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## Editors' Summary

**T**his volume of *Economía* consists of four papers. The first paper discusses the changes in the transmission mechanisms of international business cycles between China and Latin America; the second evaluates the impact of an enhancing program in Brazil's education system; the third studies micro-pricing dynamics in Uruguay using a unique data set collected by the department of commerce; and the last paper studies how industries should adapt to climate change in emerging markets.

The first paper, "China's Emergence in the World Economy and Business Cycles in Latin America" by Ambrogio Cesa-Bianchi, M. Hashem Pesaran, Alessandro Rebucci, and TengTeng Xu, studies how the transmission mechanisms from China's gross domestic product (GDP) shocks to Latin America have changed since the 1990s. Most casual observers would agree that the relationship between Latin America and China has tightened. This paper is the first to actually present evidence of this strengthening. The results are fascinating. The authors find that the transmission to Latin America is three times larger now than before the 1990s, while the transmission to other emerging Asian countries has not changed. The authors go beyond measuring the transmission mechanisms and study the channel of propagation. They find that the most important reason behind the increase in the economic proximity between China and Latin America is the effect that China has had on the United States, rather than a bolstering of bilateral relationships. This indirect trade channel has interesting policy implications, in the sense that little can be done unilaterally. The authors present a very clear methodology for measuring the international transmission mechanisms, and they offer policy discussions for the region.

The recent availability of more detailed price data—usually the raw data used to construct the consumer price index (CPI) in a given country—has generated an explosion in the literature of studies on the dynamics of price setting. What is the average duration of price stickiness? What are

the theories behind it? Are menu-cost or time-dependent models more appropriate? The second paper in our volume, “Retail Price Setting in Uruguay,” by Fernando Borraz and Leandro Zipitúa, explores some of these issues using a new microeconomic data set with a daily frequency compiled by the department of commerce in Uruguay. The data cover more than 300 grocery stores all over the country and 155 products. This unique data set allows the paper to uncover six important facts: the median duration of prices is two and a half months; there is no evidence of a seasonal pattern; the frequency of price adjustment is only correlated with expected inflation for one product category; the probability of a price change on the first day of the month is nine times higher than on any another day; the probability of a price change is not constant over time; and price changes are highly synchronized in the data. These six stylized facts shed new light on the pricing dynamics in emerging markets—an area that has largely been disregarded by the academic literature. The daily aspect of the data and the coverage across the whole country are two very interesting attributes of the data that make the data set suitable for addressing the open questions in the literature.

The third paper is “Adapting Natural-Resource Enterprises under Global Warming in South America: A Mixed Logit Analysis” by S. Niggol Seo. As Seo stresses in his paper, global warming is happening, and it is likely to continue to accelerate in the future. The question, then, is how countries will adjust their production capacity. Which sectors will benefit, and which ones will be hurt? These are extremely important questions for policymakers and practitioners in emerging market countries, many of which are located near the equator. Seo’s paper provides a thorough assessment of the possibilities in the agricultural sector. A key strength of the paper is its integrated approach to the adaptation problem. Seo models firms with different natural resource intensities, including crops, livestock, and forests and both specialized and diversified firms. The empirical analysis is based on rural surveys. The surveys are collected from 2,300 Latin American rural households in seven countries. Using a mixed logit model, the paper estimates the different transition probabilities across all the studied sectors. Household choices “are explained by climate factors, after controlling for other factors such as soils, market access, household characteristics, and country-specific effects.” The paper finds strong switching behavior. In particular, “a slightly warmer temperature by 1° Celsius would decrease crops-only enterprises by 4 percent and

crops-forests choices slightly, whereas livestock-only ventures would increase by more than 3 percent.” This implies that global warming will produce massive reallocation in the region—a cost of global warming that has been underestimated and in most cases completely disregarded.

The fourth paper in this volume is entitled “Evaluating the Impact of the Brazilian Public School Math Olympics on the Quality of Education,” by Roberta Loboda Biondi, Lígia Vasconcellos, and Naercio Menezes-Filho. Improving the quality of education is growth enhancing, yet Latin American students generally perform poorly on international tests. It has been argued that international competitions—such as Math Olympics—can be used to increase interest in the topics and to improve the overall quality of education. In the United States, this objective is explicit in the policies of the Department of Education. This paper studies the impact of one of these math programs in Brazil, OBMEP, which is exclusively aimed at public schools. The authors find that participating in the math competition improves the quality of education of the schools, as measured by the test scores. Not only did the students that participated improve their scores, but the whole distribution shifted favorably. In other words, every student, on average, saw an improvement in performance. Finally, they show that the benefits are larger for schools with repeated participation. Improving the quality of education in Latin America is one of the most crucial development policies: Teachers need to improve, infrastructure requires expansion, curricula must be modernized, students need proper incentives to study, and so on. This paper explores how a simple competition can have positive effects in several of these dimensions.

*Economía* is the result of a collaborative effort, and as usual, thanks are due to many people who made that process successful. Associate editors worked hard to guide papers to publication, members of the panel contributed valuable insights and spirited discussions, and *Economía* staff, in particular Roberto Bernal, helped put it all together. Without his steady and abundant effort, this volume would not have come to fruition. These papers were presented at two of our meetings: Medellín, Colombia, November 11–12, 2010, and Washington, D.C., May 5–6, 2011. We also are thankful to the World Bank and the Inter-American Development Bank for allowing us to use their facilities and coordinating the logistics of our meetings.

