

Fastener Market Opportunities:

Costa Rica

1. Why Costa Rica Matters Now: the Macroeconomic and Industrial Context

Costa Rica is small in population (≈5 million) but punches above its weight in export sophistication. Over the last decade the country has successfully attracted multinational manufacturers in life science (medical devices), precision electronics and specialty manufacturing. **The medical device sector alone has grown into one of the country's leading export industries** — reaching roughly USD 7.6–7.7 billion in exports in 2023 and accounting for a very large share of manufactured exports (reports indicate medical devices comprised about 42% of total exports in 2023). **This sector's needs for high-precision, certified components — including specialized fasteners used in medical device assembly lines and devices themselves — create ongoing demand.**¹

Manufacturing's contribution to Costa Rica's GDP sits close to global averages for similar economies. Recent data indicate the manufacturing sector accounts for roughly 13% of GDP (2023–2024 range), with value-added manufacturing rising to support export growth.²

NO. 1
Medical Device Sector

2. Demand Drivers for Fasteners in Costa Rica

a) Medical Devices and Life Sciences

Medical device manufacturers require high-precision fasteners (miniature screws, captive fasteners, specialty stainless and titanium screws, locking assemblies) with stringent material, traceability and sterilization compatibility requirements. Costa Rica's medical device and life science sector is booming, making it a top global hub, hosting over 90 multinationals (including 13 of the top 20 OEMs), generating over 54,000 jobs, and accounting for about 42–43% of national exports (around USD 7.6B in 2023).

b) Electronics and Semiconductors

Costa Rica has been strengthening its electronics and semiconductor ecosystem (including government roadmaps and investments in back-end assembly and test). Semiconductor Device exports were about USD 8.79M (60th globally), with major destinations being Hong Kong, the U.S., China; imports were about USD 69.2M, mainly from the US, China, Malaysia.

c) Automotive Parts and Light Industrial Manufacturing

Local automotive parts production is modest but present; Costa Rica imports and locally produces smaller metal components and assemblies. Fasteners are a continuous consumable for aftermarket and local assembly activities.

- ✓ **Market Growth:** The number of vehicles in Costa Rica has more than doubled since 2010, fuelling demand for parts.
- ✓ **Manufacturing Share:** Manufacturing's share of GDP was around 12.96% in 2024.

1. <https://www.wipo.int/en/web/global-health/w/news/2024/costa-rica-s-medical-device-revolution?utm>

2. https://www.theglobaleconomy.com/Costa-Rica/Share_of_manufacturing/?utm



Table 1. Demand Drivers for Fasteners in Costa Rica

Driver	Key Metrics
Medical Devices	90+ multinationals; 54,000 jobs; about 42–43% of exports (USD 7.6 billion, 2023)
Electronics/Semiconductors	Exports: USD 8.79 million; Imports: USD 69.2 million (Top origins: USA, China, Malaysia)
Automotive Parts	Vehicles doubled since 2010; Manufacturing GDP: 12.96% (2024); Output +20.83% (USD 11.78B, 2023); Auto imports +40% (TTM to Aug 2024); Metal mechanics exports +51% (last decade)
Construction/Infrastructure	Growth via roads/renewables; challenges in funding/execution

- ✓ **Manufacturing Output:** Increased 20.83% in 2023, reaching USD 11.78 billion USD.
- ✓ **Auto Parts Imports:** Imports grew 40% in the trailing twelve months (TTM, Sept 2023–Aug 2024), with China, the US, and Japan being major suppliers.
- ✓ **EV Impact:** A surge in EV imports is creating new demand for specific parts.
- ✓ **Exports:** Metal mechanics exports grew 51% in the last decade, with the U.S. and Dominican Republic as key destinations for auto parts.

d) Construction, Infrastructure and Renewable Energy

Costa Rica's construction and infrastructure sectors show growth driven by government investment in roads, but face challenges like poor road quality, institutional bottlenecks, and funding gaps, especially in public works; recent data highlight improvements in infrastructure transparency and ongoing modernization efforts in transport (rail, roads), though significant investment and planning are needed, with the private sector seeing opportunities despite bureaucracy. Key statistics point to a focus on connectivity, energy transition (renewables), and sustainable building, with the sector contributing to economic diversification but requiring more efficient project management.

3. Market Size Estimate and Segmentation

Import:

Costa Rica's total imports show a clear expansion phase from 2020 to 2023, rising from 34.052 to 50.842 million USD (**Table 2**). This growth is substantial and reflects a post-2020 recovery combined with increased sourcing activity. **However, the decline to 48.539 million USD in 2024 marks a turning point. While not dramatic, it signals that the market has moved out of a pure growth phase and into a more selective, possibly more price-sensitive stage.** Any assumption that demand will keep rising automatically is no longer justified by the data.

The United States remains the largest exporter to Costa Rica throughout the period, but its performance is notably volatile. After the steady growth in 2020 and 2021, US exports dropped sharply in 2022, recovered strongly in 2023, and then declined again in 2024. Its share

Table 2.

Exporters to Costa Rica	2020	2021	2022	2023	2024
World	34,052	41,297	42,516	50,842	48,539
USA	18,297	19,558	16,781	25,218	20,659
China	8,192	13,888	16,762	14,461	14,596

Unit: Numbers in thousand USD

of Costa Rica's total imports fluctuates widely, ranging from about 39% to over 50%. This instability suggests that **Costa Rica does not treat the US as an untouchable supplier and is willing to shift sourcing when conditions such as price, supply security, or alternatives change.**

China's trajectory is different and more structurally revealing. Between 2020 and 2022, Chinese exports to Costa Rica more than doubled, indicating a deliberate and successful expansion rather than a temporary spike. From 2023 to 2024, China's export value stabilized at around 14.5 million USD, showing resilience even when total imports declined. **Although China did not surpass the US, it secured a stable and significant share of Costa Rica's import market, demonstrating that it had become a permanent and credible supplier.**

The competitive dynamics between the US and China was most evident in 2022, when their export values to Costa Rica were nearly identical. This moment highlights Costa Rica's active diversification strategy and its openness to balancing major suppliers. The US regained ground in 2023 but failed to sustain it in 2024, while China maintained relative consistency. This contrast implies that the US advantage lies in scale and rebound capacity, whereas China's strength lies in cost control and stability.

Overall, the data show a market that is growing but increasingly competitive and selective. **Costa Rica is reducing dependency on any single exporter and exercising greater flexibility in sourcing.** For exporters, this means that success in this market can no longer rely on historical dominance or price alone. A clear value proposition—whether based on reliability, compliance, logistics, or differentiation—is now essential. Any strategy that ignores the dual dominance of the US and China, or assumes automatic growth, rests on weak analytical ground.

Export:

Costa Rica's total exports showed an extreme structural break between 2020 and 2021 (**Table 3**). The jump from USD 964,000 to USD 15.9 million is not organic growth; it signals a step-change—either the start of a new export category, a major contract, or a reclassification of trade flows. From an analytical standpoint, 2020 is not a useful baseline. Any serious interpretation must treat 2021 as the real starting point of Costa Rica's current export pattern.



Table 3.

Importers from Costa Rica	2020	2021	2022	2023	2024
World	964,000	15,942,000	16,655,000	11,708,000	11,371,000
USA	448,000	3,934,000	2,376,000	3,951,000	4,281,000
Malaysia	-	9,299,000	11,188,000	4,144,000	3,129,000
Singapore	-	3,000	19,000	1,641,000	2,224,000

Unit: Numbers in thousand USD

From 2021 to 2022, exports grew modestly from USD 15.9 million to USD 16.7 million, indicating consolidation rather than expansion. The sharp decline in 2023 to USD 11.7 million, followed by a further dip in 2024 to USD 11.37 million, confirms that Costa Rica failed to sustain its initial export surge. This is not volatility around a growth trend; it is a clear contraction phase. **The country is exporting significantly less than its 2021–2022 peak, and there is no sign of recovery yet.**

The United States emerges as the most stable and strategically important importer, despite fluctuations. US imports rose strongly in 2021, fell in 2022, then recovered in 2023 and continued growing in 2024 to USD 4.28M. Importantly, while total global imports from Costa Rica declined after 2022, US imports increased. **This means the US was absorbing a larger share of Costa Rica's shrinking export base, not merely riding overall market growth.** That is a sign of structural demand rather than opportunistic buying.

Malaysia tells a very different story. It appeared suddenly in 2021 with USD 9.3 million, grew further in 2022 to USD 11.2 million, and then collapsed to USD 4.1 million in 2023 and USD 3.1 million in 2024. This pattern is classic project-based or opportunistic trade, not a durable export relationship. Malaysia likely drove the export peak—and its withdrawal largely explains the global decline after 2022. Any strategy that treats Malaysia as a dependable long-term destination would be analytically weak.

Singapore's numbers are small in absolute terms but meaningful in trend. From negligible imports in 2021–2022, they rose to USD 1.64 million in 2023 and USD 2.22 million in 2024. This is not yet scale, but it is directional. Unlike Malaysia, Singapore shows gradual buildup rather than spike-and-collapse, suggesting early-stage market development rather than one-off transactions. Dismissing it due to size would be short-sighted.

The most important structural insight is this: Costa Rica's export contraction is not demand-driven across the board. It is driven by the loss of a single large buyer (Malaysia), while exports to the US and Singapore are either stable or growing. This means Costa Rica's problem is concentration risk, not competitiveness per se. The export base is narrow, and when one large buyer exits, total figures deteriorate rapidly.

In summary, Costa Rica's export profile is fragile. It depends heavily on a few buyers, lacks diversification, and has not replaced lost volume after 2022. The U.S. represents the only clearly resilient market, Malaysia represents a warning about overreliance on episodic demand, and Singapore represents a slow but potentially strategic expansion path. Any serious export strategy must prioritize stability over volume illusions, otherwise the next downturn is not a risk—it is inevitable.

4. Conclusion: A Selective, Capability-Driven Opportunity — Not a Volume Market

Costa Rica's fastener market does not reward simplistic growth assumptions. The coexistence of expanding industrial sectors and flattening or contracting trade figures is not a contradiction; it is the defining feature of the market. Demand is growing where specifications are strict, traceability is mandatory, and supply reliability matters. At the same time, undifferentiated, price-driven fastener volumes are facing intense competition, sourcing substitution, and margin compression.

Costa Rica's role as a global hub for medical devices, electronics, and advanced manufacturing reflects the presence of foreign-owned, export-oriented production rather than a diversified national export base for industrial components. This distinction is critical. The country's manufacturing sophistication generates steady demand for high-precision fasteners, yet its export profile remains narrow and exposed to concentration risk, as evidenced by the post-2022 contraction driven largely by the loss of a single major buyer. Market fragility, therefore, stems from dependency, not from declining competitiveness.

Trade data further reinforce this selectivity. While total imports peaked in 2023 and softened in 2024, the stability of Chinese supply alongside the volatility of U.S. exports underscores Costa Rica's active sourcing discipline rather than weakening demand. Buyers are willing to shift suppliers when cost, availability, or compliance advantages emerge. Conversely, on the export side, the United States stands out as the only consistently resilient destination, absorbing a growing share of Costa Rica's reduced export volume. Malaysia's collapse illustrates the risk of episodic, project-based dependence, while Singapore's gradual rise points to a more sustainable, albeit slower, diversification path.

Taken together, these dynamics redefine what "opportunity" means in this market. **Costa Rica is not an attractive destination for commodity fastener exporters seeking scale through price competition. It is, however, a strategically valuable market for suppliers capable of meeting stringent quality standards, integrating into regulated supply chains, and offering logistical responsiveness and documentation discipline.** Growth potential exists, but it is concentrated on medical devices, life science, advanced electronics, EV-related components, and specialized construction applications—segments where value is determined by reliability and compliance rather than volume. ■

