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LONG-RUN DETERMINANTS OF ECONOMIC GROWTH IN SOUTH AMERICA

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Based on an annual historical database for South American countries from 1960 to 2008, we develop an empirical study to gain insight into the long-run determinants of economic growth using a two-equation framework. A system of two panel data models is estimated to identify the growth determinants and their connection with foreign direct investment. We find that economic growth is driven most strongly by physical and human capital accumulation, as well as by sectorial exports, and that institutions and policy have a substantial impact on economic growth and investment. Macroeconomic disturbances have a significant detrimental effect on long-run growth. Trade openness correlates positively with foreign investment, indicating that relatively closed countries stand to benefit most from opening up their economies. Our division of the sample into two sub-periods, 1960–1980 and 1981–2008, indicates a structural change.

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I. Introduction

The primary purpose of this paper is to provide a quantitative assessment of the long-run determinants for South American economic growth.[1] The empirical study is based on a cross-country regression framework where economic growth is explained primarily by: (a) proximate and measurable influences, captured in the growth accounts, and (b) potential influences (i.e., institutional influences and macroeconomic distortions), which are more difficult to measure. The econometric work has two innovative features. First, it benefits from a long-term database spanning almost fifty years, which enables construction of a rich panel data set that includes a large number of growth fundamentals for the period 1960–2008.[2] Second, to test the temporal instability of the growth determinants, we divide the sample into two sub-periods: 1960–1980 and 1981–2008.

By testing the effect of foreign direct investment (FDI) on growth, our research fills a gap in the empirical literature for developing economies. The recent wave of global liberalization in South America triggered the phenomenon of investment-led growth by lowering the relative prices of traded goods and services and improving resource allocation in more open economies. To extend analysis of this concept, we must focus on the growth model developed by Baldwin and Seghezza (1996), which shows that trade openness, can affect return on investment by influencing the capital rental rate and its cost, the main factors influencing growth rates.

Our empirical approach follows this line of inquiry using a two-equation framework that relates economic growth and foreign investment. The first model estimates the effects of a group of fundamental variables with other exogenous factors of economic growth. The second model re-examines the nature of the investment-growth channel, providing empirical insight by analyzing explanatory variables that affect capital inflows in South American economies. Both models are necessary because the measure of openness sometimes fails to explain growth.

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[1] Our sample covers the ten largest South American countries: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, and Venezuela. In 2008, these countries had a combined population of 382 million, equivalent to 99.3% of the region's total population and almost the 99.9% of its GDP. We collected a dataset for these countries that incorporates more than 400 annual observations over the last five decades, covering a wide range of political systems, institutions, exchange rates, and historical circumstances.

[2] Choice of period was largely dictated by data availability. Great effort was made to include a large sample of the region's less developed countries—Bolivia, Ecuador, and Paraguay.