while running their US plants at full tilt. Japanese automakers encountered "capacity restraints in their existing US plants as a sharp increase in the price of gasoline sparked greater consumer demand for fuel-efficient, environmentally friendly vehicles," says William Duncan, general director of the Japan Automobile Manufacturers Association's office in Washington, DC.

All told, each of the Detroit automakers supports 2 1/2 times more US jobs than Toyota, says Jim Doyle, president of the Level Field Institute, a Washington research group. He acknowledges, however, that "people are trying to define what an American car is, and they are having a tough time."

The confusion pains Luehrmann, 48. Hoping to reach a decision soon about his next car, he's looking at everything. He's a believer in American cars, but, says with a tinge of regret, "I don't feel any great loyalty anymore."

Case Discussion Questions

1. What are the pros and cons of inbound foreign direct investment (FDI) in the US automobile industry? Discuss this question from the perspective of (1) the US economy, (2) US car consumers, and (3) US car companies.

2. Toyota tries very hard to advertise itself as an "American" company. Recently, it has been adding more production capacity than any automaker in the United States. Yet, it still confronts significant liability of foreignness. If you were (1) a Toyota spokesperson, (2) a GM spokesperson, (3) the governor of California, Kentucky, Mississippi, or Texas (where Toyota makes cars), or (4) a US car buyer who drives a Toyota or Lexus, do you think it is fair to label Toyota a "non-American" company?

3. A number of Japanese companies have increased US-bound FDI and exports (or imports from the US perspective) at the same time. What does that tell us in terms of the relationship between FDI and trade?

4. In this age of globalization, is it still relevant to identify an "American" car? Should patriotic American consumers continue to look for "American" cars?
2005, the acreage of soybean planting in Heilongjiang Province (China’s northernmost province located in the Northeast [Manchuria]) decreased from 108 million mu to 82 million mu, a 24% decrease from the previous year. During the same period, the soybean acreage in the Inner Mongolian Autonomous Region also decreased by 17%, from 28 million mu in 2004 to 23 million mu in 2005. At the same time, soybean supplies stockpiled due to low prices. Many farmers who had planted and harvested soybeans with the expectation of increased income lost profits instead. For example, in Heilongjiang, which had the largest acreage and highest output of soybeans, the average sales price was only $0.271 per kilogram, which was lower than the farmers’ cost. Consequently, farmers in Heilongjiang collectively lost $419.26 million, had incentive to reduce output, and the number of unemployed soybean farmers soared to approximately 1.2 million.

**Subsidies and Imports**

Soybean farmers suffer, but farmers who grow wheat and corn are “lucky.” To encourage farmers’ enthusiasm toward wheat and corn, the government offers subsidies every year. For example, in 2005, the Henan provincial government gave $1.23 for every mu of wheat grown, resulting in $3.627 million of total subsidies to wheat farmers in the province. In 2006, the Beijing municipality government adjusted its subsidies for corn growers upward to $1.88 per mu. One county in the Chongqing municipality announced that it would subsidize $0.64 per mu to wheat growers in 2007. At the national level, the central government uses strategic storage of wheat and corn to ensure that the sales prices farmers command are not lower than minimum prices. In contrast, subsidies for soybeans are negligible.

Falling soybean prices and the rise of imports also affect downstream soybean oil processing firms. No. 93 Seed-Oil Corporation was set up by one of the state-owned farms in Heilongjiang in China’s Northeast (Manchuria) with the specific purpose of absorbing and processing soybeans produced by farms in the province. The annual soybean output of Heilongjiang Province is about six million tons, and the company purchases two million tons (one-third of the total output from that province). Yet, even such a firm crucial to soybean production and processing in the Northeast had to yield to the pressures from the rise of imports. In 2004, five of its soybean oil processing subsidiaries in the Northeast went bankrupt. As a result, two new subsidiaries were built in 2005: one in Tianjin and another in Dalian. However, both these new soybean oil processing subsidiaries exclusively used imported soybeans, which commanded more than half of all the soybeans processed by No. 93 Seed-Oil Corporation.

Aside from the lack of subsidies, one crucial reason that domestic soybeans are not as competitive as imports is because soybeans are primarily grown in China’s Northeast, whereas soybean oil processing companies concentrate along the coast. If No. 93 Seed-Oil Corporation used locally grown soybeans, taking into account transportation, storage, and capital requirements, the cost of domestic soybeans is $20.54 more than imported soybeans per ton. Because of economies of scale, industrialized production, foreign government subsidies, and topographical and climatic conditions, the cost of imported soybeans is far lower than that of domestic soybeans. In 2003, the production cost of soybeans per ton in the United States was $168, in Brazil $119, and in China $192. Table 1 has a more detailed comparison of prices between domestic and imported soybeans in recent years.

More than half this huge difference in price can be attributed to agriculture subsidies. Among the 30 OECD members, the ratio of agriculture subsidies

### TABLE 1: SOYBEAN PRODUCTION, CONSUMPTION, AND IMPORTS IN CHINA

<table>
<thead>
<tr>
<th>Year</th>
<th>Planting area (million hectares)</th>
<th>Output (million tons)</th>
<th>Consumption (million tons)</th>
<th>Import (million tons)</th>
<th>Domestic Purchase Price ($/kg)</th>
<th>Import Price ($/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>8.500</td>
<td>15.152</td>
<td>22.020</td>
<td>3.196</td>
<td>0.273</td>
<td>0.181</td>
</tr>
<tr>
<td>1999</td>
<td>7.962</td>
<td>14.245</td>
<td>26.290</td>
<td>4.317</td>
<td>0.297</td>
<td>0.183</td>
</tr>
<tr>
<td>2000</td>
<td>9.299</td>
<td>15.300</td>
<td>31.810</td>
<td>10.420</td>
<td>0.261</td>
<td>0.193</td>
</tr>
<tr>
<td>2001</td>
<td>8.700</td>
<td>15.000</td>
<td>30.700</td>
<td>13.940</td>
<td>0.266</td>
<td>0.242</td>
</tr>
<tr>
<td>2002</td>
<td>8.720</td>
<td>16.507</td>
<td>32.690</td>
<td>11.320</td>
<td>0.267</td>
<td>0.220</td>
</tr>
<tr>
<td>2003</td>
<td>9.133</td>
<td>16.400</td>
<td>37.900</td>
<td>20.740</td>
<td>0.346</td>
<td>0.312</td>
</tr>
<tr>
<td>2004</td>
<td>9.600</td>
<td>18.000</td>
<td>38.150</td>
<td>20.229</td>
<td>0.326</td>
<td>0.338</td>
</tr>
<tr>
<td>2005</td>
<td>9.103</td>
<td>17.800</td>
<td>40.000</td>
<td>26.590</td>
<td>0.331</td>
<td>0.278</td>
</tr>
</tbody>
</table>

Source: http://www.93.com.cn
(percentage of subsidies over total agricultural income) varies tremendously (see Table 2). In many competing countries, agricultural subsidy ratios are over 20%, but in China, the overall agricultural subsidy ratio is only 8.5%, as pledged by the government’s commitment to the WTO in 2001.

The quality of soybeans depends on the quantity of oil that can be extracted from the bean. A 1% variance can lead to a profit difference of $1.9 million for every 100,000 tons of soybeans produced. At present, the ratio of oil extraction from domestic soybeans is only 16%–17%, which is 2%–3% lower than imported soybeans. Not surprisingly, when confronting higher prices and lower quality domestic soybeans, oil processing firms in China, such as No. 93 Seed-Oil Corporation, choose to import soybeans.

**International Competition**

In the international agricultural market for basic foodstuffs such as soybeans, about 80% of the market share is dominated by four *Fortune* Global 500 companies: Archer Daniels Midland (ADM), Bunge, and Cargill of the United States and Louis Dreyfus of France—collectively known as “ABCD.” Since 2005, these multinational firms have intensified their acquisitions in the Chinese soybean oil processing industry. In 2000, the number of Chinese soybean oil processing firms exceeded 1,000. In 2006, there were only 90, and 64 of them were wholly or partially controlled by foreign investors. These 64 foreign-invested firms command 85% of the production capability.

In 2005, Baogang Seed-Oil Corporation, once a leading seed oil manufacturing company in Jiangsu Province, declared bankruptcy due to capital shortage. The company could not pay its debt, so the Nantong municipality government authorized it to be leased by Cargill. However, employees clearly knew that the “lease” was just a transition form and that the company’s eventual fate would be an acquisition by Cargill. In addition to acquisitions, foreign firms are shifting some attention to soybean research. For example, Kwok Brothers Corporation of Singapore held talks with the Academy of Agricultural Sciences in Heilongjiang Province, hoping that the academy would license the output of its research to the Singapore company. By popularizing the new breed of soybeans pioneered by the academy, the Singapore company hoped to purchase such soybeans directly from farmers when harvested and then to gradually monopolize the soybean industry of Heilongjiang Province (and perhaps even the whole country).

**The Soybean Value Chain**

An extensive industry value chain can be derived from soybeans. First, soybeans can be made into a variety of food products, including tofu and other bean curd-based products, soy milk, and soy-protein drinks. Second, oil can be pressed from soybeans. Finally, the soybean oil extraction process generates a byproduct, soybean residue, which contains abundant proteins. Soybean residue is a main ingredient in feed for livestock and poultry. Animal feed, in turn, connects soybeans with livestock and poultry production, another crucial component of the agricultural industry.

Nowadays, foreign direct investment (FDI) has mainly penetrated the soybean oil production process (other than some attempts to be involved in upstream production as noted earlier). What is the attitude of other players in the soybean value chain toward FDI? Consider Qinghe Technology, Ltd., a large animal-feed producer. Because soybean residue represents 60% of the raw materials used in production, the market price of soybeans directly affects the company’s production cost. Obviously, the low price of imported soybeans makes Qinghe happy. Therefore, managers in the animal-feed industry are interested in more imported soybeans.

**The Future of Soybeans in China**

As the country that proudly pioneered soybean production, China has been producing non-GM soybeans for more than 5,000 years. Except for Qinghai Province, soybeans are grown everywhere in China, and the variety of soybean categories in China is the most complete in the world. We can say, without exaggeration, that China cultivates soybeans, and in turn, soybeans nurture our country. At present, soybeans are at a crucial historical crossroads between progress and decline. Fortunately, on October 1, 2006, the central government passed new regulations on the labeling standards of edible oil, requiring that “GM-based” or “non-GM-
based” soybeans be clearly labeled for consumers. Can this “institutional change” in the rules of the game governing soybean oil labeling and consumption bring new hope to domestic soybeans?

Case Discussion Questions

1. Does China have an absolute or comparative advantage in soybean production?

2. In China, what is the current crisis of the soybean industry? Do you think the government should or should not intervene? If intervention is called for, what measures should be taken?

3. What difficulties do Chinese soybean farmers face? How can they compete with international producers?

4. Will the new labeling standards for non-GM-based soybeans used for edible oil production have any impact on domestic soybeans?

5. Facing the imminent wave of consolidations fueled by FDI, what can the soybean oil processing companies do to promote locally grown soybeans? Is this their responsibility?

**INTEGRATIVE CASE 2.3**

**AGRANA: FROM A LOCAL SUPPLIER TO A GLOBAL PLAYER**

Erin Pleggenkuhle-Miles
University of Texas at Dallas

Although most readers of this book probably have never heard of AGRANA, virtually everybody has heard of Nestlé, Coca-Cola, Danone, PepsiCo, Archer Daniels Midland (ADM), Tyson Foods, and Hershey Foods. Headquartered and listed in Vienna, Austria, AGRANA is one of the leading suppliers to these multinational brands around the world. With revenues of US$2.6 billion and capitalization of $1.4 billion, AGRANA is the world’s leader in fruit preparations and one of Central Europe’s leading sugar and starch companies.

AGRANA was formed in 1988 as a holding company for three sugar factories and two starch factories in Austria. In the last two decades, it has become a global player with 52 production plants in 26 countries with three strategic pillars: sugar, starch, and fruit. AGRANA supplies most of its fruit preparations and fruit juice concentrates to the dairy, baked products, ice-cream, and soft-drink industries. In other words, you may not know AGRANA, but you have probably enjoyed many AGRANA products. How did AGRANA grow from a local supplier serving primarily the small Austrian market to a global player?

From Central and Eastern Europe to the World

In many ways, the growth of AGRANA mirrors the challenges associated with regional integration in Europe and then with global integration of multinational production in the last two decades. There are two components of European integration. First, EU integration accelerated throughout Western Europe in the 1990s. This means that firms such as AGRANA, based in a relatively smaller country, Austria (with a population of 8.2 million), needed to grow its economies of scale to fend off the larger rivals from other European countries blessed with larger home country markets and hence larger scale economies. Second, since 1989, Central and Eastern European (CEE) countries, formerly off limits to Western European firms, have opened their markets. For Austrian firms such as AGRANA, the timing of CEE’s arrival as potential investment sites was fortunate. Facing powerful rivals from larger Western European countries but being constrained by its smaller home market, AGRANA has aggressively expanded its foreign direct investment (FDI) throughout CEE. Most CEE countries have become EU members since then. As a result, CEE provides a much larger playground for AGRANA, allowing it to enhance its scale, scope, and thus competitiveness.

At the same time, multinational production by global giants such as Nestlé, ConAgra, Coca-Cola, PepsiCo, and Danone has been growing by leaps and bounds, thus reaching more parts of the world. Emerging as a strong player not only in Austria and CEE but also in the EU, AGRANA has further “chased” its corporate buyers by investing in and locating supplier operations around the world. This strategy has allowed AGRANA to better cater to the expanding needs of its corporate buyers.