UNITED NATIONS

ECLAC

ECONOMIC COMMISSION
FOR LATIN AMERICA AND
THE CARIBBEAN

JOSE ANTONIO OCAMPO
Executive Secretary

REYNALDO BAJRAJ
Deputy Executive Secretary

CEPAL

REVIEW

NUMBER 64
APRIL 1998
SANTIAGO, CHILE

OSCAR ALTIMIR
Director of the Review

EUGENIO LAHERA
Technical Secretary

UNITED NATIONS

Notes and explanation of symbols

The following symbols are used in tables in the Review:

(…)	Three dots indicate that data are not available or are not separately reported.
(—)	A dash indicates that the amount is nil or negligible.
	A blank space in a table means that the item in question is not applicable.
(-)	A minus sign indicates a deficit or decrease, unless otherwise specified.
(.)	A point is used to indicate decimals.
(/)	A slash indicates a crop year or fiscal year, e.g., 1970/1971.
(-)	Use of a hyphen between years, e.g., 1971-1973, indicates reference to the complete number of calendar years involved, including the beginning and end years.

References to "tons" mean metric tons, and to "dollars", United States dollars, unless otherwise stated.
Unless otherwise stated, references to annual rates of growth or variation signify compound annual rates.
Individual figures and percentages in tables do not necessarily add up to the corresponding totals, because of rounding.

Guidelines for contributors to *CEPAL Review*

The editorial board of the Review are always interested in encouraging the publication of articles which analyse the economic and social development of Latin America and the Caribbean. With this in mind, and in order to facilitate the presentation, consideration and publication of papers, they have prepared the following information and suggestions to serve as a guide to future contributors.

—The submission of an article assumes an undertaking by the author not to submit it simultaneously to other periodical publications.

—Papers should be submitted in Spanish, English, French or Portuguese. They will be translated into the appropriate language by ECLAC.

—Every article must be accompanied by a short summary (of about 300 words) giving a brief description of its subject matter and main conclusions. This summary will also be published on the ECLAC Home Page on the Internet.

—Papers should not be longer than 10 000 words, including the summary, notes and bibliography, if applicable, but shorter articles will also be considered.

—One copy of the original text should be submitted, accompanied by a copy on diskette (WordPerfect 5.1 format). In the absence of the latter, two printed or typed copies should be provided.

—All contributions should be accompanied by a note clearly indicating the title of the paper, the name of the author, the institution he belongs to, his nationality, and his fax and telephone numbers.

—**Footnotes should be kept to the minimum**, as should the number of tables and figures, which should not duplicate information given in the text.

—Special attention should be paid to the bibliography, which should not be excessively long. All the necessary information must be correctly stated in each case (name of the author or authors, complete title (including any subtitle), publisher, city, month and year of publication and, in the case of a series, the title and corresponding volume number or part, etc.).

—The editorial board of the *Review* reserve the right to make any necessary revision or editorial changes in the articles, including their titles.

—Authors will receive a one-year courtesy subscription to the *Review*, plus 30 offprints of their article, both in Spanish and in English, at the time of publication in each language.

CONTENTS

Institutions and growth: *can human capital* be a link?

Nauro Campos
Jeffrey B. Nugent

University of Southern California.

This paper attempts to provide a sounder link between institutions and economic growth. It does so by i) identifying those institutions which might matter the most with respect to economic performance, ii) providing a rationale as to why they might matter, and iii) confronting that rationale with some systematic empirical evidence. We postulate that the central and common characteristic of relevant institutions is that they give agents a voice, a stake in the system. By doing so, they increase the appropriability of benefits or, conversely, reduce the amount of rent-seeking. A composite index of the extent to which these institutional characteristics are attained is constructed for 19 Latin American countries for the years 1960 to 1986. Within an otherwise standard growth model, our institutional development index is shown to contribute significantly to the explanation of the variations in growth rates of per capita income across countries and over time. Some determinants of institutional development, across countries as well as decades, are also identified. In contrast to existing studies which emphasize a nexus between institutional development and per capita income growth operating through physical capital accumulation, our results suggest that a similar nexus operating through human capital formation may be stronger.

I

Introduction

On the research agenda of economics, institutions today occupy a rather similar position to that occupied by technology forty years ago. Although Abramovitz and Solow were clearly not the first economists to emphasize their importance, they were pioneers in at least two fundamental ways. First, they courageously dismissed the profession's belief that the topic should be better left to others, in this case, to engineers. Second, they understood that without an explicit and cogent attempt at quantification, there would be neither a marshalling of talent to research the topic, nor any substantial progress. They knew the profession needed some measure of its ignorance.

After three Nobel prizes, it would be difficult to find today anyone who believes that institutions should be better left to others, presumably political scientists. In the case of institutions, however, nothing is yet to be seen that is anything like the impressive marshalling of talent working on the topic, the profession's enthusiasm, and the sequence of major breakthroughs that marked the study of technological change in the 1960s. Not only does the profession still seem to be looking for the size of the residual or a measure of its ignorance, but also the links between institutions and economic growth remain very much underexplored. As a result, we are left with many unanswered questions, among them: Which institutions matter most for economic growth, and why? Can these relevant institutions be measured, and if so, how? Can their effect on economic growth be demonstrated? What are the determinants of these institutions? What is the link between institutions and economic growth? Can this link be human capital?

This paper attempts to contribute at least modestly to answering these important questions, on the basis of the Latin American experience. It begins, in section II, by surveying the characteristics of institutions deemed important to economic growth. It then describes an essential, central and common characteristic of growth-promoting institutions: namely, that they give agents a voice, a stake in the system, thereby increasing the appropriability of benefits or, conversely, reducing the amount of rent-seeking. More specifically, we identify the importance of an institution for economic development with the degree to which it helps to ensure that the tastes, needs and preferences of the citizenry are reflected in i) the organization of the State, ii) the functioning of the government, and iii) the formulation and implementation of public policies.

Based on this notion, in section III we construct a comparative index of institutional development (CIID) for 19 Latin American countries for the period from 1960 to 1986. In section IV we incorporate our CIID measure into an otherwise standard model of economic growth. Since the CIID would seem to be potentially endogenous, section V explores its determinants and re-estimates the growth model using instruments that represent the CIID rather than the index itself. Taken together, our results demonstrate the significance of the CIID in explaining economic performance and, moreover, they point to a strong and potentially important nexus between institutional development, human capital and growth in per capita income. Finally, section VI presents our conclusions.

Why should the experience of the 19 Latin American countries used in this paper be of relevance in this context? There are several important reasons behind this choice. First, in no other part of the world

□ The authors express their appreciation to the Inter-University Consortium for Political and Social Research (ICPSR) for supplying much of the data used in this study and to the following individuals for their many useful comments on earlier versions of the paper: Irma Adelman, Jean-Marie Baland, Kaushik Basu, Hans Brinkman, Hamid Davoodi, Richard A. Easterlin, William Easterly, João Carlos Ferraz, Adolfo Figueroa, Giuseppe Iarossi, Steve Knack, Michael Lipton, Norman Loayza, Florencio López de Silanes, Abraham Lowenthal, Paolo Mauro, James McGuire, Hamid Mohtadi, Christian Morrisson, Vai-Lam Mui, Mustapha Nabli, Moisés Naím, Mancur Olson, Manuel Pastor, Jean-Philippe Platteau, George Psacharopoulos, Lant Pritchett, Martin Ravallion, James Robinson, Dani Rodrik, William Savedoff, Christopher Scott, Gerald Scully, Erik Thorbecke, Douglas Walker, Eduardo Wiesner, three anonymous referees, and other participants at the Development Workshops in Namur, Belgium, the United Nations Headquarters, the University of Southern California, and the First Annual Meeting of the Latin American and Caribbean Economic Association (Mexico City). While many of the suggestions have been implemented, some have not. Hence, in no way can these reviewers be held responsible for remaining errors of commission or omission.

have the shifts in development strategy and the attendant structural reforms been as striking. Second, since sustaining these reforms appears to remain a more serious challenge in Latin America, success in extending and sustaining them would seem to require an especially delicate balance with respect to the role of the State. While in some respects the State needs to be strengthened to take on new tasks (Edwards, 1995), in other respects its role may have to be diminished and changed so as to allow greater play for the market (Wiesner, 1994; Naím, 1995). Third, among the developing regions, the data required for measuring and endogenizing institutional development are only available for Latin America. Given our interest in examining human capital as a possible link between institutions and economic growth, it is relevant to note that it is in Latin America that it has been suggested that institutional development can contribute positively to economic development only if it succeeds in realizing more fully the region's human capital potential (Londoño, 1995). Last but by no means least, it is in Latin America, with its relatively high level of resource endowments but its very considerable growth rate differences from one decade to another (with especially disappointing growth rates since the late 1970s), that the case for examining the role of institutions in explaining growth rate differences would seem to be of paramount importance.

II

Which institutions matter for economic growth, and why?

Although very substantial progress has been made in explaining both the determinants and effects of institutions at the microeconomic level (Lin and Nugent, 1995) and variations in growth rates across countries (Barro and Sala-i-Martin, 1995), much less progress has been made in explaining the relationship between institutions and economic growth.[1] Five features of institutional analysis would seem responsible for limitations in this respect: i) the persistent difficulty of operationalizing the term "institution" (Ménard, 1995); ii) as suggested by Bardhan (1996, p. 1), the insufficient attention given to the identification of "which institutions affect the process of development and *how*"; iii) the pessimistic tone of much of the literature, with its emphasis on "path dependency" and "institutional impediments" to development; iv)

Each of these limiting features and ways of overcoming them will be considered in turn. First, we feel that the much-belaboured distinction between institutions and organizations has been over-emphasized and should be softened.[2] At the same time, however, we believe that institutions need to be more strongly distinguished from policies and policy strategies. Indeed, it may be hypothesized that differences in institutions can explain why the effectiveness of a common policy adopted to overcome the same problems in two different countries may vary consider-