2016 Top Markets Report Cold Chain
Country Case Study

Brazil

Brazil's culture, proximity to the United States and level of development make it a prime location for cold chain export growth; however, systemic government structural problems and the effect of the regulatory environment on business development and trade make any short to medium-term growth diminutive.

Overall Rank	Upper-Middle Category Ranking
20	6

With a GDP of $2.3 trillion, Brazil is the seventh largest economy in the world and is the United States' ninth largest export market for goods. Exports to Brazil account for 3 percent of total U.S. exports of goods and services or around $71 billion. U.S. majority owned foreign affiliate sales in Brazil were $207 billion in 2013, and while retail sales numbers are not available, distribution services contributed more than $18 billion.[1]

More than half of Brazil's population is considered middle class, earning between $11,500 and $29,000 per year. Unemployment has been increasing, and inflation has recently been as high as 8.5 percent.

The Brazilian retail market is heavily saturated. Modern supermarkets have a market share of 50.7 percent and have seen slow growth of about 1.3 percent over 2008 through 2013. The large metropolitan cities have limited opportunity for growth overall; however, fresh food providers and franchise and restaurant service providers should continue to see growth opportunities.

The franchise sector in Brazil is one of the main growth engines and has consistently grown faster than the stagnating economy. Many common U.S. franchise restaurants have been expanding throughout Brazil's urban regions. Despite these trends, growth in franchising is likely to slow as the sector begins to suffer the effects of an economy on the verge of depression.

Figure 1:

Competitiveness Index	Score
Government/Regulatory	3.0
Labor Force	3.6
Infrastructure	4.2
Demand/Business Factors	5.0
Industry Interest	4.0

World Economic Forum and Global Cold Chain Alliance

Economic Statistics	
Population	208 Million
Cold Storage Capacity	16.0 M/m^3
Pharmaceutical Sales	$26.3 Billion
Food Spending	$200 Billion
Food Spending per Capita	$963
Agribusiness Market	$222 Billion
Agriculture Imports	$2.5 Billion
Agriculture Exports	$7.3 Billion

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E-commerce and m-commerce are rising in popularity, with as much as $14 billion in sales. Online sales of refrigerated products, however, have not accounted for any significant amount. The largest geographical area of electronic sales is São Paulo, with 34 percent of total purchases.

The pharmaceutical industry in Brazil has reached approximately $28 billion and has grown by 36 percent since 2010. Taxes on medicines are approximately 34 percent, but the government expects these to be reduced over time.

Express delivery companies face particular challenges shipping into to the country. All goods processed through the Simplified Custom Clearance, the process used for express delivery, face a flat 60 percent duty. Express delivery providers bringing in refrigerated items are also often charged a duty on the refrigerated container, or unit load device, which is used to ship temperature-sensitive products.

Agriculture is one of the largest sectors of the Brazilian economy, comprising 22.8 percent, and large portions of the country are still available to be cultivated. The infrastructure of the country, however, creates extreme challenges in connecting farmland to the global economy. Opportunities may exist for 3PLs and services that can provide vital cold chain links to these far flung Brazilian prairie regions.

In October 2014, the Brazilian government published dietary guidelines that recommended the use of fresh foods over processed foods. The guidance suggests that improved cold chain development will be needed to meet the needs for fresh food.

Brazil ranked 116th in the World Bank's 2016 Ease of Doing Business, a downgrade of 5 places since 2015, when the survey was recalculated. Of particular note were low rankings in the categories of Paying Taxes, Dealing with Construction Permits, Trading Across Borders and Registering Property.[2]

Figure 2: World Bank Doing Business Ranking

Country	Ranking (2016)	GDP Per Capita (PPP, 2014)
Russia	51	$25,635
China	84	$13,206
Brazil	116	$15,838
India	130	$5,701

Brazil's economy has been in a downward spiral for nearly two years. In February 2016, Moody's Investor Service cut Brazil's sovereign fund rating to junk, citing political turmoil and the country's gross debt, which has increased to two-thirds the value of its economy. Moody's downgrade was the last of the three major ratings firms to downgrade the country's investment grade and with a negative outlook, with most analysts believing that more downgrades are coming.[3]

Customs issues, taxes and fees can limit opportunities for U.S. businesses and inefficient rules and regulations hamper growth opportunities for businesses engaged in cold chain operations. According to the World Bank, on average businesses pay taxes totaling 69.2 percent of profits.[4] Corruption and high levels of crime also plague the business-operating environment.

Brazil has one of the lowest levels of market penetration for refrigerated warehouses at .09 cubic meters per urban resident, though the market has been growing at a rate of 26.5 percent from 2008 to 2014.[5]

Refrigerated warehouse service providers face numerous challenges in the Brazilian market. Lack of understanding about the cold chain within the Brazilian government has led to inefficient rules and regulations. For example, a cool storage facility that distributes prepackaged goods may be required to abide by the same workplace guidelines as a meat processing facility. As a result, employees are required to don full protective suits and scrub their boots and hands before entering or exiting the facility despite the fact that warehouse employees will never come in direct contact with any food or food products.

Most warehouse facilities in Brazil lack sufficient fire suppression systems because regulations do not exist that require their use. Fire suppression systems, often developed and sold by U.S. companies, can be prohibitively expensive due to customs and importation taxes and fees. Technologies in cold chain management, such as computer-based and GPS tracking systems, are likewise expensive to acquire and use in Brazil, thereby limiting the speed of growth in the Brazilian market.

Brazil is ranked 78th out of 124 countries in the World Economic Forum's Human Capital index 2015. The population has a median age of 29 and a labor participation rate of 69.8 percent. Approximately 8 percent of the population is tertiary educated, and the country is ranked 108th in ease of finding skilled employees.[6]

With a lower educated work force than other countries in the region, it is important for cold chain operators to perform a significant amount of on-the-job training.

Transportation infrastructure in Brazil is a mixed bag of success and failures. Brazil's quality of transport infrastructure is ranked 77th out of 140 countries in the World Economic Forum Global Competitiveness index. Of particular note are low rankings in areas of Quality of Overall Infrastructure, Quality of Roads and Quality of Port Infrastructure[7]

Road transportation within and around major cities is often highly developed, though traffic congestion is a major concern throughout most of the day. Distribution of products during off hours can be limited due to cultural aspects surrounding business practices and crime concerns.

Brazil ranked 65th out of 160 countries in the World Bank's 2014 Logistics Performance Index (LPI). The LPI is an indicator of key dimensions of a country's logistics performance including Customs, Infrastructure, International Shipments, Competence, Tracking and Tracing, and Timeliness. Virtually every category in the index declined from the previous studies of 2010 and 2012. Brazil's customs are ranked 94th in the survey,[8] reflecting Brazil's heavily bureaucratic processes which focus on using customs clearance as a profit center.

Logistics in Brazil are some of the most costly in the world. Distribution makes up about 32 percent of logistics costs, suggesting that there are considerable opportunities for 3PLs and service providers that can implement improvements in warehousing, inventory management and transportation management.

While rail is considered to be about 30 percent cheaper than road transportation, rail infrastructure is poorly developed and regulations surrounding management of rail lines make travel by rail a means of last resort for temperature-sensitive products.

Improvements to Brazil's government regulatory environment through trade facilitation can play a role in identifying where improvements can be made within the cold chain system. Brazil recently ratified the World Trade Organization Trade Facilitation Agreement, which may indicate a willingness to focus on this area.

The ITA is working with the Brazilian government through the U.S – Brazil Commercial Dialogue to map the cold chain and identify trade bottlenecks and barriers. The identification of these barriers will help guide policy efforts to reduce and remove these impediments to trade for distribution services industries.

Industry's Take:
The devaluation of the Real is negatively affecting the Brazilian business climate. If the political situation could become more stable, the economy would improve.
Richard Tracy, Global Cold Chain Alliance

Resources:

Brazil Country Commercial Guide:
http://export.gov/ccg/brazil090732.asp

USTR National Trade Estimate Report:
https://ustr.gov/sites/default/files/files/reports/2015/NTE/2015%20NTE%20Brazil.pdf

U.S. Mission to Brazil - Intellectual Property Protection:
http://brazil.usembassy.gov/intelprop.html

U.S. Commercial Service:
http://export.gov/Brazil/

Brazil Chamber of Electronic Commerce:
www.camara-e.net

Brazilian Association of Credit Card and Service Companies:
www.abecs.org.br

E-bit - *Certificação de Consumidores*:
www.ebit.com.br

Foreign Investment and International Trade Promotion Agency (APEX Brasil):
http://www2.apexbrasil.com.br/en

Industrial Property Institute (INPI):
http://www.inpi.gov.br/

Trade and Investment Guide (Brazil Export):
http://www.brasilexport.gov.br/

Securities Exchange Commission (CVM):
http://www.cvm.gov.br/subportal_ingles/index.html

Superintendence of Private Insurance (SUSEP):
http://www.susep.gov.br/english-susep/index

Associação Brasileira da Indústria de Armazenagem Frigorificada:
http://www.abiaf.org.br/

Brazil Agency for Industrial Development (ABDI):
http://www.abdi.com.br/

Brazil Bank Federation (Febraban):
http://www.febraban.org.br/

Brazil Franchise Association (ABF):
http://www.portaldofranchising.com.br

[1] Bureau of Economic Analysis; http://bea.gov/international/factsheet/factsheet.cfm?Area=202
[2] World Bank 2016; "Doing Business 2016: Measuring Regulatory Quality and Efficiency"; http://www.doingbusiness.org/~/media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB16-Full-Report.pdf.
[3] Bloomberg Business 2016;"Brazil Credit Ratings Cut to Junk"; http://www.bloomberg.com/news/articles/2016-02-24/brazil-downgradeed-to-junk-by-moody-s-with-negative-outlook.
[4] World Bank 2016: "Doing Business 2016: Brazil Economy Profile", http://www.doingbusiness.org/reports/global-reports/~/media/giawb/doing%20business/documents/profiles/country/BRA.pdf.
[5] International Association of Refrigerated Warehouses; "2014 IARW Global Cold Storage Capacity Report"; Salin, Victoria.
[6] World Economic Forum; "Human Capital Report 2015"; http://www3.weforum.org/docs/WEF_Human_Capital_Report_2015.pdf.
[7] World Economic Forum 2015; "Global Competitiveness Report 2015-1016"; http://www3.weforum.org/docs/gcr/2015-2016/Global_Competitiveness_Report_2015-2016.pdf.
[8] World Bank 2014; "Connecting to Compete: Trade Logistics in the Global Economy"; http://lpi.worldbank.org/sites/default/files/LPI_Report_2014.pdf.