

# Conditionality and Country Performance

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This paper explores the empirical relation between loan conditionality and country performance through the lens of 134 World Bank-supported policy-based loans approved in 69 countries between FY96 and FY00. The objective is to assess country performance in areas of policy-based conditionality two years after loan approval. Findings from a Before-After analysis of a larger dataset show that, on average, adjusting countries with better policies grew faster two-three years after loan approval than did their poor-policy counterparts. The results of the empirical model used in the paper suggest that loans with social sector conditionality tend to have a significantly positive association with higher GDP per capita growth two years after loan approval. Conditionality on the macroeconomic, public sector management, and structural policy areas does not seem to have a positive effect. These results may reflect the short time period studied, and they point to the need to focus research on the impact of conditionality on more specific micro reform areas.

# CONDITIONALITY AND COUNTRY PERFORMANCE

## I. INTRODUCTION

This paper is a first attempt to analyze the effect of policy-based lending conditionality on country performance, as measured by GDP per capita growth two years after loan approval. The effect of conditionality is analyzed in four broad policy areas, represented by the four main clusters comprising the World Bank's Country Policy and Institutional Assessment (CPIA) rating: (a) macroeconomic policy performance (macro), (b) policies for social inclusion/equity (social), (c) public sector management and institutional performance (PSM), and (d) structural policy performance (structural).<sup>1</sup>

The objective is to test whether, two years after loan approval, conditionality leads to improved country performance. It is expected that the factors influencing improved country performance include initial income, conditionality mapped to one of the four CPIA clusters, and macro and fiscal effects. The effects two years after loan approval are analyzed to determine the short-to-medium term impact of loan conditionality on GDP per capita growth.

## **II. Before-After Approach**

A Before-After analysis was undertaken of 217 loans in 80 countries approved between FY96 and FY02,<sup>2</sup> and of the corresponding 6,077 legally binding conditions<sup>3</sup> out of the 8,113 total conditions (binding and nonbinding) associated with the loans. Figure 1 shows the distribution of loan conditionality after mapping each condition to one of the four CPIA clusters; Annex A shows how this mapping is done.

Legally binding conditionality during FY95-02 is found to focus mostly on structural policy: around 45 percent of all legally binding conditionality focuses on structural conditionality,

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<sup>1</sup> The CPIA exercise assesses the quality of a country's policy and institutional framework on the basis of observable policies, with "quality" defined as the degree to which the framework fosters poverty reduction and sustains growth and the effective use of development assistance. Bank staff assess and rate 20 policy and institutional performance areas, which are then grouped and averaged into the four clusters identified above.

<sup>2</sup> Note the difference in periodization (FY96-02, 217 loans, 80 countries) and, hence, the number of conditions in this section compared to Section III (FY96-00, 134 loans, 69 countries). Data for all the variables in the empirical analysis in Section 3 are more limited than that available for the Before-After analysis.

<sup>3</sup> Legally binding conditions are recorded in the legal agreements (the text is confidential and undisclosed) and are the basis of the commitment between the Bank and borrower on a program of cooperation throughout the period of a policy reform program.

followed by 25 percent on public sector management and institutions, and 21 percent on social sector policies. However, when looking at trends for each of the four policy areas, the use of structural conditionality appears to be declining while that of public sector management conditionality appears to be slowly increasing and that of macro economic management conditionality has been essentially stable (see Figure 2).

Figure 1  
Total Number of Conditions by Policy Area, FY96-02

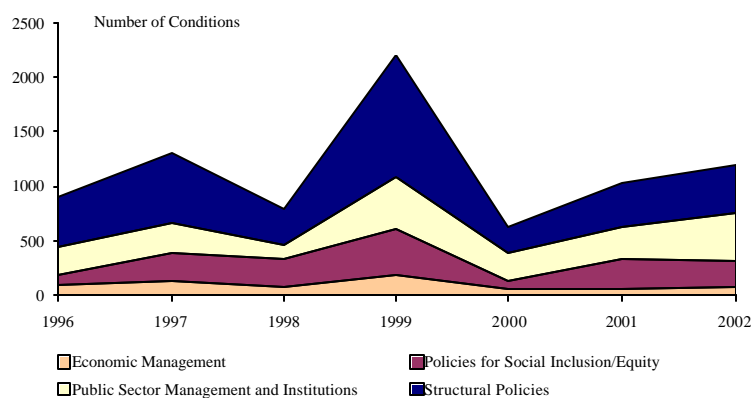
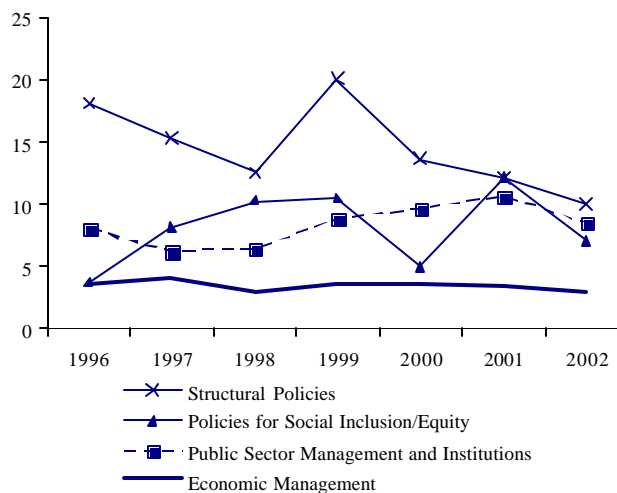


Figure 2  
Average Number of Conditions by Policy Area, FY96-02



Based on the yearly average of the total CPIA rating (the rating representing all 20 policy and institutional reform areas) for FY96-02, and solely for the purposes of this paper, countries with policy-based loans during this period have been grouped as high performers, good performers, and poor performers.<sup>4</sup> The CPIA rating prior to the year of approval of the policy-based loan is selected as the beginning period of observation because the bulk of loan preparation is undertaken in the year prior to loan approval, and the impact could thus be assessed without the influence of the loan in the CPIA rating. By comparing the change in the pre-reform CPIA cluster rating with the two-three year average post-reform CPIA cluster rating one can broadly assess the relative strengths and weaknesses of specific loan conditionality.

The Before-After analysis show that, on average, adjusting countries with better policies in the macro, social, and PSM areas have grown faster two to three years after the approval of a policy-

<sup>4</sup> A CPIA rating of 4.000 and above is designated “high,” a rating of 3.000 to 3.999 is designated “good,” and a rating less than 2.999 is designated “poor.” Two things about this classification should be stressed at the outset: (a) there are no such groupings in use today at the World Bank; and (b) neither the CPIA ratings nor the countries they represent are disclosed by the Bank.

based loan than have their poor performing counterparts. Figure 3 shows this relationship for FY96-01. The exception is for structural performance, where GDP per capita growth has been on average higher in poor performing countries than in good or high performing countries (see Table 1.a). One explanation for this apparent anomaly is the positive impact on GDP of higher oil prices in certain poor performing oil economies.

Figure 3  
GDP Per Capita Growth and Country Performance (CPIA) by Policy Area, FY96-01

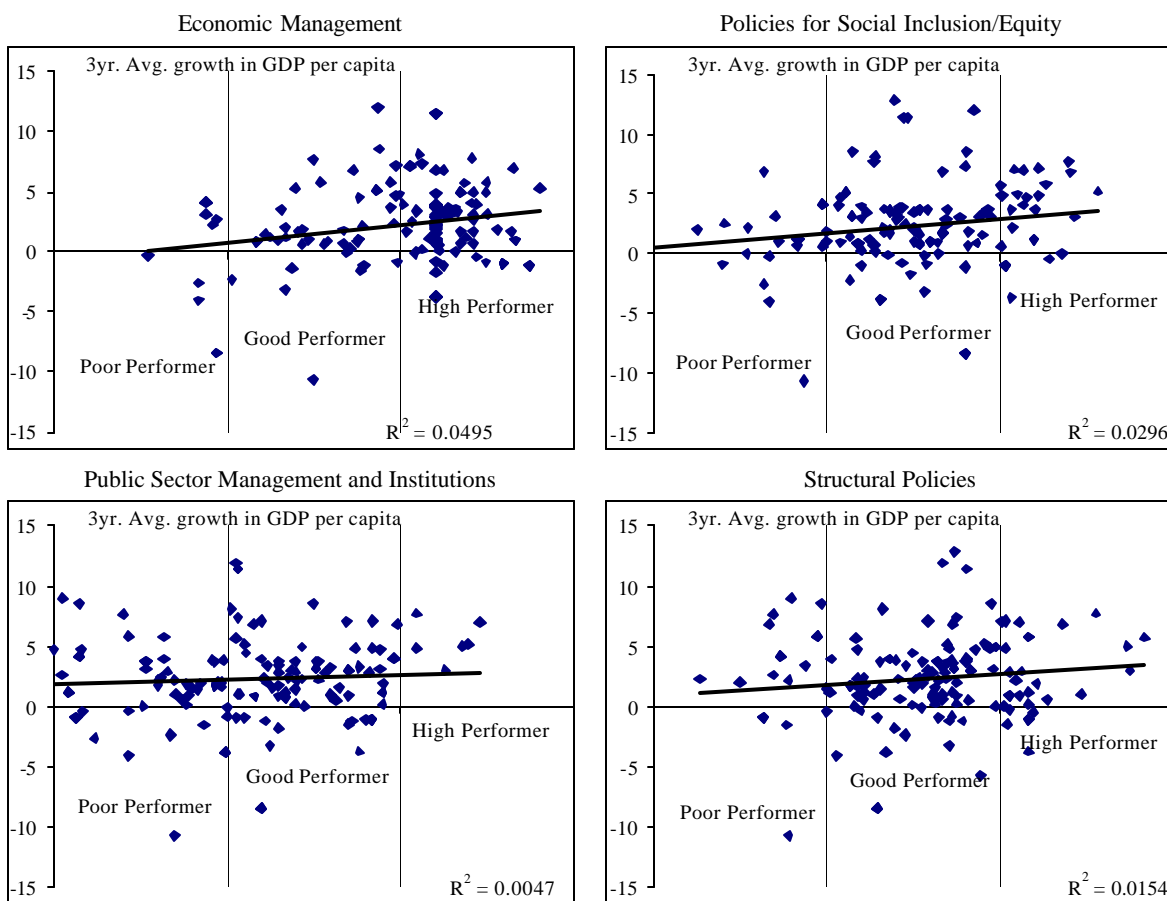


Table 1  
7g. GDP per capita growth 2-3 years after loan approval by country group

III. EMPIRICAL ANALYSIS			
Loans approved between FY96-02	Poor Performer	Good Performer	High Performer
Avg. CPIA Ratings			
Economic Management	0.8	2.1	2.5
Policies for Social Inclusion/Equity	0.6	2.4	3.1
Public Sector Management and Institution	1.7	2.3	5.5
Structural Policies	3.0	2.2	2.5

<sup>5</sup> There are two problems with the use of country performance regressions. First, the country performance regressions may suffer from parameter homogeneity—the assumption that the variables used to describe country performance are identical across countries. This assumption implies that a set of loan conditionality in similar policy areas has the same effect on country performance across countries. This assumption of parameter

supported policy-based loans approved in 69 countries between FY96 and FY00. The time series panel is mostly composed of data from the World Bank’s World Development Indicators (WDI) database, the Adjustment Lending Conditionality and Implementation Database (ALCID) maintained by OPCS, and the Europa Yearbook, which provides data on country governments and their political arrangements.

## A. Econometric Model and Application

Variants of the following equation are used to address the conditionality-performance link:

$$(1) \quad p_{it} = p_{it(init)} \mathbf{b}_p + a_{it} \mathbf{b}_a + b_{it} \mathbf{b}_b + y_t + \mathbf{e}_{it}^p,$$

where  $i$  indexes countries,  $t$  indexes time,  $p_{it}$  is the change in the logarithm of GDP per capita in 1995 prices two years after loan approval,  $p_{it(init)}$  is the initial dependent variable,  $a_{it}$  is an  $m \times 1$  vector of dummy variables that take the value of “1” if the loan carries conditionality on the four  $m$  CPIA cluster and “0” otherwise,  $b_{it}$  is a  $n \times 1$  vector of variables that might affect country performance,  $y_t$  are fixed effects, and  $\mathbf{e}_{it}^p$  is the zero scalar.

A fixed-effects-pooled-least-squares is used to estimate equation 1. The equation variants use White heteroskedasticity-consistent standard errors and covariance. They are estimated using a panel of policy-based loans approved between FY96 and FY00 (the fiscal year is July-June). Conditionality observed in a loan approved in FY96 is grouped with CY1996 data.

The country performance equation 1 is specified to account for a small range of institutional and policy conditions that can help explain country performance. To capture the convergence effects of the dependent variable, country performance during period  $t$  is allowed to depend on the logarithm of  $p_{it}$  at the beginning of the period. The specification to account for macroeconomic and structural exogenous variables,  $b_{it}$ , follows some elements of the empirical growth literature:

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homogeneity may be invalid because country circumstances are so heterogeneous. By allowing for fixed effects (i.e., constant terms differ across countries) this problem is addressed, but the approach may be of limited value in this study as the time dimension employed in the country performance regressions is relatively short. Country performance during FY96-00 may be a function of actions and policies taken in periods prior to the one studied in this paper, and the data may contain business cycle factors; consequently, it is difficult to see how long-term country performance can be affected by such short time periods. The second analytic issue is the question of causality. Many of the variables used to explain country performance are drawn from economic and social dimensions that also affect performance—the endogenous problem.

inflation, the current account balance as a percentage of GDP, and government consumption as a percentage of GDP.

Table 2 provides summary statistics for the main variables that are the focus of the analysis—conditionality and country performance. The mean number of legally binding conditions was 35.9 for the full set of 134 loans, with a maximum of 160 conditions in a 1999 loan to Indonesia. The mean annual improvement in country performance was 2.4 percent, with the largest improvement at 28 percent in a European country (1997) and the largest deterioration at 11.8 percent in an East Asian country in the context of the East Asian crisis (1998).

**Table 2**  
**Selected Summary Statistics: Common Sample**

<b>Policy-based loans approved FY96-00</b>	<b>Mean</b>	<b>Median</b>	<b>Maximum</b>	<b>Minimum</b>	<b>Std. Dev.</b>
	in number of conditions				
GDP per capita	2.4	2.3	28.0	-11.8	4.7
Total legally-binding conditions	35.9	28.5	160.0	4.0	26.3
Macro conditions	3.7	2.5	16.0	0.0	3.8
Social conditions	7.0	3.0	66.0	0.0	10.5
PSM conditions	6.8	4.0	38.0	0.0	8.3
Structural conditions	18.3	14.5	98.0	0.0	17.9
Number of loans	134				
Number of countries	69				

Source: author's estimates

## **B. Results**

Table 3 summarizes the results of applying the data to the model. Column 1 shows equation 1 specified without the interest variables, to determine which are the most significant variables—showing that all four exogenous variables are significant. All five regressions use this same set of variables, as they represent elements of economic and fiscal factors that might affect country performance.

Once conditionality is considered, and using a fixed-effects-pooled-least-squares, social sector conditionality shows statistically significant (at the 1 percent significance level) positive effect on GDP per capita growth two years after loan approval (see column 3), together with inflation and government consumption negative effects. Column 6 shows the regression when all four

conditionality groups are included. Loans with social sector conditionality tend to have a positive effect on GDP per capita growth two years after loan approval. Conditionality on macro, public sector management, and structural areas does not seem to have a positive effect.

#### **IV. CONCLUSIONS**

Findings from a Before-After analysis indicate that, on average, adjusting countries with better policies grew faster two-three years after loan approval compared to poor performing countries, and that conditionality focused mostly on structural and public sector management actions. The results of the empirical model further suggest that an increase in social sector conditionality in policy-based loans tends to be strongly associated with GDP per capita growth two years after loan approval. However, conditionality in the other three policy areas does not seem to have an effect on country performance. These latter results may reflect the short time period studied. They point to the need for more focused research in specific reform areas, such as exploring the effect of conditionality addressing fiduciary and procurement systems on the quality of public financial management performance. Such focused exercises could yield more reliable or more informative results for individual reform areas than those provided by this analysis of the four broad reform areas. There is scope for further research focusing on the impact of conditionality on more specific micro reform areas.

## Annex A. Mapping Loan Conditions with Country Performance: Thematic and CPIA Categories

Thematic Classification of Loan Conditions (ALCID database)	Country Policy and Institutional Assessment (CPIA) Categories (2003 Guideline)
<p><b>Economic Management</b></p> <ul style="list-style-type: none"> <li>• Analysis of Economic Growth</li> <li>• Debt Management and Fiscal Sustainability</li> <li>• Economic Statistics, Modeling, and Forecasting</li> <li>• Macroeconomic Management</li> </ul>	<p><b>Economic Management</b></p> <ul style="list-style-type: none"> <li>• Management of Inflation and Macro. Imbalances</li> <li>• Fiscal Policy</li> <li>• Management of Public Debt</li> <li>• Management and Sustainability of the Dev. Program</li> </ul>
<p><b>Financial and Private Sector Development</b></p> <ul style="list-style-type: none"> <li>• Corporate Governance, Standards and Financial Reporting</li> <li>• Infrastructure Services for Private Sector Dev.</li> <li>• Regulation and Competition Policy</li> <li>• Small and Medium Enterprise Support</li> <li>• State Enterprise/Bank Restructuring and Privatization</li> <li>• Municipal Finance (Urban Dev.)</li> <li>• Rural Markets and Rural Finance (Rural Dev.)</li> </ul> <p><b>Trade and Integration</b></p> <ul style="list-style-type: none"> <li>• Export Development and Competitiveness</li> <li>• International Financial Architecture</li> <li>• Regional Integration</li> <li>• Technology Diffusion, Trade Facilitation, and Market Access</li> </ul> <p><b>Environment and Natural Resources Management</b></p> <ul style="list-style-type: none"> <li>• Biodiversity and Climate Change</li> <li>• Environmental Policies and Institutions</li> <li>• Land Management</li> <li>• Pollution Management and Environmental Health</li> <li>• Water Resources Management</li> </ul>	<p><b>Structural Policies</b></p> <ul style="list-style-type: none"> <li>• Trade Policy and Foreign Exchange Regime</li> <li>• Financial Stability</li> <li>• Financial Sector Depth, Efficiency and Resource Mobilization</li> <li>• Competitive Environment for the Private Sector</li> <li>• Goods and Factor Markets</li> <li>• Policies and Institutions for Environmental Sustainability</li> </ul>
<p><b>Social Protection and Risk Management</b></p> <ul style="list-style-type: none"> <li>• Natural Disaster Management</li> <li>• Poverty Strategy, Analysis, and Monitoring</li> <li>• Social Risk Coping, Mitigation, and Reduction</li> <li>• Vulnerability Assessment and Monitoring</li> <li>• Access to Urban Services for the Poor (Urban Dev.)</li> </ul> <p><b>Social Development, Gender, and Inclusion</b></p> <ul style="list-style-type: none"> <li>• Participation and Civic Engagement</li> <li>• Conflict Prevention and Post-Conflict Reconstruction</li> <li>• Gender and Indigenous Peoples</li> <li>• Social Analysis and Monitoring</li> </ul> <p><b>Human Development</b></p> <ul style="list-style-type: none"> <li>• Child Health, Nutrition and Food Security</li> <li>• HIV/AIDS and Other Communicable Diseases</li> <li>• Education for All, Education for the Knowledge Economy</li> <li>• Health System Performance</li> <li>• Population and Reproductive Health</li> <li>• Non-communicable Diseases and Injury</li> </ul>	<p><b>Policies for Social Inclusive/Equity</b></p> <ul style="list-style-type: none"> <li>• Gender</li> <li>• Equity of Public Resource Use</li> <li>• Building Human Resources</li> <li>• Social Protection and Labor</li> <li>• Monitoring and Analysis of Poverty Outcomes and Impacts</li> </ul>
<p><b>Public Sector Governance</b></p> <ul style="list-style-type: none"> <li>• Administrative and Civil Service Reform</li> <li>• Decentralization</li> <li>• Public Expenditure, Financial Management, and Procurement</li> <li>• Tax Policy and Administration</li> <li>• Other Accountability/anti-corruption</li> <li>• Municipal Governance and Institution Building (Urban Dev.)</li> <li>• Rural Policies, Services and Institutions (Rural Dev.)</li> </ul> <p><b>Rule of Law</b></p> <ul style="list-style-type: none"> <li>• Access to Law and Justice, Legal Services</li> <li>• Judicial and Other Dispute Resolution Mechanism</li> <li>• Law Reform and Legal Institutions for a Market Economy</li> <li>• Personal and Property Rights</li> </ul>	<p><b>Public Sector Management and Institutions</b></p> <ul style="list-style-type: none"> <li>• Property Rights and Rule-based Governance</li> <li>• Quality of Budgetary and Financial Management</li> <li>• Efficiency of Revenue Mobilization</li> <li>• Quality of Public Administration</li> <li>• Transparency, Accountability and Corruption in the Public Sector</li> </ul>

