# GET Briefs
## Public Investment Management Performance (PIMP) in an Economic Crisis

53462

GLOBAL EXPERT TEAM
PUBLIC SECTOR PERFORMANCE

# Review of Public Investment Management Performance (PIMP) in an Economic Crisis[1]

## August 2009

**Contacts:**

Tom Ferris, Consultant

Theo Thomas, Latin American Region Public Sector, tthomas3@worldbank.org

The paper does not reflect the official views of the World Bank, its Executive Board, member governments, or any other entity mentioned herein. The authors would like to thank Nick Manning, Jim Brumby and Nataliya Biletska of the World Bank for their helpful suggestions and comments, although the views expressed in this paper remain the sole responsibility of the authors.

[1] This Report reviews public investment management performance ('PIMP') for the Public Sector Performance Global Expert Team at the World Bank

# Executive Summary

This Report reviews how various countries are seeking to boost public investment management performance (‘PIMP’) in response to the current economic downturn. Public investment, for the purposes of this review, includes investment by the general government plus investment by government-owned corporations. The Report was commissioned for the Public Sector Performance Global Expert Team (PSP GET) at the World Bank.

The Report focuses on the potential roles for public investment management in the current downturn, including:

i. Scaling-up investment spending i.e. simply doing more;
ii. Selecting investments that are likely to be most effective in terms of stimulating the economy or protecting particular social/vulnerable groups;
iii. Helping to accelerate investments by reducing the time between conception to implementation; and
iv. Other improvements in the general quality of investment spending, i.e. reducing waste or enhancing efficiency and effectiveness.

The Report draws on the experiences of a range of countries, and the managerial, institutional and procedural reforms that may be necessary to expedite quality investment programmes. It seeks to complement recent World Bank guidance and research, in particularly the note *A Diagnostic Framework for Assessing Public Investment Management* (World Bank 2009).

The Report is presented in five sections, and responds to a series of key questions posed by the PSP GET:

**Section one** seeks to address why governments are trying to boost investment spending in response to the current economic downturn, largely because it can have a large simulative effect on the economy and, mainly by creating jobs, an element of social protection.

**Section two** briefly describes the types of investment spending that might best be undertaken to combat a large economic downturn—what gives the biggest value for money in terms of stimulus and/or social protection?

**Section three** looks at how we might know that we are getting more high quality investments i.e. how can we measure the performance of public investment management, along the lines highlighted above?

**Section four** looks at the different institutional arrangements, systems, procedures, capacity and managerial arrangements that may be introduced to help promote efficient public investment to combat the crisis. What lessons can be drawn from country experience in terms of strengthening these features considering the urgency presented by the current economic situation?

**Section five** presents some summary observations and recommendations.

# Table of Contents



**Boxes**

# Section one: Boosting investment during a time of crisis

## 1.1 A heightened role for fiscal policy in the current economic crisis

1.1.1 The global economy is facing the most severe and widespread financial and economic downturn in over half a century. On 22 April, 2009, the IMF forecast that *"in the most severe recession since World War II, the global economy is projected to shrink by 1.3 percent in 2009*", with declining activity in countries representing three quarters of the global economy (IMF, 2009b). Only "sluggish" growth is projected for 2010.

1.1.2 There remains a large degree of uncertainty about the depth and duration of the financial crisis, which has been the initial impetus of the downturn. The spill-over into the real economy is leading to rising unemployment and slowing demand in many countries. The World Bank (2008) has pointed out that "t*he most effective interventions will be those that target people who are the most vulnerable to income declines and most exposed to the crisis, not an easy task ex ante and one which will differ across countries".*

1.1.3 In many countries, public finances are being asked to bolster falling aggregate demand, while at the same time fiscal revenues are falling. Across much of the OECD, monetary policy has been eased significantly to support demand and counter deflationary risks—in a few countries, such as the US and UK, the scope for further interest rate reductions has been practically exhausted and central banks are using less conventional methods to inject liquidity in to the economy. Given the scale and potentially protracted nature of the downturn, it is now widely accepted that fiscal stimulus is required to bolster demand in many countries. This comes despite significant falls in revenue being projected in many countries, particularly where the revenue base relied heavily on the financial, housing or export sectors.  Despite these challenges, the IMF has advocated for a coordinated fiscal stimulus across economies that is timely, large, lasting, diversified, and sustainable, with a commitment to do more if the crisis deepens (see Box 1).

1.1.4 While globalisation means the financial and economic difficulties that begun in the more advanced economies have quickly spread throughout the world, similarly stimulus packages and recovery plans of one country are likely to have some spill-over effects to other countries. This does not mean that all countries should, or are able to, take identical actions. In a simplified version of the IMF's recommendations, the UK (HM Treasury, 2008) has pointed out that the effectiveness of international fiscal actions will be enhanced if they are concerted, and conform to the following principles:

- *Timely* – to have a swift impact. This requires both that the policy change can be implemented quickly, and that it has a rapid impact on behaviors;
- *Temporary* – to maximize its immediate impact and protect medium-term fiscal sustainability. If action is not taken to maintain sound public finances, there is a risk that policies will not be seen and credible and higher long-term financing costs and interest rates may undermine the stimulus effect; and
- *Targeted* – it is important that the support boosts spending, to maximize the impact on domestic economic activity.

**Box 1: What is an Optimum Fiscal Stimulus Package?**

The IMF points out that the current crisis calls for two main sets of policy measures. First, measures to repair the financial system. Second, measures to increase demand and restore confidence. The IMF argues that the optimal fiscal package should be:

i. *timely*, because the need for action is immediate;
ii. *large*, because the current and expected decrease in private demand is exceptionally large;
iii. *lasting* because the downturn will last for some time;
iv. *diversified* because of the unusual degree of uncertainty associated with any single measure;
v. *contingent*, because the need to reduce the perceived probability of another "Great Depression" requires a commitment to do more, if needed;
vi. *collective*, since each country that has fiscal space should contribute; and
vii. *sustainable*, so as not to lead to a debt explosion and adverse reactions of financial markets.

Looking at the content of the fiscal package, the IMF conclude that, in the current circumstances, spending increases (including for investment), and targeted tax cuts and transfers, are likely to have the highest multipliers. General tax cuts or subsidies, either for consumers or for firms, are likely to have lower multipliers.

Source: IMF 2009

1.1.5 A Statement from the G-20 on 2 April 2009 recognized that "*a global crisis requires a global solution"* and pledged to do whatever was necessary to:

- restore confidence, growth, and jobs;
- repair the financial system to restore lending;
- strengthen financial regulation to rebuild trust;
- fund and reform our international financial institutions to overcome this crisis and prevent future ones;
- promote global trade and investment and reject protectionism, to underpin prosperity; and
- build an inclusive, green, and sustainable recovery.

1.1.6 There is increasing evidence that many governments are heading the call for significant fiscal stimulus packages, designed to boost short-term demand and foster recovery. According to the IMF, the fiscal balances of the G-20 advanced economies are projected to weaken by an unprecedented 6 percentage points of GDP on average, with government debt rising by 14.5 percentage points of GDP in 2008-09 (IMF 2009). The fiscal balances of the G-20 emerging economies are likely to deteriorate slightly less markedly, although a greater share is due to the collapse in commodity prices. Prasad and Sorkin (2009) have pointed out that "*There is a fair amount of frontloading in the stimulus packages of the G-20 countries, with much of the stimulus taking effect in 2009. Of course, this could reflect different beliefs about the length of the recession. It could also reflect difficulty in ramping up government expenditure quickly, especially on infrastructure and other investment projects."* Box 2 looks at the varied challenges and responses to the crisis.

## Box 2: Varied challenges and responses to the crisis

*It is difficult to succinctly define each countries vulnerability and response to the global financial and economic crisis.* This is because of the multiple dimensions to vulnerability, from weak initial conditions, to high exposure to volatile trade and financial flows, while policy makers may disagree on the response and some institutions may be better prepared to respond than others. However, nearly all G-20 countries have announced some stimulus measures, and while the aggregate size is around 2 percent of GDP in 2009 and 1.6 percent in 2010 this varies enormously between countries (IMF 2009c).

*The policy response to the financial sector crisis is focused in developed countries, where the crisis started*—measures include liquidity support, expansion of financial safety nets, and interventions in financial institutions. Few emerging economies outside Europe have needed to adopt such measures so far, although some of the large emerging economies, e.g. China, Brazil, and Russia, have taken measures to ease the perceived credit crunch and kick-start lending.

*The World Bank (2009) has classified countries exposure to the crisis*, in terms of the projected effects on growth and poverty, and also their ability to mitigate the impact of the crisis in terms of their: (1) capacity to increase the fiscal deficit (fiscal space), mainly reflecting their financing constraints and concerns about fiscal sustainability; and (2) institutional capacity to implement programs aimed at mitigating the poverty impact of the crisis, which evaluates the consistency of spending with poverty reduction priorities and the quality of social protection policies and programs.

*Accordingly, the most vulnerable group is composed of countries with high exposure to the crisis and little or no fiscal space*. Many of the world's low- and middle-income countries are in this category (e.g., Bangladesh, Ethiopia, Haiti, Lao PDR, Mozambique and Zambia), and their ability to increase, or even maintain, fiscal spending at pre-crisis levels will partially depend on increasing external aid. Similarly, some middle-income countries in Europe are vulnerable because of highly-leveraged financial sectors and a reliance on rapidly falling exports and capital inflows, e.g. Croatia, Latvia, Georgia, and Poland while in South Asia Pakistan, India, and Sri Lanka remain constrained by high levels of debt.

*Nonetheless, fiscal stimulus packages have been announced in emerging economies that have the fiscal space*. Most notable are middle and low income countries that managed to build up savings during the preceding period, including Brazil, Costa Rica, Peru, Russia, China, South Africa, many resources producers, like Saudi Arabia, and a number of countries in South East Asia (see Box 4). However, *few lower-income countries have the fiscal space to boost spending*, although stimulus programs have been announced in countries with stronger fiscal foundations, e.g. Indonesia, Tanzania, Mauritius and Vietnam. Most of these programs seek to boost investment and social protection, and often emphasize improvements in the prioritization of spending rather than just more spending. However, in addition to often more binding financing constraints in many low-income countries, "the capacity to implement efficient and well targeted investment and social programs relatively quickly is limited" (IMF 2009d).

## 1.2 The role of public investment in responding to the crisis

1.2.1 In previous recessions, as public finances weaken, governments have often come under pressure to restrict their financing requirements. In such situations, the temptation is often to cut spending on investment, as this is seen as being politically and technically easier than raising taxes or cutting social expenditures, wages and salaries. If pressure on public finances were to become particularly acute, there is a risk that governments may be induced not only to postpone investment in new infrastructure, but also to reduce spending on maintaining existing infrastructure and facilities. This *underinvestment* can not only reduce the immediate fiscal stimulus, but can also hinder the recovery that may have benefited from using the infrastructure.[2]

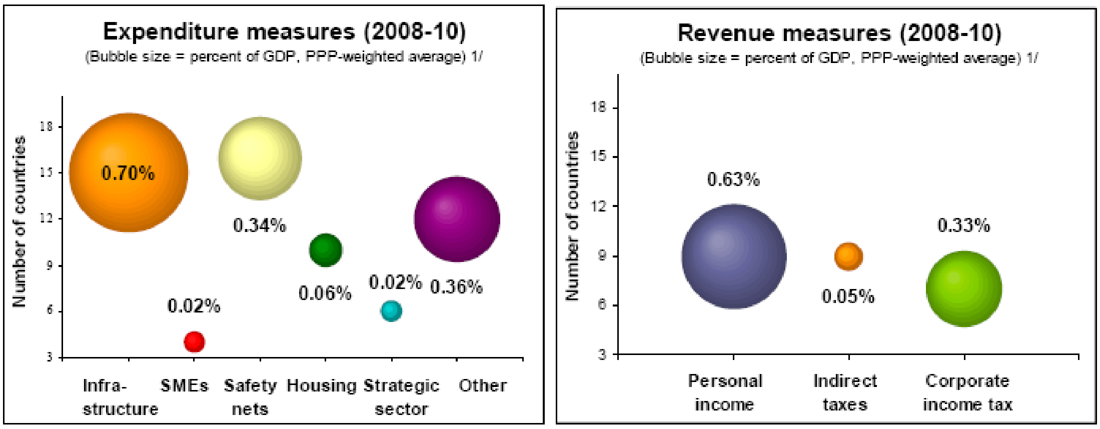
1.2.2 Public investment does not just happen, it has to be planned (Ferris, 2008). Although additional physical and technological infrastructure investments might provide an important boost to long-term growth, they are often considered difficult to design and start-up in a manner that would generate a significant short-term stimulus. For example, in January 2008, the US Congressional Budget Office (CBO, 2008) warned that "*because many infrastructure projects may take years to complete, spending on those projects cannot easily be timed to provide stimulus during recessions, which are relatively short lived*" and even tax breaks designed to spur private investment "*questions have been raised about the ability of capital goods production to respond to additional demands in the short run, a shortcoming the ITC*[3] *would share with other investment incentives*." Similarly, Elmendorf and Furman (2008) note that "a*lthough additional physical and technological infrastructure investments might provide an important boost to long-term growth, they are difficult to design in a manner that would generate significant short-term stimulus. In the past, infrastructure projects that were initiated as the economy started to weaken did not involve substantial amounts of spending until after the economy had recovered.*"

1.2.3Nonetheless, many OECD and emerging countries have announced plans to accelerate public investment spending. This may partly be driven by the belief that the *"economic weakness will continue into 2010,*[so] *there should be less concern that the expenditures will only be put into place once the economy has begun to recover"* (IMF, 2009). Three-quarters of the G-20 have announced plans to increase spending on infrastructure, largely on transportation networks, (e.g. in Canada, France, Germany, Korea, US and UK etc.) either in the form of direct central government spending, or through capital transfers to local authorities (Figure 1).

[2] Recent examples where fiscal consolidation resulted in cut backs in public infrastructure investment that reduced output in the recovery include Mexico (World Bank 2001) and Brazil (World Bank 2007).

[3] Investment Tax Credit.

Figure 1. Composition of Discretionary Fiscal Measures (G-20 Countries)




Source: IMF staff estimates (IMF 2009).
1/ PPP weights for all countries.

1.2.4 Given the severity of the current downturn and the uncertainty of the duration, now is perhaps the time to undertake investments in order to provide a significant fiscal stimulus to boost economic activity (Ferris, 2009c). The justification for additional infrastructure spending, during the current recession, is often couched in the following, highly interrelated, terms:

- To boost both long and short-term growth, over and above the addition to the capital stock (e.g. with a multiplier greater than one);
- To create both direct and indirect short-term employment, during the development phase, and long-term employment as the infrastructure is utilized;
- To bolster demand in specific areas that have weakened during the downturn, for example utilizing spare capacity and labour in the construction sector; and
- To provide an opportunity to reshape economic priorities, for example by investing in green energy or transport networks.

1.2.5 The OECD recently noted that infrastructure investment does not just add to the stock of capital, it can have effects on growth over and above the impact on capital stock. These effects can occur through a number of different channels, such as facilitating trade and the division of labor, competition in markets, a more efficient allocation of economic activity across regions and countries, the diffusion of technology and the adoption of new organizational practices or through providing access to new resources (OECD, 2009b). For advanced countries, estimates of the fiscal multiplier for investment (i.e. the ratio of the change in output to the change in public investment spending) ranges from 0.5 to 1.6—this tends to be higher than for tax cuts (0 to 1.3) or transfers (0.1 to 1.7).[4]

[4] See sources in IMF 2009d (page 11). IMF research also indicates that the multiplier effects are larger when the stimulus is multilateral and supported by accommodative monetary policy (IMF 2009).

1.2.6 Infrastructure investment projects may create both direct and indirect short-term employment. Although this maybe a subset of the broader growth objective, employment creation, and/or redistribution of income, may be an explicit objective where unemployment is rising rapidly. Job creation schemes often complement other social protection transfer programs as the direct employment generation potential of infrastructure investment may be considerable, and can be boosted through more labor intensive project selection and design. There are also tertiary effects of induced employment from the secondary impact of employee consumption.[5] This demonstrates the importance of estimating the labor impact as a part of the appraisal process of investment projects, being explicit about any "additional" weight to be given to favor labor or other distributional factors (e.g. by using weighted shadow prices for specific inputs), and monitoring the results (see Box 3).

**Box 3: The US Recovery and Reinvestment Act emphasizes job creation**

In February 2009, President Obama signed the $787 billion American Recovery and Reinvestment Act. The Act targets over $280 billion in investment toward key areas that will save or create jobs immediately, while also laying the groundwork for long-term economic growth. The legislation is designed to:

- Create or save 3.5 million jobs over the next two years;
- Provide nearly 40 percent of the package in direct relief to working and middle class families;
- Double renewable energy generating capacity over three years;
- Create a Clean Energy Finance Authority and Renewable Tax Credits that together will leverage an additional $100 billion in private investment in the renewable sector;
- Make a $150 billion investment in the nation's infrastructure – the largest investment since the interstate highway system in the 1950s;
- Inject about $280 billion into nearly 70 grant programs to states and localities
- Protect health care coverage for millions of Americans during this recession;
- Enact the most significant expansion in tax cuts for low- and moderate-income households ever.

The Act provides for unprecedented levels of transparency and accountability so that it will be possible to ascertain how, when, and where funds are being spent (with $340 million in oversight funds). The website, **www.recovery.gov**, has been set-up to enable the public to more easily monitor funding, project locations, performance information—there is a new requirement for sub-grantees and sub-contractors to report on the number of jobs created.

Source: www.recovery.gov

1.2.7 The type and location of short-term employment may also be important in terms of protecting groups that may be particularly vulnerable or hit hardest by the downturn. For example, a number of OECD countries have introduced programs with a focus on construction, a sector that has been particularly badly hit by the downturn in housing markets, and also in the car industry. Some emerging economies, like Brazil, are also emphasizing investment in social housing projects, which is both labor intensive and redistributes assets to the poor. Given current market conditions the risk of government crowding out demand in these areas is considered slim.

[5] A recent LCR Crisis Note discusses the issue in more detail and suggests that around 40,000 jobs could be created directly by around US$1 billions in Latin America (Tuck et al, 2009).

1.2.8 Finally, the crisis provides an opportunity for public investment and investment incentives can help to reshape public priorities. The OECD (2009a) notes that, "*So far, the fiscal stimulus measures all include investments in infrastructure, offering an exceptional opportunity to deal with other pressing challenges. For example, packages should include incentives for environment-friendly investments, to maximise growth while addressing climate change. Measures to sustain innovation should contribute to a "green" long-term growth, while social and regional policies should also be oriented towards low-carbon recovery".* The large fiscal stimulus packages in the US, UK and Europe provide for considerable investments in green energy initiatives both in terms of power-generation and public transport.

## Section two: Types of investment

2.1 So what are the main broad areas of public investment? Traditionally investment in transport, electricity, and telecommunication networks is thought of as the key method of injecting demand into a weak economy, although the OECD (2009b) argues that the scope of public investment goes wider. Specifically governments have the option of increasing or accelerating infrastructure, maintenance and other types of potentially welfare-enhancing expenditures, such as *human capital infrastructure* (e.g. building/refurbishing schools or hospitals), *redistributive investments* (including social housing, recreational facilities etc.), other *public goods* (e.g. defence and security or environmental protection), that have been identified after a careful cost-benefit analysis. However, only if investment in such areas can be delivered in a timely way, avoiding bottlenecks, can it be an effective and timely tool for stimulating economic activity.

2.2 Recent OECD empirical research has examined the link between more traditional infrastructure investment, including repairs and maintenance, and GDP performance over time and across countries (OECD, 2009c). The OECD used estimations for six different physical indicators of network infrastructure—one for energy, two for telecommunications and three for transport. The results are presented in Table 1, where the coefficients of the infrastructure stock show the impact of investment above the effect of simply adding to the productive capital stock—consequently a positive (negative) coefficient implies that the impact on output would be higher (lower).

**Table 1: The relationship between infrastructure investment type and growth in the OECD [1]**

| **Area of Infrastructure** | **Investment** | **Population growth** | **Human capital** | **Trend** |
|---|---|---|---|---|
| Roads Infrastructure[2] | 0.46**<br>0.3* | 0.032<br>0.019 | 0.18 | 0.02***<br>-0.03 |
| Rail Infrastructure[2] | 0.53***<br>0.39** | 0.013<br>-0.007 | 0.8 | -0.08<br>0.02*** |
| Motorways Infrastructure[2] | 0.42***<br>0.4*** | 0.019<br>-0.005 | -0.03 | 0.02***<br>-0.11 |
| Electricity Infrastructure[2] | 0.39***<br>0.39*** | 0.004<br>-0.006 | 0.08 | 0.02***<br>-0.11 |
| Telephone Mainlines Infra.[2] | 0.39***<br>0.42*** | 0.021<br>0.003 | 0.15 | 0.02***<br>-0.13 |
| Telephone Subscriptions[2] | 0.45***<br>0.34** | 0.024<br>0.009 | 0.68 | 0.02***<br>-0.07 |

Source: OECD, (2009c). **Notes**:

**(1) Data**: The table provides mean-group coefficients for Dynamic OLS regressions on the dependent

growth variable , where the coefficients are calculated for 24 OECD countries.

**(2) Two Estimates**: There are two estimates for each area of infrastructure; in the first case the variable for human capital is excluded and included in the second case.

**Significance level**: ***, ** and *, denote 1%, 5% and 10% significance levels.

2.3 The results indicate that investment has the expected positive and significant effect on growth and long-run output levels.[6] The OECD Paper concludes that – "*These results, if taken literally, would provide an indication of where additional investment has over time had effects on output beyond those implied by additions to the capital stock. However, they do not explicitly address the issue of whether additional investment today would bring about these effects*".

2.4 The OECD research also shows that individual country coefficients vary considerably. The main features of the country analysis are:

***Energy*:** The coefficients for electricity generation are positive and significant for the majority of countries, suggesting that investment in generation capacity has been associated with higher output levels. In Australia, Ireland, Korea and New Zealand there is evidence of negative spillovers from additional investment, which could reflect past over-investment, if the link with growth is non-linear, suggesting that reallocating investment to other sectors may have boosted output, or inefficient use of infrastructure.

***Roads:*** Positive coefficients are found for New Zealand and the United Kingdom for total road length per capita. On the other hand, increasing the stock of roads is estimated to have a negative effect in France, Greece, the Netherlands and Spain. The coefficient estimates for motorways are generally more often positive, possibly reflecting the more recent development of these networks and the fact that they provide services that are more specifically business-related.

***Rail:*** Positive significant effects are found for a number of countries (Australia, Austria, Greece, Korea, New Zealand, and the United Kingdom) suggesting that investment in rail track was associated with higher output levels. Conversely, estimates suggest that additional investment in rail track would have negative spillovers on output in found for Belgium, Portugal and Spain. Again, this may indicate that there has been over-investment in the sector if the link between infrastructure and output is non-linear or inefficient use of infrastructure.

***Telecommunications:*** The picture for telecommunications is mixed. The coefficients for fixed mainlines suggests that additional investment would have negative externalities in Australia, Iceland, New Zealand and the United Kingdom, and positive ones in Austria, Greece, Italy, Mexico, Norway and Spain. However, when an alternative measure of infrastructure is used (total subscriptions, including mobile telecommunications) many of these relationships are reversed, suggesting that considerable caution is required in interpreting these results, mainly due to the technological change the sector has experienced.

2.5 As noted above, stimulus packages are often also concerned with creating short-term employment, protecting vulnerable groups and sometimes also promoting long-

[6] Population growth and human capital appear insignificant, although this may reflect the trend variable included in the models specification.

term goals such as combating global warming, oil dependency etc. Some of these factors can more easily be incorporated into standard cost-benefit analysis (CBA)—for example, appraisers should assess how the costs and benefits of different options are spread across income groups, where a proposal providing greater net benefits to lower income earners is rated more favorably than one whose benefits accrue to higher income earners (using distributional weights).[7] However, there are inherent difficulties with non-marketed costs and benefits and there will always be wider political and managerial dimensions that involve judgment and, at best, more qualitative assessment. To help promote these goals Governments will need to develop transparent and clear criteria for prioritizing such issues, as a complement to growth and employment objectives, to help project planners and designers.

## Section three: Measuring improvements in public investment management performance

3.1 While the headline objective is more high quality investment, in order to monitor implementation (to know that the objectives are being achieved) it may be helpful to better define the dimensions of "performance" of public investment management in addressing the economic downturn. The above suggests that performance can be measured along the following lines:

i. The scaling-up of investment spending i.e. simply doing more;
ii. The appropriate selection of investments that are likely to be most effective in terms of stimulating the economy and protecting social/vulnerable groups;
iii. The acceleration of investments by reducing the time between conception to implementation for new and/or existing projects; and
iv. To these can be added other ways of improving the general quality of investment management e.g. reducing waste or enhancing efficiency and effectiveness of investment in ways not already included above. These issues perhaps become more important during times of economic stress, as resources are likely to be scarcer.

### 3.1 Scaling-up investment spending

3.1.1 The potential scale of public investment will be driven by individual country concerns about affordability and sustainability, as well as their ability to identify projects that can be implemented in a timely fashion. Some countries may already have a pipeline of investment projects already designed and appraised and waiting to be financed, while others will have to create new projects or bring forward their development.

3.1.2 The International Monetary Fund has called for fiscal stimulus in as many countries as possible, including emerging market and advanced economies (IMF, 2009a). The Fund has published some simulations with a multi-country structural model to show that worldwide expansionary fiscal policy, combined with accommodative monetary policy, can have significant multiplier effects on the world economy. It also provides a framework for assessing the effects of fiscal actions needed to help counter the projected contractionary pressures in the world economy.

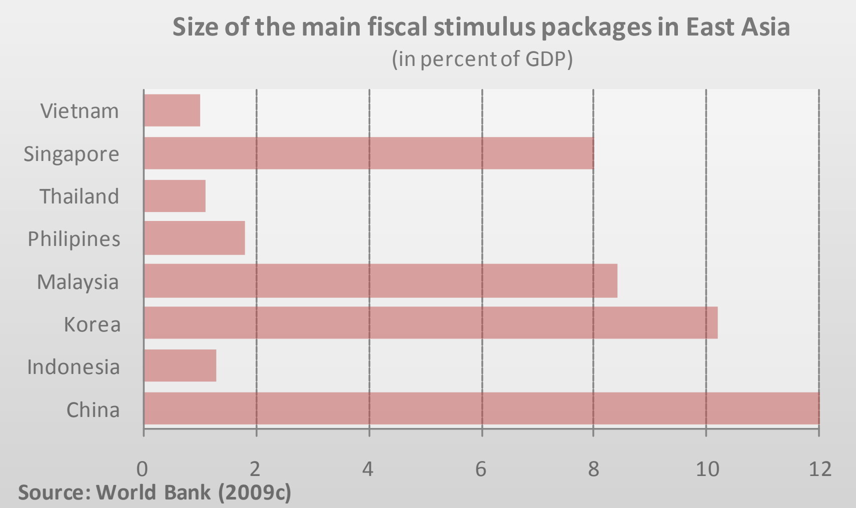
---

[7] Central agencies can help by developing "rules of thumb" standards to guide the process e.g. the UK Treasury "Green Book" guides appraisal and evaluation of projects and includes weights to assess distributional and equity impacts: http://www.hm-treasury.gov.uk/data_greenbook_index.htm.

However, the IMF also notes that not all countries are in a position to implement such plans as some will have more binding financing constraints—either high borrowing costs or difficulties in financing deficits at any cost—while others are constrained by high levels of debt (See Box 4 for examples in East Asia).

**Box 4: Fiscal Stimulus Packages in Middle and Low-income countries in East Asia and the Pacific**

The global economic downturn has significantly reduced export earnings and foreign investment in East Asia, which were majors source of growth. However, having built up large prudential savings following the last economic crisis in Asia in the last 1990s, the **middle-income countries** in the region are actively using fiscal policy to boost domestic demand, with regional stimulus packages equivalent to 3.6 percent of GDP—around 1.7 percent of GDP to be executed in 2009 with the remainder in 2010 (see chart). As the role of automatic stabilizers is general smaller in East Asia than in Europe, countries have predominantly relied on discretionary fiscal stimulus measures. Most stimulus packages are biased in favor of expenditure measures with the largest sharing going towards infrastructure investment (e.g. about half of China's package is for building transport networks and post-earthquake reconstruction). Only Indonesia and the Philippines have placed significant emphasis on tax cuts, partly reflecting the lack of infrastructure projects in the pipeline and below-budget execution of spending in recent years.




In contrast, the **low-income countries** in the region typically have little or no fiscal space and weak or limited absorptive and administrative capacity. Fiscal positions are generally loosening, due to declining export revenues and foreign investment, and countries are trying to boost expenditure with additional donor assistance and reprioritize spending to protect vulnerable groups and investment but the scope for discretionary stimulus is small.

*Source:* This box draws on World Bank (2009c), which provides more detail on the fiscal stimulus measures in the region.

3.1.3 The IMF estimates, as of mid-January 2009, refer to three types of fiscal stimulus measures – *tax-cuts; infrastructure and "other*". The "*other*" category includes transfers. Table 3 reproduces the percentages for the different effects in the different regions. As regards *infrastructure*, the impact is put at 1.1 percent for the USA and Asia (excluding Japan) over a two-year period; with the latter experiencing the full impact in 2009. The comparable *infrastructure* percentages for both the EU and Japan are 0.4 percent over the two years. The Rest of the G-20 has lower *infrastructure* percentages, at 0.3 percent during 2009 and 2010.

Table 2: Fiscal Stimulus Packages announced for 2009-10 (percent of GNP)

| | 2009 | 2010 |
|---|---|---|
| **USA** | **1.9** | **2.9** |
| Tax cuts | 0.9 | 2.9 |
| Infrastructure | 0.3 | 0.8 |
| Other | 0.6 | 0.1 |
| **Euro area** | **0.9** | **0.8** |
| Tax cuts | 0.3 | 0.3 |
| Infrastructure | 0.4 | 0.0 |
| Other | 0.2 | 0.4 |
| **Japan** | **1.4** | **0.4** |
| Tax cuts | 0.1 | 0.1 |
| Infrastructure | 0.3 | 0.1 |
| Other | 1.0 | 0.2 |
| **Asia (excl. Japan)** | **1.5** | **1.3** |
| Tax cuts | 0.1 | 0.1 |
| Infrastructure | 1.1 | 0.0 |
| Other | 0.3 | 1.2 |
| **Rest of G-20** | **1.1** | **0.3** |
| Tax cuts | 0.5 | 0.1 |
| Infrastructure | 0.2 | 0.1 |
| Other | 0.4 | 0.1 |
| **Total (PPP-weighted)** | **1.4** | **1.3** |
| Tax cuts | 0.4 | 0.4 |
| Infrastructure | 0.5 | 0.3 |
| Other | 0.5 | 0.7 |

Source: IMF (2009a).

3.1.4 However, unless the stimulus funds are adequately reported in the public sector accounts, on a timely basis, it will be difficult to monitor execution. Some countries, like the US as described in Box 3, have introduced new systems to specifically monitor the execution of “recovery” funds, although for most Government the spending is simply part of the general budget and will be reported as such. Whether new or existing financial management information systems are used, Governments’ will need to establish a baseline and carefully monitor the implementation of their stimulus packages, in terms of quantity and composition, so that any corrective action can be taken to ensure the desire level of the stimulus.

3.1.5 Calculating the impact of the stimulus can be complicated by the interrelationships with other tiers of government. For example, a stimulus at the federal level might be partially offset by a fiscal contraction at the State level—for example, in the US a number of State Governments, including the largest in California, are laying off staff and cutting spending as they try to balance their budgets.[8] In addition, the execution of a large portion of the stimulus may be at the subnational level, where the financial management systems and human capacity may also be weaker.

[8] In many countries the ability of sub national government to support a countercyclical fiscal policy maybe limited by deficit rules and/or the inability to raise funds.

3.1.6 In addition, in many countries, the entry of the private sector into the market has helped to augment the rollout of infrastructure projects in recent years. However, the crisis in financial markets has meant that bank lending to the private sector has been declining. The Public-Private Infrastructure Advisory Facility (PPIAF 2009)[9] argues that, although it is still too soon to assess the full impact of the current crisis on new public private infrastructure projects, there is strong evidence of lower rates of financial closure and projects being postponed and cancelled, mainly in energy and transport. If private investment continues to be severely affected by the financial crisis, government expenditure may be even more important. In turn, that will result in public sector deficits and debts continuing to increase, even in countries that can currently afford a fiscal stimulus, with a risk, if the current crisis lasts for a number of years, that budget constraints could slow further investment in infrastructure. Consequently, the sustainability of the fiscal position will need to be continually assessed on a country by country basis.

## 3.2 Selecting investments for a stimulus and social protection

3.2.1 As noted above, it is important to establish clear objectives, priorities and goals for the programs that would enable the establishment a clear criterion for selecting investments rapidly, and then to monitor performance (for example the US has targeted the creation of 3.5 million jobs under its recovery program and has set up new systems to monitor performance, Box 3). The OECD suggests that to maximize the benefits it is important that governments' policy framework promotes investment that is conducive to growth and other stimulus objectives (see Box 5).

3.2.2 Government policy frameworks will also need to consider the trade-offs between different types of public investment—traditional infrastructure, human capital infrastructure, other public goods and those designed to promote redistribution—in relation to their immediate stimulus impact and the economic and social benefits, including distributional effects. These will vary significantly between countries depending on the initial composition of investment, the capital stock in each area, existing investment plans, and the broader developmental needs[10]. For example, the Poverty Reduction Strategies of many developing countries provide a link between growth, poverty reduction with significant increases in spending (including investment) in primary education and health as well as spending on roads, rural development, and agriculture (IMF, 2002). In emerging market countries there may be less focus on expanding health and education investment—Brazil's stimulus includes a large social housing program, which helps to target the badly impacted construction sector as well as promoting redistribution.

[9] The Public-Private Infrastructure Advisory Facility (PPIAF) is a multidonor technical assistance facility created to help developing countries improve the quality of infrastructure through partnerships with the private sector.
[10] For example, Schwartz (2008, Chapter 2) shows the variation in the composition of investment spending in eight countries that recently joined the European Union.

**Box 5: OECD: Delivering Effective and Efficient Infrastructure**

In the case of Infrastructure Investment-"…*more is not always better and investments in the past have sometimes been misallocated and wasted. With substantial investment in infrastructure expected over the coming years, it is important that the policy framework promotes investment that is conducive to growth. Furthermore, in light of recent fiscal packages incorporating infrastructure spending in many OECD countries to boost aggregate demand, having an effective policy framework in place can ensure that such investment is efficient, raising the productive capacity of the economy in the long run in addition to expanding demand over the short run. Those countries with a more effective policy framework will have greater scope to boost demand while at the same time ensuring that those investments are not wasteful*".

Source: OECD, *Going for Growth 2009*, March 2009

3.2.3 In usual circumstances there is a need for rigorous appraisal before a project gets the 'go-ahead', in order to ensure that is has the potential to yield the maximum economic and social benefits (Ferris, 2009a and 2009b). This point is reinforced by a recent OECD Report, which argues that – "*In general, new infrastructure spending projects will have stronger supply-side effects if they are carefully chosen on a project-by-project basis with the help of a cost-benefit analysis where benefits include positive externalities for the economy as a whole".* (OECD, 2009b).

3.2.4 However, even where there is capacity for more sophisticated appraisal methods, there can be trade-offs between the technically "best" investment projects and those that maximize the objectives for a stimulus and social protection, e.g. the domestic stimulus effect will be greater if there is less leakage into savings and imports while targeting projects that boost the employment for lower skilled labor might be better from both a stimulus (boosting consumption) and social protection perspective.[11]

3.2.5 In the current environment, the criteria for project selection will also need to identify not only which projects will give the highest return, but also those projects that could be implemented more quickly and provide a measure of social protection. For example, projects to improve the quality of existing infrastructure, including repairs and maintenance may be quicker to initiate than additions to the existing stock and employ less skilled labor (OECD, 2009b).

3.2.6 A standardized '*project bank'* can also help to speed up the identification and implementation of projects. Many countries may be able to expedite investments by utilizing lists of already identified and appraised projects—the UK, for example, is bringing forward the execution of many investments planned under its current three-year spending review. Projects may also be coordinated and monitored in a central '*project bank*'—containing actual pre-appraised projects and/or standardized projects that can be quickly implemented (e.g. standardized appraisals of road or building projects can be used as quick reference guides for planners). This approach can help to reduce the costs and time taken to identify and appraise investments, particularly

[11] However, introducing protectionist measures may be counterproductive if costs rise substantially, if it leads to implementation delays due to supply shortages or other countries impose similar restrictions that inhibit exports. Despite these concerns, the US recovery Act has a flexible *Buy American* standard.

where these are to be designed by numerous sub national government bodies (e.g. as in the US) or other government agencies, while promoting some assurances about their impact. In emerging and developing countries where the capacity to appraise projects is low *project banks* may be especially useful and can be supplemented with projects, assessments and training by various agencies, e.g. donors.

## 3.3 Accelerating investment spending

3.3.1 Increasing the rate of investment spending is likely to be easier when there is already and existing bank of "shovel-ready" projects waiting to be financed and there is adequate institutional capacity within government. However, Government's cannot simply assume that planned projects will be executed and many are introducing measures to try to accelerate implementation (for an example see Box 6 on Peru). In addition, while streamlining processes and easing controls might expedite the expenditure, there can be a trade-off in terms of the quality of investment (see section four).

3.3.2 In order to address both these concerns, it is becoming more common to standardize processes (or as in Peru to create some standard project specifications for managers to utilize), reduce controls while creating specialized bodies to help assist and oversee the investment process—for example see the *Major Projects Review Goup* in the UK, discussed in section four. The latter is designed to both accelerate the project cycle, while providing an additional oversight mechanism for accountability.

**Box 6: Boosting investment in Peru**

The Government of Peru introduced a fiscal stimulus package in January 2009 to help combat the impact of the global downturn. The total fiscal cost of all the measures taken together is estimated at around 2.9% of GDP, although some measures were already included in the 2009 budget. It is estimated that the package will imply a fiscal cost of around 1% of GDP in 2009. The main features include:

- *Increases in public investment:* The bulk of the measures aim to boost the execution of infrastructure projects, particularly the acceleration of ongoing projects and new small projects. It includes allowance to carry-forward unimplemented appropriations, small infrastructure rehabilitation programs, and standardized small projects to encourage rapid execution with substantial unskilled labor content. The central government is also granting guarantees for regional government projects, resources for the largest public-private partnership (PPP) (the inter-oceanic highway) and plans to create a trust fund to co-finance large projects with private institutional investors—especially private pension funds. Finally, the government has increased appropriations for maintenance for roads, agricultural water channels, schools and health services installations.
- *Cutting red tape to accelerate public investment:* This includes measures to streamline investment processes, including easing pre-investment requirements for small projects, the elimination of obstacles in the procurement and control procedures for all public works, and more flexibility in the selection of projects and the horizon for committing appropriations within the fiscal year. In addition, inter-department groups (including the procurement agency, CONSUCODE) will monitor on-going large projects to swiftly tackle bottlenecks that commonly occur during execution.

However, the rate of implementation of public spending on investment is low (and declining) at all levels of government (the ratio of spent to budgeted funds is has fallen from slightly under 80 percent in 2004 to less than 60 percent in 2008). This is partly the result of the rapid increase in budgets—during 2008 public investment rose by more than 40% in real terms (and by more than 90% in local governments), increasing the difficulties in the added speed of execution implied in the stimulus package, which implies a further increase of about 50% in real terms. The challenge to improve execution will be to overcome the slow processes and limited managerial capabilities in Peru, particularly at the local government level.

*Source: World Bank staff*

## 3.4 Ensuring the quality of investment

3.4.1 To ensure that investment projects are being implemented well progress needs to be kept constantly under review, so that amendments can be made as necessary and lessons learned more broadly. For this, performance indicators need to be established to monitor the efficiency and effectiveness of the investment portfolio as a whole, as well as by sub-sector.

3.4.2 To reduce waste, checks also need to be in place to ensure that projects are delivered according to contract, approved project specification, within budget, on time and in compliance with government guidelines. If a project is going badly wrong,

there should be a willingness to terminate it before completion. Before making a final decision to terminate a project that is not going according to plan, the costs of termination should also be ascertained. There are additional benefits from reviewing the implementation of individual projects as lessons learned can be translated into changes in project guidelines and communicated, for future reference, to project promoters, so that they can apply any general lessons to their project approval procedures (Ireland, Department of Finance, 2005).

3.4.3 This highlights the need for some agency (or agencies) to promote standards, including the requirement for setting monitorable quality and process standards, and to then monitor and share lessons. Assigning this function to an administratively and technically capable body with a clear mandate which is supported by adequate funding is likely to produce more successful results. This function is commonly fulfilled by a central budget agency, such as a ministry of finance or planning, although can be supported by complementary agencies—see section four.

## Section four: Improving the performance of public investment management

4.1 While improving the performance of investment is always important, it is particularly so in the current period of severe economic and fiscal challenge. Given the reduction in resources and the urgency, it is imperative that public investment projects are delivered at the least possible cost, on time, and that maximum output is received from the resources invested. Careful and comprehensive project selection procedures will therefore be needed to help identify not only which projects will give the highest return but also those projects that could be implemented more quickly. This section discusses some of the ways that investment management may be strengthened to meet the needs of the current economic downturn, although many are also applicable to more benign situations.

### 4.1 Strengthening institutional arrangements for investment

4.1.1 As highlighted above, there are many common constraints that impede the effective and efficient delivery of good public investment projects. Many of these, including limited financial resources combined with institutional and procedural weaknesses, may be exacerbated in a crisis where timely delivery is a critical concern. Such weaknesses may make it difficult for governments to deliver planned public investment projects on time, within budget and of sufficient quality. The World Bank (2009) has categorized the types of inefficiency in investment management that are observed in many countries under the following six dimensions:

1. Poor project selection, including wasteful “white elephant” projects
2. Delays in design and completion of projects
3. Corrupt procurement practices
4. Cost over-runs
5. Incomplete projects
6. Failure to operate and maintain assets effectively so that the benefits are less than they should be.

4.1.2 Evidence of these failures can weaken the case for expanding investment spending, particular in a crisis where there is more of a need for speed and quality.

Based on its global experience the World Bank has identified key “must-have” features of a well-functioning public investment system, along with a diagnostic framework for assessing the quality of public investment management efficiency. The resultant “gap” analysis can be used to identify structural aspects of public investment decisions and management processes that may be weak and in need of attention and reforms to focus scarce managerial and technical resources where they will yield the greatest impact (see Box 7).

**Box 7: “Must-have” features for efficient public investment management**

The World Bank has developed guidance to help formulate a pragmatic and objective assessment of the quality of public investment efficiency in a context where governments are seeking to mobilize additional fiscal resources for investment. An indicator-based approach has been developed around a set of core “must-have” dimensions, namely:

1. Investment guidance and preliminary project screening;
2. A formal project appraisal processes (with cost-benefit analysis being best practice);
3. Independent review of appraisals (e.g. including consideration of alternatives);
4. Project selection and budgeting need to establish envelopes for public investment so that a sustainable investment program can be undertaken;
5. Implementation plans need to be realistic;
6. Adjustment for changes in project circumstances;
7. Facility operation—asset registers need to be maintained and asset values recorded; and
8. Evaluation–to ensure that there is some learning and feedback.

This approach is designed to provide a basis for both for an objective assessment as well as serving to highlight weaknesses that should be addressed if the use of fiscal resources is to enhance public sector assets and economic growth. An assessment might therefore help to identify “quick win” reforms to accelerate investment spending during a crisis. While the approach does not seek to identify “best practice”, OECD countries commonly provide guidelines and seek to strengthen their management capacity around similar dimensions.

Source: World Bank (2009).

4.1.3 An additional institutional constraint to efficient investment management is the *optimism bias* of investment planning observed in most countries—i.e. projects are expected to deliver greater benefits, more quickly and cheaper than they eventually do. Flyvbjerg (2007) argues that misinformation about costs, benefits, and risks is the norm as planners and promoters deliberately misrepresent costs, benefits, and risks in order to increase the likelihood that it is their projects, and not those of their competition, that gain approval and funding. This results in the `survival of the unfittest', in which often it is not the best projects that are built, but the most misrepresented ones. To overcome these tendencies Flyvjerg suggests reforming policy and planning for large-infrastructure projects, focus on better planning methods, such as developing benchmark standards based on previous outcomes, and governance structures that promote more independent oversight and competition. However, these recommendations are likely to be difficult to implement in many developing and transition economy countries where there may not be good market-related prices for many government services, or baseline information to compare projects (many with different designs and timeframes), and there is significant inherent uncertainty in many of the planning and appraisal parameters (Tandberg, 2007).

4.1.4 **The role of central fiscal agencies**: A necessary, but not sufficient condition for efficient public investment management is to have a central agency 'hold-the-ring', when it comes to public investment. Usually this means the finance ministry at the centre of the process (see Box 8); it should decide the framework within which investment decisions are taken. In this regard, the World Bank (2008a) recommends that having some broad strategic guidance for public investment is often an important way to anchor government decisions and to guide sector-level decision-makers. Specifically, it argues "*such guidance may be derived from a national plan or other medium to long term strategic document that establishes economy-wide development priorities at the highest decision-making levels*".

**Box 8: Strengthening the role of central agencies**

**The US:** On March 18, 2009, the Recovery Accountability and Transparency Board was created to coordinate and conduct oversight of funds distributed under this law in order to prevent fraud, waste and abuse. The Board is comprised of a Chairman, appointed by the President, and ten Inspectors General and has a series of functions and powers to assist it in the mission of providing oversight and promoting transparency regarding expenditure of funds at all levels of government. Quarterly and annual reports on the use of Recovery Act funds and any oversight matters will be issued as part of the Board's work. The Board may also make recommendations to agencies on measures to avoid problems and prevent fraud, waste and abuse. To address issues quickly, the Board may send Flash reports to the President and Congress on potential management and funding problems that require immediate attention. The Board is also charged under the Act with establishing and maintaining a user friendly website, Recovery.gov, to foster greater accountability and transparency in the use of covered funds.

**South Korea**: The period after the economic crisis in 1997 witnessed many reform efforts in Korea to enhance efficiency and transparency in developing and managing public infrastructure investment. The Ministry of Strategy and Finance played a leading role in introducing an effective appraisal and evaluation system, tightening the expenditure monitoring of total project costs, and introducing a Medium Term Expenditure Framework (Jay-Hyung Kim, 2008).

**Canada:** The Economic Action Plan, launched on 27 January 2009, (Canada, 2009) plans to expand and accelerate federal investment in infrastructure with almost $12 billion in new infrastructure stimulus funding for roads, bridges, broadband internet access, electronic health records, laboratories and border crossings across the country. A number of new oversight measures are being introduced to ensure that spending is effective and meets a high standard of accountability—these will be managed by departments and agencies, in consultation with the Treasury Board, the Office of the Comptroller General as well as the Office of the Auditor General. Regular reports will be provided to Parliament on the overall implementation and Departmental procedures will be streamlined with increased limits on spending, as approved by the Treasury Board, based on evidence of strong risk management in departments (Canada, 2009).

4.1.4 **The role of Line Ministries and Agencies**: While the central budget oversight for public investment is being strengthened in some countries, line ministries and agencies also need to be given clear authority and responsibility in relation to investments in sector programs and projects. That requires having specific guidelines to ensure effective appraisal, planning and implementation procedures, and systems to subsequently monitor and evaluate projects. Strengthening these aspects may take more time and resources, in terms of capacity building, systems development and

training, and will have to be carefully sequenced if they are to have an impact during the current crisis.

4.1.5. **Those undertaking public investment also have to demonstrate that they can effectively control delivery of their projects** – in terms of their timeliness, budget and according to specification. It is with these requirements in mind, that Flyvbjerg argued that – "*institutional checks and balances - including financial, professional, or even criminal penalties for consistent and unjustifiable biases in claims and estimates of costs, benefits, and risks should be developed and employed. The key principle is that the cost of making a wrong forecast should fall on those making the forecast, a principle often violated today*" (Flyvbjerg, 2007). However, it may be difficult to apply this level of stringent accountability in weak governance environments, in developing and emerging economies, and there is a risk that strengthening such requirements in most contexts will simply hinder the timely development and execution of new investments.

4.1.6 The above presents a dilemma in that in any system of controls, there are issues about balancing accountability, flexibility and timeliness. The need for compliance with guidelines and regulations should be balanced against the freedom that line ministries and public agencies require to do their job of delivering investment projects with the required speed. There are obvious dangers in relaxing central controls without having adequate financial and managerial systems in place. However, there are also dangers in failing to relax these controls sufficiently. Too many restrictions create conditions under which line ministries and public agencies do not have enough freedom to ensure effective and efficient delivery of public investment (Box 9 details one of the ways that the EU is relaxing its procedures to accelerate investment).

**Box 9: Relaxing procurement rules in the EU**

EU Procurement Directives set out the procedures to be followed by purchasers in the public and utilities sectors in the European Union. As part of EU plans to tackle the financial crisis, Brussels has agreed that the economic downturn can be used as justification for conducting accelerated public procurement procedures. The procedure, outlined in the EUs main procurement directives, should provide a boost to local economies by allowing a more rapid execution of major public investment projects by reducing 'restricted' procurement procedures from 87 days to 30 days. Such presumption of urgency should apply throughout 2009 and 2010 for all major public projects. The temporary nature of the adjustment acknowledges that such accelerated procedures risk reducing both the ability of firms to compete for contracts and also the administrations to as thoroughly screen proposals, which may reduce the quality and increase of costs of investment somewhat.

Source: http://ec.europa.eu/regional_policy/funds/recovery/

4.1.7 **A performance focus** can strengthen accountability and encourage central ministries to delegate implementation to speed up implementation. By changing accountability toward results, rather than simply financial inputs, the central planning and finance ministries may be encouraged to delegate the implementation of investment projects to line ministries, agencies and the private sector. This can help to expedite the implementation of investments, where capacity exists. This approach is building on the performance management reforms that are already in place, or development, in a number of countries as it would take considerable time to build new performance management information systems (see Box 10 for the case of Ireland). In

this context, the crisis may help to accelerate the adoption of new forms of performance-informed management.[12]

**Box 10: Ireland's use of performance measures to enhance investment**

In line with the majority of OECD countries, prior to the economic downturn Ireland had been gradually implementing a series of reforms aimed at shifting the focus of the budget toward enhancing its performance. In the 2006 Budget, the Irish Minister for Finance introduced Government's reform of the Estimates and Budgetary process, which have been designed to significantly enhance accountability for public expenditure. Since 2007, Ministers are required to submit Annual Output Statements to the Parliament, in tandem with their Estimate. The Output Statements are designed to match key outputs and strategic impacts to financial and staffing resources for the financial year.

The new annual output statements represent a major shift in the direction of focusing on performance in delivering public service outputs; traditionally the emphasis was solely on financial inputs. The terms of reference of the Parliamentary committees have been revised to include discussing the Output Statements with the estimates, as well as the Value for Money and Policy (VfM) reviews.

The economic downturn has highlighted the urgency of deepening these reforms, with the need to improve the performance of increasingly scarce public resources. The OECD (2008a) in a public management review on Ireland stated that: "*The introduction of Output Statements has not yet been well integrated with existing department Strategy Statements and Business Plans, or linked to departmental performance agreements with agencies. Doing so would likely reduce the number of indicators and therefore reporting burden on public servants*".

## 4. 2 Strengthening budgeting for public investment

4.2.1 **Medium term budget framework**: The World Bank (2009) points out that the fiscal framework and the annual budget need to establish envelopes for public investment (on an aggregate and/or sectoral basis) so that a sustainable investment program can be undertaken. Specifically, a medium term budget framework can provide some forward visibility regarding resource availability and predictability for long gestation investments (World Bank, 2009a).

4.2.2 As regards OECD member countries, medium-term budget frameworks form the basis for achieving fiscal consolidation. The OECD encourages countries to prepare and publish medium-term economic and fiscal forecasts (minimum of five years) and planned expenditures within a five-year expenditure plan, as well as long-term economic and fiscal projections (minimum of ten years). Proposals for public investment projects then need to be 'fitted' into the medium-term forecasts, thereby ensuring that there is capacity to accommodate them (see Box 11 for the case of Ireland). This is a concern that has been raised by Flyvbjerg, namely that *"…projects are now so big in relation to national economies that cost overruns, benefit shortfalls, and risks from even a single project may destabilize the finances of a whole country or region, as happened in Greece and Hong Kong*" (Flyvbjerg, 2007).

[12] For a discussion of the development of performance-informed budgeting in Latin America see World Bank (2009b).

**Box 11: Ireland's multi-annual budget framework**

The Irish Government has responsibility for approving capital investment envelopes. Since 2004, public capital investment, comprising Exchequer capital and targets for other capital funding, have been set out in 5 year rolling multi-annual capital envelopes[1]. This multi-annual capital investment framework (MACIF) is now established as the basis for medium-term planning and provision for capital investment. The limits for Departments are set by the Minister for Finance, following Government Decision. As regards overall budgetary decisions, it should be noted that the Irish Government has to meet its commitments as a member of the European Union (EU).

In this regard, the EU Stability and Growth Pact (SGP) provides the overriding framework for Irish budgetary policy. Under that Pact, the public finances, as measured by the General Government Balance, must be kept close to balance or in surplus in normal economic circumstances. The Supplementary Budget, introduced on 7 April 2009, in response to the abnormal economic circumstances, involved putting in place a five-year plan to ensure that the General Government deficit will be below the 3 per cent of GDP level by end-2013.

1. In the case of Transport – Transport 21 – covers a 10-year period.

## 4.3 Need for systematic appraisal

4.3.1 **Guidance systems**: It is important for governments to have formal and well publicized guidance, on the technical aspects of project appraisal, that are appropriate to the technical capacity of their ministries. Proposals for public investment usually exceed the resources available. That means that choices have to be made between different projects being proposed. A systematic appraisal system helps to ensure that the best choices of projects are made. As the UK Treasury puts it - "*Appraisal, done properly, is not rocket science, but it is crucially important and needs to be carried out carefully. Decisions taken at the appraisal stage affect the whole lifecycle of new policies, programmes and projects. Similarly, the proper evaluation of previous initiatives is essential in avoiding past mistakes and to enable us to learn from experience*" (HM Treasury, 2003).

4.3.2 In essence, project appraisal involves evaluating investment proposals for their social and economic costs and benefits assessing, in a structured manner. The difference between costs and benefits determines whether a planned public sector project is worthwhile. The real achievement is to ensure that all the costs and all the benefits are included and quantified. As well as providing detailed advice in regard to assessing the costs and benefits of projects, guidelines should also provide for a clearer definition of the respective roles and responsibilities of all involved in the management and appraisal of projects and programs.

4.3.3 **Simple system**: Guidelines for appraisal should provide a meaningful framework to explain the context within which projects should be evaluated. Governments with limited technical capability and expertise need to be led gently into the process of project appraisal. In this regard, a series of basic questions first need to be answered, before any decisions are made:

Why undertake an appraisal?
What are the different stages of Appraisal?
Will the size of the project decide the scale of appraisal?
What are the essential ingredients of an appraisal?
Who should carry-out the appraisal?

4.3.4 Governments that have not got the necessary expertise may need to engage additional expert advice in order to ensure a process that is open, transparent and for which there is clear accountability. Section 3.2 also highlights the ways in which countries can develop simpler appraisal standards or standardized project banks, that may be selected and customized by different executing agencies. Box 12 sets-out the key features of Ireland's guidelines for the appraisal and management of capital expenditure proposals.

**Box 12: Key Features of Ireland's Appraisal Guidelines**

The Guidelines bring a rigorous approach to the management and evaluation of capital programmes. Different types of appraisal apply to projects depending on the cost of the project. The appraisal methods include *multi-criteria analysis* and *cost-benefit analysis;*

The Guidelines require four stages for the appraisal and management of projects. They are – *appraisal; planning/approval; implementation*, and *post-project review;*

The Guidelines contain detailed advice for assessing the costs and benefits of projects at the different stages. The Department of Finance requires the test rate discount rate of 4 per cent, in real terms, to be applied for all *cost benefit* and *cost effectiveness analysis* of public capital projects;

All capital programmes with an annual value in excess of €30 million and of 5 years duration or more are required to be evaluated at the beginning and mid-point of each 5-year cycle, unless otherwise agreed by the Department of Finance;

Formal structures are required for the monitoring and management of investment programmes. This includes the appointment of a programme coordinator and a monitoring committee, and

The Guidelines require a clearer definition of the respective roles and responsibilities of all involved in the management and appraisal of capital programmes and projects: Government, Ministers, the Department of Finance, Government Departments and public bodies.

Source: Department of Finance, *Guidelines for the Appraisal and Management of Capital Expenditure Proposals in the Public Sector*, Dublin, February 2005.

## 4.4 Improving the management of public investment

4.4.1 No matter how good a country's capability for managing public investment is, there will always be scope for further improvements in skills and training of those responsible for such management. Further improvements in technical, financial and managerial capacity can help to increase a country's capability, flexibility and capacity to deliver public investments. Such improvements are particularly important, as countries, across the world, now have to respond to a dramatic contraction in economic activity. In a 2006 Report, the OECD provided a very useful 10-point checklist of the important issues for human resource development, in the context of a policy framework for investment – see Appendix 1. As a prelude to the checklist, the

OECD argues that - "*Human resource development is a prerequisite needed to identify and to seize investment opportunities, yet many countries under-invest in human resource development due in part to a range of market failures. Policies that develop and maintain a skilled, adaptable and healthy population, and ensure the full and productive deployment of human resources, thus support a favorable investment environment"* (OECD, 2006).

4.4.2 **The EU spurs Ireland's experience**: Ireland had limited experience of undertaking significant investment projects up to the end of the 1980s. Therefore, it was necessary to build-up technical, financial and managerial capacity in order to have the capability to effectively deliver infrastructure projects. The development of such capability has been striking in recent years. Much of the capability was initially stimulated by the formal requirements of the EU for the evaluation of Structural Funds/Cohesion Fund support, in a structured, systematic and consistent manner. Since 1989, evaluation of the EU funds has been a formal requirement of those receiving financial assistance, and this has led to further developments in the capacity and capability to deliver infrastructure more efficiently and more timely. Evidence of improvements is given in the 2008 OECD Report, which reviewed Ireland's Public Service. It acknowledged the progress that has been made in the human resource area. However, it also listed action that still needed to be taken to improve the system further:

> *"While significant efforts have been made in training with regards to skills and capacity in management, technical areas (e.g. ICT) or for sector-specific skills (e.g. health), more needs to be done to deepen project management and implementation skills across the Public Service, in particular for smaller agencies and for local government. Greater mobility and openness is required in order to improve the sharing of skills…"* (OECD 2008a).

4.4.3 **Defining clear-cut Responsibilities**: There needs to be clear-cut lines of responsibility for the delivery of public investment projects. In Ireland, implementation of public investment projects is the responsibility of the relevant Sponsoring Agency (usually a State-sponsored Body), while the Sanctioning Authority (usually a Government Department) must be satisfied that the Sponsoring Agency delivers the project as approved. The Government Investment Guidelines set-down very clear requirements for the different actors (Department of Finance, 2005). In particular, project promoters are required to make very specific organisational arrangements to advance their project s as well as providing realistic timetables to ensure the capacity to implement projects. To ensure effective delivery of projects, the Finance Ministry introduced, in May 2007, a new system for carrying-out annual spot-checks of projects to ensure compliance with requirements set out in appraisal and procurement guidelines, set-down both by the State and the EU (Ireland Dept. of finance 2007). There is no doubt that important lessons can be learned from actual delivery of projects on the ground. Such lessons can help to develop an overall, integrated approach to the management of larger projects within the public sector. The "back-checks" also signal to project managers, on both the client and contractor sides, the importance of ensuring that the original budget is not exceeded and to take appropriate legal or other action in any cases where this is not achieved. The Central Expenditure Evaluation Unit (CEEU), at the Finance Ministry, has the central role in overseeing the new system of spot-checks in Ireland. The new spot-check system is summarised in Appendix 2.

## 4.5 Some recent innovations in delivering public investment

4.5.1 **Infrastructure Australia***:* The Australian Government has taken a wholistic view of infrastructure investment, with its new approach to planning, funding and implementing the nation's future infrastructure needs. This has been done under the Infrastructure Australia Act 2008, which came into effect on 9 April 2008 (Australian Government, 2009). The Act paved the way for the establishment of *Infrastructure Australia* (IA). In essence, IA is responsible for developing a strategic blueprint for future infrastructure needs and - in partnership with the states, territories, local government and the private sector – will facilitate its implementation. It provides advice to the Australian Government about infrastructure gaps and bottlenecks that hinder economic growth and prosperity. It also identifies investment priorities and policy and regulatory reforms that are necessary to enable timely and coordinated delivery of national infrastructure investment. In tandem with the creation of IA, the Australian Government announced in Budget 2008-09 the establishment of a *Building Australia Fund*. Allocations from the Fund will be guided by IA's national audit and infrastructure priority list and is designed to help prioritize investment and overcome any tendency of spending ministries to consider only a limited set of investment options. A recent OECD Working Paper (OECD, 2009c) cautions that care is needed in the financing of such funds, as there is a danger that they become pro-cyclical, something the Australian Loan Council is charged with guarding against[13]. In addition, when revenues are earmarked (such as highway funds) there is a danger that spending is no longer strongly linked to need. Decision-making concerning the use of such funds should be transparent in project selection as they may give rise to considerable lobbying.

4.5.2 **UK Project Review Process**: The UK Government launched the Transforming Government Procurement (TGP) report in January 2007. This sets out reforms to public sector procurement to meet the public's demands for increasingly high quality services that are good value for money and delivered in a sustainable way. Arising from the TGP Report, a Major Projects Review Group (MPRG) has been established to help improve the performance of major projects and advise the UK Treasury whether projects should proceed. In essence, the MPRG is a scrutiny panel for major central government projects[14]. Its aim is to deliver better value for the taxpayer by challenging projects on deliverability, affordability and value for money:

- *Deliverability*: The extent to which a project is deemed likely to deliver the expected benefits within the declared cost/time/performance envelope.

[13] The Australian Loan Council coordinates and monitors the aggregate level of borrowings by the Commonwealth and each State and Territory. The Council is now mainly concerned with enhancing the transparency and accountability of public sector finances rather than, as in the past, securing adherence to strict borrowing limits.

[14] MPRG scrutiny panels are selected from a pool of government and commercial experts. Treasury ministers' approval is required for programs whose whole-life costs are above departmental delegated limits. MPRG looks at a subset of these programs, generally those which are highest risk, and advises Treasury Ministers on whether or not to grant approval to proceed to the next stage

- *Affordability*: The extent to which the level of expenditure and financial risk involved in a project can be taken on, given a parent department's overall financial position both singly and in light of its other funding priorities.
- *Value for money*: The optimum combination of whole-life cost and quality (or fitness for purpose) to meet the users' requirement.

4.5.3 MPRG is an effective, enhanced review process of Ministries' most significant projects in the early stages. MPRG may advise Treasury Ministers that a project should stop. However, more generally, it will identify specific issues that need to be resolved before progressing further. In these cases, the Ministry in question may be provided with recommendations on how to deal with issues and solve problems that the project may be facing. Following government policy approval, projects will generally be subject to review by MPRG at the following stages:

a) When the business case is being developed - where there is maximum scope to influence the project's outcome.
b) Before the project goes to tender - to test if the specification of the requirement is clear and unambiguous, all procurement options have been explored, and there is a realistic prospect of success.
c) Following receipt of bids but before award of the contract - to check that the contract decision is likely to deliver what is needed on time, within budget, and giving value for money.

4.5.4 The Major Projects Review Group process is managed by the Office of Government Commerce (Box 13), which is an office of the Treasury, responsible for driving value for money improvements in public procurement and estates management.

**Box 13: Procurement reform in the UK: The Office of Government Commerce**

The Office of Government Commerce (OGC) was created as a one-stop shop central procurement organization under the finance ministry to catalyze best procurement practice within central civil government. Its remit was subsequently extended to cover the wider public sector and lead role on Government efficiency. Its mandate and authority was to set out, monitor and enforce the procurement standards for departments. The OGC also acts as the head of the national public procurement service. This allows it to help focus on raising standards and capacity amongst procurement specialists.

The success of the reform has relied in part on the wider institutional framework with strong enforcement powers. The problem of duplication and waste from a very de-concentrated system was fought with the introduction of mechanisms to enforce more collaboration in the purchase of goods and services common across more than one department to get better value for money, and the focus on improving IT solutions to expedite transactions. The Government also introduced innovative procurement tools like e-auctions that allow suppliers to bid online for business. Savings, typically 20-25 per cent of the project value, emerge from the price improvements produced by a transparent negotiation, which is instantaneous and electronic, and from simpler processes. OGC also sponsored IT e-auctions that have saved nearly £16 million on an expenditure of £54 million, involving more than 300 organizations.

Additional *OGCbuying.solutions* launched the *Zanzibar e-marketplace* in February 2006 which is a web-based procurement tool that connects suppliers and their catalogues with government buyers and their demands. Buyers can easily compare prices and specifications and then operate the entire procurement process online. Also, the introduction of procurement cards (similar to debit cards) provide an efficient means for authorized staff to conduct low value transactions quickly, and consolidate large numbers of invoices from multiple suppliers into a single, monthly invoice, removing process costs and improving management information, resulting in a saving of £28 per transaction. Finally, the Government established *Supply2.gov.uk* to make it easier for small and medium size businesses to bid for government contracts under £100,000.

*Source:* "Transforming Government Procurement", HM Treasury, United Kingdom, January 2007

4.5.5 **Peer Review Process in Ireland**: The inclusion of independent advice is now at the heart of the new system for the management and control of ICT Projects in the public sector in Ireland. The Government agreed a new set of controls in October 2005 to ensure that major ICT projects are managed to best practice standards. For this, a new cross-Departmental "Peer Review Process" was introduced to apply to existing and new major ICT Projects[15]. The new system comprises senior personnel with a track record of successful management and delivery of projects, both IT and otherwise, on time and on budget. This cross-agency approach, as well as availing of the best of the public service, is also designed to include where necessary external expertise from the private sector and internationally.

4.5.6 The "peer review process" applies at various stages of contracts over the full lifecycles of projects, commencing with the initial approach being proposed. The

[15] The Process aims to provide assurances of more realistic time and cost targets, knowledge and skills transfer, while those managing projects will get timely, independent advice and guidance. Reviews are carried out at key decision points of a project cycle: the business case, the preparation and subsequent tender evaluation; contracting and project initiation; key milestones in project implementation; and at the project close-out.

persons conducting the review will be independent of the project teams. By reviewing the critical stages in the lifecycle of projects, assurance can be provided that a project can progress successfully to a next stage. More realistic time and cost targets can be secured, and knowledge and skills in the public sector can be improved through participation in this process. Those managing projects will get timely, independent advice and guidance. There is a dedicated website accompanying this process **www.peerreview.gov.ie**

# Section five: Summary observations and Recommendations

## 5.1 Summary Observations

5.1.1 *The world-wide crisis requires a country-led response*: Governments all across the world are grappling with the collapsing confidence in the global financial system and all are making a variety of interventions to try to achieve the best possible outcomes for their country. An effective international response does not mean that all countries should have to take identical actions—for example, middle and low income countries may be more constrained and need to carefully sequence their response (see Box 14). It should mean, however, that fiscal actions should be tailored to the situation of each country. The effectiveness of international fiscal actions can be enhanced if they are concerted in their actions, and conform to the principles detailed in Box 1.

5.1.2 *The role that investment can play in the crisis response will also vary considerably:* Countries need to respond to their particular circumstances.

5.1.3 *Investment may be at risk if the global recession deepens and public finances weaken*. Many governments are likely to come under increasing pressure to lower financing requirements. In such a situation, there is a real temptation to cut spending on investment, as this is seen as being easier than raising taxes or cutting social expenditure or public service wages and salaries. If pressure on public finances were to become particularly acute, there is a risk that governments might be induced not only to postpone investment in new infrastructure, but also to reduce spending on maintaining existing infrastructure and facilities (Ferris, 2009b). Empirical evidence suggests that this could both dampen demand and prolong the recover.

5.1.4 *In spite of the urgency, governments need to focus on delivering good projects*: It is imperative, in the current period of severe economic and fiscal challenge, that public investment projects are delivered at the least possible cost, according to design and on time, and that maximum output is received from the resources invested. Public investment must be focused on building capacity in key areas, such as infrastructure, education and energy efficiency, and spent strategically in order to generate jobs for those hardest hit by the recession. If investment in such areas can be delivered in a timely way and bottlenecks can be avoided, it can be an effective tool for stimulating economic activity and raising employment in the short run, (OECD, 2009b).

5.1.5 *A sound medium-term policy framework should be in place to promote investment that is conducive to growth, employment and other policy priorities*. Having an effective policy framework in place can ensure that investment is efficient, raising the productive capacity of the economy in the long run, in addition to expanding demand over the short run. Those countries with more effective policy frameworks will have greater scope to boost demand, while at the same time ensuring

that those investments are not wasteful. For example, the Australian Government's recent approach to planning, funding and implementing the nation's future infrastructure needs has established Infrastructure Australia (IA), to develop a strategic blueprint for future infrastructure needs and to facilitate its implementation. It is providing advice to the Australian Government about infrastructure gaps and bottlenecks that hinder economic growth and prosperity. It is also identifying investment priorities and policy and regulatory reforms that will be necessary to enable timely and coordinated delivery of national infrastructure investment (Australian Government, 2009).

5.1.5 *Strengthening the Medium-Term Budgetary Framework:* Having a central government ministry 'hold-the-ring' is imperative when it comes to affordable, efficient public investment management public investment. Usually this means the finance ministry at the centre of the process; it must decide the framework within which investment decisions are taken, desirably within the context of a national plan or other medium to long-term strategic document that establishes economy-wide development priorities at the highest decision-making level. Medium term budget frameworks should also provide forward visibility regarding resource availability and predictability investments. Put another way, public investment projects need to fit' into credible medium-term forecasts--that shows how the budget can be financed in a sustainable way—in order to ensure that there is capacity to accommodate them (Flyvbjerg, 2007).

5.1.6 *Having good, appropriate appraisal systems: G*overnments need to identify not only which projects will give the highest return but also projects that can be implemented more rapidly. To do this they need to establish good guidance systems to deal with the technical aspects of project appraisal that are appropriate to the technical capacity of their ministries. It is also important that there is rigorous, systematic appraisal of all public investment projects before they get the 'go-ahead', in order to ensure that they have the potential to yield the maximum economic and social benefits. Under the current circumstances, where speed is important, it may be necessary to develop standardized, if simpler, methods for project appraisal (i.e. cost-effectiveness, multi-criteria etc.) and/or standardized reference projects. As well as providing detailed guidance with regard to assessing the costs and benefits of projects, guidelines should also provide for a clearer definition of the respective roles and responsibilities of all involved in the management and appraisal of projects and programs (Ferris, 2009a).

5.1.7 *Importance of Monitoring Implementation:* Progress on projects needs to be kept constantly under review, so that account can be taken of changes in economic circumstances. For this, process and performance indicators need to be established, simple enough to collect and interpret, and limited in number to monitor the efficiency and effectiveness of the investment portfolio as a whole, as well as by sub-sector on a timely basis (more complex outcome indicators, such as growth and employment multipliers could be helpful, but there is commonly a measurement lag that may make them less useful for real-time management purposes). System checks need to be in place to ensure that projects are delivered according to contract, approved project specification and within the approved budget, on time and in compliance with government guidelines. If a project is going badly wrong, there should be a willingness to terminate it before completion (bearing in mind the costs of termination). There are additional benefits from reviewing the implementation of individual projects. Lessons learned can then be translated into changes in project

guidelines and communicated, for future reference, to project promoters, so that they can apply any general lessons to their project approval procedures (**Department of Finance, 2005**).

5.1.8 *Scope for Public Partnerships*: Many governments have now come to recognize that the involvement of the private sector is critically important in bringing their infrastructure up to world-class standards. However, at the present time, the crisis in financial markets has meant that bank lending to the private sector has been declining. In a recent report, Public-Private Infrastructure Advisory Facility (PPIAF) pointed out that, although it is still too soon to assess the full impact of the current crisis on new public private infrastructure projects, there is strong evidence of lower rates of financial closure, and projects being postponed and cancelled, mainly in energy and transport. If private investment continues to be severely affected by the financial crisis, government expenditure will remain the only contributor to GDP growth in most Member States (**PPIAF, 2009**).

5.1.9 *Improving Organisational Capacity:* Improvements in technical, financial and managerial capacity can certainly help to increase a country's capability, flexibility and capacity to deliver public investments. Significant capacity building in terms of deepening project management and implementation skills is not an easy task. But it is necessary, particularly in line ministries and public agencies that undertake public investment. They are the ones that have to demonstrate that they can effectively control delivery of public investment projects. As the OECD has pointed out - "*Policies that develop and maintain a skilled, adaptable and healthy population, and ensure the full and productive deployment of human resources, thus support a favorable investment environment"* – see Appendix 1.

5.1.10 *Need for Transparency and Accountability*: More and more electorates look to be informed of what policies governments are implementing. Also, confidence in the way the economy is being managed can help encourage consumers, businesses and financial markets to spend, subsequently supporting the recovery. And governments are responding. A good example is the US Recovery Plan. The Act underpinning the Plan provides for unprecedented levels of transparency and accountability so that it will be possible to ascertain how, when, and where funds are being spent. A dedicated website has been set-up specifically to enable the public to monitor easily the progress of the recovery. The US authorities have made it clear that the money spent under the Recovery Plan will be subject to unprecedented levels of transparency and accountability - see **www.recovery.gov.**

**Box 14: Sequencing investment management reforms in low and middle income countries**

Even if they have the fiscal space, many middle and low income countries lack the capacity to rapidly scale up public investment. There are often shortages of management and technical skills that suggest a greater need to prioritize and sequence investment management reforms. Transparency regarding policies and performance can also help to bolster confidence in the Government's economic management, amongst the public, business and markets, which is crucial for a recovery. Although reforms have to be adapted to individual country circumstances, some practical suggestions include:

- In many countries, existing policy frameworks (such as poverty reduction strategies) can provide the basis for prioritizing different types of investment in terms of their impact (on growth, employment, poverty etc.) and their likelihood for being implemented quickly (based on existing plans);
- Simple medium-term budget frameworks can provide medium term forecasts for sector aggregates, to ensure that public investment projects can be funded, and to continually assess the sustainability and risks to the fiscal position;
- Under the current circumstances, it may be more imperative to have standardized, even if simple, methods for project selection and appraisal (e.g. projects banks and appraisal guidance) than insisting on relatively more comprehensive cost-benefit analysis, which is difficult to implement in a short time even in institutionally capable environments;
- Project implementation needs to be monitored rigorously—performance indicators need to be sufficiently simple, timely and limited in terms of quantity to ensure adequate monitoring and transparency;
- Streamlining oversight during project implementation rather than relaxing controls seems more appropriate in countries where there is a higher risk of funds mismanagement;
- Effective system checks require sufficient authority and well defined processes. Assigning this function to an administratively and technically capable body with a clear mandate, supported by adequate funding, is likely to produce more successful results.
- Donors may be able to assist countries in enhancing managerial skills in project selection and implementation by providing short, targeted training. Donors may also have already identified a range of projects and developed standardized assessment procedures that could be adopted by Governments.

## 5.2 Recommendations

5.2.1 Improve Medium-term Policy Frameworks:

- Public investment decisions should be based on a medium-term budget perspective, and be linked to sustainable, strategic sector objectives.
- A central government ministry should 'hold-the-ring', when it comes to efficient public investment management. Usually this means the finance ministry; it must decide the medium-term fiscal framework within which investment decisions are taken.
- Australia's new Infrastructure Australia (IA), for planning, funding and implementing future infrastructure needs is one such approach.

5.2.2 Enhancing management and budget Processes:

- There is a need to continually asses the sustainability and short-term financing of the fiscal position while scaling up public investment. These objectives can be linked through a medium-term budget framework.
- Governments need to regularly review their appraisal and management systems to ensure that such systems do provide pragmatic assessment and management of the quality of public investments.
- Governments would do well to use the indicator-based approach suggested by the World Bank (2009) as the basis both for objective assessment of projects, as well as serving to highlight weaknesses that should be addressed if the use of fiscal resources is to enhance public sector assets and economic growth.
- Governments should initiate policy frameworks to facilitate smarter and more professional approaches to public procurement by their ministries by requiring them to develop Corporate Procurement Plans to set targets to achieve savings, value for money objectives and the appropriate structural changes in their organisations. As the European Commission put it in European Economic Recovery Plan – "*smart investment means investing in the right skills for tomorrow's needs*" (European Union, 2008).

5.2.3 <u>Appraisal Systems:</u>

- *G*overnments need to enhance their guidance for appraisal, selection, implementation, and monitoring of public investment projects. Otherwise they run the risk of not picking the best projects, having considered all the relevant social and economic costs and benefits in addition to projects that can be implemented more rapidly.
- Official guidance systems should also provide for a clear definition of the respective roles and responsibilities of all those involved in the management and appraisal of projects and programmes.
- Lessons learned from projects completed should be translated into changes in project guidelines and communicated for future reference to project promoters, to ensure the application of to project selection, appraisal, and approval procedures. This could include a standardized project bank and simpler, standardize project appraisal methods.

5.2.4 <u>Improve 'Back-checking'</u>*:*

- There is need for 'back-checks', on the implementation of projects. A post-project review should be undertaken once sufficient time has elapsed to allow the project to be properly evaluated with sufficient evidence of the flow of benefits /costs from it.
- System checks should ensure that projects are delivered according to contract, approved project specification and within the approved budget, on time and in compliance with government guidelines.
- If projects go badly wrong; they should be terminated; before making a final decision to terminate a project that is not going according to plan, the costs of termination should be ascertained and made known to the appropriate authorities.

5.2.5 <u>Continue to support the use of PPPs</u>:

- PPPs have the potential to improve risk allocation, but governments must demonstrate that the benefits are sufficiently substantial to compensate for

increased financing and transaction costs. Governments may also have to provide additional assurances for financing risks during the current financial market turmoil.

- Decisions regarding PPPs should be closely coordinated with the budget process, and governments should have clear policies regarding which investments should be financed by the budget, which may be realized through public-private partnerships and which should be handled by public or private enterprises.
- PPP arrangements and related fiscal risks should be fully disclosed in budget documents and on dedicated websites. For example, in the case of Ireland, www.ppp.gov.ie provides a central point of access to information about the Public-Private Partnership process in Ireland.

5.2.6 Make use of Expert Assistance*:*

- Governments should not hesitate to make use of external expert assistance. That assistance can come in many forms. In the case of Korea, the Korean Development Institute helps to provide diverse ideas into the appraisal and improve the transparency and objectivity of the decision-making process. In the case of Ireland, the build-up of technical, financial and managerial capacity has been helped greatly by assistance from the European Commission. Many low and middle income countries can draw on the advice and expertise of donors and the International Financial Institutions.
- Governments can set-up internal formal mechanisms to improve their capability of effectively delivering public sector. A good example is the UK's Major Projects Review Group (MPRG), which has been established to help improve the performance of major projects and advise the UK Treasury whether projects should proceed. In essence, the MPRG is a scrutiny panel for major central government projects.
- Governments might also consider using informal arrangements to tap expertise. Examples are where retired professionals are encouraged to return to the public sector to share their experience, particularly in the context of improving the overall systems for project evaluation, prioritization, and management. This is a key feature of the independent advice provided under Peer Review Process; there is a dedicated website accompanying this process, **www.peerreview.gov.ie**, which lists the names of volunteers for this process.

5.2.7 Tap all available Financing Sources:

- Governments should make every effort to tap available funding. Admittedly, a necessary condition, in most cases, is that such countries demonstrate that they are improving their capacity; in particular in the improvement of their systems for appraisal, selection, implementation, and monitoring of public investment.
- In the context of the European Union, Member States should ensure that they tap funding for which they qualify. There are a number of well-established funds, such as Structural Funds, Cohesion Funds and funds for Trans-European Networks.
- Governments should ensure that they tap lines of funding under the 'green agenda'. A recent example of such a new line of funding is the proposal by the European Investment Bank to create the 2020 European Fund for Energy, Climate Change and Infrastructure ("Marguerite Fund") in partnership with national institutional investors.

5.1.8 Human Networks should be harnessed:

- Government should encourage the development of networks to bring together relevant players from across the Public Service who deal with public investment issues.
- Government should encourage much greater emphasis on the role of ICT and e-government in strengthening information sharing out the many dimensions in the delivery of public investment projects.
- While significant efforts have been made in training with regards to skills and capacity in management and technical areas in many countries, governments need to do more to deepen project management and implementation skills across their public sectors.

* * * * *

## References

Australian Government (2009), *Infrastructure Australia*, website www.infrastructureaustralia.gov.au , 5 January 2009.

Canada 2009, Economic Action Plan, Department of Finance, Ottawa, www.fin.gc.ca,

Congressional Budget Office (US), (January 2008), *Options for responding to Short-term Economic Weakness*, CBO Discussion Paper, Washington

Department of Finance (2005), *Guidelines for the Appraisal and Management of Capital Expenditure Proposals in the Public Sector*, Dublin, February 2005.

Elmendorf D.W. and Furman J., *If, When, How: A Primer on Fiscal Stimulus*, The Hamilton Project, Brookings Institution, January 2008.

European Union (2008), *Presidency Conclusions of the Brussels European Council*, Brussels, 11 and 12 December 2008.

Ferris Tom (2008), *Planning Transport Infrastructure*" in 'Global Logistics and Supply Chain Management' by John Mangan, Chandra Lalwani and Tim Butcher, published by John Wiley and Sons, West Sussex, England, May 2008.

Ferris, Tom (2009a), *Working out the costs and benefits*, The Irish Times, 20 February 2009

Ferris, Tom (2009b), *Implications of Recession for Public Investment*, Public Affairs Ireland Journal, Issue No. 55, February 2009.

Ferris, Tom (2009c), *Investing in our Future*, Linkline Magazine, Chartered Institute of Logistics and Transport Ireland, 20 March 2009.

Flyvbjerg B (2007), *Policy and planning for large-infrastructure projects: problems, causes, cures*, Environment and Planning B: Planning and Design 2007, volume 34, pages 578-597.

HM Treasury (2003), *THE GREEN BOOK: Appraisal and Evaluation in Central Government: Treasury Guidance*, HM Treasury, London, 2003.

HM Treasury (2008), *2008 Pre-Budget Report: Facing global challenges:Supporting people through difficult times*, London, 24 November 2008.

IMF (2002), *Review of the Key Features of the Poverty Reduction and Growth Facility—Staff Analyses*, Executive Board Paper Prepared by the Fiscal Affairs and Policy Development and Review Departments, March 15, IMF, Washington DC

IMF (2008, *Fiscal Policy for the Crisis,* ), Spilimbergo, A., Symansky, S., Blanchard, O., and Cottarelli, C., IMF Staff Position Note SPN/08/01, December 29, 2008.

IMF (2009), *The State of Public Finances: Outlook and Medium-Term Policies After the 2008 Crisis*, March 6, 2009

IMF (2009a), *The Case for Global Fiscal Stimulus*, Freedman C., Kumhof M., Laxton D., and Lee J., IMF Staff Position Note, March 6, 2009, SPN/09/03

IMF (2009b), *World Economic Outlook*, April 22, 2009.

IMF (2009c), *The State of Public Finances: A Cross Country Monitor*, Horton, M., Kumar, M., and Mauro, P., IMF Staff Position Note SPN/09/21, July 30, 2009

IMF (2009d), *Fiscal Policy in Sub-Saharan Africa in response to the Impact of the Global Crisis*, prepared by Berg, Funke, Hajdenberg, Lledo, Ossowski, Schindler, Spilimbergo, Tareq and Yackovlev, IMF Staff Position Note, May 14, 2009, SPN/09/10

Ireland Department of Finance Circular: "*Procedures for carrying out spot-checks for compliance with value for money requirements under the General Conditions of Department of Finance Sanction for Multi- Annual Capital Envelopes*", Dublin, 15 May 2007

Korea Kim, Jay-Hyung, *Institutional Arrangements for Enhancing Public Investment Efficiency in Korea*, World Bank and KDI Conference, Seoul Korea, 20-21 November 2008.

Korea Ministry of Strategy and Finance (2009a), *Comprehensive policies to overcome economic difficulties*, Korea, 17 February 2009.

Korea Ministry of Strategy and Finance (2009b), *Supplementary Budget for Job Creation*, Korea, 24 March 2009.

OECD (2006), *Policy Framework for Investment*, 2006.

OECD (2008), *Ireland: Towards an integrated Public Service*, Paris and Dublin, 28 April.

OECD (2009a), *Strategic Response to the Financial and Economic Crisis*, January 2009.

OECD (2009b), *Going for Growth 2009*, March 2009.

OECD, (2009c), *Infrastructure investment: links to growth and the role of public policies*, Douglas Sutherland, Sónia Araújo, Balázs Égert and Tomasz Kozluk, OECD Working Paper No. 686, 24 March 2009.

Prasad E. and Sorkin I., *Assessing the G-20 Economic Stimulus Plans: A Deeper Look, Brookings*, March 2009.

Public-Private Infrastructure Advisory Facility, *Financial Crisis affecting new Private Infrastructure Projects*, March 2009.

Scwartz, G., Corbacho, A., Funke, K., (2008), *Public Investment and Public-Private Partnership: Adressing Infrastructure Challenges and Managing Risks*, International Monetary Fund, Palgrave, Washington DC.

Tandberg, E. (2007), *Budgeting of public investments*, International Seminar on Strengthening Public Investment and Managing Fiscal Risks from Public-Private Partnerships, Budapest, Hungary, March 7–8, 2007.

Tuck, Laura, Schwartz, Jordan, and Andres, Luis, March 2009, *Crisis in LAC: Infrastructure Investment and the Potential for Employment Generation*, World Bank, Latin American and the Caribbean region, Crisis Note http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEXT/0,,contentMDK:22160930~pagePK:146736~piPK:146830~theSitePK:258554,00.html

World Bank, 2001, *Mexico: Fiscal Sustainability*, (Report no. 20236)

World Bank, (2007) *Brazil, Improving Fiscal Circumstances for Growth*, 2007

World Bank, (2008), *Weathering the Storm: Economic Policy Responses to the Financial Crisis*, November 2008

World Bank, (2009), *A Diagnostic Framework for Assessing Public Investment Management*, Anand Rajaram, Tuan Minh Le, Nataliya Biletska and Jim Brumby Public Sector and Governance Unit, Poverty Reduction and Economic Management Network

World Bank, (April 2009b), *Performance-Informed Budgeting in Latin America Experiences and Opportunities*, Latin American and Caribbean Region, Working Paper Series on Public Sector Management, Working Paper 0309, www.worldbank.org/lacpublicsector

World Bank, (2009c), *Battling the Forces of Global Recession*, World Bank Economic Update for the East Asia and Pacific Region, April 2009, Washington DC

* * * * *

# Appendix 1: OECD, The Policy Framework for Investment, 2006: Checklist for Human Resource Development

**1** Has the government established a coherent and comprehensive human resource development (HRD) policy framework consistent with its broader development and investment strategy and its implementation capacity? Is the HRD policy framework periodically reviewed to ensure that it is responsive to new economic developments and engages the main stakeholders?

**2** What steps has the government taken to increase participation in basic schooling and to improve the quality of instruction so as to leverage human resource assets to attract and to seize investment opportunities?

**3** Is the economic incentive sufficient to encourage individuals to invest in higher education and life-long learning, supporting the improvement in the investment environment that flows from better human resources? What measures are being taken to ensure the full benefit of a countries' investment in its own human resources accrues, including the attraction of nationals who have completed their studies abroad? What mechanisms exist to promote closer co-operation between education institutions and business and to anticipate future labor force skill requirements?

**4** To what extent does the government promote training programs and has it adopted practices that evaluate their effectiveness and their impact on the investment environment? What mechanisms are used to encourage businesses to offer training to employees and to play a larger role in co-financing training?

**5** Does the government have a coherent strategy to tackle the spread of pandemic diseases and procedures to evaluate public health expenditures aimed at improving public health outcomes and, through inter-linkages, the investment environment?

**6** What mechanisms are being put in place to promote and enforce core labor standards?

**7** To what extent do labor market regulations support job creation and the government's investment attraction strategy? What initiatives have been introduced that support policy coordination, balancing social objectives, the goal of a competitive workforce and the incentives for business to invest?

**8** Do laws and regulations restrict the deployment of skilled workers from an enterprise investing in the host country? What steps have been taken to unwind unduly restrictive practices covering the deployment of workers from the investing enterprise and to reduce delays in granting work visas?

**9** Does the government support programs designed to assist large-scale labor adjustment and indirectly the investment environment by better positioning firms to seize investment opportunities? Do the incentive mechanisms in these schemes encourage broad support for change? What role is business encouraged to play in easing the transition costs associated with labor adjustment?

**10** What steps are being taken to ensure that labor market regulations support an adaptable workforce and maintain the ability of enterprises to modify their operations and investment planning?

## Appendix 2: Summary of Spot-checks used to ensure Investment Guidelines are being met in the Irish Public Sector

**Overview:** In Ireland projects are not just appraised but, after approval and implementation commences, a new system of checks has been put in place to ensure that they are being implemented in line with Government Guidelines. The new system, announced on 15 May 2007, is designed to enable early warnings about problems that might be emerging, as well as providing outcome lessons from completed projects which might be helpful for similar projects coming on stream.

**Controls:** On 15 May 2007, the Department of Finance issued a Circular consolidating their system for carrying-out annual spot-checks of projects to ensure compliance with requirements set out in the range of guidelines now in place[16]. In essence, the new system has (a) direction from the top (Department of Finance); delivery from the bottom (Agencies delivering projects) with multi-layered reporting requirements (Department of Finance, sectoral Ministries and Agencies delivering projects). The Department of Finance oversees the sectoral Ministries, and Agencies under their aegis, to ensure that the new compliance system is implemented. A system of annual spot-checks on projects has been put in place to ensure compliance with requirements set out in the Capital Appraisal Guidelines, Public Private Partnership Guidelines, National and EU Public Procurement Procedures and Tax Clearance requirements as laid down by the Revenue Commissioners. Departments are required to report the findings of such spot-checks to the Department of Finance and that Department, in turn, will carry out periodic reviews of these spot-check reports.

**Scope of Spot-Checks**: Spot-checks are to cover a reasonably representative sample of projects across all capital programs managed by each Department and its agencies. It is specifically recommended that the sample should cover (a) At least 5% of the value of all programs each year; (b) Projects at different stages of the project appraisal and management process, i.e. projects ranging from those at preliminary appraisal stage to completed projects, and (c) Projects covering the different ranges of capital values used to determine the scale of appraisal required i.e. < €0.5m; €0.5 - €5m; €5m - €30m; and > €30m. Audits or spot checks of programs and projects which are carried out for other purposes such as, for example, to meet EU requirements may count towards the 5% requirement, provided that they are carried out by persons independent of those managing the programs and projects and comply with the broad principles set out for the new system.

**Nature and Focus of Spot-Checks**: Spot-checks are carried out by Officials/ Body or persons who are independent of those directly involved in the appraisal and management of the projects which are the subject of checking. External assistance, if necessary, can be procured to carry out the spot-checks. Preference is, however, for the checks to be carried out internally to facilitate the buildup of the necessary skills within Departments and Agencies. Those carrying out the spot-checks should be sufficiently competent and be familiar with the broad body of reporting requirements. There should be a systematic examination of the actions of the sponsoring agency and sanctioning authority involved in the appraisal and management of the projects to ensure that specific requirements of the guidelines, rules and procedures have been adhered to.

**Content of Spot-Check Reports:** The annual report of Departments on spot-checks should set out details of the steps being taken to disseminate within their organization and Agencies all requirements which are subject to checking. In particular, there should be reporting of the coverage of the spot-checks carried out and the findings; this should detail projects checked,

[16] Circular: "*Procedures for carrying out spot-checks for compliance with value for money requirements under the General Conditions of Department of Finance Sanction for Multi- Annual Capital Envelopes*", Department of Finance, Dublin, 15 May 2007.

the stage at which the project was, the estimated cost of the project and an estimate of the total value of projects checked by reference to the total value of the program.

**Top-level Role**: The Department of Finance has a number of roles, in the spot-checking process. Vote Sections to carry out an initial assessment of spot check reports to ensure that it meets basic requirements as regards scope and content, and then the Central Expenditure Evaluation Unit to review the annual spot-check reports submitted and convey its views on the conclusions and findings of such reports to the Vote Sections. The Central Expenditure Evaluation Unit, in reviewing the conclusions and findings of annual spot check reports, may carry out direct checks of its own on a sample number of cases at Departmental and Agency level. It may also, at its own initiative, undertake directly occasional spot-checks of projects. Departments and Agencies will be expected to co-operate fully with all reasonable requests from the Central Expenditure Evaluation Unit, and any consultants acting on its behalf, for access to project information and the relevant personnel responsible for project appraisal and management.

**Engagement with Departments:** The Department of Finance will engage with each Department in regard to any remedial action which may be required in relation to the arrangements within the Department or Agencies under its aegis for the appraisal and management of capital programs and projects on foot of reports from the Central Expenditure Evaluation Unit. Departments will be given a reasonable period in which to respond to any such requests from the Department of Finance. In reviewing the delegated sanction for capital expenditure by Departments under the rolling multi-annual capital envelopes and the level of future funding under the envelope, the Department of Finance will take into account the level of compliance by Departments and their agencies with the conditions of sanction, including compliance with reporting and spot-check requirements, and the conclusions of the spot-checks.

**Submission of spot check reports**: In accordance with the general conditions of sanction under the multi-annual capital envelopes, Departments are required to submit an annual report on spot-checks to the Department of Finance. It is anticipated that such reports would be incorporated as a separate section in the more general Annual Reports on the capital investment programs.

**Work completed:** The Minister for Finance in a reply to a Parliamentary Question, in Dublin, on 24 September 2008, stated that the Evaluation Unit had –"… *undertaken a substantial programme of direct spot checks of individual capital projects. This programme which commenced in 2007 encompassed over 20 projects across six different Departments — Transport; Environment, Heritage and Local Government; Education and Science; Health and Children; Enterprise, Trade and Employment; and Arts, Sport and Tourism. A number of these spot checks were carried over into 2008 and this first programme of direct spot checks is now virtually complete".*