



Special Series on COVID-19

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May 11, 2020

Managing Public Investment Spending During the Crisis

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This note discusses the role public investment spending can play in the fiscal response to the COVID-19 pandemic.¹ It discusses two aspects: cuts or postponements in public investment spending to make room for emergency spending in the immediate response to the pandemic; and the scaling up of public investment spending to support economic recovery and growth. The note highlights key challenges facing countries at different levels of economic development and capacity, and it proposes concrete measures to address the two aspects. It emphasizes that, both during the immediate crisis and the recovery phase, there is a need for strong prioritization and project selection processes, accompanied by clear policy objectives, dedicated coordination mechanisms, and high transparency.

I. INTRODUCTION

Public investment has several characteristics that makes it attractive for both spending cuts and boosts in support of economic recovery. It is largely discretionary, lumpy with most spending concentrated over a few years, and it makes a substantial contribution to economic activity, especially in low-income countries.² Decisions to cut, extend or terminate public investment projects may also be driven by political economy considerations. As impacts are long-term, projects do not necessarily benefit from strong and vocal constituencies and delays and cost overruns are not always visible. As a result, countries facing financial stress very often resort to cutting or postponing public investment. At the same time, increases in public investment are common elements in fiscal stimulus programs. They have the advantage of boosting long-term economic growth in addition to supporting demand and employment in the short and medium term (IMF, 2020c).

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² FAD's database on public investment shows that in 2017 the median ratio of public investment to GDP was 3.2 percent in advanced economies, 4.8 percent in emerging market economies, and 7.5 percent in low-income developing countries. The ratios across regions range from 3.3 percent in Europe to 3.9 percent in the Western Hemisphere, 5.8 percent in the Middle East and Central Asia, 6.5 percent in Asia Pacific and 7.52 percent in Africa.

Managing these two seemingly opposing responses of public investment is complex and requires careful consideration:

- Creating fiscal space through cuts in public investment must be judiciously designed to avoid an excessively negative impact on the economy, employment, and future costs. There may also be legal and contractual impediments to reallocating funds from capital to current spending and to cancelling or postponing projects.
- Recourse to public investment for fiscal stimulus needs to ensure that projects are well planned, selected and implemented to produce their expected benefits.

II. POLICY PRIORITIES AND TIME FRAMES

As the COVID-19 global pandemic unfolds, adjustments in public investment should focus on their efficiency, equity and effectiveness (Table 1). In the aftermath of the crisis, related expenditures and revenue shortfalls will subside, and many countries will want to use fiscal policies to restart the economy. This could be a major issue when countries prepare their budgets during the second half of 2020 or early in 2021. Some countries, with a strong fiscal position, are already introducing measures to promote economic growth and protect vulnerable groups beyond the immediate emergency response.³ Others, with a weaker position, may have little capacity to provide a significant stimulus even in the medium term. Fiscal recovery measures should be timely, targeted and temporary (TTT), and public investment will in many cases be a suitable instrument for kick-starting economic growth. The post-crisis phase will also provide important opportunities for the “greening” of public investment (IMF, 2020a).⁴

Table 1: Objectives of Public Investment Adjustments

Objective	Short term	Medium term
Efficiency:	Cuts should target investment projects with lower benefits (economic and social) compared to costs. The costs and benefits of the whole portfolio should be reassessed, including discontinued pre-crisis projects.	Resources should be allocated to spending with higher benefits (economic and social) compared to costs.
Equity:	The impact of the cuts on different groups or sectors of the economy should be consistent with established political priorities.	The impact of investment projects on different groups and sectors should be consistent with established political priorities.
Effectiveness:	Cuts should contribute to fiscal adjustment of the required magnitude and timing.	Increased investment spending should contribute to an overall fiscal stimulus of the required magnitude and timing over the medium term.

³ For instance, Norway included a small component (0.03 percent of GDP) for additional spending on infrastructure construction and maintenance in its March 31 fiscal response to the COVID-19 crisis. Mexico has also increased infrastructure spending.

⁴ At the Petersberg Climate Dialogue on April 28, IMF Managing Director, Kristalina Georgieva stated: “If this recovery is to be sustainable—if our world is to become more resilient—we must do everything in our power to promote a green recovery”.

III. MANAGING SHORT-TERM CUTS IN PUBLIC INVESTMENT

If cuts in investment spending are to be unavoidable, they should be based on transparent criteria and minimize the negative impact on long-term growth.⁵ In deciding which projects to cut or postpone, countries may be faced with several challenges:

- **Ad hoc, across-the-board cuts are quite common in crisis situations but will generally fail to recognize project-specific differences.** Projects with a high economic and social return, and with low costs, may be cut as easily as projects with marginal or sub-marginal benefit/cost (B/C) ratios.
- **Spending on investment already incurred and other sunk costs are lost when projects are cancelled prior to completion.** For ongoing projects, these sunk costs may be substantial, and the B/C ratio of completing the project may be very high. For newly approved projects, or projects that have just entered the mobilization stage, sunk costs are considerably less and cancellation is less distortionary. These differences are not always recognized or reflected during a crisis.
- **It is difficult to assess the full costs of project postponement and cancellation.** The financial status of some projects may be affected by the crisis. Project adjustments might trigger the call of contingent liabilities (contract clauses, penalties) or generate new ones.
- **Cuts in capital maintenance and reconstruction may be very costly.** Capital repairs are often highly beneficial investments. Assets that are close to the end of their initial economic life may nevertheless be used for several additional years. Badly targeted cuts in capital maintenance can therefore prematurely end the life of productive assets and lead to much larger costs of maintenance and/or capital replacement down the track. To the extent possible spending on the operations and maintenance of infrastructure assets should be protected from cuts.
- **Spending cuts may reflect perverse incentives (as decisions to invest in new projects also do).** In some cases, it may be politically opportune to retain a new, politically visible investment project, while at the same time cancelling other projects that are close to completion. Alternatively, more projects may be kept alive than are financially sustainable, and payments stretched over a longer period. Such decisions reduce the net benefits of the investment portfolio.
- **Spending cuts may have unintended or unknown impacts.** Some investments by the central government complement projects carried out by subnational governments (SNGs), public corporations (PCs) or the private sector. A new road, financed by central government, may be a precondition for the completion of new local roads or for the establishment of a private industrial facility. These interrelationships should be considered when deciding which projects to cancel or postpone.
- **Spending cuts will often require coordination across different levels of government.** SNGs implement on average half of public investment in OECD countries.⁶ Such investments are typically financed through a variety of instruments, with varying degrees of central government involvement and control. In a crisis, the central government may have limited leverage to clarify the scope for postponement and cancellation of these projects. In some cases, capital transfers to SNGs may be affected by blanket spending cuts, forcing decisions at the SNG level to cut spending.

⁵ In addition to budgetary reasons, many projects may be delayed or cancelled not by active choice, but because of the lockdowns, travel restrictions, and the safety and social distancing rules designed to mitigate the impact of the crisis.

⁶ In France, for example, close to 100 percent of investment is made by SNGs.

- **Public-private partnerships (PPPs) are often bound by contracts with provisions that are difficult or expensive to change.** Governments may consider suspending PPP projects that are in preparation or in procurement until after the crisis, based on similar criteria as for traditionally procured projects. They should also be cautious in offering blanket guarantees to PPP companies.⁷
- **Spending cuts would typically focus on domestically financed investment projects.** Investment financed by development partners is generally earmarked for projects and is non-fungible.

Decisions on which projects to cut or delay should be integrated into the overall decision-making procedures for handling the fiscal impacts of the COVID-19 crisis.⁸ Countries with strong management capacity should be able to handle the challenges summarized above largely through their regular business processes, perhaps augmented by more extensive coordination and more frequent information sharing. Countries with weak public investment management institutions will require enhanced arrangements.⁹

- **Countries should define specific objectives for adjustments in public investment.** The specifics will be determined by country circumstances. The expected B/C ratio of the project should be a significant factor, when this analysis is available. Otherwise, simpler indicators may be used, for instance cost-effectiveness ratios or scores from multi-criteria analyses. Given the impact of the COVID-19 crisis on economic activity and employment, some countries may decide to focus spending cuts on investments that create few jobs. Projects that have little complementarity with other investments, either at the central or local levels, may also be candidates for postponement or cancellation.
- **Project implementation status is also important.** Whether projects have been procured or contracted may have different legal and contractual implications. It will often be necessary to update the status of project implementation and revise planned milestones within the budget period.
- **The specification of policies and objectives should result in a concrete set of selection criteria that can be used as a guide for adjusting the public investment portfolio.** Table 2 provides a simplified example of possible selection criteria. The criteria should include specific thresholds for the decisions and the selection framework should be calibrated to produce the required magnitude and timing of fiscal adjustment. Options include: (i) identifying ongoing projects that are under implementation stress; (ii) applying a temporary freeze on approving new project commitments; (iii) putting all stalled projects on hold until further notice; and (iv) designating all COVID-19 related projects as a strategic priority.
- **There should be a structured mechanism for decision making on major public investment spending cuts.** Final decisions will typically be taken by ministers or the cabinet, based on technical advice. Some countries establish projects or committees to play this role. In others, the responsibility is given to an existing or new organizational unit. The approach chosen will depend on the time constraints

⁷ The impact of the COVID-19 crisis on PPP companies may vary widely from country to country depending on the PPP law and the structure of contracts. Nevertheless, many PPP companies will be adversely affected, especially in the health sector, in energy and transportation, and to a lesser extent in water. In well-structured PPPs (which however are not the norm in many countries) health emergencies are usually defined as force majeure events implying a suspension of penalties for mis-performance. Some countries also provide minimum revenue guarantees which compensate companies, e.g., in the transport sector, for loss of demand and revenue. Assuming the compensation mechanisms are well defined, PPP companies should be better protected than many private sector companies since they may also have their losses covered by the government and have access to emergency credit.

⁸ Many countries for example have established a high-level committee, chaired by the finance minister, responsible for managing the overall fiscal response to the crisis. An infrastructure sub-committee could also be established.

⁹ Public Investment Management Assessments (PIMA) data (IMF, 2018) confirm that the performance of low- and middle-income countries is especially weak in project selection, maintenance of infrastructure, coordination of decision making, and portfolio management and oversight.

created by the crisis and the existing organizational arrangements. The finance ministry should play a leading role, and other ministries and agencies with major investments will participate. If SNGs or PCs are significant investors in public infrastructure, they could also be represented; if they have substantial autonomy, they should be encouraged to comply with criteria issued by the government.

- **Postponing or cutting infrastructure projects will require governments to negotiate changes with their contractors (in the case of traditional procurement) or partners (in the case of PPPs¹⁰).** Changes may take the form of reducing costs, altering specifications or extending deadlines, while ensuring conformity with procurement rules and other public finance regulations. When such changes are not done carefully, significant arrears and cost overruns may be generated. There must therefore be clarity in the process of postponing or cutting projects. It will also be important to establish a procedure that allows parties to resolve potential disputes without resorting to costly legal action.
- **Robust decisions will require comprehensive and consistent information about the public investment portfolio.** In some cases, existing reporting and oversight mechanisms can be utilized, but often this information will have to be supplemented. A survey of the implementation status and remaining costs of ongoing projects may be needed. This survey should focus on major investment projects.
- **It will be important to ensure a transparent process, so that the information underlying the decisions is well known and understood by different stakeholders and the public.** An information portal on public investment as part of the overall process of publishing data on the government's fiscal response to the crisis could be very useful.

Table 2: Illustrative Criteria for Postponing or Cancelling Projects

Basic decision matrix	Postpone	Cancel
Project approved, not initiated	Yes	Yes
Project initiated, less than 10 % of cost incurred	Yes	No
Project under implementation, B/C of completion >1.5	No	No
Project under implementation, B/C of completion <1.5	Yes	No
Project under implementation, B/C of completion <1.0	Yes	Yes
Additional considerations		
High employment creation	No	No
Significant synergies with other projects	Yes	No
High cost of project cancellation (beyond B/C)	Yes	No

Note: Thresholds are indicative.

¹⁰ See also, Aydin Sakrak, O, and R. Monteiro, [What is the COVID-19 Crisis Impact on Public-Private Partnerships](#), IMF PFM Blog, April 30, 2020.

IV. MANAGING PUBLIC INVESTMENT FOR FISCAL RECOVERY

As the Great Lockdown ends, governments will begin to focus on the recovery and stimulus packages, as was done in the aftermath of the global financial crisis (GFC) of 2008.¹¹ In response to the current crisis, many countries have already announced a reprioritization of capital spending. In G20 countries this response mostly involves bringing forward rather than the postponement or cancellation of projects to support employment and economic growth. Some low-income countries have also announced adjustments to their capital spending programs.¹²

It is important to develop and maintain a pipeline of projects that are technically well-defined, have gone through a rigorous appraisal and selection process, are affordable, and contribute sufficiently to growth and social cohesion. Institutional arrangements for taking decisions on the selection and management of investment projects should be part of the government's overall economic recovery program. This should include key stakeholders in central government, as well as SNGs and PCs where these sectors make a substantial contribution to public investment.

In reviewing how to kick start infrastructure investment to support the recovery, countries could consider the following measures:

- **Projects should be adequately appraised prior to selection, and regulatory approvals could be streamlined.**¹³ Even if there were a pipeline of pre-appraised projects before the crisis, conditions may have significantly changed. At a minimum, a high-level check of the portfolio/pipeline should be performed to ensure that the projects remain economically viable. If there is no existing pipeline, a framework for expedited appraisal should be established. Specialized institutions already in place for this task should take the lead. If no such arrangements exist, a task force comprising experts from key sectors could be established. The appraisal framework should be applied to all existing projects as well as new proposals.
- **The arrangements should include clear criteria for the selection of projects on the lines suggested in Table 3.** There should be an emphasis on identifying projects that correspond to the TTT principles noted above.
- **The fiscal stimulus program should be anchored in a credible and realistic medium-term fiscal policy and framework.** Estimates of fiscal space for infrastructure should guide decisions. Project selection should be based on specific projections for, and a clear understanding of, the budgetary impacts of the different investment projects. This assessment should include the full lifetime costs of projects, including their expected maintenance and operating costs.
- **Capacity constraints should be identified and addressed at an early stage.** In many low income and emerging market countries, even those with fiscal space and access to financing, the ability to rapidly scale-up investment projects may be limited. For example, there may be capacity constraints in procurement systems, or in access to capital, labor, and materials. These constraints may be exacerbated

¹¹ Many OECD countries increased spending on basic infrastructure after the GFC, much of which was carried out by municipalities (OECD, 2011). In Germany, there were two stimulus packages: one of EUR 2 billion for basic infrastructure; the other of EUR 17.3 billion for education, hospitals and energy efficiency. France followed a similar approach in the recovery from the GFC. Shovel-ready projects complying with the TTT criteria noted above included road infrastructure, the reinstatement of heritage assets, and defense procurement. Special institutional arrangements were established to implement these projects under the umbrella of France's Economic Recovery Plan. One of the three program areas identified as part of this Plan was public investment. See Wendling (2020).

¹² In Ghana, for example, the government has announced plans to increase spending in goods and services, transfers, and capital investment by 0.3 percent of GDP. In Zimbabwe, the government is redirecting capital spending toward health-related projects, water and sanitation, earmarking the Intermediated Money Transfer Tax for this purpose.

¹³ See, for example, the New South Wales (Australia) [Planning System Acceleration Program](#).

by travel restrictions and other measures to contain the COVID-19 virus, especially if there are new waves of infections and containment measures. A proactive approach to identifying financial partners, to hiring and training staff with the necessary skills, and to securing long-term supplies of key materials is important.

Table 3: Illustrative Criteria for Projects in a Fiscal Stimulus Package

Principle	Illustrative criteria
Timely	Possible to implement the projects in the required timeframe A significant share of projects should be available for immediate implementation
Targeted	High benefit/cost ratio (B/C >1.5) Additional positive impacts (beyond B/C estimate): <ul style="list-style-type: none"> ▪ Economic ▪ Social ▪ Environmental High employment creation potential Significant synergies with other projects, including SNGs and private sector Leverage concessional financing
Temporary	The projects should have a strong long-term growth impact but limited long-term fiscal impact They should not require significant funding beyond the fiscal stimulus period

- **Capital maintenance projects should play an important role in the investment program.** Maintenance and capital repairs projects are by nature flexible and can be easily expanded. They are often relatively cheap and standardized projects that are easy to program, implement and monitor, and may have a higher job content than new infrastructure projects. Capital maintenance programs can be replicated across SNGs through an earmarked capital grant scheme.
- **Adequate management for PPP projects will be even more relevant in the aftermath of COVID-19.** Some countries will launch investment programs as fiscal stimulus, while others, facing high debt, will need to achieve more with less resources. Although PPPs can be part of the solution for many countries, global experience suggests that in the absence of effective fiscal management they can lead to waste and inefficiency, often increasing governments' exposure to fiscal risks and advancing projects with poor or even negative economic value for society (but generating benefits for investors).
- **Procurement mechanisms should be reviewed to ensure timely and effective realization of the selected investment projects while maintaining transparency.**¹⁴ Procurement bottlenecks should be identified and remedied during the preparation of the fiscal stimulus program. In response to the crisis, many countries have enacted procurement laws that streamline standard procurement procedures. Clear guidelines or implementing regulations should be prepared by the ministry of finance and the procurement authority to ensure coherent application of these rules and, to condition expectations, a plan to return to "normalized" arrangements after the crisis should be publicly disclosed. Transparent communications, reporting and audit of procurement policies and transactions during the crisis are critically important.
- **Effective mechanisms for project monitoring and reporting, and for escalation and resolution of implementation issues should be put in place.** Experiences from the post-GFC period indicate that

¹⁴ Open Government Partnership (2020) provides useful guidelines on methods to mitigate governance vulnerabilities in the procurement area during the crisis.

transparency and public access to information is important for portfolio performance (OECD, 2011). A strong monitoring mechanism also enables the reallocation of funding away from projects which, contrary to the initial assessment, take more time than anticipated to be implemented, and therefore are not fully consistent with the TTTs criteria. Measures to ensure accountability and adequate controls will also be critical (IMF, 2020b).

REFERENCES

- Aydin Sakrak, O, and R. Monteiro. 2020. [“What is the COVID-19 Crisis Impact on Public-Private Partnerships”](#). IMF PFM Blog, April 30, 2020.
- International Monetary Fund. 2020a. [“Greening the Recovery”](#). IMF Special Series on COVID-19, April 20, 2020.
- International Monetary Fund. 2020b. [“Budget Execution Controls to Mitigate Corruption Risk in Pandemic Spending”](#). IMF Special Series on COVID-19, forthcoming.
- International Monetary Fund. 2020c. [Spring 2020 Fiscal Monitor: Policies to Support People During the COVID-19 Pandemic](#).
- International Monetary Fund. 2018. [“Public Investment Management Assessment - Review and Update”](#). IMF Policy Paper.
- Open Government Partnership. 2020. [A Guide to Open Government and the Coronavirus: Public Procurement](#).
- Organization for Economic Cooperation and Development. 2011. [Making the Most of Public Investment in a Tight Fiscal Environment: Multi-Level Governance Lessons from the Crisis](#), Paris, OECD.
- Wendling, C. 2020. [“French Experience with Stimulus Packages, 2008-2009”](#). IMF PFM Blog, March 26, 2020.