

Japan and Latin America and the Caribbean: Building a Sustainable Trans-Pacific Relationship



Integration and Trade Sector
Vice Presidency for Sectors and Knowledge

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Introduction

How can Latin America and the Caribbean (LAC) and Asia ensure strong and sustainable economic relations in the future? Does trans-Pacific commerce have the potential to go beyond the commodities-for-manufacturing pattern that has characterized the recent surge in LAC-Asia trade? These concerns are on the minds of policy makers on both sides of the Pacific. In this report, we examine in depth a LAC-Asia relationship that might offer an answer to these questions: ties between Japan and the region have evolved and diversified over the course of several decades. From an initial focus on minerals and agriculture, the relationship now encompasses a broad panorama of trade, direct investment, and government-to-government cooperation that has shaped the development of sectors from automobiles and alternative energies to computer software and natural disaster preparedness, while helping launch some of LAC's signature export success stories.

Trade between Japan and LAC does indeed reflect the overriding pattern of trade between the region and Asia as a whole, in which the exchange of LAC's natural resources for Asian manufactures predominates. The top LAC exports to Japan are a familiar set of minerals and primary products, whereas Japan's exports to the region consist of a diversified mix of high-tech manufactured products and their components.

Simply looking at bilateral trade flows, however, captures only one facet of the economic relationship between Japan and LAC. Japan is one of the most important sources of FDI for the region, and Japanese investments, especially over the past decade, have targeted an increasingly diverse and technologically-intensive range of sectors in LAC. This investment, which has likely acted as a substitute for trade in some cases, brings a number of benefits for both sides: cutting-edge technology, know-how, and employment opportunities for host economies in the region; and access to promising new markets for Japanese firms. In many cases, Japanese firms have become major exporters from their production bases in LAC, highlighting how the economic relationship is deeper and more diversified than simple bilateral trade flows indicate.

These linkages did not always develop organically. As the report illustrates, governments on both sides have played a major role in shaping the bilateral relationships and ensuring that opportunities to diversify and

expand commerce to new areas are not lost. In the countries where the bilateral relationship has advanced the furthest, robust policy frameworks such as Economic Partnership Agreements and an array of cooperation initiatives have helped identify and take advantage of new opportunities to strengthen ties.

On the Japanese side, a decisive strategy of aligning official development assistance (ODA) projects through the Japan International Cooperation Agency (JICA) with the objectives of its national industries has created virtuous cycles where technical support spurs the development of new trade and investment opportunities for Japanese firms, while also promoting local development. A strong program of government-to-government cooperation has thus reinforced the initiative of the private sector, helping shape economic relations in a way that encourages greater inclusion and a broader distribution of the benefits of trade and FDI.

Indeed, the interconnected and reinforcing nature of trade, investment, and cooperation has been central to the trajectory of the Japan-LAC relationship. We cover each of these “pillars” of economic integration individually, showing how they have propelled Japan-LAC relations. An underlying theme throughout the report, however, is the interaction among these pillars, with trade leading to investment opportunities, which then further drives trade. At the same time, cooperation initiatives have been designed with an eye towards boosting the capacity of LAC countries to integrate into global markets and facilitating trade and investment. Japan has pursued such initiatives both at the bilateral level and through multilateral channels such as the Asia Pacific Economic Cooperation (APEC) and the Forum for East Asia-Latin America Cooperation (FEALAC), as well as through participation as a member of the Inter-American Development Bank.

For all its successes, however, the economic relationship has yet to reach its full potential. Japan’s share of LAC’s total trade is only 3 percent, having declined from around 7 percent in 1990. Likewise, LAC accounts for less than 5 percent of Japan’s overall trade, a figure that has not changed considerably over the past two decades¹. Even taking into account the large role that FDI plays, there should be opportunities for the region to increase trade with the world’s third-largest economy and, from the Japanese perspective, to claim a larger stake in a dynamic pole of global growth.

One place to start would be eliminating remaining trade barriers, especially the non-tariff barriers that still pose a considerable obstacle in areas where countries have competitive advantages. Japan’s bilateral Economic

¹ All trade figures cited in the text are IDB/INT calculations based on UN Comtrade unless otherwise noted.

Partnership Agreements (EPAs) with Mexico, Chile, and Peru, recent entry in the Trans-Pacific Partnership (TPP) process, and participation as an observer in the Pacific Alliance represent important steps toward addressing barriers to the movement of goods, services, and capital.

In addition, Japan has a long history of engagement in the region and strong cultural ties through the presence of Japanese communities in Brazil, Peru, Paraguay, and elsewhere. Sao Paulo alone is home to the largest Japanese population outside of Japan. These links represent important assets that have long anchored the Japan-LAC relationship and could provide the basis to further deepen integration and raise Japan's profile in the region. Despite the strong presence of Japanese firms in LAC and active government-to-government cooperation, Japan could be thought of as the "unheralded" Asian giant: the benefits of integration with Japan, and opportunities to deepen it in the future, seem to fly under the radar, especially in comparison with China, whose growing presence in the region has generated nearly constant attention. Perhaps not coincidentally, China has also made strong diplomatic and cultural (in addition to commercial) inroads in LAC over the past decade, which emphasize shared values and the importance of its relationships in the region.

For both LAC and Japan, missing out on the potential for deeper integration would be costly. This report, by providing an overview of the past trajectory and present state of the Japan-LAC relationship and highlighting its major achievements, seeks to underscore that point. It also aims to illustrate how governments on both sides can take advantage of future opportunities.

Trade

Trans-Pacific trade may be a new item on many countries' economic agendas, but it is far from a new phenomenon. The relationship between Japan and LAC provides ample evidence of that fact. Economic ties between the two economies have a long history, beginning with the arrival of Japanese immigrant communities in Brazil, Peru, and other countries in the region at the beginning of the 20th Century. This diaspora helped forge early trade links between Japan and LAC.

The flow of goods between the two economies gained steam during the 1960s and 1970s, driven largely by the exchange of raw materials in LAC for Japanese manufactures, in anticipation of the pattern seen in LAC's recent trade boom with Asia. This initial surge in Japan-LAC trade, however, hit a roadblock in the early 1980s when debt crises beset most LAC economies. In addition to several years of negative or flat trade growth, the period also saw Japanese banks, which had lent heavily to the region during the 1970s, incur major losses on those loans. Total trade between Japan and LAC (in real terms) did not return to 1981 levels until the mid-1990s (see Figure 1).

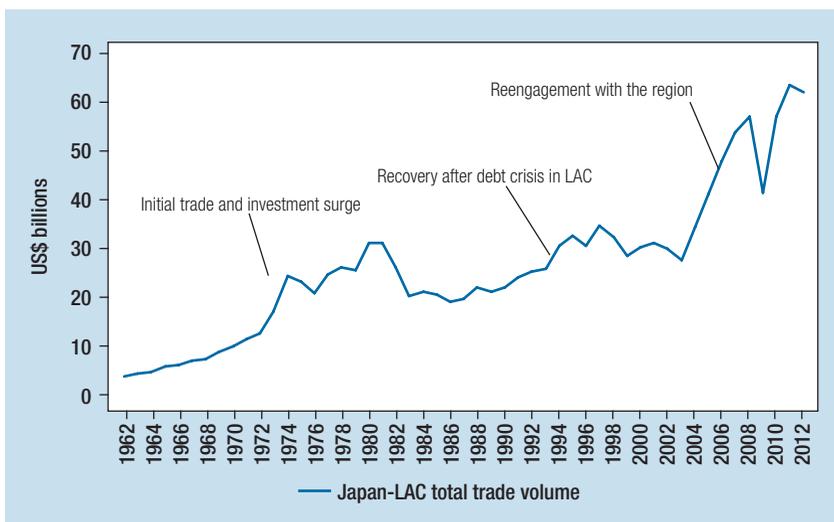


FIGURE 1/
Japan-LAC total trade,
1962–2012

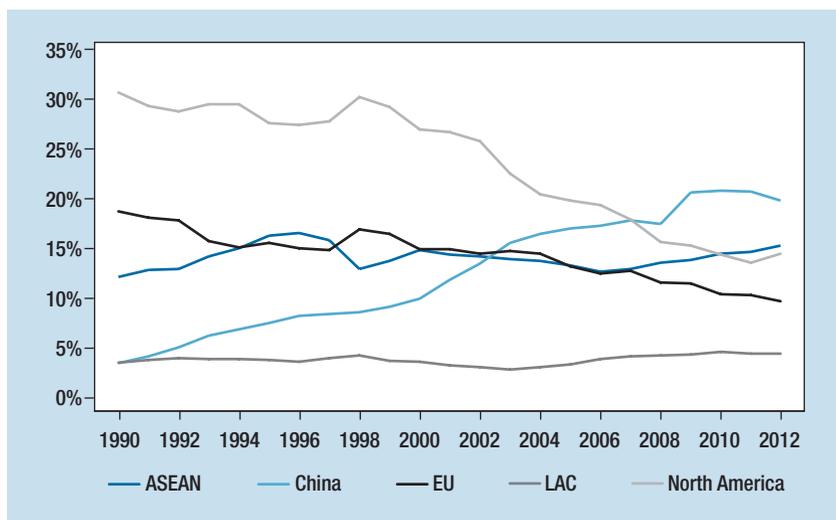
Source: IDB/INT based on UNComtrade.
Note: Trade values in real 2010 US dollars.

Trade grew steadily during the 1990s, although the round of financial crises that hit parts of the region in the late 1990s and early 2000s brought another period of stagnant trade before the sharp uptick since 2003. During this most recent period, bilateral trade grew at an annual average of 13 percent, a growth rate that puts LAC-Japan trade below the region's total trade growth (14 percent) and well short of its dynamic trade with China (32 percent), but still ahead of mature markets such as the United States (9 percent) and European Union (12 percent). LAC exports to Japan were the most dynamic component of trade, growing at an average of 18 percent each year versus 11 percent growth for LAC imports from Japan.

The ascendance of China as a major force in global trade, however, has overshadowed the steady growth of LAC-Japan trade. LAC's share of Japan's total trade has remained relatively flat over two decades, rising to 4.4 percent in 2012 from 3.6 percent in 1990. In the same period, China's share rose astronomically from a similar starting point to make up around 20 percent of Japan's trade by 2012 (see Figure 2). Japan's share of LAC's total trade, meanwhile, has declined from around 7 percent to 3 percent since 1990 notwithstanding the recent fast growth, again due to the rapid emergence of China as a major trading partner for the region.

The predominant pattern of trade between Japan and LAC has been consistent over several decades and mirrors what has been seen in the region's trade with other Asian economies—namely, the exchange of LAC's natural

FIGURE 2/
Share of Japan's total
trade, 1990–2012



Source: IDB/INT based on UNComtrade.

resources for manufactured goods from Japan. Indeed, as Figure 3 shows, Japan faces a natural resource scarcity on par with, and in some cases more severe than China's, while LAC clearly has an abundance of these same resources. While these structural characteristics have been present since the onset of Japan-LAC trade, the recent takeoff in trade is likely tied to China's emergence, which had a strong positive impact both on the price of LAC's main exports and overall growth in the region.

As a result, Japan's trade with the region remains concentrated in terms of both trading partners and products. As Table 1 shows, two countries, Chile and Brazil, combined to account for 71 percent of the region's exports to Japan in 2011 and 2012; the top five exporters from LAC make up a full 93 percent of the region's total.

In terms of products, the region's top exports to Japan consist of raw materials: minerals and primary agriculture and forestry products (see Table 2). The product concentration of exports is also considerable, with four products accounting for nearly half of the region's exports to Japan. Even so, LAC's exports to Japan are less concentrated by product than the region's exports to China, where the top four products make up over 60 percent of the total. Figure 4 shows two measures of export concentration, including one, the Herfindahl-Hirschman Index (HHI), which takes into account the full range of exports. The outcome shows that LAC exports to Japan are less concentrated than the region's exports to China (although more so than to Korea)

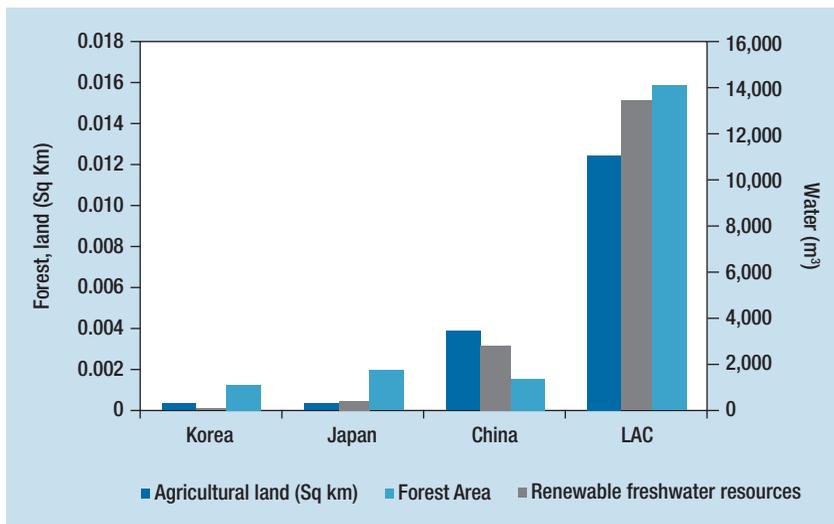


FIGURE 3/
Selected natural
resources per capita

Source: World Development Indicators.

TABLE 1/
Top LAC exporters to
Japan, 2011–2012

Country	Share (%)
Brazil	36.5
Chile	34.7
Mexico	9.7
Peru	8.5
Argentina	3.6

Source: IDB/INT based on UNComtrade.

At the sector level, however, the differences in LAC's export composition to Japan and China are minor (see Figure 5). In both cases, the large majority comes from natural resource-based sectors, with manufacturing making up a small share of the total. The sharpest distinction between Japan and China lies in fuels, which make up around 9 percent of LAC exports to China but do not figure prominently in LAC-Japan trade, which in turn has a larger agriculture component.

LAC's imports from Japan have lagged behind its exports during the recent trade surge, growing at 11 percent since 2003. On the import side, there is considerably more diversification, at least in terms of products. LAC's top ten import products from Japan only represent 30 percent of the overall imports (see Table 3). Not surprisingly, they comprise a vastly different product basket from LAC's exports and are dominated by automobiles, auto components and systems, and other high-tech products.

TABLE 2/
LAC's top ten exports to
Japan, 2011–2012
(HS2002 6-digit)

Product name	Share (%)	Accumulated Share (%)
Copper ores and concentrates	24.8	24.8
Non-agglomerated iron ores and concentrates	14.2	39.1
Cuts and offal, frozen	5.2	44.2
Coffee, not decaffeinated	5.0	49.2
Agglomerated iron ores and concentrates	3.9	53.1
Copper cathodes and sections of cathodes	2.8	55.9
Aluminum, not alloyed	2.5	58.4
Frozen fish, other	2.1	60.5
Zinc ores and concentrates	1.8	62.3
Fuel wood, non-coniferous	1.8	64.0

Source: IDB/INT based on UNComtrade.

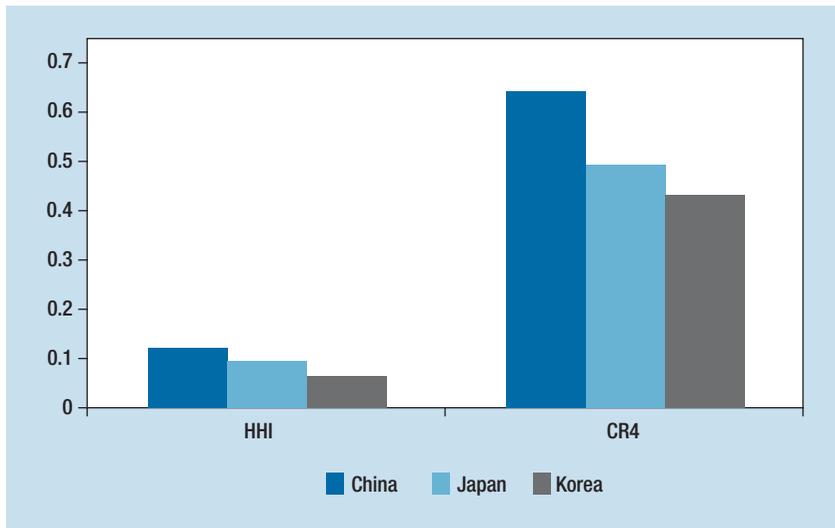


FIGURE 4/
Concentration of LAC's exports, 2011

Source: IDB/INT based on UNComtrade.

Note: HHI refers to the Herfindahl-Hirschman normalized concentration index, which ranges from 0 (diversified) to 1 (concentrated). CR4 refers to the aggregated share (in decimals) of total exports held by the top 4 exported products.

On the other hand, as Table 4 shows, five countries in LAC receive over 80 percent of Japanese imports, with Mexico alone accounting for over 45 percent of total imports. In addition to its large domestic market, Mexico's position as the destination of nearly half of Japan's exports to LAC reflects the country's emergence as a manufacturing center that has attracted large investment inflows from Japanese producers (see case study).

Finally, following the pattern of LAC's trade with the rest of Asia, the commodities-for-manufacturing exchange between Japan and LAC

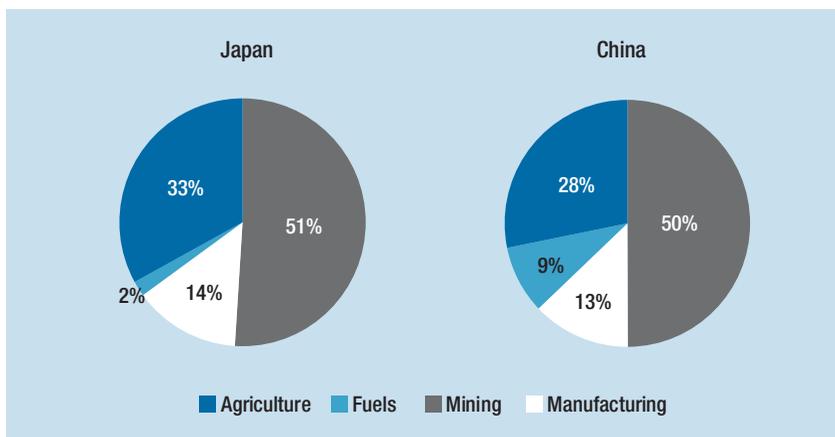


FIGURE 5/
LAC exports to Japan and China by sector, 2011–2012

Source: IDB/INT based on UNComtrade.

TABLE 3/

LAC's top ten imports
from Japan, 2011–2012
(HS2002, 6-digit)

Product name	Share (%)	Accumulated Share (%)
Motor vehicles with cylinder capacity greater than 1500 cc but less than 3000 cc	8.7	8.7
Other parts for television or radio broadcasting	3.2	11.9
Gear boxes	3.1	15.0
Parts and accessories for liquid crystal devices	2.6	17.6
Parts for printing machinery	2.3	19.9
Motor vehicles with cylinder capacity greater than 1000 cc but less than 1500 cc	2.2	22.1
Other petroleum or bituminous oils	2.0	24.1
Parts for spark ignition internal combustion piston engines	1.8	25.9
Integrated electronic circuits, other	1.8	27.7
Motor vehicles with cylinder capacity exceeding 3000 cc	1.4	29.1

Source: IDB/INT based on UNComtrade.

has translated into steep bilateral trade deficits for most LAC countries. As Figure 6 shows, despite the fast recent growth of LAC exports to Japan, nearly every country in the region has accumulated a trade deficit with Japan since 2000, in several cases reaching over 80 percent of total trade. Only Chile and Peru have run surpluses in this period.

On the whole then, the numbers suggest the current pattern of trade between LAC and Japan is similar to the region's trade with China and other Asian countries—with a powerful resource complementarity driving the trade relationship. LAC's commodities exports, moreover, have not kept pace with its imports of manufacturing goods, resulting in trade deficits (see Figure 7). However, the Japan-LAC relationship could be considered distinct from the region's trade with the rest of Asia in at least three ways. The first, as mentioned earlier, is that Japan and LAC have been important trade partners

TABLE 4/

Top LAC importers from
Japan, 2011–2012

Country	Share (%)
Mexico	45.8
Brazil	20.7
Chile	8.2
Argentina	3.8
Peru	3.7

Source: IDB/INT based on UNComtrade.

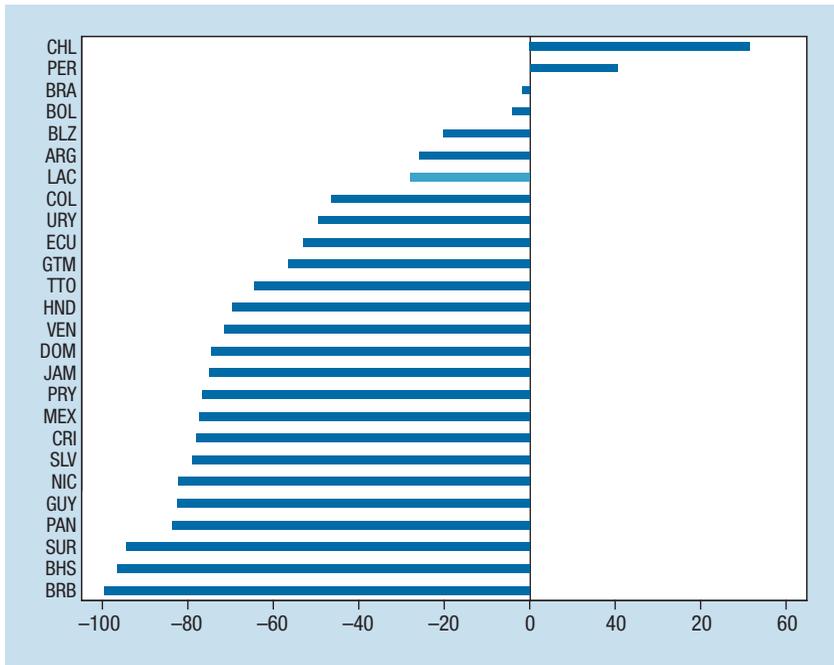


FIGURE 6/
Accumulated trade
balances as share of
total trade, 2000–2012
(%)

Source: IDB/INT based on IMF Direction of Trade Statistics.

for decades, in contrast to LAC's trade with the rest of Asia, which has only reached significant levels since 2000. It is therefore pertinent to ask whether

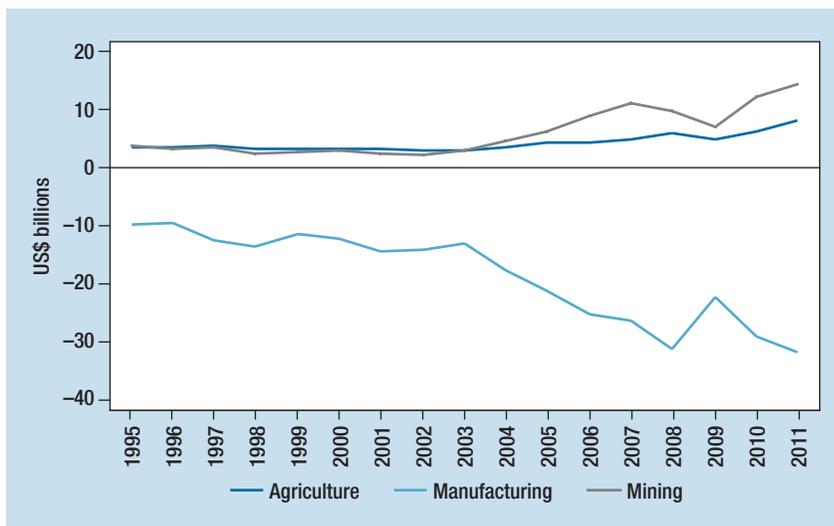


FIGURE 7/
LAC's net exports to
Japan 1995–2011

Source: IDB/INT based on UNComtrade.

the pattern of trade has evolved over time. Have LAC's exports to Japan, for example, become more or less diversified?

Here, the evidence is not so encouraging for the region. Export concentration in LAC's trade with Japan, after falling considerably between 1985 and 2000, has returned to levels that prevailed during the late 1970s and early 1980s, when oil booms in several LAC countries led to highly concentrated exports. Figure 8 shows the evolution of the CR4 and HHI indices since 1970.² The levels are not comparable to the earlier figures because more aggregated product groups are used here, but the trends clearly show that the recent trade surge has translated into a return to a higher degree of concentration of LAC's exports.

At the sector level, the story is much the same, as Figure 7 also suggests. The pattern of specialization whereby LAC exports agricultural products and minerals to Japan in exchange for manufactured products has been sharply accentuated during the trade surge of the past decade. The durability of the "typical" pattern of LAC-Asia trade, however, makes the emergence of significant FDI flows and robust government-to-government cooperation between Japan and LAC—topics discussed in detail in the following sections—all the more important.

A second feature that distinguishes Japan-LAC trade from the "typical" LAC-Asia pattern is the important role of Japanese firms, especially large trading companies, in moving goods between LAC and third countries, an activity that is not captured in the bilateral trade data. A number of large Japanese companies, either directly or through subsidiaries operating in the region, play a critical intermediary role in moving raw materials such as minerals and grains from their source in the region to destination countries in Asia, especially China. In addition to boosting trade between LAC and third countries, these firms often bring logistical, marketing, and distribution expertise to the region.

Moreover, the well-established manufacturing footprint of Japanese firms in sectors such as automobiles and electronics also serves as a source of exports to third countries, boosting LAC's trade balance and foreign exchange earnings through a channel that does not figure in LAC-Japan bilateral trade numbers. For example, Japanese automakers account for nearly a quarter of Mexico's car exports—the large majority of which go to third markets such as the United States, South America, and Europe (see case study). The section on investment below discusses the characteristics and drivers of Japanese firms' FDI in the region in more detail.

² HHI refers to the Herfindahl-Hirschman normalized concentration index, which ranges from 0 (diversified) to 1 (concentrated). CR4 refers to the aggregated share (in decimals) of total exports held by the top 4 exported products.

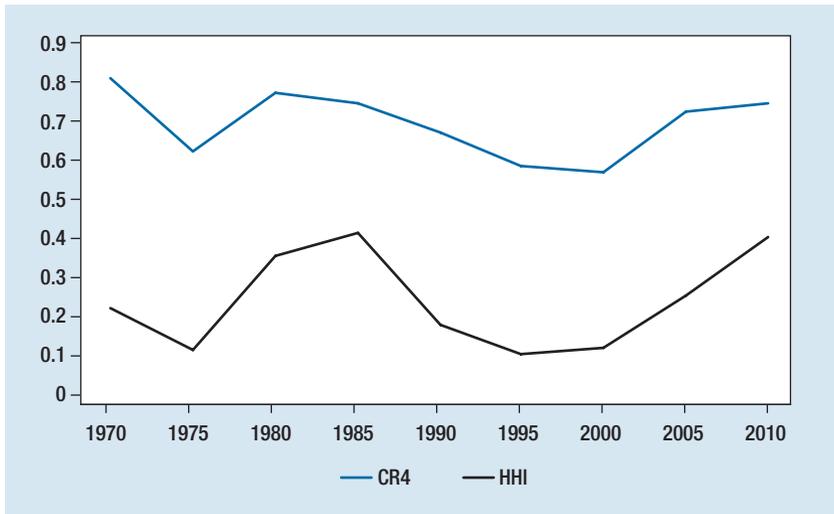


FIGURE 8/
Evolution of LAC's
export concentration to
Japan, 1970–2010

Source: IDB/INT based on UNComtrade.

Note: HHI refers to the Herfindahl-Hirschman normalized concentration index, which ranges from 0 (diversified) to 1 (concentrated). CR4 refers to the aggregated share (in decimals) of total exports held by the top 4 exported products.

The third and final consideration is that Japanese exports are less likely to be in direct competition with LAC exporters, given Japan's export profile, which is weighted more towards high-technology, capital intensive products. This stands in contrast to the case of China, where a number of studies have shown that Chinese exports often pose a direct competitive threat for LAC exporters, especially in destinations such as the United States.³

Trade Barriers

Trade between the two economies has benefitted from considerable liberalization on both sides over the past several decades. This is especially true for LAC, where average tariffs have been slashed from around 40 percent in the 1980s to less than 9 percent today and a host of non-tariff barriers (NTBs) have been eliminated. Japan too has progressively lowered tariffs and reduced other barriers to trade, especially import quotas, which were widespread during the 1970s and 1980s.

Japan's tariffs, while low overall, entail high barriers for agricultural products when ad valorem equivalents (AVEs) are included (see Table 5). Japan applied non-ad valorem tariffs on 6.4 percent of all tariff lines as of 2011. These duties, which are concentrated in agricultural products, foods, and textiles and clothing, often translate into high ad-valorem equivalent

³ See for example, Gallagher, Kevin P. and Roberto Porzecanski *The Dragon in the Room: China and Future of Latin American Manufacturing* Stanford University Press: 2010 and Moreira, Mauricio M. "Fear of China: Is There a Future for Manufacturing in Latin America?", *World Development* Vol. 35, No. 3, 2007, among many others.

**TABLE 5/
Japan's Tariff Structure,
2011**

	ARG	BRA	CHL*	COL	MEX*	PER*
Agricultural Products (average weighted by LAC country's exports)	1.19	2.21	3.28	2.44	2.40	1.97
Industrial Products (average weighted by LAC country's exports)	0.61	0.67	0.19	0.70	0.03	3.10
Agricultural Products, including AVEs (average weighted by LAC country's exports)	29.33	16.14	4.97	8.03	2.78	7.39
Industrial Products, including AVEs (average weighted by LAC country's exports)	0.70	1.87	0.19	1.16	0.03	3.52

Sources: IDB/INT based on UN Comtrade, TRAINS data.

*Country has Economic Partnership Agreement (EPA) with Japan.

rates. In the cases of Argentina and Brazil, for example, the large agriculture figures reported in Table 5 reflect high AVEs imposed on a handful of products—grains, sugar cane, and certain legumes—that have an important share in those countries' overall exports. It is also worth noting that the LAC countries that have signed FTAs with Japan (Mexico, Chile, and Peru) enjoy considerably lower barriers for agriculture exports, even when AVEs are taken into consideration.

In addition, Japan still imposes import quotas on certain products, including fish and forestry products, which represent important sectors for LAC exporters. As the WTO reported in its 2011 Trade Policy Review of Japan, the method for allocating quotas is complex, and the tendency for quota levels to change from year to year creates uncertainty for potential exporters.

On the LAC side, average tariff rates remain high on manufacturing goods in the Mercosur countries and in agriculture in the case of Mexico (see Table 6). The use of non-ad valorem tariffs on the part of LAC countries is negligible, which is why AVE tariff figures are not reported separately in Table 6.⁴

Given LAC's specialization in natural resource-based exports, at least in the context of trade with Japan, an important challenge will be adding value to agricultural and, to the extent possible, petroleum and mineral products in order to export processed foods, refined fuels, and chemicals. Tariff escalation, in which tariffs rise in proportion to a good's level of processing, poses an obstacle to adding value. Figure 9 shows that tariff escalation is not an insignificant concern for LAC exporters to Japan, especially

⁴ The six LAC countries included in Table 6 applied non-ad valorem tariffs on less than 0.1 percent of tariff lines on average.

	ARG	BRA	CHL	COL	MEX	PER
Agricultural Products (average weighted by Japan's exports)	4.75	5.80	2.93	3.95	12.89	0.71
Industrial Products (average weighted by Japan's exports)	10.48	12.18	4.72	9.00	6.76	1.47

Sources: IDB/INT based on UN Comtrade, TRAINS data

TABLE 6/
Selected LAC
Countries' Tariff
Structures, 2011

in the food and beverages sectors, where tariff rates more than double from first-stage to semi-processed goods. Still, the overall levels of protection at various stages of processing are lower than those LAC faces in other Asian countries.

In LAC, the issue is not the use of non-ad valorem tariffs, but rather NTBs such as import licenses, discriminatory taxes, and the excessive use of antidumping measures, particularly in Mercosur countries, which have raised concerns over protectionism among trading partners, especially in Asia. However, Table 7 shows that Japan has rarely been the target of anti-dumping measures from LAC, and in any event the most recent case against Japan was initiated over a decade ago.

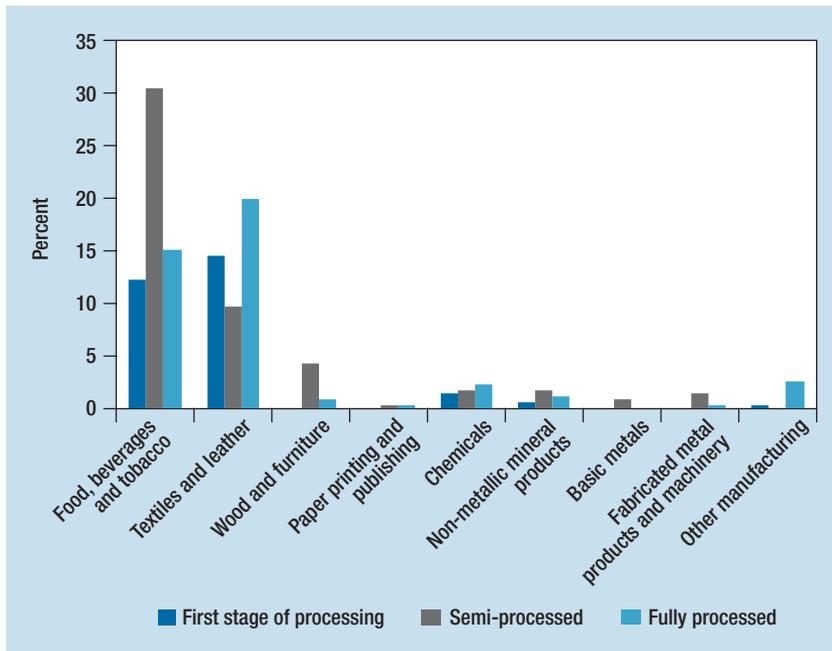


FIGURE 9/
Japan's tariff
escalation by 2-digit
ISIC industry, 2011

Source: WTO Japan Trade Policy Review, 2011.

TABLE 7/
Year and number
of Anti-dumping
investigations initiated
by LAC against Japan

Argentina	1992, 1993, 2000 (2)
Brazil	1998 (2), 2001
Mexico	1994, 1998, 1999
Venezuela	1999 (2)

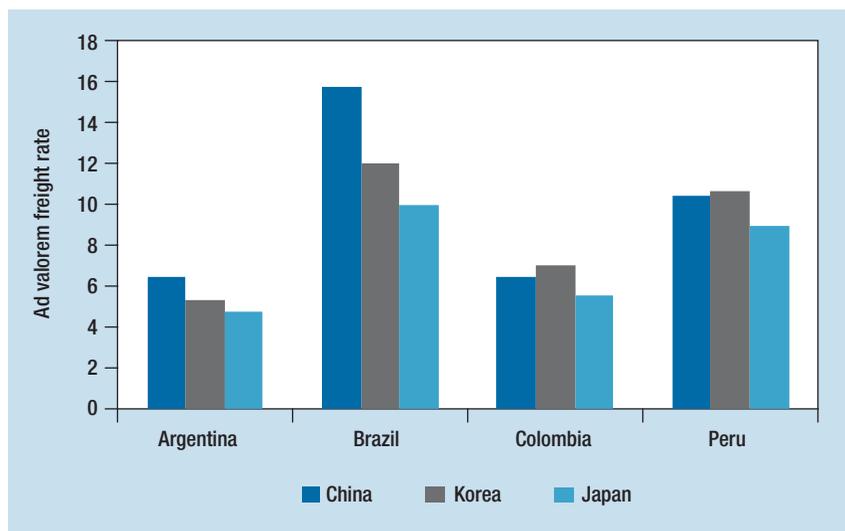
Source: World Bank Global Anti-dumping Database.

Transportation costs present another potential obstacle to LAC-Japan trade given the distance between the two economies, LAC's infrastructure and logistical deficiencies, and the nature of LAC's exports to Japan, which tend to have high weight-to-value ratios. As a result, freight costs contribute significant additional costs on an ad valorem basis. The good news, as Figure 10 shows, is that LAC countries face lower shipping costs from Japan than from Korea or China.

Trade Agreements

The past decade has also witnessed a number of formal integration agreements, bilateral and regional, aimed at lowering trade costs between Japan and LAC. On the bilateral side, Japan currently has free trade agreements with Mexico (2005), Chile (2007), and Peru (2012). These agreements, under the framework of Japan's Economic Partnership Agreements (EPA), have not

FIGURE 10/
Freight rates for
imports from Asia to
LAC



Source: INT-BID using COMTRADE and INTrade data.

only reduced tariffs and other trade barriers but have also encouraged direct investment and established mechanisms for governmental cooperation on a broad array of policy issues. The Japan-Mexico EPA, for example, provided a critical impetus for Japanese manufacturing firms to establish operations in Mexico, especially in the automotive sector (see case study).

Still, there is room for further liberalization under these existing agreements, which maintained significant barriers on certain tariff lines in which LAC exporters are competitive, such as food and agriculture products. As Table 8 shows, the Japan-Chile and Japan-Peru EPAs still allow for tariffs imposed by Japan on 28 percent and 15 percent of product lines, respectively, even by 2020. In the case of the Japan-Mexico EPA, nearly 210 tariff lines, including certain meat, fruit juice, and leather products, remain subject to tariff-rate quotas imposed by Japan, while the Japan-Chile EPA retains TRQs on nearly 30 product lines, mainly on meat and processed meat products.⁵

Looking beyond bilateral agreements, the emerging plurilateral trans-Pacific trade architecture holds great potential for deepening formal integration between Japan and LAC. Japan recently entered the Trans-Pacific Partnership (TPP) process, in which twelve countries from the Asia-Pacific region, Latin America, and North America are negotiating a comprehensive “21st Century” trade agreement. The LAC countries involved in the TPP—Mexico, Chile, and Peru—are also Japan’s existing bilateral FTA partners in the region. A comprehensive TPP agreement would ideally harmonize the rules of origin and other regulations in these bilateral agreements as well as deepen liberalization in the sectors where barriers remain.

Another recent initiative, the Pacific Alliance, offers further opportunities for strengthening Japan-LAC relations. The Alliance, a regional integration initiative formally launched by Chile, Colombia, Mexico, and Peru in 2012, aims to deepen integration among these Pacific Rim countries, with

Granted by	Granted to	2010	2013	2015	2020	2025
Japan	Mexico	84 %	87 %	92 %	92 %	92 %
	Chile	42 %	47 %	58 %	72 %	75 %
	Peru	...	82 %	82 %	85 %	87 %
Mexico		51 %	52 %	93 %	93 %	93 %
Chile	Japan	78 %	91 %	91 %	95 %	96 %
Peru		...	78 %	78 %	79 %	79 %

Source: INTrade, IDB

**TABLE 8/
Percent of duty-free
tariff lines in Japan-
LAC FTAs**

⁵ WTO Japan Trade Policy Review, 2011

the goal of forging closer economic ties to Asia. Japan participated in a High-Level Alliance meeting in May 2013 and currently holds observer status in the bloc, along with ten other non-regional countries. Within LAC, the Alliance has generated strong interest beyond the founding members, with Costa Rica in the process of becoming a member country and the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Panama, Paraguay, and Uruguay participating as observer countries. This broad participation makes the Alliance a potential vehicle to expand the geographical scope of formal LAC-Japan integration well beyond Mexico, Chile, and Peru.

While these major regional and interregional initiatives are important developments, they are not the only opportunities to reduce trade costs between the region and Japan. Policy measures to improve trade facilitation and reduce transport costs—such as streamlining customs procedures and reforming transport services to increase competition—can be undertaken relatively quickly (and unilaterally) and can reap sizeable benefits.

Investment

Japanese companies have long looked to Latin America as an attractive investment destination. The country's rapid rise as a global manufacturing leader in the mid-20th Century made Japan an important source of capital and direct investment in the following decades. Its contingent of innovative, globally competitive firms ventured abroad to achieve greater efficiency in production, enter new markets, and secure raw materials that are scarce in Japan. While initial Japanese investment in LAC was driven by the search for natural resources, Japan's FDI has diversified and grown in the 1990s and 2000s to include a wide range of manufacturing and, more recently, services sectors. In recent years, Japan has accounted for between 5 percent and 6 percent LAC's annual FDI inflows—and in some countries as much as 10 percent. This large stock of investment serves to diversify and deepen the economic relationship between Japan and the region—creating new patterns of trade and opportunities for cooperation between governments.

Historical trajectory

In the first stage of Japanese outward FDI during the 1960s, Latin America figured primarily as a source of raw materials. Japanese firms, eager to secure the inputs needed for industrial production, participated in large mining projects, mostly in Brazil and Chile. The main protagonists in this initial flow of FDI from Japan were large trading companies such as Mitsubishi, Mitsui, Sumitomo, and several others, which controlled international marketing channels and domestic distribution in Japan. By 1965 LAC was the largest recipient of Japanese FDI, with 25 percent of the accumulated total.

That soon changed, however, as Japanese investment during the 1970s and 1980s increasingly focused on setting up manufacturing operations in low cost locations that would provide easy access to developed markets. This pattern of investment favored locations in East Asia, Southeast Asia, and the Middle East. The 1980s saw a major boom in Japanese outward FDI, coinciding with the sharp appreciation of the Yen against the US dollar. For LAC, the timing of this take-off in Japanese outward investment was not fortuitous: countries throughout the region were coping with the prolonged debt

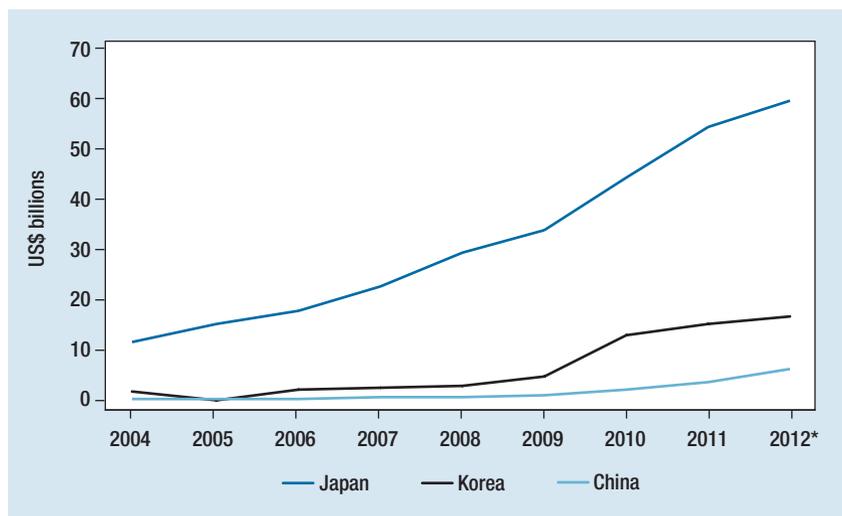
crisis, which meant the region largely missed out on this “second wave” of Japanese FDI. Japanese manufacturing FDI outflows increased from 2.2 billion in 1980 to 19.4 billion in 1995, while LAC’s share of this investment dropped from 15 percent to 2 percent.⁶

During the 1990s, Japanese firms slowly regained interest in the region as an FDI destination, with inflows increasing at an annual average rate of over 35 percent between 1990 and 1999, according to data from Japan’s Ministry of Finance. Excluding tax havens, Brazil captured around 48 percent of Japanese FDI during the decade, comprising a diversified mix of manufacturing, services, and investments in mining and forestry sectors. Mexico, the next biggest destination, received around 23 percent of the total, as the country became increasingly attractive as an export platform to the U.S. for Japanese auto and electronics manufacturers after the entry into force of the North American Free Trade Agreement (NAFTA) in 1994.

The current surge

The second half of the 2000s, as Figure 11 makes clear, witnessed a major surge of Japanese FDI in LAC, mirroring and reinforcing the trade boom during that period.

FIGURE 11/
FDI in LAC, 2004–2012
(stocks)



⁶ ECLAC, “Foreign Investment in Latin America and the Caribbean, 2000”

Source: Japan JETRO, Korea ExIm Bank, and China Ministry of Commerce; Totals do not include tax havens.

* Data for China’s outward investment in LAC for 2012 is a projection.

Broader trends on both sides of the Pacific are driving this renewed interest in LAC on the part of Japanese firms. On the one hand, despite being the world's 3rd largest economy, Japan's domestic market has ceased to be a dynamic source of demand for Japanese companies. An aging population and slow growth at home during much of the past two decades has prompted companies to invest abroad in order to capture new markets and better align their strategies with global growth trends.

Strong growth in Latin America beginning in the early 2000s made the region a natural destination for Japanese companies. Countries in Latin America were among the world's fastest growing for much of the last decade, especially in the aftermath of the 2008–9 crisis, which the region weathered relatively well.

The region's growth has driven Japanese investment in different ways. On the one hand, the commodity boom of the past decade, spurred primarily by Asian demand, sent a wave of new investment, including from Japanese companies, into the region's resource-rich countries. In fact, as alluded to earlier, Japanese trading companies such as Mitsubishi, Mitsui, and Marubeni have played a central role in facilitating the movement of LAC's primary goods to Asian markets. These firms have all increased their direct stake in LAC natural resource sectors in the past decade.

But the commodity angle is only half of the story of Japan's recent investment surge. Strong consumption growth among burgeoning middle classes in countries such as Brazil, Colombia, Mexico, and Peru has meant that Latin America is increasingly attractive as a market for Japanese companies producing a variety of consumer goods ranging from cars to electronics to entertainment products.

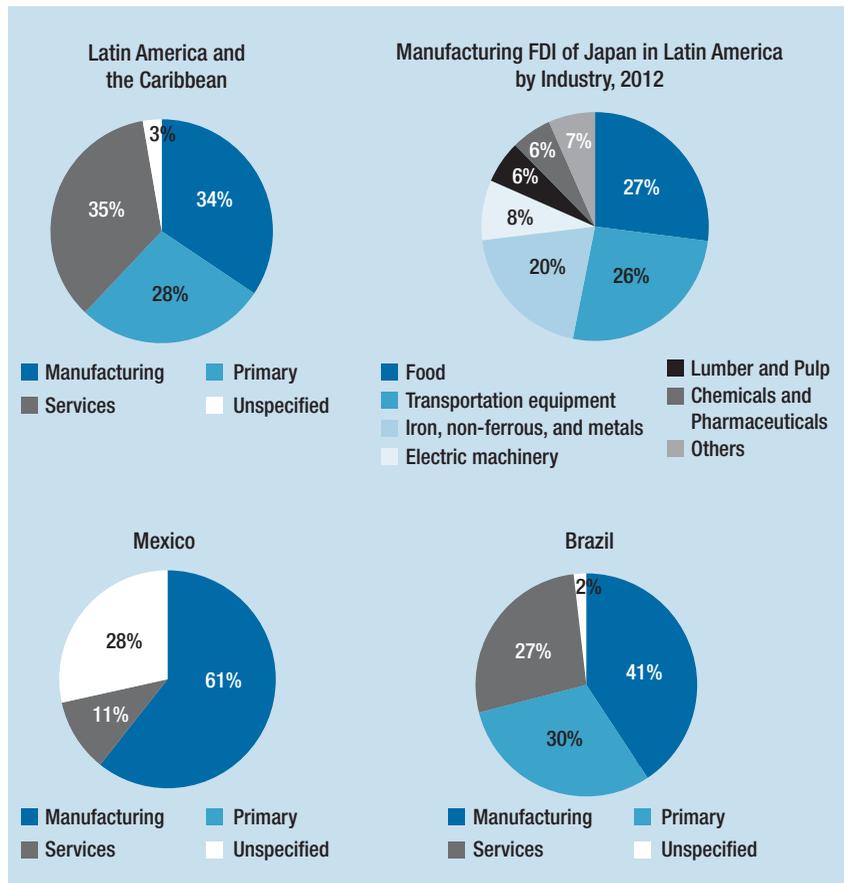
While a similar uptick can be seen in FDI from China and Korea, the magnitude of Japanese investment has been far greater than FDI from other Asian economies. Indeed, despite the attention surrounding recent Chinese investments in the region, Japan is by far the largest Asian FDI source for the region, both historically and in recent years.

Japan accounts for a significant share of the region's total FDI, making up on average 5.1 percent of LAC's annual inflows between 2008 and 2012. Likewise, LAC represents an increasingly important FDI destination for Japan's firms. According to data from Japan's Ministry of Finance, LAC's share of Japan's total outward FDI stock averaged 6.9 percent a year from 2010 to 2012, up from 3.0 percent in 2005. In this sense, the region is returning to its historical role as a key investment market for Japanese firms.

Japan's investment in the region covers a diverse range of industries beyond the primary sector. Figure 12 shows that Japanese FDI in LAC is relatively equally distributed among primary, manufacturing, and service sectors. This stands in sharp contrast to FDI from China, which, in addition to being much smaller in absolute terms, appears to be heavily concentrated in the primary sector. Data from the Heritage China Investment Tracker, for example, suggest that over 80 percent of China's investment in the region since 2005 has gone to primary activities. Japanese investment thus plays a critical role in forging a bilateral relationship that goes well beyond the region's traditional sectors.

As Figure 12 shows, Japan's investment in Brazil, the largest recipient of Japanese FDI in the region, has targeted the primary sector (mainly in

FIGURE 12/
Composition of Japan's
FDI to LAC and Selected
Countries, 2012



Source: IDB/INT based on data from the Bank of Japan.

mining and petroleum); manufacturing, where the bulk of activity has been in industries such as steelmaking, automobiles, and food products; and services, with wholesaling and retailing accounting for the majority of investment. In Mexico, the next largest FDI destination in the region, Japanese companies have a longstanding presence in the country's Northern industrial base, producing cars, electronics, power generation equipment, and other high-tech products. Japan's interest in other countries is more sector-specific: Chile and Peru have mainly been the target of large mining investments, for example.

While targeting a large number of sectors, Japanese investment has been concentrated in a handful of countries. Brazil and Mexico alone account for around two-thirds of Japanese inflows over the past five years according to official Japanese sources. However, these numbers can be misleading. Mexico's share, for example, would certainly be even larger if not for the fact that several major investments from Japanese car companies have been channeled through subsidiaries in North America and therefore do not figure into bilateral investment figures.

It is also important to point out that Japan's investments, especially in energy and mining in the region, are often reinforced by the Japanese government in the form of loans from the Japan Bank of International Cooperation (JBIC), a government-owned lender, and in some cases support from JICA to help develop infrastructure surrounding project sites. These efforts, described in more detail in the case studies, illustrate how investments from Japanese firms and government-to-government cooperation can be mutually reinforcing and beneficial.

On the other hand, FDI from LAC to Japan has yet to materialize in any meaningful way. In the case of Brazil, the largest source of outward FDI from LAC, the Central Bank of Brazil reports cumulative outflows to Japan totaling US\$ 316 million between 2007 and 2012, less than 0.05 percent of the country's total outward FDI. Similarly, Bank of Japan data for Brazil and Mexico (the two LAC countries that account for the bulk of the region's outward FDI), puts the countries' combined investment in Japan for 2012 at only US\$ 57.6 million. In the past decade, moreover, LAC firms seem to have divested considerable assets from Japan, making the net outward FDI flows reported by official sources negative during some years.

Still, a handful of *multilatinas* have made investments in Japan over the past decade, showing there are opportunities for ambitious LAC firms to find niches in Japan's mature market. Examples include Brazil's Petrobras,

which operates an oil refinery in Japan; the Argentine steel tube producer Tenaris; and San Luis Rassini, a Mexican auto parts company that has a factory in Japan.

Cooperation

Cooperation between Japan and LAC dates to the early 20th Century. When Japan sought to promote emigration, several LAC governments offered to take in Japanese migrants, forging an early link between Japan and the region. The Japanese government first launched its development assistance program in LAC to support this nascent immigrant community, which settled primarily in Brazil, Peru, and Paraguay, helping build basic infrastructure and providing financing for agriculture and small businesses.

Cooperation has been an integral and dynamic part of the Japan-LAC relationship ever since, demonstrating how interactions in the private sector open up space for government-to-government cooperation, and vice versa. In subsequent decades, the Japan International Cooperation Agency (JICA) played a growing role in the region, providing loans, grants, and technical cooperation to LAC countries since its creation in 1974.

Japanese cooperation has in fact played a central role in launching some of the region's most successful export sectors. Japanese technical assistance was critical in transforming Brazil's *cerrado* region into the country's agricultural heartland, whose production places Brazil among the world's leaders in exports of soybeans, maize and other grains. In Chile, Japanese technical assistance and financing through JICA helped develop the country's salmon industry, which has grown to become one of the most competitive export sectors of the Chilean economy.

JICA currently has a large portfolio in LAC, and the region received 9 percent of its overall technical cooperation, 5 percent of grant aid, and 4 percent of its loans during 2011, totaling nearly US\$500 million in support to the region. Peru (30 percent) and Panama (14 percent) were the two largest recipients in 2011, but JICA provided loans and technical cooperation to a total of 36 LAC countries. JICA's priority areas in the region include the development of economic infrastructure (roads, electricity, and telecommunications), especially in rural areas; environmental protection and natural disaster mitigation; and reducing disparities.

A trademark of JICA's approach is to integrate development assistance in the broader framework of Japan's cooperation and commercial relations with developing regions. To this end, JICA has been a leader in providing Aid for Trade (Aft), which aims to develop countries' capabilities to

integrate in the global economy through the development and enhancement of physical infrastructure, building private sector capacity, and supporting enabling policies and institutions. Given LAC's needs in this area, such cooperation presents a ripe opportunity to deepen the relationship in the future.

Another key institution in Japan's international cooperation efforts is the Japan Bank for International Cooperation (JBIC). Owned by the government of Japan, JBIC provides financial support for the international operations of Japanese companies with a particular emphasis on securing a supply of natural resources such as oil, gas, and iron ore.

This goal is pursued both through financial support for Japanese firms importing and investing in these resources overseas and through direct support to resource-rich developing countries. Given these objectives, it is not surprising that LAC has been a major region of interest for JBIC. The Bank has guaranteed loan-for-resource deals between Japanese firms and governments in the region and also helped finance natural resource projects owned by Japanese firms or their subsidiaries in LAC (see case studies for examples).

On the other hand, JBIC's participation in the region is by no means limited to the natural resource sector. Recent examples of major JBIC operations in the region also include a loan and guarantee for a Mexican-Japanese joint venture to produce sheet metal for Mexico's auto industry; an untied loan agreement to the government of Sao Paulo state in Brazil to expand the Sao Paulo metro system; and a loan to a Colombian firm to purchase infrastructure for a hydropower plant from a consortium of major Japanese trading companies.

In total, JBIC loan and equity financing to LAC has reached nearly US\$ 200 billion to date. The Bank made 22 loan and equity commitments to countries in the region for a total of US\$4.9 billion in 2011 alone; of these, eight went to Mexico for US\$ 236 million; three to Brazil for US\$ 1.2 billion; two to Chile for US\$ 1.5 billion; and two to Venezuela for US\$ 693 million.⁷

In addition to the work of JICA and JBIC, the governments of Japan and LAC have pursued a variety of technical and political cooperation initiatives in policy areas such as environmental management, health, renewable energy, and infrastructure, among others. These agreements are generally carried out by line agencies in charge of the relevant policy area, often in collaboration with JICA as well as universities or private sector groups.

Table 9 presents a selection of agreements signed since 2005, including those involving JICA projects, and should give a taste of the wide range of policy areas covered and institutions involved in Japan-LAC cooperation.

⁷ JBIC Annual Report 2012.

**TABLE 9/
Selected cooperation
agreements between
LAC and Japan
since 2005**

Country	Year	Name	Area	Partners
Argentina	2012	Developing a Glacier Inventory in the Argentinean Andes Using High Resolution Advance Land Observation Satellite data (ALOS)	Climate Change/Environment	JICA-GoA IANIGLA
Bahamas	2012	Sustainable fiscal balance in the Bahamas	Public Policy	GoB-GoJ
Barbados	2012	Caribbean Disaster Management Project Phase II	Climate Change/Natural Disaster Prevention	JICA-GoB
Belize	2008	Caribbean Disaster Prevention Project	Climate Change/Natural Disaster Prevention	JICA-GoB/Nat. Emerg. Manag. Org.(NEMO)
Bolivia	2010	Lithium: technical support, research, knowledge transfer for development	Mining	GoJ-GoB
Brazil	2006	Agreement on Digital TV standard	Digital TV standards	GoB-GoJ
Chile	2005	Agreement on "Assessment of Carbon Fixing in Chilean Forest Ecosystems"	Climate Change/Forests	GoJ-GoC
Colombia	2011	Agreement on the Liberalization, Promotion, and Protection of Investment	Trade and Investment	GoC-GoJ
Costa Rica	2013	Project for Promoting Participatory Biodiversity Conservation	Biodiversity/Environment Protection	JICA-GoCR
Dominican Republic	2009	Sustainable Tourism based of Public-Private Partnership in Puerto Plata	Sustainable Tourism/PPP	JICA-GoRD
Ecuador	2012	Sustainable Integrated Rural Development in the Prefecture of Chimborazo	Rural Development	JICA-GoE
El Salvador	2012	Adaptation for Climate Change and Strategic Risk Management for Strengthening Public Infrastructure	Climate Change/Capacity Building	JICA-GoES
Guatemala	2005	Maternal and Child Health in Quetzaltenango, Totonicapan, and Solola	Health-Human Development	JICA-GoG

Continued on next page

TABLE 9/
Selected cooperation
agreements between
LAC and Japan
since 2005
(continued)

Country	Year	Name	Area	Partners
Guyana	2012	Caribbean Disaster Management Project Phase II	Climate Change/Natural Disaster Prevention	JICA-GoG
Haiti	2010	Improvement of Urban Roads and Drainage for Reconstruction of Leogane City	Improvement of Economic Infrastructure	JICA-GoH
Honduras	2013	Strengthening Primary Health Care System based on "National Health Model" El Paraiso, Lempira	Health /Capacity Building	JICA-GoH
Jamaica	2007	Kingston Metropolitan Area (KMA) Water Supply Project	Water/Sanitation	JICA-JBIC/GoJ
Mexico	2012	Automotive Supply Chain Development in Mexico City, Queretaro, Guanajuato, Nuevo Leon	Industrial Development	JICA-GoM
Nicaragua	2010	Improvement of the Earthquake-Resistant Housing Construction Technology	Natural Disasters	JICA-GoN
Panama	2011	Reproductive Biology of Yellowfin Tuna and Pacific Bluefin Tuna for the Sustainable Use in Los Santos	Fisheries	JICA-GoP
Paraguay	2010	Rural Roads Improvement Project in Guaira, Paraguari, Misiones	Improvement of Economic Infrastructure	JICA-GoG
Peru	2012	Agreement to Promote Japanese investment in Peru	Investment Promotion	Bank of Tokyo-Mitsubishi UFJ-Proinversion
Trinidad and Tobago	2012	Caribbean Disaster Management Project Phase II	Climate Change/Natural Disaster Prevention	JICA-GoTT
Uruguay	2009	Saito Project for Introduction of Clean Energy by Solar Electricity Generation	Renewable Energy/Climate Change	JICA-GoU
Venezuela	2009	MoU on Oil Human Resources, Tech Assistance, E+P cooperation	Oil Sector	GoJ—Ministry of Petroleum and Mining, Venezuela

Sources: Embassies of LAC countries in Japan, Japan Ministry of Foreign Affairs.

In addition to bilateral cooperation, Japan participates actively in several interregional forums, helping forge broader ties between Asia and LAC. Japan has been a leader in the Forum for East Asia-Latin America Cooperation (FEALAC) and has been instrumental in guiding this group's agenda over the past decade. In particular, Japan has led initiatives aimed to connect SMEs from the two regions, promote adoption of information and communications technologies (ICTs), and encourage eco-friendly business practices among member countries. Japan has also produced a large body of analytical work aiming to identify ways to further trade and investment between the two regions.

Japan has also played a major role in the Asia Pacific Economic Cooperation (APEC), a forum of 21 countries including Chile, Peru, and Mexico in LAC that promotes integration in the Pacific Rim. Japan hosted the APEC leaders' summit in 2010, and its work in APEC has helped promote trade facilitation within APEC through initiatives to help member economies simplify and harmonize border procedures, develop Time Release Surveys for importing cargos, and establish Single Windows for foreign trade.

Japan and the IDB

Japan's membership in the Inter-American Development Bank provides another important vehicle for Japanese cooperation in the region. The Japanese government has collaborated with the Bank on a number of major initiatives including the IDB's Japan Program, the Japan Special Fund, and the Japan-IDB Scholarship Program, which have made an important contribution to interregional cooperation. Japan also sponsors a fund that brings Japanese technical experts to work as consultants at the IDB, as well contributing to three multidonor trust funds in thematic areas such as sustainable urban development, natural disaster prevention, and climate change.

The Japan Special Fund (JSF) provides untied resources for the Bank's technical cooperation activities. Established in 1988, the JSF is one of the IDB's oldest and largest technical cooperation Funds and has been instrumental in advancing the Bank's technical cooperation initiatives, providing more than US\$250 million of financing through 2012. JSF-funded projects cut across a number of sectors, including but not limited to education, social development, rural development, water and sanitation, environmental protection, natural disaster prevention, transportation, energy, and capital markets. Japan recently replenished US\$ 8.9 million to the JSF in

January 2013, in addition to committing US\$ 15 million to three multidonor funds that support IDB efforts in the areas of natural disaster prevention, climate change adaptation, and sustainable cities.

The JICA and the JBIC also have strong ties with the IDB, providing additional channels for Japanese cooperation in areas such as climate change, renewable energy, and trade facilitation. The JICA and the IDB recently established a Framework Agreement to provide co-financing for renewable energy and energy efficiency in Central America and the Caribbean, which was signed at the IDB Annual Meeting in 2012. Through this initiative, JICA expects to provide US\$300 million in financial support over the next five years.

The JBIC also cooperates with the Bank to identify and pursue projects that encourage energy efficient practices in the region; the recently established JBIC Green Fund is in the process of negotiating and finalizing the Term Sheet and the Limited Partnership Agreement with the selected fund manager. The JBIC has worked with the IDB to provide over US\$ 10 billion of co-financing for IDB projects since 1990 (including operations undertaken when JBIC was organized as the Export-Import Bank of Japan).

Japan has also leveraged its relationship with the Bank to pursue its strategy to promote trade facilitation and improve connectivity in the region. Japan has led an initiative to enhance involvement of the World Customs Organization in the Bank's projects, and also helped foster collaboration between the IDB and the Asian Development Bank on trade facilitation and other issues. In general, Japan's strong participation in both regional development banks has helped bring the two institutions closer together, as seen in the ongoing IDB-ADB partnership, which aims to encourage inter-regional cooperation on issues of mutual interest. These ties will help ensure that Japan and the region continue to strengthen their integration.

Conclusion

Relations between Japan and Latin America and the Caribbean have come a long way since a group of Japanese settlers first arrived in the harsh confines of the Amazon in the early 1900s. These early pioneers probably could never have imagined the impact they would have on the region: the initial link they provided helped spark what has grown into a thriving trans-Pacific relationship.

In 2012, trade between Japan and the region exceeded US\$ 60 billion, around US\$ 10 billion of foreign direct investment from Japan flowed

into LAC countries, and an array of cooperation initiatives were underway in areas such as natural disaster prevention, trade facilitation, scientific research, and private sector development, to name only a few examples. Indeed, the hallmark of the Japan-LAC relationship is its diversity. Economic ties between the two economies now comprise the production of next generation, fuel efficient vehicles, development of some of the world's richest natural resource bases, building state-of-the-art infrastructure, and sharing technology and best practices through innovative cooperation programs. Along the way, Japanese technical assistance and investment have contributed to some of the region's greatest export successes.

Looking only at trade flows, however, one might conclude that the Japan-LAC relationship is defined by the same commodities-for-manufacturing exchange that has characterized the region's recent trade boom with Asia. This pattern of trade has led to concerns about over-specialization and deindustrialization among policymakers in the region—and attendant political tensions. In the case of Japan, however, the presence of large investment flows and a robust cooperation program has consistently brought opportunities for the region to develop new industries and reach new export markets, even as bilateral trade flows have concentrated on the region's traditional exports. In short, the trade numbers tell only a small part of the Japan-LAC story.

How did this all come about? Certainly Japan's own economic strength and leading global firms played a major role, as Japanese companies struck out in search of new markets, stable sources of raw material inputs, and efficient production sites as early as the 1960s. Of course, structural factors have also been part of the equation, as the region's rich natural resource endowments complement resource-scarce Japan. Finally, the role of governments on both sides has been decisive. In Japan, the public sector has been there to support the initiatives and even guide the broader strategy of the private sector through co-financing and technical assistance for complementary investments. Government-to-government cooperation has helped LAC countries launch new export industries, develop its economic infrastructure, and absorb technology and best practices, a process Japan sees as a win-win proposition. Governments in LAC, increasingly cognizant of the benefits of relations with Japan, have launched promising integration initiatives in recent years that aim to consolidate interregional ties.

By the same token, continuing the momentum of the past decade—during which trade, investment, and cooperation between Japan

and LAC all enjoyed strong growth—will require renewed commitment by governments on both sides. Main items on the agenda include addressing the remaining barriers to trade—which increasingly take the form of non-tariff barriers and transport and logistical costs—and working to ensure that the benefits of integration are spread more evenly throughout the LAC region. The opportunities to be gained from further strengthening the Japan-LAC relationship are significant. For proof, one need only look to the past.

Case Studies

Auto Sector: Building a Global Auto Hub through Investment and Cooperation

Japanese carmakers and auto parts companies have played a central role in Mexico's emergence as a global automotive leader, with the major Japanese companies enjoying a leading position in this booming market.

The Mexican automobile industry received an initial boost with the formation of NAFTA in 1994. The combination of unique access to the United States market, low production costs, and a pool of qualified labor quickly attracted global auto companies to the country. By 2012, Mexico was producing 2.88 million vehicles, three times as many as in 1994. Mexican-made cars are sold in highly demanding markets such as Europe, Japan and North America, where one in every eight cars on the road is produced in Mexico. Exports accounted for 83 percent of the total production in 2012.

For Japanese carmakers, the Japan-Mexico Economic Partnership Agreement (EPA), which entered into force in 2005, represented a watershed moment. The agreement led companies to look seriously at the advantages offered by the Mexican market, both in terms of domestic market prospects as well as Mexico's potential as an export platform. Mexico's network of FTAs, including agreements with the United States (NAFTA), the European Union, and most of South America added to the country's appeal as a production site.

The EPA created a strong sense of confidence among Japanese companies that their investments in Mexico would be secure, thanks to the strong investment provisions and IP protections envisioned in the EPA. Japan and Mexico also established a "Committee on the Improvement of the Business Environment" in the context of the EPA, which meets once a year to discuss issues arising in the operations of Japanese firms in Mexico, from public security to support from local governments and tax issues. The committee has resolved a large number of issues and encouraged a positive view of Mexico's business environment in Japan. These efforts have been especially important in providing the confidence for SMEs and new entrants to enter the Mexican market.

The EPA also included programs aimed at promoting the capacity of the domestic auto sector, such as a public-private initiative to improve the curriculum of technical schools and help forge closer ties between educational and training institutions and the industry. In collaboration with the Japan External Trade Organization (JETRO), JICA also implemented a project to build capacity in the auto parts sector, and Japanese experts have visited more than 400 local companies to date.

Currently, Japanese carmakers are in the midst of an important escalation of their presence in Mexico. Japanese companies produced over 800,000 units in Mexico in 2012 (compared to 556,911 in 2007). This production accounts for around 30 percent of the cars made in Mexico and around 23 percent of the country's total auto exports.

Nissan, Honda, and Mazda are all building major new plants in Mexico, with a total expected investment of around US\$ 4 billion. Mazda in 2011 announced a US\$ 500 million initial investment in a new production facility in Salamanca, Guanajuato, the company's first in the country. The Japanese automaker, in alliance with Sumitomo, will produce 140,000 units by the end 2013 for the domestic market and export to Brazil and the United States.

Several months later Honda announced a US\$ 800 million investment in its second manufacturing plant in the country. The facility will produce 200,000 units of fuel-efficient subcompact vehicles by 2014.

In January 2012, Nissan announced the construction of its third Mexican plant, in Aguascalientes, with an expected investment of US\$ 2 billion. The plant will raise Nissan's output in Mexico to 825,000 units. The Aguascalientes facility is expected to draw at least 80 domestic and foreign suppliers to a surrounding industrial park. Nissan has also developed a production platform for high-efficiency electric vehicles in Mexico, demonstrating how manufacturing FDI can help bring cutting-edge technology to host countries.

More recently, a large number of Japanese auto parts companies have started investing directly in Mexico as well, revealing another layer of linkages through FDI: once a critical mass of original equipment manufacturers (OEMs) had set up production in Mexico, their suppliers (in this case producers of auto engines, catalytic converters, steel tubes, and other auto inputs) had a strong motivation to invest alongside them, given the increasingly demanding requirements of just-in-time production.

As a result, no fewer than 100 Japanese auto parts companies have set up operations in Mexico since 2010 alone, with total investments of

around US\$1 billion. The Japan Automobile Manufacturers Association expects this number to grow considerably in the coming years, projecting that around 300 auto parts companies will have operations in Mexico by 2015.

Importantly, the Japanese automakers are not just an enclave of foreign manufacturers. The sector has provided ample opportunities for local firms, including SMEs, to participate in these sophisticated value chains. The number of domestic firms supplying the likes of Nissan, Mazda, and Honda has been growing steadily in the last decade thanks in part to companies incentivizing local firms' participation in value chains.

According to estimates from the Office of the Mexico-Japan Economic Partnership Agreement, there are currently over 2,000 suppliers in the auto industry, around 30 percent of which are domestic firms. Most local companies are small and provide basic parts and raw materials, although a few Mexican auto parts firms, such as Metalsa and San Luis Rassini, are multinationals with their own foreign operations.

Sources: Interviews with former officials of the Embassy of Mexico in Japan, and Office of the Mexico-Japan Economic Partnership Agreement.

Mining: A New Phase in an Old Relationship

The mining sector has long been a target of Japanese investment in LAC, as the region's rich reserves of copper, iron ore, zinc, and other metals have provided the raw materials that powered Japanese industry. Given its reliance on imports of these crucial inputs, Japanese firms, supported by the government, have made securing stable, long-term supplies a priority.

Since the first investments in the 1960s, Japan's participation in mining in the region has evolved and diversified, with trading companies such as Mitsui, Mitsubishi, and Marubeni handling a large amount of the booming trade between the region and Asia over the past decade. Increasingly, Japanese firms are taking larger ownership shares in mining assets, as growth in the emerging economies has intensified competition for resources.

At the same time, Japanese companies and the Japan Bank for International Cooperation (JBIC) have made investments in infrastructure surrounding mining sites in order to facilitate the extraction and transport of minerals to their destination markets. These investments, which have spanned railways, roads, electricity grids, and water delivery systems, provide an added development dividend for the region.

To give one example, Japanese companies have recently expanded their participation in Chile's mining sector through a new partnership between Mitsui, a major Japanese conglomerate, and Codelco, Chile's state-owned copper company. The venture will allow Codelco to embark on an expansion plan to help consolidate its position as the world's leading copper producer.

After complicated negotiations, the Codelco and Mitsui partnership reached an agreement in 2012 with Anglo American, a British mining conglomerate, to acquire 29.5 percent of Anglo's assets in Chile in a cash deal valued at around US\$2.8 billion. Through the deal, the companies gained a stake in the fifth-largest copper source in Chile, which consists of two mines, a smelter, and two recently discovered copper deposits north-east of Santiago that Anglo estimates contain 2.1 billion tons of ore. The new alliance will help generate the investments required to develop the identified copper deposits and reserves.

For Codelco, the partnership adds 115,000 metric tons of annual copper output to its current 1.7 million metric tons and allows the state-owned company to pursue a strategy of expanding existing mines without affecting its credit rating. Codelco plans to invest more than US\$40 billion over the next decade to revamp its copper mines and boost output to more than 2 million tons a year. Meanwhile, the deal gives Mitsui the option to offtake at market conditions the total amount of copper corresponding to the joint venture participation in the Anglo Sur mining complex. The alliance also provides Codelco with a sophisticated and experienced partner to explore new business ventures related to the company's international expansion, as well as opportunities in lithium, molybdenum, and sulfates.

Elsewhere in Chile, Japan's Pan Pacific Copper (PPC), alongside Mitsui, owns and operates the Caserones Mining Project, which is expected to meet around 11 percent of Japan's annual demand for copper concentrate. The project received financial support from the JBIC, which signed agreements amounting to over US\$300 million with co-financing from private banks. The Caserones investment represents an important step in Japan's involvement in the region's mining sector, as it is the first project in which Japanese companies have undertaken the development of a large-scale copper mine through full ownership.

The Japanese government's support for mining investments in the region has also included financing for infrastructure projects in surrounding areas, such as a US\$ 500 million loan agreement for a power plant owned by Mitsubishi that will provide electricity to the Sierra Gorda copper mine in

Chile. Mitsubishi itself has invested in water desalination infrastructure to supply water to its Cerro Negro Norte iron ore mine for twenty years. Japanese firms also have access to risk compensation mechanisms provided by the government to facilitate acquisition and participation in infrastructure development projects directly linked to mining activities.

The recent activity of Mitsui and PPC is indicative of a broader move among Japanese firms to increase their ownership stake and control of mining projects in the region, with an eye towards securing a long-term, stable supply of strategically important resources.

The mining sector is likely to continue to be central to Japanese firms' strategies in the region going forward, even in a context of overall diversification. In addition to the traditional investments in copper and iron ore, interest has recently grown surrounding lithium, which has potential applications in batteries that store alternative energy and other cutting-edge technologies.

Several LAC countries such as Argentina, Bolivia, and Chile have major potential lithium deposits, and Japanese firms are positioning themselves to take advantage. In Bolivia, Japan has partnered with the government on a trial project to extract lithium from the Uyuni salt flats in the Andes, which experts believe contain around half of the world's reserves of the soft metal.

Sources: JBIC, Companies' websites, and press.

Digital Television: From Technical Cooperation to Market Opportunity

Japan is synonymous with innovative electronics, and Japanese firms such as Hitachi, Toshiba, and Sharp are among the global leaders in cutting-edge products from flat-screen TVs to semiconductors to smart phones. But with technology evolving and competition increasing, Japanese firms have had to defend their market share against companies from the rest of Asia, Europe, and the United States. At the same time, Japan's demographic trends and the maturity of the domestic market put a premium on firms' ability to capture new customer bases in emerging markets.

One important development shaping the global electronics market has been the rise of digital television. As countries around the world transition from analog to digital television standards, they must choose among competing standards. From a market perspective, a country's decision on which

standard to adopt will dictate the compatibility of its infrastructure with the technology and products of different firms.

Japan, through a collaborative strategy involving government, research institutions, and the private sector, helped develop and implement a digital TV standard based on the Japanese standard throughout Latin America, creating new business opportunities for both Japanese and LAC firms.

Japan, a leader in the field, developed the Integrated System for Digital Broadcasting (ISDB-T), a digital television and radio standard, beginning in the 1980s. When the Brazilian government began exploring options to transition from analog to digital in the early 1990s, Japanese experts from the Digital Broadcasting Experts Group (DiBEG), part of the Japanese Association of Radio Industries and Business (ARIB), participated in the process via a government-sponsored program. In 2003, Brazil solicited proposals on how best to make the transition to digital; the country had to choose among the Japanese standard and competing standards used widely in Europe and North America.

Brazil's decision was the subject of major political lobbying from the US, EU, and Japan, as the decision would determine which companies would supply transmission technology and adapters to Brazil's large market of potential digital television consumers.

Brazil chose the Japanese standard in 2006, albeit with certain technical adaptations for the Brazilian market. The decision had to do mainly with technical concerns—the Japanese offered the most robust system for transmission, low-cost infrastructure, a better fit with Brazil's topology, and the ability to support an emergency broadcast system. The agreement with Japan also included incentives such as establishing a facility to produce semiconductors in Brazil, waiving certain royalties, and opportunities to develop and utilize domestic Brazilian software in the course of implementation.

Brazil and Japan formed a ministerial-level working group to coordinate technical cooperation in implementing and disseminating the new standard in Brazil (ISDB-Tb). The Brazilian government provided financing through a special program called ProTVD, managed by the National Bank for Economic and Social Development (BNDES). Digital TV became available commercially in Brazil at the end of 2007. Through sound investments in R&D, the country not only managed to absorb technology from a world leader, Japan, but also introduced innovations while adapting it to its particular conditions.

Japan and Brazil also embarked on a campaign to spread the ISDB-Tb standard throughout South America. Japan's Ministry of Telecommunica-

tions (MIC), in conjunction with Japanese firms and the Brazilian public and private sectors, offered both technical and financial assistance to encourage countries to adopt the Japanese-Brazilian standard. As of June 2013, 11 LAC countries (including Brazil) had adopted or decided to adopt ISDB-Tb.

Bilateral cooperation between Japan and Brazil has been critical in promoting the standard beyond Brazil. The two countries have been able to combine resources in order to offer appealing incentive packages, including investment from the private sector and public-sector sources such as BNDES on the Brazilian side and Japan's JBIC.

The success of the Japanese-based standard—first in Brazil and now throughout South America—has led to business opportunities for Japanese electronics firms as well as partners in Brazil. Japanese companies increased their share of the Brazilian television market from 10 percent in 2006 to around 20 percent in 2009, and from 20 percent to more than 60 percent in the transmitter market with the adoption of the Japanese standard.

The Japanese firm Hitachi in 2011 acquired one of the largest suppliers of transmitters in Latin America, the Brazilian company Linear Equipamentos Eletrônicos, which offers a wide range of low-cost, efficient transmitters, exciters, encoders, multiplexers, gap-fillers and converters. The move is part of Hitachi's broader strategy to expand business in countries around the world where Japan's terrestrial digital broadcasting standard has been adopted.

This case provides a clear example of how coordination between the public and private sectors can bring about cooperation initiatives that are mutually beneficial—as long as there is sustained commitment. It is worth recalling that Japanese experts began participating in Brazil's discussions on digital TV adoption in the early 2000s, and this engagement has continued to bear fruit as other countries in the region adopted the ISDB-Tb standard in recent years, creating further opportunities for Japanese—and also Brazilian—companies.

Sources: Japanese Aerospace Exploration Agency (JAXA), press, and “Building the digital TV standard: The Brazilian experience” 2009 GLOBELICS Conference by Taynah Lopes de Souza and Rodolfo Saboia Lima de Souza.

Finding Space in a Mature Market: Mexican Pork Producers Win over the Japanese Consumer

While Japanese firms have long viewed LAC as an attractive market, companies from the region have not been blind to business opportunities in Japan.

They face important challenges, to be sure: Japan is a mature market, and foreign firms must vie with highly competitive domestic incumbents for customers and clients. Still, a number of LAC firms have found success in Japan. Some are among the largest *multilatinas*—companies such as Tenaris, Vale, and Agrosuper—who are no strangers to competing with the world’s top multinationals.

These big players will usually find their own way into new markets, but governments have an important role to play in generating opportunities for other firms. An excellent example of this process is the Mexican pork industry, which has grown to become an important exporter to Japan thanks in part to a decisive strategy and cooperation between the public and private sectors.

The Mexican Pork Export Association (MPEA), with the support of Mexico’s Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA), has been an aggressive and effective promoter of Mexican pork in Japan, hiring a Japanese-American consulting team to launch a strategy to win over the demanding Japanese consumer.

Mexican producers had their sights set on the Japanese market as early as 1993, when a group from Sonora state undertook a major market study that concluded a determined marketing effort combined with a strategy of producing different pork cuts to suit Japanese tastes could result in increased exports. Exports did rise sharply during the 1990s but had stagnated by the early 2000s amid increased foreign competition in Japan’s pork sector.

Around this time, a number of Mexican industry groups consolidated under the MPEA—which included the key producers in Sonora and Yucatán—and renewed their efforts in the Japanese market. The group decided that hiring a representative in Japan and initiating a major promotional program would help increase their presence in the country.

In 2004 MPEA hired the consulting firm Promar-Japan, which specializes in food and agriculture, to carry out a promotion strategy in Japan. The pork producers turned their attention to Japan just as the Mexican and Japanese governments were concluding the Japan-Mexico Economic Partnership Agreement (EPA), which lowered tariffs on Mexican pork to 2.2 percent, giving Mexican producers a cost advantage over other foreign suppliers.

The MPEA also received funding from the Mexican government via SAGARPA to support their efforts to increase pork exports to Japan. In 2006, the year after the EPA entered into force and the first year of the MPEA campaign, Mexico’s pork exports to Japan grew 15 percent. The promotional

campaign, now in its eighth year, has shifted from an initial focus on trade via importer-exporters and Japanese wholesalers to directly targeting retailers and the Japanese consumer.

With the help of SAGARPA, the MPEA has established a strong media presence, including a Japanese website and promotional brochures, launched creative promotions such as advertisements on subway train cars, and even developed brand identity through animated piglets in sombreros that aim to appeal to children and their mothers.

The success of these various strategies was evident in strong growth, as Mexico's pork exports increased at an average of around 17 percent annually in the years after the strategy was launched, compared with overall export growth of around 5 percent per year. Mexican firms' market share jumped from 4 percent in 2005 to 7 percent by 2008 with shipments growing from 35,000 metric tons to 57,000 metric tons.

The outbreak of the H1N1 flu epidemic, however, put a break on that growth, resulting in a drastic reduction in consumption of Mexican pork in Japan during several months between the middle of 2008 and early 2009.

By the end of the year, however, pork exports resumed their upward trajectory, growing again at an average of 17 percent a year between 2010 and 2012. That quick recovery was facilitated by the efforts of the MPEA, SAGARPA and Promar, which used their presence in Japan to mobilize a campaign assuring Japanese consumers of the safety of Mexican pork. What could have been a disaster turned out to be a mere blip in the steady growth of pork exports, Mexico's most important single export to Japan.

Sources: ProMexico, Promar-Japan.

Aid for Trade: A Strategic Priority for Japan and the Region

Aid for Trade has been a major emphasis of Japan's Official Development Assistance (ODA), reflecting the country's belief that trade and foreign investment play a critical role in economic development, as well as its strategy of aligning cooperation efforts with goals for expanding Japanese firms' trade and investment opportunities.

Broadly defined, Aid for Trade (AfT) encompasses concessionary lending, grants, and technical cooperation to help developing countries benefit from trade and reduce poverty through supply-side capacity building for

the private sector, support for trade policy reforms, and trade-related infrastructure.

Japan has been a leader among the major donor countries in supporting AfT. At the Sixth World Trade Organization Ministerial Conference in 2005, donors set targets for Aid for Trade funding to be met by 2010. Japan had already exceeded its target by 2008, contributing over US\$ 16 billion between 2006 and 2008.

In 2009, Japan unveiled a new AfT initiative, the “Development Initiative for Trade 2009,” which committed an additional US\$ 12 billion for bilateral technical assistance, capacity-building, and infrastructure-related projects in the AfT framework. The program also dispatched 40,000 experts and trainees in response to demand for enhanced human and institutional capacity building. Between 2006 and 2011, Japan provided over US\$ 35 billion in aid for trade according to the WTO, including support for economic infrastructure, trade policy and regulations, and building productive capacity.

The assistance program provides tools for improving trade-related capabilities and to prepare and maintain trade supporting infrastructure such as the enhancement of the ability to produce competitive products; the implementation, updating and maintenance of a domestic and overseas logistics system, including distribution infrastructure; and the pioneering of new markets.

The program combines knowledge and technology, funds, people, and systems to achieve connections between producers and laborers in developing countries and consumers around the world.

In addition to its bilateral efforts, Japan has also made a significant contribution to trade facilitation in LAC, especially in the context of LAC-Asia commerce, through the APEC forum. Japan, which hosted the APEC leaders’ summit in 2010, has focused its work in APEC on trade facilitation, promoting measures to simplify and harmonize border procedures, providing technical assistance to Time Release Surveys for importing cargos, and playing a leading role in APEC’s support for Single Window systems in member countries.

Thanks in part to Japan’s leadership, trade facilitation and AfT have become increasingly important issues in LAC-Asia interregional cooperation. In April 2013, customs leaders from Japan, LAC, and other Asian countries attended the first “Customs Leaders’ Partnership Dialogue-Efficient and Secure Trade for Shared Prosperity” in Panama, organized by the ADB,

IDB and the World Customs Organization. Customs authorities discussed ways to enhance collaboration, strategies, and solutions to common challenges in maximizing the benefits of global trade and LAC-Asia relations in particular. The participants also laid out measures to lower the costs of moving goods across borders, improve customs efficiency, and ensure the security of the supply chain.

Japan has made an especially strong AfT contribution to Central America, supporting the construction of physical infrastructure to facilitate the movement of goods throughout the subregion, as well as policies and institutions to support countries' international insertion. In certain countries, Japan has provided a considerable portion of overall AfT in recent years, such as in Costa Rica (82 percent), Guatemala (50 percent), and Belize (48 percent).

Examples of this support abound. The government of Japan and JICA have offered grants to Nicaragua to help rebuild bridges on the international highway linking Managua to the Port of El Rama on the Atlantic coast. In Costa Rica, JICA has helped establish, through a combination of grants and technical cooperation, the Centro Para la Formación de Formadores (now the UTN-CEFOF, Universidad Técnica Nacional-Centro de Formación de Formadores y Personal Técnico para el Desarrollo Industrial de Centroamérica), to promote the development of human resources in small and medium-sized enterprises (SMEs). Instructors at UTN-CEFOF train local facilitators in techniques and strategies to facilitate SME development in Central America and the Caribbean.

In El Salvador, Japan has provided support for the reconstruction of bridges and highways that have suffered considerable damage due to heavy rains in recent years. JICA implemented the Economic Infrastructure Rehabilitation Assistance Project from March to November 2012 to support the restoration of El Salvador's economic infrastructure, a project that includes support for technical plans to rapidly repair damaged roads and bridges.

Sources: JICA, WTO Aid for Trade at a Glance.

Disaster Preparedness Cooperation: Sharing Knowledge on the Greatest Risks

Japan is vulnerable to a range of natural disasters, such as earthquakes and tsunamis, and as a result, the country has accumulated a great deal of experience with disaster prevention, mitigation, and recovery.

The Great East Japan Earthquake threw into stark relief the far-reaching risks of natural disasters. In addition to the human tragedy, many factories that produce components essential to automobiles, electronics, and other manufacturing industries around the world were damaged. The resulting disruption of the supply chain had a major impact on the global economy.

Several countries in LAC share similar topological features with Japan and therefore are vulnerable to similar forces of nature, making natural disaster preparedness an area ripe for cooperation between Japan and the region.

Utilizing advanced technology, knowledge of disaster prevention and management, and its experience with international cooperation, Japan is assisting Latin American and Caribbean countries in enhancing their capabilities to prevent and effectively respond to natural disasters, with the goal of minimizing human and material losses.

Japanese and Peruvian research institutes launched in 2010 a joint project to investigate tsunami and earthquake mitigation strategies in Peru. The project, “Enhancement of Earthquake and Tsunami Disaster Mitigation Technology in Peru,” utilizes an innovative cooperation mechanism, the Science and Technology Research Partnership for Sustainable Development (SATREPS), in which the Japanese International Cooperation Agency (JICA) and the Japan Science and Technology Agency (JST) sponsor international joint research projects on issues of global relevance. Under the SATREPS framework, JICA provides technical cooperation to developing country research institutes, while JST supports Japanese researchers to partner with them on a specific project.

The project brings together researchers from Peru and Japan to collaborate on comprehensive research towards earthquake and tsunami disaster mitigation in five areas: seismic motion and geotechnical issues, tsunamis, buildings, spatial information database and damage assessment, and disaster mitigation plans. JICA provides support by sending Japanese experts and machinery to Peru and sponsoring Peruvian trainees to visit Japan.

The research activities, which will last for five years, will culminate in the implementation of earthquake and tsunami mitigation strategies in three locations in Peru. The idea is also to produce more general knowledge and technical capacity that will be applicable to other Pacific Rim nations facing similar threats in terms of natural disasters.

The researchers will develop models to study major earthquakes that have occurred in the past in order to predict earthquake motions resulting from plate boundary earthquakes off the coast of Peru and promote tsunami

damage assessment. The project also evaluates the earthquake resistance of buildings, including historical structures, and utilizes satellite images to prepare land use maps. These results will be integrated to establish effective disaster mitigation plans that are appropriate for the region.

The project has several notable strengths in its conceptualization and institutional framework that can provide lessons for future cooperation efforts. First, the cooperation entails a detailed action plan with concrete deliverables and the sites for the implementation of disaster mitigation techniques already identified. Secondly, the project enjoys strong institutional support from the SATREPS framework, which brings together several key Japanese ministries. This ensures that the projects chosen are aligned both with the priorities of Japanese science and its development cooperation and broader foreign policy goals.

Perhaps most critically, the project targets an area with special potential for cooperation between LAC and Japan. For one, there is strong demand given the vulnerability of both countries (and their Pacific Rim neighbors) to earthquakes and tsunamis. It is also a field where international cooperation might be especially fruitful. Case study research on earthquakes requires a large amount of data, and collaboration between countries with similar earthquake dynamics can enhance research opportunities. Finally, natural disaster mitigation remains an area with little commercialization potential, which shields cooperation efforts from concerns over competitive advantage at the national or firm level.

The results and methodology from this project are expected to be replicated in other Latin American and Caribbean countries.

Sources: JICA, Japan Ministry of Foreign Affairs.

