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Supervision and performance: the case of World Bank projects

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Abstract

This paper explores the impact of donor supervision on development project performance using data from World Bank-funded projects. Maximum likelihood estimation of a restricted ordered probit function finds that early supervision has a positive impact on performance. Given the size of World Bank-funded projects, gains from increasing supervision far outweigh the costs. The results provide evidence of an institutional bias toward lending at the expense of increased development impact. © 2000 Elsevier Science B.V. All rights reserved.

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Even the best laid plans can go astray. Nowhere is this aphorism more apt than in the developing world where carefully planned development projects all too frequently fail to achieve their goals. In its 1993 Annual Review, the World Bank's Operations Evaluation Department judged nearly 40% of recently completed projects to be failures. [1] While 86% of World Bank projects completed before 1980 were judged satisfactory, only 72% of projects completed since 1980 have achieved such performance. Simultaneously, several researchers have noted a

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[1] An overall rating of ''Unsatisfactory'' by the Operations Evaluation Department indicates that a project failed to achieve its major objectives and, in cases amenable to such calculations, roughly corresponds to an expected economic rate of return below 10%.

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divergence between anticipated and actual economic rates of return.[2] The sources of problems are myriad and, though some are attributable to imperfect plans, many arise during the implementation phase of development projects — policy reforms that never take place, delays, cost overruns, substandard construction, coordination failures and ''slippage.''

This paper examines aid donor attempts to combat these problems via project supervision, a combination of monitoring and advising. Using data from World Bank-funded projects, I estimate the impact of World Bank supervision on project performance. Better understanding of the role and impact of supervision is of both practical and theoretical interest. International development projects account for a very sizable investment in developing countries with the World Bank alone supervising a portfolio of 1850 projects representing some US$300 billion of investment.[3] Improved project supervision may increase the return on this investment and is one of the only instruments available to donors during project implementation. Aid performance is also central in maintaining support for aid funding in the face of donor fatigue in the post-Cold War era.

From a more theoretical perspective, examining donor allocation decisions also sheds light on donor objectives. This is the approach used in the extensive literature on donor allocation of aid among recipient countries.[4] In a parallel fashion, examining the allocation of administrative resources within an aid agency sheds light on its objective function.[5] Estimates in this paper show that, at current levels of supervision, the marginal benefit of World Bank supervision greatly exceeds its nominal marginal cost. This suggests that World Bank practices are more complex than simply maximizing expected performance on a project by project basis. Specifically, the current low level of supervision indicates a management bias toward new lending at the expense of development effectiveness.

The econometric analysis draws on data from 1426 projects completed between 1981 and 1991. Project performance, in theory a continuous variable, is measured by a discrete rating generated annually by World Bank project managers; supervision is the number of World Bank staff weeks devoted to supervising a project in a given year. The project performance equation relates lagged annual supervision to annual changes in performance. Taking changes in performance ratings as an

[2] Percentages derived from the World Bank Operations Evaluation Department's Annual Review database. ''Actual'' economic rate of return is more accurately the economic rate of return re-estimated at the end of the implementation phase. Divergence of economic rates of return is discussed in Pohl and Mihaljek (1992) and Operations Evaluation Department (1991).

[3] Projects under implementation total US$140 billion in World Bank loans and credits; I assume World Bank funding accounts for 47% of total project cost based on available data. This is a nominal figure.

[4] Early contributions to this literature include Davenport (1969) and Wittkopf (1972). Recent work includes Trumbull and Wall (1994), Dewald and Weider (1996), Katada (1997), and Meernik et al. (1998).

[5] See Deininger et al. (1998).