

Odyssey in International Markets

An Assessment of the Effectiveness of Export
Promotion in Latin America and the Caribbean

Christian Volpe Martincus

*Special Report on
Integration and Trade*



Inter-American Development Bank

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The views expressed herein are those of the authors alone, and do not necessarily reflect the views of the Inter-American Development Bank or any of its member countries.

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Inter-American Development Bank
1300 New York Avenue, N.W.
Washington, D.C. 20577
www.iadb.org

**Cataloging-in-Publication data provided by the
Inter-American Development Bank
Felipe Herrera Library**

Volpe Martincus, Christian.

Odyssey in international markets : An assessment of the effectiveness of export promotion activities in Latin America and the Caribbean / Christian Volpe Martincus.

p. cm.

"A special report on integration and trade."—t.p.

Includes bibliographical references.

ISBN 978-1-59782-123-0

1. Foreign trade promotion—Latin America. 2. Foreign trade promotion—Caribbean Area. 3. Exports—Latin America. 4. Exports—Caribbean Area. 5. Export trading companies—Latin America. 6. Export trading companies—Caribbean Area. I. Inter-American Development Bank.

FHI480.5.E9 V65 2010

Cover design: Fernando Ronzoni, Design Unit, Department of General Services

Editor: Roger Hamilton

Proofreader: Naomi Chernick-Berman

Typesetting: The Word Express, Inc.

>> Contents

PROLOGUE ix

ACKNOWLEDGMENTS xi

ITINERARY xvii

CHAPTER 1

Traveling in the Unknown Dimension:
Information Barriers and Export Promotion. 1

CHAPTER 2

Meeting the Map Makers:
An Institutional Portrait of Export Promotion Organizations . . . 29

CHAPTER 3

To Be or Not to Be Abroad:
Do Foreign Missions Make a Difference? 143

CHAPTER 4

Are Latin America and the Caribbean Heading the Right Way?
An Assessment of the Effectiveness of Export
Promotion Activities 173

CHAPTER 5

Reaching the Final Destination:
Making the Most of Export Promotion. 259

Boxes

Box 2.1	Germany Trade and Invest.	34
Box 2.2	Canadian Trade Commissioner and Unites States Commercial Services	36
Box 2.3	Austrian Trade	44

Tables

Table 2.1	The Sample	94
Table 2.2	ROW: Mission and Areas of Activity	96
	LAC: Mission and Areas of Activity.	98
Table 2.3	ROW: Legal Status and Reporting	100
	LAC: Legal Status and Reporting.	103
Table 2.4	ROW: Head of the Organization and Composition of the Board	106
	LAC: Head of the Organization and Composition of the Board	108
Table 2.5	ROW: Budget and Number of Employees (2007–2009)	110
	LAC: Budget and Number of Employees (2007–2009)	111
Table 2.6	ROW: Funding Sources.	112
	LAC: Funding Sources and Applications	113
Table 2.7	ROW: Selection of Personnel and Remuneration Policy	115
	LAC: Selection of Personnel, Remuneration Policy, and Personnel Profile	117
Table 2.8	ROW: Presence in the Home Country and Abroad.	119
	LAC: Presence in the Home Country and Abroad.	121
Table 2.9	ROW: Firms Receiving Assistance and Targeting	122
	LAC: Firms Receiving Assistance and Targeting.	125
Table 2.10	ROW: Services to Exporters	127
	LAC: Services to Exporters	129
Table 2.11	ROW: Effectiveness Assessment and Implications	131
	LAC: Effectiveness Assessment and Implications	136
Table A3.1	Main Dataset	172

Table 4.1	Peru: Average Exporter.	237
Table 4.2	Costa Rica: Average Exporter	237
Table 4.3	Costa Rica: Average Exporter by Type of Goods . . .	238
Table 4.4	Uruguay: Average Exporter	239
Table 4.5	Chile: Average Exporter	239
Table 4.6	Chile: Distribution of Export Indicators and Total Sales	240
Table 4.7	Argentina: Average Exporter	240
Table 4.8	Argentina: Average Exports by Size Category . . .	241
Table 4.9	Colombia: Average Exporter	241
Table A4.1	Empirical Approach Used in Each Case Study. . . .	256
Table A4.2	Datasets	258

Figures

Figure 1.1	Latin American and Caribbean Countries' Trade Outcomes over Time	4
Figure 1.2	Latin American and Caribbean Countries' Trade Outcomes Relative to Their Economic Size	5
Figure 1.3	Survival in International Markets, Selected Countries (1995–2007)	6
Figure 2.1	Size of Export Promotion Organizations Relative to Countries' GDP and Population (2007–2009). . . .	41
Figure 3.1	Latin American and Caribbean Countries: Share of Country-Specific Sectoral Exports in Total Exports (2007).	146
Figure 3.2	Latin American and Caribbean Countries: Share of Products Exported over Sectors and Destination Countries (2007)	147
Figure 3.3	Latin American and Caribbean Countries: Share of Differentiated Products Exported over Sectors and Destination Countries (2007)	150
Figure 3.4	Latin American and Caribbean Countries: Share of Reference-Priced Products Exported over Sectors and Destination Countries (2007) . . .	151

Figure 3.5	Latin American and Caribbean Countries: Share of Homogeneous Products Exported over Sectors and Destination Countries (2007)	152
Figure 3.6	Latin American and Caribbean Countries: Offices of Export Promotion Organizations Abroad . . .	153
Figure 3.7	Latin American and Caribbean Countries: Embassies and Consulates Abroad	155
Figure 3.8	Impact of Foreign Missions on Countries' Total Bilateral Exports	159
Figure 3.9	Impact of Foreign Missions on Countries' Intensive and Extensive Margins of Bilateral Exports	160
Figure 3.10	Impact of Foreign Missions on Countries' Extensive Margins of Bilateral Sectoral Exports	162
Figure 3.11	Impact of Foreign Missions on Countries' Extensive Margins of Bilateral Sectoral Exports across Categories of Goods	163
Figure 4.1	Peru: Aggregate Export Indicators	186
Figure 4.2	Peru: Distribution of Firms across Country-Product Export Patterns	187
Figure 4.3	Peru: Distribution of Export Shares across Firms with Different Country-Product Export Patterns . . .	188
Figure 4.4	Peru: Number of Exporters Assisted by PROMPEX. . .	189
Figure 4.5	Peru: Average Export Assistance Effect on Assisted Firms	190
Figure 4.6	Peru: Average Export Assistance Effect on Assisted Firms, Disaggregated Export Outcomes . . .	191
Figure 4.7	Costa Rica: Aggregate Export Indicators	193
Figure 4.8	Costa Rica: Distribution of Firms across Country-Product Export Patterns	194
Figure 4.9	Costa Rica: Distribution of Export Shares across Firms with Different Country-Product Export Patterns	194
Figure 4.10	Costa Rica: Number of Exporters Assisted by PROCOTER.	196

Figure 4.11	Costa Rica: Average Export Assistance Effect on Assisted Firms	197
Figure 4.12	Costa Rica: Average Export Assistance Effect on Assisted Firms by Type of Products.	198
Figure 4.13	Uruguay: Aggregate Export Indicators	200
Figure 4.14	Uruguay: Distribution of Firms across Country-Product Export Patterns	201
Figure 4.15	Uruguay: Distribution of Export Shares across Firms with Different Country-Product Export Patterns	202
Figure 4.16	Uruguay: Proportion of Exporters Entering New Export Markets	203
Figure 4.17	Uruguay: Number of Exporters Assisted by URUGUAY XXI	204
Figure 4.18	Uruguay: Average Export Assistance Effect on Assisted Firms	205
Figure 4.19	Uruguay: Export Assistance Effect on the Probability of Entering New Country and Product Markets	206
Figure 4.20	Chile: Aggregate Export Indicators	208
Figure 4.21	Chile: Distribution of Firms across Country-Product Export Patterns	210
Figure 4.22	Chile: Distribution of Export Shares across Firms with Different Country-Product Export Patterns	210
Figure 4.23	Chile: Number of Exporters Assisted by PROCHILE	211
Figure 4.24	Chile: Average Export Assistance Effect on Assisted Firms	212
Figure 4.25	Chile: Export Assistance Effect on Assisted Firms by Export Outcome Deciles	213
Figure 4.26	Chile: Distribution of Exports over Significance Groups and Deciles Defined in Terms of Export Growth	214
Figure 4.27	Argentina: Aggregate Export Indicators	216

Figure 4.28	Argentina: Distribution of Firms across Country-Product Export Patterns	217
Figure 4.29	Argentina: Distribution of Export Shares across Firms with Different Country-Product Export Patterns	217
Figure 4.30	Argentina: Number of Exporters Assisted by EXPORTAR	218
Figure 4.31	Argentina: Average Export Assistance Effect on Assisted Firms	219
Figure 4.32	Argentina: Average Export Assistance Effect on Assisted Firms by Size Categories	220
Figure 4.33	Colombia: Aggregate Export Indicators	222
Figure 4.34	Colombia: Distribution of Firms across Country-Product Export Patterns	223
Figure 4.35	Colombia: Distribution of Export Shares across Firms with Different Country-Product Export Patterns	224
Figure 4.36	Colombia: Number of Exporters Assisted by PROEXPORT	225
Figure 4.37	Colombia: Average Export Assistance Effect on Assisted Firms	226
Figure 4.38	Colombia: Distribution of Total Exports, Number of Countries, and Number of Products across Groups of Firms Participating in Different Number of Export Promotion Programs	228
Figure 4.39	Colombia: Average Effect of Export Assistance Programs on Assisted Firms Relative to Non-Assistance.	229
Figure 4.40	Colombia: Average Effect of Export Assistance Programs on Assisted Firms Relative to Each Other	231

>> Prologue

Despite progress in communication technologies, lack of information still severely handicaps companies seeking to operate in international markets. Among other things, firms must learn about the formal export process, shipment and marketing modalities, conditions required to access specific markets, and their demand profile. Particularly important, they must engage in the costly process of identifying and evaluating business partners. As such, a company embarking on an export project often must travel along unknown routes. Furthermore, the investments that firms must make to gather the information required to trade with foreign markets may yield reduced returns as third parties may derive benefits from this same information. As a consequence, these investments may be low from a social point of view. Thus, lack of information may negatively affect trade, and thereby productivity and economic growth.

For these reasons, companies traveling in the unknown dimension of foreign trade may require the assistance of a publically provided (or financed) *Global Positioning System* (GPS). This is precisely the service that export promotion organizations claim to provide—that is, activities that address information problems faced by firms pursuing business opportunities beyond national boundaries. But, how well these organizations perform this task is a virtual mystery. Export promotion is costly, and the resources used might be better employed elsewhere. In order to ascertain that these resources are, in fact, being well invested, it must be first determined whether the policy initiatives they finance have an impact

on those variables that they are supposed to affect, in this case, exports. Making this determination is the aim of this report.

Odyssey in International Markets is the second report of the Integration and Trade Sector of the Inter-American Development Bank aimed at helping countries in Latin America and the Caribbean identify obstacles that stand in the way of more effective integration into the world economy and design policies to reduce these impediments to trade. The report first makes a comprehensive analysis of export promotion organizations in some three dozen countries and regions. Second, it provides robust evaluations, using state-of-the-art econometrics and original datasets, of the impacts that policies have had on export outcomes of countries and firms. The report is supported by rigorous background studies that are available as IDB Working Papers through the Bank's website.

Based on the findings of this report, it appears that export promotion seems to have been effective in facilitating export expansion, especially along the extensive margin (i.e., diversification). At the same time, the report points to areas where further research would produce deeper insights into its relative merits.

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>> Acknowledgments

O *dysssey in International Markets* was produced with policy research carried out at the Integration and Trade Sector (INT) of the Inter-American Development Bank (IDB) as well as valuable contributions from external collaborators. Chapter 2 is based on a study that has been jointly carried out with Jacint Jordana (Universitat Pompeu Fabra and Institut Barcelona d'Estudis Internacionals) and Andrés Gallo (University of North Florida). Chapter 3 draws on analyses performed with Antoni Estevadeordal (Manager, INT), Andrés Gallo, Jerónimo Carballo (INT), and Jessica Luna (INT). Chapter 4 summarizes the main findings from several background papers that resulted from joint research efforts with Jerónimo Carballo and Pablo M. García (INT).

This report would not have been possible without the intellectual and material support of Antoni Estevadeordal and Santiago Levy Al-gazi, Vice-President of Sectors and Knowledge of the Inter-American Development Bank, and the generous collaboration of the staff of all export promotion organizations included in this study and the individuals who facilitated contacts with these organizations, as follows: Simmony Soares, Tatiana Palermo, and Aline Peixoto (APEX-Brazil); Manoj Golapan (AUSTRADE-Australia); Nella Hengstler (AWO-Austria); Senen Perlada, Bernard Soriano, and Rosalie Say (BET-Philippines); Karen Velasco (CEPROBOL-Bolivia); Regina Campa, Jordi Escriba Larios, and Isidre Sala Queralt (COPCA-Catalonia, Spain); Ricardo Estrada, Francisco Rivadeneira, Luis Montoya, Valeria Rodriguez, Vanessa Nuñez, Olga Castro, and Viviana Villafuente (CORPEI-Ecuador);

Pensri Jutidharabongse (DEP-Thailand); Shenjie Chen (DFAIT-Canada); Jorge González and Irma Chong (DNPE-Panama); Jennifer Mendoza (DPC-Guatemala); David Lovegrove (EI-Ireland); Carin Bobeldijk and Annemarie Koppers (EVD-Netherlands); Aldo Vallejo and Iris Palma (EXPORTA-El Salvador); Nora Turcios (FIDE-Honduras); Nina Jaakola and Halonen Anri (FINPRO-Finland); Marcelo Elizondo, Eduardo Bevacqua, and Emiliano Cisneros (Fundación ExportAR-Argentina); Bernd Schulze-Willebrand and Wilfried Maus (GTAI-Germany); Clelia Pia Signorelli (ICE-Italy); Robert Cuñat (ICEX-Spain); Stavinder Singh and Jayakrishnan Gopalakrishnan (IE-Singapore); Itzhak Rozen (IEICI-Israel); Yusuke Uchio and Mayumi Beppu (JETRO-Japan); Lisa Bell; Carlinea Guy, Delaine Morgan, Robert Gregory, and Andrea Reid (JTI-Jamaica); Lee Jao Hee, Younhee Han, and Joohee Lee (KOTRA-Korea); Catherine Nesus (NZTE-New Zealand); Lorena Sepúlveda and Mario Lavín Aliaga (PROCHILE-Chile); Emmanuel Hess, Francisco Gamboa, and María de los Ángeles Cambroneró (PROCOMER-Costa Rica); Omar Seoane, Viviana Arias, and Sofia Abdelmur (PROCORDOBA-Cordoba, Argentina); Felipe Londoño, Mauricio García, Andrés Salázar, Pilar Lozano, and María Cecilia Obando (PROEXPORT-Colombia); Fernando Urdaniz (PROMENDOZA-Mendoza, Argentina); Gabriel Barrera, Clementina Ramos Cárdenas, Graciela Bravo Buenrostro, and Ricardo de la Peña Rodríguez (PROMEXICO-Mexico); José Quiñones, Joaquín Schwalb, and Jorge Ascencio (PROMPERU-Peru); Christian Thielmann, Horacio Miranda, and Karina Sánchez (REDIEX-Paraguay); Jarl Frijs-Madsen and Mikkel Hagen Hess (TCD-Denmark); Christophe Lecourtier (UBIFRANCE-France); Yvonne Dale and Hannah Chaplin (UKTI-United Kingdom); Roberto Bennett, Héctor Echevarría, and Pablo Pereira (URUGUAY XXI-Uruguay), as well as Jorge Remes Lenicov, Ambassador of Argentina to the European Union; Roberto Salafia, Economic and Commercial Section, Embassy of Argentina in the United States; Antonio César da Silva, Trade Promotion Office, Embassy of Brazil in the United States; Sandra Sandoval, Colombia Trade Bureau in Washington DC; and Jürgen Morhard and Hans-Peter Jugel, Economic and Commercial Section, Embassy of Germany in the United States. Special thanks go to PROMPERU, PROCOMER; URUGUAY XXI, PROCHILE, Fundación

ExportAR, and PROEXPORT, which kindly supported this research effort with valuable data and information for both the organization case studies and the background econometric evaluations.

We also owe gratitude to Alberto Barreix, Juan Borgia, Paolo Gior-dano, Jaime Granados, Eduardo Ibarra Santa Cruz, Jessica Luna, José Salim, Manuel Ugarte Brenes, Gustavo Ulivi, Mario Umaña, Enrique Vejarano, and Luiz Villela, and staff at the Trade Monitoring Unit within Argentina's Secretary for Industry, Trade, and SMEs, who provided unconditional help in building up the datasets used in the background studies. Excellent research assistance by Elisa Botero Duque, Carlos Gutiérrez Jr., Ramiro Pascual, Ariel Mecikovsky, Gonzalo Iberti Bozo, and Jorge Mattar and editing assistance by Mariana Sobral de Elia and Roger Hamilton are also appreciated.

The report and its companion background papers have greatly benefited from comments by Juan Blyde and Mauricio Mesquita Moreira as well as by Roberto Álvarez, Edna Armendáriz, Julio Berlinski, Irene Brambilla, José Cuesta, Ana Fernandes, Victoria Florez Toro, Pablo M. García, Jaime Granados, Jeremy Harris, Fidel Jaramillo, Jessica Luna, Fabrizio Opertti, Rodrigo Parot, Mathew Shearer, Ziga Vodusek, anonymous referees, and participants in the Annual Conferences of the European Trade Study Group (Athens, Warsaw, and Rome), the Latin American and Caribbean Economic Association (Buenos Aires), the World Conference of the Trade Promotion Organizations (The Hague), the Ibero-American Network of Trade Promotion Organizations (Buenos Aires and San Jose), the Network of Regional Trade Promotion Organizations (Cordoba, Argentina), the Workshop on Exporter Dynamics and Productivity organized by the Canadian Department of Foreign Affairs and International Trade (Ottawa), a seminar at the University of San Andrés (Argentina), the IDB-WTO Course on Trade Policy for member countries of the Latin American Integration Association – ALADI-(Montevideo), the IDB Course on Strengthening Trade Policies (Washington), and the Meeting of the MIF Cluster on Trade Facilitation and International Investments (Washington). Needless to say, all usual disclaimers apply to these acknowledgments.

“Ignorance is like subzero weather: by a sufficient expenditure its effect upon people can be kept within tolerable or even comfortable bounds, but it would be wholly uneconomic entirely to eliminate all its effects. And, just as an analysis of man’s shelter and apparel would be somewhat incomplete if cold weather is ignored, so also our understanding of economic life will be incomplete if we do not systematically take account of the cold winds of ignorance.”

—George Stigler (1961)

>> Itinerary

The export performance of many Latin American and Caribbean economies has been below what one would expect for countries of their size or level of development. One explanation is the existence of significant barriers to exporting, which are both numerous and large. While we have a good understanding of the role played by some of these trade deterrents, we know very little about the effects of others. For example, the inhibiting effects on trade of transport costs and especially tariffs have been extensively studied. But in the case of other less evident obstacles, such as imperfect information, our knowledge is very limited. Difficulties firms face in obtaining basic data on specific export markets and identifying initial business contacts are likely to severely limit the scale and scope of their exports or even discourage them from venturing abroad.

Around the world, most governments have attempted to address these information problems through export promotion activities, typically implemented by specialized organizations. This raises at least three questions: How important are information barriers? Do these barriers generate a market failure that might potentially justify public intervention? And what do we know about the impact of these export promotion interventions? The quest for answers to these questions is the departure point of our journey. We set off in Chapter I with a careful review of the existing literature and conclude with a forceful message: our understanding of the effects of export promotion initiatives is, at best, very limited.

The remaining chapters of this report aim to fill gaps in our knowledge, and thereby contribute to better informed policymaking in this area.

In particular, our analysis focuses on policies designed and implemented by export promotion organizations. Among other things, the effectiveness of these interventions will hinge upon the relevant macroeconomic and sectoral policies; the institutional attributes of the export promotion organizations themselves (e.g., reporting schemes, norms that govern the selection and promotion of personnel, etc.) and their incentives structures; and the specific kinds of promotion activities performed and instruments applied. This study takes the first set of factors—macroeconomic and sectoral policies—as contextual conditioning elements to be controlled for, and then goes on to take a detailed look at the institutional attributes and the impacts of the programs and instruments. As such, Chapter 2 describes the entities tasked with export promotion in terms of their legal status, budget, profile of personnel, modalities of presence abroad, and impact evaluation mechanisms. This description is based primarily on the results of an extensive survey of export promotion organizations in over 35 countries and regions, as well as on in-depth case studies of six of them from Latin America and the Caribbean: PROMPERU (Peru), PROCOMER (Costa Rica), URUGUAY XXI (Uruguay), PROCHILE (Chile), Fundación ExportAR (Argentina), and PROEXPORT (Colombia).

Several interesting facts emerge from this analysis, two of which can be rigorously examined with data. The first is that, while some export promotion organizations operate abroad through dedicated networks of foreign offices, others must rely on diplomats at embassies and consulates to provide onsite support to exporters. These two substantially different modes of operation can therefore be expected to have similarly different impacts on countries' export outcomes, both overall and in terms of specific measures. Chapter 3 explores these potentially varying impacts through analysis of a new bilateral dataset on foreign missions.

The second fact to emerge is that most entities use inadequate procedures to assess the effectiveness of their programs. Despite this inadequacy, however, the results from such assessments appear to be critical inputs for important policy decisions, such as changing the organization's strategy, reallocating its resources among specific activities, evaluating employees, etc. Chapter 4 takes a first step towards providing strategies to improve these evaluation practices and thereby create the possibility

for better informed policy decisions. The chapter provides estimates of the impact of export promotion actions on alternative measures of firms' export performance (e.g., total exports and diversification in terms of destination countries and products), that is, the direct effect of these actions on the main variables export promotion organizations claim to target. These estimates are based on state-of-the-art econometric methods applied to new, unique datasets primarily consisting of highly disaggregated firm-level export data covering virtually the entire population of exporters and annual lists of companies receiving assistance for the six countries whose export promotion organizations are described in detail in Chapter 2 (Peru, Costa Rica, Uruguay, Chile, Argentina, and Colombia).

>> Traveling in the Unknown

Dimension: Information Barriers and Export Promotion

1.1 Introduction

Exporting is a complex endeavor. Firms may encounter many obstacles in their attempts to expand their activities in foreign markets and even to merely enter these markets. Some of these obstacles, such as tariffs and transport costs, are obvious. Others, such as lack of information, are subtler—at least to economists—but no less injurious to trade. The most common policy response to address information gaps is export promotion. Remarkably, most, if not all countries in the region, like most countries in other regions, have implemented such policies, in many cases through specialized organizations. Given that these policies are in widespread use, one would be tempted to assume that their effectiveness is a well-established fact. Is this the case? Does investment of resources in export promotion generate positive returns? This chapter highlights the role of information gaps as a trade barrier, discusses the rationale for export promotion, and reviews the evidence on its effects.

The remainder of this chapter is organized as follows: Section 1.2 characterizes Latin American and Caribbean trade performance over the last decade using standard and new indicators. Section 1.3 identifies trade costs that may be associated with this observed performance. Section

1.4 examines how information barriers may affect trade outcomes. Section 1.5 presents evidence on the relative importance of these barriers. Section 1.6 discusses the rationale for public intervention in the form of export promotion. Section 1.7 reviews existing evidence on the effects of this kind of public intervention on export outcomes. Section 1.8 provides a conclusion.

1.2 Current Coordinates: Latin American and Caribbean Countries' Export Performance

It is well known from the literature that low levels of openness and lack of diversification can be potentially costly in terms of economic growth.¹ Three main reasons can be identified. First, high export specialization implies high sensitivity to sector-specific shocks and thus to high volatility of export revenues, which affects the import capability of the country and results in underinvestment when investors are risk averse, as well as of growth rates.² In general, countries with more volatile business cycles generally exhibit lower growth rates over the long term.³ Second, assuming that there is preference for variety, less diversity in exports generally implies lower export levels.⁴ Third, high concentration of exports in a more restricted range of products limits productivity growth since it does not encourage either more efficiency in using inputs or the increased knowledge acquired through exporting.⁵

Equally well known is the fact that Latin American and Caribbean countries have traditionally lagged both in terms of level and degree of diversification of their exports, mainly specializing in natural resources and primary products. Just to mention two examples: coffee represented on average more than 60 percent of Colombia's total exports over the period

¹ See, e.g., Frankel and Romer (1999); Brainard and Cooper (1968); Lederman and Maloney (2003); Lee et al. (2004); and Herzer and Nowak-Lehmann (2006).

² See, e.g., Dawe (1996); and Bleaney and Greenaway (2001).

³ See, e.g., Fatás (2002).

⁴ See, e.g., Funke and Ruhwedel (2001).

⁵ See, e.g., Feenstra and Kee (2008); Al-Marhubi (2000); and Agosin (2006).

1905–1986, and petroleum has accounted for more than 80 percent of Venezuela’s total exports in recent years.⁶

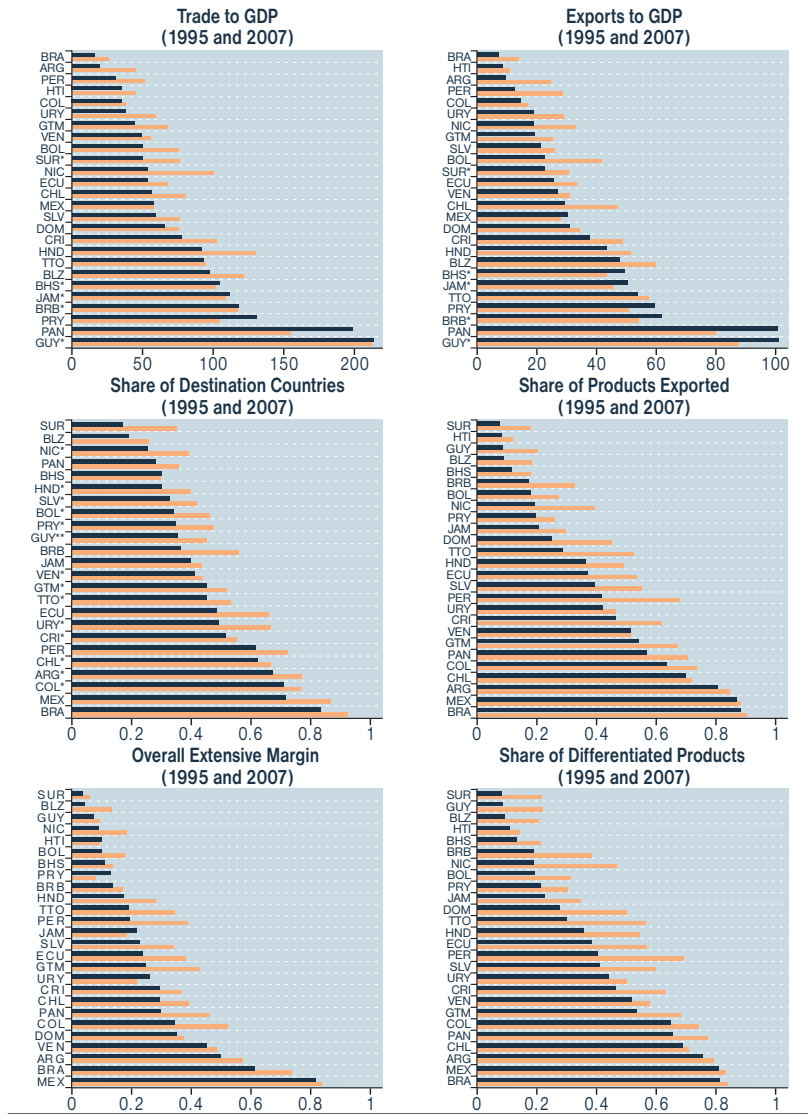
Nevertheless, trade outcomes have improved in recent years. At least three-fourths of Latin American and Caribbean countries have increased their level of openness, the relative importance of exports in their economies, the number of destination countries, the diversity of products they ship abroad, their overall level of export diversification, and the number of differentiated products they sell in foreign markets (see Figure 1.1).

Despite these general improvements, levels of trade and degrees of country and product export diversification for a number of Latin American and Caribbean economies still remain clearly below what would be expected from the size of their economies and levels of development (see Figure 1.2). Furthermore, their exports demonstrate a low ability to survive in international markets (see Figure 1.3). It has been shown that differentiated products are traded longer than homogeneous products.⁷ Due to their multiple differences across many dimensions, firms trading these products usually incur higher search costs to find an appropriate partner and then must make larger investments in these partners to

⁶ While a clear consensus is far from being established, some studies suggest that high dependence on exports of natural resources might be costly in terms of economic growth (see, e.g., Sachs and Warner, 1999). First, it has been argued that specialization in primary products does not favor convergence due to the relatively low rate of technological progress in the primary sector and the secular downward trend in the relative prices of primary products (see Prebisch, 1950; and Singer, 1950). Second, countries for which natural resources represent a large share of exports are particularly likely to suffer from “Dutch disease,” where periodic booms in those products lead to a real appreciation that reduces the ability of other exporting or import-competing sectors—typically manufacturing—to retain or increase international competitiveness (see Corden, 1980; and Corden and Neary, 1982). If manufacturing encourages a more complex division of labor and stronger linkages with the rest of the economy (see Hirschman, 1958), the consequence of dependence on exports of primary products would be a lower level of development. Third, this dependence tends to be associated with high volatility in terms of trade, which has negative repercussions on exports and investment, and therefore on economic growth (see Gylfason, 2001). This is especially true for countries that face restrictions on access to international financial markets and where the depth of domestic financial systems remains low (see Caballero, 2000). Fourth, the prevalence of natural resource-intensive sectors reduces incentives to accumulate human capital because they generate a high level of non-wage income (see Gylfason, 2004). This may cause income inequality to persist over longer periods (see Leamer et al., 1999). Low levels of education and high levels of inequality, in turn, tend to harm growth (see, e.g., Persson and Tabellini, 1994; and Aghion et al., 1999).

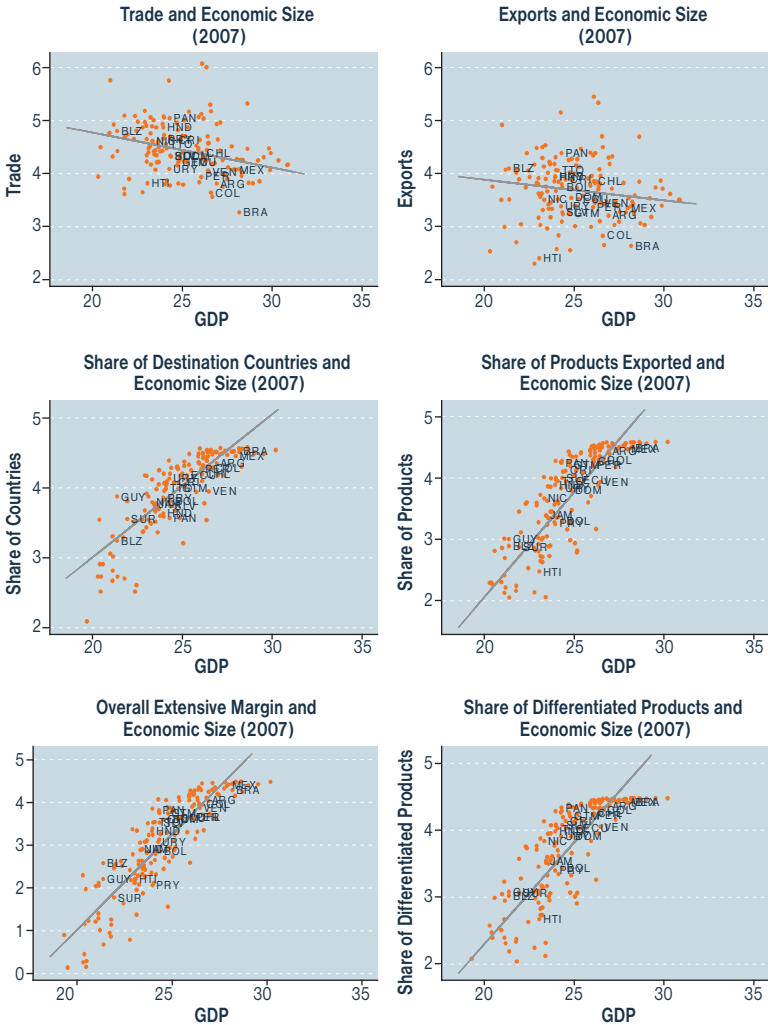
⁷ See Besedes and Prusa (2006).

FIGURE 1.1 ■ Latin American and Caribbean Countries' Trade Outcomes over Time



Source: Our calculations based on data from World Development Indicators and COMTRADE.
Trade to GDP: percentage share of exports plus imports in GDP. Exports to GDP: percentage share of exports in GDP. Share of destination countries: ratio of the number of destinations to which countries export to the total number of destinations (227 in 1995 and 237 in 2007). Share of products exported: ratio of the number of products exported by the countries to the total number of products as determined according to the six-digit HS (Harmonized System) classification, version 1988/1992 (5,018 products). Overall extensive margin: extensive margin (diversification) indicator proposed by Hummels and Klenow (2005). Share of differentiated products: share of differentiated products exported in the total number of products exported. Differentiated products are identified using the liberal version of the classification developed by Rauch (1999).

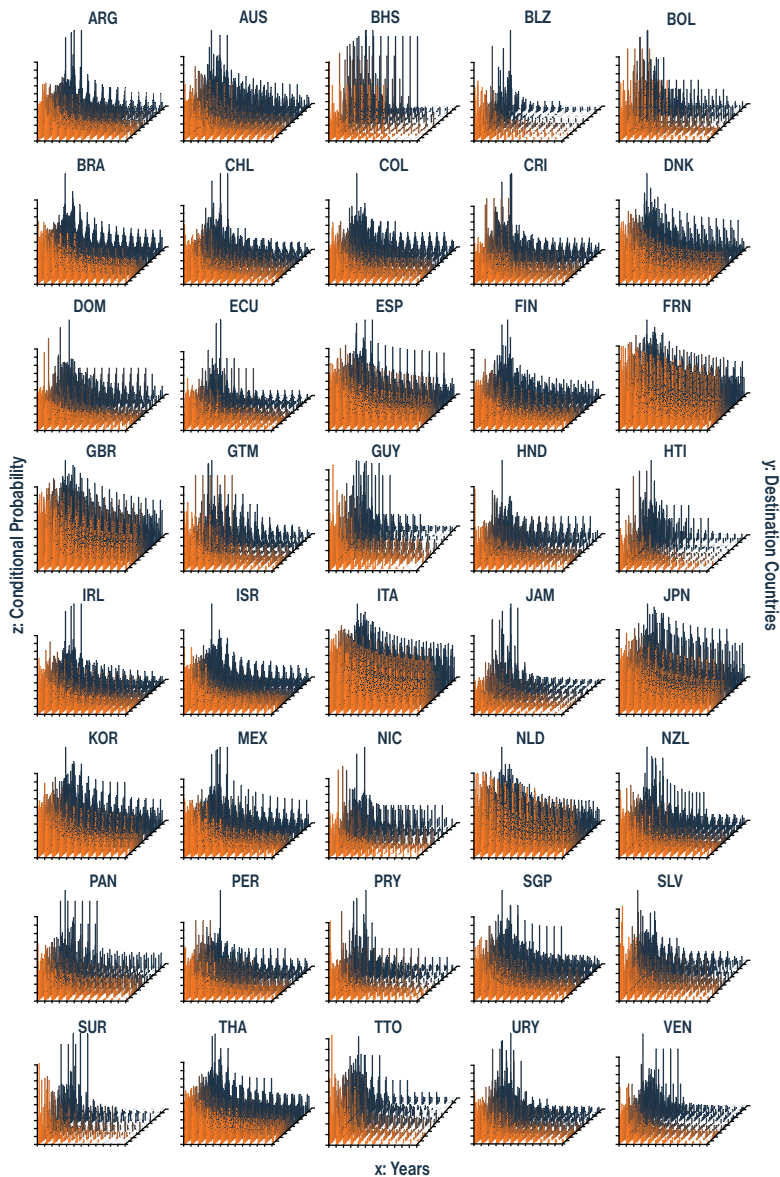
FIGURE 1.2 ■ Latin American and Caribbean Countries' Trade Outcomes Relative to Their Economic Size



Source: Our calculations based on data from World Development Indicators and COMTRADE.

Trade to GDP: percentage share of exports plus imports in GDP. Exports to GDP: percentage share of exports in GDP. Share of destination countries: ratio of the number of destinations to which countries export to the total number of destinations (237 in 2007). Share of exported products: ratio of the number of products exported by the countries to the total number of products as determined according to the six-digit HS classification, version 1988/1992 (5,018 products). Overall extensive margin: extensive margin (diversification) indicator proposed by Hummels and Klenow (2005). Share of differentiated products: share of differentiated products exported in the total number of products exported. Differentiated products are identified using the liberal version of the classification developed by Rauch (1999). All variables are expressed in natural logarithm and contrasted with the natural logarithm of countries' GDP as a proxy for their economic size. The straight line shows the relationship between these variables as obtained from a robust regression to account for the presence of outliers.

FIGURE 1.3 ■ Survival in International Markets, Selected Countries (1995–2007)



Source: Our calculations based on data from COMTRADE.

The figures present the export survival rate, i.e., the (conditional) probability that a trade flow remains positive (z-axis) for a given number of years (x-axis) for each selected exporting country and in each destination market (y-axis) across six-digit HS products, as obtained using the Kaplan-Meier estimator. A higher bar indicates a larger proportion of products registering positive exports to a given importing country after a given number of years.

ensure that large orders are delivered on a timely basis than those trading homogeneous products. These higher search and investment costs act as disincentives to switch partners. The lower survival of exports from countries in the region might thus be related to their composition in terms of goods in general, and to the relatively low shares of differentiated ones, in particular. Moreover, existing evidence suggests that these countries might have achieved significantly higher export growth if they had been able to extend the duration of their trade relationships.⁸ Therefore, the relatively low levels of trade and exports could be linked to the relatively short survival of the underlying commercial relationships. What are the reasons behind this below-expectation trade performance?

1.3 Mapping the Obstacles: Trade Costs and Export Performance

Factors shaping countries' trade performance can be broadly classified into two interrelated groups: those affecting conditions under which production activities are developed within the countries, and those affecting conditions under which the output of these activities can be moved across countries.⁹ In this chapter we focus on the second set of factors, which can be generically bundled as *trade costs*.

Trade costs are all costs incurred in getting a good to the final user, other than the marginal cost of producing the good itself. These include transport costs (both freight and time costs), policy barriers (tariff and non-tariff barriers), contract enforcement costs, costs associated with the use of different currencies, legal and regulatory costs, local distribution costs (wholesale and retail), and information costs.¹⁰

In considering possible trade cost-related explanations of Latin American and Caribbean countries' trade outcomes, tariffs and non-tariff impediments appear as natural candidates. In past decades, these

⁸ See Besedes and Prusa (2007).

⁹ The first set of factors has been extensively examined elsewhere (see, e.g., Pagés-Serra, 2010).

¹⁰ See Anderson and van Wincoop (2004).

countries' exports have been severely limited, both within the region due to the high tariffs applied by trading partners, and outside of the region also due to tariffs, but primarily to non-tariff measures applied by third countries, especially in many of the goods in which Latin American and Caribbean economies have comparative advantage.¹¹ Today, while substantial progress still remains to be made in eliminating non-tariff barriers, tariffs are significantly lower than they were 20 years ago as a result of multilateral negotiations, unilateral trade policy reforms implemented by the countries, and regional trade agreements signed among them. Thus, the average MFN tariffs of Latin American countries that are members of the Latin American Integration Association fell roughly 30 percentage points, from 39.1 percent in 1985 to 10.5 percent in 2005. Meanwhile, the average bilateral preferential tariff declined from 37.3 percent to 5.0 percent during the same period.¹² The relative importance of the aforementioned barriers is clearly smaller today than in the past. Therefore, other factors must be operating to limit Latin American and Caribbean countries' export potential.

One of these factors is transport costs. Nowadays these costs are higher than tariffs over several country and sector dimensions and appear to have a significant negative impact on both Latin American and Caribbean countries' total exports and their diversification.¹³

Is that all? The answer to this question is clearly no. Other more subtle, less studied barriers can present similar deterrents to trade. Without denying the relevance of other obstacles, we argue that one such subtle, but significant, barrier to trade is lack of information.

1.4 Information Gaps in International Trade

Information and the search for it play a vast role in economic life.¹⁴ Relevant, accurate, and timely information is a key input to effective marketing

¹¹ See, e.g., Estevadeordal and Robertson (2004) and Leamer (1990), respectively.

¹² See Ando et al. (2009).

¹³ See Mesquita Moreira et al. (2008).

¹⁴ See Stigler (1961).

decisions. Information is necessary for understanding the marketplace where the firms intend to operate, and for monitoring changes in rapidly shifting business environments, designing reliable marketing plans and strategies, finding solutions to specific marketing problems such as changing prices, setting up distribution channels, and choosing effective means for promoting products.¹⁵

Given the variety of business environments, the many factors to be considered when selling abroad, and particularly the need to deal with situations not encountered in domestic operations, information is especially important for firms operating beyond national boundaries.¹⁶ Among other things, firms must know the formal export process at home, the different ways of shipping the merchandise and their associated costs, the potential markets abroad and their demand profile, the conditions for entering these markets, and channels available to raise awareness of their products and those through which these products can be marketed. In short, exporting is an information intensive activity.

Not surprisingly, this economic activity is handicapped by the absence of complete information. In many cases, supply-demand signals cannot be sent (or received) cost-effectively to (or from) potential exchange partners independently or via market mechanisms. Thus, firms pursuing cross-border economic opportunities must engage in a costly process of identifying partners. The difficulty of this search is determined by the extent to which economic opportunities and potential trading partners are geographically dispersed. Moreover, there is usually uncertainty about the attributes of the goods (or services) to be exchanged and how the trading partners will discharge mutual obligations in the future. As a consequence, prospective exporters must also carry out a costly process of assessing the reliability, trustworthiness, timeliness, and capabilities of these partners. The importance of these deliberations increases with the cost of reversing business decisions or their effects.¹⁷ Hence, information gaps limit

¹⁵ See Leonidou and Theodosiu (2004).

¹⁶ See Johnston and Vahlne (1977); Czinkota and Ronkainen (2001); and Leonidou and Theodosiu (2004).

¹⁷ See Rangan and Lawrence (1999); and Rangan (2000).

the ability of firms to learn about international trading opportunities and find a suitable trade partner, and in this way negatively affect exports.¹⁸

Lack of information can be a particularly significant barrier to trade when uncertainty-aversion is a factor. It has been shown that countries whose business communities are uncertainty-averse and thus more sensitive to informational ambiguity, trade disproportionately less with more distant partners with whom they are predictably less familiar.¹⁹

Information problems are especially acute in the case of differentiated goods, that is, products that are heterogeneous in both characteristics and quality. This heterogeneity interferes with the signaling functions that prices normally perform, thus making it harder or even impossible to trade such goods in organized exchanges.²⁰ Information barriers are also large for so-called *experience goods* (e.g., technologically sophisticated consumer products, consumer durables, and custom designed services). Here, buyers initially lack the information they need about the quality of these goods that would otherwise be provided through personal inspection or technical descriptions; instead such information must come from consumption after purchase.²¹

Another related aspect of information is the image of the exporting firms. Exporters intending to enter a new market or expand foreign sales within an already served market are preceded by their reputation, which, in absence of an identifiable brand name, largely depends on the perception of country of origin.²² This issue is especially relevant for firms from developing countries, whose products are more likely to be perceived as technologically less advanced and of poorer quality than those of companies from developed countries.²³ This would be specifically the

¹⁸ See Rauch and Casella (2003); Suárez-Ortega (2003); and Chen (2004). Information availability also appears to be an important determinant of the composition of investors' portfolios in general, and cross-border equity transactions, in particular (see Ahearne et al., 2004; and Portes and Rey, 2005).

¹⁹ See Huang (2007).

²⁰ See Rauch (1999).

²¹ See Nelson (1970).

²² See Chisik (2003).

²³ See, e.g., Chiang and Masson (1988); Han and Terpstra (1988); Egan and Moody (1992); and Hudson and Jones (2003).

case if consumers attach informational value to quantity and accordingly interpret low market shares as a signal of low quality.²⁴

It therefore comes as no surprise that the search and deliberation processes that must precede entry into a new export market usually require face-to-face contacts to coordinate business activities.²⁵ There are several reasons for this. First, such personal contacts constitute an efficient “technology” that permit a depth and speed of feedback that other forms of communication cannot match, especially when dealing with uncodifiable information (i.e., information that is only loosely related to the symbolic system in which it is expressed).²⁶ Second, face-to-face contacts make it easier to observe and interpret a partner’s behavior and may promote the development of trust, thereby allowing parties to reduce incentive and free-rider problems. Third, these contacts facilitate the screening of potential partners by encouraging informal networks in which members create and share a pool of knowledge about their competences and performance.

Interviews with managers of purchasing firms have confirmed the importance of face-to-face contacts. These executives put a high priority on capable management when deciding among alternative suppliers or partners in joint ventures, and for this reason tend to visit their counterparts in their place of business before establishing a trade relationship.²⁷

1.5 How Important Are Information Problems?

Unlike other trade costs such as tariffs and transport costs, there is no direct measure of the relative importance of information barriers. However,

²⁴ See Caminal and Vives (1996).

²⁵ See Storper and Venables (2004). Noteworthy, over recent decades, long distance business travel has grown faster than output and trade (see Hall, 1998).

²⁶ For instance, Nohria and Eccles (1992) argue that, relative to electronically mediated exchange, face-to-face interaction offers an unusual capacity for interruption, repair, feedback, and learning. Gasper and Glaeser (1998) maintain that telephone contacts are likely to be complementary and not substitutes for face-to-face contact, as they increase the overall amount of business interaction.

²⁷ See Egan and Moody (1992).

indirect means, such as surveys to firms and inferences from econometric estimations, make it possible to arrive at some conclusions.

Several survey-based empirical studies on the impact of alternative trade barriers in the United States, Europe, and newly industrialized Asian countries indicate that lack of information is one of the most relevant export barriers, both in terms of frequency of occurrence and degree of severity.²⁸ In particular, many firms encounter difficulty in locating and analyzing foreign markets, which requires knowing where to find the information and how to retrieve complete and updated international market data; learning about foreign business practices and foreign consumer preferences; identifying business opportunities abroad; contacting and communicating with overseas customers; and accessing appropriate distribution and advertising channels.²⁹ Most of these information problems are perceived to have a high to very high impact on exporting.³⁰

Likewise, a recent survey of 460 British firms finds that the most common export impediments are associated with identifying the initial contact and the marketing costs involved in doing business overseas (more than 50 percent of the firms). Many of these firms also report difficulties in establishing initial dialogue with prospective customers or business partners and building relationships.³¹

Indications of the importance of information barriers can also be obtained from econometric studies, primarily those exploring the implications of informal institutions such as immigrant networks.³² These networks may serve as information nodes that help match buyers and sellers, for

²⁸ The studies use information obtained directly from the firms primarily through mail surveys, and through personal and phone interviews. See Leonidou (1995).

²⁹ See, e.g., Albaum (1983); Czinkota and Ricks (1983); Katsikeas and Morgan (1994); and Leonidou (2004).

³⁰ See, e.g., Keng and Juan (1988); Katsikeas and Morgan (1994); Suárez-Ortega (2003); and Leonidou (2004). In particular, limited information is often cited by exporters as a major barrier to both entering new export markets and expanding current export operations (see Cavusgil and Naor, 1987; Katsikeas, 1994; and Souchon and Diamantopoulos, 1998).

³¹ See Kneller and Pisu (2007).

³² See, e.g., Gould (1994); Head and Ries (1998); Combes et al. (2005); and Herander and Saavedra (2005).

example, making it easier for producers to find the right distributors for their consumer goods or for assemblers to find the best suppliers for their components.³³ In this regard, the trade increasing effect of the Chinese network has been found to be larger for differentiated goods than for homogeneous goods.³⁴ If the trade expanding effect of the network on the latter group of goods can be interpreted as the value of the network to informal contract enforcement, then the difference in observed impacts between these two classes of goods may be taken to represent the value of market information, matching, and referral services provided by the network. The information costs implied by the actual estimates reported in the study whose main result is referred to above would be approximately 6 percent.³⁵

In the same vein, an analysis of the role of Hong Kong in intermediating trade between China and the rest of the world reveals that net of customs, insurance, and freight charges, Chinese goods are much more expensive when they leave Hong Kong than when they enter.³⁶ The income flow from these intermediating activities is substantial, accounting for 12 percent of Hong Kong's GDP at the end of the 1990s. In particular, markups on re-exports of Chinese differentiated goods are 9 percent to 13 percent higher than those on homogeneous goods.³⁷ These additional markups might be seen as the value of information cost-reducing services provided by intermediating middlemen.

³³ Similar findings have been reported for vertical keiretsu, i.e., providers looking for export opportunities benefit from having an assembler abroad whose characteristics they know (see, e.g., Belderbos and Sleuwaegen, 1998; and Head and Ries, 2001).

³⁴ See Rauch and Trindade (2002).

³⁵ By comparing the impact on trade of switching the Chinese network variable from zero to the sample mean for countries with strong Chinese immigrant links (i.e., both partners have more than one percent Chinese population), Anderson and van Wincoop (2004) calculate that the information cost reducing value of the network would be worth a 47 percent increase in trade. Assuming an elasticity of substitution of eight, the Chinese networks save an information cost worth 6 percent.

³⁶ See Feenstra and Hanson (2004).

³⁷ Markups are also higher for products with higher variance in export prices, for products sent to China for further processing, and for products shipped to countries that trade less with China.

1.6 Overcoming the Obstacles: Do Information Barriers Justify Public Intervention?

Public interventions in this area might be—and have been—economically justified on the basis of market failures, primarily in the form of information externalities. More precisely, given that it is difficult to exclude third parties from information and that its use is non-rivalrous (i.e., use by one agent does not preclude its use by other agents), there is a potential for free riding on the successful searches of firms for foreign buyers.³⁸ These searches and the associated transactions then reveal information that may be used by other firms, which might eventually follow the pioneering firms without incurring the latter's costs.³⁹ As a result, the followers obtain important benefits from the first movers' initial investments and devalue the potential benefits from their searches.⁴⁰ This is particularly true when companies attempt to enter a new export market or to trade a new product.⁴¹ Private returns from these exporting activities would accordingly be lower than the corresponding social returns, and investment in their development would then be sub-optimally

³⁸ Firms may learn about export opportunities from other firms through employee circulation, customs documents, customer lists, and other referrals (see Rauch, 1996).

³⁹ Several studies present evidence on spillovers. Thus, Aitken et al. (1997) and Greenaway et al. (2004) report significant spillovers from multinational enterprises (MNEs) to domestic firms in Mexico and the United Kingdom, respectively. More precisely, MNE activity is positively related to export propensity of local firms. Álvarez et al. (2007) show that the probability that Chilean firms introduce given products to new countries or different products to the same countries increases with the number of peers exporting those products and to those destinations, respectively. Koenig et al. (2010) detect localized spillovers in France. In particular, agglomeration of product- and destination-specific exporters has a positive effect on individual firms' decisions to start exporting, but not on their export volumes. There are, however, analyses that fail to identify spillovers. For example, Bernard and Jensen (2004) find no (or even negative) external effects of this kind in the United States. Overall, evidence generally points to the existence of spillovers. Nevertheless, further research is required to determine the specific channels through which these spillovers take place (e.g., employment circulation) and thus whether they are actually such and not potentially confounding effects as well as the extent to which their magnitude can justify export promotion policies.

⁴⁰ See, e.g., Rauch (1996) and Álvarez (2007).

⁴¹ See Hausman and Rodrik (2003) and Álvarez et al. (2007). In Hausman and Rodrik's (2003) model, investment in developing new export activities is too low ex-ante and entry is too high ex-post.

low.⁴² Public interventions aimed at correcting this form of market failure are commonly called *export promotion actions*.

Information asymmetries on product quality may also create a case for trade policies. When, as in the case of experience goods, consumers are initially uninformed or imperfectly informed about the attributes of the product, they will make judgments on its quality by monitoring their prices. In this case, firms that produce high-quality goods may need to distort their prices, lest consumers mistakenly infer that the quality of their products is low. The mere potential to produce low-quality goods—or of entry by low-quality producers—therefore generates a negative informational externality that affects the profits of high-quality exporters.⁴³ As a consequence, firms attempting to enter the market may find it harder to compete with incumbents who have already developed a reputation for quality merchandise, and competitive products would emerge more slowly relative to a scenario with perfect information.⁴⁴ In this way, market shares will exhibit more inertia than price and quality comparisons between new and established products would justify. Furthermore, firms that would be able to enter the market and make a small profit if consumers were fully informed may be kept entirely out of the market.⁴⁵ Some authors have shown that trade policy may help correct these kinds of information externalities under certain conditions.⁴⁶

⁴² See Westphal (1990).

⁴³ See Bagwell (1991).

⁴⁴ See, e.g., Schmalensee (1982); Farrel (1986); and Bagwell (1990).

⁴⁵ See Grossman (1989).

⁴⁶ See, e.g., Mayer (1984); Bagwell and Staiger (1989); and Bagwell (1991). Besides the termination of business relationships, failure to meet the contractually agreed delivery standards by presently exporting firms may generate negative reputational effects, thus creating a negative externality for their peers. Egan and Moody (1992) report the case of a bicycle importer in the United States whose bad experience with a supplier from a country not known for supplying quality bicycles spread to other buyers and independent bicycle dealers. Similarly, Chisik (2003) refers to the case of a Colombian garment firm in the 1970s that failed to deliver the product (men's suits) with the required quality, producing a significant reputational impact on the country's overall industry. Taking into account these externalities associated with individual experiences, the government of Taiwan launched a program to compensate return shipments of defective bicycles when Taiwanese firms started to export as a way of preventing reputational damage (see Egan and Moody, 1992).

Externalities may also originate from managerial practices, training activities, technological change, and production linkages. Thus, exporters are likely to adopt efficient and competitive management styles and provide employees with higher quality training, which may potentially benefit non-exporting firms through turnover of managers and employees.⁴⁷ Moreover, externalities related to technological development may be extensive due to the imperfect tradeability of technology.⁴⁸ In particular, exporters may transfer knowledge and provide suppliers with technical assistance and facilitate access to new and improved inputs by firms in downstream industries.⁴⁹ In addition to these externalities, other market failures, such as coordination failures between complementary industries, where activities are related through backward and forward linkages, might also potentially provide a rationale for public intervention in this area.⁵⁰

It is important to bear in mind that the aim of export promotion is to facilitate an economic activity that has been found to be closely correlated to productivity growth and, therefore, with rapid and sustainable economic growth. In particular, as clearly established in the empirical literature, productivity leads to exports, and in addition, important feedback effects can be expected from larger volumes of foreign sales.⁵¹ If high information barriers break this loop, growth can be negatively affected.

In closing this section, we should note that the existence of a case for public intervention does not in itself mean that intervention is necessarily warranted. Besides the need to factor in the implied opportunity costs, care must be taken not to underestimate obvious risks of resource diversion associated with potential rent-seeking activities as well as capture of the responsible agency by specific interest groups. More generally, interven-

⁴⁷ See Kessing (1967); Feder (1983); and Edwards (1993).

⁴⁸ See Westphal (1990).

⁴⁹ See Álvarez and López (2006).

⁵⁰ See Trindade (2005).

⁵¹ Although admittedly the literature is far from conclusive in this regard, some studies find support for this learning-by-exporting. See, e.g., Castellani (2002); Baldwin and Gu (2003); van Biesebroeck (2005); De Loecker (2007); and Isgut and Fernandes (2009).

tion would be advisable only if it would improve social welfare, that is, if potential social benefits exceed corresponding social costs.

1.7 Export Promotion and Export Performance

Export promotion policies are virtually ubiquitous.⁵² Over the past two decades, the number of formal organizations responsible for carrying out these policies has increased by a factor of three.⁵³ Activities undertaken by export promotion organizations can be viewed as a means of subsidizing searches, which counter the disincentives arising from potential free riding.⁵⁴ These actions can help attenuate information problems. More precisely, trade assistance initiatives can lower the fixed costs that firms incur when exporting for the first time and in entering specific new markets by reducing those costs associated with information gathering, e.g., carrying out overseas market studies on prices, product standards, and potential buyers.⁵⁵ As a result, export promotion organizations can potentially facilitate the internationalization of companies and specifically their entry into new country and/or product markets. But is this actually the case? This question has no clear answer as the existing evidence regarding the impact of their activities is partial and inconclusive.

As we will see below, some organizations perform their own impact evaluations. In doing so, they primarily rely on information collected from firms participating in export promotion activities that they organize or automatically attribute to these activities the level and/or the change of the value of exports of firms receiving assistance. Both strategies have clear methodological flaws, which make their results highly questionable.

On the other hand, a few studies in the empirical trade literature examine the effects of regional and national expenditures on trade pro-

⁵² See Rauch (1996).

⁵³ See Lederman et al. (2006).

⁵⁴ See Rauch (1996).

⁵⁵ See Wagner (1995) and Roberts and Tybout (1997).

motion on trade outcomes. States' export promotion spending has been reported to have positively affected total states' exports in the United States. In particular, it is estimated that an increase in manufacturing promotion expenditures of US\$1 would generate additional US\$432 of manufacturing exports.⁵⁶ Recent evidence consistently shows that the size of the budget of export promotion organizations is positively related to countries' total exports in a cross section of countries. For the median organization, for each US\$1 spent on trade promotion, exports would increase by US\$40.⁵⁷

Two recent papers have used data at the firm level to evaluate more rigorously the impact of public policies on firm export behavior in the United States and Ireland. Results for the United States indicate that average states' expenditures on export promotion per firm do not significantly influence the probability that they will export. In Ireland, grants aimed at increasing investment in technology, training, and physical capital, when large enough, appear to be effective in increasing exports of firms that are already exporting, but are not effective in encouraging new firms to enter international markets.⁵⁸

While insightful, these studies use highly aggregated data and/or concentrate just on the manufacturing sector in developed countries.⁵⁹ They do not fully identify the specific channels through which export promotion may affect exports. It remains unclear whether promotion helps increase exports through adding new destination countries or new products (extensive margin) or through expanding sales abroad in already served markets or of already exported products (intensive margin).

Several other papers, mainly from the business economics literature, also investigate the impact of trade promotion on export performance.

⁵⁶ See Coughlin and Cartwright (1987).

⁵⁷ See Lederman et al. (2006).

⁵⁸ See Bernard and Jensen (2004) and Görg et al. (2008), respectively.

⁵⁹ Specifically, Bernard and Jensen (2004) examine a sample of 13,550 US manufacturing plants over the period 1984–1992, whereas Görg et al. (2008) analyze a sample of 11,730 manufacturing firm-year observations in Ireland over the period 1983–2002 (i.e., an average of 587 firms per year).

However, most of these contributions, besides their exclusive focus on developed countries, utilize highly specific, geographically and/or sectorally limited samples, or just look at one or a few specific programs. Hence, it would be virtually impossible to generalize from these analyses. Further, endogenous selection of firms into trade assistance or its specific programs is almost never properly taken into account. As a result, impact estimates are likely to be severely biased.

What do we know about the effectiveness of export promotion programs in Latin America and the Caribbean? The simple answer is, not much. Until very recently, only two careful studies had been carried out, and both focused on activities undertaken by Chile's national export promotion organization, PROCHILE. These studies conclude that instruments managed by this organization had a positive and direct effect on the number of destination markets to which firms export, and indirectly, after a period of four years, on product diversification. Further, whereas trade shows and trade missions do not significantly affect the probability that firms become permanent exporters, exporter committees do produce results in this regard.⁶⁰ Although interesting, these analyses share the same limitations as other studies in being based on small samples of manufacturing firms, thus ignoring other activities that are important in Latin America and the Caribbean, and Chile in particular, such as agriculture and mining.⁶¹

Summing up, current evaluation practices are flawed by important methodological issues, and the existing literature virtually ignores Latin America and the Caribbean as well as activities other than manufacturing, and here only using small samples of firms. These analytical gaps deserve being addressed. Export promotion is costly and is just one of the possible alternative applications of scarce—and for the most public—resources. Therefore, Latin American and Caribbean export promotion organizations should be provided with a set of analytical tools to evaluate their actions

⁶⁰ See Álvarez and Crespi (2000) and Álvarez (2004).

⁶¹ Álvarez and Crespi (2000) consider a sample of 365 Chilean firms out of a population of 7,479 exporting firms over the period 1992–1996, while Álvarez (2004) investigates a sample of 295 Chilean manufacturing firms.

and improve their allocation of funds across these actions to maximize their effectiveness.

1.8 Concluding Remarks

This chapter has shown how lack of information, while less evident than other trade barriers and thereby often neglected, nevertheless may play an important role in shaping countries' trade performance by affecting the ability of their firms to penetrate and expand their activities in international markets. Unlike the case with other trade impediments, private investments in overcoming information obstacles generate positive externalities, making these investments suboptimally low from the social point of view. Virtually all countries around the world, including those in Latin American and Caribbean, have addressed this problem by implementing export promotion policies, and in most cases by establishing specialized organizations. No matter how omnipresent these organizations are, or how widespread these policies are, existing evidence on their effectiveness is fragmentary and far from robust. Clearly, this available evidence is insufficient for rigorously assessing whether funds devoted to trade promotion policies are well spent or for properly determining how to achieve greater impacts by reallocating these funds across the different components of these policies. The next chapters aim to fill this gap.

References

- Aghion P.; Caroli, E.; and Garcia-Peñalosa, C., 1999. "Inequality and economic growth: The perspective of the new growth theories." *Journal of Economic Literature*, 37, 4.
- Ahearne, A.; Grier, W.; and Warnock, F., 2004. "Information costs and home bias: An analysis of US holdings of foreign equities." *Journal of International Economics*, 62, 2.
- Agosin, M., 2006. "Trade and growth: Why Asia grows faster than Latin America." Economic and Sector Study Series RE2-06-002. Inter-American Development Bank.
- Aitken, B.; Hanson, G.; and Harrison, A., 1997. "Spillovers, foreign investment, and export behavior." *Journal of International Economics*, 43, 1-2.
- Albaum, G., 1983. "Effectiveness of government export assistance for U.S. smaller-sized manufacturers: Some further evidence." *International Marketing Review*, 1, 1.
- Al-Marhubi, F., 2000. "Export diversification and growth: An empirical investigation." *Applied Economic Letters*, 7.
- Álvarez, R., 2004. "Sources of export success in small- and medium-sized enterprises: The impact of public programs." *International Business Review*, 13.
- Álvarez, R., 2007. "Explaining export success: Firm characteristics and spillover effects." *World Development*, 35, 3.
- Álvarez, R. and Crespi, G., 2000. "Exporter performance and promotion instruments: Chilean empirical evidence." *Estudios de Economía*, 27, 2. Universidad de Chile.
- Álvarez, R. and López, R., 2006. "Is exporting a source of productivity spillovers?" CAEPR Working Paper 2006-012, Indiana University.
- Álvarez, R.; Faruq, H.; and López, R., 2007. "New products in export markets: Learning from experience and learning from others." Indiana University, mimeo.
- Anderson, J. and van Wincoop, E., 2004. "Trade costs." *Journal of Economic Literature*, 42, 3.

- Ando, M.; Estevadeordal, A.; and Volpe Martincus, C., 2009. "Complements or substitutes? Preferential and multilateral trade liberalization at the sectoral level." IDB-INT Working Paper 151.
- Bagwell, K., 1990. "Informational product differentiation as a barrier to entry." *International Journal of Industrial Organization*, 8, 2.
- Bagwell, K., 1991. "Optimal export policy for a new-product monopoly." *American Economic Review* 81, 5.
- Bagwell, K. and Staiger, R., 1989. "The role of export subsidies when quality is unknown." *Journal of International Economics*, 27, 1–2.
- Baldwin, J. and Gu, W., 2003. "Export-market participation and productivity performance in Canadian manufacturing." *Canadian Journal of Economics*, 36.
- Belderbos, R. and Sleuwaegen, L., 1998. "Tariff jumping DFI and export substitution: Japanese electronic firms in Europe." *International Journal of Industrial Organization*, 16.
- Bernard, A. and Jensen, B., 2004. "Why some firms export?" *Review of Economics and Statistics*, 86, 2.
- Besedes, T. and Prusa, T., 2006. "Production differentiation and duration of US import trade." *Journal of International Economics*, 70, 2.
- Besedes, T. and Prusa, T., 2007. "The role of extensive and intensive margins and export growth." NBER Working Paper 13628.
- Bleaney, M. and Greenaway, D., 2001. "The impact of terms of trade and real exchange rate volatility on investment and growth in Sub-Saharan Africa." *Journal of Development Economics*, 65.
- Brainard, W. and Cooper, R., 1968. "Uncertainty and diversification in international trade." *Studies in Agricultural Economics, Trade, and Development*, 8. Stanford University.
- Caballero, R., 2000. "Aggregate volatility in modern Latin America: Causes and cures." MIT, mimeo.
- Caminal, R. and Vives, X., 1996. "Why market shares matter: An information-based theory." *Rand Journal of Economics*, 27, 2.
- Castellani, D., 2002. "Export behaviour and productivity growth: Evidence from Italian manufacturing firms." *Review of World Economics*, 138.

- Cavusgil, S. and Naor, J., 1987. "Firm and management characteristics as discriminators of export marketing activity." *Journal of Business Research*, 15, 3.
- Chiang, S. and Masson, R., 1988. "Domestic industrial structure and export quality." *International Economic Review*, 29, 2.
- Chen, N., 2004. "Intra-national versus international trade in the European Union: Why do National Borders matter?" *Journal of International Economics*, 63, 1.
- Chisik, R., 2003. "Export industry policy and reputational comparative advantage." *Journal of International Economics*, 59, 2.
- Combes, P.; Lafourcade, M.; and Mayer, T., 2005. "The trade-creating effects of business and social networks: evidence from France." *Journal of International Economics*, 66, 1.
- Corden, M., 1980. "Booming sector and Dutch disease economics: Survey and consolidation." *Oxford Economic Papers*, 36, 3.
- Corden, M. and P. Neary, 1982. "Booming sector and de-industrialization in a small open economy." *Economic Journal*, 92, 368.
- Coughlin, C. and Cartwright, P., 1987. "An examination of state foreign export promotion and manufacturing exports." *Journal of Regional Science*, 27, 3.
- Czinkota, M. and Ricks, D., 1983. "The use of multi-measurement approach in the determination of company export priorities." *Journal of the Academy of Marketing Science*, 11, 3.
- Czinkota, M. and Ronkainen I., 2001. *International marketing*. The Dryden Press.
- Dawe, D., 1996. "A new look at the effects of export instability on investment and growth." *World Development*, 24.
- De Loecker, J., 2007. "Do exports generate higher productivity? Evidence from Slovenia." *Journal of International Economics*, 73, 1.
- Edwards, S., 1993. "Openness, trade liberalization, and growth in developing countries." *Journal of Economic Literature*, 31, 3.
- Egan, M. and Mody, A. 1992. "Buyer-seller links in export development." *World Development*, 20, 3.
- Estevadeordal, A. and Robertson, R., 2004. "Do preferential trade agreements matter for trade? The FTAA and the pattern of trade." In A.

- Estevadeordal, D. Rodrik, A. Taylor, and A. Velazco (eds.), *Integrating the Americas: FTAA and beyond*. DRCLAS, Harvard University.
- Farrell, J., 1986. "Moral hazard as an entry barrier." *Rand Journal of Economics*, 17, 3.
- Fatás, A., 2002. "The effects of business cycles on growth." In N. Loayza and R. Soto (eds.), *Economic growth: Sources, trends, and cycles*. Central Bank of Chile, Santiago de Chile.
- Feder, G., 1983. "On exports and economic growth." *Journal of Development Economics*, 12, 1–2.
- Feenstra, R. and Hanson, G., 2004. "Intermediaries in entrepot trade: Hong Kong re-exports of Chinese goods." *Journal of Economics and Management Strategy*, 13, 1.
- Feenstra, R. and Kee, H., 2008. "Export variety and country productivity: Estimating the monopolistic competition model with endogenous productivity." *Journal of International Economics*, 74, 2.
- Frankel, J. and Romer, P., 1999. "Does trade cause growth?" *American Economic Review*, 89, 3.
- Funke, M. and Ruhwedel, R. 2001. "Export variety and export performance: empirical evidence from East Asia." *Journal of Asian Economics*, 12, 4.
- Gaspar, J. and Glaeser, E., 1998. "Information technology and the future of cities." *Journal of Urban Economics*, 43.
- Görg, H.; Henry, M.; and Strobl, E., 2008. "Grant support and exporting activity." *Review of Economics and Statistics*, 90, 1.
- Gould, D., 1994. "Immigrant links to the home country: Empirical implications for US bilateral trade flows." *Review of Economics and Statistics*, 76, 2.
- Greenaway, D.; Sousa, N.; and Wakelin, K., 2004. "Do domestic firms learn to export from multinationals?" *European Journal of Political Economy*, 20, 4.
- Grossman, G., 1989. "Promoting new industrial activities: A survey of recent arguments and evidence." Woodrow Wilson School, Princeton University, mimeo.
- Gylfason, T., 2001. "Natural resources, education, and economic development." *European Economic Review*, 45.

- Gylfason, T., 2004. "Natural resources and economic growth: From dependence to diversification." CEPR Discussion Paper 4804.
- Hall, P., 1998. *Cities in Civilization*. Oxford: Blackwell.
- Han, C. and Terpstra, V., 1988. "Country-of-origin effects for uni-national and bi-national products." *Journal of International Business Studies*, 16.
- Hausmann, R. and Rodrik, D., 2003. "Economic development as self-discovery." *Journal of Development Economics*, 72, 2.
- Head, K. and Ries, J., 1998. "Immigration and trade creation: Econometric evidence from Canada." *Canadian Journal of Economics*, 31, 1.
- Head, K. and Ries, J., 2001. "Overseas investment and firm exports." *Review of International Economics*, 9, 1.
- Herander, M. and Saavedra, L., 2005. "Exports and the structure of immigrant-based networks: The role of geographic proximity." *Review of Economics and Statistics*, 87, 2.
- Herzer, D. and Nowak-Lehmann, F., 2006. "What does export diversification do for growth?" *Applied Economics*, 38.
- Hirschman, A., 1958. *The Strategy of Economic Development*. Yale University Press.
- Huang, R., 2007. "Distance and trade: Disentangling unfamiliarity effects and transport cost effects." *European Economic Review*, 51, 1.
- Hudson, J. and Jones, P., 2003. "International trade in "quality goods": Signalling problems for developing countries." *Journal of International Development*, 15.
- Hummels, D. and Klenow, P., 2005. "The variety and quality of a nation's exports." *American Economic Review*, 95, 3.
- Isgut, A. and Fernandes, A., 2009. "Learning-by-exporting effects: Are they for real?" World Bank, mimeo.
- Johanson, J. and Vahlne, J., 1977. "The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments." *Journal of International Business Studies*, 8, 1.
- Katsikeas, C., 1994. "Perceived export problems and export involvement: The case of Greek exporting manufacturers." *Journal of Global Marketing*, 7, 4.

- Katsikeas, C. and Morgan, R., 1994. "Differences in perceptions of exporting problems based upon firm's size and export experience." *European Journal of Marketing*, 28, 5.
- Keng, K. and Juian, T., 1989. "Differences between small and medium sized exporting and non-exporting firms: Nature or nurture." *International Marketing Review*, 6, 4.
- Kessing, D., 1967. "Outward-looking policies and economic development." *Economic Journal*, 77, 306.
- Kneller, R. and Pisu, M., 2007. "Export barriers: What are they and who do they matter to?" GEP Discussion Paper 07/12, University of Nottingham.
- Koenig, P.; Mayneris, F.; and Poncet, S., 2010. "Local export spillovers in France." *European Economic Review*, forthcoming.
- Leamer, E., 1990. "Latin America as a target of trade barriers erected by the major developed countries in 1983." *Journal of Development Economics*, 32, 2.
- Leamer, E.; Maul, H.; Rodriguez, S.; and Schott, P., 1999. "Does natural resource abundance cause Latin American income inequality?" *Journal of Development Economics*, 59, 1.
- Lederman, D. and Maloney, W., 2003. "Trade structure and growth." World Bank Policy Research Working Paper 3025.
- Lederman, D.; Olarreaga, M.; and Payton, L., 2006. "Export promotion agencies: What works and what doesn't." World Bank Policy Research Working Paper 4044.
- Lee, H.; Ricci, L.; and Rigobon, R., 2004. "Once again, is openness good for growth." *Journal of Development Economics*, 75, 2.
- Leonidou, L., 1995. "Empirical research on export barriers: Review, assessment, and synthesis." *Journal of International Marketing*, 3, 1.
- Leonidou, L., 2004. "An analysis of the barriers hindering small business export development." *Journal of Small Business Management*, 42, 3.
- Leonidou, L. and Theodosius, M., 2004. "The export marketing information system: An integration of the extant knowledge." *Journal of World Business*, 39.
- Mayer, W., 1984. "The infant export-industry argument." *Canadian Journal of Economics*, 17.

- Mesquita Moreira, M.; Volpe Martincus, C.; and Blyde, J., 2008. *Unclogging the arteries: The impact of transport costs on Latin American and Caribbean trade*. Special Report on Integration and Trade. DRCLAS, Harvard University.
- Nelson, P., 1970. "Information and consumer behavior." *Journal of Political Economy*, 78, 2.
- Nohria, N. and Eccles, R., 1992. *Networks and organizations: Structure, form and action*. Boston: Harvard Business School Press.
- Pagés-Serra, C. (ed.), 2010. *The age of productivity: Transforming economies from the bottom up*. Inter-American Development Bank.
- Persson, T. and Tabellini, G., 1994. "Is Inequality Harmful for Growth?" *American Economic Review*, 84, 3.
- Portes, R. and Rey, H., 2005. "The determinants of cross-border equity flows." *Journal of International Economics*, 65, 2.
- Prebisch, R., 1950. "The economic development of Latin America and its principal problems." Reprinted in *Economic Bulletin for Latin America*, 7, 1 (1962).
- Rangan, S., 2000. "Search and deliberation in international exchange: Microfoundations to some macro patterns." *Journal of International Business Studies*, 31, 2.
- Rangan, S. and Lawrence, R., 1999. "Search and deliberation in international exchange: Learning from international trade about lags, distance effects, and home bias." NBER Working Paper 7012.
- Rauch, J., 1996. "Trade and search: Social capital, Sogo Shosha, and spillovers." NBER Working Paper 5618.
- Rauch, J., 1999. "Networks versus markets in international trade." *Journal of International Economics*, 48, 3.
- Rauch, J. and Trindade, V., 2002. "Ethnic Chinese networks in international trade." *Review of Economics and Statistics*, 84, 1.
- Rauch, J. and Casella, A., 2003. "Overcoming informational barriers to international resource allocation: Prices and ties." *Economic Journal*, 113.
- Roberts, M. and Tybout, J., 1997. "The decision to export in Colombia: An empirical model of entry with sunk costs." *American Economic Review*, 87, 4.

- Sachs, J. and Warner, A., 1999. "The big rush, natural resource booms and growth." *Journal of Development Economics*, 59, 1.
- Schmalensee, R., 1982. "Product differentiation advantages of pioneering brands." *American Economic Review*, 72, 3.
- Singer, H., 1950. "The distribution of gains between investing and borrowing sectors." *American Economic Review*, 40.
- Souchon, A. and Diamantopoulos, A., 1998. "Information utilisation by exporting firms: Conceptualisation, measurement and impact on export performance." In S. Urban and C. Nanopoulos (eds), *Information Management*. Gabler Verlag.
- Stigler, G., 1961. "The economics of information." *Journal of Political Economy*, 69, 3.
- Storper, M. and Venables, A., 2004. "Buzz: face-to-face contact and the urban economy." *Journal of Economic Geography*, 4, 4.
- Suárez-Ortega, S., 2003, "Export barriers: Insights from small and medium-sized firms." *International Small Business Journal*, 21, 4.
- Trindade, V., 2005. "The big push, industrialization and international trade: The role of exports." *Journal of Development Economics*, 78.
- Van Biesebroeck, J., 2005. "Exporting raises productivity in sub-Saharan African manufacturing plants." *Journal of International Economics*, 67, 2.
- Wagner, J., 1995. "Exports, firm size, and firm dynamics." *Small Business Economics*, 7.
- Westphal, L., 1990. "Industrial policy in an export propelled economy: Lessons from South Korea's experience." *Journal of Economic Perspectives*, 4, 3.

>> Meeting the Map Makers: An Institutional Portrait of Export Promotion Organizations 2

2.1 Introduction

Virtually all Latin American and Caribbean countries have implemented export promotion policies. These policies are not new; for many countries in the region they date back at least four decades. Yet, unlike their predecessors in the 1960s and 1970s, which made heavy use of direct fiscal and credit instruments, current policies emphasize support to companies for overcoming informational barriers. Most institutional arrangements in this area have been developed quite recently, including the establishment of new foreign trade ministries and the creation of new export promotion organizations. These developments have resulted in the introduction of varied and innovative organizational designs that are still being modified in response to current development strategies. This process of evolution is the subject of an intense policy debate that is addressed in this chapter.

We provide—to our knowledge for the first time—a consistent analysis of the patterns of organizational designs adopted by Latin American and Caribbean countries to implement export promotion policies. In particular, we present an institutional portrait of these entities, describe their goals, and examine the kinds of export support they provide. Our analysis is based on detailed primary information collected through

surveys of export promotion organizations as well as on the limited secondary information available. It also pays careful attention to the experience of several countries outside of the region.

The remainder of the chapter is organized as follows: Section 2.2 presents a comparative organizational examination of the export promotion organizations in Latin American and Caribbean countries vis-à-vis those in other regions of the world. This examination is primarily based on the results of an extensive survey of more than 35 national and subnational organizations, and highlights the distinguishing features of entities in the region. Section 2.3 contains in-depth case studies of six Latin American export promotion organizations that differ along several dimensions such as organizational arrangements and the extent of their network of offices abroad, if any. These organizations are PROMPERU (Peru), PROCOMER (Costa Rica), URUGUAY XXI (Uruguay), PROCHILE (Chile), Fundación ExportAR—hereafter EXPORTAR—(Argentina), and PROEXPORT (Colombia). In providing additional insights into their organizational features, these case studies offer further specific evidence on different ways export promotion is organized in the region. Section 2.4 presents conclusions.

2.2 The Map Makers at Work: Trade Promotion Organizations in Latin America and the Caribbean and other Regions¹

There is no single organizational model for export promotion organizations. The specific designs depend, among other things, on the institutional framework in which they have been created and operate, and thus will necessarily vary from country to country. Furthermore, even though the formal organizational models may be similar, they can differ in practice due to their specific operating contexts. Similarly, organizations are likely to differ in size, as measured in terms of structure, resources, and range of

¹ An explanation of the conceptual framework on which the analysis in this section is based can be found in a companion background paper for this study (see Jordana et al., 2010). This paper also includes a review of the historical background of the entities selected as case studies as well as a characterization of the context in which they operate, including a detailed accounting of the relevant inter-organization relationships.

export support activities they carry out. These size differences can reflect the home countries' different economic characteristics, for example, size and level of development. After accounting for these variables, differences in size may still remain due to, for instance, disparities in the extent to which export promotion is a policy priority, the specific organizational configuration prevailing in this policy area (i.e., if there is a single leading entity or several similar entities), the distribution of total resources among relevant organizational actors, and the existence of networks of commercial offices. In short, organizational patterns can be expected to be complex and diverse.

In this section we identify these patterns using the results of an extensive survey of several export promotion organizations conducted between the end of 2007 and early 2009. Our sample primarily includes major countries' organizations that operate nationwide. A few subnational entities have been considered to assess the existence of organizational diffusion, i.e., whether the designs of these entities replicate (or deviate) from those of national counterparts.² Organizations surveyed are from most countries in Latin America and the Caribbean, and also countries in Europe, Asia, and Oceania.³

While it is not advisable to make direct, unconditional comparisons of raw figures among countries in different regions for the reasons expressed above, the diversity of institutional and organizational experiences in our sample allows for a conditional benchmarking exercise. Thus, when required by the dimension being examined, we generally look first at the export promotion organizations of more developed countries outside of Latin America and the Caribbean, and then focus on those from the countries in the region. This enables us to explore whether and how organizational models vary across the world and thereby establish similarities and differences among those observed in the different regions.

² Further, this allows for an examination of whether and to what extent there exists coordination (or overlapping) between levels (see Jordana et al., 2010).

³ This sample includes several cases that have been utilized in the existing literature as reference of "good practices" according to certain standards (see, e.g., IERAL, 2001; Boston Consulting Group, 2004; Nathan Associates, 2004, and ECLAC, 2008).

Keeping in mind that there is no single organizational formula for designing and implementing an effective export promotion policy, and that not all organizational configurations will produce this policy outcome, this exercise aims to help identify factors or sets of combined factors (e.g., a particular organizational structure in a specific institutional environment) that may be more conducive to effectiveness.

Export Promotion Organizations: Extra-Regional and Regional Perspectives

Table 2.1 contains the countries covered by the survey, the name of their export promotion organizations, their acronyms, and their year of creation.

The Sample of Organizations

The year of creation refers to the year in which the current export promotion organization was established. In many cases, a prior organization had carried out a similar function. Hence, recent years reported in the table primarily indicate the occurrence of organizational reforms. Thus, while FINPRO was established in 1999, some form of export promotion had existed in Finland since 1919 through the Finnish Export Association and then, since 1938, through the Finnish Foreign Trade Association. Similarly, whereas today's JETRO dates from 2003, its origin can be traced back to 1958. In the same way, UKTI was originally born in 1999 as the British Trade International (BTI), and had responsibility for Trade Partner UK and Invest UK, which were established in 2000. Nonetheless, export promotion initiatives in the United Kingdom did not start with BTI or UKTI but rather go back to at least 1978. In the region, APEX initially began as an internal department of the Brazilian Service to Support Micro and Small Firms (SEBRAE) in 1997, becoming a separate entity in 2003.

Some current export promotion organizations emerged as the result of the merger of preexisting organizations. This is the case with UBIFRANCE, whose founding in 2004 resulted from the merger of the former CFCE and UBIFRANCE. Trade New Zealand and Industry New Zealand merged into NZTE in 2003. Likewise, in the region, PROMPERU was founded in 2007

through the merger of PROMPEX, which had been created in 1996, and PERU TOURISM. (See Box 2.1 for the case of Germany).

In other countries, comparable changes took place, although without the formal creation of a new organization. For example, KOTRA and AUSTRADE assumed investment promotion responsibilities in 1995 and 2007, respectively. Once again, there are examples in the region in this regard. Colombia's PROEXPORT was assigned responsibility for investment promotion when it merged with COINVERTIR and that for tourism promotion in 2004.⁴ Hence, the evidence overall reveals that intense organizational reforms have recently taken place in this field.

The Organizations' Missions and Areas of Activity

Most organizations surveyed are responsible for both export and investment promotion (see Table 2.2.ROW and Table 2.2.LAC).⁵ As noted above, in recent years, countries are increasingly placing these two responsibilities under one entity.⁶ Among developed countries, organizations exclusively focused on export promotion are observed in Finland, France, Italy, Netherlands, and Spain; and in the region, in Argentina, Chile, Costa Rica, Ecuador, El Salvador, and Guatemala.⁷

In a few cases, notably EI and NZTE, the mission of the organizations clearly extends beyond fostering cross-border economic activities to encompass the design and implementation of programs to favor business development in general. This creates an integrated support chain for companies, especially SMEs, that aims to increase their overall competitiveness

⁴ The ICE also underwent an organizational reform in 1997.

⁵ In contrast to this general pattern, responsibility for these two policy areas has been recently split in Ecuador between CORPEI (Ecuador Exports) and Invest Ecuador.

⁶ At the end of the chapter we present tables containing information on extra-regional export promotion organizations followed by tables with data on the counterparts of Latin American and Caribbean countries.

⁷ The investment promotion organizations in these countries are: Invest in Finland, Invest in France, Invitalia in Italy, NFIA (Netherlands Foreign Investment Agency), Invest in Spain; and PROSPERAR, Foreign Investment Committee and CORFO (Chilean National Economic Development Agency), CINDE (Costa Rican Coalition of Development Initiatives), Invest Ecuador, PROESA (National Commission of Investment Promotion), and FUNDESA (Guatemalan Development Foundation), respectively.

■ Box 2.1: Germany Trade and Invest

The division of labor between the public and private sector characterizes the organizational configuration of export promotion in Germany. The federal government directly promotes exports through Germany Trade and Invest (GTAI) and its network of 220 embassies and consulates, and also co-finances activities of the Chambers of Commerce (AHK, *Auslandshandelskammer*). Regional and local governments and business associations are also engaged in export promotion. The Federal Ministry of the Economy and Technology (*Bundesministerium für Wirtschaft und Technologie*) coordinates the federal and regional actors.

The GTAI was established on January 1, 2009, through the merger of the former Federal Agency for Foreign Trade (*Bundesagentur für Aussenwirtschaft*, BFAI) and Invest in Germany. The Federal Ministry of the Economy and Technology and the Federal Ministry of Transport, Building and Urban Affairs (*Bundesministerium für Verkehr, Bau und Stadtentwicklung*) fund the GTAI. The mission of this organization is to support export-oriented companies based in Germany and to promote Germany as a location for industrial and technological investments in order to create or secure jobs. More precisely, the GTAI provides German firms with comprehensive foreign market information support for increasing their international operations and advises foreign companies that seek to expand their business activities in Germany.

The GTAI reports to the Supervisory Board in accordance with German legislation. The head of the organization is appointed by the Minister of the Economy and Technology and has a fixed-term mandate. Employees are recruited through public competition conducted by the entity and wages are determined by contract.

The GTAI has offices in Cologne and Berlin in addition to a network of 46 offices abroad. These offices are staffed with industry analysts who perform onsite research on foreign markets to generate data used as inputs for its information services. In doing so, they collaborate with the German chambers abroad. This network consists of approximately 60 specialists (based on the former BFAI) distributed in the main export markets. In general, these specialists hold degrees in economic journalism. Every five years they change location and once a year they meet to exchange information. The services provided by the GTAI include comprehensive and client-oriented data (e.g., macroeconomic analyses and forecasts; country and industry analyses for over 125 countries; practical business tips; and business contacts and addresses) as well as information about calls for proposals in foreign countries (e.g., from international organizations), investment and development projects, and legal, tax, and customs regulations. In gathering these data, the GTAI targets countries, sectors, sectors within countries, and countries within sectors. The main users of these information services are SMEs over the whole range of export experience (non-exporters, potential exporters, exporters with limited experience, and experienced exporters).

The GTAI usually charges a price below market for specialized reports requested by individual companies. In 2008, the joint annual budget allocated to this network of analysts and the international fair program was US\$ 50.1 million. In addition, in 2009 US\$ 10.4 million was assigned to finance participation in world exhibitions (e.g., Zaragoza) and that of young innovative firms in international marketing events. The GTAI holds periodic meetings with similar organizations in the framework of the Network of European Trade Promotion Organizations.

and thereby facilitate their access to, and consolidation in, international markets.⁸ This is also the idea behind the establishment of ACCI0, which resulted from the merger of COPCA with the Catalan Center of Innovation and Entrepreneurial Innovation (CIDEM). In the region, an incipient collaboration agreement between PROCHILE and the Chilean Economic Development Agency (CORFO) intends to duplicate this assistance strategy. Attempts to improve coordination between activities that foster business development and those that support exports are also observed in other countries. Note that there may be a tradeoff between having specific organizations provide specialized support in particular areas, which requires more intense coordination efforts and having a centralized organization, which would reduce the coordination problem, but potentially at the cost of less specialization in the different areas.⁹ The optimal organizational arrangement would depend on several (country-specific) factors.¹⁰

In Latin America and the Caribbean, there are cases in which export promotion has also been combined with tourism promotion within the same organizational structure, although these two areas operationally remain quite separate. This is the case with PROEXPORT and PROMPERU.¹¹

Legal Status and Reporting

Export promotion organizations are legally separate entities, public, mixed public and private, and in a few cases private (e.g., IECI and, in the region, FIDE) (see Table 2.3.ROW and Table 2.3.LAC) or departments within public ministries or secretariats (TCD, BETP, DEPT, and UKTI, and, in the region, PROCHILE, DPC/ME, and DNPE/VICOMEX) (see Box 2.2 on the cases of Canada and United States). In general, these

⁸ EI assists international companies who want to set up food and drink manufacturing activities in Ireland. However, IDA Ireland (Investment Development Agency) is the formal Irish inward investment promotion organization.

⁹ See also ECLAC (2008).

¹⁰ Precisely identifying these factors along with their relative importance is beyond the scope of this chapter and would deserve a study of its own.

¹¹ PROINVERSION is the organization responsible for investment promotion in Peru.

■ Box 2.2: Canadian Trade Commissioner and United States Commercial Services

Canadian Trade Commissioner: Canada's export promotion efforts are coordinated under the umbrella of the Canadian Trade Commissioner Service (CTCS), which operates as a sub-unit of the Ministry of International Trade within the Department of Foreign Affairs and International Trade. As identified by the Ministry of International Trade's annual budget, this initiative seeks to increase Canadian commercial activity, with a focus on the promotion of exports through the provision of "high-quality international commerce services" to Canadian exporters, importers, investors, and innovators. CTCS coordinates export promotion with 22 federal agencies and departments as well as with regional and provincial state governments. It maintains a presence in all of Canada's regions and territories through 13 offices and in a large number of countries through 140 offices. As a sub-unit of the Ministry of International Trade, CTCS's budget originates from the Canadian government's budget appropriation to the ministry. For 2009, the Ministry of International Trade allocated CAN\$200.0 million (US\$191.1 million according to end of the period exchange rate) to fund CTCS programs. Services offered to Canadian exporters include the provision of general information on exporting, assistance in the development of necessary exporting skills, strategic development counseling, market entry support, and in-market support.

United States Commercial Services: United States export promotion services are coordinated among 19 federal agencies, with the United States Commercial Services (USCS) serving as the lead agency. Established in 1980 and located within the United States Department of Commerce, the USCS is a division of the U.S. International Trade Administration (ITA). USCS operates a domestic and global network of offices, including locations in 107 US cities, and abroad in 80 markets. Funded through government appropriation, in 2009 the budget for ITA activities and commercial priorities was set at US\$420 million. USCS export promotion services assist US exporting firms through the provision of market research, the organization of trade events and fairs, aiding and developing relationships with potential buyers and distributors of American products, and counseling and advocacy for all steps of the exporting process. The USCS offers trade promotion services to companies of any size, but focuses particularly on small to medium-size firms.

organizations must prepare periodic reports, usually on an annual basis, containing information on activities undertaken and, in many cases, their estimated outcomes. These reports are submitted to the ministry or secretary responsible for this policy area, the board of directors (if any), and the public. The degree of detail of these reports varies substantially from country to country.¹² In addition, most organizations must also submit finance and administrative reports explaining how they utilized allocated resources and the respective procedures followed. Typically,

¹² Some organizations must present their report to the Congress (e.g., UKTI and, in the region, PROCHILE).

public organizations or those that rely on public funding must present this documentation to the general accounting office and also to the general comptroller's office. These are commonly two separate reports and only the former is readily available to the general public. However, in a few cases, both sets of documentation are well integrated into a unified public report (e.g., AUSTRADE, EI, NZTE, and UKTI).

Head of the Organization and Composition of the Board

The heads of public or mixed organizations, who can be general directors, general or executive managers, or presidents, are generally appointed by the government, most frequently through the responsible ministry (see Table 2.4.ROW and Table 2.4.LAC). Sometimes the country's president directly designates these officials. This is primarily the case in countries in the region (Colombia, Mexico, Paraguay, and Uruguay). The holder of this position can also be appointed by the organization's board of directors (FINPRO, COPCA, and, in the region, EXPORTAR, with the approval of the corresponding ministry, and PROCOMER), and, in a few cases, the head is selected through public competition (IES, COPCA, UKTI, and, in the region, CORPEI, FIDE, and JTI). Appointments can be indefinite, that is, without a predefined tenure, or for a fixed term, for example, three years for CEPROBOL; four years for ICE, APEX, and CORPEI, and five years for TCD. In the latter case, the mandate can generally be renewed at least once.

The professional background of each recent manager includes experience in the public sector (e.g., AUSTRADE, UBIFRANCE, KOTRA, ICEX, and DEPT and, in the region, EXPORTAR, PROCHILE, DPC/ME, JTI, and REDIEX), the private sector (e.g., FINPRO, IECI, JETRO, NZTE, and, in the region, CORPEI and PROMEXICO), and in both sectors (e.g., COPCA and, in the region, EXPORTA and FIDE).¹³ Among

¹³ For instance, the head of FINPRO previously worked for information technologies and communication companies; the head of JETRO for Mitsui Trading Company; the head of NZTE for several dairy and other manufacturing firms; the head of CORPEI for telecommunication and electrical companies; and the head of FIDE for the National Company of Electrical Energy, the Secretary of Finance, and the Honduran Board of Private Company.

managers who have previously worked for the public sector, relevant sectoral experience varies widely. Thus, while the head of AUSTRADE has been the managing director of Australian Hearing, an Australian government trading company, the head of JTI worked for HEART Trust-NTA, a statutory organization of the Ministry of Education, Youth, and Culture. Some organizations' managers have reached their positions after working in the relevant ministries (e.g., TCD, UBIFRANCE, and PROCHILE), in the same entities (e.g., KOTRA and PROEXPORT), or related entities (e.g., EI, PROCOMER, and APEX, whose managers worked for their countries' investment promotion organizations IDA and CINDE, respectively; and headed the Brazilian Agency for Industrial Development, respectively).

When present, the boards of directors of these organizations may have from three to six members (ICE, EVD, PROEXPORT, and URUGUAY XXI) to more than 20 members (UBIFRANCE, JETRO, ICEX, COPCA, and EXPORTAR). The average number of members is less for organizations from Latin America and the Caribbean than for those of countries from outside of this region (i.e., 9.3 and 13.6, respectively), but dispersion is similar across groups (the coefficients of variation are 0.8 and 0.7, respectively).

With few exceptions, the composition of the board is mixed, including representatives of both the public and private sectors.¹⁴ Interestingly, even organizations that are not legally separate entities have boards with private sector representatives (e.g., TCD and UKTI). In general, among these entities, the private sector holds a majority of the seats.¹⁵ The share of seats that this sector accounts for ranges from 30 percent (CEPROBOL) to 84.6 percent (REDIEX) for entities in Latin America and the Caribbean and from 30 percent (UKTI) to 90 percent (EI) for counterparts in other countries. In the region, representatives from this sector are typically authorities of national sectoral chambers or business

¹⁴ Two particular cases are UBIFRANCE and PROEXPORT, whose boards include "qualified personalities" and individuals directly designated by the country's president, respectively.

¹⁵ Exceptions are ICEX and UKTI and, in the region, CEPROBOL, APEX, PROMEXICO, and URUGUAY XXI.

associations, for example, the Chambers of Exporters of the Argentine Republic (CERA), the Argentine Rural Society (SRA), and the Argentine Industrial Union (UIA) in EXPORTAR; the National Association of Exporters and Importers (ANIERM) in PROMEXICO; the Federation of Chambers of Industries, the National Federation of Chambers of Commerce, the National Federation of Agricultural Chambers, and the National Federation of Chambers of Small Industries in CORPEI; the Association of Exporters (ADEX) and the National Society of Industries (SNI) in PROMPERU; and the Chamber of Industries of Uruguay, the National Chamber of Commerce and Services, and the Rural Association of Uruguay in URUGUAY XXI. The same holds for ICEX. In other organizations, staff members of individual companies directly represent the private sector (e.g., FINPRO, NZTE, EI, and JTI).

Representatives from the public sector primarily include officials from the relevant ministries or secretaries (economy, trade, foreign affairs, etc.), and also from public financial organizations (e.g., the Foreign Trade Bank BICE in EXPORTAR and the National Financial Corporation in CORPEI), and investment promotion organizations (e.g., PROSPERAR in EXPORTAR and PROINVERSION in PROMPERU).

Budget and Number of Employees

Export promotion organizations may need a critical mass to perform effective trade support activities. We first look at these entities' absolute size (see Table 2.5.ROW and Table 2.5.LAC). In developed countries, annual budgets easily exceed US\$100 million, even topping US\$300 million in some cases (AUSTRADE, EI, ICE, JETRO, ICEX, and UKTI).¹⁶ In general, their employees number more than 300. Some organizations have 1,000 or more employees (i.e., AUSTRADE, JETRO, KOTRA, and UKTI)¹⁷

¹⁶ These are total annual budgets, which thus include grants made to companies, in the cases of AUSTRADE, NZTE, and EI, as well as the resources used by parent departments, in the case of the UKTI. See notes to Table 2.5.ROW for additional details.

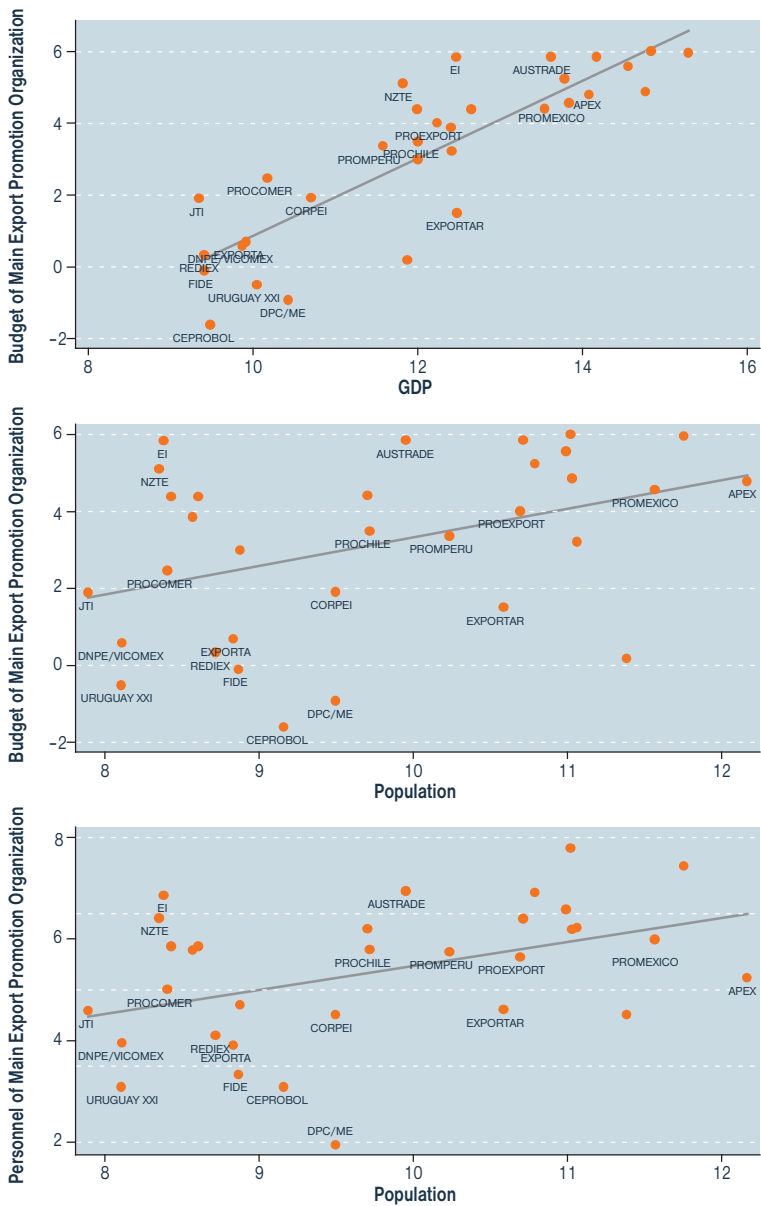
¹⁷ Note that UKTI is not an employer in its own right. See notes to Table 2.5.ROW for additional details.

In the region, only two organizations have annual budgets close to or exceeding US\$100 million (PROMEXICO and APEX, respectively) and 11 out of 16 spend less than US\$20 million annually to carry out promotional activities. Only three entities in the region have more than 300 employees (PROCHILE, PROMEXICO, and PROMPERU).

Size differences among hosting countries may explain these differences in the size of the organizations. Therefore, we also analyze the size of the entities relative to the size of the economies in which they operate. In so doing, we explore the relationship between the annual budget of the organizations surveyed and the countries' GDP and population, as well as the relationship between these organizations' personnel and the host countries' population (see Figure 2.1). There are entities whose size in terms of both financial and human resources is clearly below what would be expected in terms of their country's size, at least in our sample. This is particularly true in the case of EXPORTAR and URUGUAY XXI. In contrast, other organizations such as PROCOMER, PROCHILE, and PROEXPORT have endowments at or above what would be expected. Outside of the region, AUSTRALDE, EI, and NZTE also evidently fall into this latter group.

Even after accounting for countries' size, caution must be used when making inferences from these data. Relative differences in funding cannot be attributed solely to the level of priority assigned to export promotion. First, as the notes underneath Table 2.5.ROW and Table 2.5.LAC suggest, accounting rules are far from homogeneous. In particular, the fraction of available resources specifically allocated to promotional actions varies significantly among organizations. Second, as mentioned above, these entities may target different activities. While some only deal with export promotion, others also have responsibility for investment and even tourism promotion. In the former case, separate organizations usually deal with investment and tourism promotion with their own independent budget and personnel. Hence, the size of the entities also varies among countries depending on the functions they have been assigned. Third, figures in the tables correspond only to the countries' main national organizations. The extent to which these figures represent a quantitative measure of the total resources invested in export promotion will hinge upon the

FIGURE 2.1 ■ Size of Export Promotion Organizations Relative to Countries' GDP and Population (2007–2009)



Source: Our calculations based on data from countries' export promotion organizations and World Development Indicators. The figures show the relationship between the budget and the staff of countries' main export promotion organizations and countries' GDP and population. All variables are expressed in natural logarithms.

degree of organizational fragmentation prevailing in these countries. If the degree of fragmentation is low, and the organizational configuration of export promotion policy consists of a unique organization (although potentially accompanied by minor entities) that concentrates most resources and can bring together most public and private efforts, then the aforementioned figures would give a reasonable approximation of the country's total resources used for export promotion. In other words, the distribution of funds among relevant organizations would virtually collapse to a single value, thus an examination of the main entity would provide the total picture.

If, however, a number of organizations engage in export promotion, a more detailed analysis of resources must be carried out. Fragmentation of responsibilities in this policy area may occur along several lines. One is horizontal, where different national public sector organizations linked to different government units can be simultaneously involved in export promotion, each with its own specific support programs and personnel. Similarly, both national-level public and private entities may be involved. In addition, in federal or highly decentralized countries, fragmentation may also be vertical, as both separate public and private organizations may be active at both the national and subnational levels, as is the case for Spain and Argentina. If more than one relevant entity is operating, size measures shown in Table 2.5.ROW and Table 2.5.LAC will reflect only the resources of the entity under examination and may seriously misrepresent the total amount of resources being used to promote exports. Again, this will vary from case to case. Therefore, it is possible that while the organization in one country is larger than that of another, the latter country may, on aggregate, be devoting more funds to export promotion. Size measures should thus be strictly interpreted as those of the organization and not as representing the countrywide allocation of resources for this purpose. Further, a given total amount of resources may have different outcome implications depending on the specific export assistance initiatives undertaken and how they are coordinated with each other. Such initiatives can be properly articulated to reinforce each other, or they can overlap and lead to ineffective spending, producing a scenario where more resources do not necessarily ensure better results.

Hence, drawing conclusions on the relationship between organizations' size, as proxied by budget or personnel, and the countries' export performance requires that all of these factors be carefully taken into account.

Sources and Application of Resources

While the largest portion of resources available to export promotion organizations are directly allocated by the public sector, entities in countries outside of the region generally generate their own revenues by charging for services, primarily in the form of consulting activities (see Table 2.6.ROW and Table 2.6.LAC).¹⁸ Thus, for instance, the TCD charges for its services, including consultancy, at the rate of US\$ 150 per hour. Firms supported by COPCA must pay 50 percent of the costs of the assistance they receive.¹⁹ Some entities such as IEICI, JETRO, and FINPRO receive funding through membership fees paid by companies (see also Box 2.3 for the Austrian case).²⁰ In the region, however, except for a few entities such as JTI and PROMEXICO, operations are almost entirely funded by governments. Most of these resources come directly from the public budget, but in a few cases they are drawn from revenues raised through specific taxes. For example, funding for APEX amounts to 12.75 percent of the 3.00 percent social contributions that companies must pay on their expenditures for salaries, whereas funding for PROMPERU's tourism program is partially paid by taxes on flight tickets. Other methods are used as well. PROCOMER finances its activities primarily through the collection of fees for using the free trade zone regime and income from sales of export and import customs forms. CORPEI uses contributions from exporters and importers, redeemable in 10 years, as follows: 1.50‰ of the FOB value of private exports (for exports larger than US\$3,330, otherwise US\$5.0); 0.25‰ of the FOB value of imports

¹⁸ In the case of JETRO, membership fees cover subscriptions to publications and reports.

¹⁹ In these cases, firms using such costly services might be presumed to perceive them as useful for their purposes.

²⁰ See Seringhaus and Botschen (1991) on the Austrian case.

■ Box 2.3: Austrian Trade

In Austria, organizations engaged in export promotion primarily work within the private domain; the government is therefore not a key actor. Private and quasi-private organizations are the principal providers of export promotion assistance. These organizations focus on region-specific needs but operate at the national level. Overall, this organizational system seems to be managed in an integrated manner.

The most important entity is the Austrian Economic Chamber (Wirtschaftskammer Österreich, WKO). The structure and mandate of this chamber is more comprehensive than their equivalents from other countries. To start with, membership is obligatory for all business enterprises. Currently, around 400,000 firms are WKO members. Within the Austrian Federal System of Economic Chambers, the WKO operates as the national umbrella organization for the nine regional chambers (one in each Austrian federal region) and 110 trade associations for different industries. Export assistance is mainly provided through a central service division called Austrian Trade (Aussenwirtschaft Österreich, AWO). AWO was established in 1946. Its main mission is to help create and sustain successful sales and promotion of Austrian goods and services in international markets.

The WKO president, who is elected by the member companies, appoints the director of the AWO. Recruitment of personnel is open. Individuals must be under 27 years of age when joining the trade unit. Most employees are lawyers or economists and some have master's degrees. Their first assignment is in Austria; afterwards they carry out three different three-year overseas assignments. Upon completing this rotation, they return to Austria for one year. Wages are not tied to individual performance measures.

The AWO has 703 employees and an annual budget of US\$ 83.5 million. These resources originate from member contributions (85.0 percent) and from marketable sales (15.0 percent). In recent years, AWO has partnered with the Austrian government through the Federal Ministry of Economy and Labor (Bundeministerium für Wirtschaft und Arbeit, BMWA) in a joint initiative whose aims include identifying new exporters and preparing them to compete internationally ("Go International"), whereby AWO receives additional funding roughly totaling US\$ 34.8 million.

The AWO runs 108 offices (68 trade commissions, 7 branch offices, and 33 marketing offices) in over 72 countries. These offices are staffed with 599 employees and have an annual budget of US\$74.2 million. Trade commissioners have diplomatic status, and are remunerated accordingly. The Ministry of Foreign Affairs (Aussenministerium) must approve their designation.

Export support actions include provision of market information, business contacts, and consultancy services, assistance with cross-border sourcing, financing, research, technology transfer, and setting up subsidiaries abroad. Some of these services are costly. For instance, a company requesting an individually tailored market report can be charged approximately US\$140 per person/eight hours devoted to its elaboration. Every year AWO assists around 20,000 firms.

(for imports larger than US\$20,000, otherwise US\$ 5.0); and, until 2008, 0.50‰ of the FOB value of oil exports.

Organizations can be broadly classified into two groups depending on how they allocate their resources among different export promotion activities. One group focuses on organizing and coordinating the participa-

tion of firms in international marketing events such as missions and fairs (e.g., EXPORTAR, PROCORDOBA, DPC/ME, and PROMPERU). Members of the second group concentrate on other trade assistance activities such as training, provision of specific commercial information, and specialized consulting (e.g., PROCHILE, PROEXPORT, and EXPORTA).²¹ Although comparable information is not readily available for all entities in more developed countries, there is evidence that actions aimed at strengthening firms' export capabilities behind borders are increasingly important vis-à-vis pure marketing actions. It should be noted that copayments by private firms for participating in the aforementioned marketing events (usually, around 50 percent) have generally not been included in the organizations' total budgets.²² These copayments can be substantial. For instance, in 2008, they amounted to US\$64 million in the case of the ICE and US\$16 million for PROCHILE.²³

Personnel and Remuneration Policies

Export promotion organizations usually recruit their employees through public competition that they arrange, (sometimes) advertise, and then carry out. In a few cases, a portion of the personnel is selected by other public organizations (e.g., APEX and REDIEX), consulting companies (e.g., EXPORTAR and APEX), or directly hired (e.g., PROMEXICO and DNPE/VICOMEX) (see Table 2.7.ROW and Table 2.7.LAC).

In several entities from countries outside of the region, personnel remuneration consists of a fixed wage plus a variable component based on individual performance, which can be up to 25.0 percent. Among other things, the size of these bonuses hinge upon external sales of supported companies, the number of firms assisted, and, when costly services are

²¹ Recall that some organizations also promote foreign direct investment. In those cases "Other Applications" generally includes the portion of resources assigned for this purpose.

²² Otherwise, the size measures might be distorted depending on the specific promotional activities undertaken by the organization. Most importantly, these are resources that are not available to the entities.

²³ One key issue that deserves closer consideration due to its potential relevance for organizational performance is how resources are internally distributed between overall support and operative areas.

provided, on annual turnover.²⁴ This is the case with COPCA, whose employees' remuneration includes a portion that varies according to the degree to which goals are met for annual service sales targets.²⁵ The picture is substantially different in the region. With only a few exceptions (PROEXPORT and CORPEI), most organizations pay fixed wages without specific bonuses tied to performance.

All entities in the region have employees with master's degrees in fields such as marketing, international relations, information technologies, engineering, etc. In some cases, these highly qualified employees make up or exceed 25 percent of the employees of organizations (CORPEI, FIDE, JTI, DNPE/VICOMEX, and REDIEX). Some have employees with Ph.D.s (PROMENDOZA, APEX, EXPORTA, PROMEXICO, REDIEX, and PROMPERU). These organizations also tend to hire individuals with previous trade experience. These employees account for more than 50 percent of the personnel in several entities (PROCORDOBA, CEPROBOL, PROCOMER, DPC/ME, PROMEXICO, and PROMPERU).²⁶ Further, staffs even include former business executives, who represent 10 percent or more of the personnel in a few cases (e.g., PROCORDOBA, EXPORTA, JTI, DNPE/VICOMEX, and PROMPERU).²⁷

²⁴ Using the number of firms that received support as an additional merit pay criterion ameliorates the incentives to focus on large companies generated by the criterion based on export values.

²⁵ In particular, employees are set annual targets regarding the time spent in providing specialized costly services (excluding time devoted to other tasks, such as dealing with organizational issues, provision of basic information, etc.). The variable component of the compensation is determined according to the level of achievement of these targets, adjusted to each specific context. This encourages employees to actively seek out private firms that will provide revenues in return for assistance.

²⁶ Caution should be used in interpreting these figures because organizations are likely to assess experience differently. Even academic degrees may not be strictly comparable among countries.

²⁷ Unfortunately, similar data could be obtained solely for a few entities from countries outside of the region. For example, the share of employees with master's degree, Ph.D.s, who were business executives, and have previous trade experience are: 60 percent, N/A, 50 percent, N/A for TCD; >30 percent, >10 percent, N/A, >40 percent for EI; 36.4 percent, 0.0 percent, 9.1 percent, 36.4 percent for IECl; and 39.3 percent, 1.0 percent, 0.0 percent, and 50.0 percent for UBIFRANCE, respectively. In general, the proportion of staff with master's degrees is larger in this group of countries, which are on average better endowed in terms of human capital.

Presence in the Home Country and Abroad

In addition to their headquarters, which are typically located in the capital cities, export promotion organizations may also maintain offices in different regions of the country to facilitate access to their services to local companies. These organizations may also maintain offices abroad both to support their export promotion activities and to provide firms with onsite assistance. It should be mentioned that “office” used here refers to a specific mission staffed either by the organization’s own employees or personnel otherwise employed by the entity (i.e., staff that are selected, can be assigned goals, and are evaluated by the organizations, potentially together with other entities), regardless of where they are located (e.g., either in a separate office or within a diplomatic foreign mission such as an embassy or consulate). In applying this criterion, we observe that many organizations from developed countries tend to have several regional offices that cover a large fraction of subnational administrative divisions (see Table 2.8.ROW). Importantly, they have a large number of offices abroad that give them a presence in many countries. Some organizations have more than 90 missions in more than 60 countries (e.g., AUSTRADE, ICE, KOTRA, ICEX, and UKTI). In some of these organizations, more than 50 percent of the employees are located abroad (e.g., AUSTRADE, UKTI).

In the region, on the other hand, many entities have only one office in their countries, which is their headquarters (see Table 2.8.LAC). Admittedly, these entities establish intermediate organizational arrangements that help ensure some form of presence in their countries’ regions. Thus, for instance, EXPORTAR has 63 access points to its services created as a result of partnerships or agreements with, and hosted by, provincial or municipal governments and business associations throughout the 24 Argentine provinces. APEX has established similar access points in partnership with the National Confederation of Industries (CNI) and the states’ federations of industries. These offices are located in buildings of these federations. Currently, there are five such offices in five states (Ceara, Minas Gerais, Parana, Rio Grande do Sul, and Santa Catarina). In addition to their regional offices, PROEXPORT and PROMPERU have local

information centers managed in collaboration with other local public and/or private organizations to expand their regional presence. Since the late 1990s PROCHILE has been present in virtually all regions of the country. Since 2009 the same has held true for PROMEXICO.

There is substantial heterogeneity across countries' export promotion organizations in terms of their presence abroad. A few of these organizations have more than 10 offices in 10 or more countries (e.g., PROCHILE, PROCOMER, PROEXPORT, and PROMEXICO). Other entities have a very limited direct representation in foreign countries (e.g., EXPORTA, DPC/ME, FIDE, and JTI). Finally, a group of organizations lack foreign missions entirely (e.g., EXPORTAR, CEPROBOL, DNPE/VICOMEX, REDIEX, PROMPERU, and URUGUAY XXI). These latter organizations must rely on the support of diplomatic personnel at embassies and consulates in assisting exporting companies. However, as we shall discuss later, the level of this support generally depends on subjective personal relationships, not on an adequate assignment of institutional responsibilities. Furthermore, the lack of trade expertise, time, and sometimes resources limits the level of assistance these diplomats can provide. Even embassy officials engage in export promotion, it is frequently a part-time activity that they must balance with other responsibilities. Hence, the existence of missions abroad could be expected to affect the impact of the organizations' promotion efforts on their countries' trade performance.

Firms Receiving Assistance and Targeting

Interactions between export promotion organizations and firms are generally bidirectional. Organizations may approach companies through newsletters distributed via mailing lists, events such as workshops and seminars, and the press, which disseminate and generate awareness of their programs. They may also be contacted directly by firms.

Companies receiving assistance fall into all size segments (small, medium, and large) and are located across the whole spectrum of export experience (non-exporters, potential exporters as defined according to some evaluation of firms' export capabilities, exporters with

limited experience, and experienced exporters) (see Table 2.9.ROW and Table 2.9.LAC). Nevertheless, organizations generally give priority to small and medium-size companies—frequently through specifically designed programs—because these are more likely to suffer from informational and other trade barriers.²⁸ Moreover, virtually all entities perform some kind of geographical and/or sectoral targeting, and even combine elements of both, i.e., specific sectors (destination countries) in (for) particular destination countries (sectors) (e.g., EXPORTAR, APEX, PROCHILE, PROEXPORT, JTI, PROMEXICO, REDIEX, and PROMPERU).

Service to Exporters

Export promotion organizations offer exporters multiple services including training for inexperienced exporters on export procedures, marketing, and business negotiations; producing and disseminating analyses on country and product market trends; providing specific information on trade opportunities abroad as well as specialized counseling and technical assistance on taking advantage of these opportunities; coordinating and supporting (and in some cases co-financing) firms' participation in international trade missions and trade shows, and arranging meetings with potential foreign buyers; organizing these kinds of trade events; and sponsoring the creation of consortia of firms aimed at strengthening their competitive position in external markets (see Table 2.10.ROW and Table 2.10.LAC).

Most export promotion organizations, particularly those in the region, offer a similar basic portfolio of services. However, there are differences in the delivery process, the scale and scope of the different activities as set by priorities, overall available funding, conditions under which the respective assistance services are rendered, including whether they are articulated with each other, and the quality of the support provided. Some organizations tend to bundle different activities into specific programs, thereby facilitating synergies among them. More specifically, these entities provide services to firms with no or limited experience in foreign markets

²⁸ Interestingly, KOTRA focuses solely on medium-size companies.

that guide them throughout the whole export development process. Examples in this regard are UKTI's "Passport to Export" and IES' "Exporter Development Program," and in the region, PROEXPORT's "Expopyme" and "Plan Exportadores." It is noteworthy that these programs have an important component of "behind borders" support activities that seek to strengthen firms' export capabilities.²⁹

Additional services include facilitation of production linkages with multinational companies (e.g., PROCOMER) and support to firms' initiatives to increase value added and quality of products (e.g., PROEXPORT).

Assessment of Effectiveness

Organizational performance is usually assessed using activity (input) and outcome (output) indicators. Input indicators are generally well developed and typically consist of the number of firms using (each of) the services provided by the organization and the number of export support actions undertaken. Virtually all entities use one of these quantitative assessment measures or both (see Table 2.11.ROW and Table 2.11.LAC). This is not surprising given that, as mentioned above, most organizations must submit periodic reports on their activities. Some organizations also use input indicators that capture other aspects of their performance, such as quality and/or conditions of service delivery. Such indicators include call responsiveness rates; share of market intelligence report services, whose relevance has been peer reviewed by marketing managers (NZTE); quality of export support services according to ISO 9001 (KOTRA); time to respond to service requests (COPCA); in the region, time needed to approve a new export project (APEX); and percentage of services offered by electronic means and percentage of users utilizing electronic systems (PROCOMER). Other indicators are the degree of specialization offered by the foreign offices in their respective countries and educational level

²⁹ An exhaustive analysis of the specific programs of all organizations is beyond the scope of the present paper. Nevertheless, additional information in this area can be found in the next section, which examines our case study entities. The Boston Consulting Group (2004) and Nathan Associates (2004) have detailed descriptions of the programs for the organizations they analyze.

of personnel (KOTRA); full time equivalent staff and administrative spending (UKTI); and staff costs as a share of total expenditures (JTI). It should be noted that a few entities have their own balanced scorecard (e.g., FINPRO and, in the region, PROEXPORT).

In contrast to measurement of inputs, output indicators are, on average, less developed and more heterogeneous in terms of their design and implementation. Organizations such as AUSTRADE, EI, NZTE, and UKTI use specific indicators that have been defined in accordance with strategic goals established in their multiannual work plans. These indicators are periodically monitored to evaluate the degree to which these goals are met, and include, for instance, the number of both established and new or occasional assisted exporters that have achieved export success (AUSTRADE), number of assisted firms that achieve global sales above a certain threshold (EI), number of assisted firms implementing changes in their business models based on the “manufacturing+” model (NZTE); and financial benefits generated by trade services as determined by the sum of the value of additional profits that firms expect to achieve as a result of the help provided by the organization (UKTI).

Apart from these examples, most entities assess the effects of their actions by merely taking into account measures of client satisfaction. Many also base output evaluations on the value of exports achieved by supported firms or on the change in their value. In the latter case, the organizations in the region follow one of two main procedures. In the first, those with access to export firm-level data from customs sum up (the change of) exports by supported companies and interpret the resulting value as additional exports generated by their promotional activities and their contribution to the countries’ exports. In the second, those without access to firm-level data from customs rely on the data they gather through questionnaires sent to firms participating in the activities they organize, typically missions and fairs. These surveys usually include a question about the value of exports achieved in these international marketing events. However, the rate of response to this question is generally low, and varies widely across activities and, of course, across entities. Moreover, these figures are likely to be subject to bias due to misreporting. More impor-

tantly, substantive methodological problems flaw all of these measurement strategies, making it impossible for them to generate reliable impact indicators. Further, some organizations make direct use of countrywide measures as relevant outcomes (e.g., country's total exports, change in country's non-traditional exports, change in total national employment), even though a meaningful link between their activities and these indicators is difficult to establish. Hence, impact evaluation clearly remains an area needing substantial improvement. This is especially true given the apparent importance of such assessments as the basis for decisions on budgetary allocations, redefining strategy, redistributing resources across units and programs, evaluating employees, and/or removing managers.

Recapitulating

Our survey on organizational aspects of export promotion policymaking allows us to draw some general conclusions. First, the modal organizational configuration, both within and outside of the region, involves a leading public sector entity. In the few countries where the main organizations are private, these are under the supervision of the public sector or operate under intersectoral arrangements involving semi-public actors (e.g., Finland and Germany). In countries that are federal (e.g., Argentina) or highly decentralized (e.g., Spain) autonomous export promotion organizations operate at the regional level, thus generating a decentralized public model.

Second, there is a trend toward integrating promotion activities (export, investment, and also tourism in a few cases) into single organizations. This trend is slightly more pronounced outside of the region, but it is clearly emerging in Latin America and the Caribbean as well. In more advanced stages of this process, these policy activities are combined with those more generally aimed at facilitating business development (e.g., EI and NZTE), thus creating an integral support chain for companies. This is likely to contribute to cross-fertilization across programs and coordination by reducing fragmentation. However, if the integration process is not properly managed, it might potentially stand in the way of attaining the specialization required to provide adequate support. From a normative point of view, this implies that, while initiatives to assist private sector actors

need to be properly coordinated, there may be not be a single organizational formula for achieving this goal. For instance, instead of adopting a single organization model, a strategy could consist of cross-membership of relevant entities or officials of such entities in their respective boards (e.g., a representative from TEKES, the Finnish Funding Agency for Technology and Innovation, is a member of the board of FINPRO).³⁰

Third, organizational structures exhibit differences that are primarily country-specific rather than region-specific. All variants of formal organizational models (i.e., departments of ministries or secretariats, separate legal entities of public, private or mixed natures, along with their boards, if any) are present in both in Latin America and the Caribbean and in the rest of the world. In about 60 percent of cases, the export promotion organization is a separate public legal entity. However, we should again note that formal similarities do not necessarily imply similarities in fact. Models will actually differ in practice depending on the specific context in which they operate. This clearly makes it difficult to quantitatively assess the role of these organizational aspects in shaping the effectiveness of the entities in question.

Fourth, in absolute terms, the size of the entities in the region as proxied by the financial and human resources available to them is substantially smaller than that of counterparts from more developed countries. Budget constraints may result in suboptimal scale and scope, and even reduced quality, of the services they are able to provide to firms thereby affecting their impact on firms' export outcomes. Admittedly, these size differences are at least partially driven by size differences of their host country. Correcting for country size, some organizations in the region emerge as relatively well endowed (e.g., PROCHILE, PROCOMER, and PROEXPORT), at least within the group of entities in our sample. Does this larger amount of resources automatically translate into larger effects on exports? Ascertaining whether this is the case is again challenging when considering a cross section of countries. As the notes for Table 5.ROW and Table 5.LAC suggest, ensuring strict homogeneity in reporting budget figures is difficult, which makes measurement errors important. In addi-

³⁰ See also ECLAC (2008).

tion, as stated above, the degree of horizontal and vertical organizational fragmentation and the specific set of programs and their coordination will make the size of the entities a more or less precise measure of the overall resources invested in export promotion. Establishing the true relationship between organizations' budgets and countries' export performances would require properly addressing all of these factors.

Fifth, in most cases the head of the organization is appointed by the government for a fixed term either through, or on the basis of a proposal made by, the minister charged with overseeing the entity.³¹ In a few cases, notably in countries in the region, the manager is named directly by the country's president. Less common appointment procedures include designation by the organization's board of directors and through public contests based on merit. Most organizations formally hire their personnel through public competition. Nonetheless, specific procedures differ in practice. Furthermore, whereas several entities from countries outside of Latin America and the Caribbean apply remuneration policies that include the possibility of bonuses based on performance, this is the exception in the region (e.g., PROEXPORT). Although one would expect that bonuses make a difference in improving performance, whether this is actually the case or not is still an open question. Addressing this question, however, would demand specific data that are not readily available.

Sixth, most export promotion organizations in developed countries have a large presence abroad. This does not hold for their peers in Latin America and the Caribbean. The existence and size of a network of foreign offices depends on the financial resources available to the entities and their relationship with other relevant actors, such as the foreign service. However, the kinds of overseas presence may also reflect particular export promotion strategies.³² In this regard, we identify three groups of organizations: those with a significant number of foreign missions; those

³¹ A fixed-term appointment can a priori be considered a better protection for the manager's autonomy.

³² In fact, while PROEXPORT has approximately four times the annual budget of PROCOMER, both have a similar number of offices abroad (although these are differently staffed).

with a limited number of external offices; and those with no direct representation abroad. These latter entities must rely on diplomats assigned to embassies and consulates for assisting exporters. Given the differences between these arrangements, the nature of the presence abroad (direct vs. indirect through diplomatic missions) is likely to matter in terms of impacts on exports. Unlike other factors previously considered, the role played by these offices can be assessed in a cross-country framework. The reason is twofold: the existence and location of foreign missions can be established accurately and, given that the implied data require working at the bilateral level, country heterogeneity can be more easily controlled for with conventional econometric methods.³³

Seventh, monitoring of activities undertaken as well as rates of participation is standard since organizations need this information as a basic input for periodic reports they must submit to their constituencies. However, in most cases—and especially in the region—quantitative evaluation of the effects of these activities is far from rigorous, and in many entities is simply nonexistent. The lack of reliable impact estimates makes it virtually impossible to properly draw relevant conclusions for policies, such as the rate of return of resources allocated to export promotion, whether the level of these resources is adequate, or whether these returns can increase following a reallocation of funds across the different export support programs. This is clearly an area where substantial progress can and should be made by using econometric techniques widely applied in other fields, such as labor market policies.

2.3 Detailed Profiles of Map Makers: Six Case Studies³⁴

Selection Criteria and Analytical Approach

We conducted in-depth analyses of export promotion organizations in six Latin American countries to capture detailed insights regarding factors

³³ This is explicitly explored in Chapter 3.

³⁴ Readers not interested in the specific organizational aspects of these countries' entities can go directly to Section 2.4.

shaping the organizational configuration of export promotion policymaking and their potential implications. The countries in our sub-sample are: Peru (PROMPERU), Costa Rica (PROCOMER), Uruguay (URUGUAY XXI), Chile (PROCHILE), Argentina (EXPORTAR), and Colombia (PROEXPORT).

The criteria we used in selecting these countries consisted of three different variables that are likely to be correlated with, or which directly capture, key characteristics of the entities. First, we considered the size of the country, which might affect the absolute amount of resources invested in export promotion and thereby the scope of services the organizations provide to the firms. We selected two small countries, Uruguay and Costa Rica; two mid-size countries, Chile and Peru; and two large countries Colombia and Argentina. Second, we took into account the institutions to which entities report. Thus, the organizations from Colombia, Costa Rica, and Peru report to ministries of foreign trade, whereas those from Argentina, Chile, and Uruguay are attached to ministries of foreign relations. Third, as regards the internal features of the entities, we distinguished between countries whose export promotion organizations have their own network of offices abroad (Chile, Colombia, and Costa Rica) from those that do not (Argentina, Peru, and Uruguay).

Besides these three main variables, we also took into consideration the mandate of the export promotion organizations in terms of regulation and administration of fiscal instruments and their access to information. In this regard, the countries' organizations can be classified into three groups: organizations tasked with information gathering to produce official statistics on foreign trade in addition to tax, regulatory, and collection responsibilities (PROCOMER); organizations with privileged access to detailed information on exports from customs (PROCHILE, PROEXPORT, PROMPERU, and URUGUAY XXI); and organizations with no direct control nor access to this information (EXPORTAR).

In all six cases we focus on the internal characteristics of the organizations. In this chapter, we explore their organizational status; their network of offices in the country and abroad, if any; their budget, personnel, and management policies; export promotion activities they perform; and the mechanism they use to evaluate their effective-

ness.³⁵ The results of our evaluations of these entities' programs will be presented in Chapter 4.

PERU: PROMPERU

Organizational Structure: PROMPERU's highest governing body is the Directive Board, which is chaired by the minister of foreign trade and tourism and is composed of 17 members. Seven of these members are representatives from the public sector, namely, the vice-minister of foreign trade, the vice-minister of tourism, and representatives from the Ministry of Foreign Relations, the Ministry of Production, the Ministry of Agriculture, the Ministry of Economy and Finance, and the National Investment Promotion Agency, PROINVERSION. The remaining ten members represent the private sector: the presidents (or their delegates) of the Exporters Association (ADEX); Peru's Society of Foreign Trade (COMEXPERU); the Association of Peru's Unions of Agricultural-Exporter Producers (AGAP); the National Society of Industries (SNI); the National Coordinator of Unions SME-Peru; the Chamber of Commerce of Lima (CCL); the National Chamber of Tourism (CANATUR); and union representatives from the North-Amazonas, Middle, and South tourist zones. The representatives from the public and private sectors are proposed by the respective organizations and are appointed by the minister of foreign trade and tourism. PROMPERU's general secretary and the directors of export promotion and tourism promotion, who are also designated by this minister, participate on the board, but without voting rights.

Besides the board, the current organizational structure of PROMPERU consists of a general secretary and two directorates. Under the general secretary are four divisions that provide general services such as planning and budget, legal counseling, administration and finance, and general services (publications, communication, and institutional image). The directorates are operative departments in charge of export and tourism promotion. The first directorate has under directorates

³⁵ The companion background paper contains organizational charts for these six organizations.

separately responsible for trade promotion, services and assistance to firms, and market intelligence. Thus, this organizational structure contains three positions at the same level, each tasked with a specific set of activities, and no general manager. Hence, it seems designed to ensure that each section remains fully accountable to the minister, thus avoiding concentration of power within the entity.

Presence in the Home Country and Abroad: PROMPERU is headquartered in Lima and currently has five regional offices located in Chiclayo (Lambayeque), Iquitos (Loreto), Huanayo (Junin), Cusco (Cusco), and Arequipa (Arequipa). These offices, which began operations in 2005, are managed by PROMPERU employees, who provide local companies with basic training and general information on the export process and foreign markets. They establish links with local public offices, business associations, and other entities to promote export initiatives with programs similar to those carried out at headquarters. The first two offices have their own facilities, and the remaining three are hosted by local chambers of commerce (Huanayo and Cusco) and the Catholic University of Santa Maria (Arequipa).

PROMPERU also has ten regional information centers in Ayacucho, Cajamarca, Huanuco, Ica, La Libertad, Madre de Dios, Piura, Puno, San Martin, and Tacna. They are staffed and managed by employees of local governments (e.g., Piura) or business associations (e.g., Tacna). These centers provide information on marketing, prices of products with overseas demand, profiles of products with greater demand abroad, and export procedures and tax regimes; and organize training activities.

Lacking its own network of offices abroad, PROMPERU relies on the support of the diplomatic missions of the Ministry of Foreign Relations. Some embassies have separate offices primarily tasked with export promotion that are generally staffed with specialized personnel, as is the case with those in the United States, France, Germany, Japan, Spain, and the United Kingdom. However, in most diplomatic representations, officials formally in charge of trade issues have other duties as well, which can lead to serious problems of coordination. Recent attempts have been made to reduce these problems. For example, PROMPERU

has reached an agreement with the Ministry of Foreign Relations to facilitate contacts and information exchange, cooperate in the selection of commercial attachés for the aforementioned special offices, and help co-finance these offices.

Budget and Personnel: PROMPERU's total budget has been approximately US\$29 million in recent years. Annual resources available for the export promotion program have been approximately US\$5.2 million. For the most part, this latter amount is directly allocated by the public sector, although it also includes funds from projects of international organizations such as the IDB or the European Union that have been assigned to the organization (e.g., to produce market reports or develop innovative promotion activities). Copayments by private firms for participation in PROMPERU activities have increased in recent years, reaching roughly US\$1 million in 2008. This can be attributed to increased participation in trade fairs and missions, whose costs are only half-covered by PROMPERU. In fact, about two-thirds of resources allocated to the program support the participation of Peruvian firms in these international marketing events, while the remaining portion is allocated to market intelligence (e.g., research, dataset, and reports) and general export services (e.g., training).

The annual budget of the tourism promotion program has been roughly US\$20.1 million, part of which comes from tax revenues on airline tickets. The remaining US\$3.7 million corresponds to the administration program.

PROMPERU had 313 employees as of August 2009 distributed as follows: 84 employees under the Directorate of Export Promotion, 107 employees with the Directorate of Tourism Promotion, and the remaining 122 in the General Secretary and the Office of Institutional Control. Many PROMPERU employees are professionals and technicians with advanced university degrees and previous experience in foreign trade. Of those specifically engaged in export promotion, 18 have master's degrees (and 10 are doing master's programs), 18 are former business executives, and 59 had export experience before joining the organization.

The formal personnel selection process at PROMPERU is open and competitive. Vacant positions are announced on the organization's website.

From the applications received, a short list of candidates is prepared and interviews are held prior to making a final decision.

Wages in PROMPERU are lower than those in MINCETUR (although the differences are not large), but are similar to those in the country's comparable autonomous public organizations. The remuneration regime in the Peruvian public administration is currently under reform, including that of PROMPERU. There is an ongoing transition from a public civil service scheme with no wage flexibility to an intermediate system with some wage flexibility that is based on private sector models.

Turnover among PROMPERU employees is relatively high; after five years with the organization, approximately 20 percent of the employees involved in export promotion activities leave to join firms in the private sector which value their export experience.

Promotion Activities: Every four years PROMPERU prepares a strategic plan under the supervision of the responsible minister that establishes the organization's main objectives. The current plan corresponds to the period 2008–2012 and was approved by the Board of Directors in June 2008.

PROMPERU's main goal is to contribute to the internationalization of Peruvian firms by fostering their penetration of foreign markets and consolidating their positions in these markets. In pursuing this goal, the organization provides firms with multiple services.

First, PROMPERU carries out training activities. Some training consists of standardized courses on general issues such as the export process, marketing, and business negotiations. Courses can also be customized to meet specific needs. For example, PROMPERU offers a one-day intensive courses called "Exporter Wednesday" for large groups on topics such as foreign trade basics, e-commerce, quality management, distribution, and financial tools for international trade. These courses are also offered in the regional offices.

PROMPERU also performs market intelligence. The organization prepares reports on country and product market trends and provides firms with specific information on trade opportunities abroad as well as specialized counseling and technical assistance on how to take advantage of these opportunities.

In order to improve firms' access to relevant export information, PROMPERU has taken the lead in launching an integrated website for export promotion called the Integrated System of Foreign Trade Information (SIICEX). This website offers a basic explanation of export procedures; data on trade both at the regional and sectoral level, tariff and non-tariff barriers, and referential logistic costs; directories of exporters, providers, including those that provide logistic services, and foreign buyers; and a schedule of activities.³⁶

A major PROMPERU activity is to provide coordination and support, in particular in the form of co-financing, to firms participating in international trade missions and fairs. The organization also arranges bilateral meetings with potential foreign buyers.

PROMPERU also has programs that target SMEs. It helps form consortia of exporters and provides them with counseling and other support if necessary. In addition, it assists in the implementation of good manufacturing and marketing practices based on the ISO 9001 norm to standardize processes and thereby consistently deliver products according to specifications agreed upon with the customers ("Exporta Perú"). The agricultural sector is also provided with support to upgrade quality. Finally, PROMPERU develops activities to promote service trade, including software, health, and consulting and engineering activities.

Assessment of Effectiveness: PROMPERU prepares plans of activities and attempts to link their objectives with specific indicators. Some of these indicators relate to activities performed (e.g., number of services provided, number of firms assisted, number of fairs and missions attended) and others that measure the impact of these activities on the firms' and the country's export performance. In assessing the effects of the programs, two main methodologies are applied. First, customs data are used to track export outcomes of firms receiving assistance. Changes in their total exports as well as those in the number of destination countries are considered to

³⁶ The IDB has supported this initiative as well as another one to create a one stop shop for foreign trade in the country. The latter was managed directly by the MINCETUR without PROMPERU's involvement.

be the organization's contribution to export expansion in a given period. Second, surveys are sent to firms participating in activities organized by PROMPERU. Besides asking about their overall level of satisfaction with services received, these surveys include questions on the monetary value of the deals linked to these services. Although the rate of survey returns tends to be low, these data are also used as an effectiveness indicator.

COSTA RICA: PROCOMER

Organizational Structure: The governing body of PROCOMER is its Board of Directors. This board is chaired by the Ministry of Foreign Trade and is made up of three representatives from the executive branch, who are renewed at the beginning of each presidential mandate. The board also includes five representatives of five business associations: the Chamber of Commerce of Costa Rica, the Chamber of Industries of Costa Rica, the Chamber of Exporters of Costa Rica, the Small and Medium Exporters of Costa Rica, and the Chamber of Agriculture of Costa Rica.

A general manager leads the organization. This manager is appointed by and reports to the Board of Directors. PROCOMER has five managerial offices and four directorates: Trade Promotion, Operations, One Stop Shop, Administration and Finance, Trade Intelligence, Costa Rica Provides, Investment, Human Resources, and Legal Counseling.³⁷ These units play specific roles in four service areas: trade promotion (missions, fairs, etc.); information and analysis (statistics, market research, etc.); support to firms' export capabilities (training, counseling, facilitation of production linkages between smaller and larger companies, etc.); logistics for investors (in particular, free trade zones) and exporters (one stop shop access).³⁸ In this sense, PROCOMER also manages a network of five offices, which are one stop shop points for exporters aimed at simplifying and thereby accelerating formal trade procedures (e.g., registration, certification of origin, technical import notes).³⁹ Firms can present forms and request

³⁷ Two additional support divisions are Communication and Press and Information Technologies.

³⁸ PROCOMER managerial activities have been certified with ISO 9001.

³⁹ This initiative actually started in the late 1980s.

permits in these one stop shops rather than have to deal with a myriad of public offices. Although managed by PROCOMER, these offices have an intergovernmental character because they are staffed with officials from different governmental entities. They are located near customs offices within the country, such as Aeropuerto Santa Maria (opened in 1990), Limon (opened in 1991), Caldera (opened in 1992), Peñas Blancas (opened in 1992), and Paco Canoas (opened in 1992).⁴⁰

Presence in the Home Country and Abroad: PROCOMER's headquarters are located in San Jose, the country's capital. In addition, five regional offices established in 2005 are located in Limon (Atlantic Huetar Region), Quesada City (North Huetar Region), Liberia (Chorotega Region), Puntarenas (Central Pacific Region), and Pérez Zeledón (Brunca Region). These offices, called Regional Centers for the Support of the Small and Medium-Size Companies (CREAPYME), are a joint initiative of PROCOMER, the Ministry of Foreign Trade (COMEX), and the Ministry of the Economy, Industry, and Commerce (MINPRO). The purpose of these centers is to promote exports and production linkages of SMEs; to increase the export capabilities of these kinds of firms located outside of the Central Valley; and to create a national export culture. In pursuing these objectives, these offices offer training in foreign trade, counseling on registration and formal export procedures, and basic assistance services to firms, in addition to identifying companies with export potential.

PROCOMER also operates a network of 13 foreign offices that are staffed with a manager and one or two trade officials. These employees prepare annual work plans under the supervision of the San Jose headquarters.

The first offices abroad were established in 1999 in Mexico and the Dominican Republic. In 2003 PROCOMER opened additional offices in Trinidad and Tobago, Puerto Rico, the United States (Miami), and Canada (Toronto), and in 2004, in El Salvador (the office subse-

⁴⁰ Many online applications have been recently established to further simplify and streamline the procedures to be undertaken by trading firms. In order to make the required coordination possible, some legal norms were introduced and the Advisory Council for the One Stop Shop Offices was created.

quently moved to Guatemala). In 2006 a new mission was established in the European Union (originally in Belgium but currently in Germany), and in the United States (Boston) and China in 2007. More recently, PROCOMER added two additional representations in the United States (Los Angeles and Houston). The establishment of these foreign offices has been linked to the advancement or conclusion of negotiations toward free trade agreements. PROCOMER offices are therefore focused on facilitating export initiatives by Costa Rican firms to take advantage of these agreements (e.g., gathering direct market information on domestic demand patterns and relevant trade regulations, and establishing local contacts), and providing direct onsite support to individual companies (e.g., managing trade agendas and participating in business dialogues with potential buyers).

Budget and Personnel: PROCOMER's 2007 budget was US\$11.8 million. This budget is based on estimates of the organization's income. A 1996 law defined the sources of this income, which primarily consists of revenues from fees for the use of free trade zones and payments made for import and export customs declarations.⁴¹ In 2007 these sources accounted for 49 percent and 46 percent of the organization's budget, respectively. The remaining 5 percent was raised from subscriptions to events organized by PROCOMER and other direct sources. The entity allocated these resources in the following way: training (3.7 percent); technical assistance (4.9 percent); marketing events such as fairs and missions (16.5 percent); research and publications (1.2 percent); foreign trade offices (15.8 percent); regional trade offices (0.4 percent); management of special regimes (4.2 percent); trade advocacy (22.6 percent); others (2.4 percent).⁴² Operational costs absorbed the rest (28.3 percent).

⁴¹ When PROCOMER was established, an endowment fund was created with resources from the preexisting organizations from which PROCOMER was created. This endowment fund, however, has not yet been used because the resources derived from the two main sources have been enough to cover the expenses incurred by the organization in performing promotional activities, and so returns on this fund are reinvested in it.

⁴² The latter refers to actions supporting activities of the Ministry of Foreign Trade, including those related to trade negotiations.

Including personnel in foreign offices, PROCOMER staff consisted of 149 employees in 2008, up from 120 in 2004. Approximately 20 percent of these employees have master's degrees and more than 50 percent had previous experience in foreign trade. About 100 employees were directly involved in promotion actions. The remaining employees performed different activities, including administrative duties related to processing statistics, official paperwork for exports and imports, and collection of fees.

PROCOMER has substantial contractual autonomy due to its status as a public entity with non-state character. In fact, the organization contracts as a private employer and its labor relationships do not follow the public sector regime. PROCOMER uses a well-defined selection mechanism for new employees. When no appropriate internal candidate appears to fill a vacant position, online announcements and pre-selection of candidates are used. Personal interviews with shortlisted candidates complete this process. In addition, advanced university students are often recruited for internships, which in some cases serve as the entry point for a career at PROCOMER.

Salaries are considered to be in line with those paid in similar positions in the private sector.⁴³ Remunerations are fixed, i.e., they do not contain a variable component based on performance. PROCOMER rotates employees to encourage them to acquire experience in different areas of trade management. This is attractive to firms that hire personnel from PROCOMER, which often happens. Furthermore, the organization has established internal professional career paths to motivate employees.

Promotion Activities: PROCOMER asks firms requesting assistance, primarily SMEs, to complete a questionnaire that identifies their needs and determines which services can best meet these needs.⁴⁴ Regular interactions between PROCOMER officials and these firms enhance this initial assessment.

⁴³ Salary differences between ministries had been common in the past. In particular, salaries at the Ministry of Foreign Trade have been much higher than at the Ministry of Foreign Relations.

⁴⁴ Firms already exporting generally receive assistance at headquarters, while potential SME exporters are initially assisted by the regional offices.

PROCOMER offers multiple services.⁴⁵ They include providing private companies and their associations, other public entities, and individuals such as researchers and students, with information on foreign markets, sometimes tailored to meet specific demands.⁴⁶ Research to produce this information, particularly on those countries with which Costa Rica has signed free trade agreements is normally conducted at PROCOMER offices using inputs from different organizations.

PROCOMER also runs training programs that primarily target SMEs. These activities are aimed at increasing these firms' knowledge of foreign markets and of factors that need to be taken into account when operating in them. These programs include "Creating exporters," which supports non-exporting SMEs in the rural areas of the country; "Export decision," which generates awareness of the opportunities created by international markets; "Learning about the market," which provides market-specific information; "Specialized training," which provides instruction in topics such as marketing, innovation, certification, and standards; "Annual plan of entrepreneurial training," which is directed at those entrepreneurs seeking to develop an export project or to strengthen their knowledge in international trade and marketing; and "Impulse to value added," which seeks to stimulate ideas to generate new products and thereby favor competitiveness through differentiation.

In addition, PROCOMER organizes promotional activities that range from trade missions to foreign countries, to setting up business agendas with the logistic support of its network of foreign offices.⁴⁷ In general, these activities have been growing rapidly in recent years.

⁴⁵ A few years ago there was a debate in the Costa Rican Congress whether investment promotion should also be covered by PROCOMER. A primary argument for incorporating such an activity in this organization's mandate was that, despite the fact that the Ministry of Foreign Trade was responsible for this policy, its implementation was completely delegated to a private organization, CINDE. However, the initiative did not materialize and CINDE still operates as the Costa Rican investment promotion organization.

⁴⁶ In fact, PROCOMER is tasked with gathering information to produce official statistics on foreign trade.

⁴⁷ The organization covers nearly 70 percent of the costs associated with the participation of Costa Rican firms in trade missions and 100 percent of the costs of the annual trade missions to Costa Rica in which foreign buyers meet with domestic producers (see Nathan Associates, 2004).

PROCOMER also supports the creation and strengthening of production linkages between domestic SME suppliers and large exporting firms through a program called “Costa Rica Provides.”⁴⁸ This program specifically pursues fostering collaboration among firms in export-related activities with the aim of increasing value added generated by Costa Rican firms and improving their ability to reach external markets and expand their activities there.⁴⁹

Assessment of Effectiveness: PROCOMER periodically defines its strategic objectives in terms of specific indicators that refer to countrywide figures such as the aggregate level of exports, the share of national content, the amount and volume of business between transnational corporations and domestic suppliers; and activities performed by the organization as the share of services that are provided electronically, and the share of users who use PROCOMER electronic systems. The organization verifies the degree of progress towards the goals on a semi-annual basis.

URUGUAY: URUGUAY XXI

Organizational Structure: URUGUAY XXI is a public organization administered under private law. The organization’s executive director is directly appointed by the president of the republic, usually with the informal agreement of the minister of foreign relations, who is the president of its board.⁵⁰ Other members of this board include a representative of the Ministry of the Economy, the executive director, and three private sector representatives. Although the government appoints these board members, they are initially proposed by the business associations that

⁴⁸ Sectoral committees were established in 2000 to develop specific strategies to promote production linkages.

⁴⁹ The IDB, through the MIF, has supported this initiative.

⁵⁰ While this might lead one to expect turnovers at the top of the organization each time a president leaves, this has not been always the case. In fact, in 2000, when the first presidential change occurred after the creation of Uruguay XXI, the executive director in office was confirmed in his position. On the other hand, since 2005, under the presidency of Tavaré Vázquez, two executive directors were appointed, the last one in March 2009.

are considered the most representative in each area. These positions in the board presently correspond to the presidents of the Chamber of Industries of Uruguay, the Rural Association of Uruguay, and the National Chamber of Commerce and Services. There are also two alternate representatives from the private sector, who are currently the president of the Mercantile Chamber of the Country's Products and the Construction Chamber of Uruguay. The board of URUGUAY XXI meets four to five times a year.

URUGUAY XXI also has a smaller executive committee chaired by the executive director that meets often, in addition to an advisory committee, which is actually an expanded board that integrates other public and private organizations into the decision-making process, and which also includes representatives from the Ministry of Industry, Energy, and Mining; the Ministry of Stockbreeding, Agriculture, and Fishing; the Ministry of Tourism and Sport; and the Union of Exporters of Uruguay.⁵¹

URUGUAY XXI has a general manager who reports to the executive director. Under the general manager, five divisions have responsibility for competitive intelligence, export promotion, investment promotion, image and communication, and administration and finance. Each of these divisions has two or three units that deal with specific issues within its areas of responsibility.

Presence in the Home Country and Abroad: URUGUAY XXI's headquarters are located in the country's capital, Montevideo. The organization has no regional offices nor does it operate offices abroad, relying instead on the support from diplomatic officials at the embassies. Some of Uruguay's larger foreign missions have commercial attachés (e.g., in Argentina, Brazil, Chile, Mexico, and Spain), but in other diplomatic representations trade promotion is handled by diplomats on a part-time basis.

⁵¹ The procedure by which private sector representatives who formally participate in URUGUAY XXI are selected and appointed has been modified several times, most recently in 2006 (Decree 624/006). The changes suggest that these appointments have been a controversial issue, probably due to their influence in deciding which services URUGUAY XXI provides.

Budget and Personnel: The budget of URUGUAY XXI has declined since 1996 and is relatively small. When the organization was created in 1996, its budget was US\$4 million, later reduced to US\$2 million in 2001, and then to US\$600,000 in 2002 following a severe macroeconomic crisis.⁵² Annual resources available to URUGUAY XXI remained at this level until 2008.⁵³ URUGUAY XXI is financed almost exclusively through the national budget, which is jointly determined by the executive and legislative powers. URUGUAY XXI does not normally charge firms for the assistance it provides. Only when special services are requested is a specific fee applied, but this is far from being a major source of income. URUGUAY XXI uses approximately 30 percent of its resources to provide export support services such as training and technical assistance; 30 percent to conduct market research and prepare publications; and 20 percent to finance participation in marketing events such as missions, fairs, and shows. The remaining 20 percent funds investment promotion.

URUGUAY XXI has only 22 employees. About half have accrued previous experience in foreign trade but only one has postgraduate studies in this area. The organization selected virtually all its employees by following formal procedures based on public calls. Wages are fixed and their levels are similar to those in technical autonomous organizations in the public sector, and are somewhat higher than those in many ministries. URUGUAY XXI has developed informal internal career paths for its employees to give them a stake in the organization. Nevertheless, some well-trained individuals are recruited by private sector firms.

Promotion Activities: The board of URUGUAY XXI has the formal autonomy to set the priorities and define programs that determine its work agenda. The organization's portfolio of activities is relatively standard, combining both specific assistance services and general country-image initiatives. Services include general and specific information, training, market intelligence, support for participation in international marketing

⁵² These cuts have primarily affected the ability of the organization to sponsor the participation of Uruguayan firms in trade fairs and missions.

⁵³ URUGUAY XXI's budget was increased in 2009.

events (up to 50 percent of the associated costs), and assistance in establishing business contacts abroad. While the organization devotes special attention to SMEs, it does not explicitly target specific categories of firms. However, individual sectors and/or countries are occasionally targeted.

These services are provided on a relatively customized basis either individually or sectorally, and in some cases are delivered jointly with business associations, especially with those participating at URUGUAY XXI's board, under particular agreements.

Since 2007 the Ministry of the Economy has managed a one stop shop regime aimed at simplifying formal investment procedures. URUGUAY XXI contributes to investment promotion, for instance, by providing potential investors with information about investment conditions.

Assessment of Effectiveness: Apart from occasional distribution of surveys to firms to gauge degree of satisfaction with the assistance received, URUGUAY XXI does not systematically evaluate its management performance or the impacts of its programs. Since this organization does not use input or output indicators, its budget is not related to its outcomes.

CHILE: PROCHILE

Organizational Structure: PROCHILE is a directorate under the General Directorate of International Economic Relations (DIRECON), within the Ministry of Foreign Relations. The two other directorates within the DIRECON are the Directorate of Bilateral Economic Affairs and the Directorate of Multilateral Economic Affairs, to which are added eight departments: Legal Affairs, Administration, Communications, Programming and Management Control, a unit executing the DIRECON Capacity Building Program, Internal Audit, Risk Management, and Studies. DIRECON has significant autonomy within the ministry, which gives it the ability to define its own plans for meeting its strategic objectives. DIRECON has a separate budget that is directly negotiated with the Ministry of Finance, separate management processes with their own control mechanisms, and a separate personnel structure. Further, it has a very integrated internal organizational structure that facilitates the movement of employees across directorates.

Being part of the same ministerial department can be expected to improve the circulation of information and collaboration between PROCHILE and other directorates within DIRECON. In particular, PROCHILE can have access to updated, precise inputs on new markets for which preferential access has been achieved thanks to trade agreements, and can support trade negotiators in defining their strategies. This might be an important benefit of such an integrated organizational model.

In the early 2000s, PROCHILE was organized in four divisions: sectors, international, marketing, and information.⁵⁴ More recently, a more horizontal organizational configuration has been adopted, and PROCHILE currently has 16 departments directly accountable to its director. This flat structure includes four departments corresponding to different geographical areas (North America, Europe, Asia-Pacific and New Markets, and Latin America); four departments concentrated on different sectors (processed food, agriculture, industry, and service trade); four departments in charge of different export promotion services (commercial information, international dissemination, promotion and international marketing, and fairs and events); and four departments dealing with internal organizational needs (planning and resources allocation, strategic development, control and projects follow up, and regional development). Most of these departments do not have underlying formal organizational units.

Presence in the Home Country and Abroad: Headquartered in Santiago de Chile, PROCHILE has 14 regional offices located in each of the country's administrative regions: Antofagasta (established in 1998), Arica y Parinacota (1996), Araucania (1998), Atacama (1998), Aysen (1998), Bio Bio (1996), Coquimbo (1996), Los Lagos (1998), Los Rios (2007), Magallanes (1998), Maule (1998), O'Higgins (1998), Tarapaca (1996), and Valparaíso (1996). These offices are managed by PROCHILE staff and have sufficient autonomy to develop and implement programs to identify new business opportunities for local producers and to promote exports of regional products. In doing so, they collaborate with the regional development

⁵⁴ See Boston Consulting Group (2004).

agencies under the Presidency as well as local authorities and business associations. However, funding for new regional export promotion initiatives is decided at the central level.

PROCHILE has 50 foreign offices in 39 countries: Argentina (Buenos Aires, Mendoza, and Cordoba), Australia, Belgium, Bolivia, Brazil, Canada (Toronto and Montreal), China (Beijing, Hong Kong, and Shanghai), Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, France, Germany (Berlin and Hamburg), Guatemala, Honduras, India, Indonesia, Italy (Milan and Rome), Japan, Malaysia, Mexico (Mexico City and Guadalajara), Netherlands, New Zealand, Nicaragua, Panama, Peru, Russia, Singapore, South Korea, Spain, Sweden, Thailand, United Kingdom, United States (Los Angeles, Miami, New York, and Washington), Uruguay, Venezuela, and Vietnam.

The foreign offices have a total of 161 employees. The number of offices has declined since the 1990s, when PROCHILE had 63 offices in 49 countries. However, the number of employees then was 162, or practically the same, which suggest that some geographical concentration of resources has taken place. A typical office is headed by an official with diplomatic status as a commercial attaché, and has two to four employees, who are generally hired locally. Offices can have their own physical space or be located within diplomatic missions, but their staffs are formally employees of PROCHILE. These foreign representations identify trade opportunities, produce market reports, and perform promotional activities to support Chilean exporters in their respective countries, under the overall guidance of headquarters.

Three times a year employees from subnational offices meet to share experiences and coordinate strategies. The heads of foreign offices do the same on a regional basis every two years. Country managers return to Chile once a year to gather direct information on Chilean exporting firms, update contacts, and review export promotion initiatives with headquarters staff.

Budget and Personnel: PROCHILE's budget is set annually by the Congress based on a proposal submitted by PROCHILE and approved by the Ministry of Finance. In recent years this annual budget was US\$33 million.

Additional financing comes from loans and technical cooperation funding from international organizations.⁵⁵ Revenues from services are minimal and are not even directly collected by PROCHILE, but rather by DIRECON.⁵⁶ Copayments by firms to participate in promotion activities organized by PROCHILE, such as trade shows, missions, and fairs, amounted to approximately US\$16 million in 2009. PROCHILE applies available resources to provide specific support services to exporting companies (63 percent); projects with funds that can be obtained through competition and direct presentation, including those allocated for financing activities performed by third parties (23 percent); international marketing events such as fairs and missions (13 percent); and market investigation and publications (1 percent).

PROCHILE's budget has remained stable since the mid-2000s, but is smaller than in the 1990s.⁵⁷ Assistance programs have been adjusted accordingly. Thus, the organization reduced support to individual non-agricultural firms to participate in trade missions and fairs, whereas it expanded the provision of more generic services such as detailed online trade information and promotion of the country image abroad.

PROCHILE manages two special funds: one to support farming and forestry exports that was originally established in 1996 with resources from the Ministry of Agriculture (US\$7.5 million in 2009); and the other with resources from the Presidency that is used to improve Chile's image abroad (US\$8 million in 2008 and US\$2 million in 2009). These funds are administered under different procedures, as will be explained below.

PROCHILE currently has 384 employees who are distributed as follows: 154 at the headquarters, 69 at the regional offices (i.e., 223 in Chile), and the remainder at the foreign offices. Since 2006 PROCHILE

⁵⁵ Thus, for instance, DIRECON has received assistance from the IDB as well as support from the European Union and the German cooperation agency Gesellschaft für Technische Zusammenarbeit (GTZ).

⁵⁶ These incomes, mostly derived from studies on demand, have an annual average of US\$ 3,500.

⁵⁷ In particular, expenses associated with direct promotion activities fell approximately 50 percent from 1996 to 2006, whereas managerial expenses grew 50 percent over the same period (see Ayala Noceda, 2006).

has filled positions through public competition conducted by a professional selection unit.

Wages are fixed, with no individual bonuses based on performance. However, some incentives operate at the organizational level that are linked to aggregate export outcomes and the degree of fulfillment of managerial goals; these amount to 2–3 percent of annual wages. This wage policy is not specific to PROCHILE, but is common to Chilean public administration. Basic wages are generally higher than those for similar positions at the Ministry of Foreign Relations. Nevertheless, diplomats have a higher wage scale when serving outside of the country.

PROCHILE personnel can be staff, employees under fixed-term contracts, honorary employees, or other categories. This complicates human resource management and career development programs. Staff move between PROCHILE and other directorates of DIRECON, and previous experience within the organization or in these other directorates is expected.⁵⁸ However, there are no established mobility pathways with other ministries.

Employee rotation is important. About 10 percent of PROCHILE personnel leave the organization each year. Nevertheless, PROCHILE has a stable core of employees who have been with the organization for many years and who help provide organizational continuity.

Promotion Activities: Major PROCHILE objectives include increasing the number of exporting firms (in particular, SMEs), helping these firms remain active as exporters, expanding the number of countries reached by Chilean firms, and, more recently, improving the country's image abroad. PROCHILE translates these objectives into operational goals based on market analyses and information inputs through consultations with industry and service associations and from direct interactions with exporting firms. In pursuing these goals, PROCHILE provides direct assistance to Chilean companies as well as funding to export supporting activities carried out

⁵⁸ Heads of PROCHILE are appointed by the Ministry of Foreign Relations. They usually have a professional profile and often they are not tenured officials, an exception being the most recent office holder.

by the associations mentioned previously. In general, PROCHILE focuses on countries with which Chile has trade agreements.

PROCHILE interacts with Chilean firms in provider-client relationships in which it provides companies with a variety of services. Using different specific instruments, PROCHILE supports the different stages of a firm's export development process, from exploration of new markets (prospective), to entering into foreign markets (penetration), and finally consolidation in these markets (permanence). We can group the main activities into four main categories: specialized information and technical advice on international markets and particular products; training activities; organization and assistance to participate in missions and fairs; and financial support to export initiatives under copayment schemes.

One of PROCHILE's most innovative programs is inter-firm coaching in which experienced business executives provide specialized advice to firms that are new to exporting. Moreover, PROCHILE also has programs specifically targeted to SMEs such as Pymexporta. In this joint initiative with the Chamber of Commerce of Santiago de Chile, PROCHILE provides companies that have passed a test to gauge their export potential with training and counseling on ways to overcome tariff and non-tariff barriers, improve their export supply, and develop logistic, distribution, and marketing channels. PROCHILE finances up to 80 percent of the costs of this assistance.⁵⁹

As noted above, PROCHILE also administers a farming-forestry fund with resources from the Ministry of Agriculture. Unlike previously cited programs, this initiative involves public calls for applications to export promotion assistance. A mixed public-private council then decides which projects to support from among those submitted. Selected projects receive up to 50 percent of their costs with resources from this fund.

Finally, some programs consist of initiatives whose expected outcomes provide a public good. This is typically the case with actions to promote the image of the country abroad or Chilean products in general. Thus, PROCHILE organizes events in target countries to increase the familiarity of local consumers with Chilean culture and goods. These kinds

⁵⁹ This program has been supported by the IDB.

of generic promotion actions have become more important in recent years. In fact, as mentioned before, in the years 2008 and 2009 the Presidency provided PROCHILE with an additional fund to develop activities for this purpose. As with the farming-forestry fund, a public-private council decides on the allocation of resources for submitted projects, although in this case costs are fully covered by the public sector.

Assessment of Effectiveness: In 2001 the Ministry of Finance performed a comprehensive impact evaluation of PROCHILE export promotion programs. While this report was not conclusive, firms confirmed their satisfaction with PROCHILE services.

Since 2004, PROCHILE has measured its performance and impact using several indicators related to the organization's strategic plan. These indicators include the change in the number of firms that have used the services provided by PROCHILE, the change in the number of services provided, the change in private sector co-financing of PROCHILE activities, and the change in exports of firms receiving assistance. The organization annually tracks these changes to gauge trends in operational processes and their outcomes.⁶⁰

In addition, questionnaires are sent to firms using specific PROCHILE services, such as assistance to participate at an international trade fair. A more general survey on overall satisfaction with the organization is conducted every two years.

Finally, PROCHILE is introducing a Balanced Scorecard.⁶¹ In the future this will provide information on the extent to which the entity's different units fulfill their operational objectives as defined in the general plan.

ARGENTINA: EXPORTAR

Organizational Structure: EXPORTAR is a private foundation whose board is composed of 28 members that include representatives from the public sector, in particular, from the Ministry of Foreign Relations, International

⁶⁰ See Ayala Noceda (2006).

⁶¹ This initiative is also being supported by the IDB.

Trade, and Worship (through the Secretary of Trade and International Economic Relationships and the Undersecretary of International Trade); the Ministry of the Economy, now the Ministry of Industry and Tourism (through the Secretary of Tourism; the Undersecretary of SMEs and Regional Development; the Undersecretary of Trade Policy and Management, the latter two being under the Secretary of Industry, Trade, and SMEs) and the Ministry of Agriculture, Stockbreeding, and Fishing; the National Bank of Investment and Foreign Trade (BICE); and the Bank of the Argentine Nation (BNA). The remaining members of the board are representatives from the private sector, including those affiliated to business associations such as the Argentine Rural Society (SRA); the General Economic Confederation (CGE); and the Association of Banks of Argentina (ABA); in addition to joining individuals. The presidency and the two vice-presidencies of EXPORTAR are occupied by private entities, namely, the Argentine Industrial Union (UIA); the Chamber of Exporters of the Argentine Republic (CERA); and the Argentine Chamber of Commerce (CAC), respectively.

EXPORTAR has an executive director appointed by the board, but requiring the approval of the Ministry of Foreign Relations, International Trade, and Worship.⁶² This position is held for a fixed term, which can be renewed. The organizational structure of EXPORTAR consists of one executive directorate, two main operative departments, and several supporting divisions. Thus, under the executive directorate are two units that are responsible for trade analysis and intelligence, and coordination with the Undersecretary of International Trade and the foreign missions of the Ministry of Foreign Relations, International Trade, and Worship. The operative departments include Trade Promotion, which provides direct support both across sectors and to specific sectors (food, high differentiation products, and industry); and Trade Strategy, which provides technical assistance to firms and manages programs in the areas of training, provincial and sectoral promotion, missions, and exporter groups. Three additional divisions are responsible for institutional communication (website and logistics of events), public relationships, and institutional relationships

⁶² The most recent executive director had previously worked for the public sector.

(with firms, chambers, and organizations that act as EXPORTAR access points). Finally, an administrative division handles financial and human resources management issues.

Presence in the Home Country and Abroad: EXPORTAR headquarters are located in Buenos Aires, Argentina's capital. Although this organization does not have its own regional offices, a network of 63 EXPORTAR "windows" are located in every province in the country. These offices have been established in partnership or through agreements with, and are hosted by, provincial or municipal governments and business associations. Therefore, employees at these offices are neither hired nor are formally staff of EXPORTAR, but of the hosting organizations. These access points offer information and facilitate contacts with EXPORTAR departments that deal with firms' needs.

EXPORTAR does not have its own foreign offices to promote exports abroad. Rather it relies on the officials working at Argentine foreign diplomatic missions, especially those responsible for trade issues. These diplomats support EXPORTAR by gathering information and assisting exporters in business activities. There are currently about 90 diplomats involved in export promotion activities around the world. They perform these activities using common software for sharing information, which tends to facilitate coordination among them. However, these diplomats not only receive assistance requests from EXPORTAR but also from other entities such as provincial governments through their own export promotion organizations. Furthermore, they are often not only engaged in trade promotion, but also in attracting investment and even in other general diplomatic activities. Consequently, diplomatic missions often lack sufficient resources, qualified staff, and time to address specific export promotion needs.

Since the late 1990s Argentina began to establish more specialized export promotion offices (Argentina's Promotion Centers) in a few countries. These offices are attached to general consulates located in important non-capital cities such as Sao Paulo in Brazil; Los Angeles, Miami, and New York in the United States; Barcelona, Frankfurt, and Milan in Europe; and Shanghai in China. These offices provide firms with information and local assistance.

Budget and Personnel: EXPORTAR's budget mostly consists of resources from the Ministry of Foreign Relations, International Trade, and Worship, as established in the budget law approved by Congress.⁶³ These resources increased from US\$1 million in 2002 to US\$4.5 million in 2008. Copayments by firms to participate in events organized by EXPORTAR such as trade missions and fairs amounted to US\$2 million in 2008. EXPORTAR spends approximately 10 percent of its available funds on operational costs and the remaining 90 percent on finance promotion activities as follows: support services to exporters, such as training and technical assistance (13.0 percent); marketing and other specific promotional actions, such as missions and fairs (78.0 percent), and market research and publications (9.0 percent).

Since its creation, EXPORTAR has had only three executive directors with the following terms of office: 1993–1999, 1999–2001, and 2002–2010.

EXPORTAR's employees presently number 95 (85 staff and 10 consultants and interns), up from 35 in 2002. Of these employees, 7 percent have master's degrees in marketing and strategic management, politics and strategy, international relations, and agricultural aliments; and 15 percent have previous experience in international trade issues.

When a vacancy occurs, the formal recruiting procedure consists first of identifying a minimum of three candidates via direct public announcements, screening of current employees, primarily student interns, and/or pre-selection by specialized consulting firms; and on personal interviews.

Salaries are fixed and their levels are comparable to those in similar organizations within the Argentine public administration. There are no formal structured career paths in EXPORTAR, but there are informal pathways used by employees that take advantage of staff turnover. After having been employed five to six years with the organization, many employees, especially those in technical areas, leave for positions in the private sector.

⁶³ Occasionally, EXPORTAR has received additional funds from the Ministry of the Economy, now the Ministry of Industry of Tourism.

Promotion Activities: EXPORTAR's activities are defined in an annual working plan that is prepared in coordination and under strategic guidelines established by the Ministry of Foreign Relations, International Trade, and Worship.

EXPORTAR organizes training activities aimed at explaining the organization's services and increasing firms' familiarity with the export process, its specific stages and implied operations; and with international marketing events such as fairs and missions.⁶⁴ EXPORTAR also provides firms with trade information derived from its own market intelligence, both in general and on demand; and prepares reports and specific profiles on sectors and/or countries.⁶⁵

Most EXPORTAR activities consist of international marketing initiatives, which account for the largest share of the organization's budget. EXPORTAR coordinates the participation of Argentine firms in fairs; and organizes outgoing general and sectoral missions, incoming missions of buyers, and Argentine promotion weeks/months abroad.⁶⁶

In collaboration with the Standard Bank Foundation, EXPORTAR also supports the establishment of exporter consortia ("Grupos de Exportadores"), groups of mostly SMEs working within the same areas of activities and which join in overseas activities.⁶⁷ Besides providing technical assistance, a manager is partially financed for the group during their

⁶⁴ While the number of events has not significantly changed over the period 2002–2008, the number of participants has declined in recent years from 8,360 participants (96 courses) in 2003 to 7,309 participants (92 courses) in 2007. Among others things, this is due to a change in the training strategy, in which courses are increasingly oriented to officials responsible for export promotion in subnational entities such as municipalities, who then train firms in their territories.

⁶⁵ On average, the organization produces more than 150 documents and more than 200 market profiles. These figures have been relatively stable in recent years. Most of this material is accessible on the website.

⁶⁶ In general, the number of these activities has increased in recent years: 38 fairs with 895 firms in 2003 and 70 fairs with 1,435 firms in 2008; four outgoing missions with 56 firms in 2003 and 15 outgoing missions with 246 firms in 2008, five incoming missions with the participation of 11 foreign firms and 80 Argentine firms in 2003 and 22 incoming missions involving 235 foreign firms and 1,102 Argentine firms in 2008.

⁶⁷ There have also been initiatives to connect large exporting firms with SMEs to facilitate support from the former to the latter in export activities.

first two years of operations; the amount paid declines from the first to the second year.⁶⁸

Finally, EXPORTAR recently developed sectoral promotion programs in which it collaborates with major firms within the sector and other relevant organizations in formulating strategic marketing plans.⁶⁹ These plans identify the most suitable destination markets for the firms' products, main marketing modalities, prevailing consumption trends and market segmentations, and define a set of strategies aimed at improving the international positioning of the respective firms.⁷⁰ EXPORTAR supports the implementation of this plan with specific promotional activities.⁷¹

Assessment of Effectiveness: EXPORTAR keeps track of all promotion activities, which are detailed in its annual reports along with the number of participating firms. Outcomes of these activities are primarily assessed using the information provided by client satisfaction surveys filled out by participating firms. These surveys also include questions about sales made by companies that benefited from these activities. Even when reported, these figures are not always accurate. Nevertheless, they are then aggregated and presented as the organization's contribution to Argentine exports. While EXPORTAR's budget is not explicitly related to this assessment, the implied results are likely to actually affect its evolution over time.

COLOMBIA: PROEXPORT

Organizational Structure: PROEXPORT is a public entity operating under private law and was initially assigned an endowment fund. In

⁶⁸ Exporter groups have increased from 36 with 263 participating firms in 2003 to 56 with 389 member firms in 2008.

⁶⁹ Sectors have been initially selected using a list of 25 activities and 25 countries prepared by the Ministry of Foreign Relations, International Trade, and Worship.

⁷⁰ These plans explicitly take into account the existence of SMEs in each sector.

⁷¹ There are currently 34 ongoing programs of sectoral promotion assisting 358 firms.

October 1992, the government created a national mixed society called the Colombian Trust Company of Foreign Trade (FIDUCOLDEX), to administer PROEXPORT's assets and resources, under the supervision of the Colombian Bank of Foreign Trade (BANCOLDEX), which in turn is under control of the Ministry of Foreign Trade, now the Ministry of Trade, Industry, and Tourism.⁷² FIDUCOLDEX is a subsidiary organization of BANCOLDEX, which owns 89 percent of its capital. In this way, the ministry controls PROEXPORT. The remaining 11 percent is held by nine associations representing nontraditional export sectors (8 percent) and five major industrial chambers (3 percent).

PROEXPORT's president acts as the organization's general manager and is supervised by the Board of Advisors.⁷³ The president is appointed by the president of the republic. Thus, when the administration changes, the president of PROEXPORT generally does as well.⁷⁴ The Advisory Board is composed of the minister of trade, industry, and tourism; the president of BANCOLDEX; two individuals designated by the president of the republic; and two representatives from the private sector also appointed by the president of the republic from a list of three candidates presented by exporter and producer associations registered with the Ministry of Trade, Industry, and Tourism and a list of entrepreneurs submitted by the ministry's regional advisory committees.⁷⁵

Under the president are four vice-presidencies: export promotion, investment promotion, tourism, and country-image.⁷⁶ The vice-presidency of export promotion has four divisions: agro-industry, manufacturing, clothing, and services. The vice-presidency of investment promotion also has four divisions: investment promotion, investment climate, attention

⁷² The Ministry of Foreign Trade was merged with the Ministry of Economic Development in 2002 to produce the Ministry of Trade, Industry, and Tourism (Law 790).

⁷³ The president until 2009 had served as director of PROEXPORT's office in Brazil for over eight years.

⁷⁴ In recent years there has been more continuity as the former president of PROEXPORT became Minister of Trade, Industry, and Tourism during President Uribe's second term.

⁷⁵ PROEXPORT's board is the same as that of FIDUCOLDEX.

⁷⁶ These vice-presidencies were established in 2004 when PROEXPORT took over the responsibility of also promoting tourism and investment.

to investors, and strategic support. There are three divisions within the vice-presidency of tourism: corporate tourism, vacation tourism, and tourism marketing. In addition, there are seven separate departments for market intelligence (commercial information), planning, strategic institutional development, technology, management, events, and international cooperation agreements.

Presence in the Home Country and Abroad: In addition to its headquarters in Bogota, PROEXPORT operates seven regional offices in the country's main cities: Barranquilla, Bucaramanga, Cali, Cartagena, Cucuta, Medellin, and Pereira. Forty-five employees currently staff these offices, up from 20 in 2004. Moreover, as part of a joint initiative with the Ministry of Trade, Industry, and Tourism, and BANCOLDEX, a network of 22 centers of information and advice on foreign trade, called Zeikys, cover 19 departments: Antioquia, Atlantico, Bogota, Boyaca, Caldas, Cauca, Cesar, Huila, Magdalena, Meta, Nariño, Norte Santander, Quindio, Risaralda, San Andres Isla, Santander, Tolima, Valle, and Valle del Cauca.

In addition, PROEXPORT has foreign trade offices located in 15 countries: Brazil (Sao Paulo), Canada (Toronto), Chile (Santiago de Chile), China (Beijing), Costa Rica (San Jose), Ecuador (Quito), Germany (Frankfurt), Guatemala (Guatemala City), Italy (Rome), Mexico (Mexico City), Peru (Lima), Spain (Madrid), United Kingdom (London), United States (Miami), and Venezuela (Caracas).⁷⁷ Foreign offices employ a total of 76 persons, an increase of 16 relative to 2004. The largest office in terms of budget and personnel is located in Miami (more than US\$1.5 million and 14 employees), and the smallest office is in Rome (less than US\$200,000 and three employees).

These foreign missions offer support to Colombian exporters in cooperation with PROEXPORT headquarters. They identify barriers to Colombian exports in the host country and help remove them; detect and provide information on trade opportunities; organize and coordinate

⁷⁷ In addition, PROEXPORT collaborates with commercial representations of the Ministry of Trade, Industry, and Tourism in four different cities (Miami, New Delhi, New York, and Washington).

trade missions and shows of Colombian products in their countries; and assist exporters in contacting, preparing business agendas, and meeting potential buyers.

Budget and Personnel: Since its creation and until recently, PROEXPORT's budget was autonomously established by the Advisory Board and mainly financed with interest earned from the endowment fund.⁷⁸ This fund was created in 1991 with the resources accumulated so far by the predecessor organization (PROEXPO) through taxes on foreign trade transactions. At that time, the fund was envisaged to be drawn down within 10 years, but it actually lasted longer, even after new promotion areas such as investment and tourism were added to PROEXPORT's mandate. In recent years, the fund was almost exhausted and, in fact, its capital was used to finance the operation of the organization. As a result, different options were considered for funding PROEXPORT. In 2009 the government decided to shift to a public allocation scheme in which resources are provided directly from the national budget; about US\$55.0 million were allocated to this organization.⁷⁹

The number of PROEXPORT employees increased in recent years from 190 (110 in headquarters) in 2004 to 281 (160 in headquarters) in 2008. This reflected not only the assignment of new responsibilities in investment and trade promotion but also the expansion of export promotion activities performed by the organization. Roughly 37.5 percent of these employees have an advanced university degree (specialization studies, master's, or doctorate).

PROEXPORT follows personnel and management policies that are autonomous from the Ministry of Trade, Industry, and Tourism, and closer to private sector procedures. For most administrative and technical positions, when a vacancy occurs, PROEXPORT opens an internal selection process. If no suitable internal candidate is found, a search is performed

⁷⁸ Additional revenues were only marginal and mostly corresponded to income from sales of specialized services to firms or funds associated with international collaboration agreements allocated to specific projects.

⁷⁹ Approximately 22.0 percent of these resources are used to finance operational expenditures.

externally through public calls for applications. Selection procedures for top-level positions are similar to those used by private firms when recruiting managers. More specifically, PROEXPORT makes use of human resources consulting firms (head hunters) to recruit well-trained personnel in the private sector. This procedure also applies when selecting directors of foreign offices. Remaining personnel in these offices are primarily hired locally among candidates who have previous trade experience.

PROEXPORT has a relatively sophisticated system for monitoring the performance of its employees. Human resource management is based, first, on setting annual goals for each employee in accordance with the organization's strategic planning and with objectives of the specific unit; and, second, on assessing the degree to which these goals were achieved.⁸⁰ PROEXPORT's basic salaries are similar to those in the public administration. They are most comparable to those at the Ministry of Trade, Industry, and Tourism, although procedures and wage scales differ. In particular, there are economic incentives that consist of a variable bonus in addition to the basic salary (approximately up to 25 percent) based on the degree of achievement of individual goals, which results in relatively higher salaries for PROEXPORT employees. In addition, the organization has established more specific incentives for employees with outstanding performance. On the other hand, individuals who do not reach their goals may experience reductions in the variable component of their wages. However, these reductions are not automatic, since the role of external factors is taken into account. PROEXPORT closely monitors these employees and offers them support to improve their performance.⁸¹ While PROEXPORT has a relatively stable core of experienced personnel, there is also in this case considerable turnover as private firms attract well-trained employees with higher wages.⁸²

⁸⁰ This is done with the help of management software.

⁸¹ See Obando and Gómez Escalante (2008).

⁸² PROEXPORT does not aim to compete with private firms in terms of salaries. According to our interviews with lead officials, they perceive this situation as a natural process of personnel rotation and, to some extent, see it as an indicator of organizational success.

Promotion Activities: In 1994 PROEXPORT launched a strategic plan to expand Colombia's exports with the objectives of diversifying export products, diversifying destination countries, and securing export markets.⁸³ This plan, which was carried out through stronger collaboration among relevant public actors involved in trade policy, included different export support actions, such as training on foreign trade, provision of information services, development of private export consortia, and specific promotional activities in particular sectors and countries. Most of the plan's objectives remain basic priorities for PROEXPORT and most of these export assistance actions are still carried out, although they have been refined over time through specific programs, including sectorally focused ones.

The current services offered to exporting or potential exporting firms is diversified and includes information on foreign markets, both overall and for specific products (PROEXPORT has developed an online information center, the SIIC); training on export procedures, technical obstacles to trade, and transport and marketing logistics; support to obtain international quality certification; organization and coordination of firms' participation in international events such as trade shows, fairs, and incoming and outgoing missions, and arranging business meetings with potential clients; and assistance in the formation, coordination, and functioning of exporter consortia (Special Export Projects).⁸⁴ These services are open to all Colombian firms, in some cases, under a copayment scheme, and they are sometimes included in the framework of specific programs.

In this regard, three main programs aimed at developing firms' export capabilities are Zeiky, Expopyme, and Exporters Plan. These programs are open to any firm satisfying eligibility conditions and to some extent are based on different copayment formulas.

Zeiky, the joint initiative of PROEXPORT, the Ministry of Trade, Industry, and Tourism, and BANCOLDEX, aims at providing firms with

⁸³ See Ochoa (1998).

⁸⁴ Regional branches concentrate on providing information, training, and advice to firms. In performing these activities they collaborate with local business associations and authorities. Operatively, they use an integrated software system, so the quality of the services is likely to be similar across regions.

information and counseling on exporting through online means (phone and internet), one-day training workshops, and personalized attention by specialized counselors, in an integrated manner.⁸⁵

Expopyme consists of the provision of export training and assistance in the development of export plans for SMEs to help them place their products in foreign markets. This program leads firms with export potential through a one-year capacity building process in three main stages: assessment of firms' capabilities to identify the gap between their capabilities and those required to successfully meet international demand; development and implementation of an improvement strategy, including new management tools; and design and execution of an export plan, which includes the search for foreign buyers by means of special events organized by PROEXPORT.⁸⁶ In running Expopyme, PROEXPORT collaborates with universities, business associations such as the Confederation of Chambers of Commerce, Confecámaras, and the Colombian Association of SMEs (ACOPI); the Colombian Fund for the Modernization and Technological Development of the Micro, Small, and Medium-size Enterprises (FOMIPYME), and the National Learning Service (SENA).

The third program, Exporters Plan, assists companies in formulating and executing these plans.⁸⁷ Export plans are documents containing an evaluation of a firm's export opportunities in a particular market, a self-diagnosis of the firms that identifies their specific needs in the areas of production, financing, marketing, etc., and a list of actions to market their goods abroad. PROEXPORT assistance includes advice from international experts, validation of target and goals by foreign offices, support to participate in international fairs and visits to clients and to open and consolidate distribution channels, thus leading to an integral

⁸⁵ A portion of the reports that are given to firms are prepared with the support of PROEXPORT's external network of promotion offices. Some technical cooperation funds from multilateral organizations have been channeled for improving and expanding these market reports.

⁸⁶ Firms that successfully complete the program receive an accreditation diploma and then gain access to additional assistance from PROEXPORT, such as support to participation in trade missions.

⁸⁷ Successful Expopyme graduates are natural candidates to join the Exporters Plan.

accompaniment of firms throughout the export process. Hence, different promotion activities are combined.⁸⁸

Once Colombian firms become experienced exporters, they continue receiving support, for instance, through PROEXPORT foreign offices, which meet requests for business information or commercial contacts and help them in closing trade deals. This is done through the so-called “PROEXPORT Selling Methodology,” in which special software for business intelligence uses information collected on Colombian exporting firms and international buyers in order to facilitate business between them. This system enables employees to include detailed information on their support to firms as well as on the sales that firms eventually make.⁸⁹

Assessment of Effectiveness: PROEXPORT currently has an overall action plan that covers all areas of activity and involves all units. Every year all units discuss their accomplishments in a general meeting.

Performance assessments are primarily based on measuring the number of Colombian firms that have received export assistance from PROEXPORT and the monetary value of the export deals achieved by these firms, and comparing these figures with the objectives initially established.⁹⁰ The organization performs this assessment in different areas: sector and country markets; departments and offices; and at the individual level.⁹¹ The quality of management processes is also evaluated. PROEXPORT uses surveys on the quality of the programs that are directly sent from the organization’s headquarters to firms that received export support. However, the organization does not conduct detailed systematic program evaluations, instead hiring consultants occasionally to carry out specific assessments.⁹²

⁸⁸ This of course requires coordination across different departments.

⁸⁹ See Obando and Gómez Escalante (2008).

⁹⁰ Similar figures are used to evaluate investment and tourism promotion activities.

⁹¹ See Obando and Gómez Escalante (2008).

⁹² In general, firms tend to consider activities involving the possibility of direct contacts with potential buyers as the more valuable support provided by PROEXPORT. In particular, direct assistance from foreign offices in this regard is highly valued (see Nathan Associates, 2004).

Recapitulating

These case studies provide additional insights for achieving a better understanding of the organizations tasked with export promotion in the region. Below we will use the similarities and differences among these organizations to make a more detailed comparative examination to reveal cross-country patterns.

The specific aspects of the organizations' operational context and internal structure make it possible to compare experiences among countries. Based on the organizational dependence of the entities and the availability of a dedicated network of foreign offices, countries can be classified in two main groups. In neighboring Argentina and Uruguay, organizations are linked to the respective ministries of foreign affairs and do not have offices abroad, instead relying on the support of embassies and consulates. In Colombia and Costa Rica, organizations are attached to the respective ministries of foreign trade and have their own missions in foreign countries. Peru and Chile do not fit these models. PROMPERU is under the Ministry of Foreign Trade but lacks its own offices abroad, while PROCHILE belongs to the Ministry of Foreign Relations and has a separate network of foreign missions. Geographic organizational diffusion seems to have played a role. Southern Cone countries have ministries of foreign affairs in charge of export promotion, whereas northern countries have developed separate foreign trade ministries.

With the exception of PROCHILE, organizations are separate from the ministries' bureaucratic structures, and have their own organizational models with mixed public-private boards. The composition of these boards varies from entity to entity. In most cases, major business associations and chambers of commerce and other ministries (as well as other relevant public organizations) participate in these governing bodies. The private sector can even hold the majority of seats in these government bodies (e.g., EXPORTAR, PROCOMER, and PROMPERU).⁹³ However, the ability of these other political or business actors to control

⁹³ In PROEXPORT, the majority of the seats correspond to the public sector or its representatives.

and thereby influence the agenda of export promotion organizations is actually limited, and different decision-making procedures do not seem to result in substantially different levels of political control of these entities.⁹⁴ Although some organizational models allow for coordination among different constituencies, the ministry in charge usually guides the entity's policy either due to the difficulties faced in building a controlling coalition within the board or simply due to public control of funding.⁹⁵ In most cases these public resources are directly allocated through the annual public budget. In Costa Rica, however, they are directly raised through fees.⁹⁶

In addition, there are clear differences among groups of entities in terms of their internal organization. The way the head of the organization is appointed is also an important factor to be considered. In the cases of PROCHILE, PROEXPORT, PROMPERU, and URUGUAY XXI, this official is appointed directly by the responsible ministry or by the president of the country. In EXPORTAR and PROCOMER, the board of directors plays a role in naming the head of the entity, either submitting a proposal or directly designating this official. However, appointments must be approved by the Ministry of Foreign Relations, International Trade and Worship in Argentina and PROCOMER's board is chaired by Costa Rica's minister of foreign trade. Therefore, in all cases, governments retain significant control of the organizations.⁹⁷

In terms of internal organization, EXPORTAR and PROCOMER have few functional departments that are generally tasked with support and specific promotion activities. On the other hand, PROEXPORT has a very sophisticated organizational structure involving a matrix logic, while PROCHILE has a simple but strongly horizontal structure with a

⁹⁴ In fact, no single tenured civil servant with strong autonomy with respect to the political principal has been found.

⁹⁵ Of course, without considering copayments associated with participation in international marketing events.

⁹⁶ Recall that funding for PROMPERU's export promotion program is publicly allocated exclusively through the budget.

⁹⁷ This is particularly confirmed by these organizations' respective historical development processes (see Jordana et al., 2010).

large number of departments. Only a few export promotion organizations in the region have their own foreign missions, such as is the case with PROCHILE and PROEXPORT, with PROCHILE's network being the most extensive. Although a detailed study would be necessary to confirm it, these entities' internal models might represent alternative attempts to cope with the coordination challenges faced by relatively large organizations with extensive networks of internal and external offices. It would also be interesting to explore whether PROCHILE's location inside the Ministry of Foreign Relations has facilitated its expansion abroad.

With the exception of URUGUAY XXI, all entities have some sort of presence in different regions of their countries. PROCHILE, PROEXPORT, and PROMPERU have their own networks of offices in the field. PROCOMER's regional representations are a joint initiative with the Ministry of the Economy, Industry, and Commerce and the Ministry of Foreign Trade. PROEXPORT has also used this kind of arrangement to open information and service centers in addition to its own offices, thus expanding its regional coverage. Under a similar scheme, PROMPERU has been able to set up information centers in regions other than those where its offices are present. Finally, EXPORTAR does not have such offices, but has established access points to its services through agreements with local governments and business associations.

There are also significant differences among organizations in terms of their budget and personnel. The size of the country might partially account for these differences, but this is far from clear in our sample. The range of activities performed, i.e., just export promotion vs. export promotion, investment promotion, and/or tourism promotion, may also play a role. Further, having a large network of promotion offices, both internal and external, is naturally associated with greater financial and human resource needs. As discussed above, differences in the degree of organizational fragmentation in the countries may also help explain the differences in size of the entities. Thus, after taking into consideration all other relevant factors, in hierarchical models, the major organization concentrates most of the resources and its size is predictably larger. In decentralized models, however, resources are split among several entities whose expected average size is relatively small. Finally, priority assigned

by the government to export promotion also influences the level of budget resources of organizations tasked with the execution of this policy.

Almost all export promotion entities provide exporting or potentially exporting firms with a common set of basic services that include export instruction, market intelligence, coaching, and missions and fairs. When there are few or no private sector representatives in the government bodies, and the responsible ministry is strongly involved, these entities might devote larger shares of their resources to finance services with more public good nature, such as country image-enhancing activities or specialized information services. This appears to be the case with PROCHILE, which has recently increased the provision of these kinds of services. In contrast, in decentralized public or pluralistic models and/or more autonomous entities, and where participation from private sector representatives is relatively important, activities might tend to concentrate on supporting individual business initiatives such as participation in trade missions and fairs, which admittedly may also create positive externalities. Establishing which strategy can generate the best results is beyond the scope of this chapter. However, we can assume that challenges will be faced in both cases. The public good strategy should reduce rent-seeking from more established industries and routinely assess their overall impact (as direct specific effects will not be easily identifiable) and, in particular, whether there are individual export promotion services that may lead to larger (aggregate) effects. On the other hand, in the individual service strategy, incentives should be correctly placed, that is, copayment schemes should require larger contributions by private firms as the individual components of these services increases. Moreover, extreme heterogeneity of activities should be avoided for the sake of organizational efficiency. A large set of instruments can be expected to be associated with high administration costs. Further, given the organization's overall budget, such instruments would be poorly financed (i.e., their scale would be small), which is likely to adversely affect their ability to have a significant impact. Importantly, export promotion organizations may not be entirely free to choose among these strategies because they may be conditioned to some extent by the set of relevant entities in the countries and the implied specialization dynamics. This issue deserves closer examination in a separate study.

Impact evaluation mechanisms are generally weak, making it almost impossible to discuss them in a comparative perspective. However, export promotion organizations with external networks of offices (i.e., PROCHILE, PROEXPORT, and PROCOMER) seem to have a relatively more developed system for performance assessment. Whether this is the result of their much more complex organizational structure, or other reasons, such as larger availability of financial and human resources, must be left to further investigation.

2.4 Concluding Remarks

This chapter has described major export promotion organizations in Latin America and the Caribbean along with those from countries outside of the region based on information gathered through surveys and secondary sources, as well as case studies for a subset of Latin American entities.

Our analysis has revealed several interesting organizational patterns both across regions and among countries in Latin America and the Caribbean. Importantly, export promotion entities generally lack adequate procedures to evaluate the impact of their promotion strategies (e.g., having their own offices abroad vs. relying on those of other public organizations) and specifically the effects of their export support activities on firms' export performance. Improvements in this area would allow for a better assessment of the extent to which it makes sense to invest frequently scarce resources in export promotion and whether and how returns on these resources can be increased. We will address these issues in the following chapters.

We also point to the need for additional research into trade promotion organizations, perhaps in the form of specific in-depth case studies that would shed more light on the roles played by factors such as organizational models, budget, and remuneration policy in shaping these entities' ability to affect export outcomes.

Table 2.1 ■ The Sample

Export Promotion Organizations Covered by the Survey			
Country/ Region	Organization		Year of Creation
Rest of the World			
Australia	Australian Trade Commission	AUSTRADE	1985
Denmark	Trade Council of Denmark	TCD	2000
Finland	FINPRO	FINPRO	1999
France	Ubifrance	UBIFRANCE	2004
Ireland	Enterprise Ireland	EI	1998
Israel	Israel Export and International Cooperation Institute	IEICI	1958
Italy	National Institute for Foreign Trade	ICE	1926
Japan	Japan External Trade Organization	JETRO	2003
Korea	Korea Trade and Investment Promotion Agency	KOTRA	1962
Netherlands	Agency for International Business and Cooperation	EVD	1937
New Zealand	New Zealand Trade and Enterprise	NZTE	2003
Philippines	Bureau of Export Trade Promotion	BETP	1987
Spain	Institute of Foreign Trade	ICEX	1982
Catalonia ¹	Consortium for the Trade Promotion of Catalonia	COPCA	1987
Singapore	International Enterprise Singapore	IES	2002
Thailand	Department of Export Promotion	DEPT	1977
United Kingdom	United Kingdom Trade and Investment	UKTI	2003
Latin America and the Caribbean			
Argentina	EXPORTAR Foundation	EXPORTAR	1993
Cordoba	PROCORDOBA	PROCORDOBA	1998
Mendoza	PROMENDOZA	PROMENDOZA	2003
Bolivia ²	Center for the Promotion of Bolivia	CEPROBOL	1998
Brazil	Brazilian Agency for the Promotion of Exports and Investments	APEX	2003
Chile	Direction of Export Promotion	PROCHILE	1974
Colombia	PROEXPORT	PROEXPORT	1992
Costa Rica	Costa Rican Promoter of Foreign Trade	PROCOMER	1996
Ecuador	Corporation for the Promotion of Exports and Investments	CORPEI	1997
El Salvador	El Salvador Exports	EXPORTA	2004

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Table 2.1 ■ The Sample *(continued)*

Export Promotion Organizations Covered by the Survey			
Country/ Region	Organization		Year of Creation
Guatemala	Department of Trade Promotion	DPC/ME	2000
Honduras	Foundation for Investment and Export Development	FIDE	1984
Jamaica	Jamaica Trade and Investment	JTI	1990
Mexico	PROMEXICO Investment and Trade	PROMEXICO	2007
Panama ³	National Direction of Export Promotion	DNPE/VICOMEX	1998
Paraguay	Network of Investments and Exports	REDIEX	2004
Peru	Commission for the Promotion of Peru for Exports and Tourism	PROMPERU	2007
Uruguay	Institute for the Promotion of Investments and Exports of Goods and Services	URUGUAY XXI	1996

¹ As of March 14, 2008, COPCA was merged with the Center for Innovation and Business Development (CIDEM) into ACC10.

² As of October 2008, a new trade promotion organization was created in Bolivia, Bolivia Promotes, out of the former CEPROBOL.

³ The year of creation reported in the table corresponds to that of the Vice-Ministry of Foreign Trade (VICOMEX).

Table 2.2 ■ ROW: Mission and Areas of Activity

Country/ Region	Organization	Mission	Areas of Activity
Australia	AUSTRADE	Contribute to national prosperity by promoting two-way investments and helping more Australians to succeed in export and international businesses.	Export promotion and investment promotion
Denmark	TCD	Provide counseling for Danish companies in all aspects of internationalization.	Export promotion and investment promotion
Finland	FINPRO	Provide Finnish companies, especially small and medium- size ones, with access to high quality, comprehensive services to promote internationalization abroad.	Export promotion
France	UBIFRANCE	Promote French companies abroad and develop their export capacities through information.	Export promotion
Ireland	EI	Accelerate the development of world-class Irish companies to achieve positions in global markets, resulting in increased national and regional prosperity.	Export promotion and business development promotion in general
Israel	IEICI	Promote exports and international collaboration of Israeli companies in world markets.	Export promotion
Italy	ICE	Promote trade, business opportunities, and individual cooperation between Italian and foreign companies, and support the internationalization of Italian firms, especially small and medium- size ones, and their consolidation in foreign markets.	Export promotion
Japan	JETRO	Promote FDI in Japan, assist small to medium-size Japanese firms, promote cross-border business, supply Japan with foreign economic information, and provide an intellectual base and investigate developing economies.	Export promotion and investment promotion
Korea	KOTRA	Promote mutual prosperity between Korea and its partners in facilitating international trade and investment.	Export promotion and investment promotion
Netherlands	EVD	Promote trade abroad for Dutch companies.	Export promotion

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Table 2.2 ■ ROW: Mission and Areas of Activity *(continued)*

Country/ Region	Organization	Mission	Areas of Activity
New Zealand	NZTE	Improve international competitiveness and sustained profitability of New Zealand business by providing access to people, knowledge, and opportunities.	Export promotion, investment promotion, and business development promotion in general
Philippines	BETP	Develop, promote, and help expand the foreign trade of the Philippines.	Export promotion
Spain	ICEX	Promote and facilitate the internationalization of Spanish companies, in general, and their exports, in particular.	Export promotion
Catalonia	COPCA	Promote the internationalization of Catalan firms and help them adapt to the new challenges of the world economy.	Export promotion
Singapore	IES	Promote the overseas growth of Singapore-based enterprises by helping them export, develop business capabilities, find overseas partners, and enter new markets; and position Singapore as a base for foreign business to expand in the region in partnership with locally based companies.	Export promotion and business development promotion in general
Thailand	DEPT	Foster development of the competitive capabilities of Thai companies and businesses by organizing activities and events that create opportunities to increase exports.	Export promotion
United Kingdom	UKTI	Assist British companies to succeed in international markets and attract high quality investment to the United Kingdom.	Export promotion and investment promotion

Table 2.2 ■ LAC: Mission and Areas of Activity

Country/ Region	Organization	Mission	Areas of Activity
Argentina	EXPORTAR	Assist Argentine companies in their efforts to introduce competitive products in international markets.	Export promotion
Cordoba	PROCORDOBA	Promote Cordoba's trade, with a special emphasis on supporting small and medium-size enterprises in entering international markets.	Export promotion
Mendoza	PROMENDOZA	Promote the internationalization of companies in Mendoza.	Export promotion
Bolivia	CEPROBOL	Contribute to the socioeconomic development of Bolivia through the expansion and diversification of exports with increasing levels of value added and the attraction of foreign direct investments to the country.	Export promotion and investment promotion
Brazil	APEX	Promote the exports of goods and services thereby contributing to the internationalization of Brazilian companies.	Export promotion and investment promotion
Chile	PROCHILE	Support small and medium size-firms in their process of internationalization, assist Chilean companies to take advantage of commercial opportunities generated by trade agreements, develop public private partnerships, and position Chile's brand in other markets.	Export promotion
Colombia	PROEXPORT	Produce a greater impact in the economic growth of the country through the promotion of nontraditional exports, international tourism, and foreign investment.	Export promotion, investment promotion, and tourism promotion
Costa Rica ¹	PROCOMER	Design and coordinate programs relative to exports and investments, help exporting (or potentially exporting) small and medium-size firms in accessing international markets, support the Ministry of Foreign Trade technically and financially in administering the special export regimes, manage the one stop shop regime for foreign trade that centralizes and streamlines the procedures of importing and exporting, and keep track of foreign trade statistics with the competent institutions.	Export promotion

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Table 2.2 ■ LAC: Mission and Areas of Activity *(continued)*

Country/ Region	Organization	Mission	Areas of Activity
Ecuador	CORPEI	Promote exports and investments of productive sectors, through the provision of quality technical services, thereby contributing to enhance the image and the competitive development of the country.	Export promotion
El Salvador	EXPORTA	Promote an effective and sustained basis of participation of firms in key international markets, thereby increasing their exports.	Export promotion
Guatemala	DPC/ME	Contribute to the promotion of Guatemalan exports, the development of a favorable economic culture, and the improvement of the pertinent execution instruments.	Export promotion
Honduras	FIDE	Promote the sustainable development of the country through the promotion of investment and exports and thereby the continuous improvement of its international competitiveness and that of its firms.	Export promotion and investment promotion
Jamaica	JTI	Facilitate and promote investment and trade by fostering creativity and innovation to build existing or potential competitive advantages for the economic benefit of the country.	Export promotion and investment promotion
Mexico	PROMEXICO	Promote exporting activities, attract foreign investment, and coordinate the offices of the federal public administration related to these activities.	Export promotion and investment promotion
Panama	VCE/DNPE	Promote investments for exports and the exports of goods and services of the country.	Export promotion and investment promotion
Paraguay	REDIEX	Carry out the National Plan for Exports to favor economic development through the promotion of exports, attraction of investments, and spurring public-private dialogue to improve the business environment.	Export promotion and investment promotion
Peru	PROMPERU	Propose and execute plans and strategies to promote exportable goods and services and tourism, promoting and disseminating Peru's image in tourism and export matters according to sectoral policy and objectives.	Export promotion and tourism promotion

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Table 2.2 ■ LAC: Mission and Areas of Activity *(continued)*

Country/ Region	Organization	Mission	Areas of Activity
Uruguay	URUGUAY XXI	Support the internationalization process of the Uruguayan economy through the promotion of export growth and the positioning of the country as a destination for productive investments.	Export promotion and investment promotion

¹ As the organization responsible for administering the free zones regimes, PROCOMER collaborates with the Costa Rican Investment Promotion Agency (CINDE) in supporting firms that wish to invest in Costa Rica.

Table 2.3 ■ ROW: Legal Status and Reporting

Country/ Region	Organization	Separate Legal Entity	Legal Status	Reporting
Australia	AUSTRADE	Yes	Public	Annual report presented to the minister of trade (Department of Foreign Affairs and Trade) containing information regarding finances and activities undertaken by the organization.
Denmark	TCD	No	Public	Annual report presented to the public and available online containing information regarding the contribution of the organization to the export and innovation of Danish companies.
Finland ¹	FINPRO	Yes	Private	Report presented to the Board of Directors (monthly), Ministry of Labor, Employment and Economy, and the Board of Supervisors (annually) containing information regarding finances and the estimated impact of activities undertaken by the organization on the assisted firms' businesses.
France	UBIFRANCE	Yes	Public/ Private	Annual report presented to the Board of Directors and the Ministry of Finance containing information regarding finances and activities undertaken by the organization.
Ireland	EI	Yes	Public/ Private	Annual report presented to the Ministry of Enterprise, Trade, and Employment containing information regarding finances and activities undertaken by the organization.

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Table 2.3 ■ ROW: Legal Status and Reporting *(continued)*

Country/ Region	Organization	Separate Legal Entity	Legal Status	Reporting
Israel	IEICI	Yes	Private	Annual work plan presented to the Ministry of Industry, Trade, and Labor.
Italy	ICE	Yes	Public	Annual report presented to the Ministry of Economic Development containing information regarding activities undertaken by the organization.
Japan	JETRO	Yes	Public	Annual report presented to the Ministry of the Economy, Trade, and Industry and the Japanese public containing information regarding activities undertaken by the organization.
Korea	KOTRA	Yes	Public	Annual report on activities presented to the Ministry of Strategy and Finances containing information regarding activities undertaken by the organization; inspection of administration is conducted by the National Assembly.
Netherlands	EVD	Yes	Public	Quarterly report presented to the Ministry of Economic Affairs containing information regarding finances and the progress of activities undertaken by the organization.
New Zealand	NZTE	Yes	Public	Quarterly reports presented to the ministers of economic development and of foreign affairs and trade containing information regarding the progress of key projects and initiatives as well as an annual report presented to key stakeholders and the public in general containing information regarding finances and activities undertaken by the organization.
Philippines	BETP	No	Public	Semiannual report presented to the undersecretary of the International Trade Group (ITG), and the secretary of the Department of Trade and Industry (DTI) containing information regarding accomplishments of the organization.

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Table 2.3 ■ ROW: Legal Status and Reporting *(continued)*

Country/ Region	Organization	Separate Legal Entity	Legal Status	Reporting
Spain	ICEX	Yes	Public	Annual report and different periodic reports presented to the Direction Committee of the State Secretary of Tourism and Trade (SECTYC) and to the Secretariat of Finance and Budgets (IGAE), the Accounting Office (TC), and the ICEX Council of Administration containing information regarding finances and activities undertaken by the organization.
Catalonia	COPCA	Yes	Public/ Private	Annual report presented to the General Council and the Executive Committee containing information regarding activities undertaken by the organization.
Singapore	IES	Yes	Public	Annual report presented to the Ministry of Trade and Industry and the general public containing information regarding initiatives and activities undertaken by the organization.
Thailand	DEPT	No	Public	Quarterly report presented to the Committee of the Civil Service containing information regarding activities undertaken by the organization and estimates of their qualitative and quantitative outcomes relative to the work plan.
United Kingdom	UKTI	No	Public	Annual report presented to the Congress containing information regarding finances and activities undertaken by the organization and their outcomes.

¹ FINPRO is a private sector organization with public sector participation.

Table 2.3 ■ LAC: Legal Status and Reporting

Country/ Region	Organization	Separate Legal Entity	Legal Status	Reporting
Argentina ¹	EXPORTAR	Yes	Private	Annual report presented to the Ministry of Foreign Relations, International Trade and Worship containing information regarding activities undertaken by the organization, the firms participating in each of these activities, and their estimated outcomes.
Cordoba	PROCORDOBA	Yes	Public/ Private	Annual report presented to the Ministry of Finance, Ministry of Industry, Trade, and Labor, and the Congress containing information regarding activities of trade promotion, international cooperation, and technical assistance undertaken by the organization along with their estimated outcomes. Budget execution is reported every three months.
Mendoza	PROMENDOZA	Yes	Public/ Private	Annual report presented to the partners of PROMENDOZA (provincial government, Commercial and Industrial Union, Stock Exchange of Mendoza, and Economic Federation of Mendoza) containing information regarding activities undertaken by the organization.
Bolivia	CEPROBOL	Yes	Public	Quarterly report presented to the Ministry of Foreign Relations containing information regarding progress of activities undertaken by the organization; monthly (annual) report presented to the Ministry of Finance (General Accounting Office) containing information regarding budgetary execution.
Brazil	APEX	Yes	Public/ Private	Semiannual report presented to the Ministry of Development, Industry, and Foreign Trade and the organization's Board of Directors containing information regarding the evolution of indicators measuring the degree of accomplishments of the goals set in the management contract.

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Table 2.3 ■ LAC: Legal Status and Reporting *(continued)*

Country/ Region	Organization	Separate Legal Entity	Legal Status	Reporting
Chile	PROCHILE	No	Public	Quarterly report presented to the Executive Power and the Congress containing information regarding activities undertaken by the organization and the evolution of specific performance indicators. PROCHILE also periodically reports to the Directorate of Budget (DIPRES).
Colombia ²	PROEXPORT	No	Private	Annual report presented to the Ministry of Trade, Industry, and Tourism, the Congress, and the Board of Advisors containing information regarding finances, accounting, and management.
Costa Rica	PROCOMER	Yes	Public	Annual report presented to the Ministry of Planning containing information regarding the degree of accomplishment of the organization's goals as established by the National Development Plan 2006–2010, and to the Ministry of the Economy, which coordinates policies for small and medium-size companies.
Ecuador	CORPEI	Yes	Private	Annual report presented to the Board of Directors containing information regarding activities undertaken by the organization.
El Salvador	EXPORTA	Yes	Public	Annual report presented to the Executive Power and the Strategic Committee on Exports containing information regarding activities undertaken by the organization.
Guatemala	DPC/ME	No	Public	Annual report presented to the Vice-Ministry of Integration and Foreign Trade, the Minister of the Economy, and the National Board of Exports (CONAPEX) containing information regarding activities undertaken by the organization.
Honduras	FIDE	Yes	Private	Monthly reports presented to the Board of Directors, annual reports presented to the Governors' Assembly and reports to donor organizations (periodicity being determined by the respective agreements) containing information regarding execution of the working plan and finances.

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Table 2.3 ■ LAC: Legal Status and Reporting *(continued)*

Country/ Region	Organization	Separate Legal Entity	Legal Status	Reporting
Jamaica	JTI	Yes	Public	Monthly report presented to the Ministry of Industry, Investment, and Commerce, and the Board of Directors containing information regarding key investment promotion, export promotion, and trade facilitation initiatives, and outcomes of the work plan, including major targets achieved (monthly and year-to-date).
Mexico	PROMEXICO	Yes	Public	Annual and quarterly reports presented to the Ministries of the Economy and Finance containing information regarding finances, activities undertaken by the organization, and the degree of achievement of goals.
Panama	DNPE/VICOMEX	No	Public	Monthly report presented to the vice-minister of foreign trade and then to the minister of trade and industries containing information regarding activities undertaken by the organization and outcome measures.
Paraguay	REDIEX	No	Public	Monthly, quarterly and annual reports presented to the Ministry of Industry and Trade, the Ministry of Finance, and the Board of Directors containing information regarding budgetary execution, activities undertaken by the organization, and follow-up on operation plans.
Peru	PROMPERU	Yes	Public	Annual report presented to the Board of Directors containing information regarding finances and activities undertaken by the organization.
Uruguay	URUGUAY XXI	Yes	Public	Annual report presented to the Board of Directors containing information regarding finances and activities undertaken by the organization.

¹ In legal terms, EXPORTAR is a private entity with public participation and funding.

² PROEXPORT was created as a trust fund with public resources, but is administered under private law.

Table 2.4 ■ ROW: Head of the Organization and Composition of the Board

Country/ Region	Organization	Head of the Organization			Board			
		Appointment	Tenure		Number	Public	Private	Others
Australia	AUSTRADE	Appointed by the government/minister of trade.	Fixed term appointment		0	N/A		
Denmark	TCD	Appointed by the government/Ministry of Foreign Affairs.	Fixed term appointment		11	0.0	100.0	0.0
Finland	FINPRO	Appointed by the Board of Directors of the organization.	Indefinite appointment		8	37.5	62.5	0.0
France ¹	UBIFRANCE	Appointed by government/Ministry of Finance.	Indefinite appointment		28	21.4	17.9	60.7
Ireland	EI	Public competition.	Fixed term appointment		10	10.0	90.0	0.0
Israel	IEICI	Appointed by the government/Ministry of Industry, Trade and Labor.	Fixed term appointment		13	30.0	70.0	0.0
Italy ²	ICE	Appointed by the government/president of the Council of Ministers based on a proposal by the Ministry of Economic Development.	Fixed term appointment		5	20.0	80.0	0.0
Japan	JETRO	Appointed by the government/Ministry of the Economy, Trade and Industry.	Fixed term appointment		22	48.0	52.0	0.0
Korea	KOTRA	Appointed by the government/Ministry of Knowledge and the Economy.	Fixed term appointment		5	100.0	0.0	0.0
Netherlands	EVD	Appointed by the government/Ministry of Economic Affairs.	Indefinite appointment		4	100.0	0.0	0.0
New Zealand ³	NZTE	Appointed by the Board of Directors of the organization.	Fixed term appointment		8	25.0	75.0	0.0

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Table 2.4 ■ ROW: Head of the Organization and Composition of the Board *(continued)*

Country/ Region	Organization	Appointment	Head of the Organization	Tenure	Board			
					Number	Public	Private	Others
Philippines	BETP	Appointed by the government/president of the republic.		Indefinite appointment	0		N/A	
Spain	ICEX	Appointed by the government/Ministry of Industry, Tourism, and Trade, and State Secretariat of Tourism and Trade.		Indefinite appointment	34	73.5	26.5	0.0
Catalonia	COPCA	Public competition/Appointed by the General Committee.		Indefinite appointment	21	28.6	71.4	0.0
Singapore	IES	Appointed by the government/Ministry of Trade and Industry.		Indefinite appointment	11	36.4	63.6	0.0
Thailand	DEPT	Appointed by the government/Ministry of Trade.		Fixed term appointment	0		N/A	
United Kingdom ⁴	UKTI	Public competition.		Fixed term appointment	10	70.0	30.0	0.0

¹ The percentage share that corresponds to the public sector includes representatives from the regions (presidents of regional councils). The category "Others" includes five "qualified personalities" and 10 personnel representatives.

² Figures correspond to the Board of Administration and include the president of ICE among its members.

³ There are two special advisors to the Board of Directors: the secretary of the Ministry of Foreign Affairs and Trade and the chief executive of the Ministry of Economic Development.

⁴ The board includes seven members of the Executive Team who are civil servants and three non-executive members who are private sector representatives.

Table 2.4 ■ LAC: Head of the Organization and Composition of the Board

Country/ Region	Head of the Organization				Board			
	Organization	Appointment	Tenure	Number	Sectoral Composition (%)			
					Public	Private	Others	
Argentina	EXPORTAR	Appointed by the Board of Directors of the organization, but approval is required from the Ministry of Foreign Relations, International Trade and Worship.	Fixed term appointment	28	32.1	67.9	0.0	
Cordoba	PROCORDOBA	Nominated by the government and selected through a referendum of the assembly of shareholders. President is usually from the Industrial Union of Cordoba and the vice president from the Chamber of Foreign Commerce.	Fixed term appointment	13	38.5	61.5	0.0	
Mendoza ¹	PROMENDOZA	Appointed by the government/Ministry of the Economy.	Fixed term appointment	8	25.0	75.0	0.0	
Bolivia	CEPROBOL	Public competition.	Fixed term appointment	11	70.0	30.0	0.0	
Brazil	APEX	Appointed by the government/Ministry of Development Industry and Foreign Trade.	Fixed term appointment	7	57.1	42.9	0.0	
Chile	PROCHILE	Appointed by the government/Ministry of Foreign Relations.	Fixed term appointment	0		N/A		
Colombia ²	PROEXPORT	Appointed by the government/president of the republic.	Indefinite appointment	6	33.3	33.3	33.4	
Costa Rica	PROCOMER	Appointed by the Board of Directors of the organization.	Indefinite appointment	9	44.4	55.6	0.0	
Ecuador ³	CORPEI	Public competition.	Fixed term appointment	13	38.5	61.5	0.0	
El Salvador	EXPORTA	Appointed by the government/president of the National Commission for the Promotion of Exports and Investments (CONADEI).	Indefinite appointment	0		N/A		

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Table 2.4 ■ LAC: Head of the Organization and Composition of the Board *(continued)*

Country/ Region	Organization	Appointment	Head of the Organization	Tenure	Board			
					Number	Public	Private	Others
Guatemala	DPC/ME	Appointed by the government/Ministry of the Economy.		Fixed term appointment	0	N/A		
Honduras	FIDE	Public competition.		Indefinite appointment	12	0.0	100.0	0.0
Jamaica	JTI	Public competition.		Fixed term appointment	14	21.4	78.6	0.0
Mexico	PROMEXICO	Appointed by the government/president of the republic.		Indefinite appointment	9	66.7	33.3	0.0
Panama	DNPE/VICOMEX	Appointed by the government/minister of trade and industries.		Indefinite appointment	0	N/A		
Paraguay	REDIEX	Appointed by the government/president of the republic.		Indefinite appointment	13	15.4	84.6	0.0
Peru	PROMPERU	Appointed by the government/Ministry of Foreign Trade and Tourism.		Indefinite appointment	18	44.4	55.6	0.0
Uruguay	URUGUAY XXI	Appointed by the government/president of the republic.		Indefinite appointment	6	50.0	50.0	0.0

¹ The number of members reported in the table corresponds to those of both directive bodies, the Administration Board and the Executive Committee. Each of these bodies has four members: one representative from the public sector (Ministry of Production) and three representatives from the private sector.

² "Others" correspond to two individuals designated by the president of the republic.

³ The number of members reported in the table corresponds to the so-called "Institutional Members." In addition, there are "Statutory Members" who represent the sectoral units of exporters, i.e., groups of firms exporting a product that accounts for no less than 2 percent of the country's private (non-petroleum) exports as moving averages over the last three years. These delegates have voice but not voting rights.

Table 2.5 ■ ROW: Budget and Number of Employees (2007–2009)

Country/Region	Organization	Budget (million US\$)	Number of Employees
Australia ¹	AUSTRADE	347.5	1,029
Denmark	TCD	80.4	350
Finland	FINPRO	48.0	322
France	UBIFRANCE	130.3	484
Ireland ²	EI	344.6	950
Israel	IEICI	20.0	110
Italy ³	ICE	264.5	718
Japan	JETRO	390.0	1,680
Korea ⁴	KOTRA	188.0	1,000
Netherlands	EVD	82.6	490
New Zealand ⁵	NZTE	165.1	609
Philippines ⁶	BETP	1.2	91
Spain	ICEX	348.0	600
Catalonia	COPCA	81.6	180
Singapore ⁷	IES	80.3	350
Thailand	DEPT	25.0	500
United Kingdom ⁸	UKTI	409.5	2,400

¹ The budget reported in the table includes both operational funding (US\$197.4 million) as well as the resources allocated to the Export Market Development Grant (EMDG) scheme (US\$150.1 million). This scheme is administered by AUSTRADE under different specific rules. It aims at encouraging small and medium-size businesses to develop export markets by reimbursing up to 50 percent of expenses incurred on eligible export promotion activities above a certain threshold.

² The budget reported in the table includes both net operating costs (US\$144.6 million) and financial support to industries, i.e., grants in aid to companies (roughly US\$200 million). Resources allocated to this latter purpose amounted to approximately US\$300 million in 2008.

³ The budget reported in the table includes resources allocated to institutional activities including operative costs (US\$154.9 million) and to promotion activities (US\$109.6 million). Copayments by private companies to participate in these latter activities amounted to US\$64.0 million. The number of employees has been traditionally around 1,000. In recent years several vacancies have occurred, primarily due to retirements. ICE plans to fill these positions over the next years.

⁴ The budget reported in the table corresponds to fiscal year 2010.

⁵ The budget reported in the table includes both operation funding (US\$121.3 million) as well as resources devoted to provide grants to companies (US\$43.8 million).

⁶ The budget reported in the table strictly corresponds to the BETP. Overall, the DTI budget for 2008 included US\$8.5 million for promotion of exports and investment overseas through commercial intelligence work and direct promotion. Furthermore, in 2009 the government launched an Export Support Fund endowed with US\$20.8 million.

⁷ The budget reported in the table includes both operational expenditure (US\$59.7 million) and development expenditures (US\$20.6 million). For 2009 these figures were US\$81.1 million and US\$66.2 million.

⁸ UKTI is a joint department of the Foreign and Commonwealth Office (FCO) and the Department of Business, Innovation, and Skills (BIS), formerly Department Business, Enterprise, and Regulatory Reform (BERR). UKTI is not an employer in its own right. It draws the majority of its human resource requirements from civil service staff employed by these two parent departments. Most of its UK staff is drawn from the BIS, while most overseas staff is from the FCO. The budget amount reported in the table consistently includes both operating costs associated to the UKTI program, mainly direct support for businesses such as grants, "Passport to Export", and marketing, which are voted directly by Parliament (US\$136.4 million); as well as the resources used by UKTI's parent departments, FCO and BIS, in meeting UKTI objectives, primarily the costs of directly employed staff with their related costs and those of overseas staff with their related costs such as accommodation and IT, respectively (US\$273.1 million).

Table 2.5 ■ LAC: Budget and Number of Employees (2007–2009)

Country/Region	Organization	Budget (million USD)	Number of Employees
Argentina	EXPORTAR	4.5	95
Cordoba	PROCORDOBA	1.7	31
Mendoza	PROMENDOZA	0.7	30
Bolivia	CEPROBOL	0.2	22
Brazil	APEX	120.0	214
Chile	PROCHILE	33.0	384
Colombia	PROEXPORT	55.0	281
Costa Rica	PROCOMER	11.8	149
Ecuador ¹	CORPEI	6.8	91
El Salvador ²	EXPORTA	2.0	50
Guatemala ³	DPC/ME	0.4	7
Honduras ⁴	FIDE	0.9	28
Jamaica	JTI	6.7	98
Mexico ⁵	PROMEXICO	97.0	401
Panama ⁶	DNPE/VICOMEX	1.8	52
Paraguay	REDIEX	1.4	60
Peru ⁷	PROMPERU	29.0	313
Uruguay	URUGUAY XXI	0.6	22

¹ The budget reported in the table does not include resources associated with international cooperation and with specific allocations. The number of employees does not include 40 employees under government programs.

² The number of employees reported in the table includes 25 administrative employees who are shared with the country's investment promotion agency PROESA.

³ The budget corresponds to resources allocated to the Directorate of Foreign Trade Policy (there is no separate budget for the DPC). From the functional point of view, this is the budget for foreign trade management. Not all of these resources are available to support export promotion activities. These are allocated on a case-by-case basis.

⁴ The number of employees reported in the table corresponds to permanent staff. In addition, there are 60 employees in the framework of temporally limited programs (i.e., Competitividad, CIPRES, Eurocentro). The budget does not include funds from projects with other organizations.

⁵ In addition, PROMEXICO manages an additional pool of resources (4.5US\$ million) called "PROMEXICO Fund." This fund aims at supporting sustainable foreign investment projects that are expected to generate a large number of jobs in "strategic sectors," thus contributing to the country's competitiveness.

⁶ The budget corresponds to the total budget of the VICOMEX. Resources devoted to export and investment promotion amount to US\$1.2 million. Specifically, 50 percent of these resources can be considered to be allocated to export promotion. The remaining US\$0.6 million are assigned to the Office of the Vice-Minister. In addition, in recent years, this organization has had funding from an IDB project amounting to US\$1.8 million. The number of employees reported in the table corresponds to the VICOMEX. The DNPE has 34 employees. The remaining 18 employees are evenly distributed between the Office of the Vice-Minister and the National Directorate of Investment Promotion.

⁷ The number of employees and the budget reported in the table correspond to the whole organization. In particular, the Directorate of Export Promotion has 84 employees and 18 percent of the total budget, US\$5.2 million, is available to the export promotion program.

Table 2.6 ■ ROW: Funding Sources (%)

Country/Region	Organization	Public Allocation	Own Revenues from Services	Other Revenue Sources
Australia ¹	AUSTRADE	85.0	14.0	1.0
Denmark	TCD	75.0	25.0	0.0
Finland ²	FINPRO	65.5	34.5	0.0
France	UBIFRANCE	51.6	48.4	0.0
Ireland ³	EI	84.9	4.3	10.8
Israel ⁴	IEICI	50.0	0.0	50.0
Italy	ICE	97.2	2.8	0.0
Japan ⁵	JETRO	60.0		40.0
Korea ⁶	KOTRA	83.0		17.0
Netherlands	EVD	100.0	0.0	0.0
New Zealand ⁷	NZTE	96.7	0.6	2.7
Philippines	BETP	100.0	0.0	0.0
Spain ⁸	ICEX	93.0	7.0	0.0
Catalonia	COPCA	75.0	25.0	0.0
Singapore	IES	100.0	0.0	0.0
Thailand	DEPT	100.0	0.0	0.0
United Kingdom ⁹	UKTI	95.0	0.0	5.0

¹ These percentages have been calculated by inputting first the organization's own and other sources of revenues to cover the operating costs and then assigning the remaining portion to those resources allocated by the government, which, besides this fraction, covers all grants conceded. In this case, "Other Revenue Sources" includes property rentals.

² Firms that are members of FINPRO pay a membership fee.

³ These percentages have been calculated by first inputting the organization's own and other sources of revenues to cover the operating costs and then assigning the remaining portion to those resources allocated by the government, which, besides this portion, covers all grants conceded. In this case, "Other Revenue Sources" include sales of shares in client companies, rental income, and funding from third parties.

⁴ "Other Revenue Sources" corresponds to membership fees.

⁵ "Own Revenues from Services" and "Other Revenue Sources" include, besides business income associated with services provided (e.g., logistic centers for exporters, seminars, specialized information, specialized technical assistance), membership fees covering subscriptions to publications and reports, contributions from associations and local governments, and returns on invested capital.

⁶ "Own Revenues from Services" and "Other Revenue Sources" include revenues from provision of specialized information (0.6 percent) and specialized technical assistance (1.7 percent), lease profits such as those associated with logistic centers for exporters (1.5 percent), fees from participation in overseas exhibitions (3.7 percent), and other sources such as participation fees paid by local governments and interests (9.5 percent).

⁷ These percentages have been calculated by first inputting the organization's own and other sources of revenues to cover the operating costs and then assigning the remaining portion to those resources allocated by the government, which, besides this fraction, covers all grants provided. In this case, "Other Revenue Sources" includes operating and financial incomes (e.g., rent received, conference revenues, and other cost recoveries; and interest on short-term deposits, respectively).

⁸ "Own Revenues" corresponds to fees for national pavilions in international marketing events.

⁹ "Other Revenue Sources" corresponds to private sector contributions.

Table 2.6 ■ LAC: Funding Sources and Applications (%)

Country/ Region	Organization	Sources			Applications		
		Public Allocation	Own Revenues from Services	Other Revenue Sources	Non-Marketing Support	Marketing Support	Other Applications
Argentina	EXPORTAR	100.0	0.0	0.0	22.0	78.0	0.0
Cordoba ¹	PROCORDOBA	76.5	0.0	23.5	35.0	65.0	0.0
Mendoza	PROMENDOZA	100.0	0.0	0.0	50.0	50.0	0.0
Bolivia	CEPROBOL	100.0	0.0	0.0	75.0	25.0	0.0
Brazil ²	APEX	0.0	0.0	100.0	22.0	1.0	77.0
Chile ³	PROCHILE	99.0	0.0	1.0	64.0	13.0	23.0
Colombia ⁴	PROEXPORT	100.0	0.0	0.0	37.0		63.0
Costa Rica ⁵	PROCOMER	0.0	5.0	95.0	10.9	16.6	72.5
Ecuador ⁶	CORPEI	0.0	1.5	98.5	11.0	24.0	65.0
El Salvador ⁷	EXPORTA	100.0	0.0	0.0	67.0	33.0	0.0
Guatemala	DPC/ME	100.0	0.0	0.0	25.0	75.0	0.0
Honduras ⁸	FIDE	0.0	20.0	80.0	22.0	29.5	49.5
Jamaica ⁹	JTI	85.0	15.0	0.0	21.5	39.5	39.0
Mexico ¹⁰	PROMEXICO	72.1	27.9	0.0	20.0	30.0	50.0
Panama ¹¹	DNPE/VICOMEX	100.0	0.0	0.0	22.6		77.4
Paraguay	REDIEX	100.0	0.0	0.0	40.0	30.0	30.0

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Table 2.6 ■ LAC: Funding Sources and Applications (%) *(continued)*

Country/ Region	Organization	Sources			Applications		
		Public Allocation	Own Revenues from Services	Other Revenue Sources	Non-Marketing Support	Marketing Support	Other Applications
Peru ¹²	PROMPERU	100.0	0.0	0.0	33.0	67.0	0.0
Uruguay	URUGUAY XXI	100.0	0.0	0.0	60.0	20.0	20.0

¹ "Other Revenue Sources" corresponds to resources from other organizations that support specific projects.

² APEX receives 12.75 percent of the 3.00 percent tax that companies must pay on their expenditures on salaries as social contributions. "Other Applications" corresponds to specific export promotion projects.

³ "Other Revenue Sources" corresponds to funding from international organizations (IDB) in the form of technical cooperation. "Other Applications" primarily refers to projects with funds subject to competition and direct presentation.

⁴ "Other Applications" corresponds to tourism promotion (44 percent) and investment promotion (19 percent). These figures are approximate.

⁵ "Other Revenue Sources" corresponds to fees for using the free trade zone regime (49 percent) and income from sales of customs forms of export and import (46 percent). "Own Revenues from Services" are resources primarily gathered through subscriptions to events. "Other Applications" corresponds, among other things, to trade advocacy abroad and trade offices in the country and abroad.

⁶ "Other Revenue Sources" corresponds to contributions from exporters and importers, redeemable in 10 years, as follows: 1.50 % of the FOB value of private exports (for exports larger than US\$3,330, otherwise USD 5.0); 0.25% of the FOB value of imports (for imports larger than USD 20,000, otherwise US\$5.0); and, until 2008, 0.50 % of the FOB value of oil exports. "Own Revenues from Services" are resources primarily gathered through seminars and information sales. "Other Applications" refers to specific projects with cooperating organizations (56 percent) as well as other particular joint initiatives with the government (9 percent).

⁷ A portion of the budget normally corresponds to variable funds associated with technical cooperation allocated to the National Commission of the Promotion of Exports and Investments (CONADE). "Own Revenues from Services" corresponds to commissions and honoraria, whereas "Other Revenue Sources" corresponds to interest earned on investments (15 percent), office rentals (28 percent), administration of projects (34 percent), and others (3 percent). "Other Applications" includes resources allocated to investment promotion (16.5 percent).

⁹ "Own Revenues from Services" corresponds to exporter registration fees, library services, incentive processing fees, mission support, and proposal writing. "Other Applications" refers to resources for investment promotion.

¹⁰ In 2009 fees for services were temporarily waived. "Other Applications" refers to resources primarily devoted to investment promotion.

¹¹ The Ministry of Trade and Industries (MICI) has revenues from the one stop shop scheme for foreign trade. Usually a portion of these resources is allocated to the VICOMEX. "Other Applications" includes those resources devoted to investment promotion (50 percent).

¹² While resources for the export promotion program are directly publicly allocated, resources for the tourism promotion program have two sources, direct public allocation and revenues from a tax levied on airline tickets. Application percentage shares have been computed on the basis of the budget assigned to the export promotion program.

Table 2.7 ■ ROW: Selection of Personnel and Remuneration Policy

Country/ Region	Organization	Selection of Personnel	Remuneration Policy
Australia	AUSTRADE	Public competition by the organization.	Fixed wage, with the exception of performance bonuses for employees who have been with the organization more than 12 months and have performed exceptionally.
Denmark	TCD	Public competition by the organization.	Fixed wage plus target-based bonus, typically 10–20 percent.
Finland	FINPRO	Public competition by the organization.	Fixed wage.
France	UBIFRANCE	Internal and public competition by the organization.	Fixed wage.
Ireland	EI	Public competition by the organization.	Fixed wage plus bonus variable based on performance.
Israel	IEICI	Public competition by the organization.	Fixed wage.
Italy	ICE	Public competition by the organization.	Fixed wage. For employees working within Italy, there may be a bonus based on performance usually larger than the monthly wage.
Japan	JETRO	Public competition by the organization.	Fixed wage plus a variable component depending on additional work and performance.
Korea	KOTRA	Public competition by the organization.	Fixed wage (75 percent) plus a variable component (25 percent) based on performance.
Netherlands	EVD	Public competition by the organization.	Fixed wage.
New Zealand ¹	NZTE	Public competition by the organization.	Fixed wage plus a component based on performance.
Philippines ²	BETP	Public competition by the Department of Trade and Industry.	Fixed wage.
Spain	ICEX	Public competition by the organization.	Fixed wage plus a bonus based on performance as subjectively estimated by the direct supervisors.
Catalonia ³	COPCA	Public competition by the organization.	Fixed wage plus a variable component based on qualitative and, for those who have turnover objectives to meet, quantitative performance.

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Table 2.7 ■ ROW: Selection of Personnel and Remuneration Policy
(continued)

Country/ Region	Organization	Selection of Personnel	Remuneration Policy
Singapore	IES	Public competition by the organization.	Fixed wage plus a variable component based on performance.
Thailand ⁴	DEPT	Public competition by the organization, public competition by other governmental organization, and other procedures.	Fixed wage.
United Kingdom	UKTI	Internal and public competition by the Foreign and Commonwealth Office (FCO) and the Department of Business, Innovation, and Skills (BIS), formerly the Department of Business, Enterprise, and Regulatory Reform (BERR).	Fixed wage for majority of staff. Bonuses based on performance are only paid to senior staff.

¹ In defining wages, remuneration bands are used for each position based on market rates for similar skills and experiences.

² Participation in this competition is conditional on having passed the Civil Service Exam administered by the Civil Service Commission.

³ Turnover comes from value of consultancy projects signed with private firms in support of their internationalization.

⁴ Public competition by the organization (75 percent), public competition by other governmental organization (20 percent), and others such as exchange or transfer (5 percent).

Table 2.7 ■ LAC: Selection of Personnel, Remuneration Policy, and Personnel Profile

Country/ Region	Organization	Selection of Personnel	Remuneration Policy	Master's	Ph.D.	Personnel Profile (%)	
						Former Business Executives	Trade Experience
Argentina	EXPORTAR	Internal and public competition by the organization; and selection outsourced to private consulting companies.	Fixed wage.	5.9	0.0	11.8	0.0
Cordoba	PROCORDOBA	Public competition by the organization.	Fixed wage.	6.5	0.0	51.6	12.9
Mendoza	PROMENDOZA	Public competition by the organization.	Fixed wage.	13.3	6.7	20.0	0.0
Bolivia	CEPROBOL	Public competition by the organization.	Fixed wage.	18.2	0.0	54.5	9.1
Brazil ¹	APEX	Public competition by the organization, public competition by other governmental organization, and selection outsourced to private consulting companies.	Fixed wage.	14.0	1.9	46.7	N/A
Chile ²	PROCHILE	Public competition by the organization.	Fixed wage plus a common bonus (2 to 3 percent).	15.7		N/A	N/A
Colombia ³	PROEXPORT	Internal and public competition by the organization.	Fixed wage plus a variable component based on performance as assessed through the CRMS (up to 25 percent).	37.5		N/A	N/A
Costa Rica	PROCOMER	Public competition by the organization.	Fixed wage.	22.1	0.0	53.7	0.0
Ecuador ⁴	CORPEI	Internal and public competition by the organization as well as direct hiring.	Fixed wage plus a variable component based on performance depending on the functional area (up to 20 percent).	26.4	0.0	0.0	2.2

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Table 2.7 ■ LAC: Selection of Personnel, Remuneration Policy, and Personnel Profile (continued)

Country/ Region	Organization	Selection of Personnel	Remuneration Policy	Master's	Ph.D.	Personnel Profile (%)	
						Former Business Executives	Trade Experience
El Salvador ⁵	EXPORTA	Public competition by the organization.	Fixed wage.	20.0	2.0	24.0	10.0
Guatemala	DPC/ME	Public competition by the organization.	Fixed wage.	14.3	0.0	85.7	0.0
Honduras ⁶	FIDE	Public competition by the organization.	Fixed wage.	28.6	0.0	35.7	0.0
Jamaica	JTI	Public competition by the organization.	Fixed wage.	34.7	0.0	6.1	29.6
Mexico ⁷	PROMEXICO	Direct hiring.	Fixed wage.	30.0	1.0	50.0	5.0
Panama ⁸	DNPE/VICOMEX	Direct hiring.	Fixed wage.	25.0	0.0	10.0	10.0
Paraguay ⁹	REDIEX	Public competition by the organization and commissioning of other public organizations.	Fixed wage.	26.7	1.7	23.3	10.0
Peru ¹⁰	PROMPERU	Public competition by the organization.	Fixed wage.	21.4	1.2	70.2	21.4
Uruguay	URUGUAY XXI	Public competition by the organization.	Fixed wage.	4.5	0.0	45.5	0.0

¹ Public competition by the organization (71 percent), public competition by other governmental organization (8.5 percent), and selection outsourced to private consulting companies (20.5 percent).

² The figure reported in the table corresponds to the percentage share of staff (i.e., over 255 employees) with postgraduate studies as self-reported (it likely understates the true share of employees with such education level as it only considers employees that responded to the survey).

³ According to a survey of the Ministry of Industry, Trade, and Tourism, 37.5 percent of the employees have advanced studies (specializations, master's or Ph.D.). No additional information is available.

⁴ Percentage shares have been computed for the total number of employees excluding those under specific government programs. In addition, 9.9 percent of the employees are currently attending master's programs. Most employees have acquired trade expertise at the organization.

⁵ Percentage shares have been computed over the total number of employees (i.e., including the 25 administrative employees shared with PROESA).

⁶ Percentage shares have been computed over permanent personnel.

⁷ Direct hiring has been used as the main procedure to fill positions to allow for the organization to start operating. The organization plans to implement public competition from now on.

⁸ Percentage shares have been computed over the total number of employees of the VICOMEX.

⁹ Public competition by the organization (90 percent) and commissioning of other public organizations (10 percent).

¹⁰ In addition, 8.4 percent of the employees are currently attending master's programs.

Table 2.8 ■ ROW: Presence in the Home Country and Abroad

Country/ Region	Organization	Offices in the Home Country		Offices Abroad	
		Total Number	Region Coverage	Total Number	Country Coverage
Australia ¹	AUSTRADE	18	8/6 states and 2 mainland territories	117	63
Denmark	TCD	6	5/5 regions	83	63
Finland	FINPRO	8	4/6 provinces	57	40
France ²	UBIFRANCE	6	6/22 metropolitan and 4 overseas regions	15	8
Ireland	EI	10	10/26 counties	31	25
Israel ³	IEICI	1	1/6 districts	0	0
Italy ⁴	ICE	17	17/20 regions	117	87
Japan	JETRO	38	38/47 prefectures	73	54
Korea ⁵	KOTRA	1	1/9 provinces and 7 metropolitan cities	94	68
Netherlands ⁶	EVD	1	1/12 provinces	20	11
New Zealand	NZTE	10	9/16 regions and 1 territory	37	30
Philippines ⁷	BETP	1	1/80 provinces	0	0
Spain ⁸	ICEX	31	18/17 autonomous communities and 2 autonomous cities	98	77
Catalonia ⁹	COPCA	3	3/4 provinces	38	31
Singapore	IES	1	1/1 city-state	35	21
Thailand	DEPT	6	6/76 provinces	61	44
United Kingdom ¹⁰	UKTI	11	9/9 regions	160	98

¹ AUSTRADE also operates within Australia through a national network of 50 export assistance offices called TradeStart. These offices have been established through partnerships between AUSTRADE and local private and public sector organizations (i.e., local business associations and governments, respectively).

² UBIFRANCE has 15 integrated economic missions in eight countries (Canada, Germany, Italy, Spain, United Arab Emirates, Turkey, United Kingdom, and the United States). By 2010, almost 50 trade missions would become UBIFRANCE representations abroad. If this plan materializes, this organization would then have 64 offices in 44 countries. Counting all diplomatic offices, UBIFRANCE has a presence in 140 countries.

³ IEICI does not have offices abroad. However, this organization can set goals for commercial attachés and can evaluate their activities.

⁴ Regional offices are staffed with 156 employees while offices abroad have a total of 123 employees.

⁵ KOTRA has recently closed its regional offices within the country. This organization has a network of 94 Korea Trade Centers (KTCs) coordinated by eight regional offices as follows: Moscow for the CIS countries (6 KTCs); Frankfurt for Europe (22 KTCs); Dubai for the Middle-East and Africa (15 KTCs); Shanghai for China (9 KTCs); Singapore for Asia and Oceania (17 KTCs); Tokyo for Japan (4 KTCs); New York for North America (10 KTCs); and Mexico City for Latin America (11 KTCs).

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Table 2.8 ■ ROW: Presence in the Home Country and Abroad *(continued)*

- ⁶ EVD directly operates 20 Netherlands Business Support Offices (NBSOs) in 11 countries. In addition, 28 embassies and general consulates in 24 countries provide the same services as the NBSOs. If all these foreign missions are grouped together, EDV would have 48 access points in 35 countries.
- ⁷ The BETP has only one office in Manila, the capital of the country, and does not have representations abroad. However, the Regional Operations Development Group (RODG) of the Department of Trade and Industry (DTI) manages 16 regional offices and 83 provincial offices and the Foreign Trade Service Corps, which is another agency of the International Trade Group (ITG) of the DTI manages 32 trade and investment promotion offices in 23 countries.
- ⁸ The network of offices abroad is shared between ICEX and the State Secretary of Trade of the Ministry of Industry, Tourism, and Trade. Twenty-two of these 98 offices employ ICEX staff.
- ⁹ In addition, there are 13 representations staffed with personnel who are non-employees of COPCA, but are expected to provide support when requested.
- ¹⁰ On international trade UKTI has management responsibility for its own staff and programs in the English regions and operates as the regional development agencies' (RDA) international trade arm. UKTI works in partnership with the RDAs on strategy and priorities through a nationally agreed dual key framework, and jointly signed-off delivery plans at the regional level. International Trade Directors (ITDs) are responsible for UKTI activities in the nine UK regions. They are based, with their small regional core teams, within each RDA, but work directly for UKTI. The ITD in all cases is responsible for strategic relationships, not just with the RDA but also with other regional stakeholders, partners, and the business community. On inward investment, RDAs act in partnership with UKTI with funding via the RDA Single Pot. RDA inward investment staff work with UKTI's sales and investor development teams in UKTI's Business Group and UKTI's overseas teams on the combined UK inward investment effort. The RDAs have direct presence in some key overseas markets, in which cases they collaborate with the UKTI's inward investment overseas teams in British Diplomatic Missions. UKTI is not an employer in its own right. Operations abroad are thus mostly conducted by civil service staff employed by the Foreign and Commonwealth Office (FCO).

Table 2.8 ■ LAC: Presence in the Home Country and Abroad

Country/ Region	Organization	Offices in the Home Country		Offices Abroad	
		Total Number	Region Coverage	Total Number	Country Coverage
Argentina ¹	EXPORTAR	1	1/23 provinces and 1 autonomous city	0	0
Cordoba	PROCORDOBA	1	1/26 departments	0	0
Mendoza	PROMENDOZA	4	4/18 departments	2	2
Bolivia	CEPROBOL	1	1/9 departments	0	0
Brazil ²	APEX	1	1/26 states and 1 federal district	5	5
Chile	PROCHILE	15	15/15 regions	50	39
Colombia ³	PROEXPORT	8	8/32 departments and 1 federal district	15	15
Costa Rica ⁴	PROCOMER	6	6/7 provinces	14	10
Ecuador ⁵	CORPEI	3	3/24 provinces	3	3
El Salvador ⁶	EXPORTA	1	1/14 departments	1	1
Guatemala	DPC/ME	1	1/22 departments	3	3
Honduras	FIDE	2	2/18 departments	1	1
Jamaica	JTI	2	2/14 parishes	1	1
Mexico ⁷	PROMEXICO	32	32/31 states and 1 federal district	34	21
Panama ⁸	DNPE/VICOMEX	10	9/11 provinces and 1 territory (<i>comarca</i>)	0	0
Paraguay ⁹	REDIEX	1	1/17 departments	0	0
Peru ¹⁰	PROMPERU	6	6/25 regions and 1 province	0	0
Uruguay	URUGUAY XXI	1	1/19 departments	0	0

¹ While EXPORTAR does not have regional offices besides its headquarters in Buenos Aires, there are 63 access points to its services established in partnership or through agreements with, and hosted by, provincial or municipal governments and business associations throughout the 24 regions.

² APEX has only one office in Brasilia. However, this organization has established access points to its services in partnership with the National Confederation of Industries (CNI) and the states' federations of industries. These offices are located in buildings of the federations and are not staffed with APEX employees. Currently, there are five such offices in Ceara, Minas Gerais, Parana, Rio Grande do Sul, and Santa Catarina. Five additional ones were planned to be opened. These offices will be located in Amazonas, Goias, Mato Grosso do Sul, Pernambuco, and Sao Paulo.

³ In addition, in a joint initiative between PROEXPORT, the Ministry of Trade, Industry, and Tourism, and BANCOLEX, there is a network 22 centers of information and advice on foreign trade (Zeikys) covering 19 departments.

⁴ In addition, PROCOMER manages five one stop shop offices for foreign trade in five provinces.

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Table 2.8 ■ LAC: Presence in the Home Country and Abroad

(continued)

- ⁵ In addition, 11 offices have been administered within the framework of an inter-organizational agreement between CORPEI and the Ministry of Foreign Relations, Trade, and Integration (MRECI). These offices are located in 10 countries: Buenos Aires (Argentina), Toronto (Canada), Berlin (Germany), Guatemala City (Guatemala), New Delhi (India), Milan and Rome (Italy), Mexico City (Mexico), Lima (Peru), Madrid (Spain), and London (United Kingdom). Together with the MRECI, CORPEI was planning to establish 14 additional foreign offices staffed with technical personnel in the following cities: Sao Paulo (Brazil), Santiago de Chile (Chile), Shanghai and Canton (China), Paris (France), Hamburg (Germany), Teheran (Iran), Tokyo (Japan), Moscow (Russia), Stockholm (Sweden), Pretoria (South Africa), Los Angeles and New York (United States), and Caracas (Venezuela).
- ⁶ EXPORTA has plans to open additional offices in China, Colombia, Dominican Republic, France (or Spain), Japan, Mexico, Panama, and the United States.
- ⁷ In addition, PROMEXICO has six regional representations.
- ⁸ These offices correspond to the Ministry of Trade and Industries (MICI) and henceforth to the Vice-Ministry of Foreign Trade (VICOMEX). In addition, the DNPE manages seven one stop shop offices for foreign trade in seven provinces.
- ⁹ REDIEX uses the regional offices of the Ministry of Industry and Trade (MIC) to advertise activities and receive support requests.
- ¹⁰ In addition, PROMPERU has 10 regional information centers covering 10 regions.

Table 2.9 ■ ROW: Firms Receiving Assistance and Targeting

Country/ Region	Organization	Firms Receiving Assistance		
		Firms' Size	Firms' Export Experience	Targeting
Australia ¹	AUSTRADE	Small, medium, and large	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.
Denmark	TCD	Small, medium, and large; specific segments targeted by particular programs	Potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.
Finland	FINPRO	Small, medium, and large; specific segments targeted by particular programs	Potential exporters and experienced exporters.	Sectors within countries and countries within sectors.
France	UBIFRANCE	Specific segments targeted by particular programs	Potential exporters, exporters with limited experience, and experienced exporters.	Countries within sectors.

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Table 2.9 ■ ROW: Firms Receiving Assistance and Targeting *(continued)*

Country/ Region	Organization	Firms Receiving Assistance		
		Firms' Size	Firms' Export Experience	Targeting
Ireland	EI	Specific segments targeted by particular programs	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.
Israel	IEICI	Small, medium, and large	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.
Italy	ICE	Small and medium	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries within sectors.
Japan	JETRO	Small, medium, and large	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries and sectors.
Korea	KOTRA	Medium	Potential exporters, exporters with limited experience, and experienced exporters.	Countries and sectors within countries.
Netherlands	EVD	Small and medium	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.
New Zealand	NZTE	Small, medium, and large	Non-exporters, potential exporters, and exporters with limited experience.	Countries, sectors, sectors within countries, and countries within sectors.
Philippines	BETP	Small, medium, and large	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.

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Table 2.9 ■ ROW: Firms Receiving Assistance and Targeting *(continued)*

Country/ Region	Organization	Firms Receiving Assistance		
		Firms' Size	Firms' Export Experience	Targeting
Spain	ICEX	Specific segments targeted by particular programs, although overall small and medium-size firms are prioritized	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.
Catalonia ²	COPCA	Small, medium, and large	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.
Singapore	IES	Small, medium, and large	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.
Thailand	DEPT	Small, medium, and large; specific segments targeted by particular programs	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, and countries within sectors.
United Kingdom	UKTI	Small, medium, and large	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.

¹ The Export Development Market Grant scheme focuses on small and medium-size firms.² Small firms (65 percent), medium-size firms (30 percent), and large firms (5 percent).

Table 2.9 ■ LAC: Firms Receiving Assistance and Targeting

Country/ Region	Organization	Firms Receiving Assistance		Targeting
		Firms' Size	Firms' Export Experience	
Argentina	EXPORTAR	Small, medium, and large (to a lesser extent). Specific segments targeted by particular programs	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.
Cordoba	PROCORDOBA	Small and medium	Potential exporters, exporters with limited experience, and experienced exporters.	Sectors and countries within sectors.
Mendoza	PROMENDOZA	Small and medium	Non-exporters, potential exporters, and exporters with limited experience.	Countries and countries within sectors.
Bolivia	CEPROBOL	Small and medium	Potential exporters, exporters with limited experience, and experienced exporters.	Sectors and sectors within countries.
Brazil	APEX	Small, medium, and large	Potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.
Chile	PROCHILE	Small, medium, and large	Potential exporters, exporters with limited experience, and experienced exporters.	Countries within sectors.
Colombia	PROEXPORT	Small, medium, and large. Specific segments targeted by particular programs	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.
Costa Rica	PROCOMER	Small, medium, and large. Specific segments targeted by particular programs	Potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, and sectors within countries.
Ecuador ¹	CORPEI	Small, medium, and large	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, and sectors within countries.

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Table 2.9 ■ LAC: Firms Receiving Assistance and Targeting *(continued)*

Country/ Region	Organization	Firms Receiving Assistance		Targeting
		Firms' Size	Firms' Export Experience	
El Salvador	EXPORTA	Small, medium, and large	Potential exporters, exporters with limited experience, and experienced exporters.	Sectors, sectors within countries, and countries within sectors.
Guatemala	DPC/ME	Small, medium, and large. Specific segments targeted by particular programs	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries and sectors.
Honduras	FIDE	Small, medium, and large. Specific segments targeted by particular programs	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries and sectors within countries.
Jamaica	JTI	Small, medium, and large	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.
Mexico	PROMEXICO	Small, medium, and large. Specific segments targeted by particular programs	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.
Panama	DNPE/VICOMEX	Small and medium	Non-exporters, potential exporters, and exporters with limited experience.	Countries, sectors, sectors within countries, and countries within sectors.
Paraguay	REDIEX	Specific segments targeted by particular programs	Potential exporters, exporters with limited export experience, and experienced exporters.	Countries, sectors, and countries within sectors.
Peru	PROMPERU	Small, medium, and large. Specific segments targeted by particular programs	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries, sectors, sectors within countries, and countries within sectors.

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Table 2.9 ■ LAC: Firms Receiving Assistance and Targeting *(continued)*

Country/ Region	Organization	Firms Receiving Assistance		Targeting
		Firms' Size	Firms' Export Experience	
Uruguay	URUGUAY XXI	Small, medium, and large	Non-exporters, potential exporters, exporters with limited experience, and experienced exporters.	Countries and sectors.

¹ CORPEI has selected 10 priority sectors including fruits and vegetables, cacao and coffee, flowers, metal mechanics, tourism, software, and logistics services.

Table 2.10 ■ ROW: Services to Exporters

Country/Region	Organization	Services to Exporters
Australia	AUSTRADE	Export instruction, general information and specific market intelligence, counseling and technical assistance, coaching, missions and fairs, specific business contacts, assistance in seeking financing.
Denmark	TCD	Export instruction, general information and specific market intelligence, counseling and technical assistance, mission and fairs, specific business contacts.
Finland	FINPRO	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts, exporter consortia, assistance in seeking financing.
France	UBIFRANCE	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts, assistance in seeking financing.
Ireland	EI	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts, assistance in seeking financing; in addition, advice and financial support for high potential start-ups, assistance in developing a business growth strategy, and support, including funding, to firms' R&D initiatives.
Israel	IEICI	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts, assistance in seeking financing.
Italy	ICE	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts, assistance in seeking financing (specifically, projects from international organizations).

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Table 2.10 ■ ROW: Services to Exporters *(continued)*

Country/Region	Organization	Services to Exporters
Japan	JETRO	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts.
Korea	KOTRA	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts.
Netherlands	EVD	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts.
New Zealand	NZTE	Export instruction, general information and specific market intelligence, counseling and technical assistance, coaching, missions and fairs, specific business contacts, assistance in seeking financing.
Philippines ¹	BETP	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions, specific business contacts, assistance in seeking financing.
Spain	ICEX	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts, assistance in seeking financing.
Catalonia	COPCA	Export instruction, general information and specific market intelligence, counseling and technical assistance, coaching, missions and fairs, specific business contacts, trade infrastructure (landing areas and business platforms), assistance in receiving financing.
Singapore	IES	Export instruction, general information and specific market intelligence, counseling and technical assistance, coaching (local firm groupings under the leadership of industry associations), missions and fairs, specific business contacts, assistance in seeking financing.
Thailand	DEPT	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts, assistance in seeking financing.
United Kingdom	UKTI	Export instruction, general information and specific market intelligence, counseling and technical assistance, specific business contacts, assistance in seeking financing.

¹ Responsibility for trade fairs corresponds to two other government organizations which are also under the International Trade Group (ITG) of the Department of Trade and Industry (DTI), the Center for International Trade Exhibitions and Missions (CITEM) and the regional offices of the DTI.

Table 2.10 ■ LAC: Services to Exporters

Country/Region	Organization	Services to Exporters
Argentina	EXPORTAR	Export instruction, general information and specific market intelligence, counseling and technical assistance, coaching, missions and fairs, specific business contacts, exporter consortia.
Cordoba	PROCORDOBA	Export instruction, general information and specific market intelligence, counseling and technical assistance, coaching, missions and fairs, specific business contacts, exporter consortia.
Mendoza	PROMENDOZA	Export instruction, general information and specific market intelligence, counseling and technical assistance, coaching, missions and fairs, specific business contacts, exporter consortia.
Bolivia	CEPROBOL	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts, exporter consortia.
Brazil	APEX	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts, exporter consortia, assistance in seeking financing.
Chile	PROCHILE	Export instruction, general information and specific market intelligence, counseling and technical assistance, coaching, missions and fairs, specific business contacts, exporter consortia.
Colombia	PROEXPORT	Export instruction, general information (and specialized information on transport logistics) and specific market intelligence, counseling and technical assistance, coaching, missions and fairs, specific business contacts, exporter consortia, support for quality upgrading.
Costa Rica	PROCOMER	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts, coaching, production linkage facilitation, support to firms' initiatives to increase value added of products.
Ecuador	CORPEI	Export instruction, general information and specific market intelligence, counseling and technical assistance, coaching, missions and fairs, specific business contacts, exporter consortia.
El Salvador	EXPORTA	Export instruction, general information and specific market intelligence, counseling and technical assistance, coaching, missions and fairs, specific business contacts, exporter consortia.

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Table 2.10 ■ LAC: Services to Exporters *(continued)*

Country/Region	Organization	Services to Exporters
Guatemala	DPC/ME	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts, assistance in seeking financing.
Honduras	FIDE	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts.
Jamaica	JTI	Export instruction, general information and specific market intelligence, counseling and technical assistance, coaching, missions and fairs, specific business contacts, exporter consortia, assistance in seeking financing.
Mexico	PROMEXICO	Export instruction, general information and specific market intelligence, counseling and technical assistance, coaching, missions and fairs, specific business contacts, assistance in seeking financing.
Panama	DNPE/VICOMEX	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions.
Paraguay	REDIEX	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, specific business contacts, assistance in seeking financing, and exporter consortia.
Peru	PROMPERU	Export instruction, general information and specific market intelligence, counseling and technical assistance, missions and fairs, exporter consortia, support for quality upgrading (agricultural and manufacturing sectors).
Uruguay	URUGUAY XXI	Export instruction, general information and specific market intelligence, counseling and technical assistance, coaching, missions and fairs, specific business contacts, exporter consortia.

Table 2.11 ■ ROW: Effectiveness Assessment and Implications

Country/ Region	Organization	Indicators		Implications of Evaluation Results
		Input	Output	
Australia ¹	AUSTRADE	Number of firms using the services provided by the organization.	Value of exports achieved by assisted firms; number of established and new or occasional assisted exporters that have achieved "export success," and client satisfaction.	Redefinition of the organization's strategy and evaluation of employees.
Denmark	TCD	Number of firms using the services provided by the organization.	Value of exports achieved by assisted firms and client satisfaction.	Redefinition of the organization's strategy, internal budget redistribution across units and programs, evaluation of employees, and removal of manager.
Finland	FINPRO	Balance Scorecard.	Impact of the organization's activities on assisted firms' businesses as reported by themselves and client satisfaction.	Budget allocated to the organization, redefinition of the organization's strategy, internal budget redistribution across units and programs, evaluation of employees, and removal of manager.
France	UBIFRANCE	Number of firms using the services provided by the organization, number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs), annual turnover, and number of international volunteers sent abroad by French companies.	Client satisfaction.	Budget allocated to the organization, redefinition of the organization's strategy, internal budget redistribution across units and programs, evaluation of employees, and removal of manager.

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Table 2.11 ■ ROW: Effectiveness Assessment and Implications *(continued)*

Country/ Region	Organization	Indicators		Implications of Evaluation Results
		Input	Output	
Ireland	EI	Number of programs of competitive improvement.	Value of exports achieved by assisted firms, new export sales made by assisted firms, number of firms undertaking meaningful and significant R&D levels, number of high potential start-ups, and number of assisted firms achieving global sales above certain thresholds.	Budget allocated to the organization, redefinition of the organization's strategy, and evaluation of employees.
Israel	IEICI	Number of firms using the services provided by the organization.	Number of deals out of business opportunities created as reported by assisted firms.	None.
Italy	ICE	Number of firms using the services provided by the organization.	Client satisfaction.	Budget allocated to the organization, internal budget redistribution across units and programs, and evaluation of employees.
Japan	JETRO	Number of firms using the services provided by the organization and number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs).	Client satisfaction and, occasionally, change in the value of exports achieved by assisted companies.	Redefinition of the organization's strategy and internal budget distribution across units and programs.

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Table 2.11 ■ ROW: Effectiveness Assessment and Implications *(continued)*

Country/ Region	Organization	Indicators		Implications of Evaluation Results
		Input	Output	
Korea	KOTRA	Number of clients using the services provided by the organization, quality of activities undertaken to support exporting (according to ISO 9001), quantity and quality of market reports, specialization of the KTC's in the resident region; and formation and education of personnel.	Value of exports achieved by assisted firms, number of new exports achieved by assisted firms, and client satisfaction as evaluated by the Ministry of Planning and Budget.	Budget allocated to the organization.
Netherlands	EVD	Number of firms using the services provided by the organization.	Client satisfaction.	None.
New Zealand ²	NZTE	Number of firms using each of the services provided by the organization, number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs), and quality in delivering the associated services (e.g., call response rates, share of market intelligence services whose relevance is peer reviewed by the international marketing managers, etc.).	Value of exports achieved by assisted firms, number of firms entering new international markets, number of firms implementing changes in their business models based on the "Manufacturing+" model, and client satisfaction.	Budget allocated to the organization, redefinition of the organization's strategy, internal budget redistribution across units and programs, evaluation of employees, and removal of manager.
Philippines	BETP	Number of firms using each of the services provided by the organization, number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs), and several other quantifiable performance indicators.	Value of sales and exports achieved by assisted firms, client satisfaction feedback rating, and the Philippine Export Development Plan 2008 to 2010 Scorecard (measured in export growth).	Budget allocated to the organization, redefinition of the organization's strategy, internal budget redistribution across units and programs, and evaluation of employees.

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Table 2.11 ■ ROW: Effectiveness Assessment and Implications *(continued)*

Country/ Region	Organization	Indicators		Implications of Evaluation Results
		Input	Output	
Spain ³	IOEX	Number of firms using the services provided by the organization and number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs).	Client satisfaction.	Redefinition of organization's strategy, internal budget redistribution across units and programs, and removal of manager.
Catalonia ⁴	COPCA	Number of firms using services provided by the organization, number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs), turnover associated with services sold, and time of response to service requests.	Client satisfaction.	Redefinition of organization's strategy, internal budget redistribution across units and programs, evaluation of employees, and removal of manager.
Singapore	IE	Number of firms using the services offered by the organization and number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs).	Value of exports achieved by assisted firms and client satisfaction.	Budget allocated to the organization, redefinition of the organization's strategy, internal budget redistribution across units and programs, and evaluation of employees.
Thailand	DEPT	Number of firms using the services provided by the organization and number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs).	Value of exports achieved by assisted firms and value of exports across sectors and destination countries relative to the respective targets.	Budget allocated to the organization, redefinition of the organization's strategy, internal budget redistribution across units and programs, evaluation of employees, and removal of manager.

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Table 2.11 ■ ROW: Effectiveness Assessment and Implications *(continued)*

Country/ Region	Indicators			Implications of Evaluation Results
	Organization	Input	Output	
United Kingdom	UKTI	Percentage of resources devoted to new to export firms, number of registered customers to the organization's website services, full time equivalent staff, administrative spending, and several other specific indicators.	Total financial benefits generated by trade services as determined by the sum of the value of additional profits that firms expect to achieve as a result of the help provided by the organization, share of assisted established exporters that report improved business performance within two years, number of new exporters, number of firms entering new export markets, and client satisfaction in general according to the Performance Impact Monitoring Survey (PIMS).	Budget allocated to the organization, redefinition of the organization's strategy, internal budgetary redistribution across units and programs, and evaluation of employees.

¹ A new Client Relationship Management (CRM) system is being implemented.
² A Performance Management Framework (PMF) is being implemented.
³ Specific impact indicators are being developed within the framework of the Strategic Plan 2009–2012.
⁴ Specific impact indicators are being developed.

Table 2.11 ■ LAC: Effectiveness Assessment and Implications

Country/ Region	Indicators			Implications of Evaluation Results
	Organization	Input	Output	
Argentina	EXPORTAR	Number of firms using the services provided by the organization, share of small and medium-size companies in the total number of assisted companies, and number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs).	Value of exports achieved by assisted firms, in particular small and medium-size ones, and client satisfaction.	Budget allocated to the organization, redefinition of the organization's strategy, internal budgetary redistribution across units and programs, evaluation of employees, and removal of manager.
Cordoba	PROCORDOBA	Number of firms using the services provided by the organization and number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs).	Client satisfaction.	Budget allocated to the organization, redefinition of the organization's strategy, internal budgetary redistribution across units and programs, evaluation of employees, and removal of manager.
Mendoza	PROMENDOZA	Number of firms using the services provided by the organization.	Client satisfaction.	Budget allocated to the organization and redefinition of the organization's strategy.
Bolivia	CEPROBOL	Number of firms using the services provided by the organization.	Client satisfaction.	Budget allocated to the organization, redefinition of the organization's strategy, internal budgetary redistribution across units and programs, and evaluation of employees.

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Table 2.11 ■ LAC: Effectiveness Assessment and Implications *(continued)*

Country/ Region	Organization	Indicators		Implications of Evaluation Results
		Input	Output	
Brazil	APEX	Number of firms using the services provided by the organization, number of economic segments supported by the organization's projects, number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs), time needed to approve a new export project, and budget application (difference between what is spent and the amount received).	Value of exports achieved by assisted firms and related indicators such as: the share of these companies in Brazilian exports, the difference between these firms' exports and the goal established in their respective export projects, and the relationship between the total amount invested in a specific export project and the increment in the value exported by these companies; and client satisfaction.	Redefinition of the organization's strategy and internal budgetary redistribution across units.
Chile	PROCHILE	Number of firms using the services provided by the organization, change in the number of firms using the services provided by the organization, and change in the number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs).	Change in the value of exports achieved by assisted firms and client satisfaction.	Budget allocated to the organization, redefinition of the organization's strategy, internal budgetary redistribution across units and programs, and evaluation of employees.
Colombia	PROEXPORT	Number of firms using the services provided by the organization and number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs); Internal Balance Scorecard.	Value of exports achieved by assisted firms and client satisfaction.	Redefinition of the organization's strategy and evaluation of employees.

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Table 2.11 ■ LAC: Effectiveness Assessment and Implications *(continued)*

Country/ Region	Organization	Indicators		Implications of Evaluation Results
		Input	Output	
Costa Rica	PROCOMER	Percentage of services offered by electronic media and percentage of users using the organizations' electronic systems.	Value of exports achieved by assisted firms, country's total exports, increase in national content of exports and productive linkages, both in terms of numbers and volume; and client satisfaction.	Redefinition of the organization's strategy and internal budgetary redistribution across units.
Ecuador	CORPEI	Number of firms using services provided by the organization and number of visits to the organization's website.	Value of exports achieved by assisted firms, number of exporters, and client satisfaction.	Evaluation of employees.
El Salvador	EXPORTA	Number of firms using each of the services provided by the organization (e.g., number of users of the system of commercial information, number of firms provided with market information, number of firms trained, number of firms advised, number of firms that participated in missions and fairs) and number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs).	Change in the country's nontraditional exports and change in the value of exports achieved by firms assisted with different services (in particular, change in the value of exports of firms that are members of exporter consortia, change in value of exports of firms that participate in missions and fairs, etc.).	Budget allocated to the organization, redefinition of the organization's strategy and internal budgetary redistribution across units and programs.
Guatemala	DPC/ME	Number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs).	Client satisfaction.	Internal budgetary redistribution across units and programs.

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Table 2.11 ■ LAC: Effectiveness Assessment and Implications *(continued)*

Country/ Region	Organization	Indicators		Implications of Evaluation Results
		Input	Output	
Honduras	FIDE	Number of firms using the services provided by the organization and number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs).	Value of exports achieved by assisted firms and change in total employment (and investments).	Budget allocated to the organization, redefinition of the organization's strategy, internal budgetary redistribution across units and programs, and evaluation of employees.
Jamaica	JTI	Number of firms using the services provided by the organization, number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs), staff costs as a percentage of total expenditures, volume of cash flow, and percentage of internally generated income; Business Scorecard.	Value of exports achieved by assisted firms, number and volume of linkage contracts signed, number of jobs created in facilitated projects, and ratio of expenditure to exports facilitated.	Budget allocated to the organization, redefinition of the organization's strategy, internal budgetary redistribution across units and programs, and evaluation of employees.
Mexico ¹	PROMEXICO	Number of firms using the services provided by the organization and number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs).	Value of exports achieved by assisted firms and client satisfaction.	None.
Panama	DNP/COMEX	Number of firms using the services provided by the organization and number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs).	Value of exports achieved by assisted firms, number of new exporters, and a subjective measure of "percentage" of advance as determined by client satisfaction surveys (as well as opinion gathering from the public in general).	Budget allocated to the organization, redefinition of the organization's strategy, internal budgetary redistribution across units and programs, and evaluation of employees.

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Table 2.11 ■ LAC: Effectiveness Assessment and Implications *(continued)*

Country/ Region	Organization	Indicators		Implications of Evaluation Results
		Input	Output	
Paraguay	REDIEX	Number of firms using the services provided by the organization, number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs), and budgetary execution.	Value of exports achieved by assisted firms and change in the value of exports of firms assisted with business plans and co-financing projects.	Redefinition of the organization's strategy and evaluation of employees.
Peru	PROMPERU	Number of firms using the services provided by the organization, number of export support activities undertaken by the organization (e.g., training events, reports, missions, and fairs), and number of visits to the website.	Value of exports achieved by assisted firms, change in the number of exporting firms, change in the number of exported products, change in the number markets and segments, and client satisfaction.	Budget allocated to the organization, redefinition of the organization's strategy, internal budgetary redistribution across units and programs, evaluation of employees, and removal of manager.
Uruguay	URUGUAY XXI	None.	Client satisfaction.	None.

¹ PROMEXICO is currently defining how the results from the evaluations would affect the organization and its activities.

References

- Boston Consulting Group (BCG), 2004. "Export development and promotion: Lessons from four benchmark countries." Mimeo.
- ECLAC (Economic Commission for Latin America and the Caribbean), 2008. "La transformación productiva 20 años después: Viejos problemas, nuevas oportunidades." Santiago de Chile.
- IERAL, Fundación Mediterránea, 2001. "La inserción de la Argentina en la economía global." Mimeo.
- Jordana, J.; Volpe Martincus, C.; and Gallo, A., 2010. "Export promotion organizations in Latin America and the Caribbean: An institutional portrait." IDB Working Paper.
- Nathan Associates, 2004. "Best practices in export promotion." Report submitted to USAID.
- Obando, M. and Gómez-Escalante, A., 2008. "Experiencia de la remuneración variable en PROEXPORT." Presentation at the Annual Conference of the Latin American Network of Trade Promotion Organizations.
- Ochoa, P. 1998. "Políticas e instrumentos de promoción de exportaciones en Colombia." *Integration and Trade*, 4–5.
- Seringhaus, R. and Botschen, G., 1991. "Cross-national comparison of export promotion services: The view of Canadian and Austrian companies." *Journal of International Business Studies*, 22, 1.
- World Bank, 2001. "Why have trade promotion organizations failed, and how can they be revitalized?" PREM Notes Economic Policy, 56.

>> To Be or Not to Be Abroad: Do Foreign Missions Make a Difference?

3

3.1 Introduction

As highlighted in Chapter 2, export promotion organizations are heterogeneous in terms of their internal structure, funding, and qualification of their personnel and how they are chosen, among other things. They also differ in how they provide exporters with onsite support. Some organizations maintain their own offices abroad, with or without their own physical space but staffed with their own employees. Other organizations do not have such offices and must rely on the collaboration of staff of their countries' diplomatic missions (embassies and consulates) to assist firms in destination markets.

Do these overseas offices and missions provide effective support to firms abroad? Do they make a difference? Evidence presented in recent empirical studies suggests the affirmative. In one sample of mostly developed countries, for example, the presence of diplomatic missions correlates positively with exports. Each additional consulate is associated with a 6 percent to 10 percent increase of exports.¹ In the case of Spain, this effect ranges between 9.2 percent and 45.6 percent, depending on the estimation method and the specification of the estimating

¹ See Rose (2007).

equation.² Hence, a country's diplomatic corps seem to play a role in developing and maintaining export markets. It should also be noted that offices of Spanish subnational export promotion organizations also appear to have a significant positive impact on their region's total exports ranging between 46.4 percent and 74 percent.³

These different effects on exports in the experience of mostly developed countries may indicate the relative importance of delivering export promotion services directly through offices of export promotion organizations or indirectly through diplomatic missions. Is this also the case with Latin American and Caribbean countries? Does the kind of presence export promotion organizations have abroad affect their ability to influence export outcomes and reach their goals? If so, why does this happen? Equally relevant, what are the channels through which the potentially heterogeneous effects, if any, take place? This chapter will address these questions using bilateral sectoral trade data along with newly collected data on the location of offices of export promotion organizations and diplomatic missions of Latin American and Caribbean countries in foreign markets.

The remainder of this chapter is organized as follows: We first characterize Latin American and Caribbean export patterns across destination countries and sectors, both overall and for goods with varying degrees of differentiation, and show the geographical distribution of both offices of export promotion organizations and embassies and consulates. Second, we assess whether, how, and to what extent these foreign missions affect countries' exports. Finally, we close with a discussion of the findings and their implications for export promotion policymaking.

3.2 Latin American and Caribbean Countries' Trade Patterns across Sectors and Destinations

In Chapter I we saw that trade performance of several Latin American and Caribbean countries in terms of the level and diversification of their exports

² See Gil et al. (2008).

³ See Gil et al. (2008). Nitsch (2007a) reports that state visits have on average a positive impact on bilateral exports. Moreover, Rose (2004, 2005) and Nitsch (2007b) analyze the

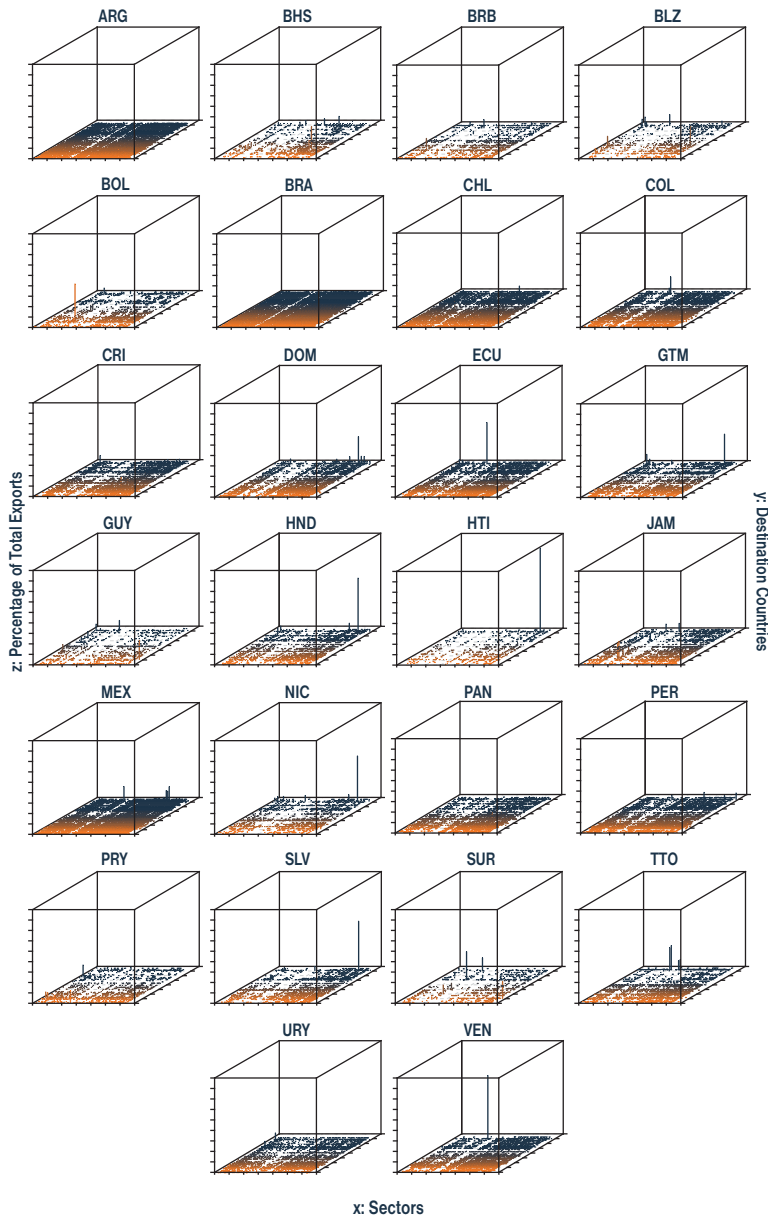
is below expectations. There are, however, substantial differences among countries, both overall and across sectors and destination markets. These bilateral sectoral export patterns are characterized below using export value data reported at the two-digit SITC Rev.2 level.⁴ Figure 3.1 shows the percentage share of exports in each sector to each destination in each country's total exports in 2007. This figure clearly reveals that while exports of some countries are spread across many sectors and destination markets, foreign sales for other countries are relatively concentrated in a few sectors, and even in specific importing nations. Thus, for instance, the mean export percentage share across destinations and sectors, over positive values, is 0.02 for Argentina and Brazil, but 0.1, 0.1, 0.2 for Guyana, Belize, and Haiti, respectively. Furthermore, the maximum percentage shares, which are 5.4 and 5.8 in the cases of Argentina and Brazil, correspond to exports of oil seeds and oleaginous fruits, and ores to China, respectively. These maximum percentage shares are 30.1, 41.4, 45.2, 62.3, and 75.5 in Ecuador, Bolivia, Honduras, Venezuela, and Haiti, and correspond to exports of petroleum and petroleum products to the United States, natural gas to Brazil, clothing and accessories to the United States, petroleum and petroleum products to the United States, and clothing and accessories also to the United States, respectively. It should be noted that, while in Mexico the average export percentage share is 0.02, there are four sectors whose exports to the United States account for almost 50 percent of the country's total exports: electrical machinery, apparatus and appliances, and electrical parts (9.1); telecommunications and sound-recording and reproducing apparatus and equipment (11.5); road vehicles (12.8); and petroleum and petroleum products (12.8). In a few economies, there is no export activity at all in various broadly defined sectors and/or markets (e.g., Guyana, Haiti, and Suriname).

Figure 3.2 indicates the degree of diversification of these bilateral sectoral exports in terms of products, also in 2007. The figure presents the ratio of the number of goods that an economy actually exported to a

influence of international organizations and country groupings, such as the G7, on trade flows, respectively.

⁴ In particular, mirror values (i.e., imports from Latin American and Caribbean countries) are used.

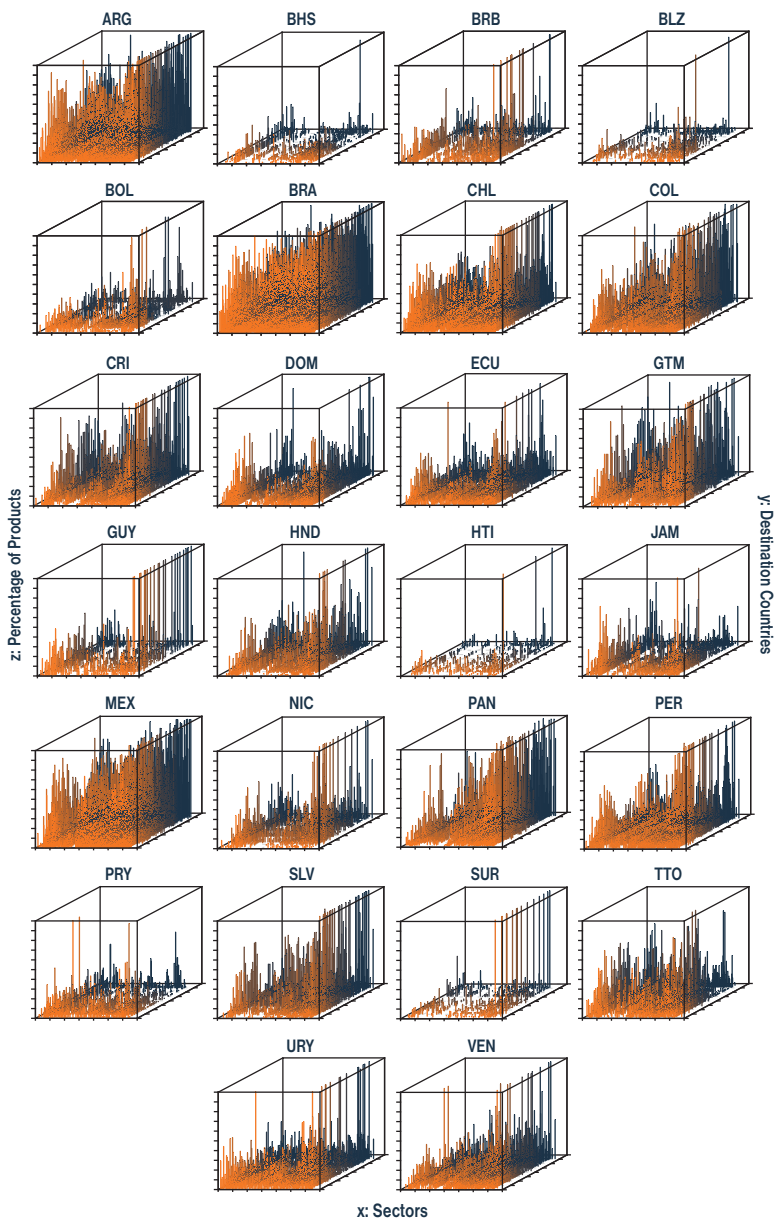
FIGURE 3.1 ■ Latin American and Caribbean Countries: Share of Country-Specific Sectoral Exports in Total Exports (2007)



Source: Our calculations based on data from COMTRADE.

The figures show the percentage share of exports (z-axis) in each two-digit SITC (Standard International Trade Classification) sector (x-axis) to each destination country (y-axis) in each Latin American and Caribbean country's total exports.

FIGURE 3.2 ■ Latin American and Caribbean Countries: Share of Products Exported over Sectors and Destination Countries (2007)



Source: Our calculations based on data from COMTRADE.
The figures show the percentage share of six-digit HS goods exported (z-axis) by each Latin American and Caribbean country in each two-digit SITC sector (x-axis) to each destination country (y-axis).

given destination country in a given sector to the total number of goods that it could potentially export in this sector. This ratio is computed as the number of six-digit HS codes corresponding to each two-digit SITC Rev.2 code registering positive exports relative to the total number of the six-digit HS codes in each of these two-digit SITC Rev.2 codes.

As suggested by Figure 3.1, there are significant differences among countries. Argentina, Brazil, and Mexico exhibit relatively large shares in many sectors and destination countries as a result of having relatively diversified bilateral exports. In these countries, the mean (median) percentage share of products exported across sectors and destinations over positive values is 14.3 (7.1), 19.4 (12.3), and 18.3 (10.7). These economies achieve the maximum share (100) in exports of goods within certain sectors to particular importers. It is noteworthy that these maximum shares are typically registered in foreign sales to neighboring countries and/or to those with which they have trade agreements (e.g., Argentina's exports of travel goods, handbags, and similar containers to Bolivia, Paraguay, and Uruguay; Brazil's exports of the same goods to Uruguay, and Mexico's exports of furniture to Canada and the United States). In contrast, in Belize, Haiti, and Suriname most shares are low or zero and only a few, if any, are high. Their mean (median) percentage shares are, 3.2 (1.9), 4.0 (1.9), and 4.9 (2.0), while their maximum percentage shares are 30.8, 38.5, and 35.7, respectively.⁵ These latter shares correspond to Belize's and Haiti's exports of travel goods, handbags, and similar items to the United States and Suriname's exports of furniture to Guyana.⁶ In short, these countries' exports are concentrated in a very narrow set of products in a few sectors.

Even within sectors, goods display different degrees of differentiation. They can be primarily classified as homogeneous goods, whose prices are quoted in organized exchange; reference-priced goods, whose prices are quoted only in trade publications; and differentiated goods, which have

⁵ In all cases, maximum shares referred to in the text correspond to sectors with more than one good.

⁶ Other Caribbean countries show similar patterns. Thus, for instance, Jamaica has a mean (median) of 5.5 (2.6) and maximum percentage share of 64.7, which is observed for exports of beverages to Barbados and Antigua.

no reference price.⁷ How do the trade patterns of Latin American and Caribbean countries look like in each of these product categories? The answer to this question can be found in Figures 3.3 to 3.5, which report for each of these categories the percentage share of goods actually exported by these economies to each destination market in each sector. With the relative exception of the larger ones, most countries in the region only export a very small portion of goods across sectors. Not surprisingly, the contrast is more evident in the case of differentiated products.

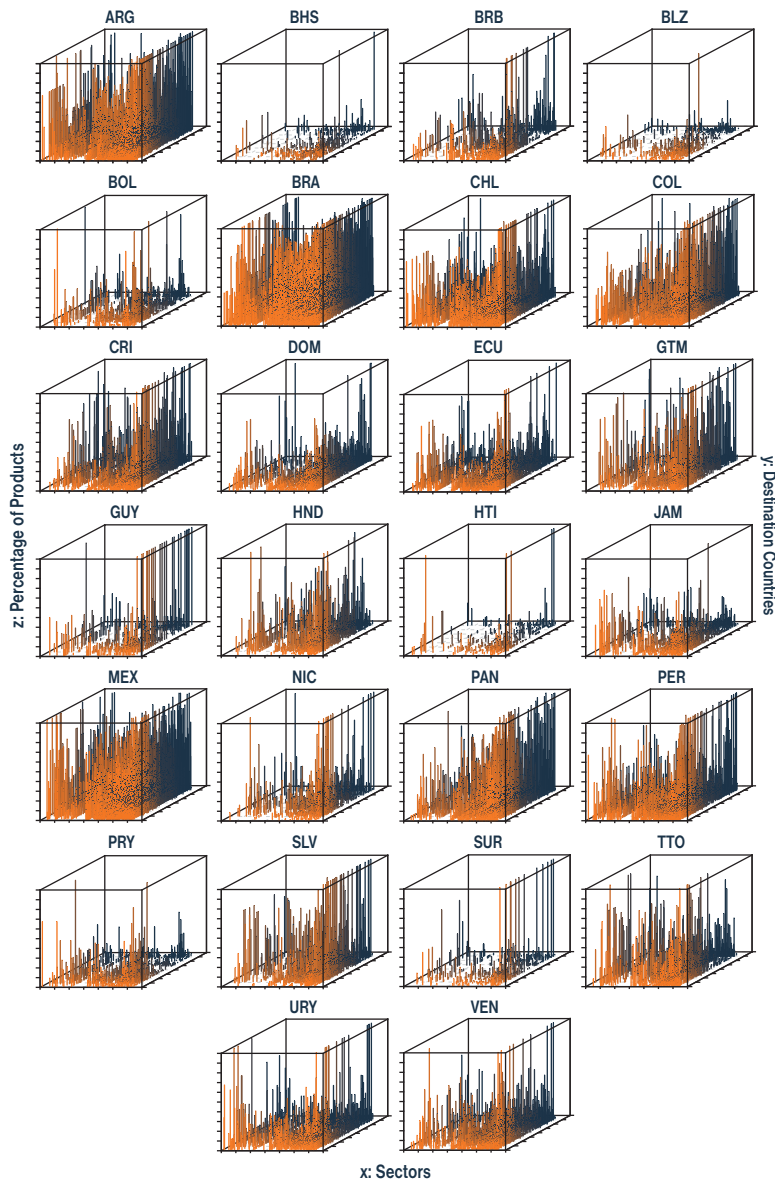
3.3 Locating Supporting Stations Abroad: A Map of Trade Offices and Foreign Diplomatic Missions

In Chapter 2 we showed that the direct presence of export promotion organizations of Latin American and Caribbean countries abroad is highly asymmetric. A few entities have a relatively large number of offices in foreign countries (see Figure 3.6). PROCHILE has missions in virtually all South, Central, and North American countries, most Western European countries, several Asian countries, and even in Oceania. In a few cases, there is more than one office per country: United States (4), Argentina (3), China (3), Canada (2), and Mexico (2). Although PROMEXICO has less coverage (e.g., no presence in Oceania), this organization generally resembles PROCHILE's geographical pattern, except that the location of its branches is more skewed towards Mexico's partners in North America: the United States (8) and Canada (3).

A second group of organizations has an intermediate number of their branches abroad. For instance, PROEXPORT has offices in all South American countries except Argentina, Paraguay, and Uruguay, as well as in two Central American countries (Costa Rica and Guatemala), Canada, Mexico, and the United States. Outside of the region, PROEXPORT has offices in four European countries (Germany, Italy, Spain, and the United Kingdom), and China. PROCOMER also has most of its foreign missions

⁷ See Rauch (1999). Following Hallak (2006), when a two-digit sector includes products that belong to different categories, the two-digit sector is broken accordingly, with each part only including the relevant goods.

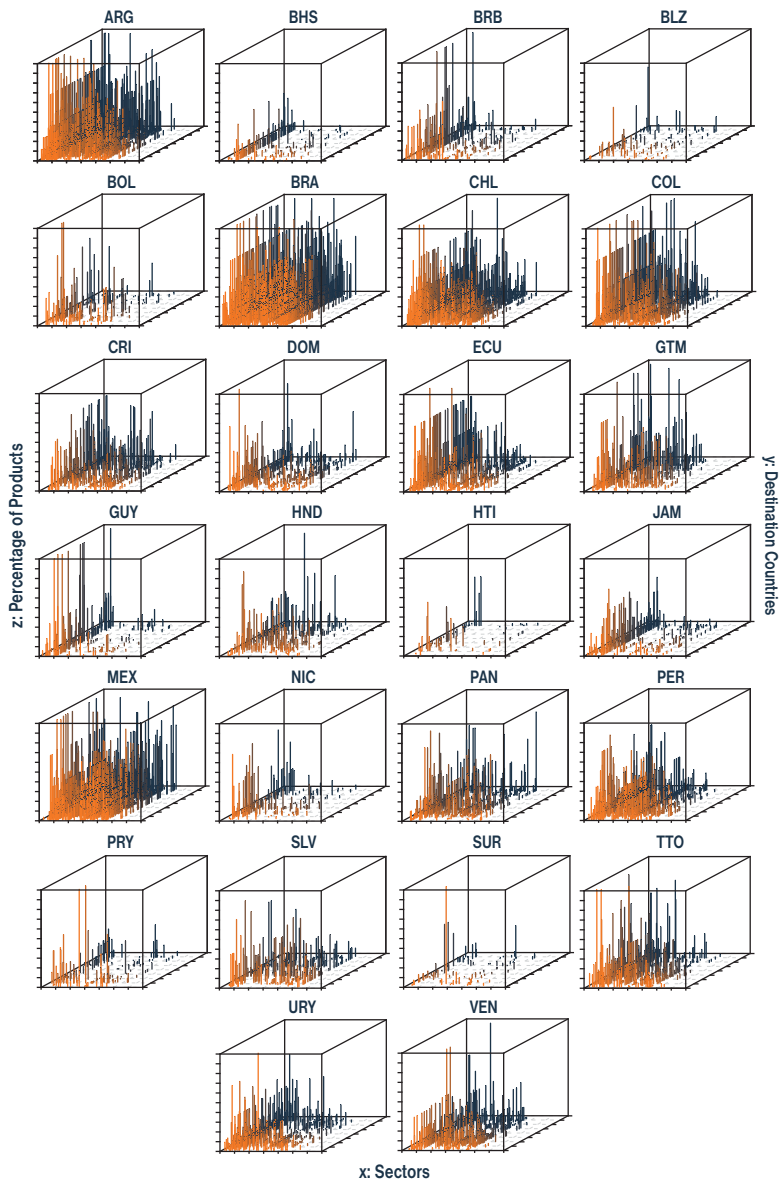
FIGURE 3.3 ■ **Latin American and Caribbean Countries:**
Share of Differentiated Products Exported over
Sectors and Destination Countries (2007)



Source: Our calculations based on data from COMTRADE.

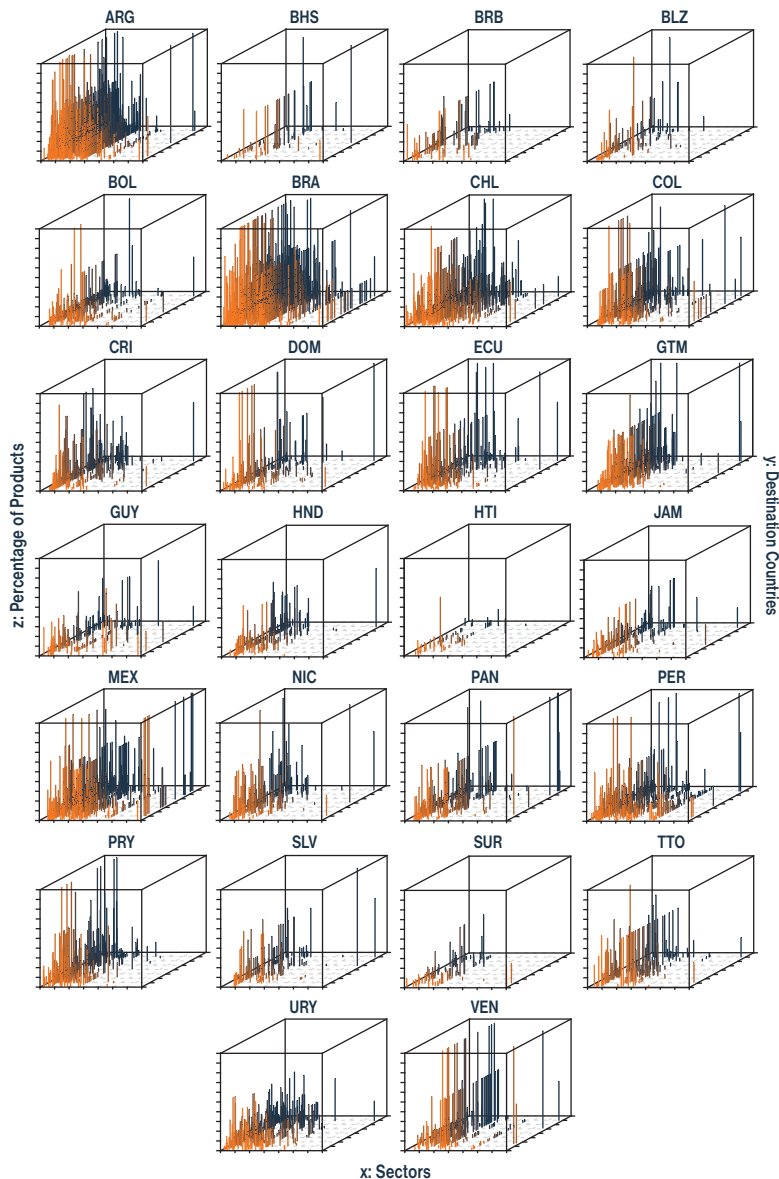
The figures show the percentage share of six-digit HS differentiated goods exported (z-axis) by each Latin American and Caribbean country in each two-digit SITC sector (x-axis) to each destination country (y-axis).

FIGURE 3.4 ■ Latin American and Caribbean Countries: Share of Reference-Priced Products Exported over Sectors and Destination Countries (2007)



Source: Our calculations based on data from COMTRADE.
The figures show the percentage share of six-digit HS reference-priced goods exported (z-axis) by each Latin American and Caribbean country in each two-digit SITC sector (x-axis) to each destination country (y-axis).

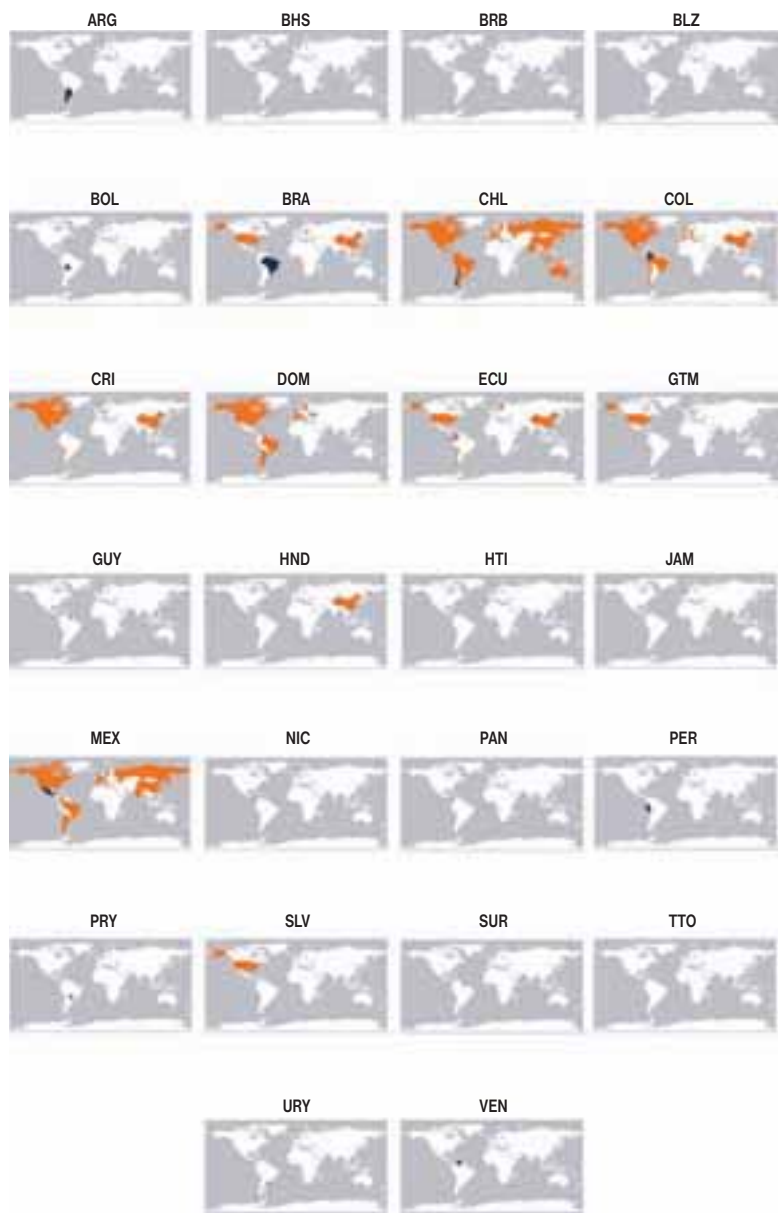
FIGURE 3.5 ■ Latin American and Caribbean Countries: Share of Homogeneous Products Exported over Sectors and Destination Countries (2007)



Source: Our calculations based on data from COMTRADE.

The figures show the percentage share of six-digit HS homogeneous goods exported (z-axis) by each Latin American and Caribbean country in each two-digit SITC sector (x-axis) to each destination country (y-axis).

FIGURE 3.6 ■ Latin American and Caribbean Countries: Offices of Export Promotion Organizations Abroad



Source: Our calculations based on data from countries' export promotion organizations.

in the region, primarily in Central America, the Caribbean, and North America. This organization has just one branch in South America (Chile), and two offices outside of the region (Germany and China).

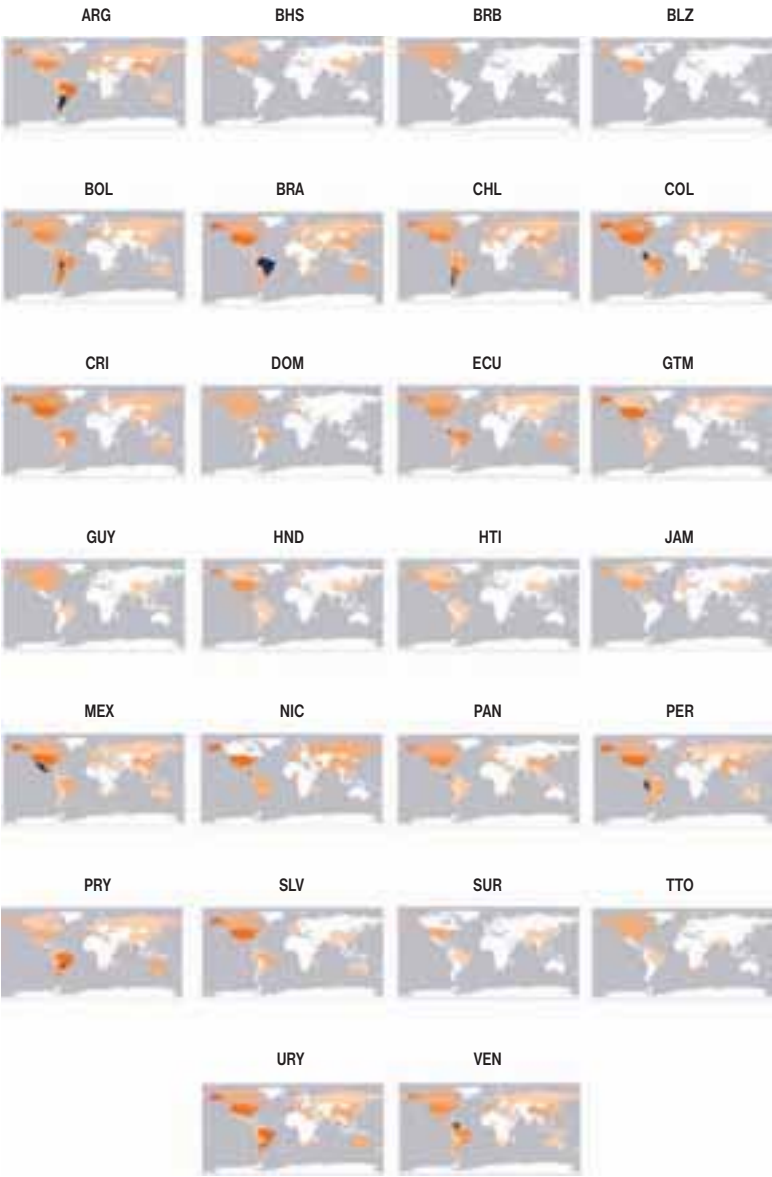
Finally, most entities have only a small number of foreign offices (e.g., El Salvador, Guatemala, Jamaica, and Brazil) or no offices at all (e.g., Argentina, Peru, and Uruguay) (see Figure 3.6).⁸ The latter entities rely on diplomatic missions to assist exporters abroad (see Chapter 2).

In Figure 3.7 we show the geographical distribution of these diplomatic missions. It is clear that these are more numerous and are spread over a larger number of partners than are offices of export promotion organizations. The maps further reveal substantial differences across nations along this dimension, both in terms of overall number of missions and their specific locations. A few countries, primarily the large ones, have diplomatic offices (embassies and/or consulates) in more than 50 countries, which is the case of Argentina, Brazil, Chile, Mexico, Peru, and Venezuela. When adding across host countries, they have a total of over 100 diplomatic missions abroad. It should be noted that export promotion organizations of some of these countries have few offices abroad (e.g., Brazil) or none (e.g., Argentina and Peru). On the opposite end of the spectrum, a number of countries, mostly in the Caribbean, have diplomatic presence in fewer than 15 countries; these include Bahamas, Barbados, Belize, Guyana, Suriname, and Trinidad and Tobago. Finally, most remaining South American and Central American countries have foreign diplomatic missions in 30 to 50 countries. It should be mentioned that not all of these missions have a commercial section.

The distribution of Latin American countries' diplomatic missions across trading partners is skewed. While diplomatic representation generally consists of just one embassy or consulate, some have several diplomatic offices in a few of their export destination countries. This is particularly the case with neighboring countries and the United States.

⁸ Through an agreement between Venezuela's BANCOEX (Bank for Foreign Trade), the Ministry of Foreign Relations and the former Ministry of Production and Trade (now Ministry of Trade), the commercial sections of the embassies in Argentina, Brazil, Colombia, Ecuador, Germany, Mexico, Panama, Peru, Spain, and Trinidad and Tobago constitute a network of foreign offices tasked with export promotion.

FIGURE 3.7 ■ Latin American and Caribbean Countries: Embassies and Consulates Abroad



Source: Our calculations based on data from countries' ministries of foreign affairs.
The darker the color, the larger the number of diplomatic offices. Segments considered are: 1, 2–5, 6–9, and more than 10. In the cases of Guatemala, Honduras, Haiti, Nicaragua, and Paraguay, mainland China has been colored as a location of diplomatic foreign missions. These missions are actually located in Taiwan.

Thus, for instance, Argentina, Paraguay, and Uruguay have 10, 10, and 20 missions in Brazil, and Bolivia and Chile have 9 and 13 in Argentina, respectively. On the other hand, Bolivia, Colombia, El Salvador, Guatemala, Honduras, and Peru have 9, 10, 16, 10, 9, and 13 representations in the United States. The extreme case is Mexico, which has 36 out of its 118 diplomatic missions in the United States.

In Europe, countries from the region have the largest number of representations in Germany and especially in Spain, where Argentina, Bolivia, Colombia, Uruguay, and Venezuela have between 5 and 10 diplomatic offices. Foreign missions from the region's countries in Asia do not exceed three per country (e.g., Chile and Peru have three in China). Overall most small countries are scarcely represented in Asia as well as in Oceania. The diplomatic presence of Latin American and Caribbean countries in Africa is limited to a few nations.

3.4 How Supportive Are Supporting Stations Abroad? The Impact of Foreign Missions on Total Exports and Export Diversification⁹

The previous sections have shown that trade outcomes of Latin American and Caribbean countries are asymmetric across destination markets. The same holds for the geographical distribution of these countries' diplomatic foreign missions and that of the offices of their export promotion organizations abroad, if any. Is there a link between these countries' trade patterns and the location patterns of these foreign missions? Do representations abroad help explain countries' trade performance? One might assume that they do. By providing information on foreign markets and disseminating information on domestic products, these representations would help overcome information-driven trade barriers and, as a result, increase exports.

While this positive effect is theoretically plausible, in order to actually identify a meaningful relationship between foreign offices and exports it is necessary to account for the influence of other possible factors, such

⁹ This section builds upon the analysis contained in Volpe Martincus et al. (2010a, 2010b).

as the characteristics of the exporter and importer countries (e.g., size as measured by their GDPs) that define their trade potential and the characteristics of each specific pair of exporters and importers (e.g., the distance between their main cities and whether they share a common border) that determine the level of bilateral trade costs. This determination can be made by using the “gravity” model of international trade.¹⁰ In the extended, commonly used version of this model, trade flows between two countries depend (positively) on their economic sizes and (negatively) on the distance between them, along with a series of covariates including membership of both partners in the same free trade agreement, a common language, and the existence of colonial links. The idea is then to assess the impact of the foreign offices of export promotion organizations and diplomatic missions after conditioning for these other relevant factors by considering them as additional explanatory variables.

Moreover, the many differences among representations abroad (see Chapter 2) may potentially translate into different effects on exports. With only a few exceptions, commercial offices are located in importer countries where there is at least one embassy and/or consulate, which most likely had existed previously. Thus, these commercial offices are actually an addition to their countries’ existing export promotion institutions in the importer country. Therefore, from a policy point of view, the effect of their presence on exports should be compared to that of increasing the number of diplomatic missions, as opposed to the simple existence of such missions.¹¹

As referred to above, information problems grow more serious when attempting to introduce new goods to the export bundle and thereby diversify foreign sales (i.e., extensive margin) than when seeking to expand exports of already exported products (i.e., intensive margin). Furthermore, these problems are more acute for differentiated products than for homogeneous products. In the former case the multidimensional characteristics of the goods prevent prices from fully performing their signaling role, while in the latter case commodities are exchanged in organized

¹⁰ See, e.g., Anderson and van Wincoop (2003, 2004).

¹¹ In other words, a count variable should be used instead of a binary variable.

markets, so prices are readily known and suffice for trade decisions. As a result, when trading differentiated goods, the amount and complexity of information that must be exchanged between commercial partners are larger, thus raising the intensity of communication.¹² Hence, in their role as mechanisms to reduce the cost of information, foreign missions are likely to have heterogeneous effects across export margins as well as varying impacts depending on the products being traded.¹³

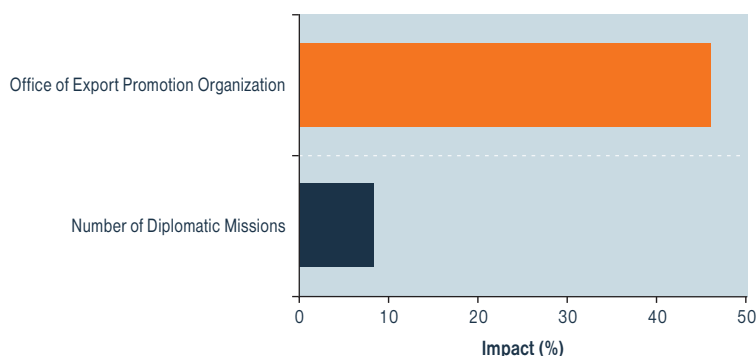
In the following sub-sections we will examine these effects primarily by applying the gravity framework on total and sector-level bilateral export data for Latin American and Caribbean countries to countries worldwide over the period 2000–2007, as well as data on the location of external offices of these countries' export promotion organizations and foreign diplomatic missions. In doing so, we carefully check the robustness of our findings to changes in the econometric strategies aimed at addressing various potential problems. Thus, an obvious concern is possible reverse causality, that is, that exporter countries establish commercial offices of their export promotion organizations or increase the number of their diplomatic missions in importer countries in response to bilateral trade. Appendix A3.1 includes a technical explanation of the specific econometric methodologies used to address this and other issues, as well as a description of the full dataset.

Impact of Offices of Export Promotion Organizations and Diplomatic Missions on Total Exports

Overall estimates indicate that opening an office of an export promotion organization in an importer country has a substantially larger impact on total bilateral exports than enlisting the services of an additional diplomatic mission. In fact, setting up a local branch of the entity formally tasked

¹² See Harris (1995). The existing empirical evidence consistently indicates that the trade reducing effect of communication costs is greater for differentiated goods (see Fink et al., 2005). Similarly, information flows appear to be more important for less standardized financial assets such as portfolio equity or corporate bonds, as opposed to more homogeneous products such as treasury bonds (see Portes et al., 2001).

¹³ As mentioned in Chapter I, Rauch and Trindade (2002) and Hanson and Feenstra (2004) detect these heterogeneous effects for informal institutions such as the Chinese trading networks and Hong Kong's middlemen trading Chinese goods, respectively.

FIGURE 3.8 ■ Impact of Foreign Missions on Countries' Total Bilateral Exports

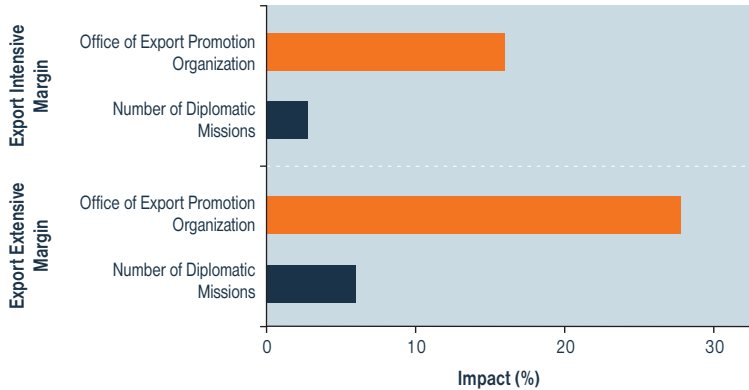
Source: Our calculations based on data primarily from COMTRADE and IDB/INT.

with export promotion is associated with an increase in exports 5.5 times larger than adding a new diplomatic representation (see Figure 3.8).

Impact of Offices of Export Promotion Organizations and Diplomatic Missions across Export Margins

Estimation results suggest that foreign offices of export promotion organizations and diplomatic missions help expand bilateral exports along both the intensive and extensive margins. In both cases, the effect is larger on the extensive margin than on the intensive margin. Thus, as expected, these entities have a more pronounced influence precisely on those export activities that must overcome more serious information problems, namely, the introduction of new export goods. Furthermore, while the estimated impact of export promotion organizations is consistently greater than the effect produced by diplomatic representations across both export margins, the difference between them is clearly greater along the extensive margin. In particular, the number of products exported is 27.8 percent greater when establishing a foreign office of an export promotion organization in the importer country, but only 6 percent greater as the result of opening a new embassy or consulate. On the intensive margin, the respective estimates are 16.1 percent and 2.8 percent. Again, this is not

FIGURE 3.9 ■ Impact of Foreign Missions on Countries' Intensive and Extensive Margins of Bilateral Exports

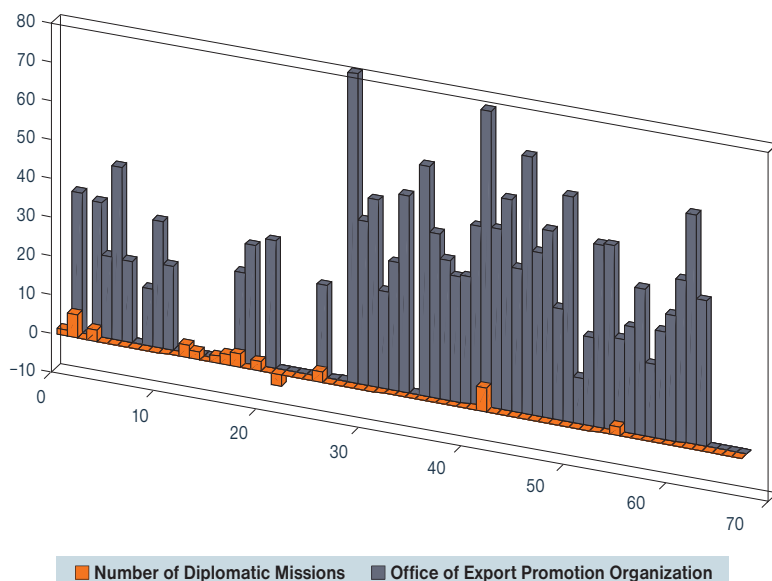


Source: Our calculations based on data primarily from COMTRADE and IDB/INT.

surprising. Among other things, export promotion organizations generally have personnel with specialized marketing expertise and can therefore be expected to be better able to solve specific information problems associated with exporting new products than are the staff of purely diplomatic missions (see Figure 3.9).

The previous estimates, which are based on total bilateral export data, can be viewed as an aggregate measure of the impact of the entities in question on countries' exports. Further insights can be gained when performing similar estimations at the sectoral level (i.e., 67 two-digit SITC). The results from these estimations confirm the different effects of offices of export promotion organizations and diplomatic foreign missions on the extensive margin of exports. The former have a positive effect in 47 sectors (70.2 percent of all sectors), which include organic chemicals; textile yarn, fabrics, and related products; general industry machinery and equipment; machinery specialized for particular industries; electrical machinery, apparatus, and appliances; road vehicles; furniture and parts thereof; articles of apparel and clothing accessories; and footwear. This positive effect ranges between close to zero and 79.8 percent with an average of 36.5 percent (see Figure 3.10). These figures are clearly higher than those for diplomatic representations, where the addition of one mis-

FIGURE 3.10 ■ Impact of Foreign Missions on Countries' Extensive Margins of Bilateral Sectoral Exports



Source: Our calculations based on data primarily from COMTRADE and IDB/INT.

This figure presents the distribution of the effects of both the existence of an office of the export promotion organization and the number of diplomatic representations of the exporter country in the importer country on the number of products exported across sectors (i.e., two-digit SITC Revision 2).

sion would result in an expansion of the number of exported products in just 12 sectors, with an average (maximum) effect of 3.3 percent (6.2 percent) over these sectors.

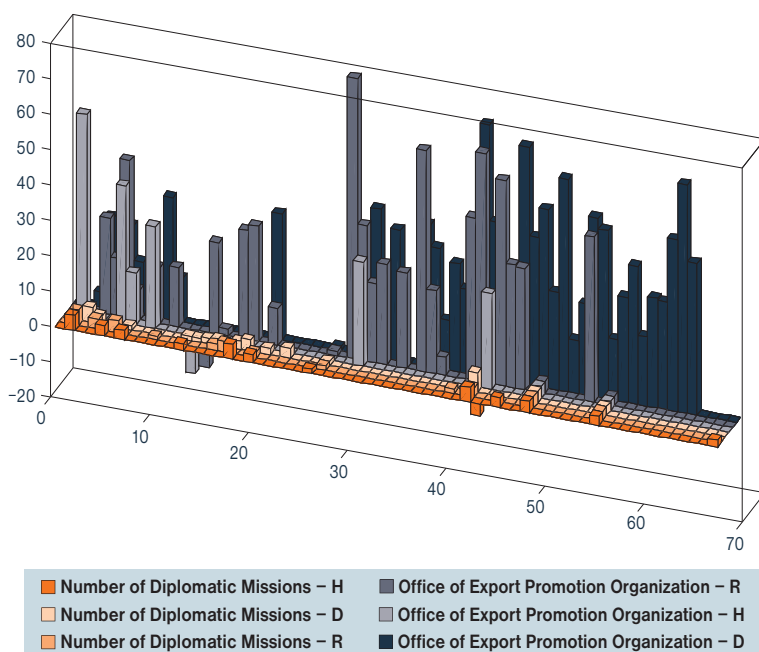
Impact of Offices of Export Promotion Organizations and Diplomatic Missions on the Export Extensive Margin across Categories of Goods

When distinguishing among goods with varying degrees of differentiation, sectoral estimates of the impact of offices of export promotion organizations and diplomatic foreign missions reveal that the former seem to be more effective than the latter in increasing the extensive margin of exports of differentiated goods and, to a lesser extent, reference-priced goods. Both the number of sectors for which positive and significant ef-

fects are observed and the average effects are greater for these kinds of goods. For instance, for differentiated products, opening a local branch of an export promotion organization would have a positive impact in 38 sectors (74.5 percent of the sectors with differentiated products), including power generating machinery and equipment; machinery specialized for particular industries; metalworking machinery; electrical machinery, apparatus, and appliances; telecommunications and sound recording apparatus; road vehicles; textiles yarns, fabrics, and related products; articles of apparel and clothing accessories; photographic apparatus, optical goods, and watches; and professional, scientific, and controlling instruments.¹⁴ This positive impact averages 32.4 percent. The greatest estimated effect is 71.5 percent and corresponds to textiles, yarns, fabrics, and related products. In contrast, establishing an additional consulate would be associated with a significant increase in the extensive margin of exports in only 15 sectors (29.4 percent of the sectors with differentiated products) with an average impact of 2.4 percent. While a similar pattern is also observed for reference-priced goods, the picture is entirely different for homogeneous products (see Figure 3.11). In this case, estimated effects do not significantly differ from each other. It should be noted that foreign diplomatic missions have a positive significant impact in a greater number of sectors than do export promotion offices (12 vs. 8, i.e., 30.8 percent vs. 20.5 percent of the sectors with homogeneous goods). In particular, the number of diplomatic representations is positively associated with the number of homogeneous products exported in cereals and cereal preparations; hides, skins, and furskins, raw; textile fibers; metalliferous ores and metal scrap; animal oils and fats; non-ferrous metals; and gold non-monetary, while the existence of branches of the aforementioned organizations are not. Hence, the presence of foreign offices of export promotion organizations seems to favor the expansion of the number of differentiated goods, whereas diplomatic missions seem to contribute more to an increase of homogeneous goods.

¹⁴ The total number of sectors differs across goods categories. The reason is that trade in specific good categories may not be observed in some sectors (or the number of observations with positive trade is not large enough to perform estimations).

FIGURE 3.11 ■ Impact of Foreign Missions on Countries' Extensive Margins of Bilateral Sectoral Exports across Categories of Goods



Source: Our calculations based on data primarily from COMTRADE and IDB/INT.

This figure presents the distribution of the effects of both the existence of an office of the export promotion organization and the number of diplomatic representations of the exporter country in the importer country on the number of products exported across sectors (i.e., two-digit SITC Revision 2), distinguishing across categories of goods as identified in (the liberal version of) the classification proposed by Rauch (1999): homogeneous goods (H), reference-priced goods (R), and differentiated goods (D).

These results are also in line with our expectations. With a clear mandate to diversify trade, and with employees better qualified to carry out this mandate, export promotion organizations seem to be more effective in fostering exports of those goods whose trade must overcome higher information barriers, i.e., differentiated products. On the other hand, diplomatic foreign missions are primarily capable of developing general marketing activities, which are generally related to strengthening the country image in the host nation. These kinds of trade support initiatives are more likely to facilitate exports of new goods that are “technologically” similar to the countries’ products that already known abroad, i.e., homogeneous goods in the case of Latin American and Caribbean countries.

3.5 Concluding Remarks

Setting up and maintaining an overseas network of dedicated export promotion offices is costly. This cost is known. But not known are the benefits that these offices provide in terms of trade outcomes. In the past, these potential benefits have been claimed, but have not been proven with quantifiable data, at least in the case of Latin American and Caribbean countries. This is not a minor missing piece of information, since countries in the region face multiple demands on their limited revenues to cope with several social and economic challenges. Furthermore, no evidence has been available for the region as to how these benefits would differ depending on the kind of entity that provides exporting firms with assistance—offices of specialized organizations or branches of the diplomatic services. This chapter aimed at filling these gaps.

The results we have reported suggest that both offices of export organizations and foreign diplomatic missions seem to positively affect countries' exports, primarily along the extensive margin. However, their effects are not uniform. In general, the establishment of a foreign office of an export promotion organization seems to have a greater effect on exports, and makes a greater contribution to export product diversification than the addition of a diplomatic representation. Specifically, the former seems to favor the expansion of the extensive margin of exports of more differentiated goods, while the latter is associated with increased extensive margin of homogeneous goods.

Given our findings in Chapter 2, these results appear reasonable. Export promotion organizations are specialized entities, staffed with personnel experienced in international marketing who are specifically tasked with helping exporting firms do business abroad. In many cases, these organizations are managed according to private sector practices. Thus, it comes as no surprise that these organizations appear more successful in resolving the specific information problems involved in, and thereby facilitating exports of, differentiated goods, thus helping countries to effectively diversify their exports away from homogeneous commodities.

Embassies or consulates do not always have a commercial section or personnel with the expertise needed to carry out the highly specialized

function of export promotion. Further, officials at diplomatic representations are usually responsible for a variety of tasks, only one of which is supporting companies in their export activities. Moreover, mechanisms for coordinating export promotion organizations and foreign diplomatic missions that are supposed to help them in assisting trading firms tend to be informal and weak, or even nonexistent. For instance, with only a few exceptions, these former organizations do not participate in the selection of the commercial attachés or in their evaluation. Moreover, diplomatic officials formally responsible for export promotion usually do not have any incentives, such as progression along their career path, to perform the required activities. Diplomatic foreign missions can therefore be expected to stimulate larger exports of homogeneous products, whose trade faces less serious informational impediments, and which accordingly have less need for specific skills, resources, and time.

These results highlight the importance of having specialized export promoting services abroad to increase export diversification. However, it should be stressed that export promotion organizations do not necessarily have to open their own offices abroad. The same result could potentially be achieved by properly strengthening trade competencies in diplomatic representations, increasing incentives of the officials tasked with export promotion, and improving the articulation of these representations with their countries' export promotion organizations.¹⁵ Of course, making these moves would require addressing major institutional challenges. If, as expected, the costs of these alternative strategies differ, then the implied benefit/cost relationships should be computed and compared to each other to assess their relative merits. More generally, this criterion should be used not only to guide the allocation of resources across different organizational arrangements of the presence abroad, but also between this presence and other promotion modalities (e.g., activities at home such as buyer or reverse missions).¹⁶

¹⁵ An alternative whose merits would be worth exploring would be to outsource some export assistance services in specific market niches to specialized companies.

¹⁶ Unfortunately, data on the costs of specific foreign missions are not available to us.

References

- Anderson, J. and van Wincoop, E., 2003. "Gravity with gravitas: A solution to the border puzzle." *American Economic Review*, 93, 2.
- Anderson, J. and van Wincoop, E., 2004. "Trade costs." *Journal of Economic Literature*, 42, 3.
- Baldwin, R., 1988. "Hysteresis and the beachhead effects." *American Economic Review*, 78.
- Blundell, R. and Bond, S., 1998. "Initial conditions and moment restrictions in dynamic panel data models." *Journal of Econometrics*, 87, 1.
- Broto, C.; Ruiz, J; and Vilarrubia, J., 2006. "Firm heterogeneity and selection bias: Estimating trade potentials in the Euromed region." Paper presented at the 8th Annual Conference of the European Trade Study Group, Vienna.
- Bun, M. and Klassen, F., 2002. "The importance of dynamics in panel gravity models of trade." UvA Econometrics Discussion Paper 2002/18.
- Fink, C.; Mattoo, A; and Neagu, I., 2005. "Assessing the impact of communication costs on international trade." *Journal of International Economics*, 67, 2.
- Gil, S.; Llorca, R.; and Martinez Serrano, J., 2008. "Measuring the Impact of Regional Export Promotion: The Spanish Case." *Papers in Regional Science*, 87, 1.
- Glick, R. and Rose, A., 2002. "Does a CU affect trade? The time series evidence." *European Economic Review*, 46, 6.
- Greene, W., 1997. *Econometric Analysis*. Prentice Hall.
- Hallak, J., 2006. "Product quality and the direction of trade." *Journal of International Economics*, 68, 1.
- Hanson, G. and Feenstra, R., 2004. "Intermediaries in entrepot trade: Hong Kong re-exports of Chinese goods." *Journal of Economics and Management Strategy*, 13, 1.
- Harris, R., 1995. "Trade and communication costs." *Canadian Journal of Economics*, 28.
- Helpman, E.; Melitz, M.; and Rubinstein, Y., 2008. "Estimating trade flows: Trading partners and trading volumes." *Quarterly Journal of Economics*, 73, 2.

- Herzer, D. and Nowak-Lehmann, F., 2006. "What does export diversification do for growth?" *Applied Economics*, 38.
- Lederman, D.; Olarreaga, M.; and Payton, L., 2006. "Export promotion agencies: What works and what doesn't." World Bank Policy Research Working Paper 4044.
- Nitsch, V., 2007a. "State visits and international trade." *The World Economy*, 31, 12.
- Nitsch, V., 2007b. "Does the G7/G8 promote trade?" *Economics Letters*, 94, 1.
- Portes, R.; Rey, H.; and Oh, Y., 2001. "Information and capital flows: The determinants of transactions in financial assets." *European Economic Review*, 45.
- Rangan, S. and Lawrence, R., 1999. "Search and deliberation in international exchange: Learning from international trade about lags, distance effects, and home bias." NBER Working Paper 7012.
- Rauch, J., 1999. "Networks versus markets in international trade." *Journal of International Economics*, 48, 3.
- Rauch, J. and Trindade, V., 2002. "Ethnic Chinese networks in international trade." *Review of Economics and Statistics*, 84, 1.
- Rose, A., 2004. "Do we really know that the WTO increases trade?" *American Economic Review*, 94.
- Rose, A., 2005. "Which international institutions promote international trade?" *Review of International Economics*, 13.
- Rose, A., 2007. "The foreign service and foreign trade: Embassies as export promotion." *The World Economy*, 30, 1.
- Ruiz, J. and Vilarrubia, J., 2007. "The wise use of dummies in gravity models: Export potentials in the Euromed region." Documento de Trabajo 720. Banco de España.
- Santos Silva, S. and Tenreyro, S., 2006. "The log of gravity." *Review of Economics and Statistics*, 88, 4.
- Vettas, N., 2000. "Investment dynamics in markets with endogenous demand." *Journal of Industrial Economics*, 48, 2.
- Volpe Martincus, C.; Carballo, J.; and Gallo, A., 2010a. "The impact of export promotion institutions on trade: Is it the intensive or the extensive margin?" *Applied Economic Letters*, forthcoming; see also IDB Working Paper.

- Volpe Martincus, C.; Estevadeordal, A.; Gallo, A.; and Luna, J., 2010b. "Information barriers, export promotion institutions, and the extensive margin of trade." *Review of World Economics*, 146, 1; see also IDB Working Paper.
- Webster, F. and Y. Wind, 1972. *Organizational buying behavior*. Prentice Hall: Englewood Cliffs, New Jersey.

Appendix A3.1. Empirical Methodology

The effect of both offices of export promotion organizations and diplomatic foreign mission on bilateral exports from Latin American and Caribbean to all countries is identified using the “gravity” model of trade. Formally, we estimate by OLS the following equation:

$$\ln X_{ijt} = \beta_1 TPO_{ij} + \beta_2 EmbCon_{ij} + \beta_3 \ln Dist_{ij} + \beta_4 PTA_{ijt} + \beta_5 Lang_{ij} + \beta_6 ColTies_{ij} + \beta_7 ComCol_{ij} + \beta_8 Is_{ij} + \beta_9 Land_{ij} + \delta_{it} + \lambda_{jt} + \mu_{ijt} \quad (1)$$

where i indexes exporter countries, j importer countries, and t time; X denotes exports; TPO is a binary variable taking the value of 1 if the trade promotion organization of the exporter country has an office in the importer country and 0 otherwise; $EmbCon$ is the number of diplomatic representations (embassies and consulates) of the exporter country in the importer country; remaining variables control for other factors that are likely to affect bilateral trade flows: (the natural logarithm of) the distance between (the main cities in) the trading partners ($Dist$); membership in the same preferential trade agreement (PTA), sharing a common language ($Lang$), former colonial ties ($ColTies$), sharing the same colonizer ($ComCol$), and whether there are island (Is) or landlocked ($Land$) countries among the trading partners; μ is the stochastic error. Finally, all time-varying country-specific variables such as GDP and population are captured by exporter-year and importer-year fixed effects (δ_{it} and λ_{jt} , respectively).

The extensive margin of exports is measured as the number of products exported (i.e., number of six-digit HS codes registering positive exports to each specific destination), N , while the intensive margin of exports is captured through the average exports per product, X/N . Since OLS is a linear operator, regressions of each of these factors on the explanatory variables additively decompose their effects on these export margins. Hence, in order to determine these separate effects, the following equations are estimated:

$$\ln N_{ijt} = \beta_1^N TPO_{ij} + \beta_2^N EmbCon_{ij} + \beta_3^N \ln Dist_{ij} + \beta_4^N PTA_{ijt} + \beta_5^N Lang_{ij} + \beta_6^N ColTies_{ij} + \beta_7^N ComCol_{ij} + \beta_8^N Is_{ij} + \beta_9^N Land_{ij} + \delta_{it}^N + \lambda_{jt}^N + \mu_{ijt}^N \quad (2)$$

$$\ln(X_{ijt}/N_{ijt}) = \beta_1^{XN} TPO_{ij} + \beta_2^{XN} EmbCon_{ij} + \beta_3^{XN} \ln Dist_{ij} + \beta_4^{XN} PTA_{ijt} \quad (3)$$

$$\beta_5^{XN} Lang_{ij} + \beta_6^{XN} ColTies_{ij} + \beta_7^{XN} ComCol_{ij} + \beta_8^{XN} Is_{ij} +$$

$$\beta_9^{XN} Land_{ij} + \delta_{it}^{XN} + \lambda_{jt}^{XN} + \mu_{ijt}^{XN}$$

In addition, to quantify the effects of both types of export promotion institutions on the extensive margin of countries' sectoral exports, a sectoral-level equation is also estimated:

$$\ln N_{ijt}^k = \beta_1^k TPO_{ij} + \beta_2^k EmbCon_{ij} + \beta_3^k \ln Dist_{ij} + \beta_4^k Cont_{ij} + \quad (4)$$

$$\beta_5^k PTA_{ijt} + \beta_6^k Lang_{ij} + \beta_7^k ColTies_{ij} + \beta_8^k ComCol_{ij} +$$

$$\beta_9^k Is_{ij} + \beta_{10}^k Land_{ij} + \delta_{it}^k + \lambda_{jt}^k + \mu_{ijt}^k$$

where k indexes sectors.

Further, the existence of potentially differential effects of these entities on exports of goods with varying degrees of differentiation is assessed estimating the next sectoral-level equation:

$$\ln N_{ijt}^{k,z} = \beta_1^{k,z} TPO_{ijt} + \beta_2^{k,z} EmbCon_{ij} + \beta_3^{k,z} \ln Dist_{ij} + \beta_4^{k,z} Cont_{ij} + \quad (5)$$

$$\beta_5^{k,z} PTA_{ijt} + \beta_6^{k,z} Lang_{ij} + \beta_7^{k,z} ColTies_{ij} + \beta_8^{k,z} ComCol_{ij} +$$

$$\beta_9^{k,z} Is_{ij} + \beta_{10}^{k,z} Land_{ij} + \delta_{it}^{k,z} + \lambda_{jt}^{k,z} + \mu_{ijt}^{k,z}$$

where z indicates the type of goods (homogeneous, reference-priced, and differentiated).

Admittedly, OLS estimates might potentially suffer from biases originated in diverse econometric problems. First, trade flows display inertia and tend to be correlated across groups of countries. In other words, serial- and cross-sectional correlations are likely to be present in our data. The reasons are multiple.¹⁷ When serial correlation is not properly addressed, least squares estimates are inefficient and inference based thereon is adversely affected.¹⁸ Second, the dependent variable in

¹⁷ See, e.g., Webster and Wind (1972); Baldwin (1988); Rangan and Lawrence (1999); Vettas (2000); Bun and Klaaseen (2002); and Broto et al. (2006).

¹⁸ See Greene (1997).

Equations (1)–(2) and (4)–(5) is a count variable that may take the value of zero. Taking the natural logarithm implies dropping all observations for which bilateral trade flows are zero. If this is more likely to occur when there are no foreign missions of the former country in the latter country (or when both are far apart or do not share a common border), then estimates of the parameters of interest will be biased. In particular, there may be a selection of countries into trading partners, which would generate a correlation between the unobserved error terms and the independent variables thus leading to inconsistent estimates. Third, as discussed above, endogeneity may be present in the form of reverse causality, namely, countries may set up foreign representations in those partners where exports are relatively large.¹⁹ If this were the case, the estimates would be inconsistent. Fourth, ignoring the impact of the number of exporting firms might result in biased estimates.²⁰ In our background studies we have performed varying robustness checks on the different estimating equations to address these econometric issues, including: Prais Winsten with panel corrected standard errors, Poisson à la Santos Silva and Tenreiro (2006), correction for sample selection, correction à la Helpman et al. (2008), “System” GMM à la Blundell and Bond (1998), and certain combinations of these strategies. Results from these estimations confirm the main findings reported here.

¹⁹ See, e.g., Rose (2007). It is noteworthy that this is less likely to be serious problem for estimations performed at the sectoral level. While countries may decide to open an office of their export promotion organization or new diplomatic representations in countries where their aggregate exports are both large and highly diversified, it is less clear that they will do so on the basis of exports in a particular sector, unless of course these exports account for large shares of countries' total exports.

²⁰ See Helpman et al. (2008).

Table A3.1 ■ Main Dataset

Variables	Source
Bilateral exports from Latin American and Caribbean countries to countries worldwide at the two-digit SICT Rev.2 and six-digit HS levels	COMTRADE
Offices of export promotion organizations in each country	IDB/INT
Number of embassies and consulates in each country	IDB/INT
Bilateral distance	CEPII
Common border	CEPII
Common language	CEPII
Colonial ties	CEPII
Common colonizer	CEPII
Island condition	CEPII
Landlocked condition	CEPII
Membership in preferential trade agreements	Glick and Rose (2002) and WTO

>> Are Latin America and the Caribbean Heading the Right Way? An Assessment of the Effectiveness of Export Promotion Activities

4

4.1 Introduction

As reported in Chapter 2, export promotion organizations in the region generally monitor their different activities as well as the participation of firms in these activities, but they lack appropriate practices to evaluate their success in helping companies increase their exports.¹ This is a significant problem. Without proper impact assessments, it is virtually impossible to establish returns on resources invested in trade promotion, and therefore determine whether allocating scarce public funds for this purpose is justified. Moreover, since specific export assistance programs and their various combinations may have heterogeneous effects, in the absence of systematic evaluations, policymakers do not know whether trade promotion activities are being well targeted, in the sense that firms that use a certain service perform better than if they had used another service, or whether some services are consistently better than others. More

¹ Admittedly, this lack of robust assessments of the effects of public interventions is not specific to export promotion, but is common in many policy areas.

specifically, policymakers lack reliable information to tell them whether resources assigned to export promotion are producing maximum returns, or whether these returns could be increased by reallocating them across programs. Therefore, very basic questions such as whether and how trade support effectively helps companies expand their exports remain unanswered. As such, carrying out policies to promote exports without a rigorous evaluation of their impacts is like traveling in an unknown territory with a GPS whose accuracy cannot be trusted. There is no way to tell if the course is correct or must be changed.

In this chapter we first carry out a critical review of evaluation practices currently used in the region and identify their main shortcomings. Second, we discuss how measurement of performance can be improved by using tools from the econometrics literature for program evaluation that have been previously applied to other fields, such as labor market policies. In particular, we describe how these tools make it possible to overcome the limitations of standard assessment strategies. Third, we apply these tools to examine the effects export promotion activities have on firms' export performance. As seen in Chapter 3 for country-level trade, these activities are likely to have asymmetric effects along export margins (e.g., the extensive margin vs. the intensive margin). We shall see in this chapter that the same holds for firms' export outcomes. Further, the impacts can vary according to different characteristics of firms (e.g., small firms vs. large firms). Moreover, as referred to above, individual programs or combinations of programs may differ in effectiveness. We explore this set of various potential impacts using highly disaggregated export data for six Latin American countries: Peru, Costa Rica, Uruguay, Chile, Argentina, and Colombia. The chapter closes with a summary of the evidence generated by these six case studies.

4.2 Can the Current Guiding Instruments Be Trusted?

As shown in Chapter 2, among other things, due to lack of better data, some export promotion organizations in the region rely solely on client satisfaction surveys to assess the effects of their actions. These surveys primarily provide these organizations with qualitative indications on how

they are doing. But the usefulness of this information is doubtful because evaluations based on non-objective data may be more easily biased.² Furthermore, these studies are generally carried out by professional evaluators who work on commission and risk losing future clients if they provoke strong criticism.

In some cases, these surveys ask the managers of firms about the volume of incremental sales associated with the assistance received from the organization. These quantitative measures of the effects of their activities also have several weaknesses.³ First, it could be presumed that the managers would exaggerate the size of the payoff because that would increase chances that the program would continue.⁴ Second, individual case studies may have high marginal costs per case and may suffer from being non-representative. More specifically, the response rate may be, and in fact is, markedly uneven and, on average, relatively low. Third, managers may not necessarily provide an accurate estimate of payoffs from a certain export promotion activity because they must address counterfactual questions that are similar to those the econometricians must deal with, and may even have less information than the latter on the outcome of competing programs and firms.

While lack of objective information is not an issue when comprehensive firm-level customs data are available, organizations in the region with access to these data do not properly exploit them to overcome the limitations of survey-based evaluations. The most common practice can be called *direct imputation*. Here, export promotion organizations directly take the sum of the values of exports (and/or the number of destination countries and number of exported products) or compute the change in this value for those firms that they have assisted, attributing the export outcomes of these firms—and the resulting expansion of national exports as well—as their contributions. These figures are likely to overestimate the impact of export promotion support as it is implicitly assumed that these foreign sales or the increment of these sales would not have taken

² See, e.g., Klette et al. (2000).

³ See, e.g., Klette et al. (2000).

⁴ On the other hand, in some countries it has been reported that sometimes exporters under declare sales abroad, anticipating that this information might be used for tax purposes.

place in the absence of this support. This is evidently a very questionable assumption.

It is extremely challenging to perform evaluations that can produce reliable impact estimates. Strategies currently used by export promotion organizations seem to be too rudimentary to cope with these challenges. In the next section, we explain how the key issues involved in these exercises can be at least partially addressed with the help of econometric tools.

4.3 Incorporating New Technology into the Guiding Process: Tools from Econometrics Literature Focused on Program Evaluation⁵

Assessing the impact of public programs is essentially a counterfactual analysis in which causal inference about the effect of these programs requires determining how participants would have performed if they had not participated. In this regard, in order to assess the effectiveness of export promotion activities, we need to compare export performance of firms, both overall and along the intensive and extensive margins, when receiving export support (i.e., treatment) versus their performance when not receiving this support (i.e., no treatment).⁶

Each firm does or does not participate in trade promotion programs. Hence, while ex-ante, each of the potential levels of exports is latent and could be observed, ex-post, only exports corresponding to participation or non-participation are observed. The other outcome is counterfactual and unobservable by definition, as is the difference between a firm's exports if it uses the services provided by the export promotion organization relative to what its exports would be in the absence of these services, i.e., the causal effect of assistance by the organization.⁷ This is the so-called *fundamental problem of causal inference*.⁸

⁵ Readers not interested in technical issues can skip this section and move directly to Section 4.4.

⁶ The expression "treatment" is used as an analogy with medical terminology, whereby public programs are seen as the treatment to which firms are exposed.

⁷ See Lechner (2002).

⁸ See Holland (1986).

As a consequence, the counterfactual outcome must somehow be recovered from the data available. The statistical solution to this problem consists of using the population of firms to learn about the properties of the potential outcomes and computing an *average treatment effect*. Since we are dealing with programs with voluntary participation, we will focus on the *average treatment effect on the treated*, i.e., the effect of these programs on firms that participated. If we are interested in the effect on firms' total exports, this measure corresponds to the average difference between the actual exports of those firms that have received a service from the organization and the exports they would have made had they not received a service. *Mutatis mutandis* this also applies to measures of export performance along the extensive margin (number of destination countries and number of products exported) and the intensive margin (average exports per country, average exports per product, and average exports per country and product).

In order to consistently estimate the aforementioned treatment effect, an unbiased estimate of the expected counterfactual is required. This can be done by averaging exports of a group of firms. The most obvious candidate is the mean exports of those firms that have not been served by the export promotion organization. Notice that the policy intervention being examined is not a randomized trial. Hence, there may be non-random differences between assisted and non-assisted firms that are potentially correlated with export performance. Failure to properly account for these differences would clearly produce a selection bias in estimated impacts.⁹ This bias can be broken down into three components: differences in the range of values of the relevant observable characteristics of the groups being compared, differences in the distribution of these values over the common range, and differences in outcomes that persist after controlling for observable factors.¹⁰ We therefore need to control for firms' differing characteristics to get comparable groups of firms.

⁹ See, e.g., Heckman et al. (1998) and Klette et al. (2000).

¹⁰ See Heckman et al. (1998).

Alternative non-experimental methods have been proposed in the literature to construct the correct sample counterpart for the missing information on the outcomes had the firms not received services when no randomized control groups are available.¹¹ Two of these methods are *difference-in-differences* and *matching*. Appendix A4.1 includes a formal explanation of these methods and their variants as well as a table that lists the specific econometric approaches used to perform the impact evaluations in each case study.

The main idea behind *difference-in-differences* is to use repeated observations on individuals—firms in our case—to account for time-invariant differences among them. This estimator is a measure of the difference between the before and after change in exports for assisted firms and the corresponding change for non-assisted firms.¹² The latter change serves here as an estimate of the true counterfactual, i.e., the export results that the firms in the treatment group would have achieved if they had not received trade promotion support, which makes it possible to identify temporal variations in outcomes that are not due to having received assistance.¹³ Therefore, by comparing the aforementioned changes, the difference-in-differences estimator permits controlling for observed and unobserved time-invariant firm characteristics as well as time-varying factors common to both assisted and control firms that might be correlated with participation in export promotion programs and export outcomes.¹⁴ *Matching* consists of pairing each assisted firm with the more similar members of the non-assisted group on the basis of their observable characteristics, and then estimating the impact of the assistance by comparing exports of matched assisted and non-assisted firms. This method is based on the main identifying assumption that selection into assistance occurs only on these observable characteristics of firms.¹⁵

¹¹ See, e.g., Heckman et al. (1998); Heckman et al. (1999); Klette et al. (2000); Jaffe (2002); Blundell and Costa Dias (2002); Lee (2005); and Smith and Todd (2005a).

¹² See Smith (2000) and Jaffe (2002).

¹³ See Abadie (2005).

¹⁴ See, e.g., Galiani et al. (2008).

¹⁵ See, e.g., Heckman and Robb (1985) and Heckman et al. (1998). Formally, matching is based on two assumptions. First, conditional on a set of observables, the non-treated

Due to data limitations, several characteristics may not be observed by the econometrician. Consequently, systematic differences between the outcomes of assisted and non-assisted firms may persist even after conditioning on observable factors. Therefore, the assumption that there is no selection on unobservables can be very restrictive. However, under certain conditions, selection on an unobservable determinant can be allowed for if *matching* is combined with *difference-in-differences*.¹⁶ This is the *matching difference-in-differences* estimator.¹⁷ Specifically, this estimator compares the before and after change in exports of assisted firms with that of matched non-assisted firms, so that imbalances in the distribution of covariates between both groups are accounted for and time-invariant effects are eliminated. Both procedures rely for identification on the assumption that there are no time-varying unobserved effects influencing selection and exports.¹⁸

While evaluations based on these methods will certainly allow for substantial improvements in the accuracy of the estimates of impacts of export promotion programs, they can be expected to have limitations.

exports are independent of the participation status (conditional independence assumption). The rationale is that firms that are very similar in terms of the characteristics determining their selection into a program and potential outcomes should have similar exports when participating, so that the differences in exports between participating and non-participating firms could be used as an estimate of the average effect of assistance if enough pairs of similar firms exist (see Rubin, 1974; Frölich, 2004). Second, all firms have a counterpart in the non-assisted population and any firm is a possible participant (common support). Together, both assumptions are called "strong ignorability." Under these conditions, experimental and non-experimental analyses identify the same parameter. For additional details see, e.g., Rosenbaum and Rubin (1983), Heckman et al. (1998), Heckman et al. (1997), Heckman et al. (1999), Angrist and Krueger (1999), Blundell and Costa Dias (2002), and Caliendo and Kopeinig (2008).

¹⁶ In particular, selection on an unobservable determinant is possible as long as this determinant lies on separable individual and/or time-specific components of the error term (see Blundell and Costa Dias, 2002).

¹⁷ See also Heckman et al. (1997), Heckman et al. (1998), Abadie (2005), and Smith and Todd (2005a).

¹⁸ See Heckman et al. (1997) and Blundell and Costa Dias (2002). Firms differ across multiple dimensions. Thus, matching firms may imply a potentially important dimensionality problem. In order to reduce this problem, matching is in general performed on the propensity to participate given the set of observable characteristics, or *propensity score* (see Rosenbaum and Rubin, 1983). Non-participants are then paired with participants that are similar in terms of this score according to a specific metric.

Therefore, caution is required when interpreting these estimates. First, if unobserved time-variant firm-specific factors (e.g., developing an effective innovative marketing strategy) leading to improved export performance are more likely to be present among firms participating in export promotion activities, these procedures might overstate their true causal effects on export outcomes.

Second, these evaluations generally assume that cross and general equilibrium effects are not present.¹⁹ However, these assumptions are likely to be violated in many contexts. This might happen, for instance, when estimating the effects of foreign acquisitions on wages.²⁰ Evaluation of export promotion policies is, of course, not an exception. Thus, as discussed in Chapter I, there may be information externalities associated with exporting activities. If these spillovers were linked to participation in specific export promotion actions, then the outcome differences between assisted and non-assisted firms corrected by observable heterogeneity across these groups would underestimate the true impact of these actions.²¹ In particular, under perfect contemporary dissemination of information across firms, this impact would not be statistically different from zero and could accordingly not be identified.²² On the other hand, there might also be negative (pecuniary) externalities in the form of increased competition. Firms receiving trade assistance (as well as their followers) may penetrate particular country and/or product markets, thereby potentially eroding the position of other domestic firms that are already serving these markets. According to informal tests performed in some of

¹⁹ See, e.g., Roy (1951) and Rubin (1974). For instance, the definition of potential outcomes on which most evaluation models are based implicitly relies on the assumption of no interference between different units (see Cox, 1958) or stable-unit-treatment-value assumption (see Rubin, 1980). More precisely, potential outcomes of each firm are not affected by the allocation of other firms to programs (see Frölich, 2004).

²⁰ See Girma and Görg (2007).

²¹ See, e.g., Heckman et al. (1999); Miguel and Kremer (2004); and Ravallion (2008).

²² The presence of significant positive effects of export promotion on specific firms' outcomes does not make it possible to draw any precise conclusion on the existence of information spillovers or their extent because, for instance, such spillovers may occur concurrently with trade support or the associated firms' exports or, more likely, follow later. It would require a separate study to determine whether or not information spillovers are sufficient to potentially justify the implementation of export promotion policies.

the case studies, neither self-discovery nor competition effects seem to seriously threaten the validity of the estimation results reported in this chapter. Nonetheless, these phenomena deserve to be explored more thoroughly in future research.²³

Third, in several policy areas, interventions are multiple. Support to companies is of course not an exception. As stated in Chapter 2, in some countries, firms may potentially get assistance from different public and private entities. Unfortunately, in these cases there is no unified register of firms benefiting from various support measures. Thus, it is not actually possible to explicitly account for the influence of interventions other than trade promotion, with the result that these actions become an unobserved factor. If this factor is time invariant over the sample period, its impact will be automatically controlled for by the estimation procedures, which identify the effects of interest based on the time variation. If firms' participation status in other assistance programs is instead a time-varying variable, we are back to the first scenario described above. In this regard, two extreme cases can be considered. If all firms assisted by export promotion organizations are also simultaneously receiving support through programs managed by other public or private agencies, and if these programs have significant effects on firms' export performance, then the estimated impacts will overestimate those of trade promotion activities and will instead reflect the effects of the combined assistance. In contrast, if no company participating in these activities is simultaneously a beneficiary of other support initiatives, then, as long as these are effective, estimates will understate their true incidence on firms' export outcomes. We will return to this issue in Chapter 5.

Keeping in mind these limitations, in the next section we apply the methods described above to assess the impact of trade promotion programs run by export promotion organizations in the region.

²³ A first step in this direction could be, for instance, to define a control group that excludes firms that are most likely to be exposed to externalities, namely, those that export the same (or similar) products to the same (or similar) countries. This control group would then include firms similar to those assisted but exporting other products to other destination markets.

4.4 Assessing the Effectiveness of Export Promotion Activities in Latin America

The effects of trade support may be heterogeneous along several dimensions. The strength of these effects are generally related to the severity of the information problems involved in the specific trading operations or faced by individual trading companies. The purpose of this section is to inform these effects.

Evaluations have made use of firm-level export data from six Latin American countries: Peru, Costa Rica, Uruguay, Chile, Argentina, and Colombia. For each country, the dataset consists of two main databases. The first database has highly disaggregated export data at the firm level for four to eight years (depending on the country) over the period 2000–2007 from the national customs agencies. Data are reported annually at the firm-product-market level to reveal how much a given firm exported of a certain product to a certain market in a particular year. Each record includes a firm's identifier, the product code (8 to 10-digit HS), the country of destination, and the export value in US dollars.²⁴ We should mention that in most cases the sum of these firms' exports virtually adds up to the total merchandise exports as reported by the national central banks or the countries' national statistical offices. Hence, these datasets cover the whole population of exporters including supported firms. They are not merely a sample of manufacturing firms. This is especially important for most Latin American countries as non-manufacturing activities still account for relatively large shares of total exports.

Second, export promotion organizations in these countries have provided us with a list of the firms they have assisted in each year of

²⁴ Unfortunately, we do not have the data needed to estimate and henceforth explicitly control for firms' total factor productivity. Nevertheless, note that, if adding a new destination country or product requires incurring specific sunk costs of entry, then trading with a larger number of countries or a larger number of products will reflect higher productivity (see Bernard et al., 2006). Those export outcome indicators (lagged) are included in the propensity score underlying the estimates presented here. Hence, the role of productivity differences across (groups of) firms, and the possibility that the agency picks "winners," is at least partially accounted for.

the respective periods. PROEXPORT has additionally furnished a list of companies using each of its main services.

Finally, for some countries, additional data has been gathered on exporters, such as employment and location (e.g., Peru, Costa Rica, and Argentina), starting data (e.g., Peru), and sales (e.g., Chile). These data are from the national tax or social security agencies (e.g., Peru's National Tax Administration Agency (SUNAT), Costa Rica's Social Security Administration (CCSS), Argentina's Federal Administration of Public Revenues (AFIP), and Chile's Internal Revenue Service (SSI)).²⁵

These data are used to assess the impact of export promotion support on firms' export performance with the methods described in the previous section as well as some variants of these methods.²⁶ It should be noted that we therefore focus on the *direct effect* of this support, and do not evaluate it from a social welfare point of view.²⁷ Moreover, since we unfortunately do not have the required data, we cannot examine how export assistance affects other dimensions of firms' performance such as total sales or profits. For the same reason, we are not able to analyze the impact of trade promotion activities on the overall firm extensive margin (i.e., the number of exporters).²⁸ In the same vein, indirect, sometimes non-pecuniary effects from participating in export

²⁵ Thus, data on employment only cover formal employment. There is of course some risk of misreporting, which would generate measurement errors. As long as these errors are systematic across firms, they will be eliminated by the time differentiation implemented in the estimation methods used to carry out the evaluations.

²⁶ We primarily focus on the contemporaneous effects. Notice, however, that there can also be lagged effects. For instance, business contacts obtained through participation in export promotion activities such as missions and fairs may take some time to materialize into concrete sales. We find some evidence that these effects are present. Further, there may also be cumulative effects, which may be associated with self-learning and reputation building over time.

²⁷ To do so we would need to contrast the social costs implied by trade promotion policies with the social benefit they may generate. This is beyond the scope of the present study, which is limited to providing Latin American and Caribbean export promotion organizations with a set of analytical instruments to evaluate the effects of their actions.

²⁸ Among other things, this analysis would require firm-level data on variables such as total sales and/or employment for both exporters and non-exporters and a list of non-exporting firms assisted by the export promotion organizations.

promotion activities, such as fairs and missions (e.g., testing the market for product acceptance, intelligence on competitors, morale of staff, etc.), cannot be easily gauged and are not explicitly measured.²⁹ Finally, we should stress that the quantitative outcomes of the assessments are not always directly (perfectly) comparable across countries due to differences in sample periods, coverage of trade support data, and sets of control variables (see Table A4.2 in the appendix to this chapter for a description of the specific dataset used in each country), and even in specific estimation methods.³⁰ In this regard, we should note that different estimation methods needed to be used in some cases to explore specific impacts of trade promotion (e.g., average effects vs. distributional effects; continuous export outcomes vs. discrete export outcomes, etc.). Further, from an economic policy point of view, organizations operate in heterogeneous contexts and have different levels of resources and structures, including foreign offices (see Chapters 2 and 3). Hence, differences in estimated effects among organizations should be interpreted with extreme caution because these differences might be due to various factors, and it is not possible to clearly establish to what extent these various factors are driving them.

After a brief introduction describing the countries' export patterns and dynamics in recent years and characterizing their typical exporters, we next present the results of impact evaluations performed for each of

²⁹ See, e.g., Bonoma (1983); Spence (2003); and Seringhaus and Rosson (2005).

³⁰ Data availability reasons prevented us from carrying out the same analysis in all cases. For example, comparisons of different programs were only possible in the case of PROEXPORT since required data were not available for other organizations. Similarly, examination of how effects of trade promotion vary with firm size as measured by employment could not be performed for URUGUAY XXI, PROCHILE, or PROEXPORT. In the same vein, control variables vary from case to case. For instance, while we could gather data on employment and age for the entire population of Peruvian exporters, similar data could not be obtained for Colombian or Uruguayan exporters. Admittedly, this might potentially create heterogeneous risks of overestimation of the true causal effects among countries. The size of the group of beneficiaries of export promotion programs might also affect estimates, particularly in the case of PROCHILE and PROEXPORT. These organizations assist a large proportion of exporters. As a consequence, trade support-related spillovers would be more likely and, *ceteris paribus*, so might therefore be an understatement of the effects of interest. As we shall discuss below, the coverage of export assistance data, in terms of firms included and programs in which they participated, would also predictably influence estimated impacts.

the six countries.³¹ This latter part consists of a discussion of the general effects of export promotion on firms' export outcomes, which is common among cases, and an examination of its specific effects along particular dimensions (e.g., product types, firm-size categories, etc.). Technical details on the estimation procedures applied in each case can be found in the companion papers to this report as indicated in the respective sub-sections (www.iadb.org/int/ or <http://www.iadb.org/publications/search.cfm?docType=WorkingPapers>).

New Destinations and New Cargos or More of the Same Cargos to the Same Destinations?

Firms can expand their exports either along the extensive margin (i.e., increasing the number of destination countries or the number of products exported) and/or along the intensive margin (i.e., increasing exports to current destination markets or of already exported products). Products involved in this trade can be more or less complex and, in the first case, country and product markets can be entirely new or may include some with which firms have had past experience. The challenges faced by companies in these alternative scenarios are clearly diverse, and the impacts of export promotion assistance are likely to be similarly varied. Below we present the results of assessments of these potentially heterogeneous impacts based on data from Peru, Costa Rica, and Uruguay.

*Peru: Extensive Margin vs. Intensive Margin*³²

Informational obstacles can be expected to be more important when firms attempt to increase their number of destination countries or the set of products they sell abroad than when they seek to expand exports of goods they have already been trading and/or to countries that are already among their destination markets (see Chapters 1 and 3). Export promo-

³¹ Readers who are not interested in the patterns and dynamics of countries' exports may skip their description and go directly to the discussion of evaluation results.

³² This sub-section is based on Volpe Martincus and Carballo (2008).

tion programs can accordingly have varying effects across firms' export margins, i.e., on the extensive margin of exports and on the intensive margin. We focus on the case of PROMPEX (currently PROMPERU) (see Chapter 2) to shed light on this issue.

The Pattern and Dynamics of Peruvian Exports in Recent Years: Peruvian exports grew approximately 150 percent between 2001 and 2005 (see Figure 4.1). Most of this expansion was accounted for by a larger intensive margin, i.e., larger average shipments by product and country, and by more firms becoming exporters. The number of exporters increased almost 40

FIGURE 4.1 ■ Peru: Aggregate Export Indicators



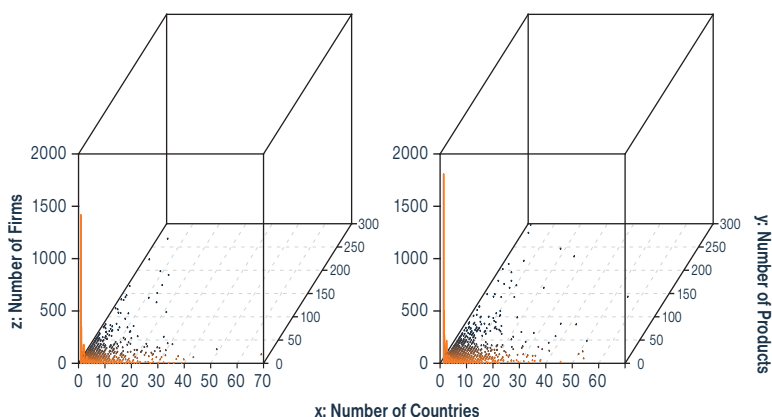
Source: Our calculations based on data from PROMPEX (currently PROMPERU).
Total exports are expressed in millions of US dollars.

percent from 2001 to 2005. The number of destinations and products exported also increased, but more moderately.

Table 4.1 characterizes the average Peruvian exporter over the sample period. The exporting firms had on average 80 employees, were 10 years old, and were mostly located in the Lima region (more than 80 percent). In recent years, both the firms' average size and average age declined due to the large number of smaller and younger firms entering international markets. The average exporter sold 7.5 products to 2.6 markets. Note that, while the average number of products grew, the average number of destination countries remained relatively stable over the five-year period we are considering. This pattern is consistent with a scenario in which many firms are starting to export to just one market, which tends to reduce the mean number of markets, and incumbent firms are increasing the number of destinations where they sell their products, which pushes in the opposite direction. Moreover, the variables capturing different dimensions of the intensive margin (average exports per product, country, and product-country) increased substantially between 2001 and 2005.

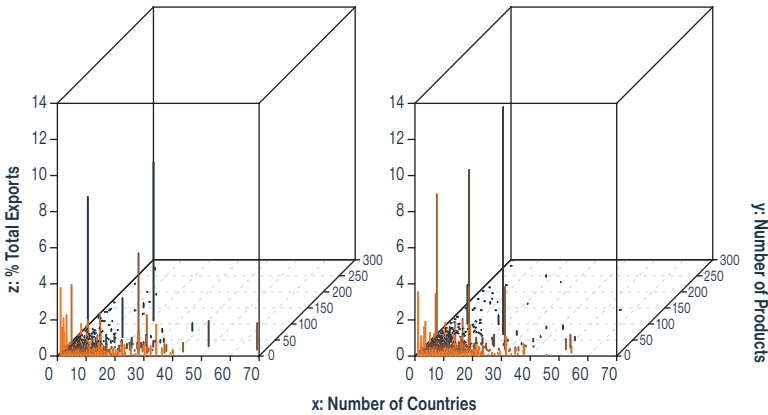
Figures 4.2 and 4.3 present the distribution of firms and their foreign sales for the initial and the final sample years, 2001 and 2005, respectively.

FIGURE 4.2 ■ Peru: Distribution of Firms across Country-Product Export Patterns (2001–left and 2005–right)



Source: Our calculations based on data from PROMPEX (currently PROMPERU).

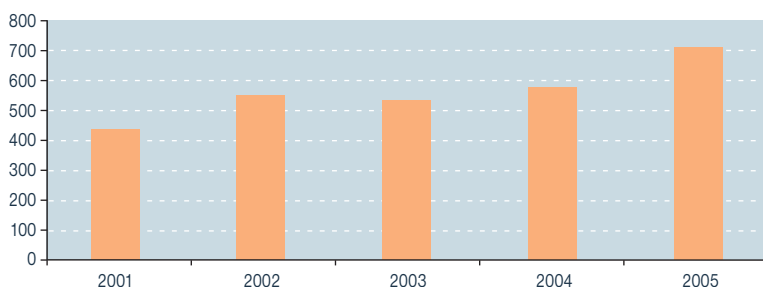
FIGURE 4.3 ■ Peru: Distribution of Export Shares across Firms with Different Country-Product Export Patterns (2001–left and 2005–right)



Source: Our calculations based on data from PROMPEX (currently PROMPERU).

Figure 4.2 clearly shows that most Peruvian firms exported just a few products to a few destination countries. In 2005 around 60 percent of the firms exported to just one country, irrespective of the number of products. Only three exporters traded with 50 countries or more (i.e., 0.05 percent of their total number). Moreover, 35 percent of the Peruvian companies only exported one product, regardless of the number of destinations. Furthermore, almost 30 percent of the exporters just sold one product to one country; almost 60 percent sold less than five products to less than five markets; and approximately 80 percent sold less than 10 products to less than 10 countries. Note that there were firms that exported relatively few products to many countries, firms that exported many products to relatively few markets, but virtually no firms that exported many products to many countries.

Figure 4.3 shows that overall exports are largely accounted for by firms whose exports are concentrated in less than 40 products and less than 40 destination countries. These firms jointly accounted for approximately 80 percent of total exports in 2005. Exporters who sold just one product to one country represented 3.5 percent of total exports, whereas firms exporting up to 10 products to up to 10 countries accounted for 24.5 per-

FIGURE 4.4 ■ Peru: Number of Exporters Assisted by PROMPEX

Source: Our calculations based on data from PROMPEX (currently PROMPERU).

cent of this total. If we only consider the number of destination countries, the share of total exports from firms that exported to just one country was 4.8 percent of total exports, while that from firms that sold to less than 10 markets was 38.9 percent. The share corresponding to firms that exported just one product to one or several countries was 7.3 percent.

The Impact of Export Promotion: PROMPEX assisted between 10 percent and 11.8 percent of the exporting companies in Peru in the years 2001 to 2005 (see Figure 4.4). Micro firms represented the largest category in this group of firms—40.5 percent in 2001 and 45.6 percent in 2005. Micro and small firms accounted for almost 70 percent of the firms served by PROMPEX during these years.³³

What have been the effects of this assistance on firms' exports? Overall estimates suggest that participation in activities performed by PROMPEX has been associated with an increased rate of growth of firms' total exports, number of destination countries, and number of products exported (see Figure 4.5). Specifically, the rate of growth of exports was 17 percent higher for firms assisted by PROMPEX, while those of the number of countries and the number of products were 7.8 percent and

³³ Four size categories are defined in terms of employment: up to 10 employees (micro), between 11 and 50 employees (small), between 51 and 200 employees (medium), and more than 200 employees (large) (see INEI, 1999).

FIGURE 4.5 ■ Peru: Average Export Assistance Effect on Assisted Firms



Source: Our calculations based on data from PROMPEX (currently PROMPERU) and SUNAT. Statistically insignificant effects are reported as zero. In all cases, an effect is reported as statistically different from zero if it is significant at the 10 percent level or less.

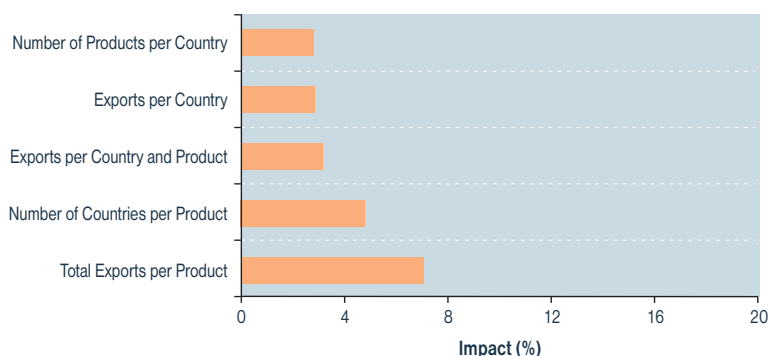
9.9 percent higher, respectively. Given a sample average annual growth rate of the number of products of 36.5 percent, the latter result implies that supported companies would have had a growth rate 3.6 percentage points higher than non-supported companies.

On the other hand, the impact on the remaining variables is weaker and evidently less robust. Export promotion only seems to stimulate greater exports per country. This might be explained by the fact that an organization can help obtain business contacts in new regions within countries that are already among firms' destination markets. However, this latter result is not as robust as the previous ones and does not survive all control exercises.³⁴

Hence, export promotion seems to have favored an expansion of firms' exports, essentially along the extensive margin. In contrast, the activities of the organizations do not seem to have had a robust significant impact on the intensive margin of exports.

The effects of trade promotion actions on firms' exports can also be assessed at a more disaggregated level, namely, on total exports per product or country, number of destination countries per product, num-

³⁴ See Volpe Martincus and Carballo (2008).

FIGURE 4.6 ■ Peru: Average Export Assistance Effect on Assisted Firms, Disaggregated Export Outcomes

Source: Our calculations based on data from PROMPEX (currently PROMPERU) and SUNAT. Statistically insignificant effects are reported as zero.

ber of products per destination country, and exports per product and destination country.³⁵ Here, results for the years examined indicate that export promotion had a positive and significant effect on all these variables (see Figure 4.6). In particular, it proved to be an effective means of expanding exports of given products through diversification of markets. The growth rate of exports per product was 7 percent higher for firms assisted by PROMPEX, and this was mainly explained by a higher growth rate of the number of countries to which these products were exported (4.8 percent). Furthermore, the growth rate of exports per product and destination country was 3.2 percent higher for firms receiving support from PROMPEX.

To Sum Up: Results from the impact evaluation exercises suggest that export promotion assistance by PROMPEX has helped Peruvian firms expand their exports, primarily along the extensive margin, both in terms of destinations and products. At the same time, no robust significant

³⁵ Whereas the estimates reported above were based on estimations performed on firm-level data, those shown below have been obtained from data at the firm-country-level, firm-product-level, and firm-product-country-level.

effect is observed on the intensive margins of exports. This pattern of results confirms our expectations, since the impacts of trade support are stronger for export activities that predictably face more serious information problems.

*Costa Rica: Differentiated Products vs. Homogeneous Products*³⁶

The degree of incompleteness of information can vary according to the nature of the goods traded. As mentioned above, differentiated goods are heterogeneous both in terms of their characteristics and their quality. This interferes with the signaling function of prices, thus making it difficult to trade these goods in organized exchanges. Therefore, it should be expected that information problems faced when trading differentiated products are more severe than those arising when trading more homogeneous goods.³⁷ Hence, the effects of export promotion support may potentially depend on the degree of differentiation of the products that the firms export. We will explore whether this is the case based on the experience of PROCOMER.

The Pattern and Dynamics of Costa Rican Exports in Recent Years: Costa Rican exports grew 63.5 percent between 2001 and 2006 (Figure 4.7). The total number of destination countries and the number of products increased over these years (9 percent and 12.2 percent, respectively), but a large fraction of this aggregate export growth was due to significant expansions along the intensive margin and the increase in the number of firms selling their products abroad (almost 40 percent from 2001 to 2006).

Table 4.2 presents a profile of the average Costa Rican exporter over the sample period. This exporter had on average 99 employees and was located in San Jose (in more than 60 percent of the cases), the capital and largest city in the country. In recent years, the average size of exporting firms declined because a larger number of smaller firms entered international markets. The average exporting firm sold 7.1 products to 3.3 countries.

³⁶ This sub-section is based on Volpe Martincus and Carballo (2010a).

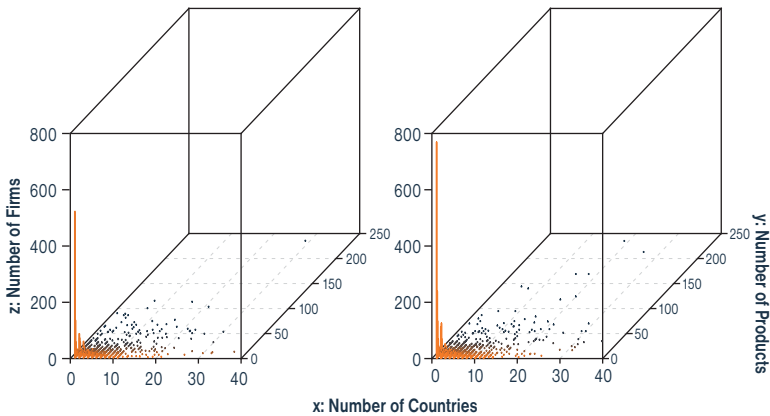
³⁷ See Rauch (1999).

FIGURE 4.7 ■ Costa Rica: Aggregate Export Indicators

Source: Our calculations based on data from PROCOMER.
Total exports are expressed in millions of US dollars.

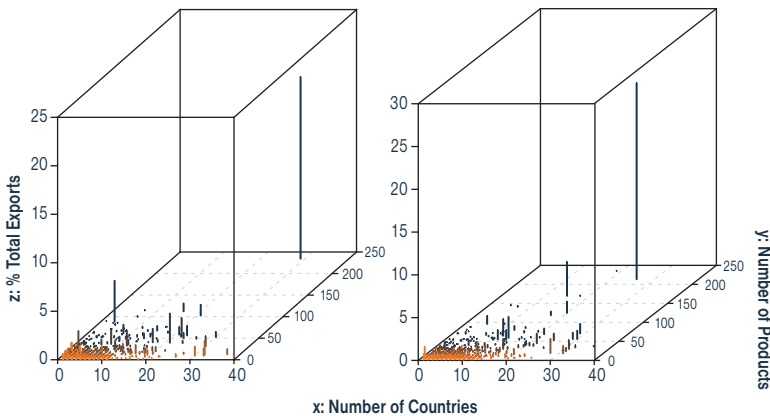
Figures 4.8 and 4.9 present the distribution of firms and their exports across country-product diversification patterns for 2001 and 2006. Figure 4.8 confirms that in Costa Rica as well, most firms exported just a few goods to a few destination markets. For example, in 2006, 46.7 percent of the firms exported to just one country, regardless of the number of products. Further, no firm exported to more than 36 countries. Moreover, 35 percent of the Costa Rican exporters just sold one product abroad, irrespective of the number of destination countries. In addition, almost 25 percent of the firms exported just one product to one country, almost 60 percent exported less than five products to less

FIGURE 4.8 ■ Costa Rica: Distribution of Firms across Country-Product Export Patterns (2001–left and 2006–right)



Source: Our calculations based on data from PROCOMER.

FIGURE 4.9 ■ Costa Rica: Distribution of Export Shares across Firms with Different Country-Product Export Patterns (2001–left and 2006–right)



Source: Our calculations based on data from PROCOMER.

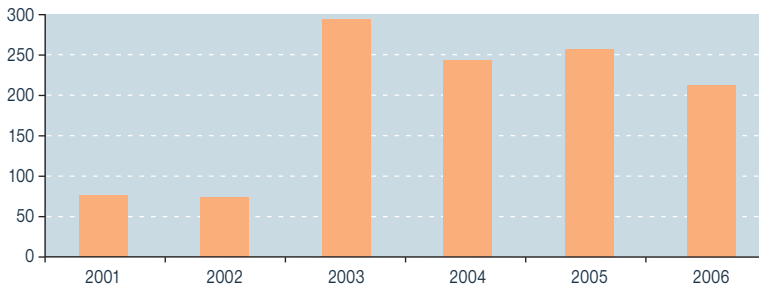
than five countries, and approximately 80 percent exported less than 10 products to less than 10 markets. These figures are remarkably similar to those observed in Peru.

Figure 4.9 shows that firms that only exported a few products to a few countries only accounted for a small fraction of the country's total exports. Thus, companies selling just one product to one destination represented 0.7 percent of total exports, whereas firms that exported up to 10 products to up to 10 markets accounted for 24.3 percent of this total. Firms that had trade relationships with one country, regardless of the number of products sold, represented 4.3 percent of Costa Rican exports, while firms that only exported one good, regardless of the number of destination countries, had a joint percentage share of 5.5 percent in these exports.

Table 4.3 reports basic average export indicators for subsets of firms exporting goods with different degrees of differentiation using the classification proposed by Rauch (1999). As such, we distinguish among homogeneous goods, which are internationally traded in organized exchanges; reference-priced goods, which are not traded in these organized exchanges but have reference prices quoted in specialized publications; and differentiated goods, which are neither traded in organized exchanges nor have reference prices, that is, prices do not convey all the relevant information for international trade on these goods.³⁸ Groups of firms are constructed that have similar export bundles: only differentiated products, only reference-priced products, only homogeneous products, and their alternative combinations. In the years shown, almost 50 percent of the firms exclusively exported differentiated goods. On average, these firms exported 4 products to 2.5 countries. Around 20 percent of the companies exported both differentiated and reference-priced goods. These companies exported an average of 14.8 products to 5.5 countries. Firms exporting only reference-priced and homogeneous products accounted for 12 percent and 8.2 percent of the total number of exporters, respectively. Firms in the former group exported 2.3 products to 2.1 countries, whereas those in the latter exported just 1.3 products to 2.9 countries. As expected, exporters of homogeneous goods registered the smallest average in terms of number of products. Finally, as expected, firms exporting

³⁸ We use the liberal version of this classification because it is more stringent in typifying goods as differentiated, which we believe is more appropriate for a developing country such as Costa Rica.

FIGURE 4.10 ■ Costa Rica: Number of Exporters Assisted by PROCOMER



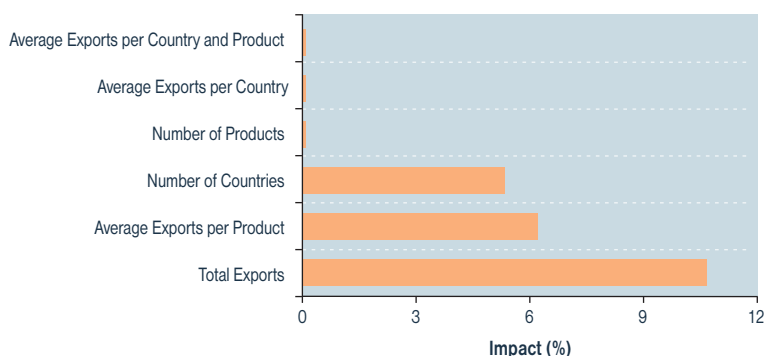
Source: Our calculations based on data from PROCOMER.

goods all across the differentiation spectrum exported more products to more countries—an average of 28.1 products to 7.1 countries.

The Impact of Export Promotion: The fraction of exporters receiving PROCOMER assistance fluctuated between 3.5 percent and 13.2 percent between 2001 and 2006, reaching 7.2 percent in the latter year (see Figure 4.10). Micro and small firms represented the largest category in the group of firms assisted by PROCOMER—48.8 percent over the sample period.³⁹ Whereas firms that only exported differentiated products (both differentiated and reference-priced products) accounted for more than 30 percent (almost 60 percent) of the total number of PROCOMER-supported exporters, firms that only exported homogeneous products represented only 6.3 percent of this total.

According to the aggregate results of the impact evaluation, trade support was on average associated with an increased rate of growth of exports and number of destination countries (see Figure 4.11). But on the contrary, with the exception of an effect on average exports per product, trade promotion actions do not seem to have had a significant impact on the

³⁹ Four size categories are defined in terms of employment: up to 5 employees (micro), between 6 and 30 employees (small), between 31 and 100 employees (medium), and more than 100 employees (large) (see CCSS, 2007).

FIGURE 4.11 ■ Costa Rica: Average Export Assistance Effect on Assisted Firms

Source: Our calculations based on data from PROCOMER and CCSS.
 Statistically insignificant effects are reported as zero.

intensive margin of firms' exports.⁴⁰ As with the case of Peru, these results are consistent with our expectations. Export promotion activities aimed at reducing information problems are likely to have, and appear to have, a stronger effect when these problems are greater, namely, when enlarging the set of destination countries, rather than when expanding operations in countries that are already destination markets for the companies.

As discussed above, the impact of export promotion may vary depending on the degree of differentiation of the goods exported. Thus, firms are accordingly grouped according to the same export bundles, as defined in terms of type of goods, and the effects of trade support are then assessed for each of these groups. Disaggregated estimates indicate that firms already exporting only differentiated goods that participated in promotion activities organized by PROCOMER had higher rates of growth of exports and number of destination countries than did firms that were not assisted (see Figure 4.12). More specifically, the rate of growth of exports was on average 15.3 percent higher for firms assisted

⁴⁰ The positive effect of trade promotion on firms' average exports per product is statistically weak, being marginally significant at the 10 percent level (see Volpe Martincus and Carballo, 2010a).

FIGURE 4.12 ■ Costa Rica: Average Export Assistance Effect on Assisted Firms by Type of Products



Source: Our calculations based on data from PROCOMER and CCSS.

Effects on outcomes of firms that export alternative combinations of the different types of goods are not significant. Statistically insignificant effects are reported as zero.

by PROCOMER, while that of the number of countries was 8.5 percent higher. Given a sample average annual growth rate of the number of countries of 4.6 percent, this implies that supported companies would have had a rate 0.4 percentage points higher than non-supported counterparts. Hence, export promotion actions seem to have favored an expansion of exports of those firms already selling differentiated goods abroad, primarily facilitating an increase in the number of trading partners.⁴¹ In contrast, assistance by PROCOMER does not seem to

⁴¹ It should be noted, however, that PROCOMER assistance does not seem to have encouraged firms already active in international markets to start exporting differentiated goods. As seen in Chapter 2, PROCOMER has six programs within a broad area of services aiming to develop an export culture and strengthening the competitiveness of national exports. Only one of them is specifically focused on helping firms to compete through differentiation (PIVA: Programa de Impulso al Valor Agregado – Value Added Impulse Program). While these six programs jointly represent less than 4 percent of PROCOMER's budget, standard export promotion activities such as sponsorship of participation in trade missions and fairs, which are more likely to help exporters acquire new trading partners, accounted for more than 15 percent of this budget. PIVA is a small scale program in which only 23 entrepreneurs participated in 2007. Görg et al. (2008) have shown that, when assistance is not large enough, it may not result in expanded export activities in international markets.

have translated into higher export growth either on the intensive or on the extensive margin for firms that only exported reference-priced or homogeneous products, which is where limited information is less likely to function as a trade barrier.⁴²

To Sum Up: The effects of export promotion actions can be expected to be greater for export operations *and* goods traded that encounter more serious information problems. In particular, the evidence presented above suggests that trade support provided by PROCOMER was only associated with increased exports for Costa Rican firms that were already selling differentiated goods abroad, and this primarily along the country-extensive margin.

*Uruguay: Entering New Destination Countries and Incorporating New Export Products?*⁴³

So far we have not strictly evaluated the direct impact of export promotion programs on the probability that a firm will add an entirely new destination country or introduce a completely new export product into its export business activities. Note that this is not necessarily the same as an overall increase in the number of markets in which firms operate, as in the Peruvian case, since such an increase might just as well result from simultaneously adding several markets and dropping others, potentially including some that could have been served in the past.⁴⁴ In explicitly taking into account the discrete choice nature of the decision to enter new markets, such an evaluation mentioned above can provide valuable additional insights into

Hence, in addition to the role that supply factors may play, the aforementioned finding might at least be partially related to the fact that PROCOMER did not have a large enough program to support exporters in competing through differentiation.

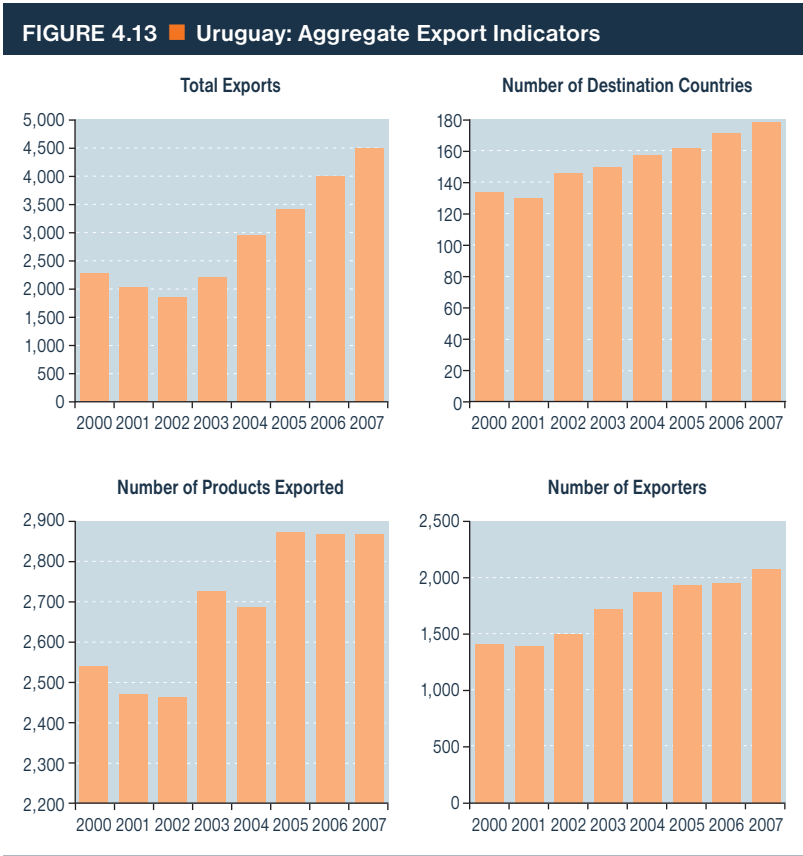
⁴² While there are some additional significant effects, these results are not consistently observed across robustness checking exercises.

⁴³ This sub-section is based on Volpe Martincus and Carballo (2010b).

⁴⁴ In fact, in Uruguay only about 30 percent of the exporting companies registering expansions in the number of destination countries and products exported penetrated a new market between 2001 and 2007.

how trade promotion actions specifically affect the extensive margin of firms' exports and therefore their overall export performance, including their ability to survive in foreign markets. We now do so considering the case of URUGUAY XXI.

The Pattern and Dynamics of Uruguayan Exports in Recent Years: Uruguayan exports grew almost 100 percent between 2000 and 2007 (see Figure 4.13). As in countries previously analyzed, this growth can be primarily traced to significant expansions along the intensive margin, but also along the extensive margins. Thus, the number of firms selling their products abroad



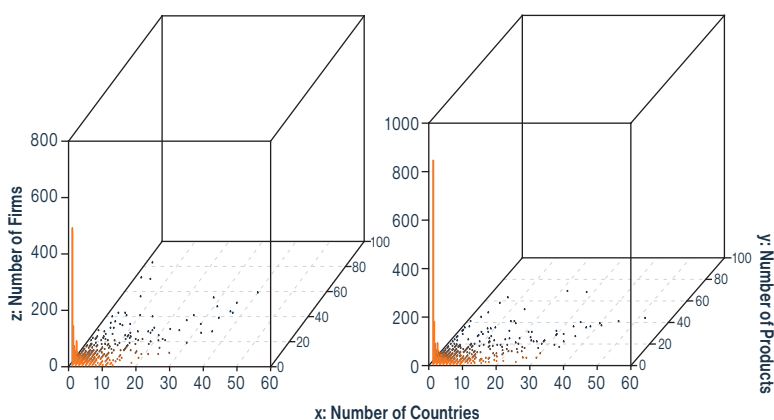
Source: Our calculations based on data from URUGUAY XXI.
Total exports are expressed in millions of US dollars.

rose 46.6 percent over this period, whereas the total number of destination countries and of products also rose over these years, by 32.8 percent and 13 percent, respectively.

Table 4.4 characterizes the average Uruguayan exporter in the period 2000–2007. This representative firm had total exports of around US\$1.7 million and sold 4.4 products to 3 countries. Average exports and number of destination countries increased over recent years, whereas the opposite held for average number of products.

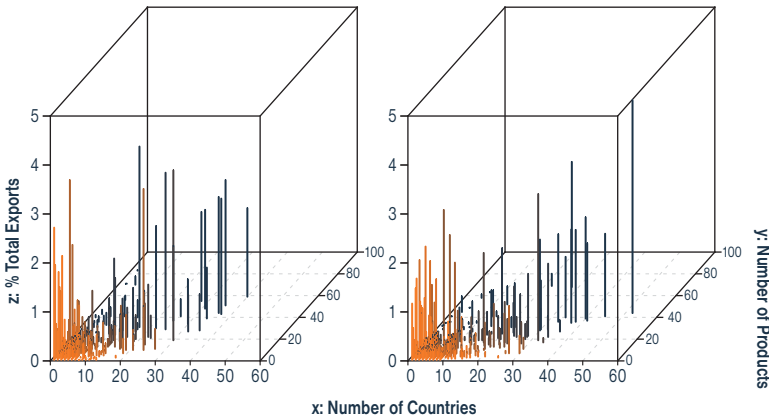
In accord with previous case studies, Figures 4.14 and 4.15 reveal that most exporters sold a small number of products in a small number of countries. As shown in Figure 4.14, 40.3 percent of these firms shipped only one good to one destination country and more than 70 percent (about 90 percent) shipped less than five goods to five countries (up to 10 products to up to 10 markets). Along the country extensive margin, roughly 60 percent of the exporting companies traded with just one country and only one exported to more than 50 countries (as in Peru, this amounted to 0.05 percent of the total number of firms active in foreign markets). On the product side, 46.5 percent of the exporters sold one product abroad and the maximum number a firm registered in 2007 was 69.

FIGURE 4.14 ■ Uruguay: Distribution of Firms across Country-Product Export Patterns (2000–left and 2007–right)



Source: Our calculations based on data from URUGUAY XXI.

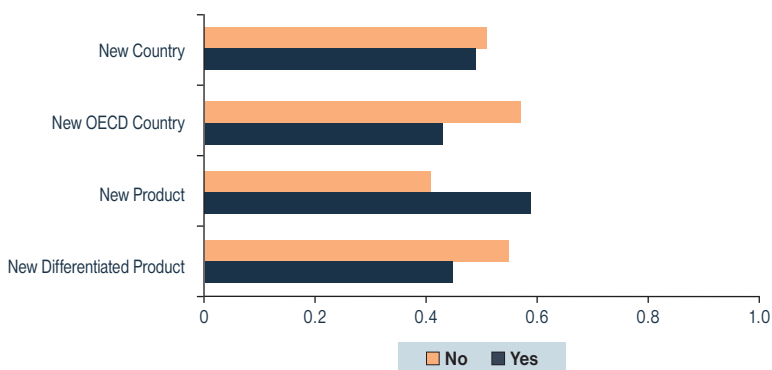
FIGURE 4.15 ■ Uruguay: Distribution of Export Shares across Firms with Different Country-Product Export Patterns (2000–left and 2007–right)



Source: Our calculations based on data from URUGUAY XXI.

Again with the case of Uruguay, as shown in Figure 4.15, even large numbers of firms selling a few goods to a few countries only accounted for small shares of the country’s total exports. Thus, exports of companies trading one good to one country together represented only 1.2 percent of Uruguay’s external sales, whereas those that shipped up to 10 products to up to 10 destinations accounted for approximately 32 percent of these sales. Firms that were present in only one foreign market, regardless of the number of products traded, together represented 2.7 percent of total exports. The joint percentage share reached 4.8 percent when adding foreign sales of companies with only one product exported, regardless of the number of destination countries.

Figure 4.16 shows the shares of firms that add new destination countries and new export goods between 2000 and 2007. Over this period, 50 percent of Uruguayan firms began exporting to a new country. Information barriers to entry are likely to differ across countries. It could be expected that these barriers would be higher in more sophisticated markets, such as the OECD countries. Uruguayan data accordingly indicate that only 43 percent of the companies incorporated a new OECD country

FIGURE 4.16 ■ Uruguay: Proportion of Exporters Entering New Export Markets

Source: Our calculations based on data from URUGUAY XXI.

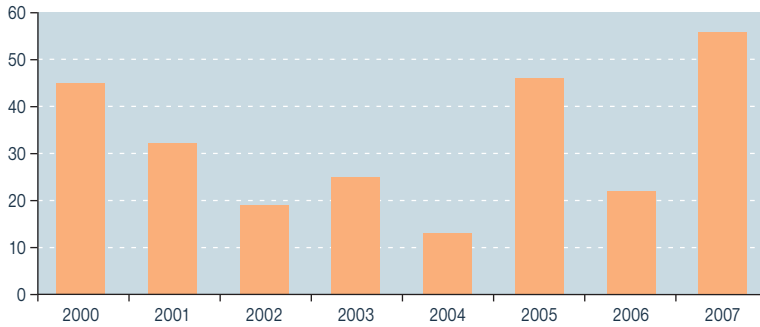
The figure reports the percentage share of Uruguayan exporters that entered new country, new OECD country, new product, and new differentiated product export markets over the sample period.

among their export destinations over the period referred to above. On the other hand, almost 60 percent of the firms introduced a new export product. As with countries, trade of different goods faces obstacles of varying degrees of severity, which, as seen above, are correlated with their degree of differentiation. The proportion of firms that added a new differentiated product, as defined using the classification proposed by Rauch (1999), was significantly smaller than that for products overall (45 percent vs. 59 percent).⁴⁵

Impact of Export Promotion: The share of Uruguayan exporters that had received support fluctuated around 2 percent over the sample period (see Figure 4.17). We should note that the numerator of this share primarily includes firms that interacted closely with URUGUAY XXI on a face-to-face basis. Typical cases are companies that participated in international

⁴⁵ In this case as well, the liberal version of the classification has been used because it is more stringent in typifying goods as differentiated, which is more appropriate for a developing country such as Uruguay.

FIGURE 4.17 ■ Uruguay: Number of Exporters Assisted by URUGUAY XXI

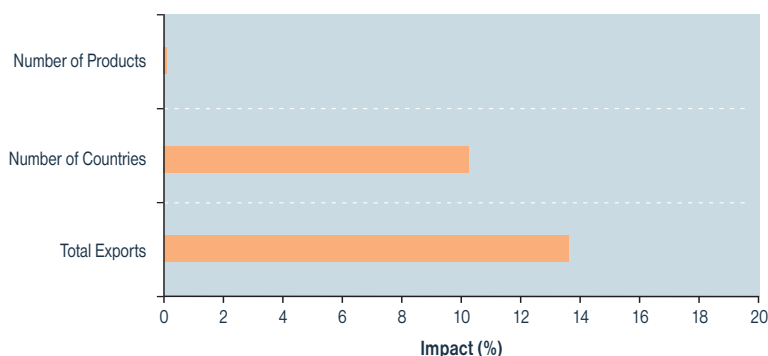


Source: Our calculations based on data from URUGUAY XXI.

fairs and missions, potentially including those taking part in complementary training activities.⁴⁶ Given that support involves a subset of actions more likely to lead to foreign sales in the short term (as opposed to other promotion initiatives, such as the provision of generic information), in this case estimated effects reported below should be more properly interpreted as an upper bound on the true impact of export promotion.

The results of the assessment indicate that this support seems to have helped Uruguayan firms expand their exports, primarily along the country-extensive margin. In particular, the rate of growth of exports was 14 percent higher for firms assisted by URUGUAY XXI, while that of the number of destination countries was 10.3 percent higher (see Figure 4.18). Thus, the average annual growth rate of the number of countries of 2.8 percent implies that firms participating in trade promotion programs would have had a rate 0.3 percentage points higher than non-participating firms. As before, these programs had stronger effects when information problems are greater, specifically in increasing the number of destination markets.

⁴⁶ Thus, for instance, firms that merely visited the organization's website to access public reports on foreign trade or simply requested specific information (e.g., the tariff on a given good) via phone calls or e-mails are not identified as assisted firms. Unfortunately, data on this kind of assistance are not consistently available over the sample period.

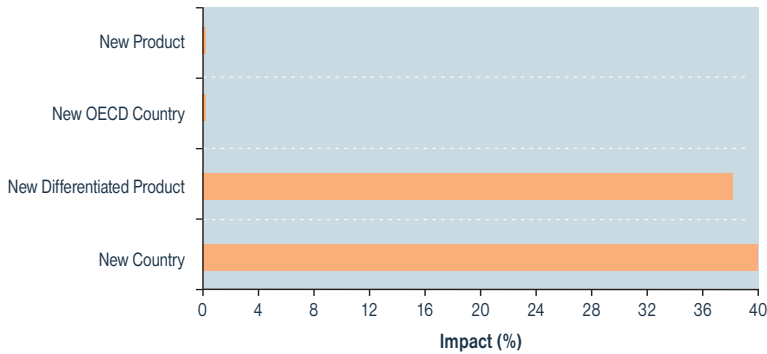
FIGURE 4.18 ■ **Uruguay: Average Export Assistance Effect on Assisted Firms**

Source: Our calculations based on data from URUGUAY XXI.
 Statistically insignificant effects are reported as zero.

We next turn to the specific effects of support on the probability of adding a completely new country or product market. Estimates suggest that support had a positive and significant impact on the probability of adding a new country—40 percent higher for firms supported by URUGUAY XXI (see Figure 4.19). As stated above, this point estimate is likely to represent the upper limit of the real impact of trade promotion.

Specifically, export assistance had an insignificant impact on the probability that a firm would enter a new OECD country, although this assistance seemed to have been effective in helping firms penetrate non-OECD country markets. In fact, the assistance effect on assisted firms was 41 percent when the outcome variable is the probability of incorporating a new non-OECD country. Interestingly, results from separate estimations for non-OECD Latin American and Caribbean countries and their counterparts outside of the region indicate that positive significant impacts are only observed in the former case. Even though search costs stemming from deficient communication and transport infrastructure are clearly high in Latin America and the Caribbean, these costs are likely to be smaller than those involved in trading with more sophisticated markets, such as the OECD countries. If this is the case, then these results would imply that trade support seems to have contributed to overcoming the

FIGURE 4.19 ■ Uruguay: Export Assistance Effect on the Probability of Entering New Country and Product Markets



Source: Our calculations based on data from URUGUAY XXI.
Statistically insignificant effects are reported as zero.

non-trivial obstacles affecting entry into regional markets, but it was not effective enough to help firms cope with the more serious information problems faced when attempting to start operating in markets of developed countries.

Export promotion assistance does not seem to have had any impact on the probability that a firm would add new products in general. This can be explained by the fact that, when no distinction is made among goods whose trade involves information problems of varying severity, effects of export support actions of varying intensity (strong for differentiated products as referred to above and weak or null for homogeneous products) are likely to be mixed. This is confirmed when focusing just on differentiated goods. In this case, the impact was positive and significant: the assistance effect on assisted firms was 38.2 percentage points, i.e., the probability of introducing these goods was 38.2 percent higher for firms participating in trade promotion programs.

To Sum Up: URUGUAY XXI's support for export activities seems to have been effective in helping Uruguayan firms penetrate new destination countries, especially Latin American and Caribbean markets, and introduce new differentiated products.

Are All Ships the Same? The Different Effects of Trade Promotion Programs on Different Firms

Obstacles faced when operating in foreign markets are different for firms of different sizes and different degrees of export involvement.⁴⁷ In particular, barriers to becoming successful players in these markets tend to be greater for firms that are smaller and have limited exporting experience.⁴⁸ This is particularly the case for information-related obstacles.⁴⁹ Public programs aimed at addressing such information problems can therefore be expected to have varying effects for different groups of companies. Specifically, these impacts are predictably stronger for smaller firms with less export experience. Further, policymakers are generally interested in the distributional impacts of such public programs, and smaller firms are the declared main beneficiaries of these public interventions. Therefore, insights into the impacts mentioned above are valuable for assessing whether the overall program mix is well targeted in the sense that benefits are primarily accruing to the intended beneficiaries, thus serving as a guide for allocation of scarce resources among alternative programs. We next discuss the evidence on these effects based on the experiences of PROCHILE and EXPORTAR.

*Small Exporters vs. Large Exporters*⁵⁰

If trade promotion activities have heterogeneous impacts for firms with different sizes and at different stages of their internationalization process, this should be reflected in non-uniform effects over the distribution of their relevant export outcomes. This sub-section explores these potentially asymmetric effects by assessing the programs managed by PROCHILE.

⁴⁷ See, e.g., Diamantopoulos et al. (1993); Naidu and Rao (1993); Czinkota (1996); and Moini (1998).

⁴⁸ See, e.g., Naidu and Rao (1993); Roberts and Tybout (1997); Wagner (2001); Bernard and Jensen (1999, 2004).

⁴⁹ See Kneller and Pisu (2007).

⁵⁰ This sub-section is based on Volpe Martincus and Carballo (2010c).

FIGURE 4.20 ■ Chile: Aggregate Export Indicators



Source: Our calculations based on data from PROCHILE.
Total exports are expressed in millions of US dollars.

The Pattern and Dynamics of Chilean Exports in Recent Years: Chilean exports increased 221.6 percent between 2002 and 2006 (see Figure 4.20). The total number of destination countries and the total number of products grew only slightly over these years (4.4 percent and 2.4 percent, respectively), while the number of firms selling their products abroad rose moderately, almost 14 percent from 2002 to 2006. Thus, as in cases previously described, most of the export growth took place along the intensive margin.

Tables 4.5 and 4.6 show the average Chilean exporter and the distribution of each export outcome variable and total sales in terms of their own deciles over the period 2002–2006, respectively. The average

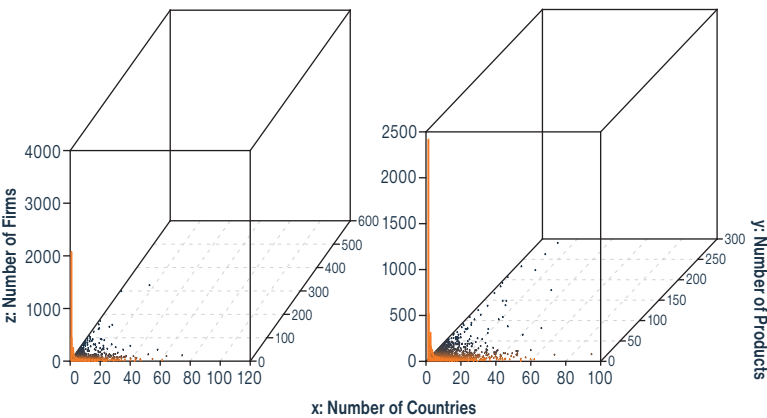
exporter shipped 5.2 goods to 3.4 countries and its total exports were roughly US\$5 million. The median Chilean exporter (fifth decile), instead, is a PyMEX selling two products abroad, to just one country, for approximately US\$50,000.⁵¹ These differences between mean and median are indicative of a highly asymmetric distribution of exports across companies. Firms in the first four deciles exhibit the same diversification patterns both in terms of countries and products, i.e., they exported only one good and to only one country. However, total exports registered a tenfold increase from the first to the fourth decile. Average exports behaved similarly. This implies that in this part of the distribution, export expansion primarily occurred along the intensive margin. In the ninth decile total sales were higher than US\$12.5 million and total exports exceeded US\$2.5 million, while the corresponding numbers of destination countries and products were 8 and 11, respectively. Note that the ratio of the ninth decile to the first decile of total exports was 1,218.5.

Figures 4.21 and 4.22 break down firms and their exports across country-product diversification patterns for 2002 and 2006. In accord with what has been observed in the other countries, the largest portion of Chilean firms exported just a few products to a few countries (see Figure 4.21). For example, in 2006, around 50 percent of the firms exported to just one country, regardless the number of products. Further, eight Chilean exporters traded with more than 50 countries; these companies represented 0.1 percent of the total number of exporters. Furthermore, 43.7 percent of the firms exported just one product to one country, 66.7 percent less than five products to less than five countries, and 83 percent less than 10 products to less than 10 markets. In these figures, the main diagonal is almost empty, meaning that only a few firms exported many products to many countries.

Most exports are accounted for by firms that concentrated in relatively few products (see Figure 4.22). Firms that exported less than 25 products represented almost 95 percent of total exports in 2006. We

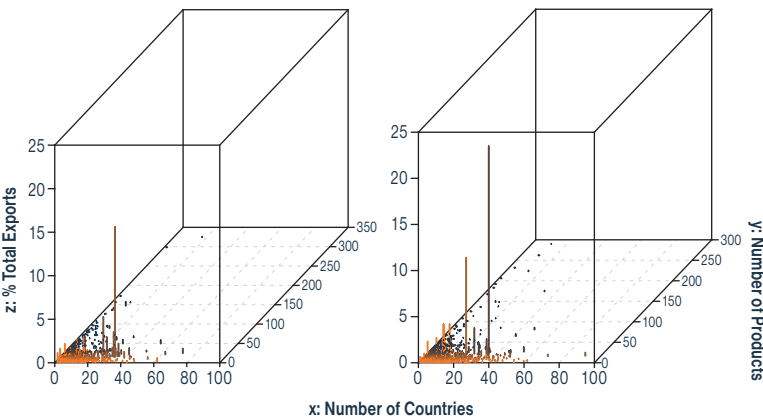
⁵¹ Four size categories are defined in terms of sales: micro firms (US\$0 to US\$60,000); PyMEX, i.e., small and medium-size exporters (US\$60,001 to US\$7,500,000); medium large firms (US\$7,500,001 to US\$12,500,000); and large firms (US\$12,500,001 and up).

FIGURE 4.21 ■ Chile: Distribution of Firms across Country-Product Export Patterns (2002–left and 2006–right)



Source: Our calculations based on data from PROCHILE.

FIGURE 4.22 ■ Chile: Distribution of Export Shares across Firms with Different Country-Product Export Patterns (2002–left and 2006–right)



Source: Our calculations based on data from PROCHILE.

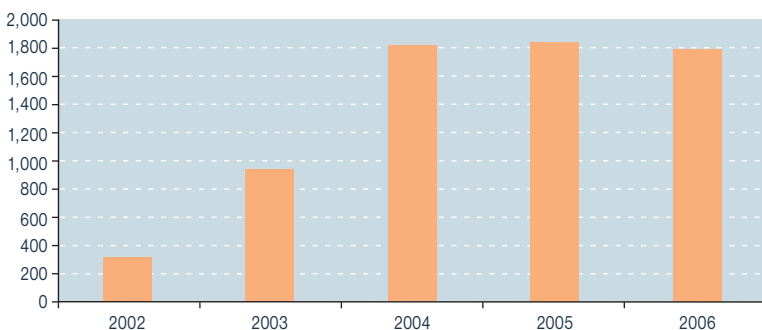
note in passing that the joint share corresponding to firms that exported just one product to one or several countries was 4.8 percent, while that of firms exporting less than 10 products was 43.7 percent of this aggreg-

gate. In particular, exporters that sold just one product to one country represented 0.6 percent of total exports, whereas firms exporting up to 10 products to up to 10 countries accounted for 11.2 percent of this total. The joint share of total exports of firms that exported to just one country was 1.6 percent of total exports, whereas that of firms that sold to less than 10 destination markets was 14.5 percent, in both cases regardless of the number of products.

The Impact of Export Promotion: The fraction of exporters who received assistance from PROCHILE increased from 5 percent to almost 30 percent between 2002 and 2006 (see Figure 4.23). The PyMEXs represented the largest category in this group of firms. Specifically, the share of these firms ranged between 60.7 percent and 64.8 percent over the period.

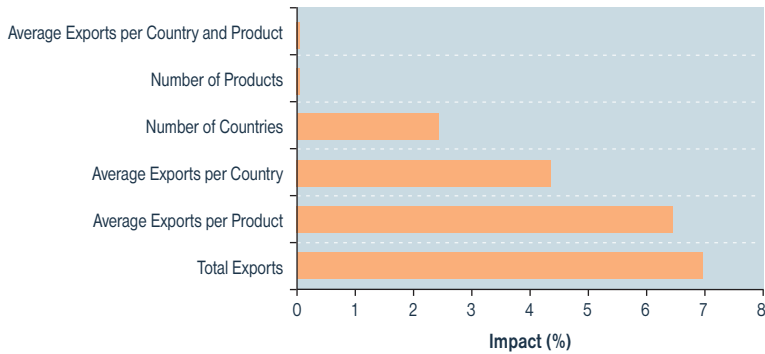
Impact estimates suggest that, on average, export promotion assistance seems to have had significant positive effects on the growth of total exports as well as on their extensive margin, especially in terms of destination countries. Thus, the rate of growth of exports was on average 7 percent higher for firms assisted by PROCHILE, while the rate of growth of the number of countries was on average 2.5 percent higher (see Figure 4.24). Given a sample average annual growth rate of total exports of 13.3 percent, assisted firms would have had a rate 0.9 percentage points higher than non-assisted firms. PROCHILE's trade promotion actions also

FIGURE 4.23 ■ Chile: Number of Exporters Assisted by PROCHILE



Source: Our calculations based on data from PROCHILE.

FIGURE 4.24 ■ Chile: Average Export Assistance Effect on Assisted Firms



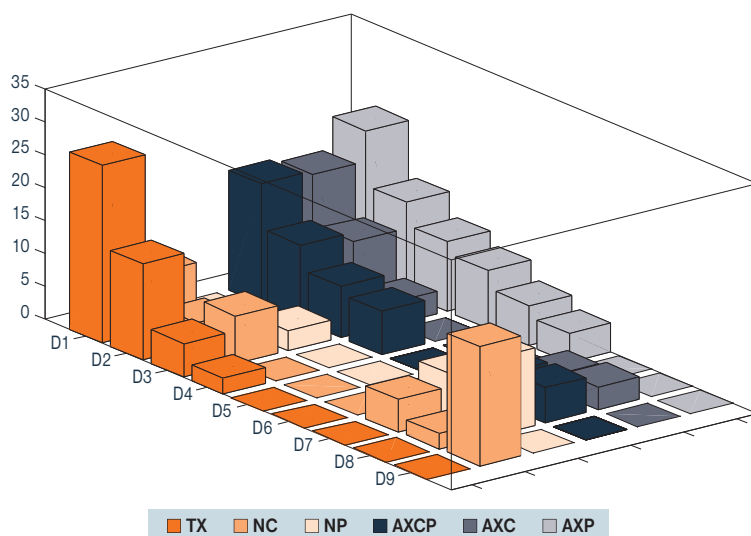
Source: Our calculations based on data from PROCHILE.
Statistically insignificant effects are reported as zero.

appear to have had a significant impact on the intensive margin of firms' exports by stimulating larger foreign sales per destination country and per product. Here, the rate of growth of average exports per country and that of average exports per product were 4.4 percent and 6.5 percent higher for supported companies, respectively. As mentioned above, this finding might be explained by the fact that trade promotion organizations can help firms obtain new business contacts in regions other than those to which they are exporting within countries that they are already serving.

Evidence presented so far has dealt with average effects, which may hide significantly different impacts for different groups of firms. In particular, this evidence does not reveal where in the distribution of export outcomes support from PROCHILE has had the greatest effects. We now examine these distributional impacts.

Results of group-specific estimations indicate that, in the case of total exports, trade promotion programs have had a significant impact on the lower tail of the distribution, i.e., in the first to fourth deciles (see Figure 4.25). The impact was the strongest in the lowest decile, and it monotonically decreased from the second to the fourth deciles. Moreover, significant effects were observed in both tails of the distribution (first to third and seventh to ninth deciles) of the growth rate of the number of

FIGURE 4.25 ■ Chile: Export Assistance Effect on Assisted Firms by Export Outcome Deciles



Source: Our calculations based on data from PROCHILE.

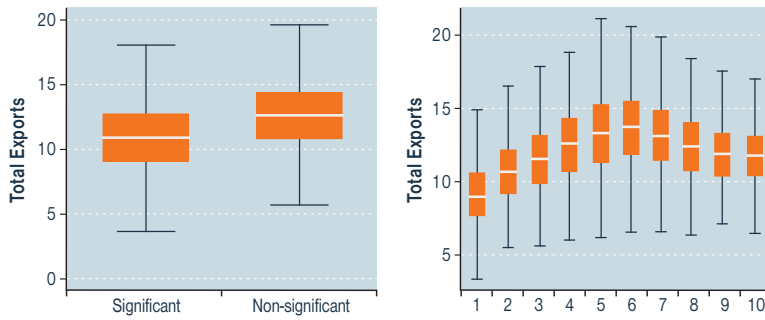
TX: total exports; NC: number of countries; NP: number of products; AXCP: average exports per country and product; AXC: average exports per country; AXP: average exports per product. Deciles are defined in terms of growth rates of these variables. Statistically insignificant effects are reported as zero.

countries. Furthermore, while the average assistance effect on the number of products was virtually zero, significant positive impacts were identified in specific parts of the relevant distribution. As with the case of the number of countries, these impacts were concentrated in the lower and upper ends of the distribution (second to third and seventh to eighth deciles).

In order to exactly identify which kinds of firms were benefiting from these programs, we looked back at the export levels of the different groups of firms.⁵² The distribution of exports for the set of firms with significant impacts is below that for the set of firms with no significant impacts (see

⁵² We estimated the distributions of firms' total (lagged) exports both aggregating over deciles of the distribution of their growth rates where significant and non-significant effects of trade promotion have been found, and for each decile of the distribution of first-differentiated total exports. These distributions are graphed as box plots in Figure 4.26.

FIGURE 4.26 ■ Chile: Distribution of Exports over Significance Groups and Deciles Defined in Terms of Export Growth



Source: Our calculations based on data from PROCHILE.

Figure 4.26, left). More interestingly, the distribution of exports for the (two) group (groups) of firms where the strongest effects were detected is clearly located below those for the groups of firms where weaker or no significant effects were registered (see Figure 4.26, right). This clearly indicates that smaller exporters benefited proportionally more from trade promotion activities than did larger exporters.

We can also conclude that companies at the lower end of the distribution of intensive margin indicators (average exports per country, average exports per product, and average exports per country and product) benefited the most from export promotion actions. Thus, trade promotion programs seem to have fostered a more balanced export growth path across firms along this dimension.

To Sum Up: Firms with different levels of export experience face different barriers in their exporting activities, have accordingly different needs in terms of assistance, and are therefore likely to derive different benefits from given trade support actions. Evidence based on the programs managed by PROCHILE indicates that their effects have been greater for smaller, relatively inexperienced firms as measured by their (lagged) total exports, i.e., those companies that face the greatest challenges in overcoming informational barriers.

*Small Firms vs. Large Firms*⁵³

Effects of export assistance actions can be expected to differ not only depending on previous export involvement as measured by companies' past exports, but can also be predictably heterogeneous across firm size categories as conventionally defined in public policy, that is, in terms of number of employees. We focus on the Argentine case to examine this issue.

The Pattern and Dynamics of Argentine Exports in Recent Years: Exports grew approximately 81 percent in Argentina between 2002 and 2006 (see Figure 4.27). Even though there were increases in the number of destination countries and the number of products exported, most of this expansion was accounted for by a larger intensive margin, i.e., larger average shipments per product and country. The number of exporters rose 19.2 percent from 2002 to 2006.

Table 4.7 characterizes the average Argentine exporter over the sample period. This exporter had on average 92 employees and exported 9.2 products to 3.6 countries. Approximately, 40 percent of the exporting companies were officially located in the city of Buenos Aires.

Figures 4.28 and 4.29 represent the distribution of firms and their exports for 2002 and 2006. As with other countries in the region, most exporters exported a few goods to a few countries (see Figure 4.28). Some 80 percent of the exporters traded up to 10 products to up to 10 countries and about 24 percent of the firms exported just one good to one external market. Further, 47.6 percent of the exporting companies traded with only one country and 29.4 percent shipped only one product abroad. In contrast, the fewer number of firms with more diversified export patterns along both the country and product dimensions accounted for the largest shares of Argentina's total exports. For example, in 2006, the 663 companies that exported more than 10 products to more than 10 countries represented 67.5 percent of aggregate exports as reported in the dataset. Firms trading with only one country jointly accounted for 2.5 percent of these exports, whereas those just selling one good abroad, 3.7 percent.

⁵³ This sub-section is based on Volpe Martincus et al (2010).

FIGURE 4.27 ■ Argentina: Aggregate Export Indicators



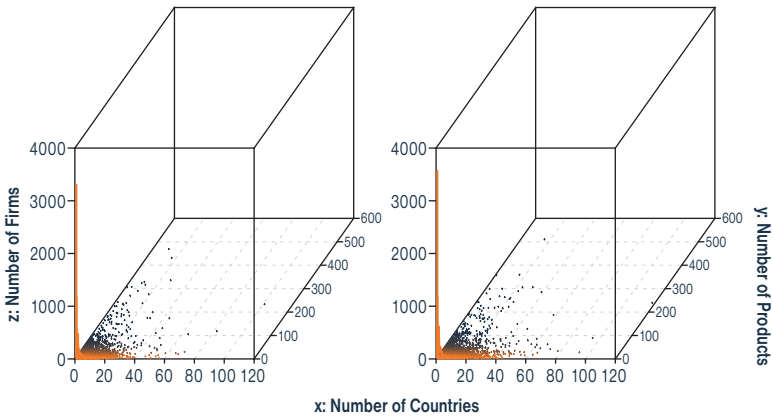
Source: Our calculations based on data from UMCE-SICP, EXPORTAR, and AFIP.
Total exports are expressed in millions of US dollars.

Table 4.8 presents basic figures on the relationship between size and exports at the firm-level for Argentina. This table breaks down export and assistance indicators into three size categories defined in terms of employment: up to 50 employees (small), between 51 and 200 employees (medium), and more than 200 employees (large).⁵⁴ As expected, on average, large firms exported more (US\$36 million), and exported more products (31) to more countries (11).⁵⁵ These firms together accounted for

⁵⁴ This is the standard classification used in the literature (see, e.g., Álvarez, 2004; Holtenstein, 2005; and Observatorio PyME, 2008).

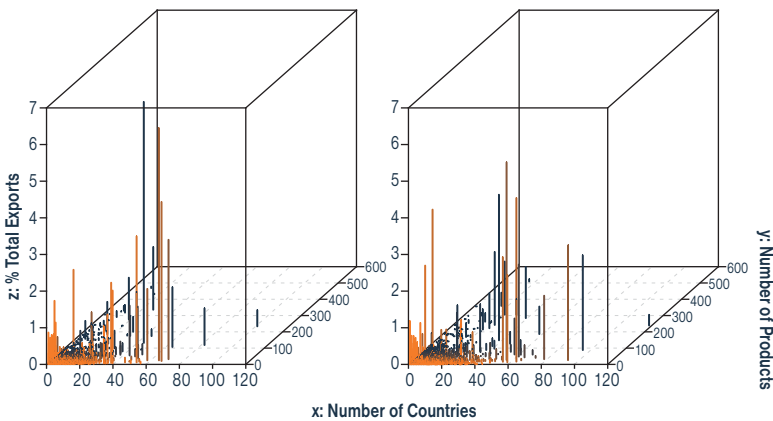
⁵⁵ This adds to the evidence reported in the empirical international trade literature suggesting that larger firms are more likely to export (see, e.g., Roberts and Tybout, 1997;

FIGURE 4.28 ■ Argentina: Distribution of Firms across Country-Product Export Patterns (2002–left and 2006–right)



Source: Our calculations based on data from UMCE-SICP, EXPORTAR, and AFIP.

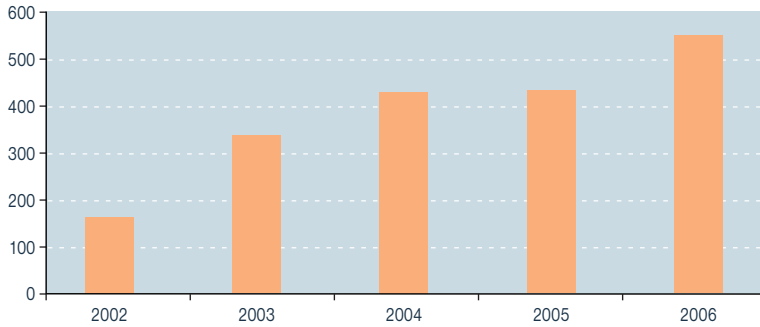
FIGURE 4.29 ■ Argentina: Distribution of Export Shares across Firms with Different Country-Product Export Patterns (2002–left and 2006–right)



Source: Our calculations based on data from UMCE-SICP, EXPORTAR, and AFIP.

Bernard and Jensen, 2004), tend to export more (see, e.g., Görg et al., 2008), and have a higher export intensity (see, e.g., Barrios et al., 2003).

FIGURE 4.30 ■ Argentina: Number of Exporters Assisted by EXPORTAR



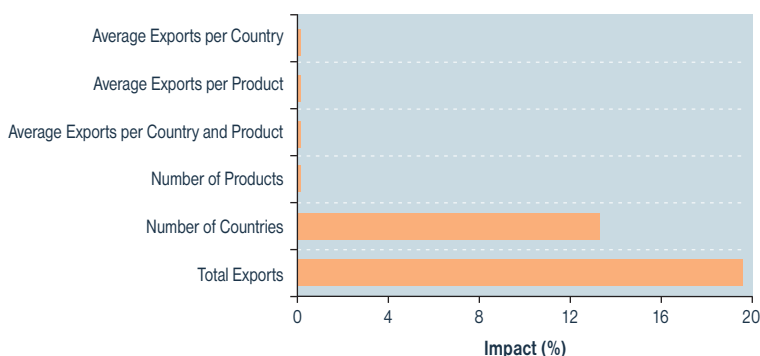
Source: Our calculations based on data from EXPORTAR.

more than 75 percent of aggregate exports. In turn, small firms represented approximately 73 percent of the exporters. These firms exported, on average, 6.5 products to 2.6 countries for approximately US\$380,000, and their exports jointly accounted for 7.8 percent of Argentina's total exports.

The Impact of Export Promotion: Considering only those firms that have worked closely with EXPORTAR (a criterion similar to that used in the case of URUGUAY XXI), the proportion of exporters assisted increased from 1.5 percent to 4.2 percent over the period (see Figure 4.30).⁵⁶ Small firms represented the largest category in this group of firms—56.1 percent in 2002 and 59 percent in 2006. As a group, small and medium-size firms accounted for more than 80 percent of the firms supported by this organization between 2002 and 2006.

Overall impact estimates suggest that participation in export promotion programs managed by EXPORTAR has been linked to an increased rate of growth of firms' total exports, number of countries to which the firms export, and number of products exported. In our analysis, the rate of growth of exports was 14.1 percent higher for firms assisted by EXPORTAR, while the rates of growth of the number of countries and

⁵⁶ Similar qualifying comments on the interpretation of estimated impacts also apply in this case.

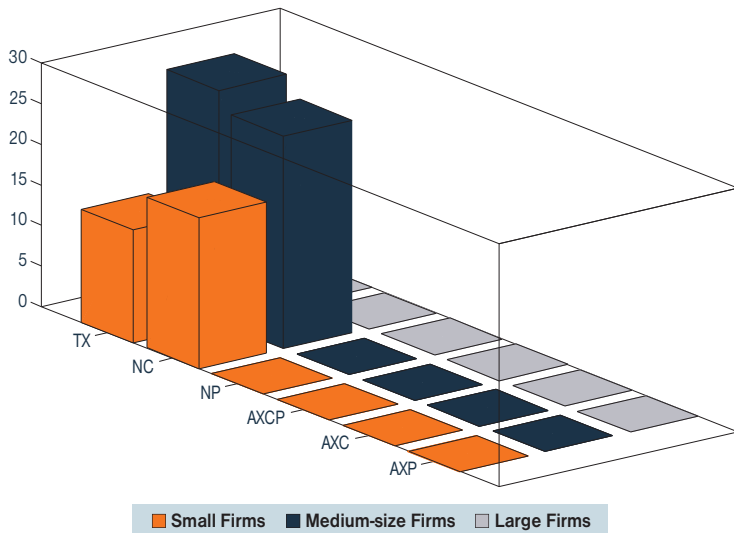
FIGURE 4.31 ■ **Argentina: Average Export Assistance Effect on Assisted Firms**

Source: Our calculations based on data from UMCE-SICP, EXPORTAR, and AFIP.
Effects correspond to first-time assistance. Statistically insignificant effects are reported as zero.

the number of products were 10.4 percent and 9.7 percent higher, respectively. When restricted to firms being helped for the first time, these effects were 19.4 percent, 13.1 percent, and 0.0 percent, respectively (see Figure 4.31). In this case, the sample average annual growth rate of total exports was 11.9 percent, which implies that supported firms would have had a rate 2.3 percentage points higher than non-supported firms. The impact on the remaining export outcomes was substantially weaker and less robust. These findings are in line with those reported above for other countries in the region.

Previous results are based on the assumption that trade promotion programs have a common effect for different firms. As discussed above, these effects may differ according to firm size. When allowing for heterogeneous impacts, estimates suggest that the positive effects of export promotion programs administered by EXPORTAR on total exports and number of destination countries are clearly stronger for small and medium-size firms. Thus, the growth rates of exports and number of countries were 10.7 percent and 10.4 percent higher, respectively, for small firms that had participated in these programs than for comparable non-participating firms. Similarly, these rates were 16.2 percent and 8.9 percent higher, respectively, for medium-size companies assisted by EXPORTAR than

FIGURE 4.32 ■ Argentina: Average Export Assistance Effect on Assisted Firms by Size Categories



Source: Our calculations based on data from UMCE-SICP, EXPORTAR, and AFIP.

TX: total exports; NC: number of countries; NP: number of products; AXCP: average exports per country and product; AXC: average exports per country; AXP: average exports per product. Small firms: 1–50 employees; medium-size firms: 51–200 employees; large firms: more than 200 employees. Effects correspond to first-time assistance. Statistically insignificant effects are reported as zero.

for companies within the same size category that had not received this assistance. The impact of assistance is larger on firms assisted for the first time.⁵⁷ For small firms, growth rates of exports and number of destination markets were 13.9 percent and 18.5 percent higher, while for medium-size firms they were 28.7 percent and 26.4 percent higher, respectively (see Figure 4.32). With average growth rates of total exports of 10.8 percent and 14.7 percent for small and medium-size firms, these estimates mean that supported companies in these size segments would have had rates 1.5 and 4.2 percentage points higher than non-supported companies, respectively. As regards large firms, no significant impacts on export

⁵⁷ This appears to be a general pattern in most countries, although not necessarily in all export performance dimensions. This might indicate that there may be diminishing returns to assistance. As firms' involvement in international markets deepens, their information needs decrease, and so accordingly does the value added of the service provided by the organizations.

outcomes were generally observed. In short, as one would expect, trade promotion actions mainly benefited small and medium-size companies.

To Sum Up: Incompleteness of information is likely to be a particularly severe barrier for smaller companies because they lack the scale and resources to perform information gathering and disseminating activities required to enter new export markets. For this reason, supporting small and medium-size companies is a common goal of export promotion organizations. The evidence we have provided suggests that the positive effects of EXPORTAR's trade promotion programs concentrated on small and medium-size companies, for which they resulted in increased exports mainly through the addition of destination countries.

Different Routes Lead to Different Destinations: The Different Impacts of Different Trade Promotion Programs⁵⁸

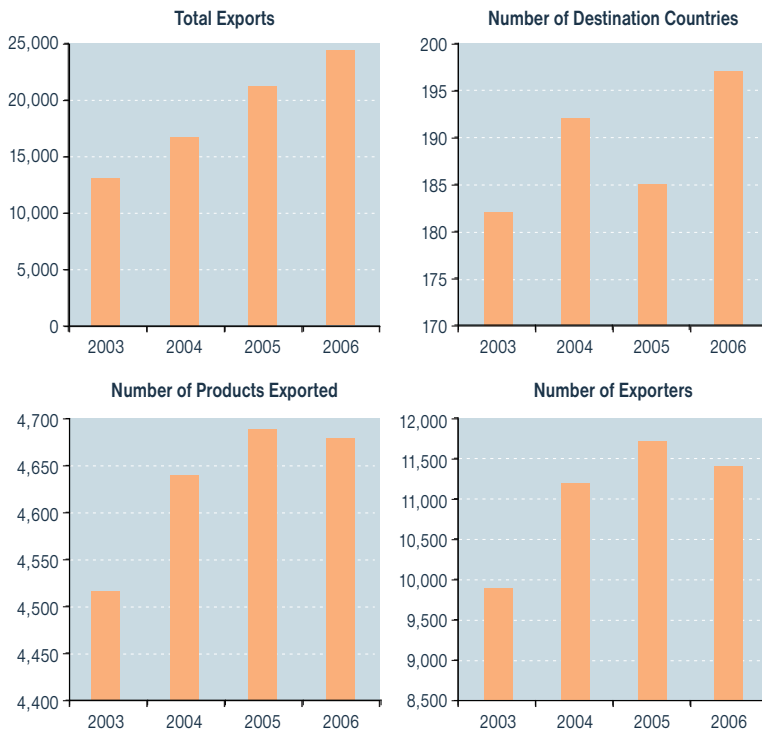
Export promotion policies consist of a variety of programs. Thus, as seen in Chapter 2, trade promotion organizations typically offer a broad spectrum of services, including training on the export process for inexperienced exporters; information on market opportunities and counseling services; coordination and sometimes co-financing for participation in trade missions, shows, and fairs, and the organization of these events; setting up meetings with potential customers; and sponsoring the creation of export consortia to enhance the competitive position of firms in international markets. Although all these programs share the common aim of improving the export performance of firms, they may differ significantly from each other in terms of effectiveness. Gauging the relative effectiveness of these programs is extremely important for assessing whether trade promotion activities are well targeted—in the sense that firms that use a certain service perform better than if they had used another service—or whether some services are consistently better than others. A comparative analysis of these programs can help determine not only the average absolute returns of resources invested in export promotion in terms of

⁵⁸ This sub-section is based on Volpe Martincus and Carballo (2010d).

(potentially) enhanced firms' export performance, but also the relative average returns associated with allocating these resources across alternative activities. This information can be valuable in guiding the allocation of public funds devoted to trade promotion in order to maximize their impact and thereby improve existing policies. We now explore these program-specific effects by analyzing data from Colombia.

The Pattern and Dynamics of Colombian Exports in Recent Years: Total Colombian exports grew 86.3 percent between 2003 and 2006 (see Figure 4.33). This aggregate export growth can be attributed to significant expansions along the intensive margin, and to a lesser extent to the

FIGURE 4.33 ■ Colombia: Aggregate Export Indicators



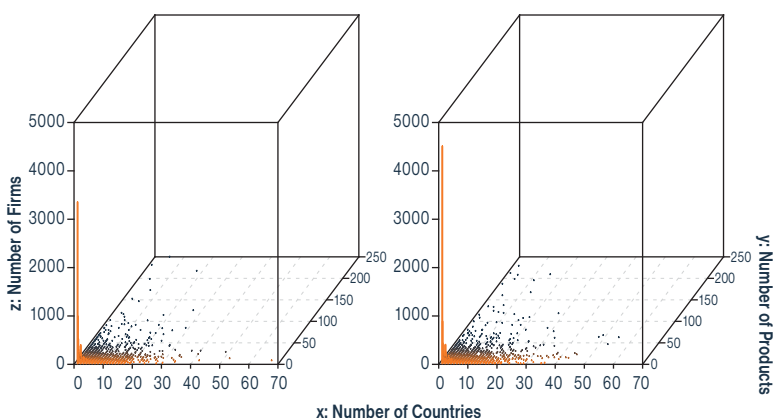
Source: Our calculations based on data from PROEXPORT.
Total exports are expressed in millions of US dollars.

increasing number of firms selling their products abroad (15.4 percent from 2003 to 2006). The total number of destination countries and products exported increased moderately—8.2 percent and 3.6 percent, respectively, over this period.

Table 4.9 shows that the average Colombian exporter over the sample period sold 5.1 products to 2.7 countries for approximately US\$1.7 million.

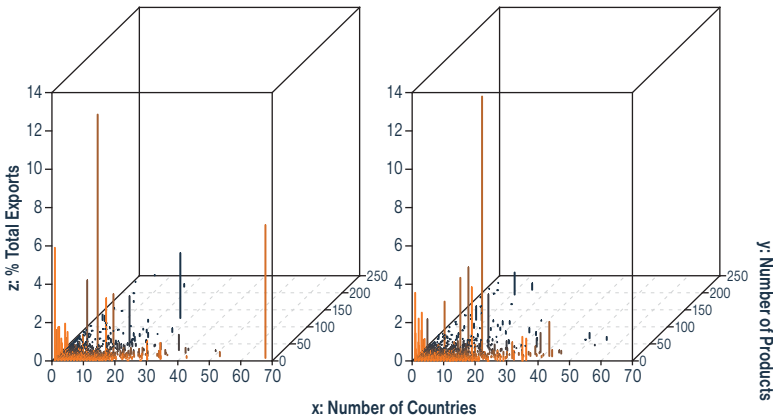
Figures 4.34 and 4.35 present the distribution of exporters and their external sales for 2003 and 2006. Figure 4.34 reveals that most Colombian firms' exports are highly concentrated in terms of both destination countries and products. In 2006, 59.8 percent of the firms exported to just one country, regardless of the number of products. Just two exporters traded with more than 50 countries; they represented 0.02 percent of the total number of exporters. Moreover, 45.8 percent of the Colombian exporters just sold one product abroad, regardless of the number of destination countries. Almost 40 percent of these firms exported just one product to one country, 68.8 percent less than five products to fewer than five countries, and 84.8 percent less than 10 products to fewer than 10 markets. As with all countries examined, the main diagonal of Figure 4.34 is almost

FIGURE 4.34 ■ Colombia: Distribution of Firms across Country-Product Export Patterns (2003–left and 2006–right)



Source: Our calculations based on data from PROEXPORT.

FIGURE 4.35 ■ Colombia: Distribution of Export Shares across Firms with Different Country-Product Export Patterns (2003–left and 2006–right)



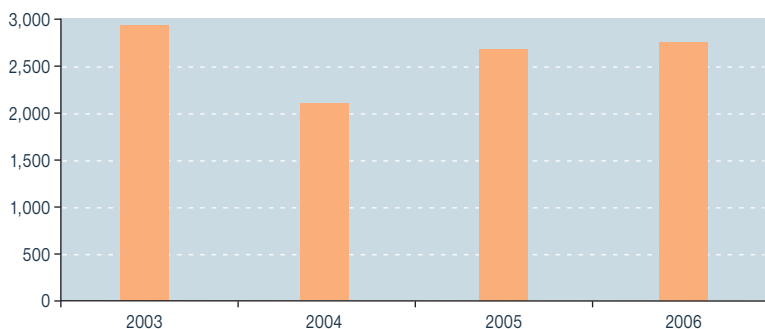
Source: Our calculations based on data from PROEXPORT.

empty, which indicates that there were virtually no firms that exported many products to many markets.

Figure 4.35 shows the distribution of export shares across firms with different product-country export patterns. Exporters that sold just one product to one country accounted for 3.5 percent of total exports, whereas firms exporting up to 10 products to up to 10 markets represented 26.1 percent of this total. Considering the number of countries served irrespective of the number of products traded, the share of total exports from firms that exported to just one country was 7.2 percent. On the other hand, the share corresponding to firms that exported just one product to one or several countries was 14.4 percent.

Impact of Export Promotion: On average, PROEXPORT assisted more than 2,500 firms annually during the period 2003–2006 (see Figure 4.36), which represented almost 25 percent of the total population of exporters in these years.

The results of the evaluation suggest that this assistance was on average associated with an increased rate of growth of exports, number

FIGURE 4.36 ■ Colombia: Number of Exporters Assisted by PROEXPORT

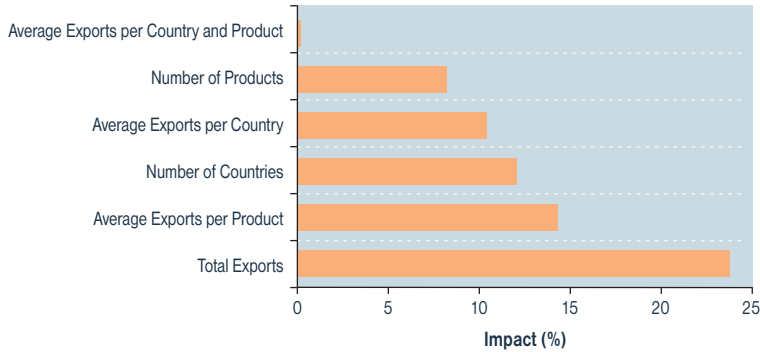
Source: Our calculations based on data from PROEXPORT.

of destination countries, and number of products exported. Specifically, the rate of growth of exports was 23.7 percent higher for firms assisted by PROEXPORT than for non-assisted firms, while the growth rates of the number of countries and the number of products were 12.1 percent and 8.2 percent higher, respectively (see Figure 4.37). The fact that the sample average annual growth rate of the number of countries was 2 percent implies that supported firms would have had a rate 0.2 percentage points higher than non-supported pairs. PROEXPORT's trade promotion actions also seem to have had a significant impact on the intensive margin of firms' exports. These actions seem to have resulted in more exports per country and per product, a finding that can be rationalized as indicated in the cases of Peru and Chile.

The analysis whose results have been presented above aggregates all programs into a single program. Thus, it does not reveal the specific source of the observed effects, either specific instruments or particular combinations of them. As mentioned before, different export promotion programs may have different effects. Below we will examine whether this is actually the case.

PROEXPORT provides Colombian exporters with multiple services. These can be aggregated into three fairly homogeneous groups: counseling, trade agenda, and trade fairs, shows, and missions. Counseling services consist of a variety of activities including training on the export process;

FIGURE 4.37 ■ Colombia: Average Export Assistance Effect on Assisted Firms



Source: Our calculations based on data from PROEXPORT.
Statistically insignificant effects are reported as zero.

provision of information on business opportunities for Colombian products in international markets; specialized data on specific target markets and on transport logistics; and assistance in the formulation and execution of individual and collective export plans. Trade agenda services include setting up appointments with potential customers through the commercial offices of the organization and support to commercial management. Services related to trade fairs, shows, and missions provide firms with opportunities to gain experiential knowledge, show their products, establish contacts, and close deals.⁵⁹ PROEXPORT coordinates and co-finances participation in these events.

Since firms may participate in more than one of these activities in the same year, effectiveness assessments must be performed on bundles

⁵⁹ Seringhaus and Rosson (1990) suggest that trade shows allow SMEs to further expand their international activities once they are established in targeted markets. Young (1995) argues that outgoing trade missions help participating firms acquire first-hand experience with foreign countries' culture through direct contact with business executives and government officials, thus enabling them to adjust their perceptions of markets' potential and increase their knowledge of local commercial networks. According to Bonoma (1983), among other things, fairs allow exporters to sell products; gain access to decision makers; disseminate facts about services, products, and personnel; and identify prospects. See also Tanner (1995) and Wilkinson and Brouthers (2000).

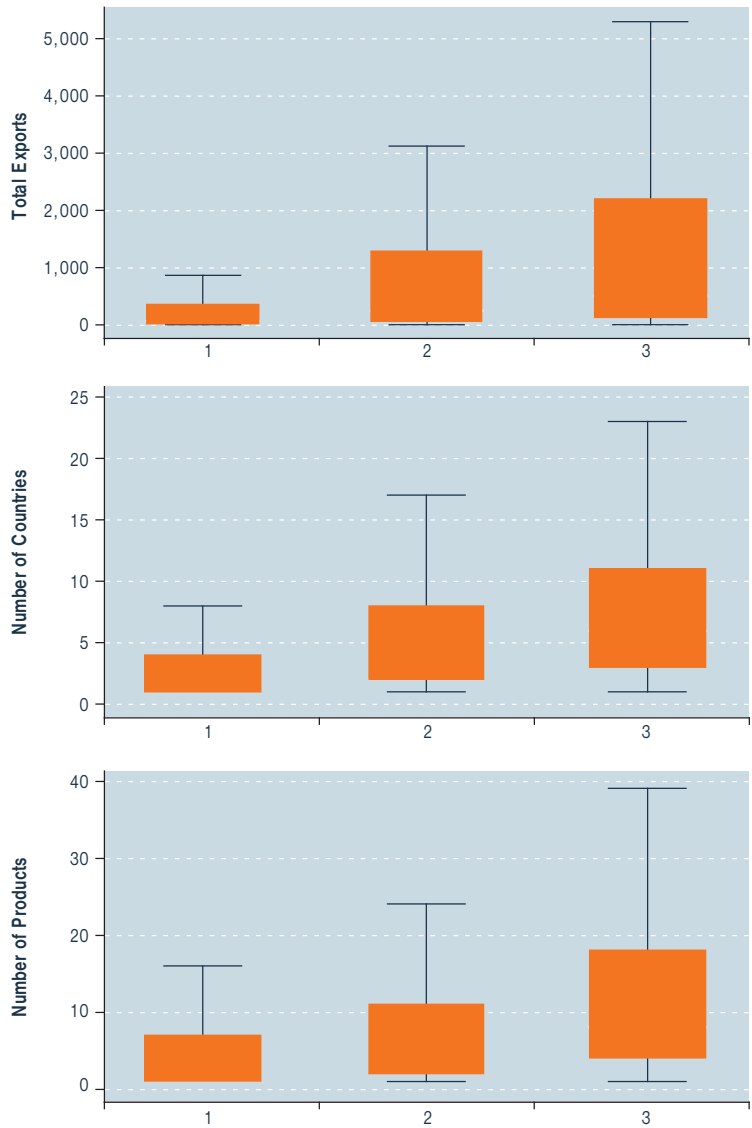
of activities made up of alternative combinations of the basic services described above, in addition to non-participation. In our analysis, firms are assigned to one of these service groups each year. For instance, a firm is assigned to the trade agenda service group in a given year if it has received assistance to arrange meetings with potential buyers in this year. Similarly, it will be allocated to the three service group if it has simultaneously used the counseling, agenda, and mission services, in a given year. This classification allows us to explicitly evaluate whether combined services are more effective in promoting exports than individual ones (e.g., whether participation in a trade mission combined with counseling and previously arranged trade agendas has a larger impact on exports than just trade mission participation).

Figure 4.38 presents box plots showing the distribution of three key variables characterizing the past degree of internationalization of firms using different numbers of programs: total exports, number of destination countries, and number of products sold abroad.⁶⁰ The figure suggests a common pattern across variables. Firms that are more engaged in international trade along the dimensions measured by these variables tend to participate in various activities and thus make more use of PROEXPORT services.

Figure 4.39 presents the estimated average assistance effects of participating in a specific program versus not participating. Most export promotion programs had a positive significant effect on the growth of firms' total exports as well as on the growth of the number of countries to which they export. Furthermore, all programs combining export services were also associated with higher export growth along the product-extensive margin. Thus, the rate of growth of exports was on average 26.1 percent higher for firms using these sets of combined services, whereas the growth rates of the number of countries and the number of products were 12.5 percent and 9.8 percent higher, respectively. Interestingly, these estimates suggest that the program that bundles counseling, trade agenda, and trade missions has had the greatest impact on total exports and the two measures

⁶⁰ This figure has been constructed considering, for each year in our sample period, one year lagged values of the variables characterizing the degree of internationalization of the firms.

FIGURE 4.38 ■ Colombia: Distribution of Total Exports, Number of Countries, and Number of Products across Groups of Firms Participating in Different Number of Export Promotion Programs

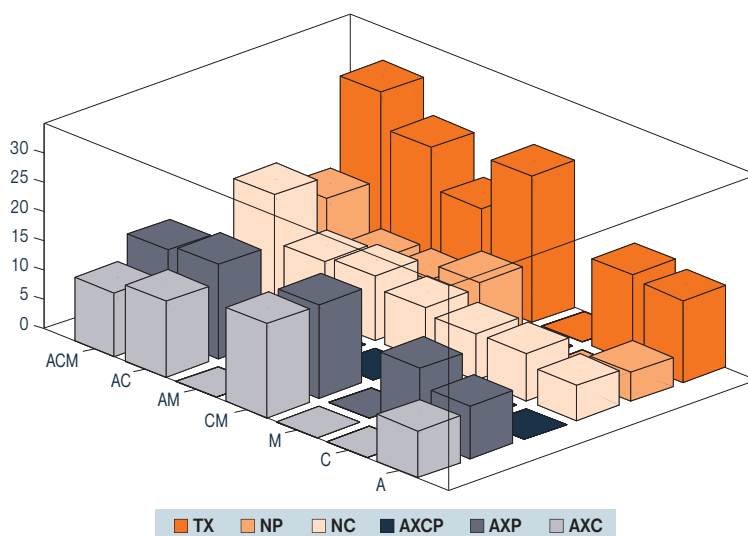


Source: Our calculations based on data from PROEXPORT.

1: one service; 2: two services; 3: three services

Exports are expressed in thousands of US dollars.

FIGURE 4.39 ■ Colombia: Average Effect of Export Assistance Programs on Assisted Firms Relative to Non-Participation



Source: Our calculations based on data from PROEXPORT.

The figure reports the effect of each export promotion program relative to non-participation. C: counseling services; A: trade agenda services; M: trade fair, shows, and mission services; TX: total exports; NP: number of products; NC: number of countries; AXCP: average exports per country and product; AXC: average exports per country; AXP: average exports per product. Statistically insignificant effects are reported as zero.

of the extensive margin. Finally, some of the programs also produced a significant positive effect on the average export growth both in terms of countries and products. However, these effects were less robust across robustness check estimations.⁶¹

Therefore, export promotion seems to have favored an expansion of firms' exports, primarily along the extensive margin (i.e., an increase of the number of countries served and, to some extent, the number of products), in particular, when different activities are combined to address the different problems faced in establishing and developing export businesses.

⁶¹ See Volpe Martincus and Carballo (2010d).

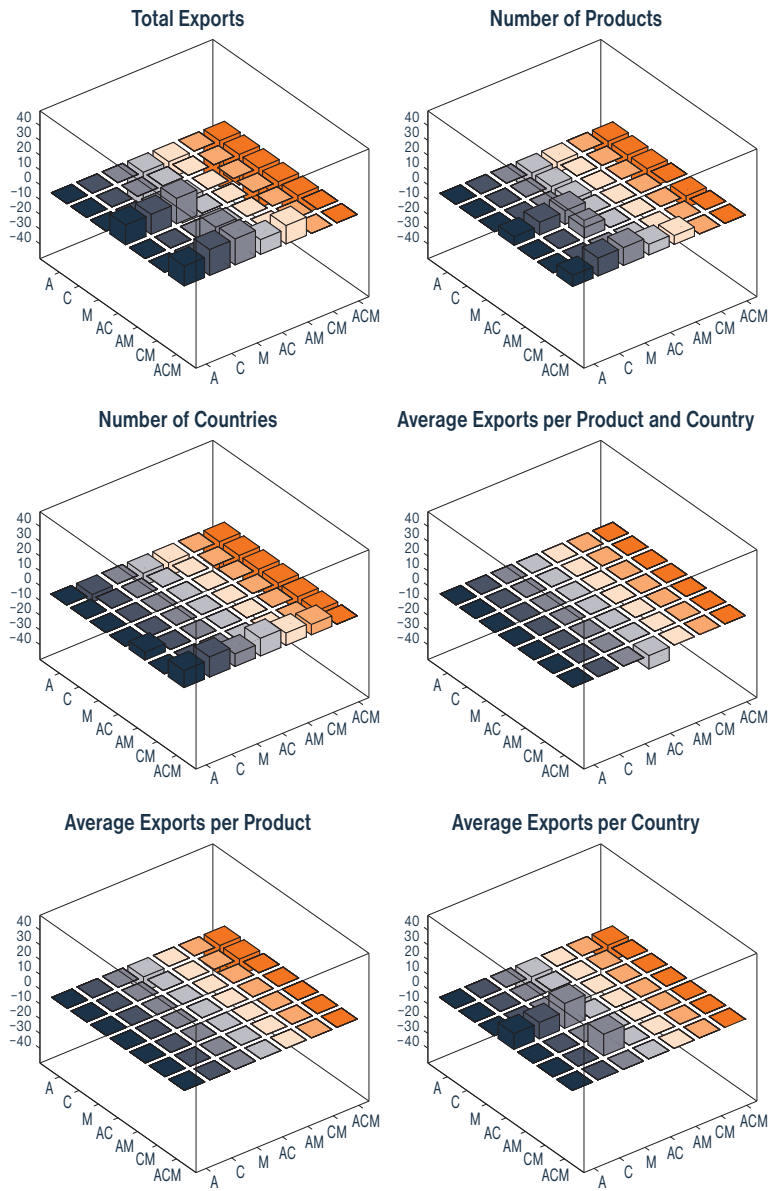
Although the results are interesting, nothing can be learned about the sources of these different effects from this separate comparison of individual programs to non-participation. These heterogeneous effects can reflect differential effectiveness across programs, but they could also be due to differences in the groups of firms participating in the various programs. For this reason, the previous analysis does not make it possible to assess whether services are well targeted nor to identify whether there is a program that outperforms the rest.⁶² Insights into these issues can only be gained by directly comparing individual programs to each other, which we do next.

The one-to-one program comparisons indicate that a combination of the three basic services—counseling, missions and fairs, and trade agenda—systematically performed better than the other programs. Firms combining these services have had significantly higher export growth along the country and product extensive margins than if they had used each of these services separately. For these firms, the growth rate of exports was on average 17.7 percent higher, that of number of countries was 11.7 percent higher, and that of number of products was 11 percent higher (see Figure 4.40). Further, these firms exhibit a higher growth of the number of destination countries (on average, 9.4 percent higher), when compared to a scenario where they had used alternative combinations of two of these three services. These results suggest that this service bundle is well targeted. Note that there is also some evidence that specific combinations of two services are associated with better export performance than their individual components for comparable firms (e.g., trade agenda and counseling versus trade agenda and counseling and trade missions versus trade missions).

Results also indicate that firms that only participated in missions would have experienced higher export growth, especially along the product-extensive margin, if they had instead used counseling services plus trade agendas. Hence, contrary to what we have seen before for the combination of the three basic services, the program only consisting of missions and fairs does not seem to have been well targeted.

⁶² See Sianesi (2005).

FIGURE 4.40 ■ Colombia: Average Effect of Export Assistance Programs on Assisted Firms Relative to Each Other



Source: Our calculations based on data from PROEXPORT.
The figure reports the effect of each export promotion program relative to each other. C: counseling services; A: trade agenda services; M: trade fair, shows, and mission services. Statistically insignificant effects are reported as zero.

Overall, estimates appear to provide formal support to arguments in the literature on export promotion that preparatory activities before trade missions significantly enhance the gains derived from participation.⁶³ Thus, it is likely to be worth obtaining objective knowledge of a country's economy, politics, culture, industries, and product lines of interest to the firm before visiting it through the organization's counseling and information services. Thus, managers participating in missions learn what to expect and how to properly interact with the target culture. Moreover, having this information helps managers present the right range of products together with appropriate promotion material.⁶⁴ In this regard, informing potential customers through different communication methods (e.g., press releases, product brochures with invitation letters, etc.) and properly training booth staff have been shown to have a positive impact on exports associated with participation in international trade fairs.

It has also been reported that prearranged meetings with potential customers tend to generate more leads and larger sales. Further, visits to the targeted markets before the trade missions are associated with a higher likelihood of closing deals during subsequent events.⁶⁵ Follow-up activities such as phone, fax, and e-mail communications, and new visits, are also instrumental in increasing outcome from participation in missions by helping turn contacts and leads into concrete exports.⁶⁶

Hence, successful participation in foreign markets requires that firms develop a comprehensive and systematic approach for starting export businesses and building up solid buyer-seller relationships. Export promotion organizations are likely to be more effective and contribute most to this goal when they provide integral support throughout the export development process.

⁶³ See, e.g., Branch (1990); Hibbert (1990); Seringhaus and Rosson (2005); and PROEXPORT (2008).

⁶⁴ See Spence (2003).

⁶⁵ See Spence (2003).

⁶⁶ See Branch (1990); Hibbert (1990); and Spence (2003).

To Sum Up: Services of export promotion organizations aimed to reduce information problems may have varied effects on export performance of comparable firms. An examination of the different promotion programs carried out by Colombia's PROEXPORT reveals that bundled services combining counseling, trade agenda, and trade missions and fairs, which provide exporters with comprehensive support throughout the process of starting export businesses and building up buyer-seller relationships with foreign partners, are more effective than isolated assistance actions, e.g., trade missions and fairs alone.

4.5 Concluding Remarks

Current impact evaluation practices of Latin American and Caribbean export promotion organizations are flawed with methodological problems. Because these evaluations are based on figures gathered through questionnaires whose coverage is generally low and whose accuracy is doubtful to say the least, or on direct attribution of export values of assisted firms as registered by national customs, they are likely to largely misrepresent the real contribution these organizations make to the companies' export growth and thereby to that of the countries. In fact, based on our estimates, we determine that the latter strategy would on average overestimate these contributions in 5.9 times for PROMPEX (currently PROMPERU); 9.4 times for PROCOMER; 7.3 times for URUGUAY XXI; 14.3 times for PROCHILE; 5.2 times for EXPORTAR; and 3.7 times for PROEXPORT, over the sample period.⁶⁷ Hence, the outputs of these evaluations are not adequate for guiding the strategies and activities of these organizations and specifically the allocation of their generally scarce resources across these activities to maximize their influence on their countries' export development.

⁶⁷ The numerator of these ratios are the sum of the actual absolute growth of assisted firms' total exports relative to the previous year, whereas the denominator of these ratios are the sum of the actual absolute growth of assisted firms' total exports relative to the previous year multiplied by the average assistance effect on these exports as reported above. Such ratios are equal to one divided into the average assistance effect on assisted firms when the outcome is total exports. These ratios are then averaged over the sample period.

In this chapter, we have argued that substantial improvements in evaluating these organizations' programs can be achieved through the use of econometric methods already employed in other fields to assess the effects of public policies. We have then discussed the results obtained when applying these methods on highly disaggregated firm-level export and trade support data to analyze the impact of trade promotion programs on various dimensions of firms' export performance. From this in-depth analysis at least four general conclusions can be made.

First, trade assistance can have different effects on exporting activities involving varying degrees of information incompleteness. These effects are predictably greater on the extensive margin of firms' exports, i.e., when firms attempt to increase the number of destination countries and/or to expand the set of goods exported and, specifically, when they seek to enter an entirely new country or product market.

Second, the impact of export support is not uniform across the differentiation spectrum. The degree of complexity of the goods is directly related to the severity of the information barriers faced by companies when transacting across borders. By helping firms overcome these barriers, export promotion actions are more likely to generate larger export gains to the degree to which products traded are more differentiated.

Third, firms are different and thus have different assistance needs. Due to the greater limitations they face in accessing relevant export information, firms that are relatively small and whose previous involvement in international markets has also been small suffer more from the deterring effects of information frictions. These companies can therefore be expected to benefit more from export assistance, provided that they turn out to be productive and able to survive in these markets.

Fourth, the mix of programs matters. More specifically, bundled support services provided throughout the export process, from the beginning of the commercial contacts to the establishment of the business relationships, seem to be more effective in enhancing firms' export perspectives than individual actions. Admittedly, this strategy can be more costly. This is of course a consideration that needs to be taken into account when deciding on the assistance programs offered to the companies and the allocation of resources to them. If combined services produce higher

returns than individual ones, but are also more costly, then their effect/cost ratios should be compared.⁶⁸

In general, the cost side of the equation should be brought into the analysis to make possible an overall assessment of export promotion programs. At the least, one would like to see a relationship between each dollar invested in these programs and a dollar amount of additional exports generated. This requires knowing precisely the volume of resources specifically allocated to promoting exports. Among the organizations in our sample, this is relatively clear for PROMPERU (Export Program), URUGUAY XXI, and EXPORTAR (see Table 2.6.LAC in Chapter 2).⁶⁹ In those countries, each US dollar allocated to trade promotion would on average result in increased foreign sales for US\$45, US\$38, and US\$41, respectively.⁷⁰ It should be stressed that, for the reasons mentioned in Section 4.2, these figures should be viewed with caution.⁷¹ Further, these ratios do not necessarily apply to other countries. Exercises similar to those whose results have been presented above should be performed to establish whether this is the case.

Do the previous findings necessarily imply that larger companies expanding their exports of reference-priced goods in their current destination markets should not be supported? Not necessarily. For instance, these firms might generate positive external reputational effects that

⁶⁸ Unfortunately, we do not have access to data on costs of specific programs.

⁶⁹ Recall that PROEXPORT promotes exports, investment, and tourism; PROCOMER also performs administration functions and is tasked with commercial advocacy; PROCHILE manages general programs aimed at improving the country-image abroad.

⁷⁰ The numerators of these ratios have been obtained by multiplying the estimated average support effect on the total exports of these countries' supported firms as reported above with the actual absolute growth of their total exports in the last sample year and summing over these individual values. If instead we had calculated these numerators as the total export growth of supported companies as many organizations do, these figures would have been US\$260, US\$212, and US\$278, respectively.

⁷¹ This exercise has several caveats that should be kept in mind, starting with the fact that overestimation risks cannot be entirely ruled out (see Section 4.3). Moreover, assistance effects can be heterogeneous across firms (see sub-section on Chile and Argentina in Section 4.4). Furthermore, a proper comparison across countries would require, among other things, taking into consideration not only the indirect effects (see below) but also the potentially differential impacts of these entities' programs on the exporters extensive margin, which due to lack of data is not explicitly accounted for in the estimates presented here.

benefit trading initiatives of other firms. We should recall that these and other indirect effects are not explicitly considered in our evaluations. But ideally they should be taken into account for computing cost-effectiveness ratios. These facts should therefore be interpreted as general criteria that, along with others to be developed through further research, could be used in designing trade support programs to maximize their impact.⁷²

⁷² For some preliminary ideas on directions of future research see Chapter 5.

Table 4.1 ■ Peru: Average Exporter

Variables	2001–2005	2001	2005
Employees	80.02	82.84	72.28
Age	10.01	10.23	9.63
Location (Lima=1; 0 otherwise)	0.81	0.81	0.81
Exports	2,094.10	1,596.93	2,870.13
Number of Countries	2.60	2.65	2.58
Number of Products	7.54	7.10	8.15
Average Exports per Country	385.06	322.58	455.41
Average Exports per Product	448.02	395.53	544.63
Average Exports per Country and Product	149.45	137.33	186.42

Source: Our calculations based on data from PROMPEX (currently PROMPERU) and SUNAT.
Exports and average exports are expressed in thousands of US dollars.

Table 4.2 ■ Costa Rica: Average Exporter

Variables	2001–2006	2001	2006
Employees	98.83	99.91	93.51
Location (San Jose = 1; 0 otherwise)	0.62	0.61	0.65
Exports	2,575.23	2,290.14	2,699.73
Number of Countries	3.34	3.45	3.17
Number of Products	7.07	7.19	6.78
Average Exports per Country	437.64	469.64	398.65
Average Exports per Product	372.02	339.38	346.46
Average Exports per Country and Product	110.99	107.30	99.80

Source: Our calculations based on data provided by PROCOMER and CCSS.
Exports and average exports are expressed in thousands of US dollars.

Table 4.3 ■ Costa Rica: Average Exporter by Type of Goods

Variables	2001–2006
Firms Exporting Differentiated Products	
Total Number of Firms	3,450
Average Exports	697.16
Average Number of Countries	2.47
Average Number of Products	3.97
Firms Exporting Reference-Priced Products	
Total Number of Firms	840
Average Exports	677.06
Average Number of Countries	2.14
Average Number of Products	2.25
Firms Exporting Homogeneous Products	
Total Number of Firms	572
Average Exports	1,762.39
Average Number of Countries	2.86
Average Number of Products	1.34
Firms Exporting Differentiated and Reference-Priced Products	
Total Number of Firms	1,276
Average Exports	6,828.95
Average Number of Countries	5.54
Average Number of Products	14.82
Firms Exporting Differentiated and Homogeneous Products	
Total Number of Firms	199
Average Exports	2,878.10
Average Number of Countries	3.84
Average Number of Products	5.99
Firms Exporting Reference-Priced and Homogeneous Products	
Total Number of Firms	265
Average Exports	2,285.70
Average Number of Countries	2.81
Average Number of Products	6.82
Firms Exporting Differentiated, Reference-Priced, and Homogeneous Products	
Total Number of Firms	403
Average Exports	9,372.03
Average Number of Countries	7.13
Average Number of Products	28.09

Source: Our calculations based on data provided by PROCOMER and CCSS.

Average exports are expressed in thousands of US dollars. Total number of firms corresponds to the number of different firms within each category over the sample period, 2001–2006.

Table 4.4 ■ Uruguay: Average Exporter

Variable	2000–2007	2000	2007
Total Exports	1,675.27	1,601.64	2,163.85
Number of Countries	2.96	2.93	3.03
Number of Products	4.35	4.76	4.13
Average Exports per Country	272.03	307.43	325.16
Average Exports per Product	286.33	254.01	366.53
Average Exports per Country and Product	105.57	111.55	112.13

Source: Our calculations based on data from URUGUAY XXI.

Exports and average exports are expressed in thousands of US dollars.

Table 4.5 ■ Chile: Average Exporter

Variable	2002–2006	2002	2006
Sales	2.21	2.14	2.33
Exports	4,910.45	2,829.67	7,993.24
Number of Countries	3.42	3.23	3.60
Number of Products	5.16	5.29	5.09
Average Exports per Country	465.18	334.07	682.61
Average Exports per Product	956.71	590.23	1,663.61
Average Exports per Country and Product	166.27	117.75	252.32

Source: Our calculations based on data from PROCHILE.

Total Sales: 1–4 correspond to the four segments identified: 1. US\$0–US\$60,000; 2. US\$60,001–US\$7,500,000; 3. US\$7,500,001–US\$12,500,000; 4. US\$12,500,001 and up.

Table 4.6 ■ Chile: Distribution of Export Indicators and Total Sales

Export and Sales Indicators\ Deciles	Number of Firms	Total Exports	Number of Countries	Number of Products	Average Exports per Country	Average Exports per Product	Average Exports per Country and Product	Total Sales
1	3,262	2,135	1	1	1,280	2,000	1,015	1
2	3,262	5,235	1	1	2,922	4,470	2,111	2
3	3,262	11,669	1	1	5,676	9,028	3,885	2
4	3,262	23,422	1	1	10,935	16,598	6,815	2
5	3,263	50,160	1	2	20,529	29,860	11,860	2
6	3,262	113,202	2	3	41,080	54,127	20,304	2
7	3,262	258,307	3	4	88,160	103,333	36,392	2
8	3,262	694,767	4	6	219,866	210,000	70,832	3
9	3,262	2,601,423	8	11	707,095	555,009	184,000	4

Source: Our calculations based on data from PROCHILE.

Total Sales: 1–4 correspond to the four segments identified: 1. US\$0–US\$60,000; 2. US\$60,001–US\$7,500,000; 3. US\$7,500,001–US\$12,500,000; 4. US\$12,500,001 and up.

Table 4.7 ■ Argentina: Average Exporter

Variable	2002–2006	2002	2006
Employees	92.44	78.23	110.35
Location (Buenos Aires = 1; 0 otherwise)	0.41	0.41	0.40
Exports	3,012.44	2,468.49	3,597.41
Number of Countries	3.62	3.34	3.79
Number of Products	9.20	9.51	9.35
Average Exports per Country	298.62	249.77	343.02
Average Exports per Product	335.37	246.66	386.89
Average Exports per Country and Product	103.67	62.92	110.10

Source: Our calculations based on data from UMCE-SICP, EXPORTAR, and AFIP.

Average exports are expressed in thousands of US dollars.

Table 4.8 ■ Argentina: Average Exports by Size Category

Year	Number of Firms	Average Exports	Average Number of Countries	Average Number of Products
Small Firms (<= 50 Employees)				
2002	7,868	302.84	2.35	6.89
2006	9,256	381.43	2.61	6.40
Medium-Size Firms (50< Employees <=200)				
2002	1,698	2,507.17	5.07	12.67
2006	2,421	2,637.44	5.31	11.78
Large Firms (>200 Employees)				
2002	650	28,581.85	10.86	32.93
2006	972	36,613.02	11.24	31.38

Source: Our calculations based on data from UMCE-SICP, EXPORTAR, and AFIP.

Average exports are expressed in thousands of US dollars.

Table 4.9 ■ Colombia: Average Exporter

Variables	2003–2006	2003	2006
Exports	1,708.14	1,328.56	2,139.71
Number of Products	5.12	5.07	5.05
Number of Countries	2.68	2.66	2.73
Average Exports by Country	326.35	277.36	403.57
Average Exports by Product	429.00	318.24	554.91
Average Exports by Country and Product	148.77	137.44	178.37

Source: Our calculations based on data from PROEXPORT.

Exports and average exports are expressed in thousands of US dollars.

References

- Aakvik, A.; Heckman, J.; and Vytlacil, E., 2005. "Estimating treatment effects for discrete outcomes when responses to treatment vary: an application to Norwegian vocational rehabilitation programs." *Journal of Econometrics*, 125.
- Aakvik, A.; Holmas, T.; and Kjerstad, E., 2003. "A low-key social insurance reform-effects of multidisciplinary outpatient treatment for back pain patients in Norway." *Journal of Health Economics*, 22.
- Abadie, A., 2005. "Semiparametric difference-in-differences estimators." *Review of Economic Studies*, 72.
- Abadie, A. and Imbens, G., 2006. "On the failure of the bootstrap for matching estimators." NBER Technical Working Paper 325.
- Álvarez, R., 2004. "Sources of export success in small- and medium-sized enterprises: The impact of public programs." *International Business Review*, 13.
- Angrist, J. and Krueger, A., 1999. "Empirical strategies in labor economics," in Ashenfelter, O. and Card, D. (eds), *Handbook of Labor Economics*. Elsevier.
- Athey, S. and Imbens, G., 2006. "Identification and inference in nonlinear difference-in-differences models." *Econometrica*, 74.
- Barrios, S.; Görg, H.; and Strobl, E., 2003. "Exporting firms' export behaviour: R&D, spillovers, and destination market." *Oxford Bulletin of Economics and Statistics*, 65.
- Bernard, A. and Jensen, B., 1999. "Exceptional exporter performance: Cause, effect, or both?" *Journal of International Economics*, 47, 1.
- Bernard, A. and Jensen, B., 2004. "Why some firms export?" *Review of Economics and Statistics*, 86, 2.
- Bernard, A.; Redding, S.; and Schott, P., 2006. "Multi-product firms and product switching." NBER Working Paper 12293.
- Bertrand, M.; Duflo, E.; and Mullainathan, S., 2004. "How much should we trust difference-in-differences estimates?" *Quarterly Journal of Economics*.
- Blundell, R. and Bond, S., 1998. "Initial conditions and moment restrictions in dynamic panel data models." *Journal of Econometrics*, 87.

- Blundell, R. and Costa Dias, M., 2002. "Alternative approaches to evaluation in empirical microeconomics." CEMMAP Working Paper CWPI0/02.
- Bonoma, T., 1983. "Get more out of your trade shows." *Harvard Business Review*, January–February.
- Branch, A., 1990. *Elements of Export Marketing and Management*. Chapman and Hall, London.
- Caliendo, M. and Kopeinig, S., 2008. "Some practical guidance for the implementation of propensity score matching." *Journal of Economic Surveys*, 22, 1.
- CCSS (Caja Costarricense de Seguro Social), 2007. "Empleo según tamaño de empresa." DIGEPYME, Ministerio de Economía, Industria y Comercio, Costa Rica.
- Chen, S.; Mu, R.; and Ravallion, M., 2009. "Are there lasting impacts of aid to poor areas?" *Journal of Public Economics*, forthcoming.
- Czinkota, M., 1996. "Why national export promotions." *International Trade Forum*, 2.
- Diamantopoulos, A.; Schlegelmich, B.; and Tse, Y., 1993. "Understanding the role of export marketing assistance: Empirical evidence and research needs." *European Journal of Marketing*, 24, 2.
- Firpo, S., 2007. "Efficient semiparametric estimation of quantile treatment effects." *Econometrica*, 75, 1.
- Frölich, M., 2004. "Programme evaluation with multiple treatments." *Journal of Economic Survey*, 18, 2.
- Galiani, S.; Gertler, P.; and Schargrodsky, E., 2008. "School decentralization: Helping the good get better, but leaving the poor behind." *Journal of Public Economics*, 92.
- Girma, S. and Görg, H., 2007. "Evaluating the foreign ownership wage premium using a difference-in-differences matching approach." *Journal of International Economics*, 72, 1.
- Görg, H.; Henry, M.; and Strobl, E., 2008. "Grant support and exporting activity," *Review of Economics and Statistics*, 90, 1.
- Heckman, J., 1981. "Heterogeneity and state dependence," in Rosen, S. (ed), *Studies on labor markets*. The University of Chicago Press, Chicago.

- Heckman, J. and Robb, R., 1985. "Alternative methods for evaluating the impact of interventions," in Heckman, J. and Singer, B., *Longitudinal analysis of labor market data*. Wiley, New York.
- Heckman, J.; Ichimura, H.; and Todd, P., 1997. "Matching as an econometric evaluation estimator: Evidence from evaluating a job training programme." *Review of Economic Studies*, 64, 4.
- Heckman, J.; Ichimura, H.; Smith, J.; and Todd, P., 1998. "Characterizing selection bias using experimental data." *Econometrica*, 66, 5.
- Heckman, J.; LaLonde, R.; and Smith, J., 1999. "The economics and econometrics of active labor market programs," in Ashenfelter, O. and Card, D. (eds), *Handbook of Labor Economics*. Elsevier.
- Hibbert, E., 1990. *The management of international trade promotion*. Routledge, London.
- Holland, P., 1986. "Statistics and causal inference." *Journal of the American Statistical Association*, 81, 396.
- Hollenstein, H., 2005. "Determinants of international activities: Are SMEs different?" *Small Business Economics*, 24.
- Imbens, G., 2004. "Nonparametric estimation of average treatment effects under exogeneity: A review." *Review of Economics and Statistics*, 86, 1.
- Imbens, G. and Wooldridge, J., 2008. "Recent developments in the econometrics of program evaluation." IZA Discussion Paper 3640.
- INEI (Instituto Nacional de Estadísticas e Informática de Perú), 1999. "Evolución de los determinantes del empleo en las micro y pequeñas empresas," 1995–1998.
- Jaffe, A., 2002. "Building program evaluation into the design of public research support programs." *Oxford Review of Economic Policy*, 18, 1.
- Klette, T.; Moen, J.; and Griliches, Z., 2000. "Do subsidies to commercial R&D reduce market failures? Microeconomic evaluation studies." *Research Policy* 29, 4–5.
- Kneller, R. and Pisu, M., 2007. "Export barriers: What are they and who do they matter to?" University of Nottingham, mimeo.
- Lach, S., 2002. "Do R&D subsidies stimulate or displace private R&D? Evidence from Israel." *Journal of Industrial Economics*, L, 4.

- Lechner, M., 2002. "Program heterogeneity and propensity score matching: An application to the evaluation of active labor market policies." *Review of Economics and Statistics*, 84, 2.
- Meyer, B., 1995. "Natural and quasi-experiments in economics." *Journal of Business and Economic Statistics*, 13.
- Miguel, E. and Kremer, M., 2004. "Worms: Identifying impacts on education and health in the presence of treatment externalities." *Econometrica*, 72, 1.
- Moini, A., 1998. "Small firms exporting: How effective are government export assistance programs?" *Journal of Small Business Management*, 36, 1.
- Naidu, G. and Rao, T., 1993. "Public-sector promotion of exports: A need-based approach." *Journal of Business Research*, 27.
- Observatorio PyME, 2008. *Informe 2007/2008: Evolución reciente, situación actual y desafíos futuros de las PYME industriales*. Buenos Aires.
- PROEXPORT, 2008. "Prepare a su empresa para un evento internacional." <http://www.zeiky.com>.
- Rauch, J., 1999. "Networks versus markets in international trade." *Journal of International Economics*, 48, 3.
- Ravallion, M., 2008. "Evaluating anti-poverty programs," in Evenson, R., and Schultz, P.(eds.), *Handbook of Development Economics*. North-Holland, Amsterdam.
- Roberts, M. and Tybout, J., 1997. "The decision to export in Colombia: An empirical model of entry with sunk costs." *American Economic Review*, 87, 4.
- Robins, J. and Rotnitzky, A., 1995. "Semiparametric efficiency in multivariate regression models for repeated outcomes in the presence of missing data." *Journal of the American Statistical Association*, 90.
- Rosenbaum, P. and Rubin, D., 1983. "The central role of the propensity score in observational studies for causal effects." *Biometrika*, 70, 1.
- Rosenbaum, P. and Rubin, D., 1985. "Constructing a control group using multivariate matched sampling methods that incorporate the propensity score." *American Statistician*, 39, 1.
- Roy, A., 1951. "Some thoughts on the distribution of earnings." *Oxford Economic Papers*, 3.

- Rubin, D., 1974. "Estimating causal effects of treatments in randomized and nonrandomized studies." *Journal of Educational Psychology*, 66.
- Rubin, D., 1980. Comment on "Randomization analysis of experimental data: The Fisher randomization test" by D. Basu. *Journal of the American Statistical Association*, 75.
- Seringhaus, R. and Rosson, P., 1990. *Government Export Promotion: A Global Perspective*. Routledge, London.
- Seringhaus, R. and Rosson, P., 2005. "An analysis model of performance measurement of international trade fair exhibitors." Wilfred Laurier University, mimeo.
- Smith, J., 2000. "A critical survey of empirical methods for evaluating active labor market policies." *Zeitschrift für Volkswirtschaft and Statistik*, 136, 3.
- Smith, J. and Todd, P., 2005a. "Does matching overcome Lalonde's critique of nonexperimental estimators?" *Journal of Econometrics*, 125.
- Smith, J. and Todd, P., 2005b. Rejoinder. *Journal of Econometrics*, 125.
- Spence, M., 2003. "Evaluating export promotion programmes: U.K. overseas trade missions and export performance." *Small Business Economics*, 20.
- Tanner, J., 1995. "Curriculum guide to trade show marketing." Center for Exhibition Industry Research, Baylor University.
- Wilkinson, T. and Brouters, E., 2000. "An evaluation of state sponsored promotion programs." *Journal of Business Research*, 47.
- Volpe Martincus, C. and Carballo, J., 2008. "Is export promotion effective in developing countries? Firm-level evidence on the intensive and extensive margins of exports." *Journal of International Economics*, 76, 1; see also IDB Working Paper.
- Volpe Martincus, C. and Carballo, J., 2010a. "Export promotion activities in developing countries: What kind of trade do they promote?" *Journal of International Trade and Economic Development*, forthcoming; see also IDB Working Paper.
- Volpe Martincus, C. and Carballo, J., 2010b. "Entering New Country and Product Export Markets: Does export promotion help?" *Review of World Economics*, forthcoming; see also IDB Working Paper.

- Volpe Martincus, C. and Carballo, J., 2010c. "Beyond the average effects: The distributional impacts of export promotion programs in developing countries." *Journal of Development Economics*, 92, 2; see also IDB Working Paper.
- Volpe Martincus, C. and Carballo, J., 2010d. "Export promotion: Bundled services work better." *The World Economy*, forthcoming; see also IDB Working Paper.
- Volpe Martincus, C.; Carballo, J.; and Garcia, P., 2010. "Public programs to promote firms' exports in developing countries: Are there heterogeneous effects by size categories?" *Applied Economics*, forthcoming; see also IDB Working Paper.
- Young, S., 1995. "Export marketing: Conceptual and empirical developments." *European Journal of Marketing*, 29, 8.

Appendix A4.1. Empirical Methodology

This appendix briefly explains the main estimation methods used to generate the estimates reported in the chapter.⁷³ Let Y_{it} be (the natural logarithm of) firm i 's total exports in year t .⁷⁴ Each year firm i may either participate in export promotion programs ("1") or not participate in these programs ("0"), but not both. Hence, firm i has two potential export outcomes: Y_{it}^1 and Y_{it}^0 , which correspond to the participation and non-participation states, respectively. Further, let D_{it} be an indicator codifying information on assistance by the export promotion organization. Specifically, D_{it} takes the value 1 if firm i has been assisted by the organization in year t and 0 otherwise.⁷⁵ In this case, firm i 's observed export outcome can be expressed as follows:⁷⁶

$$Y_{it} = D_{it}Y_{it}^1 + (1 - D_{it})Y_{it}^0 \quad (1)$$

and the impact of trade support is therefore given by: $\Delta Y_{it} = Y_{it}^1 - Y_{it}^0$. The fundamental problem of causal inference is that it is impossible to observe Y_{it}^1 and Y_{it}^0 for the same unit. Hence, the population of firms is generally used to learn about the properties of the potential outcomes and compute an average treatment effect. More specifically, when participation in the programs under consideration is voluntary, it is common practice to determine their effects on those who participated and accordingly an *average treatment effect on the treated* is estimated:

$$\gamma = E(Y_{it}^1 | D_{it} = 1) - E(Y_{it}^0 | D_{it} = 1) = E(\Delta Y_{it} | D_{it} = 1) \quad (2)$$

⁷³ An explanation of the methods used in robust check exercises such as the dynamic panel data estimator proposed by Blundell and Bond (1998) or double-robust estimation (see, e.g., Robins and Rotznisky, 1995; Imbens, 2004; Imbens and Wooldridge, 2008; and Chen et al., 2009) can be found in the respective technical papers.

⁷⁴ The use of (natural) logarithm is partially motivated by the scale problem originating in the fact that our binary variable D does not capture the size of the assistance (see Lach, 2002). The presentation hereafter focuses on firms' total exports, but *mutatis mutandis* also applies to measures of export performance along the extensive margin and the intensive margin.

⁷⁵ We interchangeably use the terms assistance, support, treatment, and participation.

⁷⁶ This is the potential outcomes framework due to, among others, Fisher (1935), Roy (1951), and Rubin (1974).

where $E(Y_{it}^1 | X_{it}, D_{it} = 1)$ is the expected (average) exports of those firms that have received export support and $E(Y_{it}^0 | X_{it}, D_{it} = 1)$ is the expected exports of these firms had they not received this support. The parameter γ then measures the average rate of change in exports between these trade support statuses.⁷⁷

Difference-in-differences and *matching difference-in-differences* are alternative methods to generate an appropriate sample counterpart for the missing information on outcomes had the firms not been assisted, and thereby to compute the effect of this assistance. Both procedures rely for identification on the assumption that there are no time-varying unobserved effects influencing selection into trade promotion programs and exports.⁷⁸

Difference-in-differences: In general, in order to calculate standard errors, a regression approach is used (see Ravallion, 2008). Thus, assuming that the conditional expectation function $E(Y | X, D)$ is linear and that unobserved characteristics, μ_{it} , can be decomposed into a firm-specific fixed-effect, λ_i ; a year, common macroeconomic effect, ρ_t ; and a temporary firm specific effect, ε_{it} , leads to the following error-components specification:

$$Y_{it} = X_{it}\theta + \gamma D_{it} + \lambda_i + \rho_t + \varepsilon_{it} \quad (3)$$

This equation is estimated on the whole sample and, to create a common before-treatment period, on the sub-samples formed by those firms that were never previously treated (thus yielding the effect of the first assistance) or those that were not treated in the previous period.⁷⁹ Further,

⁷⁷ See Lach (2002). In this exercise, general equilibrium effects are ignored so that outcomes for each firm do not depend on the overall level of participation in the activities performed by the agency (see Heckman et al., 1998). In particular, information spillovers are not considered. As mentioned above, firms may learn about export opportunities from other firms (see Rauch, 1996). If these spillovers would be associated with participation in export promotion activities, i.e., untreated firms obtain business information from treated firms, then the treatment effects would be underestimated.

⁷⁸ See Heckman et al. (1997); and Blundell and Costa Dias (2002).

⁷⁹ See Lach (2002).

estimation of Equation (3) can be potentially affected by severe serial correlation problems.⁸⁰ Standard errors are then estimated allowing for an unrestricted covariance structure over time within firms, which may differ across them.⁸¹

A common treatment effect (i.e., $\gamma = \gamma_i \forall i$) assumption underlies Equation (3). However, effects can vary across groups of firms. More formally, they are likely to be heterogeneous by observed covariates. Under heterogeneity, the correct specification of the estimating equation would be:⁸²

$$Y_{it} = X_{it}\theta + (\gamma + \gamma_X X_{it})D_{it} + \lambda_i + \rho_t + \varepsilon_{it} \quad (4)$$

Further, Equation (3) assumes linearity. This may lead to inconsistency as a consequence of potential misspecification.⁸³ *Matching difference-in-differences* does not impose this functional form restriction in estimating the conditional expectation of the outcome variable and therefore generates estimates that are robust to these potential specification errors.

Matching Difference-in-Differences: Formally, the estimator is given by:

$$\hat{\gamma}^{MDID} = \sum_{i \in \{I^0 \cap S^*\}} \left\{ \Delta Y_{it} - \sum_{j \in \{I^1 \cap S^*\}} W_{ij} \Delta Y_{jt} \right\} w_{ij} \quad (5)$$

where I^0 (I^1) is the set of control (treatment) firms; S^* is the common support; W is the weight placed on comparison observation j for firm i and w accounts for the re-weighting that reconstructs the outcome distribution for the treated sample. The weights W depend on the cross-sectional matching estimator employed. Three alternative methods based on different metrics are generally used in the evaluation studies: the nearest neighbor, the radius, and the kernel estimators.⁸⁴ Note that, in general, in

⁸⁰ See Bertrand et al. (2004).

⁸¹ See Bertrand et al. (2004).

⁸² See Djebbari and Smith (2008).

⁸³ See Meyer (1995); Abadie (2005).

⁸⁴ See, e.g., Smith and Todd (2005a) for a formal definition of these estimators.

order to reduce the dimensionality problem of matching, this is generally performed on the propensity to participate given the set of observable characteristics X , or *propensity score*: $P(X_i) = P(D_i = 1 | X_i)$.⁸⁵

Since the propensity score is in fact based on fitting a parameter structure (probit or logit), its success in balancing the values of covariates between matched treatment and comparison groups needs to be tested. The quality of matching is thus evaluated using several alternative tests such as the stratification test; the standardized differences test; the t-test for equality of means in the matched sample; the test for joint equality of means in the matched sample or Hotelling test; and the pseudo R^2 along with the likelihood ratio test of joint insignificance of regressors in the propensity score before and after matching.⁸⁶ Finally, the significance of the estimated impacts is assessed using analytical, bootstrapped, and subsample-based standard errors.⁸⁷

Multiple Program Matching Difference-in-Differences: Interestingly, matching difference-in-differences can also be used to assess the relative effects of different trade assistance initiatives. Let export promotion policy be a bundle of S different programs. There are accordingly $(S+1)$ different mutually exclusive states (treatments) whose respective outcomes are denoted by $\{Y^0, Y^1, \dots, Y^S\}$ and where outcomes correspond to a specific measure of export performance. Thus, Y_i^s is (the natural logarithm of) firm i 's total exports if this firm is assigned to program s . Similarly, Y_i^r is (the natural logarithm of) firm i 's total exports if this firm is assigned to program r , and so forth. In this case:

$$\hat{\gamma}^{s,r} = E(Y^s | D = s) - E(Y^r | D = s) \quad (6)$$

where $D \in \{0, 1, \dots, S\}$ is a variable indicating participating in a particular program and $\gamma^{s,r}$ is the expected (average) effect of program s relative to program r for a firm randomly drawn from the population of firms

⁸⁵ See Rosenbaum and Rubin (1983).

⁸⁶ See, e.g., Smith and Todd (2005b); Girma and Görg (2007); and Caliendo and Kopeinig (2008).

⁸⁷ See Heckman et al. (1998); Smith (2000); and Abadie and Imbens (2006).

participating in program s .⁸⁸ It can be shown that this average effect can be expressed as follows:

$$\hat{\gamma}^{s,r} = E(Y^s | D=s) - \frac{E}{Pr^{sr}(X)} \left\{ E \left[(Y^r | Pr^{sr}(X), D=r) | D=s \right] \right\} \quad (7)$$

where $Pr^{sr}(x) = Pr^{sr}(D=r | D=r \vee D=s, X=x) =$

$$\frac{P(D=r | X=x)}{P(D=s | X=x) + P(D=r | X=x)}$$

In order to identify $\gamma^{s,r}$ only information from the sub-samples of participants in programs s and r is required. When all values of s and r are of interest one can model and separately estimate binary conditional probabilities over the $S(S-1)/2$ sub-samples or formulate the complete choice problem in a model and estimate it on full sample with a multinomial probit.⁸⁹ The previous methods produce estimates of average treatment effects. When one is instead interested in the distributional impacts of trade promotion, *quantile treatment effects* need to be estimated.

Quantile Treatment Effects: Formally, quantile treatment effects on the treated effects are given by:

$$\Delta_{\tau|D=1} = q_{1,\tau|D=1} - q_{0,\tau|D=1} = \inf_q \left\{ Pr[Y(1) \leq q] \geq \tau \right\} - \inf_q \left\{ Pr[Y(0) \leq q] \geq \tau \right\} \quad (8)$$

where $\tau \in (0,1)$; and *inf* denotes inverse function.

Under the conditional independence assumption and the common support condition assumptions (see Footnote 8), a consistent estimator of the quantile treatment effect on the treated can be obtained as the difference between the solutions of two minimizations of sums of weighted check functions:⁹⁰

⁸⁸ Notice that $\gamma^{s,s} = 0$. In addition, if participants in programs s and r differ in a non-random way, i.e., systematically differ over the distribution of their characteristics, and program effects vary with these characteristics, then the treatment effects on the treated are not symmetric, i.e., $\gamma^{s,r} \neq \gamma^{r,s}$.

⁸⁹ See Lechner (2002).

⁹⁰ See Firpo (2007).

$$\begin{aligned}\hat{\Delta}_{\tau|D=l} &= \hat{q}_{l,\tau|D=l} - \hat{q}_{0,\tau|D=l} \\ &= \underset{q}{\operatorname{argmin}} \sum_{i=l}^N \hat{\omega}_{l,i|D=l} \rho_{\tau}(Y_i - q) - \underset{q}{\operatorname{argmin}} \sum_{i=l}^N \hat{\omega}_{0,i|D=l} \rho_{\tau}(Y_i - q)\end{aligned}\quad (9)$$

where the check function $\rho_{\tau}(\cdot)$ evaluated at the real number of a is $\rho_{\tau}(a) = a(\tau - 1\{a \leq 0\})$ and the $\hat{\omega}$ s are the individual weights given by:⁹¹

$$\hat{\omega}_{l,i|D=l} = D_i / \sum_{i=l}^N D_i \quad (10)$$

$$\hat{\omega}_{0,i|D=l} = [\hat{p}(X_i) / (1 - \hat{p}(X_i))] [(1 - D_i) / \sum_{i=l}^N D_i] \quad (11)$$

In this context, selection on an unobservable determinant can be allowed for as long as we assume that this determinant lies on a separable individual specific component of the error term, i.e., using as outcome variable the first (logarithmic) difference of exports.⁹² We should note that, in doing so, this procedure yields estimates of the impact of trade promotion actions across quantiles of the distribution of the growth rates of exports. In order to gain insights on effects of trade promotion actions across quantiles of the distribution of export levels, we have to compare the distribution of (lagged) export levels corresponding to firms in quantiles of the distribution of first-differentiated exports registering assistance effects of different magnitude.

Estimating Treatment Effects with Dichotomous Outcome Variables: Procedures such as difference-in-differences and matching difference-in-differences work well with continuous export performance measures along the extensive margin such as the (growth of the) number of export destinations and the number of products exported. However, with binary outcomes, standard procedures can lead to predictions outside the allowable range, and giving up the additivity assumptions to avoid potential misspecification without imposing additional assumptions may result in non-identification of the counterfactual distribution of outcomes.⁹³ As a consequence, to assess

⁹¹ See Koenker and Bassett (1978).

⁹² See Blundell and Costa Dias (2002).

⁹³ See Athey and Imbens (2006).

whether export promotion activities actually help firms reach new destination countries (or introduce new export products) alternative estimation methods need to be used. A specific strategy has been recently proposed to address this issue.⁹⁴ This strategy consists of specifying and estimating an endogenous switching binary response model where selection into export promotion programs and export outcomes are jointly determined and unobservables are generated by factor structures. Formally, assume the following export outcome equations of the assistance and non-assistance states and the following decision rule for using this assistance, respectively:

$$Y_{li}^* = X_i \beta_l + U_{li} \quad (12)$$

$$Y_{li} = \begin{cases} 1 & \text{if } Y_{li}^* \geq 0 \\ 0 & \text{otherwise} \end{cases}$$

$$Y_{0i}^* = X_i \beta_0 + U_{0i} \quad (13)$$

$$Y_{0i} = \begin{cases} 1 & \text{if } Y_{0i}^* \geq 0 \\ 0 & \text{otherwise} \end{cases}$$

$$D_i^* = Z_i \beta_D + U_{Di} \quad (14)$$

$$D_i = \begin{cases} 1 & \text{if } D_i^* \geq 0 \\ 0 & \text{otherwise} \end{cases}$$

where Y_{li}^* is a latent index of adding a new country when receiving support and Y_{0i}^* is the corresponding latent index when not receiving support; X_i is a vector of observed random variables; β_0 and β_l are set of parameters; U_{0i} and U_{li} are unobserved random variables with $U_{0i} \neq U_{li}$, so that idiosyncratic gains from assistance are allowed for each firm; D_i^* is a latent index that determines whether a firm is assisted or not; Z_i is a vector of observed random background variables that determine selection into these programs, such that those variables included therein but not included in X_i provide an identifying exclusion restriction; β_D is a set of parameters; and U_{Di} are unobservables.⁹⁵

⁹⁴ See Aakvik et al. (2005).

⁹⁵ See Aakvik et al. (2003).

Unobserved heterogeneity is assumed to follow a factor structure and enter into the selection as well as the outcome equations:⁹⁶

$$U_{Di} = \alpha_D \theta_i + \varepsilon_{Di} \quad (15)$$

$$U_{1i} = \alpha_1 \theta_i + \varepsilon_{1i} \quad (16)$$

$$U_{0i} = \alpha_0 \theta_i + \varepsilon_{0i} \quad (17)$$

where θ_i is an unobserved firm-specific time invariant factor and $\varepsilon_D, \varepsilon_1, \varepsilon_0$ are independent with respect to each other and of the exogenous variables in the model.⁹⁷ The α 's are factor loading in each equation that capture potential correlations among their error terms. In this case, the effect of the assistance by the agency on assisted firms is given by:

$$\begin{aligned} \Delta^{TT}(x, z, D=1) &= E(\Delta | X=x, Z=z, D=1) = \\ &= Pr(Y_i = 1 | X=x, Z=z, D=1) - \\ &= Pr(Y_0 = 1 | X=x, Z=z, D=1) \\ &= \frac{1}{F_{U_D}(z\beta_D)} [F_{D,1}(z\beta_D, x\beta_1) - F_{D,0}(z\beta_D, x\beta_0)] \\ &= \frac{1}{E(\Phi(z\beta_D/\sqrt{2}))} \int [\Phi(x\beta_1 + \alpha_1\theta) - \Phi(x\beta_0 + \alpha_0\theta)] \\ &\quad \Phi(z\beta_D + \theta) \phi(\theta) d\theta \end{aligned} \quad (18)$$

Since θ is not observed, it is integrated out assuming that $\theta \Pi(X, Z)$. The likelihood function for this one-factor model integrating out θ has the following form $L = \prod_{i=1}^N \int Pr(D_i, Y_i | X_i, Z_i, \theta) \phi(\theta) d\theta$, where $Pr(D_i, Y_i | X_i, Z_i, \theta_i) = Pr(D_i | Z_i, \theta_i) Pr(Y_i | D_i, X_i, \theta_i)$. This function's parameters can be estimated by maximum likelihood and the significance of the implied export support effect can be assessed based on bootstrapped standard errors.

⁹⁶ See Heckman (1981) and Aakvik et al. (2005).

⁹⁷ See Aakvik et al. (2003).

Table A4.1 ■ Empirical Approach Used in Each Case Study

Export Promotion Organization	Program	Export Outcomes*	Estimation Method
PROMEX/PROMPERU	Single program (binary participation status: 1 if a firm receives assistance from the organization through one or more programs described in Chapter 2, and 0 otherwise).	Total exports, number of destination countries, number of products exported, average exports per country, average exports per product, average exports per country and product, exports per country, number of products per country, exports per product, number of countries per product, and exports per country and product.	Difference-in-differences, matching difference-in-differences, and GMM system.
PROCOMER	Single program (binary participation status: 1 if a firm receives assistance from the organization through one or more programs described in Chapter 2, and 0 otherwise).	Total exports, number of destination countries, number of products exported, average exports per country, average exports per product, average exports per country and product, both overall and by groups of firms exporting differentiated goods, reference-priced goods, homogeneous goods, differentiated and reference-priced goods, differentiated and homogeneous goods, reference-priced and homogeneous goods, and differentiated, reference-priced and homogeneous goods.	Matching difference-in-differences.
URUGUAY XXI	Single program (binary participation status: 1 if a firm receives assistance from the organization through one or more programs described in Chapter 2, and 0 otherwise).	Total exports, number of destination countries, number of products exported, addition of a new export product, addition of a new differentiated export product, addition of new destination country, and addition of a new OECD destination country.	Matching difference-in-differences and endogenous switching binary response model.

Continued on next page

Table A4.1 ■ Empirical Approach Used in Each Case Study *(continued)*

Export Promotion Organization	Program	Export Outcomes*	Estimation Method
PROCHILE	Single program (binary participation status: 1 if a firm receives assistance from the organization through one or more programs described in Chapter 2, and 0 otherwise).	Total exports, number of destination countries, number of products exported, average exports per country, average exports per product, average exports per country and product, both overall and by deciles of these variables.	Semiparametric method for estimating quantile treatment effects (combined with difference-in-differences).
EXPORTAR	Single program (binary participation status: 1 if a firm receives assistance from the organization through one or more programs described in Chapter 2, and 0 otherwise).	Total exports, number of destination countries, number of products exported, average exports per country, average exports per product, average exports per country and product, both overall and by firm size categories (small, medium, and large) as defined in terms of their levels of employment.	Difference-in-differences, matching difference-in-differences, and double-robust estimation.
PROEXPORT	Multiple programs (participation status specific to counseling services, trade agenda services; trade fair, shows, and mission services; or their alternative combinations).	Total exports, number of destination countries, number of products exported, average exports per country, average exports per product, average exports per country and product, both overall and comparing programs to non-participation and to each other.	Multiple program matching difference-in-differences.

* Since estimation methods work on differences over time to control for observed and unobserved time-invariant firm characteristics as well as time-varying factors common to both assisted and control firms that might be correlated with participation in export promotion programs and export outcomes, estimation effects are in fact measured on the growth of these variables, except for those discrete export outcomes examined in the case of Uruguay.

Table A4.2 ■ Datasets

Country	Export Data	Trade Support Data	Sample Period
Peru	Firm exports disaggregated by product (10-digit HS) and destination country	All exporters/All programs	2001–2005
Costa Rica	Firm exports disaggregated by product (10-digit HS) and destination country	All exporters/All programs	2001–2006
Uruguay	Firm exports disaggregated by product (10-digit HS) and destination country	Exporters interacting closely with the organization (i.e., face-to-face contacts)/ Primarily missions and fairs	2000–2007
Chile	Firm exports disaggregated by product (8-digit HS) and destination country	All exporters/All programs	2002–2006
Argentina	Firm exports disaggregated by product (10-digit HS) and destination country	Exporters interacting closely with the organization (i.e., face-to-face contacts)/ Primarily missions and fairs	2002–2006
Colombia	Firm exports disaggregated by product (10-digit HS) and destination country	All exporters/All programs	2003–2006

>> Reaching the Final Destination: Making the Most of Export Promotion

5

Latin American and Caribbean countries still have levels of trade and degrees of export diversification below what would be expected given the size of their economies and levels of development. Several studies have shown that this limited integration into the world economy has potential to negatively affect long-term growth prospects. Of the various explanations for this below-expectation trade performance, trade costs are a leading factor. With tariffs substantially lower than in the past, and leaving aside other relevant determinants of trade such as transport costs, the question arises whether other trade costs may be hindering the countries' export potential. The answer to this question is certainly positive. Information problems still remain an important trade barrier for firms seeking to enter international markets as well for firms engaged in expanding their operations to more countries, and with more products. In undertaking such activities, companies must embark on a costly process of information gathering on export logistics and business opportunities, including the search for suitable commercial partners. This primarily entails a fixed cost, which may bar entry into those markets. As highlighted by recent international trade models featuring firm heterogeneity, given the distribution of productivity across firms, these fixed costs determine a country's extensive margin of trade, both in terms of exporters and destination markets.

Successful searches for business partners and the associated economic transactions reveal valuable information for third parties, thus generating positive externalities. Other companies may take advantage of this information, thereby reducing the potential benefits accruing to those firms actually making the investments in searches. As a consequence, aggregate investments to seek business opportunities would be sub-optimally low and the level and diversification of exports would be low as well.

This potentially creates a rationale for public intervention. Nevertheless, the desirability of this intervention from a social welfare point of view is not necessarily warranted. For this to be the case, the associated change in the social net benefits, i.e., the difference between the social benefits and the social costs generated by the public policies, relative to the status quo must be positive. In particular, the opportunity costs of means applied in specific public interventions need to be explicitly taken into consideration. In short, in order to properly assess the advisability of these interventions, measures of social benefits and costs must be estimated and compared.

Export promotion policies are widespread in the region. Virtually all countries have specialized organizations tasked with the design and implementation of policy measures primarily aimed at increasing and diversifying their exports. However, despite their pervasiveness, consistent evaluations of these policies are far from being the rule in Latin America and the Caribbean. Even robust evidence on the direct impact of these policies on the variable that they are supposed to influence—exports—is almost entirely missing.

This report has aimed at establishing whether these direct effects are actually present and how they take place. It is therefore a first step towards the goal of filling this evaluation gap and in this way makes an initial contribution to the development of sound, well-grounded public export promotion policies in the region.

Our study has focused on the export support provided by organizations specifically charged with this task and not on effects associated with general macroeconomic measures intended to expand external sales, such as fiscal or exchange rate stimulus. We have therefore started with an organizational analysis of the entities that manage these export assis-

tance programs, which has taken into account both those from countries in the region and relevant counterparts from outside of the region. This analysis suggests that there are both similarities and differences among organizations across regions and across countries within regions. In terms of differences, entities in Latin America and the Caribbean tend to be smaller relative to their extra-regional peers as measured by the size of the financial and human resources available to them, in most cases even relative to their countries' sizes. Their boards of directors have a smaller number of members, and they make less use of bonuses as economic incentives to motivate their employees. Further research is required to convincingly establish the role of these factors (as well as that of comparable ones, such as the share of the private sector in these boards) in shaping their effectiveness.¹ Organizations in the region also have a more limited direct presence abroad. Disparities along this latter dimension are also pronounced within the region as a few organizations have many foreign missions, whereas most have few or no representations abroad. As a result, these latter organizations must rely on the collaboration of diplomats working at their countries' embassies and consulates.

The econometric evidence indicates that the manner in which export promotion is organized abroad is not neutral in terms of its impact on countries' export performance. More precisely, establishing an office of an export promotion organization with dedicated staff has a larger effect on the level of exports and the number of products exported than increasing the number of diplomatic representations. Further, while the former has a larger impact on the extensive margin of differentiated products, the latter seems to be relatively more effective in expanding the set of homogeneous goods exported. These findings are unsurprising. Entities with offices abroad have more expertise in performing the specialized task of export promotion, dedication to this specific task, and coordination between relevant involved actors. Does this imply that export

¹ The method through which certain specific export support services are provided to firms, either directly or through outsourcing to third parties, such as business associations or specialized private companies, may also likely matter for the effects of export promotion programs. This is an issue of interest in itself that should be examined in a separate study.

promotion organizations should open such offices? The answer to this question is not necessarily positive. These results should be interpreted as suggesting that, given a certain global amount of resources that has been allocated to finance foreign missions, the specific goal of increasing and diversifying exports into more differentiated goods is better served by redistributing these resources to finance export support that is similar and under similar conditions to that provided by these specialized entities. This might be achieved by strengthening trade competencies at diplomatic missions, enhancing coordination and accountability mechanisms among officials in charge of export promotion at these missions and the respective organizations, and providing effective incentives to motivate these officials to perform marketing activities. However, it is not easy to make the organizational changes needed to create these conditions. More generally, one should not only assess the adequacy of financial resources available to different types of foreign missions, but also that of total available resources for these missions versus other modalities of export support (e.g., specific actions or combinations of actions, such as incoming business trips accompanied by commercial agendas).

While most export promotion organizations in the region attempt to quantify the impact of their interventions, estimates are usually flawed by serious methodological deficiencies that render them invalid as inputs to guide their general strategy and to define the relative composition of their service mix. Consistent periodic evaluations of overall and program-specific effectiveness are necessary components of the process by which these organizations adjust to their clients' evolving needs, and are therefore a practice that needs to be incorporated.

This report has presented the results of six exercises of effectiveness assessment, each for a different entity. These assessments are based on state-of-the-art econometric methods used in the impact evaluation literature.² These methods have been applied on highly disaggregated

² As mentioned in Chapter 4, these are non-experimental methods, since no randomized groups are available. Social experiments can generate further and, under certain conditions, more robust insights into the effects of trade assistance, and therefore appear as the natural alternative strategy to pursue.

firm-level data to estimate the effects of these entities' export promotion programs on alternative firms' export outcomes (i.e., total exports, extensive margin, and intensive margin), i.e., the direct effects on the declared primary variables of interest. The estimates indicate that export promotion assistance has a larger impact on firms' export extensive margin, primarily along the country dimension and, in particular, when trading differentiated products. The same holds for companies that are small or medium-size and whose experience in foreign markets is limited. Trade promotion might thereby substantially help increase the countries' exports as long as these are, or become, sufficiently productive. Finally, effects appear to be greater when individual programs are combined to provide exporters with support throughout the different stages of the development of export relationships, as opposed to isolated actions, such as solely sponsoring the participation of firms in international marketing events. Properly combined with cost-side considerations, these findings suggest some preliminary lines of actions when defining the export promotion strategies and thus have concrete implications on the allocation of available resources to different program components.

Admittedly, our econometric analyses have limitations that must be addressed in future research. First, our "sample" of firms virtually corresponds to the countries' entire population of exporters. Due to lack of data, we do not consider non-exporting companies and unfortunately we cannot explicitly examine whether and how export promotion helps firms entering international markets for the very first time, i.e., the firms' extensive margin. Anecdotal evidence suggests that the effect of trade assistance might be large in this case. The fact that the greatest impacts are observed for small and medium-size companies can be considered consistent with this evidence since there is a robust empirical relationship between their size and their probability of becoming exporters. If this were so, then our impact (point) measures might understate the true ones. Potentially non-accounted spillover effects would have the same effect. On the other hand, our databases are sufficiently rich to allow us to reasonably account for key factors that simultaneously determine selection into export promotion programs and export performance. Nonetheless, we cannot completely rule out the possibility that there are unobserved

time-varying firm-specific factors (e.g., developing an effective innovative marketing strategy) that would lead to increased exports that are more likely to be present among firms participating in these programs, in which case the estimates would overstate their causal effect. The risk of this problem occurring would be smaller if additional information on firm characteristics were available (e.g., data required to compute specific measures of firms' total factor productivity). Unfortunately, gathering this information is extremely difficult, even for the export promotion organizations themselves, in some cases because these are private entities from a legal point of view.³ Access of these organizations to relevant data stored by other public agencies, including national bureaus of statistics, as well as collaboration to generate new relevant data should be improved—all under conditions that ensure strict confidentiality. In this regard, strengthened inter-agency cooperation in sharing lists of beneficiaries of different public support programs (e.g., export promotion and innovation promotion) would be desirable not only for coordination purposes under the prevailing conditions, but also for making possible reliable evaluations that take into consideration the existence of other assistance initiatives in which companies participate and assess complementarities and synergies among them. Insights into these potential interdependencies would be a valuable input for designing policy instruments and establishing their components and sequencing. More generally, these consistent data on the various relevant programs would allow for evaluations of their relative merits in terms of a common metric (e.g., effect on the outcome variable of interest and on, say, productivity) and would help policymakers better allocate resources.

As mentioned above, we have primarily focused on the direct impact of export promotion activities carried out by the countries' major organizations on exports. Participation in these activities may also have byproducts and indirect effects whose significance should be explicitly explored. For example, participation in a trade show may help companies reach non-sales objectives, such as maintaining their image before their competitors, clients, the industry generally, and even the press; gathering

³ This is a specific reason to consider carrying out randomized experiments to gain a deeper understanding of the impacts of export promotion programs.

information on competitors' products, prices, and marketing strategies; enhancing staff morale; and testing the sales potential of specific products.⁴ Furthermore, export promotion seems to help firms diversify their exports in terms of destination countries and also, to some extent, of products. A simple portfolio argument suggests that, if covariance of firm sales across countries is not perfect, then spreading these sales over a larger number of countries will be associated with more stable total sales. This can be expected to result in less likelihood of business failure and of abandoning international markets. The final outcome may be increased firm survival.⁵ Moreover, although still disputed in the empirical literature, exporting and expanding exports along the country and products extensive margins may generate positive externalities (i.e., learning-by-exporting effects), thereby resulting in increased productivity. In this way, trade support may potentially end up boosting firms' productivity.

In closing, it is worth keeping in mind that export promotion policies are just one subset of public policy instruments that may affect countries' profiles in international trade. Strictly conceived, they reduce information and trade costs, thus enabling existing firms to enter international markets as well as current exporters to diversify their external sales of the goods they already produce in different markets. Other specific public policies, some of which are becoming increasingly interconnected with export promotion in developed countries, would also predictably have impacts on countries' international trade. Thus, business development support throughout the process of establishing new companies may result in the emergence of new firms producing new goods, and therefore in product diversification and potentially export diversification (for example, when properly combined with trade promotion). Finally, macroeconomic, sectoral, and general trade (i.e., regional trade agreements) policies are important conditioning factors of the effects of trade assistance initiatives.

⁴ See, e.g., Bonoma (Harvard Business Review, January-February 1983).

⁵ Volpe Martincus and Carballo (2009) show that larger diversification in terms of destinations and goods is indeed associated with higher survival rates of Peruvian exporters. See Volpe Martincus, C. and Carballo, J., 2009. "Survival of new exporters in developing countries: Does it matter how they diversify?" IDB Working Paper 140.

INTEGRATION AND TRADE

This IDB report is an invaluable contribution to assess the effectiveness of export promotion in the LAC region, including the challenging subject of institutional performance. It will help export promotion officials better understand differences among institutional and policy options, more clearly define export priorities, and provide the basis for more effective support to the private sector for maximizing the region's trade potential.

Patricia Francis, Executive Director, International Trade Center

Odyssey in International Markets is a must reading for economic policymakers in Latin America and the Caribbean. The study presents a unique comparative analysis of organizational schemes and incentive structures of agencies tasked with export promotion and, for the first time, provides a rigorous assessment of the effectiveness of several of these entities' activities. Its findings constitute a valuable input to improve the quality of government decision making on export promotion policies.

Luis Guillermo Plata Páez, Former Colombian Minister of Trade, Industry, and Tourism

The importance of informational barriers to international trade has been increasingly well documented. What to do about them is much less well understood. This book makes a strong case that government intervention through export promotion organizations is a justified and effective remedy in many Latin American countries, and shows how the operation of these organizations can be improved. It should be read by practitioners and scholars alike.

James E. Rauch, Professor of Economics, University of California, San Diego, and National Bureau of Economic Research

Export promotion programs can increase the chances of success for small and young companies in developing countries by providing them with support throughout the process of discovering new foreign markets. Our experience in selling natural health and food products abroad has been entirely consistent with the findings reported in this lucidly written and meticulously researched study.

Damián Silva, Managing Director, Peruvian Nature