How did Costa Rica turn one investment into an industry?

Fernando Martín, 12 November 2026

This note draws on Small Markets, Global Winners: Pathways to Competitive Industries Beyond Trade Distortions, the study Simon Evenett and I wrote for the World Economic Forum with IMD Business School (October 2026). Over the coming weeks I will release its case studies in this format, one industry at a time. Each case asks the question the study asks, which is what made firms invest, and each draws lessons on productive development and industrial policy for emerging economies: policy that changes the decisions of investors, removes a specific obstacle firms cannot clear alone and works without a large budget or a large home market.

Costa Rica won Intel's 1996 chip assembly-and-test plant against six larger countries without a bidding war. It asked what blocked the investment and fixed each item in a form the next firm could use, and the firms that followed built a medical-device industry that supplied 52 per cent of the country's goods exports to the US in 2025. Every bottleneck Costa Rica removed for Intel, it removed for everyone.

Most governments approach a large foreign investor with one question: what will it take to win this firm? The usual answer is a package of tax holidays, land and cash, negotiated in private and different for each company. Costa Rica asked a different question, and the difference is the lesson.

In 1996 Intel compared seven countries for a microprocessor assembly-and-test plant. Costa Rica, with 3.5 million people and no electronics industry, was the smallest. Mexico had a cluster around Guadalajara, power at about two US cents a kilowatt-hour against seven to nine in Costa Rica, and was reportedly first on Intel's list. **Costa Rica won by competing on the conditions any firm like Intel needed, not on the size of the cheque.**

Choose the sector, not the firm

The strategy began more than a decade before Intel. The debt crisis of 1979-1984 discredited import substitution. In 1982 the private sector, with support from USAID, set up the Costa Rican Coalition for Development Initiatives (CINDE) as a non-profit agency to attract export investment, with electronics an early priority. Over time it concentrated on three sectors that suited an educated and expensive workforce: electronics and advanced manufacturing, medical devices and corporate services.

The choice was targeted, but at sectors, not at firms. It told the agency where to spend its time and the universities what to teach, and it never told an official which company should win. Intel was the firm that tested the choice. A former senior trade official describes the case as definitional: it proved the model worked and set the template through which every later investor was handled. **Industrial policy of this kind picks a direction, not a winner.**

Ask what blocks the investment

Costa Rica's first question to Intel was what it needed. The answer was mostly general: about 800 trained technicians, working customs and airports, reliable power and changes to the free-zone rules. “What Intel asked for were conditions not for Intel, but for any company like Intel to operate,” the former official told us.

The question works because the investor knows its binding constraint and the state does not. CINDE could ask it because it was a private body bound by confidentiality: firms showed it their internal returns and site comparisons, numbers

they would not have shown a ministry. An agency that sees the real numbers can fix the one thing that blocks a decision instead of offering money for everything.

Speed mattered as much as content. President José María Figueres pledged to do whatever was necessary and named his trade minister, José Rossi, as the government's single accountable channel for the bid, with CINDE as Intel's daily contact. Rossi's argument was that a small state should turn its size into one fast channel to the top.

Fix each bottleneck as a public good

The state then fixed each item in a form others could use. Ministries, universities and Intel matched curricula against the plant's needs, professors from the Technological Institute spent six weeks in Intel plants, and the Ministry of Education approved a one-year technical certificate and an associate degree. Those courses then trained technicians for any employer. The closest thing to a firm-specific favour was a new power tariff for users above 12 megawatts, at about five cents a kilowatt-hour, which in 1996 only a plant of Intel's size would use. Even that was written as a tariff tier open to any user of that size, not as a payment to one firm.

Put the incentive in law

Intel received the free-zone package any qualifying investor could get under the 1990 law: a full income-tax exemption for eight years and a partial one for four more, with no duties on imported equipment or inputs. Mexico offered to make an exception to its own rules for Intel, as it had for other large investors, and Spar records that the offer made Intel wary of how policy was made there. Mexico's 1994-1995 currency crisis and its mandatory union rules counted against it as well, so the rule was not the only factor. But a country that will not re-trade its rules for one firm is unlikely to re-trade them against that firm later, and that lowers the risk every investor prices in.

Saying no is part of the method. CINDE told investors early that payroll taxes of about 42 per cent would not be discounted, and it lost some projects on purpose. A veteran of 28 years at the agency calls the answer to requests for payroll relief “a hard no”. An agency whose yes cannot be bought sends a stronger signal than one that matches every bid.

Build machinery that firms trust and that competes

Two design choices made the method repeatable. CINDE was governed by a board of business and academic figures rather than political appointees, which kept the strategy stable across governments of four different parties, and it could hire staff like a firm. The industrial parks were private and competed for tenants on clean rooms, redundant power, certifications and transport, while the state set the rules. The former official calls it a Costa Rican version of competition among Swiss cantons: the state defines the field and private competition keeps upgrading it.

The free zones grew from 56 firms and 7,000 jobs in 1990 to 626 firms and 197,000 direct jobs in 2024, and accounted for 74 per cent of the country's foreign direct investment that year, according to PROCOMER, the export agency.

The strongest objection is that Costa Rica was born lucky. It made primary education free and compulsory in 1869, abolished its army in 1948 and has been a stable democracy since, and no minister can buy a century of schooling. The objection is right about the endowment and wrong about the lesson: the endowment explains why the talent existed, not how it was put to use or why a second industry followed the first. What travels is the method, not the history. Nor were the free-zone exemptions a deal: they were set by law, the same for every qualifying firm, foreign or domestic.

Each fix made the next investment cheaper

The method reinforced itself. Intel's technician courses enlarged the pool every manufacturer drew on, its arrival told other investors the talent was real, and every new tenant gave the park developers a reason to invest in better infrastructure for the next. Medical devices, present since Baxter arrived in 1985, grew on the same field. A former director-general of CINDE traces the cluster's workforce to two sources: textile plants, which had trained operations managers and nimble hands, and Intel, which had

trained engineers. When executives from St. Jude Medical, which Abbott acquired in 2017, toured the textile lines, their verdict, as she recalls it, was "We have the management, and you have the skills."

Medical-device exports to the US rose from US$0.09 billion in 2000 to US$6.9 billion in 2025, from 3 to 52 per cent of Costa Rica's goods exports to that market (Figure 1). The cluster's firms also moved up. Firms typically entered with lower-risk devices and moved to higher-risk ones as they proved capability: needles and catheters were 95 per cent of device exports to the US in 2000 and 45 per cent in 2025, as instruments, implants and orthopaedic devices grew around them, and the number of product lines above US$10 million rose from one to eight (Figure 2). Training kept pace, through programmes co-designed with employers such as a master's in medical-device management.

The test of a self-reinforcing field is what happens when its anchor leaves. Intel closed the plant in 2014, with about 1,500 job losses, but kept its engineering and services centres, and other firms hired its engineers. During the chip shortage of 2020 it decided to restart assembly in the same building, and in July 2025 it announced a second closure while keeping more than 2,000 staff. **The field no longer depended on the firm that had tested it, and the firm kept coming back to the field.**

Gross exports also overstated the anchor's weight, which is a warning for any government judging an investment. Intel's exports were recorded at the full value of components it processed but did not own. La República reported that in 2014 only about US$700 million remained in the country as payment for the work. A government that measures an anchor by gross exports will overpay to attract it and overpay to keep it.

Keep the rules working when they change

World Trade Organization rules prohibit subsidies tied to exporting, so in 2010 Costa Rica rewrote its free-zone law. Benefits for new manufacturers depend on belonging to a strategic sector, defined with business, technical and academic representatives and including medical devices, or on investing outside the capital region, not on exporting. **The targeting stayed at the level of the sector and the place, and the terms stayed in law.** A year earlier CAFTA-DR, the trade agreement with the US, had locked in market access, and Costa Rica opened its state telecom and insurance monopolies to join it, two services every investor buys.

Where the loop stops

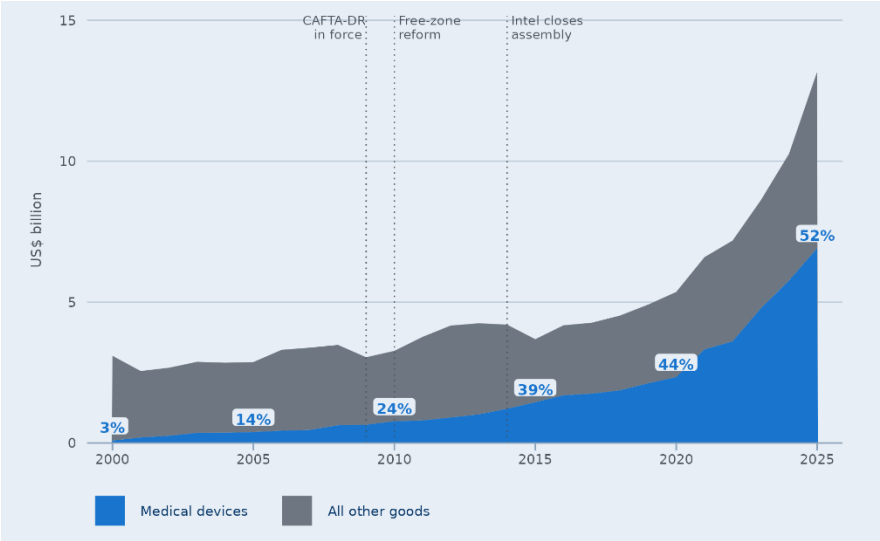
But the method has limits, and governments copying it should plan for them from the start. By one former official's estimate, fewer than 5 per cent of firms in the parks became suppliers to the multinationals, and most local successes were spin-offs by former multinational staff. Establishment Labs, a Costa Rican implant maker, qualified for the same free-zone terms as Intel, but every local source refused it capital in 2011-2012 and it survived on Guatemalan and US investors, the same gap this series found in Peru's blueberries. **The field supplied talent and rules, but not risk capital for founders.**

The foundations also need upkeep. Talent has turned from a quality problem into a quantity problem, immigration rules make specialists hard to bring in, and the people we interviewed worry about basic education after the pandemic. And in 2023 CINDE lost the public funding that made up about three-quarters of its income: the agency that made the method work can be unbuilt by a budget decision.

The playbook is short. Choose sectors, not firms. Ask investors what blocks them and fix each bottleneck as a public good. Put incentives in law and refuse exceptions. Build capability into people, who can move between firms and sectors. Then add what Costa Rica did not: finance for domestic founders, measurement by value added and stable funding for the agency. Every bottleneck Costa Rica removed for Intel, it removed for everyone, and that is why one investment became an industry.

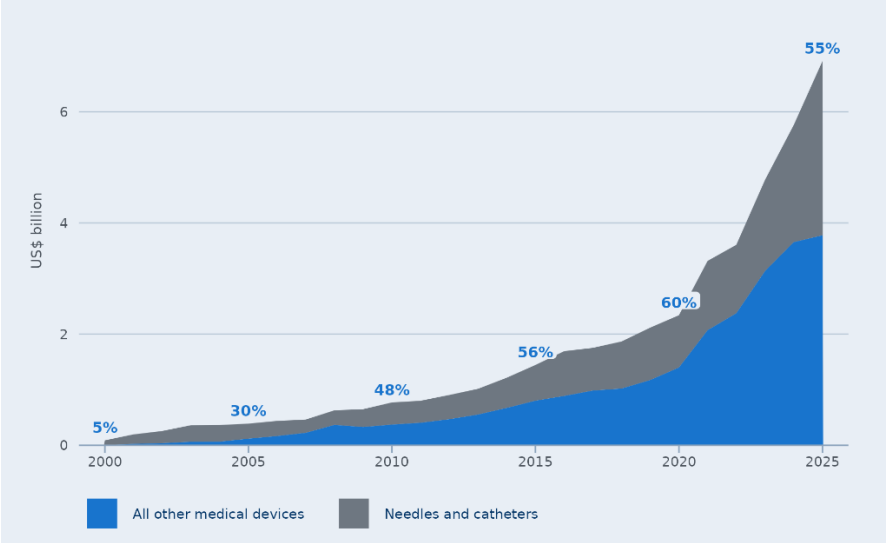
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Figure 1. Medical devices rose from 3 per cent of Costa Rica's goods exports to the US in 2000 to 52 per cent in 2025



Source: Trade Data Monitor (TDM), exports reported by Costa Rica to the United States, HS 9018 and 9021 (medical instruments and appliances; orthopaedic appliances and artificial body parts). US$ billion, 2000-2025. Labels show medical devices as a share of goods exports to the US. Medical devices were worth US$0.09 billion in 2000 and US$6.9 billion in 2025.

Figure 2. Needles and catheters fell from 95 per cent to 45 per cent of Costa Rica's device exports to the US as other devices grew to US$3.8 billion



Source: Trade Data Monitor (TDM), exports reported by Costa Rica to the United States. US$ billion, 2000-2025. Needles and catheters: HS 90183x. All other devices: the remaining HS 9018 and 9021 lines, chiefly other medical instruments (HS 901890), artificial body parts such as heart valves and breast implants (HS 90213x) and orthopaedic appliances (HS 90211x). Labels show the share of devices other than needles and catheters. Product lines above US$10 million a year rose from one in 2000 to eight in 2025.