

GRAY PORTLAND CEMENT AND CEMENT CLINKER FROM JAPAN AND MEXICO

Gray portland cement is the dominant type of hydraulic cement produced and used in the United States, accounting for nearly all domestic production.¹⁵¹ Cement clinker are small grayish-black pellets that are ground to produce gray portland cement. Clinker is produced from a raw material mixture containing the following chemical components: calcium carbonate, silica, alumina, and iron oxide.¹⁵²



The raw materials are blended either with or without water and then heated in rotary kilns at a temperature of 2,700 degrees Fahrenheit, and the resulting clinker is ground to produce cement. Cement is used to produce concrete, a major material in road and building construction.¹⁵³

National data on gray portland cement are collected and published by the United States Geological Service (USGS). According to USGS, there were 40 companies producing gray portland cement in 37 states and in Puerto Rico as of 1999.¹⁵⁴ On a national basis, net sales in 1999 totaled \$5.8 billion.¹⁵⁵

Markets for cement in the United States are generally regional. Cement is a heavy substance, which increases the cost of transporting the product, and has a low value-to-weight ratio. As a result, nearly 80 percent of domestic production is shipped to customers within 200 miles of the production site, and import sales occur near the location of the import terminal.¹⁵⁶

Cement is a commodity product, and the domestic and imported products are readily interchangeable.¹⁵⁷ Due to the commodity nature of the product,

151 Gray Portland Cement and Cement Clinker from Japan, Mexico, and Venezuela, USITC Pub. 3361, Invs. Nos. 303-TA-21 (Review) and 731-TA-451, 461, and 519 (Review) (October 2000) at I-23. Hydraulic cement is cement that sets or hardens under water.

152 Id. at I-25.

153 Id. at I-24.

154 Id. at I-28.

155 Id. at III-37.

156 Id. at 12.

157 Id. at 32.

price is an important factor in purchasing decisions. Demand for cement is relatively inelastic because demand is derived from demand for concrete and concrete costs are a relatively small share of total building costs.¹⁵⁸ As a result, lower prices do little to spur demand and instead result in declining revenues. Production of cement is capital intensive, which means that high capacity utilization rates are required to maximize returns on investment.¹⁵⁹ As a result of these factors, dumped imports that reduce prices and production volumes can seriously injure domestic producers. In 1989, the Bureau of Mines observed:

The primary issue facing the cement industry is a lack of capital investment for new plant construction or capacity modernization and expansion. Foreign import penetration into coastal markets and regional competition among domestic producers have combined to reduce the profitability of the U.S. industry. The lack of domestic investment capital has opened the door for foreign investors who now own more than two-thirds of U.S. cement production capacity.¹⁶⁰

Original investigations and determinations

The original petitions covering cement and cement clinker from Mexico, Japan, and Venezuela were filed in 1989, 1990, and 1991, respectively. Antidumping petitions were filed against all three countries, while a counter-vailing duty petition was filed only against Venezuela.

The Mexican petition was filed by domestic producers in Arizona, New Mexico, Texas and Florida. The Department of Commerce found dumping margins ranging from 3.69 percent to 58.38 percent.¹⁶¹ The USITC performed a “regional analysis” of imports into the “Southern-tier region”, which the Commission defined to include Florida, Alabama, Mississippi, Louisiana, Texas, New Mexico, Arizona, and California.¹⁶²

The petition against imports from Japan was filed by U.S. producers in Southern California and by unions representing the plants in Southern California.¹⁶³ The Department of Commerce calculated dumping margins ranging from 47.79 percent to 84.70 percent. The Commission again performed a regional analysis. The southern California region was defined to include twelve counties in accordance with the USGS definition for the southern part of the state.

The petition alleging dumped and subsidized imports from Venezuela was filed by three domestic producers in Florida.¹⁶⁴ The Department found that one firm

158 Id. at 33.

159 Id. at 35.

160 United States Bureau of Mines, *Cement Minerals Yearbook*, Cement 1989, as quoted in Pub. 3361 at I-28.

161 USITC Pub. 3361 at I-2.

162 Id. at I-2.

163 Id. at I-2.

164 Id. at I-3.

did not receive a subsidy and that another firm received a subsidy of 3.63 percent. The dumping margins were found to be approximately 50 percent.

The Commission made affirmative final determinations in the investigations of imports from Mexico and Japan. The investigation of imports from Venezuela was suspended after the two primary Venezuelan suppliers to the U.S. market agreed to eliminate completely the price difference between their U.S. sales and sales to other foreign markets.¹⁶⁵ The impacts of the Venezuelan unfair trade are thus not considered here.

The Commission found the following indicators of injury in the investigation of cement from Mexico,

- The value of subject imports from Mexico into the Southern Tier increased by 13 percent from 1986 to 1989, while the volume of subject imports increased by 20 percent.¹⁶⁶
- Underselling by the subject imports was predominant in 9 out of 10 markets in which comparisons were possible and depressed prices for the domestic product.
- The combination of increasing dumped imports had a material adverse impact on employment, investment, capacity utilization, and financial indicators such as profits and cash flow.¹⁶⁷

The Commission found the following indicators of injury in the investigation of cement from Japan:

- The volume of subject imports from Japan into the California region rose from 349,000 tons in 1986 to 1.7 million tons in 1989, an increase of 386 percent.¹⁶⁸
- The subject imports almost always undersold the domestic product in head-to-head comparisons. The Commission found underselling in 60 out of 60 months in the Los Angeles market, 57 out of 60 months in the Orange County market, 59 out of 59 months in the Riverside County market, and 12 out of 12 months in the San Diego market.¹⁶⁹

165 Id. at I-3, fn. 8.

166 Id. at 36.

167 *Gray Portland Cement and Cement Clinker from Mexico*, USITC Pub. 2305, Inv. No. 731-TA-451 (Final) (August 1990) at 47-49, and 65.

168 USITC Pub. 3361 at 43.

169 Id. at 44, and fn. 272.

- The subject imports adversely affected the financial operations of the Southern California industry, resulting in a decline in total operating income due to falling prices. Producers lost market share in the early part of the period of investigation and suffered further in 1990 due to declining sales caused by falling consumption.¹⁷⁰

The following table includes some of the relevant data collected by the Commission during the original investigations and the sunset investigation of 2000.

Table 21a. Gray Portland Cement and Cement Clinker from Mexico:
Selected Data Collected by the USITC

Item	1986	1987	1988	1989	1997	1998	1999
Southern-tier shipment (\$mil.)	1,100.2	983.9	983.4	1,047.1	1,746.4	1,849.5	1,981.8
U.S. regional share (percent, by volume) ⁽¹⁾	69.1	68.3	69.3	69.7	75.6	69.7	65.1
Subject imports (\$mil.) ⁽¹⁾	113.4	138.2	164.7	168.9	75.1	86.1	93.2
Subject import unit value (\$/ton) ⁽¹⁾	34.29	34.37	30.76	32.00	40.73	40.25	41.75
Production workers (Number)	4,437	4,051	3,739	3,593	3,282	3,304	3,447

(1) Subject imports include Japanese data because Southern California is included in both regions examined by the Commission.
Sources: USITC Pub. 3361 at I-5 to I-6.

Table 21b. Gray Portland Cement and Cement Clinker from Japan:
Selected Data Collected by the USITC

Item	1986	1987	1988	1989	1990	1997	1998	1999
So. California shipments (\$mil.)	348.3	317.9	317.6	334.7	325.7	299.2	305.2	346.7
U.S. regional share (percent, by volume) ⁽¹⁾	78.5	72.9	69.3	67.1	69.2	77.3	67.4	61.7
Subject imports (\$mil.) ⁽¹⁾	33.0	38.8	60.0	69.4	70.3	0.8	1.7	3.1
Subject import unit value (\$/ton) ⁽¹⁾	35.30	34.98	32.86	31.54	34.40	40.45	38.32	38.67
Production workers (Number)	1,146	1,072	986	965	960	771	809	805

(1) Subject imports include Mexican data because Southern California is included in both regions examined by the Commission.
Sources: USITC Pub. 3361 at I-7 to I-8.

Estimated revenue impact of unfair trade

The revenue effects of the dumping by Mexico and Japan were estimated only for the Southern-tier region because all of Japan's imports came into Southern California, which is included in the Southern-tier region. In addition, the Commission did not publish its elasticity estimates in the determinations of the original investigations. We have been guided by the elasticity estimates published in the sunset review determination.¹⁷¹ However, these elasticity estimates were based on the market structure and market shares at the time of the reviews and are not necessarily appropriate for the circumstances that existed at the time of the original investigations. Consequently, we have diverged from the practice of using

170 *Gray Portland Cement and Cement Clinker from Japan*, USITC Pub. 2376, Inv. No. 731-TA-461 (Final) (April 1991) at 43-44.

171 USITC Pub. 3361 at II-20 to II-25.

the mid-point of the Commission's elasticity estimates in the model.¹⁷² Finally, the margins were calculated as the simple averages of the individual company rates calculated by the Department of Commerce in its original investigations. The results of the model estimates for 1986 to 1989 appear in the table below. The estimates indicate annual losses in the range of \$188.3 million to \$290.9 million, for a total 4-year loss of nearly one billion dollars to the regional industry. According to the model, U.S. shipment quantity and prices would have been approximately 8 percent higher than was the case with dumped imports in the market.

Table 22. Gray Portland Cement and Cement Clinker from Mexico and Japan:
Estimated Lost Revenue due to Dumping in the Southern-tier Region

Item	1986	1987	1988	1989	Total
Estimated dumping margin (percent)	41.38	41.94	45.26	47.42	N/A
Lost revenue due to dumping (\$mil)	188.3	212.9	263.4	290.8	955.5
Sources: USITC Pub. 3361 at I-5 to I-6 and author's calculations.					

The lost revenue due to dumping not only has direct effects on producers of cement, but also indirect effects on cement industry suppliers and their suppliers as well. These indirect effects are shown in the table below. Based on the Department of Commerce's benchmark survey for 1997, the indirect industry multiplier for cement manufacturing is 0.84. This means that a one dollar reduction in industry output by cement manufacturers due to dumping would result in a \$0.84 reduction in other industries' output. The financial cost of the dumping is estimated by multiplying the constant maturity interest rate for a 1-year T-bill by the increase in imports that results from the dumping. The interest rates during the 1980s were higher than during the 1990s, leading to borrowing costs of nearly \$29 million due to the market distortion of dumping during the 1986-to-1989 period.

¹⁷² Specifically, the domestic supply elasticity used was in the model is 1 instead of 2.5 and the elasticity of demand used is -0.50 instead of -0.35.

Table 23. Gray Portland Cement and Cement Clinker from Mexico and Japan:
Indirect Costs and Interest Costs due to Dumping in the Southern-tier Region

Item	1986	1987	1988	1989	Total
Indirect industry output multiplier	0.84	0.84	0.84	0.84	N/A
1-year T-bill rate (percent)	6.46	6.76	7.65	8.54	N/A
Lost indirect activity (\$mil.)	158.3	178.9	221.4	244.4	803.0
Interest on borrowed funds (\$mil.)	5.1	6.1	8.1	9.5	28.9

Sources: Bureau of Economic Analysis at <http://www.bea.gov/bea/dn2/i-o.htm#benchmark> (data for multiplier); Federal Reserve Bank of St. Louis at <http://www.research.stlouisfed.org/fred2/series/GS1/downloaddata> (interest rates); and authors' calculations.

As noted in the overview to this report, pure consumer gains are the increase in the consumer surplus that does not come at the expense of another actor in the economy. When dumping or subsidies lead to increased imports, those imports come at the expense of domestic production and fairly traded imports. The only consumer surplus gains that do not come at the expense of another actor are the increase in consumption quantities that occurs due to the dumping. This surplus value can be calculated using the inputs and outputs of the model employed to generate the lost revenue estimates. Calculated on a market-wide basis, the pure gain to consumers from 1986 to 1989 was approximately \$5 million, as shown in the table below along with the estimated losses due to dumping.

Table 24. Gray Portland Cement and Cement Clinker from Mexico and Japan:
Summary of Costs and Benefits of Dumping in the Southern-tier Region

Item	1986	1987	1988	1989	Total
Lost revenue due to dumping (\$mil.)	-188.3	-212.9	-263.4	-290.8	-955.5
Lost indirect activity (\$mil.)	-158.3	-178.9	-221.4	-244.4	-803.0
Interest on borrowed funds (\$mil.)	-5.1	-6.1	-8.1	-9.5	-28.9
Consumption gains (\$mil.)	0.5	0.4	2.0	2.1	5.0

Sources: Author's calculations.

Long-term impact of the order

As shown in the first two cement tables, the orders had a positive impact on the regional industries. The period covered by the first sunset review indicate that subject import prices during the review period were higher and that subject import quantities were significantly lower absent the unfair trade. U.S. market share and employment levels were relatively stable compared to the sharp downward trends that had been apparent during the original investigations. U.S. shipments in the southern-tier region as a whole experienced a marked expan-

sion compared to levels that prevailed during the late 1990s.¹⁷³ Other notable trends uncovered by the sunset review include higher prices for the domestic industry, higher capacity utilization, and a dramatic increase in operating income. In contrast to the low profits bemoaned by the Bureau of Mines above, operating profits during the review period were healthy and capital expenditures robust.¹⁷⁴ From 2001 to 2005, firms in the industry received \$27.2 million in distributions from the Countervailing Duty Subsidy Offset Act.

As a result of the sunset review in 2000, the Commission terminated the suspension agreement with Venezuela, but maintained the orders on Mexico and Japan. The Commission noted that the Mexican and Japanese industries maintained significant excess capacity and faced high fixed costs, which would provide incentives to increase shipments to the United States in the absence of the orders.¹⁷⁵

The Mexican and Japanese orders came up for a second sunset review cycle in 2006. The United States and Mexican governments signed an agreement in January 2006 allowing for an increase in imports from Mexico and a phase out of tariffs in 2009.¹⁷⁶ As part of that agreement, the Mexican government agreed to open the Mexican market to imported cement, potentially eliminating that sanctuary market. The Japanese industry did not file an adequate response to the Commission's notice of initiation for the second review. Consequently, the Commission decided to conduct an expedited review of the Japanese order. Such reviews are based on facts on the record, which in this case consist mainly of information gathered during the first sunset review of 2000 and the original investigation.¹⁷⁷ Based on these facts, the Commission determined that a revocation of the antidumping duty order on gray portland cement and cement clinker from Japan is likely to lead to continuation or recurrence of material injury to the California regional industry within a reasonably foreseeable time.¹⁷⁸

173 There is some difference in coverage between the two investigations, but the responding producers in both investigations accounted for at least 96 percent of active capacity. See I-6, table note 3.

174 USITC Pub. 3361 at I-6; and III-41. The Commission noted that the high profits were in part due to the business cycle. 41.

175 *Id.* at 41 and 46.

176 "U.S., Mexico Reach Agreement to End High Cement Duties," *Concrete Monthly* (February 2006) (on line at <http://www.concretemonthly.com/monthly/art.php?1962>).

177 *Gray Portland Cement and Cement Clinker from Japan*, USITC Pub. 3856, Inv. No. 731-TA-461 (Second Review) (May 2006) at 4-5.

178 *Id.* at 3.