

AID-FOR-TRADE: CASE STORY

COSTA RICA

FDI Attraction and Participation in Global Value Chains

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EXECUTIVE SUMMARY

Along with its trade liberalization process, Costa Rica has placed strong emphasis on the attraction of foreign direct investment (FDI) –particularly in high-tech and advanced manufacturing and in services activities, which is one of the cornerstones of its development strategy. Nevertheless, the country faces important challenges that need to be addressed in order to continue enhancing the business climate and to become more attractive for FDI, including improving transport infrastructure and the modernization of strategic services such as telecommunications and energy. Technical assistance from several donors in the recent past has contributed to help address these challenges, thus promoting a more competitive and healthier business climate for FDI attraction.

As a result, Costa Rica has witnessed a substantial transformation in the structure of its exports, and now a substantial share of its economy is part of global value chains (GVCs)¹. In fact, about 43 percent of the country's total exports are related to GVCs, with an average of 36 percent of such exported value being added domestically. Labor and capital employed by GVC-participating firms account for about 40 percent of the domestic contribution to exports, while locally-provided services and supplies account for almost one sixth and one tenth, respectively.

ISSUES ADDRESSED

As a complement to its trade liberalization process, Costa Rica has pursued a strategy to boost FDI, thus allowing for further diversification of its export portfolio, particularly of high-tech and advanced manufactured goods. This strategy, however, has had to address lingering challenges in the country's economic framework, such as:

- Improvement of the transportation infrastructure (roads, ports and airports).
- Modernization of strategic services (such as telecommunications and energy).

¹ A Global Value Chain can be understood as an international production-sharing scheme in which the different stages of a production process are spread over several countries around the world. Therefore, GVCs tend to be characterized by larger trade of intermediate inputs than that of final goods or services.

- Increase in the quality standards of the educational system.
- Simplification of bureaucratic regulations.
- Increased investment in innovation and research and development (R&D) activities.

OBJECTIVES PURSUED

Attract FDI as a center piece of the country's development strategy, to the extent it leads to increasing economic growth, exports and employment, as well as to further diversification of the export portfolio and better access to leading technologies. All these elements are encompassed in the 2011-2014 National Development Plan, with the ultimate goals of increasing social welfare, competitiveness and innovation, while guaranteeing the sustainability of growth.

DESIGN AND IMPLEMENTATION

The creation of the Export Processing Zones (EPZ) regime and the unilateral trade opening started in the 1980s led both to higher exports and higher FDI inflows,² a trend reinforced by Costa Rica's accession to the GATT and then the WTO. Subsequently, the country has negotiated multiple and comprehensive free trade agreements, both at the regional and bilateral level, aimed at establishing disciplines that provide for security and predictability to trade and investment with strategic partner countries.³ The EPZ regime has favored the establishment of firms involved in GVCs⁴.

As a result of the approval of the Free Trade Agreement with the United States (CAFTA) in 2007, Costa Rica took an important step towards the increased competitiveness of strategic services, by opening up the market for mobile telephones and internet services to the participation of private providers. Beyond the benefits stemming from the increased competition among providers, private investment will have multiplying effects on the rest of the economy and new job sources will emerge as a result of this structural reform. Besides, the profile of the FDI attracted by Costa Rica (mainly high-technology, advanced manufacturing and services activities) requires first-class telecommunications services at an internationally competitive cost.

A significant step towards the improvement of the country's infrastructure took place in 2010, when the new highway connecting San Jose with Puerto Caldera (the largest port in the country's Pacific coast and the second largest of the country) started operations. This highway cuts in approximately 50 percent the travel time from the capital city to Puerto Caldera, thus allowing a substantial reduction in transportation costs of both merchandise and tourists.

With a view to further consolidate Costa Rica's participation in GVCs, in 2002 the Inter-American Development Bank (IDB) put in place a program aimed at developing capabilities among small and medium-size enterprises (SMEs) to become domestic suppliers for high technology multinational firms (HTMNs). This program had three components:

- Develop at least 45 new linkages between SMEs and HTMNs.
- Create a supporting information system for the creation of new linkages between SMEs and HTMNs.
- Create a national office in charge of promoting and facilitating the creation of new linkages between

² See Figure 1 in the Annex.

³ These countries include the United States, the European Union, China, Mexico, Chile, other Central American nations, Canada and Singapore. See Figure 2 for more information.

⁴ See Chart 2 in Annex. The law regulating the operation of the EPZ regime was updated in 2009, with the objective of assuring both its conformity with Costa Rica's obligations under the WTO and its capacity to continue serving as a key element for FDI attraction.

PROBLEMS ENCOUNTERED

- **Coordination problems among public institutions** and the asymmetric information available to investors at the time they evaluate a country as a potential destination for their business.
- **Need for continuous improvements in the business climate**, a goal that is highly desirable and rewarding, but extremely complicated to pursue at the same time, in light of the multiplicity of areas, activities and reforms it often involves.
- **Need for reforms to the educational system** in order to guarantee that labor supply will meet the changing and growing requirements of the labor demand.
- **Need to continue improving the economic infrastructure**, giving priority to areas such as roads, ports, airports, telecommunications and energy production.

FACTORS FOR SUCCESS

- **Inter-institutional policy coordination:** The joint work of COMEX, the Costa Rica Investment Promotion Agency (CINDE), and the Foreign Trade Corporation of Costa Rica (PROCOMER), has contributed to mitigate and overcome the coordination problems among public institutions and the asymmetric information available to potential foreign investors. In fact, these public entities have also been working as promoters of several initiatives to improve the business climate, particularly in promoting reforms to increase the competitiveness in strategic areas.
- **Technical assistance from development agencies:** For these purposes, the technical assistance received from the Inter-American Development Bank, the Central American Bank of Economic Integration, the World Bank, the United Nations Economic Commission for Latin America and the Caribbean, the United Nations Conference on Trade and Development, the Organization of American States, the United States Agency for International Development, and the WTO, as well as other bilateral donors has made a relevant contribution to support the efforts aimed at improving the business climate in Costa Rica (see Chart 1).
- **Robust trade platform and consistent vision of the role of trade for development:** Costa Rican policy makers have sustained a constant vision over the last twenty five years on the key role that trade plays as an engine for economic growth. This translated into a strong commitment to trade opening and allowed for the negotiation of several preferential trade agreements (PTAs), which provide for security and predictability to over three quarters of the country's total foreign trade.

RESULTS ACHIEVED

- FDI Attraction:** FDI has followed a clear increasing trend in Costa Rica over the last 25 years⁵ despite the short-term fluctuations stemming from international business cycles. Moreover, it is worth noting how these sequential building blocks have delivered their payoff, particularly in the last fifteen years, as the rate of growth of Costa Rica's FDI attraction has remained above its long-term average (3 percent) during the years in which the WTO rules have been in force and its PTAs were negotiated.
- Costa Rica's participation in GVCs:** Higher FDI levels have contributed to Costa Rica's insertion into GVCs. A turning point was INTEL's decision to establish a plant to manufacture computer microprocessors in the 1990s. Ever since, several other HTMNs have arrived in Costa Rica, thereby contributing to the expansion and diversification of the country's participation in GVCs. For instance, the World Bank has ranked Costa Rica first among high-tech exporters, and the country is one of the

⁵ See Figure 3 in the Anex.

first three per-capita exporters of non-natural resource products, both in Latin America. Moreover, Costa Rica displays the fourth largest share worldwide of high-tech exports to total exports⁶.

Costa Rica is currently participating in at least five major GVCs: electronics, medical devices, automotive, aeronautic/aerospace and film/broadcasting devices (see Chart 2). Costa Rica's participation in these five GVCs takes place through the exportation of a limited number of products and services (presented in Chart 2) produced in the country by sixty firms, 80 percent of which operate in EPZs. Moreover, total exports of the products listed in Chart 2 account for about 43 percent of Costa Rica's total exports.

Costa Rica's participation in GVCs can be measured through the Domestic Component of Exports (DCE) that take place in GVCs. This includes not only the value added to its exports by each GVC-participating firm, but also the value of all the goods and services it purchased from other firms operating in Costa Rica. The overall average for the DCE was 36% in 2009 and the firms' individual scores ranged between 16% and almost 100%⁷. The GVCs with the highest average DCE were aeronautic/aerospace and medical devices, scoring 71% and 59% respectively. In regards to the latter, the high average DCE seems to respond—at least in part, to the growing domestic capacity to provide some services that had to be purchased abroad in the past⁸. In turn, the GVC with the lowest average DCE is electronics, which probably responds to the fact that the production of this chain is highly globalized and still receives a considerable share of intermediate inputs from other countries.

The way the DCE is made up reveals a relevant participation of labor⁹, capital¹⁰ and domestically provided services¹¹, while there is more room to continue expanding the share of the provision of local supplies¹². In fact, the joint contribution of labor and capital accounts for 60% of the DCE in the aeronautic/aerospace GVC and about one half of the DCE in the electronics and automotive GVCs, while only the medical devices GVC scored a joint contribution of labor and capital that is below the overall average¹³.

- c) **Higher participation of SMEs:** The domestic provision of goods and services to firms participating in GVCs has grown over the last years. Thanks in part to the IDB program mentioned above, between 2002 and 2009 over 400 new business relations were established between local SMEs and HTMNs, half of which happened just once while a third were only replicated a second time.
- d) **Job creation and better wage standards:** multiplying effects that investment spreads over the entire economy as well as the positive impact on employment, both through the creation of job positions as well as the increase in the wage standards, particularly for high-skilled workers. In fact, a study by

⁶ <http://data.worldbank.org/sites/default/files/section5.pdf>

⁷ See Figure 4 in the Annex.

⁸ For example, the firms producing medical devices require a special sterilization service for their products, which in the past was provided in Puerto Rico. Currently, such sterilization service is provided in Costa Rica.

⁹ The measure of the contribution of labor used by Monge-Ariño (2010) includes both the wages paid to the workers and other labor-related costs paid by the employer, such as the contributions to social security, work insurance and contributions to pension funds.

¹⁰ The contribution of capital is measured by the depreciation costs reported by the firms.

¹¹ Measured as the value of total services purchased by the firm minus the value of services purchased from abroad.

¹² Measured by the value of inputs and supplies purchased in Costa Rica.

¹³ See Figure 5 in the Annex.

PROCOMER showed that while in 2004 the average wage in EPZ firms was 48% bigger than the country-wide average wage, in 2008 such markup increased to 65%¹⁴.

e) **Positive incidence on balance of payments:** FDI has allowed financing a significant share of the current account deficit¹⁵.

LESSONS LEARNED

One of the main lessons learned from Costa Rica's experience is that sophisticated export processing activities are very sensitive to the availability of educated and easily-trainable workers, as well as to the quality of physical and economic infrastructure. Therefore, education, business facilitation and infrastructure development become fundamental concerns for any FDI attraction strategy.

Another lesson learned is that FDI does not arrive spontaneously, but rather as a result of the coordinated work of the entities aimed at investment promotion, thus being an efficient mechanism to overcome problems such as institutional coordination and asymmetric information. In this regard, technical assistance for capacity building received from international organizations will continue to play a significant role for the success of the FDI attraction strategy.

Another lesson is that a good investment climate is as necessary for successful FDI attraction as difficult to achieve and maintain, to the extent it involves several elements, such as a robust trade platform, policies applied consistently and continuously over time, competitive infrastructure, a highly skilled labor force, and a business-facilitating environment. As Costa Rica is fully aware of the relevance of these elements and has been somewhat successful in addressing most of them, continued and timely progress is still needed.

Finally, Costa Rica has experienced how important it is for FDI to have a comprehensive, stable and trustworthy set of rules that provide for certainty and predictability to exports. In this regard, the consolidation of Costa Rica's trade liberalization process through the development of improved multilateral and bilateral trade disciplines continues to be an essential undertaking.

CONCLUSION

Costa Rica has combined since the mid 1980s a continuous process of trade liberalization with a sustained policy for the attraction of FDI. The set of trade and investment rules developed, along with Costa Rica's remarkably stable political and social environment, its long standing commitment to invest in education and healthcare, its solid EPZ regime, and its privileged geographical location, have combined altogether to create a robust export platform that has transformed the structure of production and exports, through the insertion of a significant share of the economy into GVCs.

In order to consolidate, deepen and expand Costa Rica's participation into GVCs, priority should be given to achieving further improvements in the economic infrastructure, business facilitation and the educational system. In this regard, technical assistance for capacity building provided by international organizations can be essential.

¹⁴ PROCOMER. Balance de las Zonas Francas: beneficio neto del Régimen para Costa Rica 2004–2008. June, 2009.

¹⁵ Between 1999 and 2009, FDI has represented on average 102% of the Current Account deficit, with a minimum of 59% (2000) and a maximum of 234% (2009).

Chart 1
Example of assistance received in support of Costa Rica's
telecommunications market reform process

Donor	Project	Amount	Components and activities
World Bank	Technical assistance to develop the legislative framework to open the local telecommunications market	US \$310.000	Funding was used to hire a number of local and international experts and consultants that provided their technical assistance and expertise during the development of the relevant laws and regulations required to open the telecommunications market to competition, as a result of the commitments acquired by Costa Rica under the Dominican Republic-Central America-United States Free Trade Agreement (CAFTA-DR)
World Bank	Comparative study of universal services experiences in Latin America	N/A	To support its own decision-making process in this area, through this study the Costa Rican government received inputs on existing experiences in Latin America regarding the supply of universal services, including lessons learned from those previous experiences
World Bank	Analysis of the competition framework in the telecommunications sector	US \$30.000	Funding was used to study the competition framework applicable to the telecommunications sector in the Costa Rican market, in order to support the reform process underway at the time
Government of The Netherlands / World Bank	Analysis of the mobile spectrum	US \$50.000	A series of studies were conducted to determine the state of the mobile spectrum in those areas of relevance to the opening of the telecommunications market, including a sector overview and key inputs for developing spectrum policy, strengths and weaknesses present in the existing procedures for spectrum management and monitoring and recommendations for re-farming the mobile spectrum to allow for the migration of users
Government of The Netherlands / World Bank	Technical advice to support the process of consensus building required to successfully construct the legislative framework to open the local telecommunications market	US \$40.000	Funding was used to hire consultants that provided their technical assistance and expertise to support strategies for building consensus for the new legislative and regulatory framework of a new telecommunications market, open to competition
Government of Japan / World Bank	Technical support for market opening implementation	US \$640.000	Funding was used to hire a number of international experts and consultants that provided their technical assistance and expertise in developing proper requirements for the public bidding process to supply mobile / wireless telecommunications services. Expertise was also provided to identify and implement adequate models for

			interconnection, and the preliminary studies for the establishment of the national telecommunications fund
Government of the United States of America	Regional workshop: "Laying a path for growth and innovation" (Guatemala, November 2008)	N/A	This workshop served as a forum where experts from the United States shared their experiences in the telecommunications sector, with countries from the Central American region
Government of the United States of America / United States Federal Communications Commission (FCC) / and United States Telecommunications Training Institute (USTTI)	Technical training and internships	N/A	Spectrum engineers were trained by USTTI experts, and a number of internships and visits to FCC headquarters in Washington D.C. were organized under this project, to provide the new Costa Rican telecommunications authorities with relevant tools to administer the system and supervise the market
Inter American Development Bank	Technical support for market opening implementation	N/A	For a period of two weeks spread throughout the year, a telecommunications expert and economist of the IDB has worked hand-in-hand with local telecommunications authorities, helping to set up different processes and systems for proper supervision of the telecommunications market

Source: own elaboration.

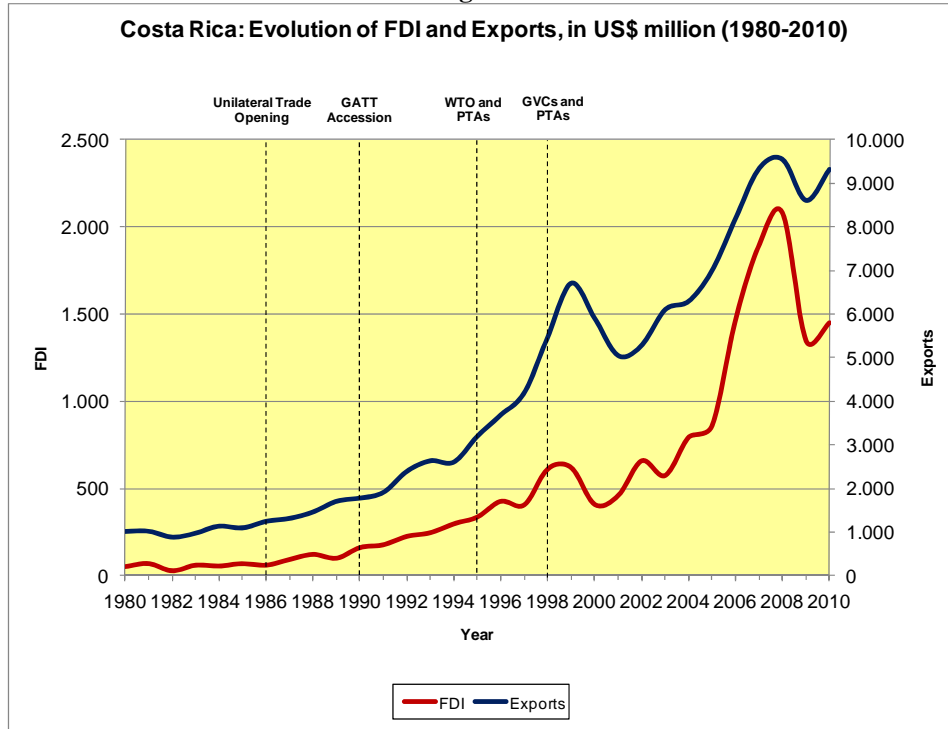
Chart 2
Participation of Costa Rica in Global Value Chains

GVC	Total Firms	Firms in EPZ	Average employees per firm	Main Products	Exports 2009 (US\$ million)	Share in Total Exports *	Main destination	Share in GVC Exports
Electronics	10	90%	571	- Computer parts and accessories - Digital microprocessors - Electrical switches - Electronic filters for TV sets	2.196,6	25,5%	China	35%
Medical Devices	25	80%	475	- Needles, catheters and equipment for serum infusion and transfusion - Other medical devices - Devices for electro-diagnose - Devices for electro-diagnose - Medicaments put up for retail sale	1.268,8	14,7%	USA	60%
Automotive	9	89%	273	- Tires - Shock-absorbing systems for cars - Incandescent lamps and electric tubes - Seats for vehicles and their parts - Lubricant or fuel filters - Plastic manufactures for injection equipment - Film and foil of polymers of vinyl chloride - Parts for vehicles' seats	180,0	2,1%	USA	75%
Aeronautic / Aerospace	16	69%	137	- Design of turbines for airplanes - Design and testing of electronic devices for airplanes - Machined parts for airplanes - Printed circuit boards for airplanes - Thermostats - Repair of mother boards for airplanes - Maintenance for helicopters - Metal coatings for airplane parts - Wire harnesses for airplanes - Turbines for airplanes - Lasers for airplanes - Circuit protection gas tubes - Design of plasma engines for space shuttles	21,9	0,3%	USA	34%
Film / Broadcasting Devices	1	0%	N/A	- Tripods for videocameras	20,4	0,2%	USA	53%
Sub-Total	60	80%	---	---	3.687,8	42,8%	---	---
TOTAL	---	---	---	---	8.611,3	100,0%	---	---

Source: Monge-Ariño (2010).

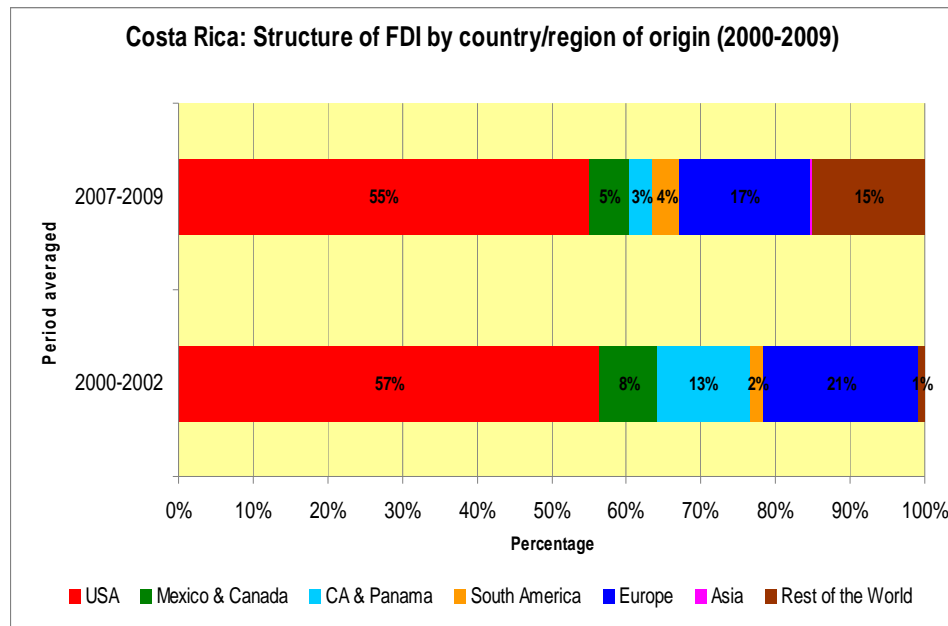
*: Includes only exports of goods. The Aeronautic/Aerospace GVC has in addition exports of services that were worth US\$ 41,7 million in 2009.

Figure 1



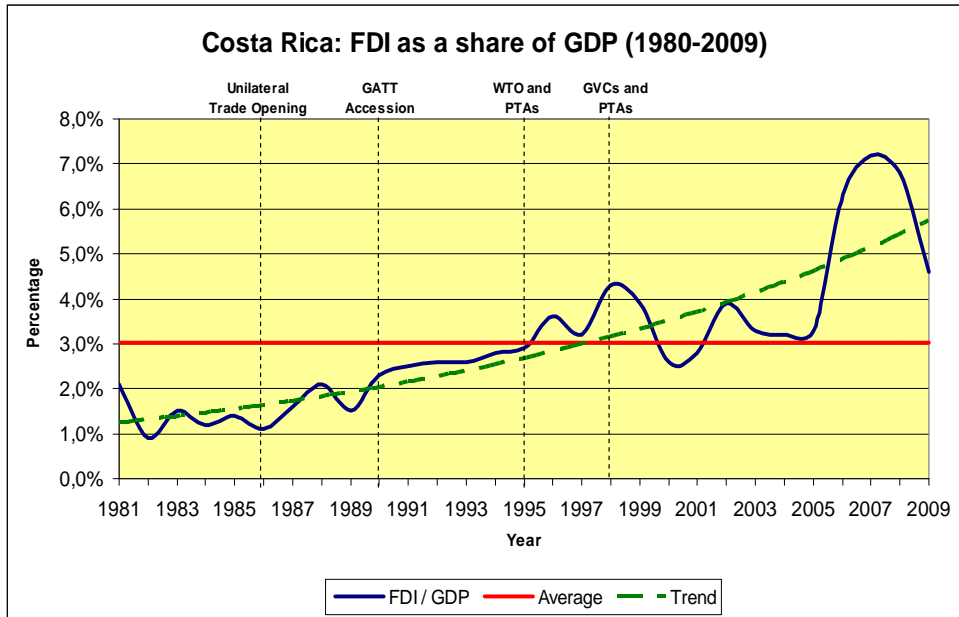
Source: Monge-Ariño (2010).

Figure 2



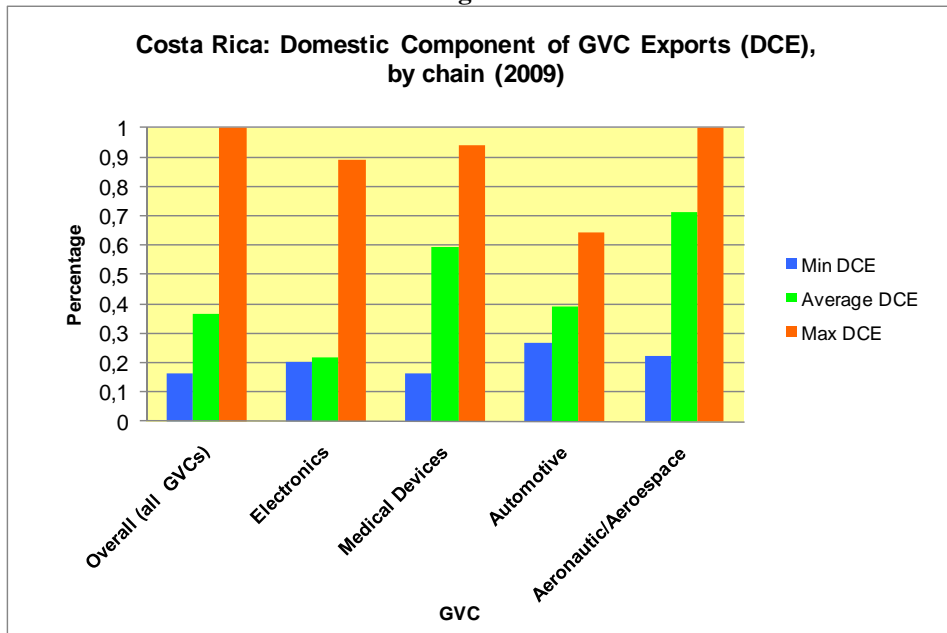
Source: Monge-Ariño (2010).

Figure 3



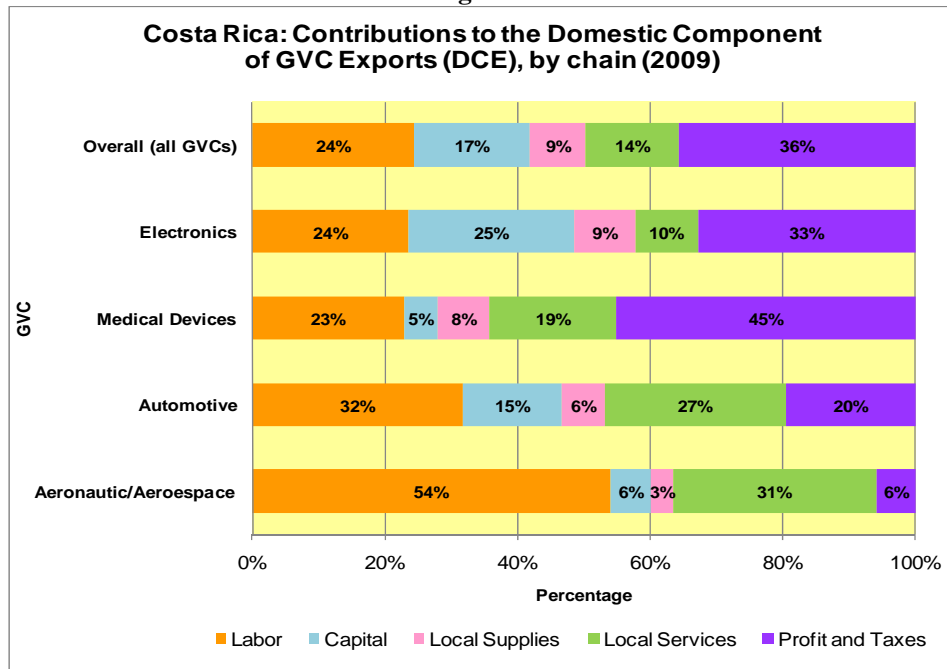
Source: Monge-Ariño (2010).

Figure 4



Source: Monge-Ariño (2010).

Figure 5



Source: Monge-Ariño (2010).