

Economic Growth and Restructuring through Trade and FDI

Costa Rican experiences of interest to Cuba

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This paper solely reflects the opinions of the author.

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Development is the result of many policies and national characteristics regarding economic and extra-economic issues. No country in Latin America is developed or even close to it, a stark reminder that the job is hard and largely pending. But the region is very heterogeneous, not only in terms of income—where there is a 15 to 1 difference between the richest and poorest nation—but also in terms of relative strengths and achievements. Several Latin American countries display, along with salient policy failures, some successes worthy of study and, perhaps, emulation.

The purpose of this paper is to discuss one of those examples of progress—namely, the internationalization of the Costa Rican economy after economic reform beginning in the mid-1980s—and the extent to which it represents a useful reference when discussing policies aimed at the growth prospects of another nation in the region: Cuba.¹

Over the last 30 years, Costa Rica has implemented, in a fairly consistent manner, significant reform in its trade, foreign investment and other related policy areas. This yielded some valuable results in terms of the volume and composition of its exports, the sectorial composition of its economy, and the volume and nature of the foreign direct investment (FDI) it attracts. Overall, the nation has made some progress over the years; for example, it ranks second in Latin America in terms of cumulative output growth (PPP) in the three decades after 1980, and first in the proportional fall of its extreme poverty rates.² Costa Rican progress can be largely attributed to this trade and investment performance.

1. Introduction: Cuba and Costa Rica

Some of the strengths on which Costa Rica built this successful trade policy strategy are similar to the most salient advantages of the Cuban economy, in particular the relative abundance of human capital. As such, it is worth considering the applicability of Costa

¹ For comprehensive—albeit old— surveys of the academic literature on the effect of trade liberalization on income and growth, the classic reference is Edwards (1993, 1998). See the introduction of Trejos and Ferreira (2006, 2012) for some more recent references. For an excellent and modern summary of the more applied literature, see Blyde et.al (2013). In the context of this project, and specifically directed at the Cuban case, see Feinberg (2012).

² According to the World Development Indicators, the fraction of the Costa Rican population living under the extreme poverty line (\$1.25 per person per day) fell from 9.2 percent in the early 1990s to 2.2 percent in the mid-2000s. The fall regarding the alternative poverty line (\$2 per person per day) fell from 18.8 percent to 6.4 percent. Proportionally, no Latin country achieved a larger fall in the former, and only Chile in the latter.

Rica's policy experience to Cuba. Costa Rica's poor showing in other areas, such as infrastructure, only enhances the interest in this case.³

Costa Rica and Cuba make an interesting comparative case for other reasons, besides the fact that both have made investments in education and healthcare—which far exceed expectations given their (similar) levels of income and development:

- Both nations place a high value on the role of the state in promoting more equity in income distribution.⁴
- While Costa Rica has moved away from its past leanings toward central planning, the country has not shared the privatization impetus of the rest of the region and still holds a very large fraction of its economy in the form of state-owned enterprises.⁵ In other words, some long-held aspects of the Costa Rican economy,

⁵ In Costa Rica, the government still has a legal monopoly on fuel and fuel distribution, electricity distribution, water, alcohol production and a few other activities. In other activities, the legal monopoly has been broken, but the government still keeps dominant companies with overwhelming market share in telecoms, power generation and insurance, and over 50 percent market share in banking.

³ Most analysts agree on several policy areas where improvement has been slow and irregular. Reform worked toward macroeconomic stabilization, a reduction of the role of the state in the economy and, especially, internationalization. In other areas, policy has been erratic and government has lost effectiveness. The problems—financial and administrative—in its capability to execute infrastructure projects in transportation and energy, the inability to cope with some safety and security issues, the perception of corruption in government officials by the general population, recent concerns about the long-term financial sustainability of the current pension schemes and healthcare institutions and the slow pace with which the formal educational system has adapted to new challenges, needs and opportunities, are all examples of policy areas where Costa Rica has not been a success.

⁴ For instance, according to UNDP data, in 2009 Costa Rican household income derived from the market displayed a far from enviable 0.452 Gini coefficient, and a 31.2 to 1 ratio between the top and bottom deciles. However, through social services, transfers and other policies, the corresponding numbers after the intervention of government transform into net household incomes with a far better 0.324 Gini and a 6.9 ratio. Other UNDP data show that, despite the high disparity in pre-government market incomes, the heads of household that can be described as "Upper and middle class, owners, experts, professionals and management" has grown from 28.5 percent of the labor force in 1987, to 32.3 percent in 1998, to 40.9 percent in 2008, clearly a positive trend. Some other social indicators, on the other hand, have not improved in the same period. Besides direct redistributive policies through the transfer system, the Costa Rican state mostly seeks equity through the provision of universal healthcare and education, the funding for the housing of the poor, a social security (solidary pensions), and the protection of worker's rights. Health efforts are singularly important, as the country has -for instance- the second highest life expectancy in the hemisphere (second after, precisely, Cuba). According to the last census, the proportion of households in "precario" (irregular property rights over their dwelling) has fallen to 0.8%, the number in "tugurio" (dwellings of unacceptable quality or characteristics that do not satisfy the legal requirements) to 0.5%, and adding those in "cuarterías" (rented rooms), it reaches 0.7%. Before the efforts of the housing funding system, these numbers were in double digits.

as compared to other Latin American examples, would be more familiar to the contemporary Cuban analyst.

• Minerals and fossil energy resources play a small role in Cuba's resource endowment, as in Costa Rica but unlike most of the region. This implies that both countries must confront their growth challenges while facing deteriorating terms of trade; both growth and significant change in the industrial composition of output and exports are necessary in order to move toward their development objectives. Human capital is at the forefront of the strategy. Employment must improve in quantity and quality, along with the creation of economic conditions that reduce incentives to emigrate. These are parallel challenges on which Costa Rica has done well, largely due to its export performance and ability to attract the right kind of FDI.

Before the mid-1980s, a closed Costa Rican economy exported barely \$1 billion annually in goods and services. These exports were largely concentrated on three undifferentiated and unprocessed agricultural commodities (coffee, bananas and sugar), and sales from the import-substitution manufacturing base to a captive regional common market. Since then, after significant trade liberalization and further promotion policies, the volume of exports has multiplied by 18. More to the point, exports have also diversified so that those original commodities represent less than 8 percent of the total, no other product represents a similar concentration, and 3000 different lines of goods and services are exported. Further, with diversification has come sophistication; the prevalence of differentiated products and services —mostly those in which the availability of human capital, scientific

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⁶ Despite the prominence of electronic and computing equipment (about \$2 billion) and medical equipment (about \$1.2 billion), these categories are in fact composites of a variety of differentiated goods and companies and their weight relative to total exports is far below the historical levels of concentration. For instance, back in 1982 the four traditional commodities represented 61.4 percent of the exports of goods, with coffee alone amounting to 27.2 percent.

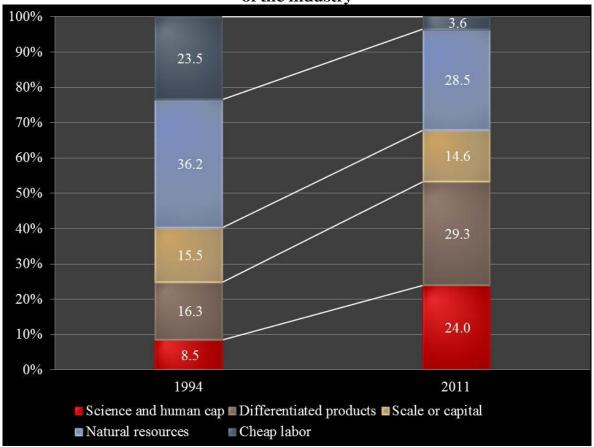
⁷ Service exports are an increasing share of total Costa Rican exports, now approaching a quarter of the total gross exported value (and, since service activities tend to be very vertically integrated, they represent an even higher share of exported value added). The originally successful service export industry since the late-1980s was, of course, tourism; Costa Rica now receives nearly \$2 billion in net tourism revenues and well over 1 million tourists. This is, of course, very important in a country of 4.5 million people and approaching \$45 billion GDP. Costa Rican tourism is very well positioned in a high-value niche (ecological and adventure travel), with enviable levels of service, duration of stays, repetition of stays, expenditures per day and other similar industry indicators. More recently, there has been a fast growth in business process operations: IT and software development, outsourcing, call centers and, professional and management services of increasing complexity and value. After 2010, these services have made a net contribution to the balance of payments exceeding that of tourism; unfortunately, there are no statistics about gross exported value, employment levels, remuneration, or the like.

and technical abilities can be utilized—and the capacity to meet quality standards are the key competitive characteristics. As Umaña et.al have documented, nearly all manufacturing exports by the late 1980s consisted of product lines typically prevalent in either very poor or very closed economies. Since then, the country has shifted the composition of production—with exports as a driver—towards the kind of product lines that one would associate with developed nations. An updated version of their analysis is presented in the next figure.⁸

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⁸ Umaña et.al group manufacturing products in five categories, depending on whether the most important competitive driver in the industry is the availability of 1) cheap unqualified labor, 2) a key natural resources to process, 3) a captive market or specific capital good, 4) the capability to differentiate and add quality or 5) the availability of scientific and technical personnel. Manufacturing exports in the last two categories—which one could associate with the manufacturing supply of a developed country—grew from nearly zero before reform, to 25 percent by 1994 (when total manufacture exports reached \$1.6 billion) and an impressive 53% = percent by 2011 (when the total reached \$8 billion). Meanwhile, the first two categories—the more typical manufacturing supply of a poor economy—are now below 32 percent. Similar changes have occurred in service exports, where tourism and call centers are giving way to much more complex business processes. Lall et al (2011) create a measurement technique for what they call "sophistication of output", apply it cross-country, and come to similar results in the case of Costa Rica. To the extent that the sectorial makeup of the economy relates to development—say, because the reward structure of antiquated industries or their degree of positive externalities falls short of new activities with more sophisticated technologies and better resource requirements—this is the kind of change we would like to see in most of Latin America, and in particular in Cuba.

Composition of manufacturing exports, sorted by the key competitive driver of the industry



Source: PROCOMER

Some of the previous results would not have been possible if the country had not managed to attract significant FDI. Multinational corporations provide capital that enhances domestic labor productivity without using funds from the domestic savings pool and import new technology to the country, improving current productivity and transferring knowledge, best practices and familiarity with global industry to workers or domestic suppliers. More importantly, FDI provides a different kind of "market access" as it is often the case that a country possesses the labor and other resources that enable it to competitively produce a particular good or service, but lacks organizational capability of an entrepreneur or company. Costa Rica's inflows of FDI have grown rapidly, reaching a record level of \$2.3 billion in 2012. Even if it no longer has the highest per-capita levels of jobs, income, exports or implied change in output composition and productivity, Costa Rica arguably has the most successful FDI receipts in the region, since almost all of this investment is in advanced manufacturing and services (which carry smaller price tags

than, say, infrastructure projects or mining investments, yet have larger transformative potential).9

Our thesis is that some aspects of trade and investment experience in Costa Rica, particularly in terms of policies and strategies, are applicable to Cuba. To that end, the rest of this paper proceeds as follows. The next section describes the key strategic policies that allowed the above-mentioned performance in exports and FDI in Costa Rica, along with the reasons why some of those choices could be relevant and applicable to Cuba. Section 3 discusses some errors that Costa Rica may have committed along the way and that may be avoided in the Cuban case, while Section 4 delves on the key differences between the Costa Rican strategic starting point in the mid-1980s, and the Cuban situation today. Finally, Section 5 concludes, pondering what is reasonable to expect and what cannot be achieved from a strategy like this, especially in the absence of complementary action in other areas of economic policy.

2. The Costa Rican trade and investment strategy

A large number of policy choices, social decisions and intangibles underlie the Costa Rican performance in exports and FDI attraction. Here, we attempt to organize them around the following categories.

EDUCATION AND HUMAN CAPITAL

The key competitive advantage for Costa Rican exports and, more saliently, for Costa Rica's FDI inflows, is the remarkable productivity of the Costa Rican labor force and, in particular, its comparatively high levels of training and education. For over a century, Costa Rica has spent significantly in public education, training, and healthcare. Enrollment rates are high: by constitutional mandate, education expenditure cannot fall below 6% percent of GDP and scores on internationally comparable tests (like PISA) are slightly better than those of other developing countries of similar income. Traditional academic education is complemented by technical education (in high schools) and a job training system, which tends to be in tune with the specific industry needs. Life expectancy is very high, with the entire population covered by an efficient national health care system.

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⁹ FDI comes in many forms: green-field, when the investing company is creating an operation from scratch; acquisitions, when it is acquiring a running enterprise; real estate, obviously when it is purchasing domestic land and its resources, perhaps to develop them or infrastructure concessions, when it is forming a domestic company that builds or operates an asset for the state, etc. In terms of value, mining acquisitions and infrastructure concessions often carry the larger price tags.

Costa Rica was already relatively well endowed in human capital before economic reform, but its economy demanded little of that resource. Manufacturing and services catered to a closed and underdeveloped domestic market, and very simple unprocessed agricultural products for export require little training and technical sophistication in their production and management. The state bureaucracy was a very large part of demand for human capital. This means that, as reform has progressed, the entry of qualified labor into the export segment of the economy has been facilitated not only by the *flow* of entrants to the job market, but also by a *stock* of older qualified workers already in the system who shift from jobs where their abilities are underutilized.

Costa Rican blue collar workers, in general, have a strong and well-earned reputation for productivity; they seem to possess strong "soft-skills" that enable them to operate well in demanding markets or as part of global corporations. These skills include the ability to work in teams, learn from abstract content (as opposed to only direct experience), adapt and learn as they progress, communicate effectively, and remain disciplined and rebelliously creative.¹⁰

Consequentially, a more open Costa Rican economy has proven a competitive export location for products, services and niches in the market that demand high technical standards and specialized knowledge. In a Hecksher-Ohlin sense, its comparative advantage lies in products that use human capital intensively. Furthermore, the nature of the labor market has been changed by the emergence and entry of national and international companies that produce those products for export. Because human capital abundance is hard to fake or substitute, the position in the market of those companies and products is strong.

OPENNESS TO TRADE

A country that is closed for imports is closed for exports. This is a well-argued fact in basic economic theory. When an economy is closed to imports, the resulting artificial profitability of the protected sectors aimed at the domestic market diverts resources that otherwise would have been allocated to export activities. Furthermore, domestic prices of tradable intermediate inputs will be higher if the market is protected, raising costs and

 10 See Arce et al (2012) for a description of the surveys and measurements available to assess the Costa Rican historical strength in human capital, as well as the current challenges being faced by its educational system, which are detailed in the next chapter.

creating an anti-export bias that drains the competitiveness of the final, exportable product.

In Costa Rica, unilateral trade liberalization came quickly during the 1980s. Early in the decade, as in the previous two or three decades, tariffs averaged over 100 percent, including prohibitive rates for most products. By the mid-1980s tariff rates began to steadily fall, with the average at 85 percent, reaching reaching 6 percent in 2002 and only 2 percent today. This means that for the overwhelming majority of products, producers for the domestic market face international competition. This has created a competitive pressure that helps raise productivity, allowing consumers to buy and producers to source their inputs at lower prices. It has also allowed, in most industries, a base on which to build export growth.

MARKET ACCESS

Costa Rica belongs to the Central American Common Market (CACM), an integration effort which has been fairly successful in generating trade. Established in the late 1950s, CACM was initially intended to be a mechanism to enlarge the domestic market and, thus, properly implemented an import substitution strategy. As import substitution came to an end and these economies opened to global trade, the regional market lost importance. Recently, however, the market has grown quite dramatically, representing as much as in \$11 billion of intraregional trade in 2012. Now its driver is not the common external barrier, but rather the geographic proximity and the complementarity of these economies— so it makes sense for companies to see the region, rather than a single country, as the "domestic market." The integration effort is quite mature—there is a common external tariff on most products; free intra-regional trade on all but one good (sugar); customs legislation, regulation, registries, sanitary and phyto-sanitary protection; coordinated technical norms; and regionally-negotiated block trade agreements with several large parties.

Preferential market access is enjoyed not only for exports to the neighbors, but also for markets representing over 90 percent of non-oil trade. In particular, Costa Rica has negotiated free trade agreements, on its own and as part of CACM, with its three largest trading partners (the United States, the European Union and China), other developed nations (Canada, Singapore), other immediate neighbors (CARICOM, Mexico, Panama) and other countries in the hemisphere (Peru, Colombia and Chile). Therefore, Costa Rican

products enter those markets paying lower tariffs and confronting fewer non-tariff barriers than their more relevant competitors, like Asian manufactured products or South American tropical agriculture. Furthermore, these agreements provide a binding legal basis for trade and investment. Since Costa Rica is the "small" partner in most of these relationships, it tends to do better when there is a binding legal basis, rather than informal interaction.

EXCHANGE RATE AND CURRENCY-RELATED POLICIES

Management of the exchange rate is perhaps the most important macroeconomic measure affecting export growth. On the one hand, the exchange rate level determines the profitability of exports, since a local company would mostly face costs in the domestic currency and obtain revenues that are linked to foreign currency, so the relative value of costs to revenues—that is, the profit rate—would be proportional to the exchange rate.

On the other hand, the volatility of the exchange rate is also important. It adds significant risks to production for export since it introduces a variable wedge between the units in which costs are measured in the present and the units in which revenues are measured in the future. Export activity typically carries some additional risks as compared to normal domestic production, including international logistics, international marketing, performance of foreign economies, etc. As such, it is clear that adding risk to the proposition of exports does very serious damage to growth prospects.

Some countries have chosen to intervene in the currency market in order to undervalue the local money, hence pushing their exports growth strategy. Perhaps the clearest example of this is China. Although it is not the most desirable of options for other objectives, like reducing inflation or keeping the value of domestic incomes, it is a tempting option to push export competitiveness with such a simple instrument.

Other countries in Latin America do not necessarily push down the value of their currency, but rather try to compensate market forces. This is the case of exporters of raw materials who are enjoying unusually good terms of trade, but whose non-commodity exports are affected by the "Dutch disease." This is also true of countries, such as Costa Rica, facing significant influx of capital due to the current distortions in global interest rates and financial markets.

Costa Rica aggressively managed its exchange rate between 1985 and 2006 by keeping the real exchange rate nearly constant with the purpose of increasing the competitiveness of its exports. The actual policy was to make very small daily adjustments to the nominal fixed exchange rate, which were pre-announced and calibrated to equal the difference between domestic and international inflation rates.

The original purpose of the policy was to simply to take the real exchange rate variance out of the equation, but as time progressed and productivity growth (especially in the export sectors) exceeded that experienced by trading partners the exchange rate level was arguably distorted towards undervaluation, further pushing exports. The consequences of this are studied in the next chapter.

INCENTIVES

Back in the mid-1980s, when Costa Rica's push towards export promotion started, one of the key instruments for export promotion was a subsidy known as a *Certificado de Ahorro Tributario* (CAT). This certificate was an asset tradable in the financial market which could be used (by the recipient or the purchaser) as a credit at tax-payment time. Exporters would be issued a CAT worth 15 percent of the gross value whenever they shipped a new product (meaning anything but the original four traditional agricultural exports) to a new market (meaning not Central America) .

Blunt as this instrument was—in the sense that some recipients of the incentive probably were already profitable without it, others were in the business only to get the incentive, and still others easily found ways to corrupt the system—it did compensate the initial entrepreneurs (at the time, mostly local) who entered export businesses in new lines for the first time. Entry was risky and involved a lot of previously unmeasured costs (figuring out the true nature of the international market, organizing international logistics, assuming new risks, etc.) that were not present when producing for the domestic market.

In other sectors—in particular, in tourism—similar incentives and subsidies were applied, at least in the early stages of the growth process. With a better design, they not only targeted entry into the activity, but also linked to performance indicators and the qualitative evolution of the industry.

It is hard to argue that the CAT was not effective in inducing some eventual exporters into the market—just like it is easy to imagine, at least in theory, a better system of incentives. Today, something like this would be legally untenable before the WTO and politically impossible to justify. CATs lasted for nearly a decade, until the late-1990s, when it became clear that they were unnecessary, unforgivably expensive and a large source of corruption. Nevertheless, in other places where there has been little room for entrepreneurship and the initial risks associated with entry into export activities would be large, something like this incentive may play a role.

FREE TRADE ZONE REGIME

Another intervention, considered by some a subsidy, is the existence of a free trade zone (FTZ) regime. In the case of Costa Rica, this is less related with government-run locations and serves more as an alternative legal/fiscal regime in which companies can choose to participate.¹¹

A company may enter this regime whether it is physically located in a privately-owned, industrial park designed for this purpose or in a stand-alone location. To qualify for the regime, the company must meet certain conditions and subject itself to strong controls and measurements.

In the first version of the regime (the law that existed until 2007) the main requirement for an FTZ company was a performance requirement: that it would export a certain percentage of its output. In exchange, the main concession was the exemption from certain taxes (including taxes on profits) for a period typically lasting 15 years, renewable under some extreme conditions. Instead, companies paid a much lower "canon" for the space and services occupied. Companies were also allowed to bring in imported inputs and capital goods free of tariffs through an expedited process significantly simpler than the ordinary import-export process. In the current version of the law (passed through congress in 2007) the tax exemption is no longer total—although FTZ companies still pay significantly less than regular companies—and its magnitude depends on features like a company's expenditure on training Costa Rican workers, investment in research and development, local reinvestment, growth, etc. Furthermore, under the new law qualification for the regime is harder for companies located in San Jose's Great Metropolitan Area and looser for those established in regions of lower human development. The key condition is no

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¹¹ In many countries, especially in Africa, FTZs consist of government-owned industrial parks, often near ports or in disadvantaged areas, offering special conditions to any company operating from them.

 $^{^{\}scriptscriptstyle 12}$ If an FTZ company chooses to sell part of its output in the domestic market, it does pay income tax on that portion of its profits and pay tariffs on that portion of its inputs.

longer a performance requirement, which was illegal through a WTO ruling that interprets a fiscal incentive designed that way as an export subsidy. Rather, conditionality is linked to the industry and other operating characteristics of the company. Emphasis is now placed on fostering international value-chains, clusters of related companies and linkages between domestic and foreign companies. In particular, the tax exemption to a direct exporter is extended proportionally to its domestic suppliers of key inputs. Nationality is not a condition to participate in the regime.

Manufacturing exports from FTZs in Costa Rica have a gross value roughly 2.5 times that of non-FTZ manufactures, while non-tourism exports of services are roughly half in FTZs and half not. The dynamic clusters in electronics, medical equipment, life sciences and business process outsourcing are taking place mostly within the regime.

Some analysts have argued that this type of regime is just a subsidy scheme by another name and that by competing with each other different locations are just engaged in a "race to the bottom" that only benefits multinational corporations. While some of that may be so, the fact of the matter is that companies in certain key industries do face very attractive fiscal conditions in other places and a country that does not compete along this dimension may have a tough time growing in those industries. Furthermore, it is interesting to note that companies whose fiscal benefit expires choose to remain in the FTZ regime although the legal controls and limitations are stricter, meaning that the other aspects of the regime (in particular, the expedited import-export processes and the geographical proximity of similar companies) hold value. How the regime of the regim

FOSTERING INSTITUTIONS

Costa Rica has three key institutions with the mandate of promoting development through the successful internationalization of the economy.

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¹³ An interesting example of an alternative is the case of Mexico, Chile and Ireland, which no longer offer a differentiated fiscal regime for this type of industries. In order to do so they significantly reduced the tax rates for all companies. In Costa Rica, ordinary companies pay 30 percent profit tax and, if foreign, an additional 15 percent on the repatriation of the dividends. Cutting these rates for the economy as a whole would perhaps be unaffordable for fiscal reasons and expecting that local and foreign companies that pay zero elsewhere would stay here facing 40.5 percent total tax rates would simply be naive.

¹⁴ The author has also heard from some executives in this companies that a reason to stay in the regime is that the public institutions in charge of it are virtually corruption free and predictable (e.g, attached to the letter and spirit of the law) in their decisions, while being outside the regime makes one subject to problems of transparency and rule of law coming from the rest of government.

First, it has a specialized Ministry of Foreign Trade which is not part of an Economy or a Foreign Relations Ministry, as in other Latin American countries: Ministerio de Comercio Exterior (COMEX). COMEX is small but agile and historically has not been subjected by law to all the civil-service restrictions that afflict the rest of the state (for instance, it attracts better professionals, pays more, and can hire and fire at will). Despite its size and limited mandate, it is a politically influential institution, especially due to the public attention to the negotiations of international trade agreements. In addition to the negotiation, implementation and oversight of those instruments and of trade policy in general, COMEX is charged with promoting a competitive business climate for export promotion.

Second, and organizationally linked to COMEX, is Costa Rica's Trade Promotion agency (PROCOMER). PROCOMER, funded by fees from administering the export-import process and the canon paid by FTZ companies, is in charge of fostering the quantitative and qualitative growth of exports through very varied activities. PROCOMER is exceptionally flexible within the usually rigid rules for the Costa Rican state (the law describes it as an institution of "maximum deconcentration"). Among its programs are training initiatives like the Creando Exportadores program, which teaches international marketing and logistics to the management of established domestic firms; market intelligence about specific products and places; advisory services for small exporting companies; events for potential buyers to see samples of Costa Rican products and even promotion of the "image" of Costa Rican output. It also runs a program (*Costa Rica Provee*) to promote linkages between large multinationals operating in the country and local small and medium enterprises that could be their providers. It has small offices in a few key capitals.

Third, is the Costa Rican Investment Promotion Agency (CINDE), an NGO founded with USAID support in the 1980s to help train and encourage small agricultural exporters of new products. As the years passed—and especially as Costa Rica ceased to be a natural target for foreign aid—the institution evolved into a small, local private organization funded through an endowment and the sale of services, whose main purpose is to promote hi-tech greenfield FDI. It does this by acting as an informational bridge and informal competitiveness expert to potential investors by channeling their concerns and problems after establishment and advising or lobbying the government and congress on problems that the country encounters in the competition for FDI. Much smaller than other institutions of its kind, CINDE is almost always cited among the best investment

promotion agencies in the world and is quite distinct from the others as it is not a part of government or funded by the Treasury.

While economic theorists are often fond of assuming that, if profitable opportunities exist, entrepreneurs will find them, the Costa Rican experience is that if a country is small enough it will take a while for foreign companies to find it and if it is poor enough the same will happen with the local entrepreneur. In the absence of institutions that solve the immediate problems, channel information in both directions and reduce the riskiness and entry costs, it is likely that multinationals would pass up places like Costa Rica and go to "safer" (by which we mean larger, or better known, or easier to argue from the distance of corporate headquarters) locations and small local companies would more often stick to the comfortable domestic market.

This institutional arrangement also has the benefit of avoiding certain conflicts of interest regarding FDI and the FTZ regime, since PROCOMER, the organization in charge of overseeing and collecting fees and canons from the companies, is separate from both the institution promoting their entry (CINDE) and the institution authorizing their participation in the FTZ regime (COMEX). The arrangement has also created an environment that is very welcoming to the potential FDI, by providing a predictable set of rules, plenty of information that facilitates decisions and reduces risks, a mediator than can help investor and regulator understand each other and, in general, a "voice on its side" that speaks its language and sees its points.

Costa Rica already provides a fairly welcoming legal regime for FDI.— By Constitutional mandate, any firm operating legally in the country is endowed with certain common rights, which are not subject to the nationality of the company or its owners. The country has also signed a number of FTAs and over 40 bilateral investment treaties which grant investors an extra layer of guarantee over both those rights, and the right to arbitration (typically at the UN or the World Bank's arbitration units) in case of violation. Added to the simplicity of the paperwork and the role of the supporting institutions, greenfield, productive FDI aimed at exports finds a very welcoming and trustworthy environment and access the excellent human resources that make up Costa Rica. ¹⁵

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¹⁵ One must add the caveat that the above is true for export-oriented greenfield FDI, but not for other forms of FDI. For instance, Costa Rica is closed to mining investment (the law specifies that due to environmental concerns, there is a moratorium on most mining endeavors) and the facilitating institutions don't see as their role to help investment aimed at the domestic market, real

INDUSTRIAL POLICY (OR LACK THEREOF)

Traditionally in Latin America, policy was inclined to distort across different industries, with the state making very strong interventions by determining which industries to enter as an entrepreneur and which industries to promote the entry of the private sector through taxation, subsidies and other "blunt" policy mechanisms. This type of industrial policy seemed to be based on a view that certain sectors and activities were desirable and part of a development process, even if their growth did not come from becoming better at producing in those sectors. It was also based on the notion that government has enough information and probity to make these policy decisions wisely and transparently.

After the 1980s crisis, many policymakers in the hemisphere became of the view that this type of distortions caused by sector-specific policies was very damaging; neutrality across industries was a better choice. Unless there was clear evidence of externalities, public goods or other well-justified market failures that the policy was compensating for, horizontal policy (i.e., common across industries) was thought to be better.

We are now seeing the intellectual pendulum swinging back on this issue, as a number of scholars have raised the point that the success of some Asian countries seems to emerge largely from well selected "vertical" industrial policies, according to both data and to narrative. Furthermore, the argument goes, profitability across different sectors is not the sole determinant regarding the desirable composition of the economy, as clearly there are some activities that can be more strongly associated with development and others with poverty.

Do Costa Rican export promotion and FDI attraction policies focus on fostering "picking winners" in specific industries? Perhaps the best way of describing the existing policy is that government does not pick winners, but rather follows them. That is, the Costa Rican state does not apply any blunt policy instruments (like credit restrictions differentiated taxes subsidies etc.) that select across sectors. However, the fostering institutions have plenty of soft instruments (like selecting in which activities to train labor, or to conduct

estate investment, or the acquisition of ongoing operations. Furthermore, the laws granting rights to minority stockholders are weak and the restrictions on large acquisitions, especially of companies registered in the stock exchange, are arcane. Finally, companies who do business with the government (build infrastructure, BOT public facilities, or provide services to the general public charged to the Treasury) find a nightmare of controls and, worse still, harshly inquisitive attitudes by Congress, press and the Comptroller General. But, all this aside, for private, aimed-at-export, greenfield FDI, the legal and institutional regime in Costa Rica is as attractive as any in the world.

research, or contact companies etc.) which strongly target specific industries, based on the market evidence of existing entrants in those industries or in "similar" activities.

Take, for instance, the growth of the emerging sector that produces medical devices and, more broadly, inputs to the global hospital industry. It would be false to claim that policy considers this type of activity as equivalent to others—say, sewing cotton garments. Medical devices are the kind of product in which we would like to grow, as it requires hightechnology, uses well qualified workers, provides space to differentiate products according to quality, and possesses other characteristics that make this industry more likely to emerge in a developed country than in a poor one.

It would be naïve for the fostering institutions to ignore the fact that we have already managed to acquire some companies in that activity. Once some participants in that industry are present, it becomes easier to convince others to enter. Furthermore, once some key companies in those industries flourish, there is more value in attracting the providers of their key inputs to the country as part of intelligent "cluster" policy.

Does this mean that the country should offer stronger instruments like differentiated tax rates or public services, government subsidies, or something else to promote that industry at the expense of others? The answer seems to be no, as government is still in general inefficient and corruptible when making this type of decision.

Regarding some policy areas, government is simply "doomed to choose," paraphrasing Ricardo Hausmann. It is impossible, for instance, to create infrastructure and other public goods without making choices about design and location)that are not neutral across industries. The same goes for specialized training and college education.

What about farming? What policies affect the land usage in different crops, for example? In agriculture, the key policy instrument has been the removal of tariffs and other barriers to imports. Through its effect on relative prices, trade liberalization has induced a shift in land use, from some of the crops the domestic market consumes, to others for which the land is better suited. As tariffs in agriculture have fallen over the last 20 years, 120,000 hectares (or a quarter of the available arable land) shifted from certain grains, like vellow corn, to exportable products where comparative advantages are present. This change along the extensive margin explains almost all the productivity growth in Costa Rican agriculture in that period, the fastest in the hemisphere. 16 In a way, opening the economy and fostering exports has been the agricultural industrial policy in this period.¹⁷

As another example of Costa Rica dabbling in productive development policy, the changes in the new FTZ laws are aimed at promoting linkages between domestic and foreign firms, participation of domestic companies in international value chains and healthy dynamics in productive clusters like electronics, advanced manufacturing, medical devices or BPOs. In those, more than choosing a particular sector to promote, the policy aims to get the market dynamics right.

COMPETITIVENESS

Costa Rica's competitiveness performance –understood as the quality and availability of traits and institutions that are outside the control of specific firms, yet affect total factor productivity— is quite varied. Look, for instance, at the results in the Global Competitiveness Index compiled by the World Economic Forum. Costa Rica's rank in what the index considers to be simple, basic tasks is dismal, especially in all categories related to infrastructure.¹⁸ Meanwhile its performance in the indicators of those more complex things that one would associate with development—especially all that relates to human capital and technological readiness—is very high.

Part of the issue is the philosophy with which many Costa Rican productive services are organized. Take, for instance, infrastructure. The network is organized in a very bottom-up way, with noticeable underinvestment in the key arteries (large ports, airport, and the

¹⁶ In the meantime, according to FAO data and TradeStat, Costa Rica has become the sixth largest agriculture exporter per capita and second largest per area in the world outside of intra-European trade. Output per worker in agriculture has grown from 40 percent to 75 percent of output per worker outside agriculture, with the corresponding convergence between rural and urban human development and poverty indicators.

¹⁷ This is not ideal. One would have hoped to combine the cleansing and productivity-enhancing effects of trade liberalization along the extensive margin, with a more active government policy along the intensive margin to deal with the many externalities, public goods, social and other market distortions that are common in agriculture. Sadly, this type of efforts by the Costa Rican state regarding agriculture were sacrificed during the fiscally-lean decades of the 1980s and 1990s. This implied that the social cost of this efficient shift in land use was higher than necessary: many farms ended up changing owner in order to change crop. For further analysis of these matters, see Trejos (2009).

¹⁸ The fact that many of the components of the index are measured on the basis to opinion polls rather than hard data, on the other hand, leads to exaggeration. Costa Rica, for instance, ranks in "seaports" below some landlocked African countries and below Nicaragua, a neighbor whose firms actually utilize Costa Rican ports instead of their own. On matters that evolve very slowly—again, like infrastructure—the index tends to oscillate very wildly, and to be very correlated to the shortterm popularity of the government. Nevertheless, the data do paint a broad picture.

main highways) but a very rich network of capillaries. For example, while the expressway linking the two main cities with the airport has half the lanes that it should, and boasts a perennial traffic jam, almost every little town has a paved road entry, power, clean water and telecoms, plus schooling and healthcare infrastructure. The former failure is very visible and clearly documented, but perhaps the latter success is more important, especially for the competitiveness of sectors like agriculture and tourism and the participation of the rural population in the dynamic labor market of the new sectors.

Like infrastructure, the paperwork and bureaucratic cost of regulation is also extremely burdensome. Construction permits often take months to be granted, regulatory decisions are often guided by form rather than content, private operators are often left in a legal limbo. Several efforts of trade of paperwork facilitation and simplification have been performed over the years, but have in general failed because the bulk of the regulatory burden seems to be court-mandated. Further, the current political mood of the country leads to more regulation, not less. To some extent—but only some—export companies and especially FDI are somewhat isolated from this problem by the nature of the FTZ regime. Yet, while Costa Rica's institutional and legal environment would seem like heaven for companies that utilize private resources to export, —thus related to government only in its regulatory role— those firms that need to interact with government as a key supplier or costumer may instead find themselves in a hell of unclear rules, corruption, slow bureaucracy and erratic decisions.

Costa Rica has invested consciously in its brand name, making sure that the label "Made in Costa Rica" adds rather than subtracts value. In a 1996 study, researchers at the INCAE business school measured that being located in Costa Rica allowed tourism companies to charge prices with a 15 percent premium, and campaigns like "No Artificial Ingredients" have positioned the environmental merits of the country very well in the mindset of potential travelers. Rather than wasting large budgets in very expensive mass advertising, CINDE and PROCOMER focus their message to industry events and one-to-one public relations where the returns are maximized.

A final topic that may be worthy of mention, in which Costa Rica performs comparatively well in the Global Competitiveness Index, is the area of labor relations. This is an area that varies very significantly across countries and strongly determines productivity, the flexibility of the productive sector and the well being of the general population.

Workers' rights are very important and need to be protected if the fruits of growth are to be well shared, but the way in which workers represent their interests and the means by which their rights are implemented may be in some places an additional institutional strength –building consensus, facilitating information flows, creating healthy incentives to performance—while in other places it becomes a source of cost and volatility, impair intraindustry mobility and creative destruction, prolong unemployment and foster a misallocation of resources that would affect labor productivity.

Costa Rica demonstrates a very interesting case with regard to this issue. Costa Rican labor is very strongly protected by laws ranging all the way back to the 1940s. These include mandatory coverage by a national healthcare insurance scheme, a universal—now fully-funded—mandatory pension scheme, generous severance pay, workers compensation, maternity and disability and a myriad of other social schemes. These rights are granted by law to all workers, are not specific to certain labor employer relationship and can be demanded by the worker through the state, which allocates resources to the oversight and compliance of labor laws.

This means that workers are adequately protected, in a manner predictable by law, and companies know exactly what are they getting into, through an institutional arrangement that is significantly less confrontational and wasteful than collective bargaining. Union membership in the private sector is, therefore, remarkably low, with most employers and employees preferring instead to organize along "Solidarismo", a very peculiar labor arrangement.

Solidarism organizes labor through associations that operate independently at a firm rather than industry level, usually with a close direct connection between the employee, the union officer and the employer. They are funded by contributions from the employer, who provides a monthly deposit to the union in the worker's name for what would be the worker's severance, to be utilized in a savings-and-loans type arrangement for the workers. The worker keeps the money regardless of whether the termination of the labor contract is of a severance-induced nature or not.

Many solidarity unions branch their activities in other directions; for example, some firms outsource to their solidarity associations certain services and inputs, or engage them into profit-sharing mechanism. In that way, the employer finds a route to improve the well being, morale and productivity of the worker, while the worker benefits and finds his

interests aligned with those of the company. An overwhelming majority of Costa Rican private sector employees choose to participate in solidarity unions, rather than the more traditional and aggressive unions.¹⁹ This allows for a situation in which labor and player relationships are almost entirely devoid of aggressiveness and friction. Employer-employee relationships are, as a result, very non-adversarial.

3. Mistakes and lessons along the way

We have said that Costa Rica's wealth of human capital, the offspring of many decades of investment in health and education, is the country's main competitive advantage. But there are some growing weaknesses in the educational system which put in danger not only the sustainability of the success experienced so far, but also the capability to extend services to the entire labor force and the rest of the economy.²⁰

In the last few years, education planning has focused on raising the budget allocated to the task and raising enrollment rates at all levels, especially the fraction of the corresponding age group that completes high school. These matters are, of course, important, but not the only dimension along which the system can improve.

First, consider the mix between technical and vocational education, on the one hand, and traditional humanities education on the other. Despite the fact that students demonstrate significantly higher interest in the former (with very low dropout rates), it only involves 7.5 percent of available high school seats, and falling.²¹ Meanwhile, the traditional route is still designed —as half a century ago—as a preparation for university, seemingly useless for students who know they will not follow that path. Both employers and students believe education ends with the "third cycle" (that is, end of ninth grade), with the rest of high school being valued only as a university requirement, with no apparent intrinsic value.

Another mix problem happens in public university, where the fraction of the seats assigned to engineering, basic sciences, computing and health professions falls well short of student

¹⁹ Some analysts question whether this is really a choice, as employers are often as keen to encourage solidarism as they are to discourage the formation of unions. But clearly, in my experience, workers seem to value the opportunity of solidarism strongly and sincerely, while the radicalism of traditional unions –which prevail among public sector workers— and their inclination to engage more in political matters than in labor representation, weakens their appeal.

²⁰ The ideas and data in this section largely come from Arce et al.

²¹ As a reference point, technical and vocational high school reach 75 percent of the students in Finland, 66 percent in Germany, and over 50 percent in most other European countries, despite the fact that those countries have much higher enrollment rates in higher education than Costa Rica.

and job market demand. A high fraction of applicants to those fields are being pushed against their will away from opportunity and into social sciences and education. Thirty consecutive years of excess applicants in some fields and excess places in some others has not led the system to reallocate resources. This problem is made more difficult because the university curricula are very rigid, forcing students to become specialists in a field, with little flexibility to mix training in that field with other abilities, or to graduate as a generalist familiar with several fields. Today's production processes, especially in the provision of exportable services like BPOs, demand and reward workers that have mixed abilities in several areas, while specialists are already quite available. Soft skills among Costa Rican university graduates are worsening, while similar skills measured on blue collar workers are exemplary.

The process of tariff reduction, key for the export success, also could have been fine-tuned. Costa Rica managed to open to trade very aggressively throughout the 1980s through unilateral tariff phase-out, and then at the slower pace of barrier reduction associated with international trade negotiations after the 1990s. In general, doing this was politically difficult, but the results have been very satisfactory. Still, three weaknesses deserve attention.

First, the phase-out process was unbalanced across goods, with tariffs coming down very quickly for most sectors, with exception to a few products (mostly crops), whose growers had the necessary political clout and were able to maintain untouched protection. The discrepancies and price distortions this generated were great, and the political vested interests proportional.²²

Second, some of those phase-outs were very quick, without any parallel support offered to the affected producers. Many farms needed to change ownership in order to change crop output. In those cases, the transitional cost could have been much lower had a different combination of policies been implemented.

implies the benefits are mostly received by the former. Interesting descriptions of the situation appear in Umaña (2009) and Cornick (2013).

²² Perhaps the worst case is rice, a crop with a few large and very competitive industrialized producers who do not need protection to be profitable, along with a number of very small growers in land without proper irrigation, for whom the best support would be to help them transit to another product better suited to their location. Although the policy has been to maintain high protection and a vast system of subsidies in the name of the latter, these instruments are designed in a way that

Third, the industries of import, distribution and retail of certain goods are very concentrated in oligopolies or monopolies, and in those cases the reductions in import barriers do not reflect automatically and fully in domestic relative prices, impairing the benefits from trade. Costa Rican antitrust legislation is somewhat modern, but the institutions in charge are weak and, more to the point, mostly focus their attention to other industries.

The choice of reducing to almost zero the short-term volatility of the real exchange rate was wise, as it created a much safer environment for entrepreneurs to experiment with entry in export markets and for local and foreign companies to add predictability to their profitability.

The mechanism chosen, on the other hand, implied that the average level of said real exchange rate remained roughly constant for nearly 30 years. Because productivity grew faster than in trading partners, by the end of the period the Central Bank required such large transactions in the currency market to implement the policy that it largely lost command over its overall monetary policy. This also implied that, once the system was reformed to allow better monetary control and the reduction of inflation, the massive appreciation that came as a result was a very large obstacle for future export growth performance.²³

The design of the CATs, the export subsidy described in the previous chapter, left much room for improvement. The design choice was to make the subsidy proportional to an easy-to-calculate variable—in this case, the gross value of export—so that there would be little room for subjectivity in the calculation. Despite this rationale, the CAT system was very easy to manipulate (by, say, falsifying invoices) or even corrupt. For example, a company was found to be simply exporting ice, at a loss, to itself. Additionally, while many entrepreneurs clearly needed a push to take this leap into the unknown, giving everybody a push of the same size was probably suboptimal. Calibrating the parameters of the support to more specifics of the transaction probably would have been better, especially if the payment had not been in a cash-equivalent but rather into the assigning of resources to reduce some real inefficiencies and real costs that the exporter had to face. Finally, it was

significant deceleration and difficulty in further export growth.

²³ As the currency started to float, other phenomena have conspired to the appreciation of the colon, including the significant inflow of short-term financial capital caused by the distortions in the international markets after the great recession. At the moment of this writing (mid-2013) the colon has appreciated in real terms nearly 40 percent relative to four years ago, thus bringing along a

clear that the subsidy lived for far too long and should have at best been a transitory policy very early in the reform process.

We described also in the last chapter the system of FTZs and the way it was reformed in 2009. While controversial, we hold that such a system is necessary to remain competitive in certain sectors for which the terms of tax treatment are simply too heterogeneous across countries. In Delgado and Trejos (2006) calculations of direct and indirect contributions to taxation by one specific large firm in the FTZ system reach the conclusion that indirect contribution (the extra payment that workers, service providers and owner of resources make to the state because their income is more valuable than it would have been selling to somebody else) is larger than tax exemption. So, in net terms the system is probably not even a drain—at least not a large one—on the tax revenues. Nevertheless, the design, negotiation and lobbying of the 2009 reforms demonstrated several lessons that would have been useful earlier on. First, giving a complete tax exemption was probably unnecessary, since there are positive yet small rates that can be applied and yield some revenues, if designed in a way that they net out from tax credits applicable in their home country. Second, once one has a positive tax, even if the rate is low, one can provide incentives as credits against that tax for companies to do things that government finds desirable or that the market under-provides, like training or R&D. Third, the incentive did not differentiate between the conditions to enter an FTZ in the developed heart of the country, versus its very poor periphery. This similarity in the rules implied that government could not push companies to establish themselves in areas of lower development. Further, as the country made progress, companies in very backward sectors would leave the Metropolitan Area. However, but of reallocating to a poorer part of Costa Rica, they would move to another country altogether. Fourth, and finally, the FTZ system should have contained or otherwise extended not only direct exporters but also their local suppliers from the beginning. At the very least, the rules should have been designed to avoid creating a negative distortion that led companies to try to source abroad, because sourcing locally was administratively onerous.

Finally, we address issues related to export competitiveness. A lesson from every successful exporting country is that rather than hoping to be ideal in every possible aspect of productivity and the business climate, the target should be to find a winning combination of attractive traits or advantages. One can argue that, in the case of Costa Rica, the macroeconomic environment, human capital and quality of the labor force, clarity of the

rule of law, favorable fiscal regime, assisting institutions and very welcoming labor relations constitute such a winning combination. Nevertheless, some of the current salient weaknesses do hurt and carry a serious cost.

The poor condition of the country's infrastructure is perhaps the largest competitive weakness in Costa Rica. For reasons that are not pertinent here (see instead Cornick and Trejos (2009)), the government simply lost its ability to legally perform any infrastructure project of significant size, after the decade-long hiatus in such investments that took place as a consequence of the financial crisis of the early 1980s. We are getting to the point where the costs caused by bad logistical infrastructure, and the complexities and delays associated with dealing with government and regulation in general, are too onerous to compensate for other positive traits, valuable as they may be.

Another aspect of general competitiveness that causes concern is energy. As of the late 1990s, Costa Rica became one of the few nations in the world that required no fossil fuels for electric power generation, due to decades-long investments by the public utility, ICE, in renewable energy capability. Not only was this a very significant environmental achievement, but also provided a guarantee of high-quality energy whose price did not need to vary along with the oil price. Over the last few years, however, construction of generation capacity has fallen behind, and today 9 percent of energy is generate through hydrocarbons. If no large new plants come in line till then, this percentage could reach 50 percent by 2021. This problem is due to the combination of the same limitations to public investment mentioned above, a set of barriers erected by the state and congress against private investment for these purposes (driven by ideological reasoning) and poor decisions regarding pricing and exchange conditions.

4. Conclusions: On the applicability of this strategy to Cuba

The remaining question is the applicability of the Costa Rican story to the Cuban reality. The similarities between the potential competitive strengths of the two countries lead us to believe that some of the experiences that are described in the previous chapters could be of some value and use for Cuban policy makers. Other similarities and opportunities need to be ascertained, including a more detailed, quantitative comparison between the humancapital endowment of the two countries, in order to assess the value of the effort and to guess where the low-hanging fruits could be.

Some concerns and pending questions arise right away, however. One of them is the role of the Cuban entrepreneur. While prominent, FDI is not the lead character of the Costa Rican story, the domestic exporting company is. One can easily imagine that Cuba could aim, with limited adjustments within its current economic structure, to attract similarly impressive multinational corporations as Costa Rica. But the applicability of this story to Cuban growth largely depends on the capability for the Cuban entrepreneur to do its part or the Cuban state enterprise to take its place. It is not our objective or place to recommend an appropriate economic design for Cuba. One is compelled, however, to identify points where the Costa Rica-Cuba analogy gets most tightly challenged.

Another difficulty in applying some of this story in the case of Cuba comes from timeframe. The global economy is very different now from what it was in the early 1980s. One example is the willingness, before the current wave of FTAs, that rich countries had then to grant unilateral preferential market access to poorer partners. Another example is the inflexibility of current multilateral rules regarding the design of new FTZs or, in general, other exports subsidy schemes, for mid-income countries.

Finally, the current global macroeconomic climate—let alone the peculiarities of Cuban macroeconomic management—pose some limitations on matters like real exchange rate policy, currency convertibility, etc.

Despite these difficulties we contend that there are components of the Costa Rica story that are applicable and interesting for Cuba, yielding purpose to the broader project to which these pages belong.

References

Arce, Ronald, Ricardo Matarrita, Alejandro Roblero and Alberto Trejos. <u>Desarrollo del talento humano para competir en la atracción de inversión extranjera directa.</u> Mimeo, INCAE y CINDE, 2012.

Blyde, Juan, Carlo Pietrobelli and Christian Volpe. <u>Políticas de Internacionalización para el Desarrollo Productivo</u>. Mimeo, Banco Interamericano de Desarrollo, 2013.

Cornick, Jorge. <u>La organización del sector público para PDPs exitosas</u>. Mimeo, Banco Interamericano de Desarrollo, 2011.

Cornick, Jorge and Alberto Trejos. <u>Political and Institutional Obstacles to Reform</u>. In *Growing Pains in Latin America*, edited by Lilliana Rojas-Suarez, *Center for Global Development*, 2009.

Delgado, Félix y Alberto Trejos, <u>El Impacto macroeconómico de la presencia de INTEL en Costa Rica</u>. *Consejeros Económicos y Financieros*, 2006.

Edwards, Sebastian. Openness, trade liberalization and growth in developing countries. Journal of Economic Literature, 1993.

Edwards, Sebastian. <u>Openness</u>, <u>productivity</u> and <u>growth: What do we really know?</u> *Journal of Economic Literature*, 1998.

Feinberg, Richard. The New Cuban Economy: What Roles for Foreign Investment? *Brookings Institution*, 2012.

Ferreira, Pedro and Alberto Trejos. On the Output Effects of Barriers to Trade. *International Economic Review*, 2006.

Ferreira, Pedro and Alberto Trejos. <u>Trade in Intermediate Goods and Total Factor Productivity</u>. *Review of Economic Dynamics*, July 2011.

Lall, Sanjaya, John Weiss and Jinkang Zhang. <u>The 'Sophistication' Of Exports: A New Measure Of Product Characteristics.</u> QEH Working Paper Series – QEHWPS 123, Oxford University, 2009.

Trejos, Alberto. <u>Trade, the Efficient Use of Land, and Agricultural Productivity: the Case of Costa Rica and Lessons for Africa</u> . In <i>Perspectives In Agriculture: Strengthening Africa</i>		
Performance, Brenthurst Foundation, 2010.		