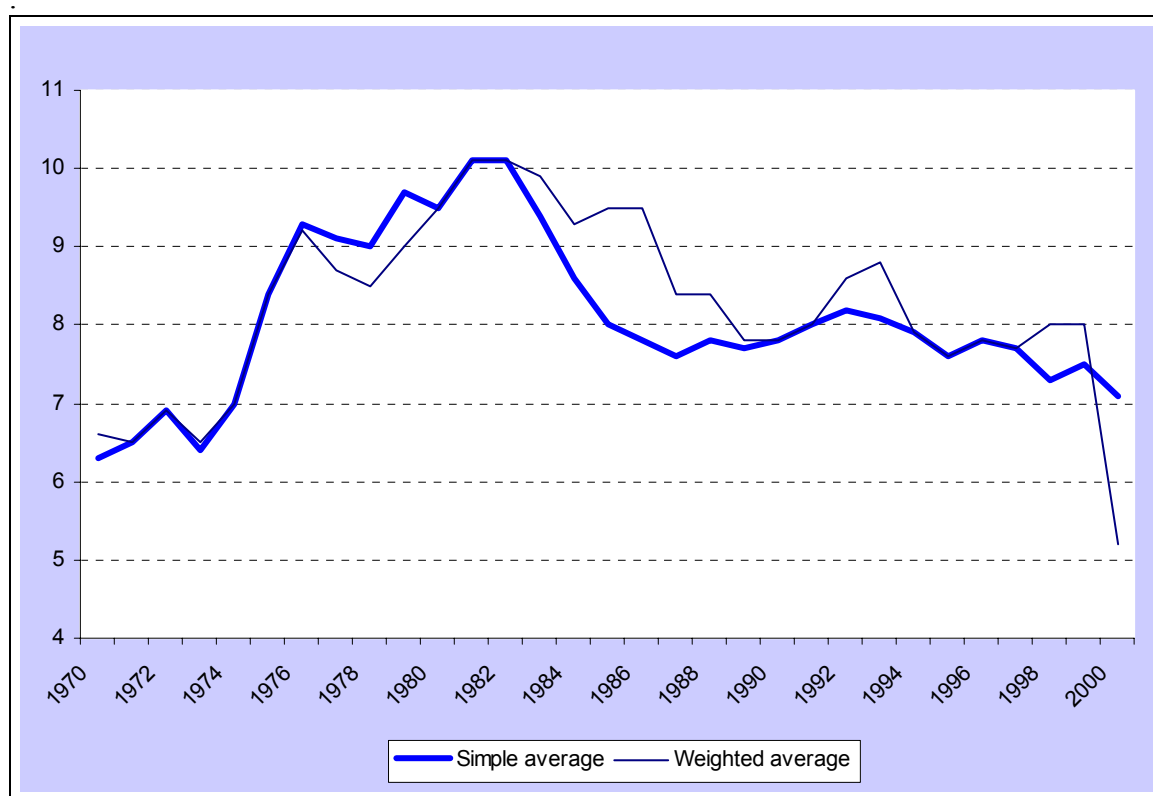
Section one presents a summary of the evidence that restrictive fiscal targets used in fiscal reform programmes - chiefly the fiscal deficit and the debt/GDP ratio – are an important reason for the observed decline in public investment/GDP ratios (and in particular, infrastructure/GDP ratios) globally. Section two examines the analytical reasoning underlying the causal link between restrictive fiscal targets and reduced infrastructure spending and the consequent case for advocating alternative fiscal rules that exclude public investments on infrastructure from deficit calculations. In section three, we present and assess arguments put forth by scholars and policymakers that the standard fiscal framework used by the Bretton Woods Institutions approach is unsuitable for an assessment of the long-term development needs of a typical developing country. Section four provides a review of the Bretton Woods Institutions’ response to the new development challenge raised by the MDGs. The final section provides policy recommendations for the design of a fiscal framework that supports a human development oriented public investment strategy.

1 Trends in Public Investment spending and the development challenge

1.1 Public investment spending has been declining since the 1980s

The fact that public investment - and especially public infrastructure investment spending – has been declining (as a share of GDP) in the developing world over the past two decades, and during the 80s in particular, has been well documented. The phenomenon has affected certain countries or regions and specific sectors more than others, but a general trend is clearly observable, with pronounced declines in public investment spending occurring during the 1980s in particular (figure 1).

**Figure 1: Public Investment in Developing Countries, 1970-2000
(as a share of GDP)**



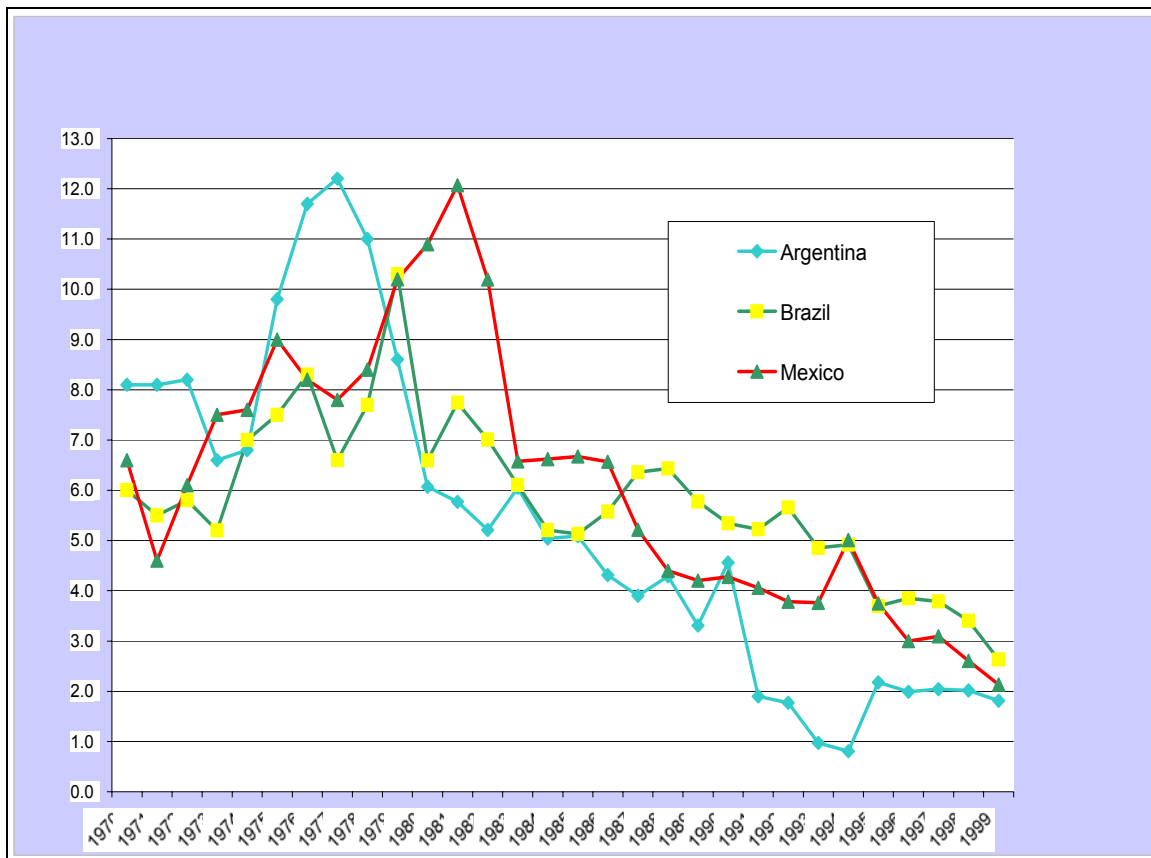
Source: Everhart and Sumlinski (2001). Page 2

These declines are particularly pronounced in low-income countries which embark on the development process with a historically low stock of public and infrastructure assets. A particular example highlights the magnitude of the problem from a development perspective even in a context where public investment is not declining - total government spending on transportation and telecommunications in 43 developing countries increased by less than 7 percent between 1980 and 1998 (Fan and Rao, 2003)³, corresponding to an average 0.38 percent increase per annum. At this pace, a given sub-Saharan country which, in 1980, aimed at doubling the mileage of its road network would not achieve its target until the year 2210.

³ All figures are in 1995 constant prices.

Latin America has been the region most affected by declining public investment (figure 2). In Brazil, for instance, public investment as a share of GDP fell from a 10 percent record in 1980 to 2.2 percent in 2002 (Ferreira Cavalcanti and Gonçalves do Nascimento, 2005). In Argentina and Mexico, it reached a peak at 12 percent of GDP respectively in the late 1970s and early 1980s, to fall over both subsequent decades – in spite of a slight and temporary increase at the end of the 1990s, to a low 2 percent in 2000 (IMF, 2004).

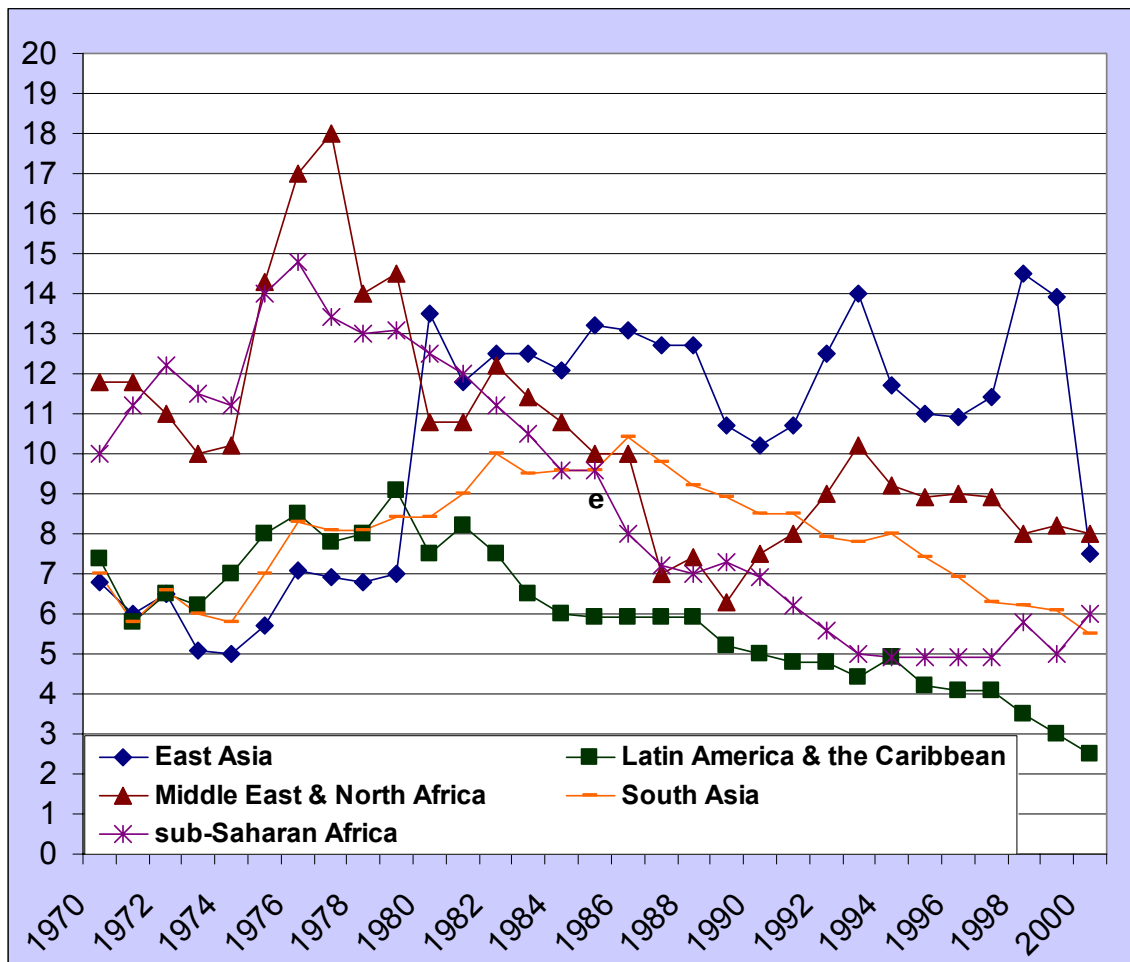
**Figure 2: Public Investment in Argentina, Brazil and Mexico, 1970-2000
(as a share of GDP)**



Source: Everhart and Sumlinski

Similar trends are observable in East Asia, Middle East and West Africa, and sub-Saharan Africa (SSA). In Asia as a whole, public investment over GDP decreased from 10 percent to 7 percent between 1980 and 2000, while SSA experienced a drop from 9 percent to 6 percent over the same period (figure 3).

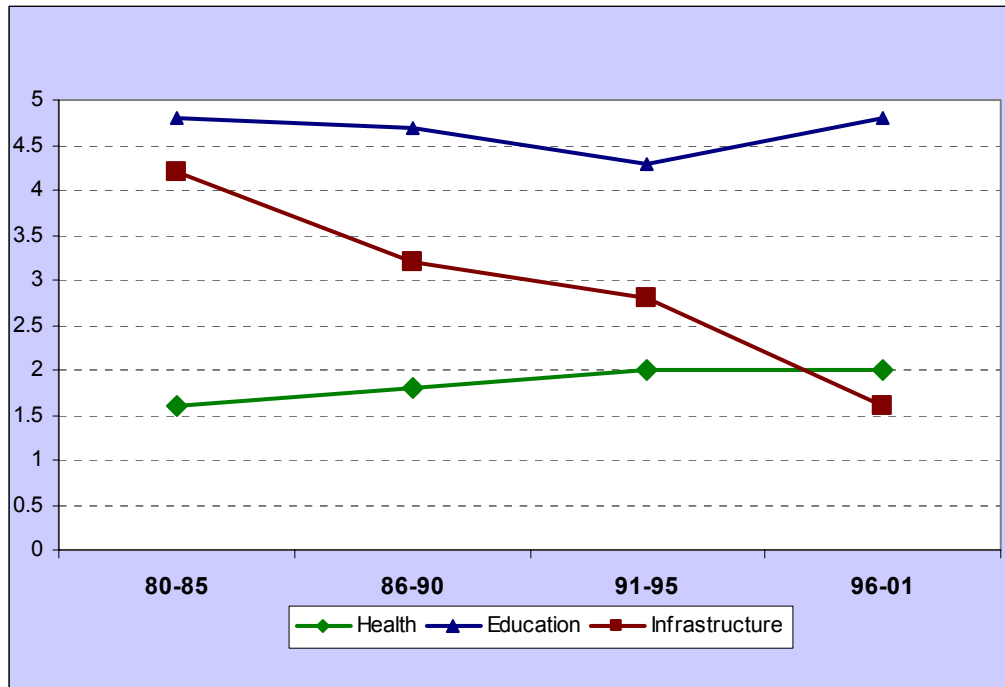
Figure 3: Public Investment by Developing Region, 1970-2000
(as a share of GDP, weighted averages)



Source: Everhart and Sumlinski (2001). Page 2

Declines are even more striking in the specific case of public investment in infrastructure. Between 1980 and 2000, the share of total infrastructure spending globally fell from 2.1 percent in 1980 to 0.81 percent of GDP. Currently the public sector accounts for 75 percent of total infrastructure investments in developing countries, with levels ranging on average between 2 percent and 4 percent of GDP. In Africa, public investment in infrastructure fell dramatically (figure 4) in the second half of the 1990s. Given the very low existing stock of infrastructure assets in sub-Saharan Africa this causes “critical bottlenecks to economic growth, poverty reduction and reaching the MDGs” (Development Committee, 2005). The access rate to electricity in the whole continent is as low as 15 percent, while it is 9 percent for telecoms, 36 percent for sanitation and 64 percent for clean water, with significant differences across countries as well as between urban and rural areas (Estache, 2005). While data is scarce and subject to caution, there is little doubt that inadequacy and poor quality of infrastructure in Africa constitute a significant impediment to growth and development in that region.

**Figure 4: Africa* Public Expenditure 1980-2001
(as a share of GDP)**



* 11 countries sampled

Source: Estache (2005)

The drop in public spending on infrastructure has been the most significant in Latin America where the average ratio is only 1.6 percent of GDP. The transportation sector was particularly hit in Brazil during the 1990s, since average public investments in roads in the 1990-1995 period amounted only to 25 percent of the levels observed in the 1970-1975 period (Ferreira Cavalcanti and Maliagros, 1998). This has resulted in significant ‘infrastructure gaps’ in these countries, in particular when contrasted to the levels of infrastructure of the most successful East Asian economies (Calderón, Easterly and Servén, 2003). According to the World Bank, logistics costs in the region represent 20 percent to 30 percent of product value, in sharp contrast to an average 9 percent for OECD countries, while the lack of adequate infrastructure services has direct detrimental effects on the poor’s access to clean water and thus health (Development Committee, 2005).

1.2 Why has public investment spending declined?

Several, related, reasons are identified in the policy literature to explain these trends in public investment spending.

The fiscal consolidation that took place in most developing regions in the 1980s and early 1990s as an outcome of the implementation of Structural Adjustment Programs (SAPs) is identified as a major causal factor for this decline. While SAPs were not specifically designed to curb public investment *per se*, it is argued that they typically had this effect. SAPs focused on securing macroeconomic stability and fiscal solvency by placing controls on fiscal deficits and on public debt. Empirically, constant or declining fiscal

deficit/GDP ratios and debt/GDP ratios were used as overriding policy targets to be secured through fiscal consolidation. The choice of these policy priorities and fiduciary indicators greatly constrained the ability of governments to engage in public spending. This 'adjustment' fell disproportionately on public capital expenditures, including public investment in infrastructure. The International Monetary Fund (IMF) itself acknowledges that it "has proved difficult to prevent public investment from bearing the brunt of the required fiscal adjustment" and that subsequently "there is evidence that public investment has fallen because of fiscal adjustment", adding that "on this count there are reasons to be concerned" (IMF, 2004, page 9). The same report records that public investment cuts were "on average more than three times larger than cuts in current spending during periods of fiscal adjustment in the 1980s". This point has also been noted in the policy literature on Latin America (Servén and Solimano, 1992; Calderón, Easterly, and Servén, 2003) where infrastructure investment cuts contributed to half or more of fiscal adjustment in five of the nine major Latin American countries over the 1980s and 1990s (Calderón, Easterly, and Servén, 2002).

Many policy makers and scholars have argued that the focus on the fiscal deficit regardless of composition of expenditures introduced a strong bias against expenditures characterized by high short-term costs and long-term returns such as infrastructure projects. This view has also been expressed by heads of State such as President Lula of Brazil and President Musharraf of Pakistan, who underlined in 2004 "the need to find alternatives solutions to fiscal adjustment that does not penalize infrastructure projects" (Estache, 2006, page 15).

The argument is as follows: in the presence of fiscal rules that cap their fiscal deficit, governments are left with two options: either increase revenues or restrain expenditures. Increasing revenues is possible, but is often not a plausible option in the short run, and it could also be associated with undesirable distortions resulting from increased tax rates. Reducing expenditures is thus the most straightforward and favored means used to abide by the rule. The question is then: which expenditures should be cut or curbed?

The focus on the fiscal deficit in this circumstance "puts both current and investment spending on an equal footing in the measurement of the deficit" (Perée and Văilă, 2005, page 6), which directly affects the type of expenditure reductions that will be prioritized. On political considerations governments have an incentive to protect spending on current programs and transfers that ensure immediate economic and political benefits to their voters compared to investments in capital "that yields social benefits for future voters" (Mintz and Smart, 2006, page 3). Further, while interrupting an investment project appears relatively easy, "it is neither a feasible nor in general a desirable option for wages, transfers, and interest payments which make up the bulk of current spending" (IMF, 2004, page 13). Postponing the construction of an airport by one or two years – an investment that will only benefit the economy and voters in the long run - is obviously less politically costly than cutting civil servants' salaries.

A second set of factors is related to the level and patterns of foreign aid. Controversies about tied aid, concerns about corruption and evidence of 'white elephants' led to a growing skepticism among the donor community, and to a resulting shift away from infrastructure projects towards social development programs (CARE, 1999).

An important political economy discourse on the role of the development state had a major impact on mainstream views on the utility of public investment *per se* (Lal, 1988 and 1989; Bhagwati, 1988; see Chang, 1994 and Roy, 1994 for a detailed review). This asserted that the State was generically incapable of operating “at scale” and hence ambitious public investment programmes would be unproductive as those in charge of the State would use the instruments at their disposal to maximize their own benefits and/or the benefits of the elites to whom they reported, rather than in the public interest. It was argued that the State would act as a ‘predator’ stifling and inhibiting private entrepreneurial energy.

In our view the behavioral assumptions underlying the above paradigm fed into a central hypothesis underlying many SAPs - that the private sector would compensate for the drop in public investment spending. SAPs, to a great extent, aimed to shape a macroeconomic framework that would better enable the private sector’s involvement in areas hitherto reserved for the public sector. An obvious target was infrastructure but also, in many countries, capital spending for health and education. At the very least it was expected that the norm would be for the private sector to increasingly *provide* services with government stepping in to *purchase* these services where (as in the social sectors) such services exhibited public good characteristics.⁴ In the case of infrastructure, the provider purchaser distinction was absent – the focus was on “unbundling” private provision of infrastructure (in electricity, for instance, separating the producer transmitter and distributor of power) to allow competitive forces to enhance productive efficiency and “signal” opportunities for increased investment in sectors where outputs were supply constrained. Unfortunately this did not happen as we show below.

SAPs and IMF-supported programs were also rooted in the belief in the ‘crowding-out’ effect, which posits that public spending will negatively impact private sector’s investment through increased interest rates and a non-competitive business environment (Roy and Weeks, 2004), resulting in an overall decline in total investment. Again, it is by now well established that this has not happened in most developing regions as we show below. Cuts in aggregate public investment have not typically been compensated by increases in aggregate private investment.

2. The failure of old doctrine and the new development challenge

2.1 The private sector does not fully take over from the public sector

Recent research shows that *the private sector did not compensate for the drop in public investment as it was hoped* (IMF, 2004). The Evaluation of Fiscal Adjustment in IMF-Supported Programs (2003) stressed the consistent overestimation of aggregate investment in IMF programs, which contradicts the hypothesis that public investment crowds out private investment. The Report of the Commission for Africa (2005) concluded that the sharp reduction in infrastructure investment “was a policy mistake founded in a new dogma of the 1980s and 1990s asserting that infrastructure would now be financed by the private sector” (page 234). Both theoretical and empirical evidence show limited substitution between public and private investment (Calderón, Easterly and Servén, 2003) and emphasize the critical importance of public investment to provide a

⁴ Defined in section 5.2. below.

more long-term, durable basis for economic growth and human development (Roy and Weeks, 2004).

Roy and Weeks (2004), in a previous paper for the G-24, showed that the crowding-out hypothesis is based on a series of assumptions that are implausible in the context of developing countries. Theoretically, the crowding-out proposition follows from the hypothesis that financial markets are in equilibrium. If they are not, then the existence of supply side bottlenecks and/or demand constraints greatly affects the relevance of the crowding-out hypothesis. It is difficult to argue that such constraints do not exist in most developing regions, which greatly weakens the strength and relevance of the crowding-out argument, and of policies based on its premises. The same paper cited UNDP supported empirical research showing that relationship between public and private investment appears complementary rather than conflictual in most countries in the Asia Pacific.

Recent IMF research also recognizes that “*public investment can crowd-in private investment*”, which reflects “the complementarity of private investment with some components of public investment, especially infrastructure” (Gupta, Powell and Yang, 2006, page 26-27).

2.2 Public investment matters for human development

The debate on investment in infrastructure (IMF, 2004; Suescún, 2005) focuses on whether infrastructure investment has a significant positive impact on growth. Further, does the magnitude (intertemporally) of the impact allow for debt financed investments in infrastructure greater than that admissible under fiscal rules that impose an overall ceiling on the fiscal deficit and debt/GDP ratios? On this count, the debate is inconclusive. IMF (2004) reviews over 40 studies on the subject, spanning a variety of methodologies and country groups. The review highlights the fact that there is inconclusive evidence that there is a significant positive causal link between public investment levels and rates of economic growth over time and across countries. This inconclusivity is largely because of technical constraints, for example, data constraints - especially in the sub-Saharan African context -, methodological challenges and econometric limitations. For instance, there is a well-known concern that the right hand-side variables of models designed to capture the impact of a set of factors – including the ratio of infrastructure investment to GDP - on growth are not independent or exogenous (Klitgaard, 2004).

This inconclusivity notwithstanding, the renewed interest in public investment within the development community and on part of developing country governments has stemmed from the growing importance of the Millennium Development Goals’ agenda. In this respect, the IMF itself acknowledges that “these gaps may adversely affect the growth potential of the affected countries, and limit targeted improvements in social indicators” (IMF, 2004, page 3). There is a consensus in the literature and among development practitioners on the positive effect of infrastructure investment on productivity and output in different regional and sectoral settings (Estache, 2006; Leipziger et al., 2003). One of the most interesting features of the recent research has indeed been the refinement of the analysis of the channels through - and conditions under which - output is most responsive to such investments or to the lack thereof.

The ‘poverty trap’ (Sachs et al., 2004) and ‘bottlenecks’ (Willoughby, 2004) theories support the idea that investments in infrastructure yield substantial returns respectively in low-income (especially those slowly starting to move out of stagnation) and middle-income (in particular those that had been growing fast) countries (Willoughby, 2004). Additionally, there is strong evidence of the positive impact of investment in transportation and communication (and of rural roads in particular) and agricultural R&D, as well as in electricity (Fan et al., 2002; Klitgaard 2004; Willoughby, 2004).

The key message here is that the *type* of investments, and the channels and magnitude of their impact on output are highly setting-specific. The policy decision making process must therefore be embedded in the local context, strengthening participation, ownership and ultimately, the adequacy of the means to the end.

But more critically, departing from and augmenting this debate about the ‘trickle down’ effect of infrastructure (via growth), growing attention has recently been paid, in the context of the MDG agenda, to the *direct* impact of *public investments that secure tangible developmental outcomes* (such as those measured by the MDG indicators) and on their potential *feedback* on long-term growth (Anderson, de Renzio and Levy, 2006). While, again, the relationships and interactions at play are not yet fully understood, there is solid and growing empirical evidence that better access to water, sanitation, health facilities, transportation, can play a significant and direct role in lowering child mortality rates, prevalence of malnutrition, as well as in promoting schooling and gender equality (UNDP and JICA, 2005). This suggests that well designed public investments, including infrastructure, do have a direct positive impact on the MDGs. Further, there is evidence of complementarities - through reciprocal positive externalities - between policies and expenditures geared toward different developmental goals - such as health and schooling or access to water and health. The Report of the Commission for Africa (2005) emphasizes the “failure to appreciate the important complementarities between investment in infrastructure and social sectors [which] have also contributed to the fall in spending on infrastructure and a lack of emphasis on it in many national poverty reduction strategies” (page 234).

It is obvious and well-known that, *ceteris paribus*, improving a child’s health improves its class attendance and ability to learn, and that better access to water decreases infant mortality figures. A study (Leipziger et al., 2003, page 10) surveying twenty developing countries, which concluded that “increasing the poorest quintile’s access to piped water from its dismally low 3 percent level to the level of the richest quintile at 55 percent would eliminate more than a quarter of the difference in infant mortality between these two groups, and more than a third of the difference in child mortality”. In Morocco, road improvements resulted in a rise of primary school enrollment from 28 to 68 percent (World Bank, 1996). Similarly investment in electricity increased the number of Colombian children reading books in the evening from 43 to 72 percent (Ndulu, Kritzinger-van Niekerk and Reinikka, 2005).

The existence of such complementarities makes a strong case, for a scaling-up of multi-sectoral public investment programs, given that the payback of an integrated package focusing on several developmental goals is higher than the sum of the paybacks of its components taken separately.

We therefore conclude that the argument to specifically exclude infrastructure investments, as opposed to public investments that positively impact on human development from public expenditure ceilings (such as fiscal deficit and debt/GDP ratios) is self-limiting. There are two main reasons why this is the case:

- The argument relies on the positive effect on growth of investments in infrastructure to make the case for relaxing public expenditure ceilings. This effect is empirically problematic to identify and limited in its analytical scope.
- The case for multi-sectoral public investment programmes based on human development paybacks (as measured by the MDGs) that can be quantified *ex ante* is both empirically easier to justify (given that the MDGs are quantitative targets) and analytically more consistent.

A key conclusion is therefore that a strong case exists for a wide array of setting-specific public investments (including in infrastructure) that can positively impact growth and human development through several channels. This is good for growth, both directly – through the provision of physical capital - and indirectly, through its impact on human capital (through developmental outcomes). It is also good for human development, both directly and through the ‘trickle down’ effect.

In the rest of this paper we will therefore argue that the argument for easing fiscal space for infrastructure investment is subsumed within the larger policy advocacy for a fiscal framework that recognizes the human development payback from a public investment led strategy. The MDGs provide the basis for developing such a framework. We accept that existing fiscal rules focused on fiduciary solvency and sustainability are inadequate for this purpose and illustrate why this is the case in the following two sections, before discussing different issues involved in creating a more appropriate fiscal framework for this purpose in the final section.

3. Fiscal Policy and public investment in the Bretton Woods approach

The Bretton Woods Institutions’ (BWIs) approach to fiscal policy focuses on the overall fiscal balance and gross public debt as a measure of macroeconomic stability, within the time frame of a standard BWI evaluation instrument such as an IMF Article IV report or a World Bank Country Policy and Institutional Assessment (CPIA). Within this approach BWI-supported programs influence public investment through the funds disbursed to governments, the policy conditions they attach to their loans and, more generally, their policy advice (Dreher, 2005). The overall impact of BWI-supported programs depends on the balance between the benefits of fiscal consolidation and the costs (to the economy) of lower levels of public expenditure.

This approach suffers from three serious shortcomings which, collectively, render the approach unsuitable for an assessment of the long-term needs of a typical developing country⁵: (1) the narrow focus on growth and stability ignores the positive impact of public investment on competitiveness and the quality of growth; (2) the use of overall fiscal balance and public debt as the main empirical indicators of ‘sound’ fiscal policy is limits the scope for a public investment led strategy to achieve the MDGs; (3) the reliance on conditionality-based programmes.

The model driving the BWIs’ fiscal policy prescriptions inadequately recognizes the role of public investment for poverty reduction and economic growth. This approach implicitly considers public investment as an endogenous variable bound by strict fiscal deficit targets rather than a catalytic force for economic and human development. This is incompatible with an enabling medium term development framework such as that required to achieve the MDGs. As the Millennium Project argues “without public-led investment in infrastructure and human capital, the private sector simply stays away [because] many of the preconditions for growth (...) are public goods, meaning in shorthand that the social returns to providing them are much higher than the private returns” (Millennium Project, 2005, page 49).

UNDP empirical research (Roy and Weeks, 2004) shows that the countries whose macro frameworks included strong public investment strategies enjoyed substantial and stable levels of economic growth with high poverty elasticities. On the other hand, governments that sought to achieve deficit targets without reference to growth and poverty objectives suffered from economic stagnation. This demonstrates that the need to maintain sound fiscal policy to maintain macroeconomic stability goes beyond managing the fiscal deficit and public debt. The economic function of government is not merely to maintain a stable macro environment; its primary responsibility to its citizens is to foster the general welfare. A deficit target should not be set that undermines a government’s ability to achieve the latter.

Liberating policy from a deficit target makes fiscal space for public investment. China and Vietnam are outstanding examples of robust public investment which has facilitated private investment, both domestic and foreign. Between 1990 and 2000, public investment grew from 35 to 38 percent in China and 13 to 31 percent in Vietnam. While in both countries the public sector accounts for a considerable share of output (more in Vietnam than in China), private investment has grown more rapidly than public. The share of foreign direct investment in gross capital formation in 2001 reached 8.3 and 12.8 percent in China and Vietnam (Roy and Weeks, 2004).

⁵ The shortcomings apply in different measure to low and middle-income countries. In the latter case for instance the competitiveness argument would be the most important. In the case of low-income countries, this critique is of particular importance for explaining and reversing public investment declines in the quest for a scaled up public investment led strategy to achieve medium term international development goals (most importantly the Millennium Development Goals).

In contrast, countries that have limited the investment role of the public sector during the same period – for instance Indonesia where it fell from 31 to 17 percent - have experienced poor private sector investment performance. The share of foreign direct investment in gross capital formation in 2001 was negative (-13.2 percent) in Indonesia (McKinley, 2003, page 10). In the case of middle-income countries it is also important to note that Easterly (2001) and Calderón et al. (2003) find that the impact of lower investment on the lack of competitiveness can worsen the fiscal deficit.

The instruments used to determine resource allocation to countries with IMF and World Bank programs do not explicitly address public investment needs in a development context. The objective and design of the Poverty Reduction and Growth Facility (PRGF), Stand-By Arrangement (SBA) and Extended Fund Facility (EFF) programs of the IMF is not intended to support public investment but to preserve macroeconomic stability. The evaluation of fiscal adjustment in IMF supported programs (IMF, 2003; Development Committee, 2005) show that stabilization has been established at the cost of public investment. World Bank programs are more explicitly targeted to public investment. Following the launch of the Infrastructure Action Plan in 2003, total Bank lending for infrastructure in 2005 reached over \$7.4 billion, representing 33 percent of the Bank's total portfolio (Development Committee, 2005). Yet the Development Committee Report on "Infrastructure and the World Bank" (2005) stresses that "the increase in support to infrastructure is still very small relative to needs" (page ii). The direct impact of the money disbursed to governments appears to play a limited role on capital spending.

It has been argued that fiscal (and other) conditionalities of BWI-supported programmes adversely impact public investment. Assessing the impact (on public investment) of these programmes is undermined by some methodological difficulties. It is difficult to compare programme outcomes with the counterfactual of what economic performance would have been with a different programme design or without a programme (Haque and Khan, 1998). However it can be plausibly argued that more (and more broad ranging and micro-level) conditionalities would constrain proposals for expanding public investment as there would be more restrictions on the types and magnitude of investments that would not affect conditionality compliance.

This would also reduce national ownership and, transitively, the effectiveness of public investment programmes further undermining the viability of proposals for public investment led development strategies. In this context, a recent evaluation of IMF and World Bank conditionality (Eurodad, 2006; Buira, 2003) in 20 countries (EURODAD, 2006) shows that on average, poor countries face as many as 67 conditions per World Bank loan. Despite the IMF's new guidelines on conditionality in 2002, structural conditions in PRGF loans have risen. The average number of structural conditions contained within an IMF PRGF loan across the 20 countries Eurodad assessed has risen from ten to eleven per loan review between 2002 and 2006. This assessment contradicts the IMF's own review of conditionality, which concluded that structural conditions had been streamlined within PRGF programmes (IMF, 2005). This finding is complemented by that of an IMF Evaluation of Fiscal Adjustment in IMF-Supported Programs (2003) which shows that country program arrangements projected a decline in investment rates in 25 percent of the cases reviewed while in reality investment rates fell in 50 percent of the arrangements (IMF, 2003, page 6).

The World Bank model also fails to account for country public investment needs and its potential impact on economic growth and economic development. The World Bank Country and Policy Institutional Assessment, considers public investment as a by-product – not a spearhead - of economic growth. The only reference to public investment in World Bank CPIA is under the benchmark on “Economic Management - Fiscal Policy”, which assesses whether “the provision of public goods, including infrastructure, is consistent with medium-term growth.” (World Bank, 2005a, page 7). Clearly public investment is little more than a footnote in the CPIA.

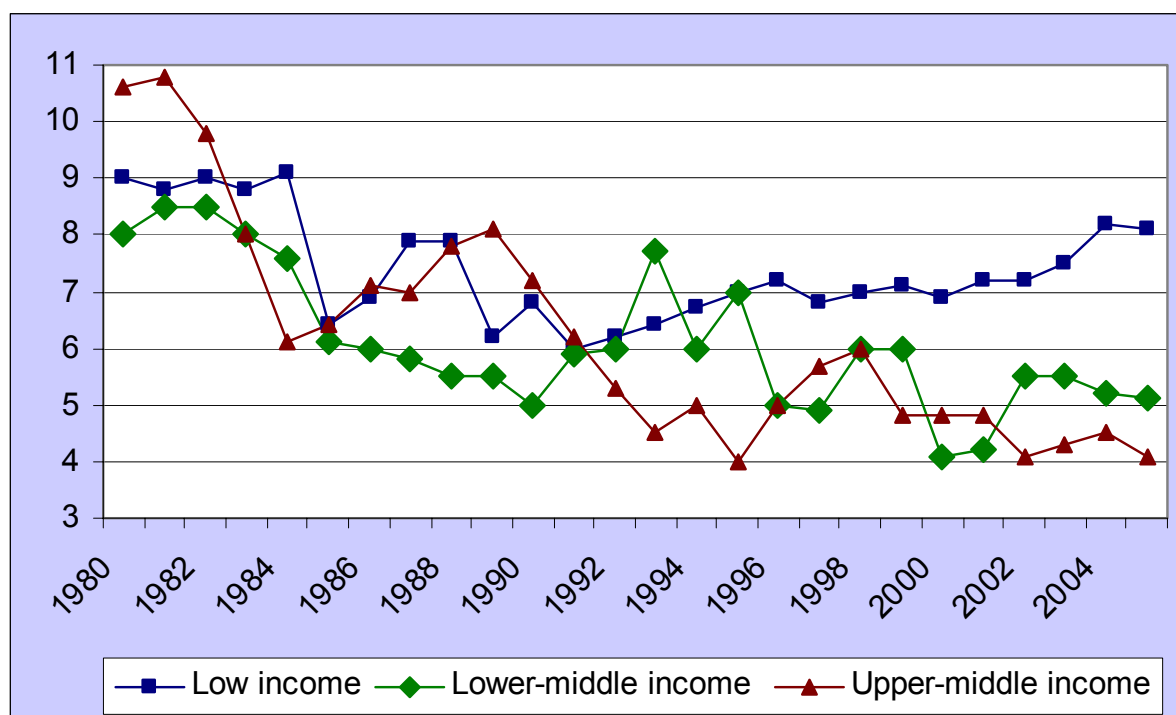
4. The Bretton Woods response to the new development challenge

International partners – including the Bretton Woods Institutions - have increasingly recognized the central role of fiscal policy in financing the provision of public goods needed to achieve the MDGs within a longer time horizon such as that embodied in the Millennium Declaration (United Nations, 2000). The World Bank Group is committed to play a major role in “facilitating the international response to the call for expanded assistance to Africa by working in partnership with other development partners to help every African country to reach as many of the Millennium development Goals as possible by 2015” (World Bank, 2005b, page i).

Has the acknowledgement of the MDG-based development paradigm resulted in a new approach to fiscal policy that addresses the concerns raised by previous critiques, as summarized in section 3? The approach to the MDGs is best encapsulated in a report to the Development Committee for the IMF-World Bank meetings of spring 2006, titled *Fiscal Policy for Growth and Development* (Development Committee 2006 – henceforth ‘The Report’). The Report focuses on “on how fiscal policy could be adapted to strengthen its role with respect to growth and the achievement of the MDGs” (Development Committee, 2006, page i).

The Report recognizes the cost of adjustment programmes on long-term economic growth: “The success of fiscal policy in relation to its stabilization objective may have come at the cost of long-term economic growth (...). Across regions the pattern is that a disproportionate share of fiscal adjustment was borne by infrastructure” (page 2). Figure 5 highlights the evolution of public capital formation between 1980 and 2005. Infrastructure investments cuts contributed to half or more of fiscal adjustment in five of the nine major Latin American countries over the 1980s and 1990s (Calderón, Easterly, and Servén, 2002). The Report stresses that the weighted average of public investment in infrastructure in Latin American countries fell from 3 percent of GDP in 1980 to 2 percent of GDP in 1990 and to less than 1 percent of GDP in 2001. Estache (2005) finds comparable results for Africa where public capital formation has only been maintained in some countries – such as Uganda and Tanzania - through higher aid flows. Similarly, public capital expenditure on irrigation, power and transport fell by 3 percent in India during the first half of the 1990s (Pinto, Zahir and Pang, 2006).

Figure 5: Public Capital Formation by Income Group, 1980-2005
(as a share of GDP)



Source: Development Committee (2006). Page 5

The Report acknowledges that fiscal policy must better serve growth and poverty reduction objectives. It also acknowledges that private investment alone is insufficient to provide the levels of public goods and services necessary to secure long-term developmental objectives (such as those summarized by the MDGs). However, the Report confines its endorsement of this long-term developmental challenge by specifying that such investment should consist of “some public infrastructure” that exhibits high returns and positive externalities. “In a country where the Government can build and maintain infrastructure efficiently, increasing borrowing to finance new high return infrastructure would enhance government solvency” (page 16). In consequence the fiscal framework presented remains subordinate to fiduciary rather than developmental concerns.

The Report presents a fiscal policy framework that is not significantly different from that used for short-term fiscal assessments by both Bretton Woods Institutions, and fails to provide the substantial analytical reworking required by the initial acknowledgement of long-term objectives. The framework is of limited relevance to assess the *developmental* (as opposed to *fiduciary*) implications of increasing fiscal space. It emphasizes the importance of considering the ‘longer term effects’ and ‘long-term impact’ of key elements of fiscal policy such as fiscal deficit and of public spending. The report further criticizes those ‘short-sighted decisions’ – including cuts in public capital formation - that undermined ‘long-term growth’. However, it is maintained that an expansion of public expenditures is only desirable when it does not compromise “macroeconomic stability, which is further referred to as “short-term macro-economic stability” (page 19). Additionally, it is indicated that fiscal deficits “with their short-term impact on aggregate demand” will influence “any decisions on public expenditure” (page 19).

Thus, the short-term continues to act as a binding constraint on the long-term. The framework presented in the report allows for fiscal expansion only in situations where solvency is improved *and* macroeconomic stability is sustained (page ii). Even if fiscal space exists (i.e. public expenditure improves solvency), the Report deems fiscal expansion undesirable if it compromises short-term macroeconomic stability. The positive endogenous effect of the *outcomes* of additional public investment on solvency and stability are totally ignored. For instance, using fiscal space for increasing military spending will have a significantly different impact from investing in rural roads, but the analytical framework of the report cannot distinguish between the fiduciary (not to mention developmental outcomes) of these very different spending decisions.

If, on the one hand, fiscal policy should better incorporate long-term growth objectives, it is hard to see why, on the other hand, the short-term macroeconomic impact of public expenditures is the major determining factor and thus a binding constraint in deciding on their appropriateness. Recent research establishes that the long-run macro-stability implications of a scaling up in public spending are rather different from those that emerge in a short run analysis (Gupta, Powell and Yang, 2006; Bruno and Easterly, 1998).

As a result the Report's framework understates the possibility for enhancing fiscal space through debt financed MDG-oriented public investments. For instance the Report distinguishes between countries with(out) access to international borrowing and with(out) access to external grant aid (page iii). It considers borrowing as a second-best option, despite the potential rationale for using this financing instrument, even in the presence of other funding sources. Though the Report recognizes the potential crowding-in between public and private investment, it does not then assess the implications of this shift for debt financed public investment. *Ceteris paribus*, crowding-in effects should enhance the net benefits from debt financed public investment. This is not taken into account in the analytics used to assess 'solvency' with the result that only 'self-financing' projects as suitable for debt finance.

Further, this approach does not capture 'savings realization failures' – i.e., macroeconomic, social and political factors inhibiting the channeling of savings to public goods financing - and makes no recommendations on potential instruments to create an enabling environment to enhance savings mobilization for public investment; addressing this issue should be an integral part of any analytical framework that seeks to secure fiscal space for achieving the MDGs (Roy and Heuty, 2005).

5. An enabling fiscal framework for public investment: accounting, analytical and policy issues

What, then, would be the desirable features of a fiscal framework that supports a human development oriented public investment strategy, whose results can be measured in terms of quantifiable long-term development goals such as the MDGs?

First, an MDG-based analysis should focus on the impact of public expenditures on aggregates and trends; within the time frame (10 years) for achieving the MDGs. This would imply that a deviation from the trend in the short-run is acceptable if it translates into positive outcomes in that timeframe.

Second, in a ten-year time period, public expenditure can have an endogenous effect on domestic resource mobilisation. This effect can be positive or negative depending on the impact of public investment on the productive base, the capital accumulation process and savings behavior. In this context, even if fiscal expansion results in a negative impact on macro-stability indicators in the short-run, it is critical to assess whether this effect is temporary (short-run) or structural and permanent. If macroeconomic instability is temporary, the desirability of fiscal expansion must be assessed by weighing the costs of this instability against the expected longer term benefits.

What would the details of such a strategy look like? This is the subject of our discussion in the rest of this section. In sub section 5.1 we discuss proposals to develop better accounting rules for an enabling fiscal strategy. In the following sub-section we discuss analytical and policy issues.

5.1 Accounting rules to increase fiscal space

In section 1 we noted the point made by several scholars and policy makers that restrictive fiscal targets used in fiscal reform programmes - chiefly the fiscal deficit and the debt/GDP ratio – were responsible for the observed decline in public investment/GDP ratios and, in particular, infrastructure/GDP ratios globally. In this context they here have been several suggestions for alternative fiscal rules - and associated institutional arrangements - that would foster an enabling reform environment for scaled up public investments.

The generic technical argument can be summarized as follows: existing fiscal indicators and targets do not account for the uniqueness of public investment “which stems, obviously, from its potential to improve the economy’s output potential and to benefit multiple generations” (Perée and Vålilä, 2005, page 5). Public spending creates public capital, “an outlay of expenditure on assets that provide longer run benefits going beyond the current period” (Mintz and Smart, 2006, page 9). While current expenditures - such as salaries or transfers associated with programs - are *flow* variables, public investment increases the *stock* of public capital, whose payback impacts the economy in the long run.

Most budgets classify current and capital expenditures separately. However the fiscal deficit does not make this distinction, being defined as the difference between current revenues and current *and* capital expenditures.⁶ A fiscal rule that recognizes the distinction between current and capital expenditure line items in the budget will ensure that fiscal restraint does not discourage growth in the aggregate public capital *stock* (the corresponding on-budget *flow* variable being gross public sector capital formation). On this count, the current budget deficit/surplus would be a logical indicator to choose.

However, it is now commonly argued that financing gross public sector capital formation entirely through current revenues makes little economic sense (Blanchard and Giavazzi, 2004; Mintz and Smart, 2006; Creel, 2003 and Fatás, 2005) and that “a rule (...) that introduces a financing constraint on investment expenditure is simply stupid” (Romano Prodi, former President of the European Commission quoted in Blanchard and Giavazzi, 2004, page 9). Consequently, there have been many proposals for alternative fiscal rules,

⁶ There is of course the issue what which expenditures fall under each category, a point we take up later in this section.

inspired in their various forms by the UK's 'Golden Rule'.⁷ All these aim to allow borrowing by the government for the sole purpose of financing net public investments.

It is important to understand the different arguments underlying these alternative proposals as to *why* (and consequently what type of) public investment should be debt financed (Mintz and Smart, 2006). The first argument pertains to intergenerational equity. Current generations should not be the sole financiers of investments that will also benefit future generations. Financing public investment through borrowing “provides an opportunity to postpone taxes to the future”, and it is therefore “a means for future generations to help contribute to the cost of public investment” (Mintz and Smart, 2006, page 8). Moral hazard questions apart, the intergenerational equity issue cuts both ways. Higher debt/GDP ratios would impose a cost on future generation creating a reverse intergenerational in-equity in the form of a higher debt service burden in the future.

The second, related argument pertains to tax smoothing. In summary, “because the static marginal cost of public finance is an increasing function of the government tax take, there is a *prima facie* case for borrowing to finance public investment, thereby smoothing the associated tax burden over future years and future generations” (Mintz and Smart, 2006, page 7). Given its focus on future tax revenues, the key policy implication is that while debt finance of tangible assets – infrastructures in particular - with direct link to future private incomes is allowable, other forms of public capital (environmental, military, cultural) that do not generate future tax returns should have limited recourse to debt finance.

A third argument focuses on net debt and the value of assets. It posits that total debt does not matter as long as it is backed by assets whose value, if sold or leased to the private sector, would provide funds to amortize the debt. However, Mintz and Smart (2006) have argued that this analogy is false. Confidence in sovereign solvency in the perception of private agents – investors, lenders, financial markets and rating agencies - is important for fiscal sustainability. It would be difficult to convince these agents that rural roads or schools in remote areas, unlike power plants, could easily be sold or leased to the private sector.

Thus the tax smoothing and asset value arguments privilege some types of public investments – tangible infrastructure investments with a full private market value – over others. This epitomizes a major policy challenge for creating fiscal space for public investments, which we explicate below in section 5.2.

For accounting purposes, public investment can be decomposed in two distinct forms of ‘public capital’: public capital used as an input “used to produce goods and services directly”, and public capital as an output “constructed by the public sector that provides longer-term benefits to society over time” (Mintz and Smart, 2006, page 14). An example from Mintz and Smart (2006) illustrates the argument: health services use labor – doctors and nurses - and buildings – hospital, dispensaries - to produce health services. Hospitals “are clearly capital inputs used in producing health services and should be amortized

⁷ Since 1997, the UK government has been subject to a self-imposed “Golden Rule”, which states that over the cycle, the government is to borrow only to finance capital and not current expenditures. This rule is augmented by a “Sustainable Investment Rule” which stipulates that over the cycle the net debt to ratio is not to exceed 40 percent (where debt is defined as gross government debt less liquid assets). Taken together, they constitute the ‘Modified Golden Rule’.

under capital budgets”, while “nurses salaries should be expensed” (page 15) i.e. be financed out of current revenue. Yet, the output, health services, yields returns in the future” through higher income paid to a healthier workforce. Why then shouldn’t public expenditures on teachers or nurses’ salaries be treated as capital expenditures given that they yield returns in the future?

In our view, there are two reasons for not doing this:

- The services provided by teachers and health workers are ‘exhausted’ or fully delivered when their job is done (teaching children, treating patients).
- The services do not on their own create future human capital which is created through a combination of capital inputs (like hospitals) to which we apply current inputs (like doctors and nurses) on a continuous and *recurrent* basis - which is why current expenditures are sometimes referred to as recurrent expenditures.

Thus the distinguishing feature of a public investment is not the outcome of the investment but its role in the capital accumulation process – which is that of a stock variable providing returns, in combination with recurrent inputs (flow variables), over a number of accounting years.

What conclusion do we draw from the above? First that while there are arguments for rules that infrastructure investments differently from other public investments, the reasons for doing so are principally fiduciary in nature. This may be problematic in a development context, as we shall elaborate in section 5.2. Second, while there are cogent arguments for interrogating the distinction between current and capital expenditures, we feel that there are sound economic reasons for treating these separately. This would imply our continued acceptance of the proposition that governments are not justified in running current deficits. On the other hand we do not accept, either, the argument to privilege infrastructure investments over other types of public investments on tax smoothing or market valuation grounds.

Our argument finds support in a seminal paper by Blanchard and Giavazzi (2004). The contemporary debate about fiscal rules and fiscal space for public investment has been influenced by debates on the Stability and Growth pact (SGP) adopted by the European Union in 1997. Blanchard and Giavazzi’s paper finds the fiscal rules set by the SGP problematic. Under the SGP rules, member states must keep the ratio of the annual fiscal deficit to gross domestic product (GDP) below 3 percent and the ratio of gross government debt to GDP must not exceed 60 percent. In summary they argue that borrowing should only be allowed to finance net investment, while the current fiscal deficit should be zero. This would include external grants in the context of developing countries. They expect three desirable outcomes: First “it would remedy an obvious mistake in the way the Pact was written”, as “a private company does not attribute the entire cost of an investment project to a single year’s account” but rather distributes its cost over time “as [the] returns [to investment] accrue” (page 3). Second, “over time the debt-GDP ratio would tend to become equal to the ratio of public capital to GDP” (page 4) – a level that can reasonably be expected to be less than the debt ratios of many developing countries. Third, the modified rule would also “introduce more transparency in the budget” and fight tendencies “to shift borrowing off-budget” (page 4).

We can anticipate an objection to applying Blanchard and Giavazzi's proposal in a development context. It can be argued that what matters is aggregate capital accumulation, not its distribution between public and private capital, making it illegitimate to allow governments privileged access to resources for net public capital formation as opposed to other economic agents. However, the evidence cited in section 1 does not support this argument – we observed there that current fiscal restraint rules inhibit public capital formation by government with no compensating increase in capital formation by other agents. We also observed that empirical evidence indicated that “crowding-in” rather than “crowding-out” could be typically expected to hold in the case of developing countries.

Another concern is the fear of “creative accounting” as governments would have an incentive to classify more and more expenditures as capital expenditures. Blanchard and Giavazzi agree, and stress the need to define ‘accounting rules’ that would complement alternative fiscal rules and clearly specify what can and cannot be counted as ‘investment’ under the modified rule (Blanchard and Giavazzi, 2004; Creel, 2003). In this context we propose that expenditures on the following should *not* be classified as capital expenditures:

- Outputs that are fully used up in the fiscal year in which the expenditure is incurred and;
- Inputs that are required to obtain desired outputs on a recurrent basis.

5.2 An enabling fiscal framework for human development: analytical issues and policy implications

In sections 1 and 2, we argued that the argument for excluding infrastructure investments from public expenditure ceilings (based on benchmarks such as fiscal deficit and debt/GDP ratios) is self-limiting. We argued in sections 3 and 4 that a fiscal framework that recognizes the human development payback from a public investment-led strategy and that the MDGs provide the basis for developing such a framework.

Moving to a fiscal framework that is development centred from one that is grounded in a purely fiduciary logic raises several analytical issues. Perhaps the most important what we term the “*fiscal space conjecture*.”⁸

This problem can be defined as follows:

The outputs from a given set of public investments are *public goods*. Different public goods vary in the intensity to which they display *public good characteristics*.

⁸ This is termed a conjecture pending a formal exposition which is currently work in progress. We are indebted to Sanjay Reddy for sharpening the analytical reasoning underlying the conjecture.

The public finance literature identifies the *characteristics* of a public good⁹ as:

- Non rival consumption;
- Non excludability;
- Jointness in supply.

Our conjecture then is:

For any public investment programme¹⁰, the more the public good characteristics of the public investment outputs, the less the precision¹¹ and predictability¹² of the *fiduciary* payback calculation. The less the public good characteristics, the more the precision and predictability of the *fiduciary* payback calculation.

And:

For any public investment programme the more the public good characteristics of the public investment outputs, the more the precision and predictability of the *development* payback calculation. The less the public good characteristics, the less the precision and predictability of the *development* payback calculation.

The existence and magnitude of public good characteristics affect the two paybacks differently for three principal reasons:

- (1) Jointness in supply and non rivalness in consumption make it difficult to assign unit costs and benefits to individual agent recipients. As a result proxies have to be used to calculate prices and returns.
- (2) Non excludability makes individual price calculation or market-based revenue earmarking problematic.
- (3) The fiduciary returns from public investments with strong public good characteristics are dependent on the second order impacts on revenue and expenditure.

The above jointly reduce the precision and predictability of calculations of the expected direct fiduciary return of the public investment. They do not however affect the precision and predictability of the calculation of the expected development payback. Conversely, the impact of public investments with weak public good characteristics on developmental outcomes tends to be second order in nature, reducing the precision and predictability of the calculation of the expected development payback.

⁹ We define public goods here following Atkinson and Stiglitz (1987), which defines the characteristics more broadly than the original (Samuelson, 1954) definition. We are trying here to avoid using terminology such as ‘pure’ and ‘impure’ public goods, ‘quasi’ public goods, etc since no universally accepted technical lexicon exists. For our purposes ‘public good characteristics’ suffices. We make the simplifying assumption, that the characteristics are additively separable. We also assume that all goods can be ordinally ranked as possessing higher or lower observable public good characteristics.

¹⁰ A note of caution here is in order. There are some public goods where the desired outcomes cannot be quantified. The conjecture would not hold for these examples include an improved security environment, better foreign relations and greater religious freedom. Such outcomes would need to be proxied by specific quantifiable indicators (lower crime, fewer violent conflicts because of religion, etc...).

¹¹ By *precision* we mean the degree of expected error in ex ante calculations of payback.

¹² By *predictability* we mean the degree of observed error in ex post payback outcomes.

The following example will illustrate the difference between *fiduciary payback* and *development payback*.

Consider two public investment programmes:

- (1) A programme of public investments to increase the capacity of the country's airports;
- (2) A programme of public investments to reduce infant mortality.

Both programmes have quantifiable indicators. In the first case, the *fiduciary payback* from successful completion of the public investment programme is clearly calculable. The returns from the capacity expansion is determinable over time by projecting demand and supply estimates and the marginal returns based on the impact of the enhanced capacity expansion (given projected demand) on price. In fiduciary terms the public sector returns have a clear impact on the fiscal deficit by enhancing revenue.

The development payback is not so clear. The same problems that render the empirical investigations into the relation between public investment and growth inconclusive (discussed in section 2) make forecasts of the positive impact of the public investment on development variables – growth, employment, etc. - problematic (for simplicity we are ignoring negative externalities in all cases). In this circumstance one can be more confident of the predictability and precision of the fiduciary calculus than of the development calculus.

In the case of the infant mortality programme the story is reversed. Medical and public health expertise can identify which interventions would be necessary (schools, hospitals, doctors, drugs, teachers) to ensure that a given public investment programme would reduce infant mortality. 'Needs assessments' (Millennium Project 2005) exercises and MDG-based simulation models like the World Bank's 'Maquette for MDG simulation' (Lofgren and Diaz-Bonilla, 2005) can specify the sequencing and time frame for such exercises.¹³ As long as the exercises are credible and comprehensive one can be reasonably confident of the development payback i.e. a reduction in infant mortality by a specified timeframe.

¹³ A 'needs assessment' compares a country's current situation with MDG targets and identifies the combination of public investments that would enable the country to achieve the MDGs by 2015. This needs assessment should identify the particular barriers that prevent faster economic development and greater progress towards poverty reduction, and establish a set of specific interventions that to address and remove these obstacles. A needs assessment thus provides a methodology for identifying key interventions that require a significant scaling-up through 2015 to achieve the MDGs. See Millennium Project (2005) Page 51 and Chapter 13. The Millennium project has applied its approach in Bangladesh, Cambodia, Dominican Republic, Ghana, Kenya, Tajikistan, Tanzania, Uganda and Yemen. The World Bank 'maquette' has been applied in Ethiopia, Nicaragua and Peru.

The fiduciary payback is more difficult to calculate. There is no stream of direct financial return flowing from this programme. Any returns would come through positive impacts on revenue and GDP and would affect the fiscal deficit through those channels. Perhaps a more healthy population in the long run will also generate expenditure savings on the health budget. But it is clear that the predictability and precision of fiduciary payback forecasts will be poorer than those for the development payback in this case.¹⁴

This simple example illustrates and explains our fiscal space conjecture. It also explains why, despite the political acknowledgement of the human development agenda and the specification of quantifiable development goals, there continues to be a tension, (such as that reflected in Development Committee, 2006) between the need to secure fiduciary and developmental outcomes. In that Report, the conjecture was sought to be resolved by making one payback (development) contingent upon satisfactory achievement of the other (fiduciary). Conversely proposals for long-term MDG-based national development strategies that provide a clear rationale for achieving the developmental outcomes quantified by the MDG indicators are faulted for being vague and imprecise on exactly how such ambitious scaled up plans could be implemented without adversely affecting sustainability and solvency of the fiscal system.

It can be argued that a public investment led strategy financed largely using external grants (Official Development Assistance) relieves the fiduciary constraint, by leaving the fiscal deficit and debt/GDP ratios unchanged. The Millennium Project's Report (2005) to the UN Secretary General sets out a practical plan to achieve the MDGs, which calls for a major increase in Official Development Assistance (ODA) from 0.25 percent of donor GNP in 2003 to 0.54 percent in 2015 (Millennium, 2005). While the report also emphasizes the need for domestic resource mobilization, debt relief and trade, it focuses mainly on the role of ODA in breaking the poverty trap and financing a major scale up of public investment in developing countries to achieve the goals.

The issues that then arise on the macroeconomic front (like Dutch disease) are important ones, but recent analytical work seems to indicate that these issues can be managed, over a ten year horizon, such they will not pose a binding constraint to scaling up to achieve the MDGs (Gupta, Powell and Yang 2006; Chowdury and McKinley, 2006).

While such a scaling up in ODA would indubitably relieve the current binding constraint it does not obviate the need for an enabling fiscal framework in the long run. The success of development strategies developed by Chile, Korea, Malaysia, Singapore and Thailand has not been contingent on significant foreign assistance, though such assistance did play an enabling role in many ways. In low-income countries in developing Asia (such as the South Asian Countries), aid supplies only a very small portion of investment needs and the growth in ODA would need to be of an order of magnitude that is simply unrealistic. In middle-income developing countries the question is obviously moot.

¹⁴ Note that both cases are *ceteris paribus*. Poor implementation, absorptive capacity constraints etc would have negative impacts on predictability and precision, but there is no reason to believe that such negative impacts would be dependent upon the public good characteristics of the public investment output.

5.3 Analytical and policy conclusions

How, then are these issues to be resolved? It is difficult to offer a ready made solution in the face of this diagnosis. What we shall attempt to do below is set out a “roadmap” of the principal issues on which attention needs to be focused to bring about a satisfactory resolution.

First, it should be noted that the fiscal space conjecture does not deny the possibility that a harmonious solution exists in which fiscal paybacks and development paybacks are simultaneously secured. Indeed the contemporary history of successful development is precisely about simultaneously securing such paybacks. The fiduciary returns to improved economic development for China, Vietnam, Malaysia, and South Korea can, in hindsight, be judged to have been perfectly compatible with the impressive strides in poverty reduction made by these countries. UNDP-commissioned research also demonstrates how the fiscal space conjecture was managed (if not entirely resolved) in Thailand (Choedchai and Jansen, 2006).

Second, it should be clear that as far as technical work on fiscal affairs goes, there have been very few systematic attempts to calculate the development payback of a scaled up public investment programme. This is so not because such a payback is difficult to calculate; rather, we feel this is due to a paradigmatic dogmatism regarding the role of public finance, that keeps it confined to a policy arena where the fiscal function is viewed as being essentially prudential in nature. The caricature of the development oriented health minister or the dynamic energy of an infrastructure minister pitted against the conservative prudential finance bureaucracy captures this almost cultural dogmatism among and about ‘people of the fisc’. This will clearly have to change if progress is to be made. Perhaps the first attempt needs to be at the international level, where it cannot continue to be the case that the chief dispenser of technical advice on fiscal affairs – the International Monetary Fund - has neither the mandate nor the expertise to combine thinking on human development and poverty reduction with developing high quality advice on enabling fiscal frameworks to secure these objectives. As at least one recent IMF paper shows (Gupta, Powell and Yang, 2006) there is plenty of professional talent within the Fund to discharge such a mandate - but the mandate will need to be given, and the operational culture of the organisation changed to one in which the phrases ‘pro-poor’ and ‘MDG-based’ are as well understood and internalized as the phrases ‘fiscal prudence’ and ‘fiduciary sustainability’. The exemplary impact of such a change on Ministries of Finance cannot be understated. If the IMF itself cannot take on such a role then it would be important to devise an institutional arrangement in which long-term development payback assessments conducted by United Nations development agencies inform IMF technical and surveillance work – particularly Article IV activities - on a mandatory basis.

Third, the development discourse needs to more centrally take on board the fact that development is a risky business with potentially serious prudential and fiduciary consequences when things go wrong, as they all too often do. The fact that it is possible to achieve the MDGs by 2015 should donors make good on their ODA commitments is in itself not a cause for celebration. Structural shocks, volatile financing for a scaled up public investment programme, and even natural disasters and political conflicts can detract from expected results. These risks and uncertainties have direct and tangible

fiduciary impacts which can be of a magnitude that would threaten or even reverse achievements on the MDG front. Such shocks and volatilities – more generally, a combination of random events due to uncertainty that, collectively, have a negative structural impact on macro-fiscal fundamentals, such as the debt stock - can, over time, seriously reduce the capacity of a country to engage in structural transformation to achieve development results of the type called for by the MDGs. It is therefore important not to assume these away and to devise instruments to mitigate their impact.

A good example of such an instrument is the proposed “Stability and Social Investment Facility for High Debt Countries” (Dervis and Birdsall, 2006). The paper proposes a long-term facility (SSF) to provide a predictable source of development finance for high debt emerging market economies. The paper focuses on the fact that in such economies, (a) the debt burden significantly constrains growth performance and (b) growth when it occurs tends not to be pro-poor. The paper highlights an example of the fiscal space conjecture in the context of high debt emerging market economies. In such economies, fiscal prudence requires either curtailing public investments altogether, or sanctions only investments that are consistent with providing adequate fiduciary payback. These are not likely to be chosen within a paradigm of human development within which growth would be demonstrably pro-poor.

The key innovation in the proposal is the advocacy of a long-term negotiated relationship focused on reducing the debt burden, thereby allowing for scaled up pro-poor public investments.¹⁵ The proposal requires countries to have a medium term growth programme with a path for the primary (or current) surplus and structural policies in support of growth. It would also require conditionality to be “framed in terms of reductions in numbers of people living in poverty (...) and other such more easily measured indicators such as primary and secondary school completion rates and infant mortality rates” (Dervis and Birdsall, 2006, page 11).

Finally, in the short-term the link between development results and public investment is exogenous – in such a circumstance, it is analytically meaningless to distinguish between fiduciary and development payback. As the long-term emphasis of the SSF proposal above makes clear, it is important to recognize that the fiscal space conjecture is operational only in the medium to long-term context. We argue that this involves devising an analytical framework in which the key fiscal impact variables – and, transitively the indicators to measure fiscal success – would focus more on the impact of the development process on domestic resource mobilisation, savings and capital accumulation, than is currently the case.

The Millennium Project’s Report underlines the need for a framework that assigns a central role to the development of capital accumulation processes. “The Goals are ends in themselves, [they] are also ‘capital inputs’ - [the means to a productive life] to economic growth and to further development (...). So, many of the goals are part of capital accumulation defined broadly as well as objectives in their own right” (Millennium Project, 2005, page 28). The identification of capital *accumulation* as the key economic *process* by which the goals are to be achieved provides an innovative framework to

¹⁵ While the paper rightly emphasizes that the proposed facility would not be used to mitigate specific exogenous shocks, it can be argued that countries with persistently high levels of debt are in such a situation because of a combination of negative events that were not *ex ante* predictable.

understand the impact of a public investment led development strategy. Economic models provide diverging explanations of the link between the capital accumulation process and the achievement of developmental outcomes (Solow, 1946 and 1988; Lucas, 1988). Yet all assume that investment in physical and human capital is a prerequisite for achieving development objectives such as the MDGs.

Understanding the pursuit of the MDGs as a process of generating sustainable regimes of accumulation underscores the dual challenge of the international community to cope with the ambition of the Millennium Declaration, beyond the specific quantitative targets set for each goal.¹⁶ The first challenge is to foster a regime of capital accumulation at the national level so as to free developing countries from reliance on external concessional financing for the provision of public goods and their full integration in the world economy. The second challenge is to promote country specific accumulation regime that sustains and perpetuates an enabling accumulation regime.

Thus, even if ODA-financed interventions to achieve the MDGs eventually lead to poverty reduction and foster capital accumulation, the sustainability of these virtuous outcomes is not automatically certain. The external and volatile nature of aid can undermine country ownership and increase vulnerability to shocks, which hinders the sustainability of regimes of accumulation. Substantial dependence on aid as the main financing source for the provision of public goods to achieve the MDGs will impact significantly on domestic patterns of consumption and production. An adequate mode of regulation needs to be in place to build an adequate productive and economic base, which can sustain these achievements. There is evidence that, in Mexico for example, disparities in the wage-labor nexus and an economy prone to external shocks fostered extreme international dependence with domestic productive capacities weak or even absent in a number of critical areas of the economy, becoming a major impediment for building self-supporting growth regimes (Talha, 2002). In Mexico and Venezuela, the external financial constraints of the eighties led to the complete destabilization of the regulation mode, with consequent slippages in development results (Aboites, Miotti and Quenan, 2002).

The BWIs' paradigm focuses on fiduciary measures and normative policy assumptions that are not sufficiently developed to assess the evolution of a capital accumulation process appropriate for securing fiscal space for sustainable human development. The CPIA¹⁷ is an important tool used by the World Bank for the political economy and institutional assessment of a country. A country is identified as having 'good' policies if it receives a high score on the CPIA. This assessment includes subjective criteria such as the presence of a 'Competitive Environment for the Private Sector' and 'Property Rights and Rule-based Governance.'¹⁸ The CPIA gives equal weights to each indicator, notwithstanding the preponderance of indicators linked to economic policies and

¹⁶ For a detailed discussion of the role of capital accumulation in sustaining human development progress, see Roy and Heuty (2005).

¹⁷ The CPIA assigns a value between 1 and 6 to capture perceived performance in twenty different respects, ranging from macro-economic management and factor market policies to policies for social inclusion and public sector management (Dollar and Burnside, 2000).

¹⁸ Vandemoortele (2003) stresses the subjectivity of evaluations concerning, for instance, whether a country has a distortionary minimum wage, excessive labor market regulations or too many public sector workers (page 14).

outcomes and the relatively few indicators linked to social policies and outcomes. The instrument provides no long-term guidance.

New instruments need to be defined to address the political economy nature of the capital accumulation process that underpins the link between successfully securing human developmental outcomes (such as those embodied in the MDGs) and ensuring long-term fiscal sustainability. As our discussion in the previous section on the fiscal space conjecture indicates, the development challenge is to forge a credible instrument to quantify long-term fiscal payback from a public investment programme with strong public good characteristics. While the process can be kickstarted using foreign aid (in low-income countries) or a Stability and Social Investment Facility (in middle-income countries), fiscal sustainability would ultimately require ‘closure’ - that the development payback deliver (within a defined time frame) a level of productive activity and savings mobilisation that is compatible with long-term fiduciary sustainability.

The definition of political economy instruments to assess fiscal space and secure a sustainable capital accumulation process within the long-term is meant to complement – not replace - existing fiduciary fiscal assessment tools focused on annualized and short-term assessments of fiscal solvency and sustainability. Indeed the latter are essential prerequisite inputs for the former. However, the absence of such instruments does not mean that an exercise where such short-term instruments are used for want of anything better is either appropriate or desirable. The Chief Economist of the World Bank recently noted the absence of “an obvious policy framework within which to evaluate infrastructure investment options and tradeoffs” and called for further research in this area (Bourguignon, 2006, page 5). A collaborative effort involving IMF expertise on fiduciary instruments and the UN system expertise in demonstrating the long-term human development payback from well designed public investment programmes, in equal partnership with other development partners and developing country grouping, is therefore a matter of pressing urgency.

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