



## 2016 Top Markets Report **Cold Chain** Country Case Study

### Singapore

Singapore’s well-established infrastructure, favorable business climate and high per capita income make it a top market for cold chain. Its strategic location is ideal for cross docking and distribution networks to service the ASEAN region.

**Overall Rank**  
**1**

**High-Income Category Ranking**  
**1**

Singapore has an estimated GDP of \$308 billion, and U.S. exports to Singapore amounted to nearly \$43 billion in 2015. U.S. majority owned foreign affiliate sales were \$405 billion in the country, and distribution services accounted for more than \$202 billion in 2013.<sup>1</sup>

The population of Singapore is considered high income, with a per capita income of about \$80,270 (PPP) per year. Unemployment has held steady around 3 percent, and inflation was low, around .2 percent, in 2014.<sup>2</sup>

Singapore’s retail food sector is one of the most advanced in the world. Food spending is expected to reach nearly \$9 billion by 2020.<sup>3</sup> The mature nature of Singapore’s mass grocery retail sector is evidenced by intense competition, which ensures that retailers must be highly innovative to compete.

Singapore has one of the highest per capita incomes in the world, and more than 72 percent of the population earns over \$50,000 annually, presenting a high level of consumer purchasing power. Therefore, catering to consumer preferences, rather than competing on price alone, presents an opportunity for U.S. exporters.

Singaporean customers often value the ease of shopping in convenience stores or online. Packaged foods are an industry that appeals to this consumer

Figure 1:

Competitiveness Index	Score
Government/Regulatory	6.0
Labor Force	5.8
Infrastructure	6.3
Demand	5.1
Industry Interest	5.0
World Economic Forum and Global Cold Chain Alliance	
Economic Statistics	
Population	5.6 Million
Cold Storage Capacity	N/A
Pharmaceutical Sales	\$793 Million
Food Spending	\$6.8 Billion
Food Spending per Capita	\$1,205
Agribusiness Market	N/A
Agriculture Imports	\$1.2 Billion
Agriculture Exports	\$1.1 Billion

BMI and Global Cold Chain Alliance

segment, as these products are easier and less time-consuming to cook. In the face of rising obesity rates, government initiatives and consumer choices to eat healthier have created demand for healthy processed foods.

There is also strong demand for fresh products in Singapore; even busy professionals who cannot make treks to the markets frequently will buy fresh produce and freeze it themselves to consume later. Therefore, significant opportunity exists for firms to sell food items that are both fresh and readymade or easy to prepare.

Wet markets still represent a major point of sale for fresh grocery products. Wet markets are reminiscent of traditional markets and serve as destinations that sell fresh produce, meat and fish products. Older consumers tend to prefer shopping in these outlets.

The franchise sector in Singapore is well-developed and growing. There are more than 30,000 franchises in the country, and U.S. concepts are very well received. Many businesses use Singapore as a distribution center and a showcase for concepts to the Asia region. With more than 15 million visitors each year, it is common for visitors to inquire into bringing a concept seen in Singapore to their home country. Singapore's well-developed infrastructure and strategic location provide convenient access to the Asia region. E-commerce in Singapore is estimated at \$3.3 billion in 2015 and is expected to reach as high as \$33 billion by 2020. The e-commerce site EBay estimates that e-commerce accounts for as much as 5 percent of all retail sales in Singapore.

E-commerce and direct to consumer deliveries of temperature-sensitive products will find excellent opportunities in this market due to relatively lower overhead and real estate costs of operation and the ability to cater to consumers that do not have time to shop at a retail store. This may also represent a great opportunity for cold chain service providers, as the growth of online shopping for food and groceries should create additional demand for refrigerated deliveries and warehouses near major population centers.

Pharmaceutical sales in Singapore are estimated at \$800 million and are anticipated to increase to around \$1 billion by 2020. Singapore represents an attractive opportunity for refrigerated logistics service providers to serve the growing pharmaceutical industry.

Singapore's quality of transport infrastructure is ranked third out of 140 countries in the World Economic Forum Global Competitiveness index. All aspects of the infrastructure from road to rail, ports and air are all consistently rated in the top ten in the world.<sup>4</sup>

Singapore ranked 5<sup>th</sup> out of 160 countries in 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. While the categories of Infrastructure and Customs have shown slight improvements since 2007, almost every other category has declined.<sup>5</sup>

Singapore has a highly developed and sophisticated cold chain distribution system. Cold chain operators are looking at further developing their Singapore facilities to create a cross-docking location to more efficiently move product throughout the ASEAN region, which would help U.S. cold chain firms improve their operating efficiency and market prospects in the region.

Singapore is becoming a hub for perishable products moving from one part of the world to another. At Coolport@Changi, a \$16 million 8,000 sq. meter building is the transit point for 90 percent of the perishable goods that pass through the airport. The facility has 18 temperature zones that range from -28° C to 18° C.<sup>6</sup> A recent 1,400 square meter facility run by dnata expanded the total airport capacity to 75,000 tons annually.<sup>7</sup>

Express delivery is greatly aided by the advanced supply chain infrastructure in Singapore. Changi Airport is served by more than 100 airlines with flights to 80 countries and nearly 300 weekly freighter flights. The airport sets some of the highest standards for cargo and has goals of clearing 90 percent of cargo shipments through customs within 13 minutes.

Due to land constraints, as much as 90 percent of food consumed must be imported. Recent trends have shown Singaporean retailers sourcing more agriculture products beyond the region to meet the 5.5 percent annual increase demand of the local markets. Products range from generic to high-end organic foods. It is estimated that, this year, Singapore's dairy market will be around \$1 billion. The beef market will be \$415 million, and the fresh fruits and vegetables market is anticipated to be about \$1 billion.

The Agro-Food and Veterinary Authority of Singapore (AVA) worked with the food industry and SPRING Singapore to launch a new Singapore Standard (SS) for the cold chain management of vegetables in 2013. Named SS 585: 2013, the new standard covers major supply links starting from the farm to the packing house, transportation, distribution, wholesale center and retail. SPRING Singapore is now promoting international recognition and adoption of these

standards from the International Standards Organization (ISO).<sup>8</sup>

About 15 percent of Singapore's resident population is Muslim, and as such, there is a relatively strong demand for halal food products in Singapore. Cold chain logistics providers interested in entering this market may want to consider halal certification to appeal to all consumer segments.

Singapore has consistently ranked at the top of business friendly markets and is ranked first in the World Bank's 2016 Ease of Doing Business Rankings. One risk, however, that should be monitored arises when purchasing property. Because land is so scarce in Singapore, numerous bidders often drive the price of land to above its real value, making it costly to develop sites and facilities needed for cold chain operations. Singapore also has one of the most expensive labor markets in the world. This may be a barrier to entry for SMEs looking to expand into this market.

Singapore is ranked 24<sup>th</sup> out of 124 countries in the World Economic Forum's Human Capital Index 2015. The population has a median age of 37 and a labor participation rate of 67.8 percent. More than 21 percent of the population is tertiary educated, and the country is ranked 20<sup>th</sup> in ease of finding skilled employees.<sup>9</sup>

**Figure 2: World Bank Doing Business Ranking**

Country	Ranking (2016)	GDP Per Capita (PPP, 2014)
<b>Singapore</b>	1	\$82,763
<b>Russia</b>	51	\$25,635
<b>China</b>	84	\$13,206
<b>Brazil</b>	116	\$15,838
<b>India</b>	130	\$5,701

The United States has a free trade agreement with Singapore that has brought tariffs on most products down to zero. Singapore is also a party to the recently negotiated Trans-Pacific Partnership (TPP). Upon ratification, U.S. businesses may find increased potential for growth and more opportunities to participate in trade. The agreement will eliminate tariffs, lower service barriers and increase transparency while also increasing competitiveness by instituting stronger intellectual property rights

protection and establishing enforceable labor and environmental obligations.

The TPP will promote fairness by ensuring non-discriminatory treatment of U.S. goods and services, establishing rules for fair competition with State-owned enterprises and providing the same rights and protections for U.S. investors that foreign investors currently enjoy in the United States while protecting the inherent right of governments to regulate.

Singaporeans also pride themselves on being a 'foodie' country, and 60 percent of Singaporeans eat out at least four times a week, according to the 2010 National Nutrition Survey. "Eating out" includes hawker centers, food courts, coffee shop stalls, restaurants, coffee houses and workplace canteens as usual meal venues. A recent MasterCard survey on consumer dining habits showed Singaporeans to be one of the top spenders for dining out across the wider Asia Pacific. There is also a recognizable shift toward fine dining, new cuisines and differentiated dining experiences among Singaporeans, creating increased demands for new perishable food items.

**Industry's Take:**

**Singapore is a highly developed country with at sophisticated distribution system. There is opportunity to make Singapore a staging station for cross-docking facilities to move product more efficiently.**

**Richard Tracy, Global Cold Chain Alliance**

**Resources:**

U.S. Commercial Service:

<http://www.export.gov/singapore/>

Country Commercial Guide:

<http://export.gov/ccg/singapore090882.asp>

Restaurant Association of Singapore (RAS)

[www.ras.org.sg](http://www.ras.org.sg)

Singapore Hotel Association (SHA)

[www.sha.org.sg](http://www.sha.org.sg)

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<sup>1</sup> Bureau of Economic Analysis; <http://bea.gov/international/factsheet/factsheet.cfm?Area=625>.

<sup>2</sup> The World Bank; <http://worldbank.org>.

<sup>3</sup> Business Monitor Online; <http://bmo.bmiresearch.com>.

<sup>4</sup> World Economic Forum 2015; "Global Competitiveness Report 2015-2016"; [http://www3.weforum.org/docs/gcr/2015-2016/Global\\_Competitiveness\\_Report\\_2015-2016.pdf](http://www3.weforum.org/docs/gcr/2015-2016/Global_Competitiveness_Report_2015-2016.pdf).

<sup>5</sup> World Bank 2014; "Connecting to Compete: Trade Logistics in the Global Economy"; [http://lpi.worldbank.org/sites/default/files/LPI\\_Report\\_2014.pdf](http://lpi.worldbank.org/sites/default/files/LPI_Report_2014.pdf).

<sup>6</sup> Singapore Economic Development Board; <https://edb.gov.sg/content/edb/en/industries/industries/logistics-and-supply-chain-management.html>.

<sup>7</sup> dnata; <http://www.dnata.sg/coolchain.html>.

<sup>8</sup> Agri-Food & Veterinary Authority of Singapore; "New Singapore Standard for Cold Chain Management of Vegetables"; [http://www.ava.gov.sg/files/avavision/issues3-4\\_2013/prints/food-security-vegetables-management.html](http://www.ava.gov.sg/files/avavision/issues3-4_2013/prints/food-security-vegetables-management.html)

<sup>9</sup> World Economic Forum; "Human Capital Report 2015"; [http://www3.weforum.org/docs/WEF\\_Human\\_Capital\\_Report\\_2015.pdf](http://www3.weforum.org/docs/WEF_Human_Capital_Report_2015.pdf).