Why California is different . . .

Nationwide, 'Asian flu' had impact

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U.S. table grape exports dropped in 1998, partly due to the Asian crisis.

The effects of the Asian economic crisis on the U.S. farm economy were undoubtedly different from the effects on the state of California alone. There are agricultural examples across the nation where the Asian crisis had a clear impact. For instance, apple producers in the Pacific Northwest saw both the volume and value of fresh apple exports drop by about 15% in 1998, compared to 1997. The decline in exports has been attributed to reduced purchases by Thailand, Indonesia, and other Asian countries.

While the Asian flu had a significant impact in some commodity areas, the total effect was not as great as initially feared. For instance, Gajewski and Langley (1998) estimated that the value of U.S. agricultural exports to East Asia would fall by about 40% in each of fiscal 1998 and 1999. Sumner and Song (1999) also suggested the effects were large. But further analysis

shows the drop in the value of U.S. agricultural exports was not as large as was predicted. Table 1 reports the dollar value of U.S. exports of agricultural commodities to East Asia (including Japan, China, Hong Kong, Indonesia, South Korea, Malaysia, Philippines, Singapore, Thailand, and Taiwan) over the past 5 years. The value of U.S. exports to the region in 1997 was \$22.2 billion, and fell to about \$18 billion in calendar year 1998. These data show that from 1997 to 1998, the value of U.S. exports to the region fell by 19%, and bulk commodities experienced the largest drop.

While the data document a nationwide impact to agriculture, the impact was less noticeable in California, because growers in this state tend to export high-valued consumer-ready products, which are aimed at highincome consumers. We know that food purchases by high-income consumers were less affected by the crisis than food purchases by others. The commodity breakdown in table 1 indicates that bulk commodity exports (such as wheat, soybeans, and cotton) suffered the largest drop in export value (down 26% from 1997 to 1998). The value of intermediate commodities (e.g., soybean oil, soybean meal, and animal products) fell by 11% during the height of the crisis. The export value of consumer-ready products (e.g., red meat, fruits, vegetables, and tree nuts) to East Asia fell by 15% in the same

In a 1998 publication, the U.S. Department of Agriculture forecast that the value of total U.S. agricultural exports would drop 3% to 6% in both fiscal 1998 and 1999, from the level that would have been attained without the Asian crisis (Gajewski and Langley 1998). U.S. export value of livestock was expected to fall by 5% to 6%, and

TABLE 1. U.S. exports of agricultural products to East Asia*, calendar years 1994–1998								
Product	1994	1995	1996	1997	1998	1997-98		
			in \$1,000s			% change		
Total agriculture	18,195,454	24,646,126	25,274,397	22,221,744	17,990,115	-19		
Bulk commodities	8,429,464	12,493,744	13,299,590	10,189,865	7,580,647	-26		
Cotton+	1,936,422	2,528,616	1,846,364	1,541,673	1,110,799	-28		
Intermediate products	2,903,602	3,858,411	3,645,035	3,811,613	3,406,299	-11		
Consumer-ready	6,862,388	8,293,970	8,329,774	8,220,266	7,003,170	-15		
Red meat†	2,399,210	3,309,941	3,246,765	2,971,479	2,635,005	-11		
Fruits and vegetables†	2,100,354	2,312,457	2,270,720	2,326,811	2,006,542	-14		
Tree nuts†	233,592	256,614	280,203	264,995	199,231	-25		

*For the purposes of this table, East Asia includes Japan, China, Hong Kong, Indonesia, South Korea, Malaysia, Philippines, Singapore, Thailand and Taiwan. +Cotton is a subcategory of Bulk commodities; Red meat, Fruits and vegetables and Tree nuts are subcategories of Consumer-ready products. Source: Compiled from http://www.fas.usda.gov/scriptsw/bico/bico_frm.idc.

TABLE 2. U.S. agricultural exports, fiscal years, 1995-1999 (year ending Sept. 30)

Commodity	1995	1996	1997	1998	1999*	
	\$billions					
Grains and feeds	\$17.637	\$21.553	\$16.466	\$14.109	\$14.4	
Livestock products	\$7.831	\$8.067	\$7.706	\$7.626	\$7.6	
Horticultural products	\$9.649	\$10.019	\$10.598	\$10.318	\$10.3	
Total agriculture	\$54.629	\$59.795	\$57.258	\$53.629	\$49.0	

Source: Economic Research Service, U.S. Department of Agriculture.

1999 fiscal year figures are projections as of June 1999

TABLE 3. Korean feed grain imports, calendar years 1996-1998

Commodity	1996	1997	1998			
	metric tons					
Corn	8,673,494	8,312,626	7,111,473			
Feed wheat	957,799	1,096,075	2,349,282			
Total	9,631,293	9,408,701	9,460,755			

Source: Economic Research Service, U.S. Department of Agriculture

horticultural products by about 4%. The USDA also projected that grain (corn and soybean) exports would fall by 2% in value in fiscal 1998 due to the "Asian flu."

What were the actual effects of the Asian flu on the total U.S. farm economy? The value of total U.S. agricultural exports did indeed drop over the 2-year fiscal 1996-1998 period, from \$59.8 to \$53.6 billion (about 10% - see table 2). The fact that the value of trade for U.S. horticultural exports did not fall as projected by USDA does not necessarily mean the government projections were wrong, because it can always be argued that the export figures would have been higher without the crisis.

The USDA's projection of a 5% to 6% decline in livestock exports was not unreasonable, given the importance of the Asian market. Next to Japan, Korea is one of the most important importers of U.S. beef and beef products, accounting for about 12% of U.S. exports. The value of total U.S. beef exports has been relatively constant for the past 3 years, and U.S. exports of beef for calendar year 1998 actually grew in volume. However, both the volume and value of U.S. exports of beef to Korea fell by about 40% from 1996 to 1998.

In addition to beef, a decline in shipments of U.S. corn to Korea is attributed to the Asian crisis by some observers. However, the situation with corn is not so obvious. It is true that South Korea's livestock feed consumption did decline in 1998, with reduced livestock numbers. In fact, feed grain usage in Korea (and in some other key Asian nations) is on a declining trend, partly because of the impact of increased meat imports. But we cannot look at corn in isolation. Feed wheat represents as much as 20% of South Korea's compound feed in some years. Korea's imports of corn did fall by about 1.6 million metric tons from 1996 to 1998 (table 3). However, the Koreans imported feed wheat instead of corn - table 3 shows that feed wheat imports increased by 1.4 million metric tons from 1996 to 1998.

region imported less quantity at a given price) due to the relative appreciation of the U.S. dollar and the decline of income growth in the importing region.

Figure 4 shows that if California has a small customer whose demand has changed, this demand shock is relatively easy to accommodate without a large impact on the price. The same would not necessarily be true for a demand shock within a region that was a large customer.

We know that in general, for a small customer, the California export supply schedule ES_{EA} is relatively flat (or "price elastic" — meaning the quantity exported is highly responsive to small price changes). The reason is that California exporters quickly reduce shipments to the affected region (to match demand) and spread a little greater supply among other large customers. With the demand curve shifting leftward along the elastic supply curve, the impact will mostly fall on quantity traded, rather than price. In figure 4, the U.S. export price falls a relatively small amount from P, to P, and the volume of trade declines significantly from Q_1 to Q_2 .

Other ways California is different

In addition to the crisis, there were other significant changes in the supply and demand fundamentals during this time period. Nonetheless, the summary trade statistics in table 1 are consistent with the conclusion that the crisis had no large negative impact on California agriculture.

California is different from other major agricultural states in the nation in that California tends to export numerous high-valued commodities, which are aimed at high-income consumers. Unlike the bulk commodities, such as grains and oilseeds, which were experiencing stagnant import demand growth in Asia even prior to the crisis, demand was growing for California's high-valued exports. In the 1990s, the most significant import growth in Japan was in fruits, vegetables, and beef. This growth occurred despite the fact that Japan's domestic production of agricultural products remains highly protected due to import trade barriers. For in-



California asparagus on its way to Japanese markets.

stance, under the semblance of phytosanitary concerns, Japan continues to restrict the import of several U.S. fresh fruits, vegetables, and other horticultural crops (U.S. Trade Representative, 1998). Of course, there are exceptions to these trade barriers that are important to California. For example, raw cotton imports enter Japan duty free.

Japan trade effects

The Japanese economy has been sluggish for most of the 1990s and it slipped into a recession (with falling real GDP and relatively high unemployment) in 1997 and 1998. Despite a deteriorating economic situation, the value of Japanese agricultural imports (in yen) did not fall significantly in recent years. According to Japanese import data, Japan's 1997 agricultural imports totaled 4,366 billion yen, up from 4,298 billion yen in 1996. For 1998, the figure was 4,288 billion yen. The value of Japan's vegetable imports grew by 6% from 1996 to 1997, and then again by 14% from 1997 to 1998. Japanese imports of fruits and nuts also grew over this period. Most remarkable was increased wine imports by Japan, growing by an estimated 25% to 30%, in value terms, in 1998. Wine is California's third most important export commodity. In 1998, Japan replaced Canada as the second largest market for U.S. wine exports (behind the United Kingdom). U.S. wine exports to Japan totaled \$92 million in 1998. Perhaps recessions lead to high consumption of imported California wine!