

Innovation in Latin America

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What kind of innovation is occurring in Latin America and the Caribbean? How does innovation there make people better off? And what could be done to increase both the rate of innovation and its contribution to well-being? These are the fundamental questions we need to answer if we are to understand better wealth creation in Latin America.

The OECD more or less wrote the book on innovation – literally: the widely-used “Oslo Manual” establishes the standards for defining, measuring and monitoring innovative activity in the economy. Innovation, as defined in the “Oslo Manual”, can mean several things, but all have to do with putting a new idea into practice. That idea could be a new or significantly improved good or service; but it could also be a new way of marketing goods and services, or of organizing the work place.

But innovation, by its very nature, is hard to pin down; it doesn’t stand still. The way ideas are put into practice evolves as the global economy evolves. And, just as important, the way ideas are put into practice varies from one *place* to another. The innovation economy in Latin America or other emerging markets surely differs in many respects from the innovation economy in high-income OECD countries.

Now more than ever it is critical to increase our understanding of the determinants of economic growth in the Latin American region. After decades of sluggish growth, the region has recently enjoyed several years of economic bonanza – and now, in the current climate of global financial crisis, seems set to suffer disappointing growth for a time. How does innovation contribute to growth in the region – and how could it contribute more?

More important, perhaps, and subtly distinct from the motors of growth are the motors of development: the improvement of *well-being*, which is not the same thing as growth. In particular, in a region still marked by high rates of poverty, income inequality and social exclusion, a pressing question is what the innovation economy in Latin America does – or could do – to make life better at the bottom of the social pyramid. Answering this question will require looking closely at the innovations pioneered by people of modest means – in the informal economy, in small and medium enterprises, in civil society, even in the relationships between citizens and states.

Understanding the connections between innovation, on the one hand, and growth and development, on the other, requires us to understand the differences in the working of the “innovation ecosystem” in high-income and middle-income countries. There is a “high-income” innovation ecosystem, peopled by men and women in white lab coats, patent officers and budget directors deciding upon R&D spending. But there is also a “middle-income” innovation ecosystem, in which cost-saving, productivity-enhancing new ideas are put into practice, but not always, or even often, in laboratories or patent offices or universities. Using a yardstick developed for the high-income innovation ecosystem (based, for example, on the number of patents, or formal R&D activity) might fail to detect the innovative activity going on in the middle-income innovation ecosystem.

In truth, of course, many Latin American countries exhibit characteristics of *both* kinds of innovation ecosystems, and over time will probably make a transition from the middle-income to

the high-income model. Across Latin America, moreover, the relative preponderance of one or the other model varies from country to country.

New yardsticks, and new concepts, are needed to monitor and analyse innovation in Latin America and other middle-income ecosystems. To that end, a useful tool would be an Innovation Index to measure the inputs and the outputs of the innovation ecosystem.¹ The goal of such an index is to produce a transparent and easily communicated measure of innovation in Latin America that will influence decision-makers in the public and private sectors, in Latin America and elsewhere. The inputs are the features that make an economy innovation-prone: institutions and the policy environment; human capacity; infrastructure, particularly in information and communications technology; the business climate, including the quality of capital markets; technological sophistication. The outputs of a country's innovation ecosystem include knowledge, competitiveness and wealth creation.

One way to understand the differences between high- and middle-income innovation ecosystems is that the relationship between inputs and outputs is different in both settings. In Latin America, it may be that innovation occurs precisely *because* the factors that favour innovation in high-income economies – large consumer demand, good transport infrastructure, an educated work force – are in short supply. Much innovation in developing economies takes the form of getting around these very bottlenecks. The spread and impact of telecommunications in much of the developing world can be seen in exactly this light. Mobile telephony in particular substituted for the absence of good land-line telephony, and at times even substituted for good transport or financial infrastructure. In some sense, the countries most likely to witness explosive growth of mobile telephony are those with the “worst” indicators of infrastructure.

There are other differences between high- and middle-income innovation ecosystems. Consider the prevalence of research scientists, which might favour innovation in high-income countries. If much innovative activity in developing countries takes the form of adapting new ideas developed in high-income countries – sometimes in ways that are radically different from their intended use – then it is not clear that more scientists will lead to more innovation: what a middle-income country needs is more “idea adapters”.

The job of analysts of innovation in Latin America – our job – is to provide tools for more accurate monitoring of the relative success of innovation ecosystems, and of the transition from one model to another. This will, in turn, provide another key to unlock the puzzle of wealth creation in Latin America.

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The views expressed in this article are those of the author and not necessarily those of the World Economic Forum.

OECD/EU/Eurostat (2005), *Guidelines for Collecting and Interpreting Innovation Data, Oslo Manual*, 3rd Edition, Paris.

World Economic Forum/Insead (2007), *The Global Information Technology Report 2007-2008: Fostering Innovation through Networked Readiness*, Palgrave Macmillan, Basingstoke.

¹ The OECD Development Centre and Insead, with the support of the Telefónica Foundation, have begun work on developing and analysing an Innovation Index for Latin America, along the lines described in this note. Our model for the Report and the Index is the annual World Economic Forum-Insead *Global Information Technology Report*, which computes a multidimensional country-level index.