Performance Assessment, Vulnerability, Human Capital, and the Allocation of Aid Among Developing Countries

PATRICK GUILLAUMONT a,b, MARK McGILLIVRAY c,a and LAURENT WAGNER a,b,*

a FERDI, Clermont-Ferrand, France
b University of Auvergne, Clermont-Ferrand, France
c Deakin University, Geelong, Australia

Summary. — Developing country performance with respect to economic policies and institutional behavior is a common criterion for the allocation of aid among recipient countries. This paper examines how performance is used, arguing that performance is too narrowly defined. A more appropriate definition is one that controls for the economic vulnerability and human capital of developing countries. Econometric analysis of cross-section and panel data is presented that supports this contention. The paper also contends that performance and exogenous economic shocks are likely to be pro-cyclical. This implies a double punishment when aid is allocated according to performance. Evidence of such punishment is also provided. The paper concludes by arguing that economic vulnerability and human capital variables should augment performance measures in aid allocation decision-making.

Key words — performance, aid allocation, human capital, vulnerability, exogenous shocks

1. INTRODUCTION

Performance is an important criterion for the allocation of aid among developing countries. Some donors, such as the World Bank and the African Development Bank, allocate aid among recipient countries according to formal prescriptive models that incorporate performance as a determining variable. The amount of aid prescribed by these models for a given recipient country is an increasing function of its performance. The World Bank International Development Association (IDA) performance-based allocation system is perhaps the best-known model of this type. This system relies heavily on the well-known World Bank Country Institutional and Performance Assessment (CPIA). Other donors allocate aid in a less systematic manner but often provide more aid to given countries than would otherwise be the case on the basis of superior performance. Performance, in this context, is defined in terms of the efficacy of economic and social policies and public sector management and institutions. The efficacy of public sector management is typically based on factors including the perceived quality of budgetary and financial management, revenue mobilization and public administration, and on the transparency and accountability of the public sector. The rationale for basing aid receipts on performance, as defined, is twofold. The first reflects a widely held view in the donor community, that the incremental impact of aid on recipient country economic growth is an increasing function of the performance of these countries. Ensuring that the allocation of aid among recipient countries is an increasing function of their performance is consistent with maximizing the global economic growth and poverty reduction efficiency of development aid. In short, it is thought to maximize aid effectiveness from these perspectives. This is consistent with the very well-known Burnside and Dollar (2000) and Collier and Dollar (2001, 2002) studies. The second rationale follows from a strategy of ex-post conditionality. Better economic policies and institutional performance are (rightly) thought to be better for economic growth. Rewarding high-performing countries with more aid promotes further growth in them, and provides positive incentives for other countries to improve their performance.

There is much to be said in support of basing aid allocation on recipient country performance using an indicator such as the CPIA. Above all, it ensures that developmental criteria determine aid allocation rather than political and commercial criteria, and imposes order on what can otherwise be a chaotic decision-making process that results in illogical outcomes. If it is transparent recipient countries can understand the amounts of aid they have been allocated and what they need to do to receive a larger share of aid from the donor in question in future. It is not without weakness, however. Three weaknesses are especially apparent.

First, its assessments of performance are somewhat narrow, ignoring what might be described as initial country conditions. An important such condition is human capital. It is reasonable to expect that countries with low human capital levels are likely to have low performance scores. They may have difficulties formulating economic and social policies and achieving high-quality budgetary and financial outcomes, mobilizing revenues and achieving public transparency. A country with low human capital might achieve relatively low performance assessments, despite the best of intentions and huge efforts. Penalizing such a country with less aid than would otherwise be the case is not consistent with a strategy for providing positive incentive to improve performance.

Second, performance-based allocative approaches are highly reductionist with respect to aid effectiveness criteria. Aid effectiveness will be contingent on a number of factors in addition to performance. The literature on aid and growth has pointed to a number of contingencies, including economic vulnerability. Guillaumont and Chauvet (2001) show that the incremental impact of aid on growth is contingent on recipient country

* The authors are grateful for the very helpful comments on an earlier draft of this paper from two anonymous referees and for the research assistance from Marc Curran. The usual disclaimer applies. Final revision accepted: May 18, 2015.
structural economic vulnerability, with the former being an increasing function of the latter. Allocating more aid to economically vulnerable countries than would otherwise be the case is consistent with maximizing the global growth and, by implication, poverty efficiency of aid. Ignoring this criterion reduces this efficiency. Put differently, not taking into account vulnerability means the effectiveness of aid in promoting global growth, and in turn reducing global poverty, will be lower than would otherwise be the case.

The third weakness relates to the impact of exogenous economic shocks on performance. There is strong reason to expect that performance will be partly driven by these shocks or, more specifically, will be pro-cyclical with respect to them. A negative exogenous shock can be bad enough in its own right, but will be made all-the-worse if accompanied by lower aid. This is a case, therefore, of double punishment. This paper empirically assesses these criticisms. While each might make sound intuitive sense a priori, and might be supported by country-specific or anecdotal evidence, they have more veracity if the behavioral relationships they describe can be observed across reasonably large samples of developing countries. This paper provides a multivariate econometric analysis of developing country performance. Performance is measured using the World Bank CPIA and Country Performance Rating measures, which are used to allocate IDA funds among eligible developing countries. The explanatory variables of interest are economic vulnerability, human capital and measures of exogenous economic shocks.

The paper consists of three further sections. Section 2 provides a brief review of the literature on the determinants of performance. Section 3 examines whether performance is determined by vulnerability, human capital and income. It reports the methods used by and results from an econometric analysis of these relationships. Section 4 explores the issue of pro-cyclicality of performance with respect to exogenous shocks, reporting the results of an econometric analysis. Section 5 concludes.

2. LITERATURE REVIEW

Poor institutional performance is, in the relevant literature, equated with state fragility or failure. Many studies examine the impact of fragility on development, either through its direct impact on income and growth, or through its indirect influence through aid allocation (see Chauvet and Collier (2008), Feeney and McGillivray (2008), Baliamoune-Lutz (2009), among others).

Nevertheless, there appear to be only two rigorous empirical studies of the determinants of state fragility. These two studies rely on the literatures on the determinants of economic growth and on the impact of conflict or institutional instability on growth. More precisely, they both take as a strong reference the work of Goldstone et al. (2005) from the Political Instability Task Force (PITF). Using a conflict-based definition of state failure that focuses on rebellion, genocide, political repression, adverse regime change and revolutionary or ethnic wars, the PITF attempts to identify a limited number of conflict predictive factors that could be used to inform security policy. It highlights factors that predict political instability, such as infant mortality, openness to trade, the level of democracy as well as the level of conflict in contiguous states.

The first of these studies is Carment, Yiagadeesen, and Prest (2008). Using the Country Indicators for Foreign Policy (CIFP) instability index as their dependent variable, they seek to establish the influence of a large number of socio-economic variables on fragility. The explanatory variables include per capita income, economic growth, infant mortality, openness to trade and the level of democracy. They also seek to establish whether other factors such as income inequality, human rights, ethnic risk and ethnic diversity also determine state fragility. They find, over a world sample, that the per capita income level is the main factor influencing fragility, with higher incomes being associated to lower fragility.

Following Carment et al. (2008), Bertocchi and Guerzoni (2010) investigate the determinants of state fragility in sub-Saharan Africa. They find that institutional variables are a strong determinant of state fragility. They also find that the probability of a country being fragile decreases with the level of civil liberties and increases with the number of revolutions. Economic determinants such as per capita GDP growth and investment are not found to be significant. They reach the same conclusion for the influence of geography and colonial history.

Carment et al. (2008) and Bertocchi and Guerzoni (2010) provide interesting insights but it is clear that the literature is in an early stage of development. The explanatory variables are either largely taken from the literature on determinants of growth or conflict. It is not clear why these variables might be expected to influence fragility, defined in terms of institutional performance. So as interesting as the existing literature might be, it provides insufficient guidance for the purpose of our study. With that in mind we choose to build a rather simple base empirical specification of an econometric model that is tested using a variety of econometric estimation techniques, data sets and control variables. This specification is also tested using different measures of performance, vulnerability, human capital and exogenous economic shocks. We use less control variables than Carment et al. and Bertocchi and Guerzoni. This is defensible to the extent that our chosen measures of structural vulnerability and human capital, identified below, are aggregations of a large number of variables that could serve as controls in their own right.

3. PERFORMANCE, VULNERABILITY AND HUMAN CAPITAL

(a) Econometric methods and data

Our econometric analysis initially focuses on vulnerability and human capital, with exogenous shocks being examined later in the paper. Our econometric model for analyzing performance and its relationships with economic vulnerability and human capital can be depicted as follows:

\[ P_i = \alpha + \beta_i V_i + \gamma_i H_i + \delta_i \Phi_i + \mu_i \quad i = 1, \ldots, n \]  \( (1) \)

where \( P_i \) is the performance of developing country as indicated by its CPIA score, \( V_i \) is a vector of variables indicating economic vulnerability of country \( i \), \( H_i \) is a vector of variables indicating human capital shortfall within country \( i \), \( \Phi_i \) is a vector of control variables relating to \( i \), \( \alpha \) is a constant, \( \beta_i, \gamma_i \) and \( \delta_i \) are vectors of regression coefficients, and \( \mu_i \) is a residual. All variables, unless otherwise indicated, are for period \( i \).

The economic vulnerability vector \( V_i \), in initial estimation contains a single element only, the natural logarithm of the well-known Economic Vulnerability Index (EVI). The EVI is the arithmetic mean of seven components: export instability, agricultural production instability, homelessness, population, the share of agriculture in GDP, export concentration, and remoteness. Each of these variables is scaled between the range of zero and 100, with 100 being assigned to the country with
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات