

The Financial Crisis Hit Korean Agricultural Imports Hard

In a short period late in 1997, Korea went into a deep recession and suffered a collapse of domestic and international confidence. The value of Korea's currency dropped sharply, making imports more expensive. Its agricultural imports dropped less than its total imports, but parts of its agricultural trade were hit very hard. Imports of meats, consumer-ready foods and beverages, and hides dropped drastically but imports of feedstuffs and cotton remained at pre-crisis levels. The economy rebounded quickly in 1999, aided by new foreign investment. Foreign involvement in Korea's food and beverage industries increased as a result of the crisis [John Dyck, (202) 694-5221, jdyck@ers.usda.gov].

South Korea was a major casualty of the financial crises that swept Asia, Russia, and Brazil in 1997-99. It experienced currency depreciation, an economic downturn, problems in securing and allocating commercial credit, and unusual difficulties with corporate debt. As a result, agricultural trade was affected, mostly through higher import prices and reduced import volume. The value of U.S. agricultural exports to Korea in 1998 fell 22 percent.⁴ The crisis was especially difficult for Korea because of the shock to the commercial credit system from a year earlier. Obtaining credit, even for ordinary business transactions (such as international trading) became very difficult for a period of 2 or more months.

The Evolution of Korea's Financial Crisis

At the onset of Thailand's financial crisis in July-October 1997, Korea appeared able to handle the region's financial crisis. However, the high level of short-term debt and low level of foreign reserves shifted market expectations. While Korea's economy had many strengths, growing problems in the financial and industrial sectors led the Korean government to lose control over the won.

Depreciation began and at the end of December, almost 6 months after the crisis erupted in Thailand, Korea let the won float freely. It reached its nadir in January 1999 (at 1,707 won per dollar), and then gradually rose in value over the course of 1998, with an average rate of 1,213 won in December 1998. In the first 5 months of 1999, the won fluctuated within the range of 1,175-1,230 won per dollar, without showing a trend. Compared with January 1997, before the Asian financial crises, it was worth 28 percent less in early 1999. At the peak of the crisis (January 1998) it had lost 50 percent of its value.

Depreciation increased the foreign currency-denominated debt load of Korean firms, widening debt-to-equity ratios.

Foreign creditors were alarmed by the great instability in the Korean economy. The domestic banking sector, at risk of insolvency, reduced credit and loans. In a general sense, the Korean economy and its firms temporarily lost creditworthiness. Without access to new credit, demands for timely repayment of old debts put Korean firms under extreme pressure, especially those with substantial foreign debt or those engaged in trade (which requires letters of credit for normal transactions).

The International Monetary Fund (IMF) came to the aid of Korea in December 1997 with a financial package worth \$58 billion, including lending from the United States, the World Bank, the Asian Development Bank, and others. The package called for reforms in Korea's financial sector, the way business is conducted at the firm level, and foreign investment regulations. It also called for easing imports and eliminating trade related subsidies. The IMF also required government spending cuts, improved tax revenue, tight monetary policy, and higher interest rates.

The economy began to decline late in 1997, and recession persisted through 1998. Real GDP dropped 5.8 percent. Unemployment reached 6.5 percent, well above the 2-percent level prevailing before the crisis. Many consumers lost income because of across-the-board salary reductions (e.g., 10 percent for many government employees), business failures, and reduced bonuses. Many households lost wealth as their stock holdings plummeted in value. Private consumption expenditures declined almost 2 percent in 1998.

Reshaping Korea's Corporate Structure

The crisis aggravated the problems already besetting some Korean corporations and added new problems, even for previously healthy firms. Korea's industrial economy is well known for its *chaebol* (large conglomerates), mostly dating from after World War II, and often controlled by a single family. The Korean government favored the development of

⁴ Calendar year 1998.

such large firms, which it believed would increase Korea's global competitiveness in manufacturing through economies of size and allow the country to quickly reach higher stages of technological sophistication. However, before and during the crisis, the *chaebol* system was widely criticized for allowing over-investment from an insufficient capital base. Even before the crisis, several *chaebol* collapsed in 1997. Among them were the Jinro group, brewers and distillers of beer, whiskey, and soju, and the Haitai group, which owned large confectionery and beverage operations.

Because Korea had prevented foreign ownership of its industries, the economic crisis and depreciation of the won affected a capital base that was located mostly inside Korea. Especially for the food industry, which had engaged in little outward investment, there were no off-shore enterprises and activities to cushion the blow that fell within Korea. Many firms experienced financial distress due to the temporary loss of credit and consequent difficulty in importing inputs, lenders' sudden calls for prompt repayment of borrowed funds, and in some cases reduced demand because of the drop in consumer confidence and income.

Legal barriers to foreign investment in Korea were significantly lowered because of the crisis and the agreement with the IMF on restructuring economic policy. Lifting barriers to foreign participation led to significant equity investment by foreign firms in Korea's food and beverage market (see box "Increased Internationalization..."). The internationalization of the large brewing industry was particularly swift. Other foreign-based agricultural-sector firms found that their ability to extend credit, when Korean-based firms could not, offered a chance to expand operations. Still other food firms expanded their business in response to the sharply lowered costs of operation in Korea, as office rents, personnel costs, and other costs made Korea an attractive place to invest.

The Financial Crisis's Linkages To Agriculture

Exchange rates, income, and credit were three macroeconomic linkages affecting Korean agriculture. Lower value of the won effectively raised the price of imported goods relative to domestic ones and made Korean agricultural exports cheaper in terms of foreign currencies. Korean agricultural imports dropped significantly both in terms of U.S. dollars and in volume.

Most Korean consumers were poorer in 1998 than before, with lower incomes. Rising unemployment reduced asset values, and, often, reduced salaries made budgets tighter for Koreans. Consumption declined as a result.

Like any commerce, trade rests on an assumption by the seller that the buyer has the funds necessary to pay for a product. The inability of importers to get credit limited pro-

duction and trade potential early in 1998 across all economic sectors, including agriculture-related industries.

Agriculture Affected Less than the Rest of the Economy

The crisis affected the farm sector less severely than other parts of the economy. Korea's production of grains, fruits, and vegetables appeared almost unaffected by the won depreciation. Inputs to these types of farming are mostly produced in Korea, and the weaker won did not directly affect input prices. Livestock production suffered from higher costs of imported feeds, but gained from less competition from imported meat. Data for Korea's broiler industry illustrate these effects (see fig. 12).

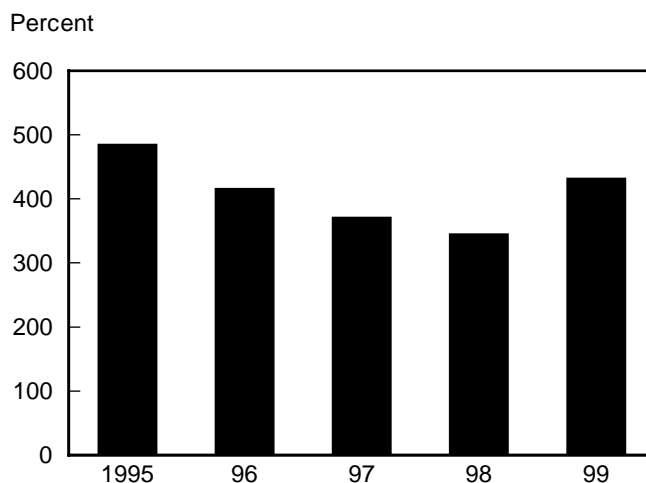
Government expenditures on farming continued, despite the fiscal austerity agreed to in the IMF assistance package. Subsidies for rice farmers were maintained and the government added major support for cattle raisers as it purchased slaughter cattle in the midst of a cyclical price drop—likely exceeding its domestic support commitment to the World Trade Organization. The government also restructured cooperative federations, ousting their leadership and announcing a plan to merge them. The cooperatives are heavily involved in rural credit and the feed sector, but changes may not affect farmers in the short run.

Effects of the Crisis on Agricultural Trade

The lower value of the won led to a higher value of Korea's imports of agricultural products from all countries in 1998 in terms of the Korean won. The volume of most major imported commodities fell (table 8). In terms of the U.S. dollar, Korean imports fell 28 percent, or \$2.6 billion. This

Figure 12

Feed price ratios for Korea's broiler producers



1999 data are Jan.-June.
Source: KA9068, 8/13/99.

Increased Internationalization of the Food Sector

While trade in agricultural goods fell in 1998, internationalization was spurred by important new foreign investments. Foreign direct investment in Korea has been limited by laws that have directly banned or minimized the degree of foreign ownership permitted in a firm operating within the country. Such laws have kept foreign firms at arm's length. They have encouraged franchising of branded operations, in which a Korean firm secures exclusive distribution or marketing rights for a foreign food product or service. Given this legal framework, joint ventures (rather than sole foreign ownership) have often been the most ambitious vehicles for foreign-firm participation, and laws have capped foreign firm shares in such ventures. Besides direct legal constraints, foreign firm participation has faced cultural and extra-legal bureaucratic discrimination.

However, the internationalization of the food sector received an extra impetus because of the financial crises. Korea, as part of its commitment to the IMF, took steps to end or reduce legal barriers to foreign firm participation in its economy. Besides these important government steps, the shocks experienced by the private sector also opened the door wider to the internationalization of food industry firms in 1997 and 1998. Two of the three major oilseed crushing firms, seven feed millers, five cotton mills, and three of the four largest bakery companies sought court protection from creditors in 1998, according to FAS/Seoul reports.

In some cases, the source of their difficulties lay in enterprises outside the food/fiber sectors to which the firms were linked. Many Korean firms found that their debt-to-equity ratios rose as a result of the crisis, and that the judgment of the ratios by lenders changed as well. Debt loads that had been tolerated by lending institutions before the crisis were not tolerated as the crisis unfolded. Companies and corporate groups (*chaebol*) were forced to lower their debt/equity ratios in order to secure continued financing. This stimulated the sale of companies or parts of them. Given the general financial distress in Korea,

there were relatively few Korean companies able to buy firms, and foreign buyers were a logical choice. Combined with the legal changes that raised the ability of foreign entities to own Korean firms, this development changed the investment climate dramatically.

Some major industries saw increases in international ownership. The brewing industry saw the three largest firms transformed. The Doosan group's OB beer breweries became a 50-50 joint venture with the international firm, Interbrew, based in Belgium. The Hite beer concern attracted strong investment from Carlsberg, based in Denmark, and from U.S. investors. The Jinro-Coors brewing business was the subject of an auction in the wake of the collapse of the Jinro group, and was acquired by the OB joint venture of Interbrew and Doosan. The Doosan group was among the groups selling the bottling and distribution rights to Coca-Cola Korea Company, an arm of the international Coca-Cola firm, which now has sole control of the Korean Coca-Cola market. The failure of the Haitai group led its creditors to offer for sale its important beverage subsidiary, in which several foreign firms were interested (as of 8/1/99). The Daesang group sold its lysine feed additive business to BASF, a firm based in Germany. The U.S. meat firm, IBP, purchased a major Korean leather tanning firm.

Other international companies expanded their operations in Korea and Japan in the midst of the crisis. Unlike Korean-based companies, their ability to invest was not affected by the shortage of credit within Korea, and their hands were not tied by the failure of associated firms in Korea. The Carrefour hypermarket chain announced plans to expand the number of its stores in Korea and plans to enter Japan. Cargill Korea expanded its feed sales to Korean livestock farms, helped by the fact that it could extend credit, while its competitors generally could not. The U.S.-based Kellogg company raised its ownership of its breakfast cereal joint venture in Korea from 50 to 90 percent of shares.

was the lowest agricultural import total (in nominal dollars) since 1993 (see fig. 13). The value of U.S. agricultural exports to Korea dropped 22 percent (table 9). The U.S. share of Korea's agricultural imports dropped significantly in 1997, but regained some ground in 1998 (see table 10). Korea's agricultural imports dropped somewhat less than its overall imports, which declined 35 percent.

Part of the drop in agricultural trade in dollar terms, especially for bulk imports such as grains, was not closely related to the financial crises, however, but was caused by the worldwide drop in agricultural commodity prices.

Dollar prices of most major agricultural products in world trade fell in 1998. Trade data provide strong indications that the volume of Korea's imports fell less than the dollar value. For corn, for example, the drop in dollar value was 27 percent, while volume dropped only 14 percent. The value of cattle hides dropped 40 percent, but the number of hides imported by Korea was 30 percent less than in 1997. The average, or unit, dollar value of major imported commodities dropped in 25 out of 27 cases (table 11). For these large import commodities, about 44 percent of the difference between the value of agricultural imports in the peak year of 1996 and the value in 1998 can be attributed to lower dollar

Table 8--Top agricultural imports, South Korea

Ranked by value in 1996	1996	1997	1998	1996	1997	1998	1996	1997	1998	1996	1997	1998	
	Million US\$			1,000 tons			US\$/ton			Million won/ton			
1	Corn, feed	1,217	965	667	6,802	6,524	5,335	179	148	125	0.357	0.295	0.250
2	Cattle hides	806	813	482	13,350	12,478	8,698	60,393	65,166	55,426	120.544	130.137	110.740
3	Cotton	714	583	522	346	315	303	2,060	1,853	1,725	4.112	3.701	3.446
4	Wheat, milling	531	440	392	2,219	2,229	2,345	239	197	167	0.478	0.394	0.334
5	Beef	496	464	249	162	166	92	3,053	2,793	2,705	6.095	5.577	5.405
6	Rubber, natural	460	355	228	320	319	297	1,439	1,113	770	2.873	2.223	1.538
7	Sugar, raw	443	420	375	1,399	1,437	1,378	317	293	272	0.632	0.584	0.544
8	Soybeans, for crush	372	407	293	1,166	1,244	1,089	319	327	269	0.636	0.653	0.538
9	Corn, industrial use	350	283	240	1,870	1,787	1,774	187	159	135	0.374	0.317	0.270
10	Soymeal	294	224	207	1,113	731	930	264	306	223	0.527	0.612	0.445
Among the top ten, 1998:													
	Wheat, feed	192	154	271	958	1,096	2,349	201	141	115	0.401	0.281	0.230
	Total above	5,876	5,108	3,925									
	Other commodities	4,627	4,249	2,775									
	Total agricultural imports	10,504	9,357	6,701									
	In billion won	8,450	8,896	9,384									

* Volumes for hides are in 1,000 pieces, not tons. Unit values are per 1,000 pieces.

Source: World Trade Atlas, Korean Republic Edition, GTI, Inc. (trademarked).

Table 9--U.S. agricultural exports to South Korea

	1996	1997	1998	1996	1997	1998	1996	1997	1998
	Million US\$			1,000 tons			US\$/ton		
Corn	1,274	453	463	8,057	3,444	4,393	158	132	105
Cattle hides *	564	548	291	8,075	7,591	4,954	N/A	N/A	N/A
Soybeans	437	372	304	1,536	1,249	1,280	285	298	238
Cotton	257	224	266	138	127	165	1,862	1,764	1,612
Wheat	328	222	216	1,613	1,309	1,503	203	170	144
Beef	244	292	142	71	90	53	3,437	3,244	2,679
Tobacco	54	63	39	7	7	4	8,232	8,891	9,192
Soymeal	0	0	60	0	0	290	214		207
Soyoil	5	23	30	8	45	48	552	519	630
Total above	3,162	2,198	1,811						
Other commodities	709	665	416						
Total agricultural exports to Korea	3,871	2,863	2,227						

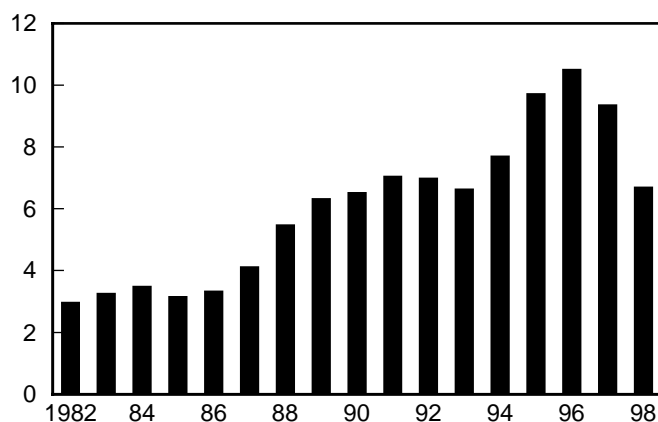
* Volumes for hides are in 1,000 pieces, and only for whole hides. Value includes pieces of hides as well.

Source: FATUS.

Figure 13

Korea's agricultural imports

Billion \$US



Source: Statistical Yearbook of Foreign Trade, Republic of Korea.

values per unit—to a lower product price. Global commodity price movements were almost as important as economic weakness in Korea in reducing its agricultural import value. In terms of the won, however, the picture was different. All but three of the top 27 commodities had a higher unit value in won in 1998 than in 1997 (table 11). In most cases, the loss in buying power of the won outweighed the dollar decreases in world commodity prices, and import unit values in won rose.

Korea's Agricultural Exports

The value of Korean agricultural exports, in dollar terms, fell 10 percent in 1998, considerably less than imports fell. In won, Korea's exports of agricultural products rose by almost one-third. This outcome tends to confirm Korea's greater competitiveness after the large depreciation in the value of won, although nonagricultural exports from Korea fared better than the agricultural ones. Korea's export potential was raised through the devaluation, but the financial

Table 10--U.S. share of Korea's imports

	1996	1997	1998
		Percent	
Volume:			
Beef	47	50	57
Wheat (milling & feed)	51	44	31
Corn (feed & indust.)	93	50	59
Soybeans (crush & food)	92	83	96
Soyoil	45	50	90
Soymeal	0	0	34
Cattle hides	87	75	82
Cotton	45	45	56
Value:			
Total agricultural imports	43	37	39

Source: World Trade Atlas, Korea Republic Edition, Dec. 1998.

Table 11--Korea's agricultural imports

Largest commodities, arranged by type	1996	1997	1998	1996	1997	1998	1996	1997	1998	1996	1997	1998
	Million US\$			1,000 tons 1/			US\$/ton 1/			Million won/ton 1/		
Feed grains												
Corn, feed	1,217	965	667	6,802	6,524	5,335	179	148	125	0.357	0.295	0.250
Wheat, feed	192	154	271	958	1,096	2,349	201	141	115	0.401	0.281	0.230
Rye, feed	161	2	3	946	4	15	171	396	206	0.341	0.790	0.411
Subtotal above	1,571	1,121	941	8,706	7,624	7,699						
Meats												
Beef	496	464	249	162	166	92	3,053	2,793	2,705	6.095	5.577	5.405
Pork	143	220	138	40	61	53	3,621	3,585	2,599	7.227	7.158	5.193
Oilseed complex												
Soybeans, for crush	372	407	293	1,166	1,244	1,089	319	327	269	0.636	0.653	0.538
Soymeal	294	224	207	1,113	731	930	264	306	223	0.527	0.612	0.445
Palm oil	103	110	98	185	197	151	558	556	644	1.114	1.111	1.286
Rapeseed meal	85	72	46	576	471	357	148	153	127	0.296	0.305	0.255
Inputs to food industry												
Wheat, milling	531	440	392	2,219	2,229	2,345	239	197	167	0.478	0.394	0.334
Sugar, raw	443	420	375	1,399	1,437	1,378	317	293	272	0.632	0.584	0.544
Corn, industrial use	350	283	240	1,870	1,787	1,774	187	159	135	0.374	0.317	0.270
Soybeans, food use	102	108	86	299	324	324	340	332	266	0.679	0.664	0.531
Inputs to nonfood manufacturing												
Hides of cattle	806	813	482	13,350	12,478	8,698	60,393	65,166	55,426	120.544	130.137	110.740
Cotton	714	583	522	346	315	303	2,060	1,853	1,725	4.112	3.701	3.446
Rubber, natural	460	355	228	320	319	297	1,439	1,113	770	2.873	2.223	1.538
Furs, raw	285	147	41	4,893	3,641	1,557	58,210	40,480	26,312	116.186	80.838	52.571
Wool, uncarded	145	124	61	27	22	13	5,417	5,709	4,625	10.812	11.400	9.240
Tobacco, unmanuf.	105	96	86	16	13	12	6,679	7,405	7,236	13.331	14.788	14.458
Silk, raw	84	71	34	3	3	1	25,356	28,372	26,798	50.611	56.659	53.542
Hides of sheep	82	73	59	8,697	7,657	9,657	9,473	9,533	6,137	18.908	19.036	12.261
Consumer oriented												
Coffee	146	208	158	58	69	63	2,516	3,034	2,498	5.022	6.059	4.991
Juices	112	110	66	63	75	45	1,778	1,459	1,454	3.549	2.914	2.906
Chocolate	78	81	46	25	28	18	3,168	2,943	2,607	6.323	5.878	5.208
Other feed & food inputs												
Cassava chips & pellets	99	60	49	628	585	463	157	103	106	0.314	0.206	0.213
Molasses	86	66	60	719	726	797	120	91	75	0.239	0.183	0.150
Wheat bran	78	69	44	521	538	428	149	128	103	0.298	0.256	0.206
Whey	77	57	36	46	40	33	1,677	1,402	1,091	3.347	2.800	2.179
Total above	7,849	6,782	5,036									
Other commodities	2,655	2,575	1,664									
Total agricultural imports	10,504	9,357	6,701									
In billion won	8,450	8,896	9,384									

1/ Volumes for hides and furskins are in 1000 pieces, not tons. Unit values are per 1,000 pieces.

Source: World Trade Atlas, Korean Republic Edition, GTI, Inc. (trademarked).

crises affecting most of the countries importing from Korea weakened demand for its exports.

Commodity-by-Commodity Effects on Trade

Examination of several major import markets illustrates the ways in which economic weakness, global price changes, and other forces worked in 1998.

Meats

The financial crises intensified what was already a cyclical downturn in cattle prices that began in June 1997.

Indications that feed prices and interest rates would be higher caused farmers who already intended to cut the number of cattle to rush them to market in December 1997 and January 1998. This caused cattle prices to fall even faster, and abnormally heavy slaughter didn't peak until June 1998. Therefore, domestic meat production increased.

The sharp downturn in domestic beef carcass prices made them more competitive with imported beef. The devaluation of the won, greatest at the beginning of 1998, further narrowed the price advantage that imported beef had always before enjoyed. At times in the first half of 1998, imported and domestic beef were selling for about the same price at wholesale. Imports by the government trading entity were delayed, and turmoil in the credit market made it difficult for private-sector importers to arrange for any imports in early 1998. As a result, neither the government nor the private-sector share of Korea's WTO-mandated quota for beef imports was filled. Imports dropped about 45 percent from 1997 levels. U.S. beef exports dropped 41 percent.

The heavy slaughter of Korean cattle in 1997 and 1998 affected the structure of the herd and the future supply of domestic beef. Cow numbers dropped 25 percent (almost entirely cows over 2 years of age), and the number of calves per cow also dropped. As a result, the number of cattle under 1 year old in June 1999 was one-third less than in June 1997. It will take over 2 years for herd rebuilding to restore Korea's domestic beef supply capability to pre-crisis levels. This should boost beef imports through 2001.

The economic crisis may have strengthened Korea's pork sector. Korea has both imported and exported pork in recent years, because preferences for cuts and quality are different in different countries. Before the crisis, Korea's industry was preparing for a possible doubling of imports after frozen pork trade was liberalized in July 1997. However, the devaluation and recession dramatically changed the situation. Pork imports became more expensive, and pork exports somewhat more competitive (almost all exports go to Japan, whose gate price system reduces the scope for passthrough of exchange rate variations). When the crisis hit, Korean swine producers were in the midst of herd expansion to increase exports to Japan, trying to fill the gap left in

Japan's supply when Taiwan ceased pork exports after a disease outbreak in early 1997. In contrast to the cattle industry, there was not a sharp cyclical downturn for swine, and prices remained strong. In this situation, pork imports were affected by the weakness of the won, but did not have to confront sharply declining pork prices within Korea, unlike the situation with beef. While frozen pork imports did not grow, they did not fall either. Chilled pork imports almost disappeared—a trade loss of 9,000 tons.

Feed Grains

Korea's imports of grains for feed in 1998 rose modestly (about 3.8 percent) from 1997. This represents a considerable achievement, given the financial difficulties that traders faced, and was aided by the allocation of GSM credit guarantees by the U.S. government early in the crisis (see box, "GSM Export Credit..."). Korea's animal producers are totally dependent on imported feed grains, and would have had to reduce herd sizes if grain import flows had been interrupted. Strong feed use in Korea's swine sectors offset declining feed use for beef cattle.

U.S. corn exports to Korea rose almost a million tons in 1998, both for feeding and for use in the corn sweetener industry. GSM credit guarantees for 3.2 million tons of corn helped Korean importers to overcome a lack of affordable credit, especially in the first half of 1998. China's corn exports to Korea declined because credit could not be arranged. Seven Korean feed companies went into receivership and had to cut back their activities, but the rest of the industry was able to survive and to replace the lost capacity at the affected mills. Large imports of feed wheat from Europe displaced corn imports later in 1998.

The Oilseed Complex

The crisis affected Korea's market for oilseed products, and made it more likely that Korea will import vegetable oils and meals, rather than oilseeds, in the future. Two of the three major soybean-crushing companies went into bankruptcy protection in early 1998. Events related to the financial crises precipitated corporate failures that had roots in earlier policy decisions by the Korean government. The three firms had enjoyed low tariffs on soybean imports and significant tariffs on soyoil and meal for over 20 years. This allowed them to sell the soy products in the Korean market at a price above world levels. However, tariff protection for meals was largely removed in the 1980's, and progressively removed from vegetable oils in the 1990's. By 2004, the soyoil tariff will be no greater than 5.4 percent, but Korea's firms are finding crushing unprofitable even with the current tariff of 7.4 percent.

To boost their earnings, the crushing companies in the last few years had induced much of the feedmilling industry to agree to buy a portion of its meal requirements from their output, paying a premium above the price of meal imports. However, the crisis forced the crushing companies to abro-

GSM Export Credit Guarantees for Korea

At the onset of Korea's financial crisis, the U.S. government offered a \$1.2-billion allocation of credit guarantees under the GSM-102 program (GSM stands for General Sales Manager in USDA). These guarantees were used by importers to secure credit so they could buy U.S. products. Repayment could be made after the products had been sold in Korea. In normal times, such transactions are routine. While GSM's relatively long repayment period had some attractions in Korea in the years before the crisis, use had been declining, and the program was in danger of ending. In the past, GSM credits had been assigned to bulk, input commodities, such as cotton and corn. In 1998, the program was designed with portions of the total allocated to meats and other consumer items, in addition to bulk commodities. Of the \$1.5 billion in GSM guarantees for Korea available in fiscal 1998, \$1.38 billion was applied for, a high rate of use.

gate their agreement in December 1997, when their dwindling finances left them desperate. Korea's feedmills, unable to import freely because of the general lack of credit, were left with reduced domestic and imported supply prospects. U.S. government-backed credit intervention allowed them to buy U.S. meal, and imports from the United States soared to over 300,000 tons, compared with almost no trade in 1996 and 1997.

It will be more difficult than before for the Korean soybean crushers to get feedmillers to buy domestic meal at a premium, since domestic supplies were withdrawn at a critical moment, calling into question the reliability of domestic meal suppliers. Increasingly, Korea is turning to meal imports, which exceeded domestic production in 1996 and 1998. Korea's imports of soy meal increased 4 percent in 1998. However, imports of other meals decreased, and total meal use was flat. Feed wheat, with a higher protein content than corn, substituted for some meal imports.

Similarly, soy oil imports are replacing domestic production. Korea's soy oil imports rose 8 percent in 1998 despite higher world prices (in dollar and won terms) and the difficult economic climate. Imports of soybeans for crushing declined 12 percent. Palm oil import unit values jumped 70 percent in won terms—more than for other imported goods. The volume of palm oil imports fell sharply as a result.

Food Inputs

Wheat for milling into flour, raw sugar for refining, corn for sweetener production, and soybeans for food use together represented 13 percent of the total agricultural import value in 1997. The volume of these commodities imported in 1998

changed very little. Domestic demand does not vary much with price or income changes. However, world price declines for all four commodities reduced the dollar value of the imports in 1998. GSM credit guarantees were used for Korean imports of wheat, corn, and soybeans. However, the United States continued to lose wheat market share to Australia and Canada, which also offered credit assistance.

Hides and Fibers

Agricultural inputs for producing nonagricultural products, long important parts of Korea's trade, were about a quarter of the total value of agricultural imports in 1997. Hides imported and tanned for the production of leather or leather products, cotton spun into yarn for domestic and foreign textile markets, natural rubber, raw furs, wool, and silk all benefit from a practice known as tariff escalation. Imports of raw materials are free from tariffs and other barriers, while imports of products processed from them are hindered by tariff barriers. This protects domestic manufacturing. In 1998, the volume of all these input commodities declined. Reportedly, manufacturers drew down stocks to avoid new purchases as much as possible.

Korea is a large importer of hides and the largest market for U.S. hides. Despite GSM credit assistance, U.S. exports of whole cattle hides to Korea dropped 35 percent in volume in 1998, contributing to very low prices for hides at slaughter plants in the United States. However, U.S. exports of cotton increased both in volume and value, aided by the GSM program.

Processed Foods and Beverages

Korea's imports of these items fell more than 40 percent in value from 1997 to 1998. This trade is quite new to Korea. Trade barriers and insufficient buying power within Korea largely kept imports of processed foods and beverages insignificant until Korea's partners in the GATT persuaded Korea to begin phasing in liberalizations, starting in 1989. Since then imports of fruit juices, chocolate products, wine, beer, sausages, noodles, dairy foods, frozen french fries, cola bases, seasoning mixtures, tomato paste, ketchup, canned vegetables and fruits, and many other products have grown quickly.

Declining volume accounted for most of the drop in value of processed food and beverage imports in 1998. During the crisis, consumption in restaurants fell, while supermarket sales held up well. Consumers stayed home to save money. Consistent with this, commodities that are regarded as luxuries, or as discretionary purchases showed very sharp declines in volume: wine imports fell 73 percent, beer imports 84 percent, mineral and aerated water 58 percent, jams and jellies 78 percent, ice cream 69 percent, biscuits/cookies/crackers 70 percent, chocolate foods 43 percent, sausage 41 percent, candy 42 percent, etc.

Summary

The value of Korea's agricultural imports dropped sharply in 1998, in part reflecting the low prices of agricultural commodities on world markets. However, the import volume of many consumer-ready products fell precipitously because of low consumer purchasing power, low confidence in Korea, and the depreciation of the won that made imported products more expensive. Expected expansion in meat imports was replaced with a sharp contraction instead, as consumption of meat fell and domestic price drops made imports less competitive. Imports of feedstuffs, wheat, cotton, and raw sugar held steady. The soybean and hide markets were affected by credit problems for importing firms. In a climate of high interest rates and widespread doubt about firm

credit-worthiness, U.S. credit guarantees were widely used by Korean firms.

Government support for agriculture expanded, despite severe fiscal constraints agreed to with the IMF in return for financial help. Agricultural production that did not depend heavily on imported inputs was unaffected by the crisis. Exports of pork to Japan surged, mostly because of the absence of Taiwan's pork exports, unrelated to the financial crisis. Partly as a result of liberalization of the investment regime agreed to with the IMF, and partly because of the reduced cost of investment in Korea, foreign investment in the beverage and food industries increased. This may stimulate agricultural trade in the future.