

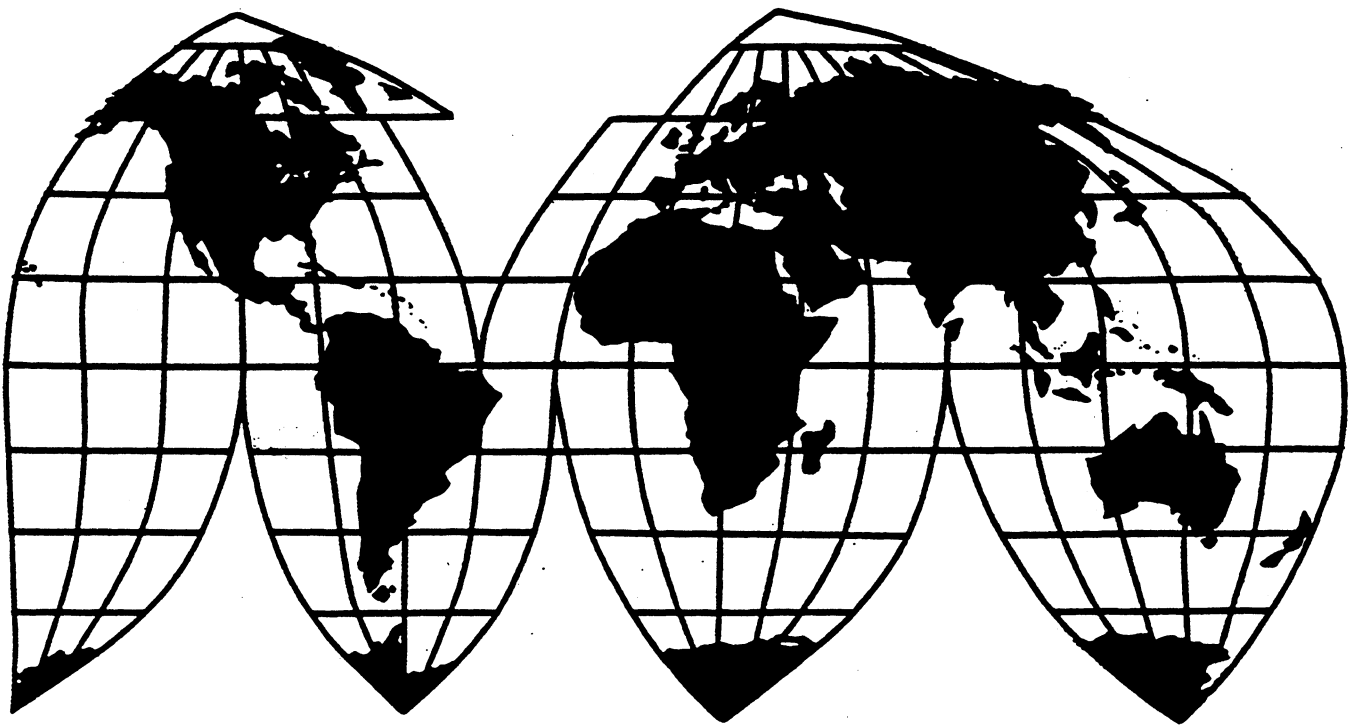
# **DRAMs of One Megabit and Above From the Republic of Korea (Views on Remand)**

Investigation No. 731-TA-556 (Remand)

Publication 2997

October 1996

**U.S. International Trade Commission**



# **U.S. International Trade Commission**

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In May 1993, the U.S. International Trade Commission made a determination in investigation No. 731-TA-556 (Final) that an industry in the United States was materially injured by reason of less-than-fair-value imports of dynamic random access memories (DRAMs) of one megabit and above from the Republic of Korea (Korea) (USITC Pub. No. 2629, May 1993). That determination was subsequently appealed to the U.S. Court of International Trade (CIT). In July 1996, the CIT ordered the Commission to reconsider its original determination in light of the Department of Commerce's revised final determination (August 1995) (Hyundai Electronics Industries v. United States International Trade Commission, Court No., 93-06-00319, Slip Op. 96-105, July 5, 1996). The attached views were submitted to the Court in response to the remand. (Business proprietary information has been deleted from this public version of the views. Such deletions are indicated by asterisks.)



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## VIEWS OF THE COMMISSION<sup>1</sup>

Pursuant to the order of the U.S. Court of International Trade (CIT) in Hyundai Electronics Industries v. United States International Trade Commission,<sup>2</sup> Ct. No. 93-06-00319, and based on the evidence on the record, we determine in this remand investigation that an industry in the United States producing dynamic random access memories (DRAMs) is materially injured by reason of imports of DRAMs of one megabit and above from the Republic of Korea (Korea) that the Department of Commerce (Commerce) has determined are sold at less than fair value (LTFV).<sup>3 4</sup>

### I. Procedural Background

The Commission originally issued an affirmative determination in this investigation in May 1993.<sup>5 6</sup> Respondents subsequently appealed both the Commission and Commerce determinations to the CIT; petitioner (Micron) also appealed Commerce's determination. By order dated September 13, 1993, the CIT postponed briefing in the appeal of the Commission determination until 30 days from the date of final resolution of the appeals of the Commerce determination.<sup>7</sup> Pursuant to order from the CIT, Commerce issued a remand determination on August 24, 1995, which found Samsung's dumping margin to be de minimis and, thus, its

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<sup>1</sup> Commissioner Watson has reached a negative determination and does not join this opinion. See his dissenting views. Chairman Miller and Commissioner Crawford did not participate in the remand in this investigation.

<sup>2</sup> Slip Op. 96-105 (July 5, 1996).

<sup>3</sup> Commission Newquist notes that here, as in the original final investigation, had he not found LTFV imports to be a cause of material injury to the domestic industry, he would have made an affirmative threat determination. See his additional views.

<sup>4</sup> Commissioner Nuzum also concludes that LTFV imports from Korea threaten material injury to the industry. See her additional views.

<sup>5</sup> Documents contained in List 1 of the Administrative Record forwarded to the CIT are identified as "Pub. Doc. No. x," and documents contained in List 2 of the Administrative Record are identified as "Conf. Doc. No. x."

<sup>6</sup> DRAMs of One Megabit and Above from the Republic of Korea, Inv. No. 731-TA-556 (Final), USITC Pub. 2629 (May 1993)(Pub. Doc. No. 240, herein referred to as "DRAMs Final"). The Commission made an affirmative determination by a 3-3 vote. Commissioners Rohr, Newquist, and Nuzum made an affirmative determination that the domestic industry was materially injured by reason of the subject imports and, in the alternative, that the industry was threatened with material injury. Commissioners Watson, Crawford, and Brunsdale made a negative determination. Vice Chairman Bragg was not a member of the Commission at the time of the original determination and notes that in order to comply with the Court's remand order, she has considered the record de novo.

<sup>7</sup> Order dated September 13, 1993.

imports were excluded from the scope of the DRAM antidumping order. The CIT affirmed Commerce's remand determination on October 27, 1995.<sup>8</sup> On March 25, 1996, two Korean plaintiffs/respondents (Hyundai and LG Semicon)<sup>9</sup> filed a motion with the CIT requesting immediate remand "for the Commission to reconsider its decision in light of Commerce's revised final determination excluding Samsung."<sup>10</sup> On July 5, 1996, the CIT ordered the Commission to reconsider its determination in light of the Department of Commerce's revised final determination (August 1995).<sup>11</sup> No other issue was remanded to the Commission for reconsideration.

The Commission reopened the record on remand to seek clarification regarding data in importer questionnaires in the final investigation, and to permit parties to file briefs.<sup>12</sup> The Commission reconsidered its original determination with the exclusion of Samsung's imports and production data from the LTFV imports; its views are provided below.<sup>13</sup>

## **II. Like Product and Domestic Industry**

Our original findings concerning the like product and domestic industry were not affected by the Court's remand order. We therefore reaffirm our original finding that there is one like product consisting of "all DRAMs," irrespective of density or whether assembled

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<sup>8</sup> Slip Op. 95-175 (Oct. 27, 1995).

<sup>9</sup> In February 1995, Goldstar changed its name to LG Semicon. Respondents' (Goldstar and Hyundai) Remand Brief at n.1 (September 9, 1996). Both names are used interchangeably in the Commission's opinion and record.

<sup>10</sup> Plaintiffs' [respondents] Motion for Immediate Remand at 9, 11 and 12 (March 25, 1996); Reply Memorandum in Support of Plaintiffs' Motion for Immediate Remand at 4 (May 3, 1996). Plaintiffs' request for remand proposed that consideration by the CIT of all other issues raised in Plaintiffs' original complaint regarding the Commission's determination should be deferred until after the remand determination. Accordingly, the Court's order did not direct reconsideration by the Commission of any of the other issues raised in the original complaint.

<sup>11</sup> Slip Op. 96-105 (July 5, 1996). Compare Borlem S.A. Empreeditmentos Industriais v. United States, 13 CIT 535, 718 F. Supp. 41 (1989), aff'd, 913 F.2d 933 (Fed. Cir. 1990); Algoma Steel Corp. v. United States, 12 CIT 518, 524, 688 F. Supp. 639, 645 (1988), aff'd, 865 F.2d 240 (Fed. Cir. 1989), cert. denied, 492 U.S. 919 (1989); USX Corp. v. United States, 12 CIT 205, 682 F. Supp. 60, 73 (1988); Alberta Pork Producers' Marketing Board v. United States, 11 CIT 563, 669 F. Supp. 445, 464 (1987).

<sup>12</sup> See 61 Fed. Reg. 42265-42266 (August 14, 1996). Appendix 1.

<sup>13</sup> This investigation was commenced prior to the effective date of the Uruguay Round Agreements Act ("URAA") amendments to the Tariff Act of 1930 ("the Act") and, thus, this remand investigation remains subject to the substantive and procedural rules of the pre-existing law. See P.L. 103-465, approved December 8, 1994, 108 Stat. 4809, at § 291.

or not, and including VRAMs and memory modules.<sup>14</sup> We adopt our original finding that there is one domestic industry producing the like product, consisting of all companies that perform some aspect of DRAM production in the United States, but do not include companies that “only assemble memory modules from purchased DRAMs, whether domestic or foreign, and do not themselves manufacture DRAMs.”<sup>15 16</sup> We further reaffirm our original finding “not to exclude any domestic producer under the related parties provision.”<sup>17 18</sup>

### **III. Conditions of Competition and Condition of the Domestic Industry**

In our original determination, we discussed at length the condition of the domestic industry, including the conditions of competition in the industry.<sup>19</sup> These views were not affected by the Court’s remand order. We therefore adopt our original views for purposes of this remand investigation.<sup>20 21</sup>

### **IV. Material Injury By Reason Of LTFV Imports**

In final antidumping duty investigations, the Commission determines whether an industry in the United States is materially injured by reason of the imports under investigation.<sup>22</sup> In making this determination, the Commission must consider the volume of imports, their effect on prices for the like product, and their impact on domestic producers of

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<sup>14</sup> DRAMs Final at 12. We also reaffirm our original finding not to establish an “upper limit” on the like product based on existing densities of DRAMs currently available. Id.

<sup>15</sup> DRAMs Final at 16.

<sup>16</sup> Vice Chairman Bragg, upon de novo review of the record, concurs with the like product and domestic industry determinations of the Commission as set forth in its original determination and reaffirmed here.

<sup>17</sup> DRAMs Final at 16.

<sup>18</sup> Vice Chairman Bragg, upon de novo review of the record, concurs with this conclusion.

<sup>19</sup> DRAMs Final at 16-24.

<sup>20</sup> Vice Chairman Bragg, upon de novo review of the record, concurs with the Commission’s analysis of the conditions of competition and the condition of the domestic industry as set forth in its original determination and reaffirmed here.

<sup>21</sup> Commissioner Newquist specifically adopts his original conclusion that the domestic industry is currently experiencing material injury. DRAMs Final at 24.

<sup>22</sup> 19 U.S.C. § 1673d(b). The statute defines “material injury” as “harm which is not inconsequential, immaterial or unimportant.” 19 U.S.C. § 1677(7)(A).

the like product, but only in the context of U.S. production operations.<sup>23</sup> Although the Commission may consider causes of injury to the industry other than LTFV imports,<sup>24</sup> it is not to weigh causes.<sup>25 26</sup>

For the reasons discussed below and based on the evidence on record including information obtained during the remand investigation, we find that the domestic industry producing DRAMs is materially injured by reason of LTFV imports from Korea.

A. Volume of Imports

With the exclusion of Samsung's imports, the volume and market share of LTFV imports increased substantially from 1989 to 1991 and was markedly higher in interim period (January-September) 1992 compared with interim period 1991 (January-September).<sup>27</sup> The volume of LTFV imports from Korea, measured in bits, was near zero in 1989 and small in 1990, but increased sharply to a substantial level in 1991 and then more than quadrupled in

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<sup>23</sup> 19 U.S.C. § 1677(7)(B)(i). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each [such] factor . . . and explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

<sup>24</sup> Alternative causes may include the following:

[T]he volume and prices of imports sold at fair value, contraction in demand or changes in patterns of consumption, trade, restrictive practices of and competition between the foreign and domestic producers, developments in technology, and the export performance and productivity of the domestic industry.

S. Rep. No. 249, 96th Cong., 1st Sess. 74 (1979). Similar language is contained in the House Report. See also H.R. Rep. No. 317, 96th Cong., 1st Sess. 46-47 (1979).

<sup>25</sup> See, e.g., Gerald Metals, Inc. v. United States, 20 CIT \_\_, Slip Op. 96-142 at 12 (August 21, 1996); The Timken Co. v. United States, 20 CIT \_\_, 913 F. Supp. 580, 591 (1996); Citrosuco Paulista S.A. v. United States, 12 CIT 1196, 1228, 704 F. Supp. 1075, 1101 (1988).

<sup>26</sup> Commissioner Newquist further notes that the Commission need not determine that imports are "the principal, a substantial, or a significant cause of material injury." S. Rep. No. 249 at 57, 74. Rather a finding that imports are a cause of material injury is sufficient. See e.g., Metallwerken Nederland B.V. v. United States, 728 F. Supp. 730, 741 (Ct. Int'l Trade 1989); Citrosuco Paulista, 12 CIT at 1228, 704 F. Supp. at 1101 (1988).

<sup>27</sup> Commission Supplemental Report, INV-T-071 (September 16, 1996) ("CSR") at Table 50 (revised) and Table 55 (revised). Appendix 2 contains all tables from the CSR that are cited in this opinion.

interim period 1992 compared with interim period 1991.<sup>28</sup> Moreover, U.S. shipments of subject imports increased at a substantially faster rate than did apparent consumption during the period of investigation.<sup>29</sup> Thus, LTFV imports captured an increasingly substantial share of the U.S. market by quantity and by value over the period of investigation, as the domestic industry's share of the market declined by a similar degree.<sup>30</sup> In addition, U.S. shipments of LTFV imports also increased substantially relative to domestic production.<sup>31</sup> LTFV imports, which were equivalent to a small share of domestic cased DRAM production in 1989 and 1990, increased to a level equivalent to almost one-third of domestic DRAM production in 1991 and almost three-quarters of domestic production in interim 1992.<sup>32</sup>

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<sup>28</sup> Subject imports of DRAMs by quantity, measured in bits, were \*\*\* billion bits in interim period 1992. CSR at Table 50 (revised). Appendix 2. Increases in subject imports by value followed a similar overall trend. *Id.*

<sup>29</sup> U.S. shipments of subject imports, measured in bits, increased by over 2,000 percent from 1989 to 1990, by over 1,000 percent from 1990 to 1991, and were 378 percent higher in interim 1992 compared with interim 1991. In contrast, apparent consumption by quantity, measured in bits, increased by 62.1 percent from 1989 to 1990, by 63.6 percent from 1990 to 1991, and was 77.1 percent higher in interim 1992 compared with interim 1991. CSR at Table 6 (revised). Appendix 2.

<sup>30</sup> The market share held by U.S. shipments of LTFV imports by quantity, measured in bits, increased from \*\*\* in 1991, and increased to \*\*\* in interim 1991. The quantity share of the U.S. market held by the domestic industry decreased from 44.5 percent in 1989 to 41.5 percent in 1990, and to 36.9 percent in 1991, and was significantly lower in interim 1992 (28.9 percent) compared with interim 1991 (37.8 percent). The market share held by nonsubject imports by quantity was relatively constant from 1989 to 1991 \*\*\* and in interim period 1992 compared with interim period 1991 \*\*\*. CSR at Tables 6 (revised) and 55 (revised). Appendix 2.

Market share by value for U.S. shipments of LTFV imports increased from \*\*\* in 1991, and increased to \*\*\* in interim 1991. The U.S. market share held by the domestic industry by value increased from 33.9 percent in 1989 to 35.2 percent in 1990 but decreased to 29.0 percent in 1991 and was lower in interim 1992 (23.4 percent) compared with interim 1991 (29.8 percent). Market share by value for nonsubject imports was relatively constant from 1989 to 1991, and was slightly lower in interim 1992 compared with interim 1991. CSR at Tables 6 (revised) and 55 (revised). Appendix 2.

<sup>31</sup> The statute directs that the Commission shall consider the volume of subject imports "either in absolute terms or relative to production or consumption in the United States . . . ." 19 U.S.C. § 1677(7)(C)(i) (emphasis added).

<sup>32</sup> U.S. shipments of LTFV imports as a ratio to U.S. DRAM production by quantity, measured in bits, increased from \*\*\* in 1991, and increased to \*\*\* in interim 1991. Calculated from CSR at Table 6 (revised) and Table E-3 (revised). Appendix 2. U.S. shipments of LTFV imports as a ratio to U.S. shipments of domestic DRAMs by quantity, measured in bits, increased from \*\*\* in 1991, and increased to \*\*\* in interim

Based on the foregoing, we conclude that the volume of subject imports and their market share, as well as the increases in those imports, are significant.<sup>33 34</sup>

B. Price Effects<sup>35 36</sup>

Prices for both domestic and subject import DRAMs declined during the period of investigation, as would be expected by the DRAM product life cycle. As each new generation of DRAM is introduced to the market, costs of production and, accordingly, selling prices tend to be high. However, as production increases during the growth phase of the product cycle, costs and prices decline as producers move along the learning curve,

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1991. Calculated from CSR at Table 6 (revised). Appendix 2.

<sup>33</sup> We reaffirm our finding in the final determination that “apparent consumption is only somewhat understated as a result of imports not counted, and that the data concerning market penetration of LTFV imports are reliably accurate.” DRAMs Final at 26 n.89 (see also DRAMs Final at 18 n.49), and Commission’s Staff Report in Final Investigation -- Public Doc. No. 240 at I-17, I-18, I-74, and n.54 and n.55; Conf. Doc. No. 17 at I-29, I-30, I-113, and n.59 and n.60. We note that respondents requested in the remand investigation that the Commission change the database used to assess market share for 1991 and 1992, so that questionnaire responses were used for nonsubject imports only for 1989 and 1990 and official import statistics were used for such imports in 1991 and 1992. Respondents’ Remand Brief at 4-6. It would be inappropriate and distorting to use data for non-subject imports from different sources in 1989-90 and 1991-92 when reliable data is available from one source for the entire period of investigation. Thus, we continue to use questionnaire responses for the entire period of investigation. Neither party indicated concern regarding this database in their briefs in the underlying final investigation. The Commission has considerable discretion in weighing particular pieces of evidence or in applying a methodology in conducting its investigation. See, e.g., U.S. Steel Group, et. al. v. United States, \_\_\_ F.3rd \_\_\_, Slip Op. 95-1245, -1257, -1306, -1307 at 12 (Fed. Cir. August 29, 1996); General Motors Corp. v. United States, 17 CIT 691, 703, 827 F. Supp. 774, 781 (1993); Granges Metallverken AB v. United States, 13 CIT 471, 481, 716 F. Supp. 17, 25 (1989).

<sup>34</sup> Vice Chairman Bragg, upon de novo review of the record, concurs with the conclusion discussed in note 33 supra.

<sup>35</sup> We incorporate by reference here our analysis and discussion of issues raised and considered in the final investigation regarding pricing that did not change in the remand investigation, such as parties’ estimates regarding product life cycle and late entrants, qualitative data from purchasers questionnaire responses, and the usefulness of final adjusted prices. See DRAMs Final at 26-29.

<sup>36</sup> Vice Chairman Bragg, upon de novo review of the record, concurs with the Commission’s analysis of the pricing issues as set forth in its final determination and reaffirmed in note 35 supra.

lowering defects and improving yields. In the mature phase of the product cycle, costs and prices are generally lowest.<sup>37</sup> Thus, prices for each new generation of DRAMs are expected to decline sharply at the beginning of the cycle, followed by flatter trends as the generation matures. However, the fact that DRAM prices declined as part of the product life cycle does not mean that LTFV imports are, thus, not causing material injury.<sup>38</sup>

As noted, over the period during which LTFV imports were in the market,<sup>39</sup> both subject import and domestic product prices for all products sold to all types of purchasers declined.<sup>40</sup> Both subject imports and domestic products were sold within a narrow price range, but LTFV imports generally were priced lower than the comparable domestic product.<sup>41</sup> The pricing information in the record further demonstrates that the decline in domestic prices was exacerbated by downward pressure from declining lower-priced LTFV imports. This evidence of prices declining in tandem, along with consistent underselling, supports a finding that LTFV imports depressed prices in the domestic industry to a significant degree.

The DRAM market is price sensitive, with the domestic and subject Korean DRAMs generally substitutable.<sup>42</sup> Nevertheless, price comparisons in the remand investigation showed an even more consistent and significant degree of underselling than the evidence in the final investigation. Of a total of 109 comparisons of domestic producers' and importers' prices in the remand investigation, LTFV imports of DRAMs were priced below the

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<sup>37</sup> See DRAMs Final at 17.

<sup>38</sup> See Iwatsu Elec. Co. v. United States, 15 CIT 44, 57, 758 F. Supp. 1506, 1518 (1991) ("importers take the domestic industry as they find it").

<sup>39</sup> In the remand investigation, the Commission considered the pricing information for domestic products and LTFV imports on the record for the period when LTFV imports were in the U.S. market. The statute directs the Commission to focus on the effect LTFV imports have on prices of domestic products while LTFV imports are present in the market. 19 U.S.C. § 1677(7)(C)(ii). Moreover, as noted above, it is consistent with the product life cycle for steeper declines in price at the beginning of the product cycle. Thus, we are not persuaded by respondents' argument to compare prices for domestic products prior to entry of the LTFV imports with prices for domestic products after LTFV imports. See Respondents' Remand Brief at 19 and 20.

<sup>40</sup> CSR at Tables 56-60, and C-10 (revised). Appendix 2.

<sup>41</sup> CSR at Tables 56-60, and C-10 (revised). Appendix 2.

<sup>42</sup> Memorandum EC-T-050 at 4 and n.8 (September 23, 1996); DRAMs Final at 27 and 28; Pub. Doc. No. 240 at I-90 - I-91, I-99, n.149; Conf. Doc. No. 17 at I-141 - I-144, I-158 and I-159, n.168; Memorandum EC-Q-042 at 28-32 (April 19, 1993) (Conf. Doc. No. 16). In the final investigation, most purchasers reported that the quality of Korean product (both subject and nonsubject) was comparable to that of the domestic product. Pub. Doc. No. 240 at I-91; Conf. Doc. No. 17 at I-142.

comparable domestic product in 75 instances, with margins of underselling ranging from 0.5 percent to 53.0 percent.<sup>43</sup> Specifically, in the OEM market, LTFV imports of DRAMs (products 1-4) were priced below the comparable domestic product in 52 of 67 comparisons of domestic producers' and importers' prices.<sup>44</sup> In the franchise distributor market, LTFV DRAMs (products 1-4) were priced below the domestic product in 9 of 26 comparisons.<sup>45</sup> In the broker/independent distributor market, LTFV DRAMs (products 1-2) were priced below the domestic product in 14 of 16 comparisons.<sup>46</sup> For sales of DRAM modules (product 6), LTFV imports of modules were priced below domestic product in 19 of 28 comparisons.<sup>47</sup>

Given the importance of price to purchasers, the decline in prices for the domestic product and subject imports, and the evidence of consistent and significant underselling by subject imports, we conclude that the prices of subject imports have had a significant depressing effect on prices of the domestic product.

### C. Impact

From 1990 to 1991, while LTFV imports increasingly entered the U.S. market and apparent consumption by value in the U.S. market increased by 26.5 percent, the financial information shows only a 2.6 percent increase in net sales for the domestic industry.<sup>48</sup> Moreover, net sales for the domestic industry were 4.7 percent lower in interim 1992 compared with interim 1991, while LTFV imports by value more than tripled and apparent consumption was 24.5 percent higher.<sup>49</sup> These nominal increases or actual declines in net sales, at the same time that domestic consumption was steadily increasing, are troubling signs for the industry, especially since the introduction of a new product, 4 Meg DRAMs, should have resulted in increased sales.

Although the domestic industry reported operating income of \$515 million in 1989

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<sup>43</sup> CSR at I-155-A and Table 61(revised). Appendix 2.

<sup>44</sup> CSR at I-155-A and Table 61 (revised). Appendix 2.

<sup>45</sup> CSR at I-155-A and Table 61 (revised). Appendix 2. We note that, with the exclusion of Samsung's data, pricing data for the franchise distributor market is sporadic and involves relatively small volumes of sales. Moreover, importers of \*\*\* product reported in the final investigation that the OEM market, including value-added resellers, and the brokers/independent distributors market rather than the franchise distributor market accounted for the vast majority of their sales in 1991. Domestic producers reported in the final investigation that most of their sales were made to OEMs in 1991. Pub. Doc. No. 240 at I-86 and notes 97-99; Conf. Doc. No. 17 at I-134 and notes 115-117.

<sup>46</sup> CSR at I-155-A and Table 61 (revised). Appendix 2.

<sup>47</sup> CSR at I-155-A and Table C-10 (revised). Appendix 2.

<sup>48</sup> Conf. Doc. No. 17 at Table 34 and CSR at Table 6 (Revised). Appendix 2.

<sup>49</sup> Conf. Doc. No. 17 at Table 34 and CSR at Table 6 (Revised). Appendix 2.

before the LTFV imports entered the U.S. market, it reported operating losses of \$164 million in 1990, \$253 million in 1991, \$161 million in interim 1991 and \$130 million in interim 1992.<sup>50</sup> Operating income as a share of net sales was 29.6 percent in 1989, but during the remainder of the period, operating losses as a share of net sales for the domestic industry were significant: 14.1 percent in 1990, 21.3 percent in 1991, 17.6 percent in interim 1991, and 15.0 percent in interim 1992.<sup>51</sup> Moreover, domestic producers that sold the majority of their product in the open market reported operating losses overall for the entire period that LTFV imports were in the U.S. market, and particularly at the end of the period (interim 1992) when LTFV imports were at their highest levels.<sup>52 53</sup> Thus, as apparent consumption and lower-priced LTFV imports increased, the domestic industry was not realizing similar increases in net sales and instead experienced negative operating returns. While cyclical variations in price and net sales are expected as part of the product life cycle as discussed above, DRAM producers still would be expected to remain profitable and not continue to incur operating losses especially as a product such as the 1 Meg DRAM matured.

The poor financial condition of the domestic industry, clearly attributable in part to the adverse impact of LTFV imports from Korea, resulted in declines in capital investment and research and development expenditures. Because DRAM production is capital intensive, producers must have access to sufficient capital to continually invest large sums in research and development of higher density DRAMs in order to participate in the market for the next DRAM generation. Weak financial operating results means that producers lack sufficient resources to fund necessary research and development internally, and will have difficulty

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<sup>50</sup> Conf. Doc. No. 17 at Table 34.

<sup>51</sup> Conf. Doc. No. 17 at Table 34.

<sup>52</sup> Conf. Doc. No. 17 at Table 34 and CSR at Table 6 (revised). Appendix 2. Respondents argued in the remand investigation and in the final investigation that the Commission should concentrate on portions of the domestic industry that compete directly with the imported products. Respondents' Remand Brief at 7-11; Respondents' Prehearing Brief at 26-38 and 59-61 (Conf. Doc. No. 7); Respondents' Posthearing Brief at 19-21 (Conf. Doc. No. 9). We note that the statute requires the Commission to determine whether there is material injury to the domestic industry "as a whole" by reason of LTFV imports. 19 U.S.C. § 1677(4)(A); Copperweld Corp. v. United States, 12 CIT 148, 165-166, 682 F. Supp. 552, 569 (1988); U.S. Steel Group, 873 F. Supp. 673, 682-83 (Ct. Int'l Trade 1994), aff'd, Slip Op. 95-1245, -1257, -1306, -1307 (Fed. Cir. August 29, 1996). Furthermore, we reaffirm our finding in the original final determination that the financial information gathered "is an accurate reflection of the profitability of the industry." DRAMs Final at 22, n.72. Pub. Doc. No. 240.

<sup>53</sup> Vice Chairman Bragg, upon de novo review of the record, concurs with the conclusion discussed in note 52 supra.

raising money in capital markets.<sup>54</sup> Capital expenditures by the domestic industry declined by 3.7 percent from 1990 to 1991 and were 43.6 percent lower in interim 1992 compared with interim 1991.<sup>55</sup> Research and development expenses also declined slightly from 1990 to 1991, but were 29 percent lower in interim 1992 compared with interim 1991.<sup>56</sup> These declines adversely affected domestic producers' ability to continue the rapid product development necessary in this industry.

The information in the record, including the limited relevant data collected in this remand investigation, indicates that LTFV imports from Korea consistently sold at prices below the domestic product, and accounted for a sharply increasing share of apparent U.S. consumption over the period of investigation. At the same time, the domestic industry's share of the market declined, domestic prices were significantly depressed by subject imports, and the injurious impact of the LTFV imports on the sales and operating results of the domestic industry limited the domestic industry's ability to develop new products.

### Conclusion

For the foregoing reasons, we determine that the domestic industry producing DRAMs is materially injured by reason of LTFV imports of DRAMs of one megabit and above from Korea.

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<sup>54</sup> Domestic producers, particularly Micron, \*\*\* indicated that they had delayed planned research and development and capital expenditures for facilities and equipment intended for higher density DRAMs due to the LTFV imports. Pub. Doc. No. 240 at I-13 - I-15; Conf. Doc. No. 17 at I-24 - I-26 and Appendix G. See also DRAM Final at 22, n.71. In addition, these domestic producers noted that delays in production of current DRAMs due to LTFV imports threaten their cash flow and their ability to earn the profits and return on investment necessary to support additional investment in the future. Conf. Doc. No. 17 at Appendix G.

<sup>55</sup> Conf. Doc. No. 17 at Table 38.

<sup>56</sup> Conf. Doc. No. 17 at Table 39.

## ADDITIONAL VIEWS OF COMMISSIONER NEWQUIST

As in the underlying final investigation, in this remand investigation, I note that had I not found material injury by reason of the subject Korean imports, I would conclude that there was threat of material injury by reason of these imports.<sup>1</sup>

As discussed both in the final investigation and in the present injury discussion in the majority's views here, this industry is characterized by an evident product life cycle: at the introduction of the new product, selling prices are higher in order to recover as much of the development and production costs as possible; as production and yields increase, costs and prices begin to decline; in the last stages of the product cycle, selling prices are at their lowest.<sup>2</sup>

Importantly, during each phase of the product life cycle, operating revenue finances the different phases of the next generation product -- research, development, production, and marketing, etc. As such, failure of the domestic industry to obtain an adequate rate of return during any one phase of the "current" generation product, severely handicaps its competitiveness both in the subsequent phases of that product cycle and in the next generation product cycle.

I think it instructive that Commerce specifically included future generations of DRAMs in its notice of investigation.<sup>3</sup> Such inclusion clearly reflects the fundamental interrelationship between today's and tomorrow's product including, by implication, the revenue nexus.

### I. THREAT OF MATERIAL INJURY BY REASON OF LTFV IMPORTS

In determining whether the domestic industry is threatened with material injury, the

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<sup>1</sup> This alternative finding does not implicate my finding the domestic industry producing DRAMs is presently experiencing material injury. My alternative finding reinforces the adverse effect of the less-than-fair-value imports on the domestic industry in light of the nature of the product life cycle, as discussed below.

<sup>2</sup> See, e.g., USITC Pub. 2629 at 17 (Pub. Doc. No. 240); supra at 8. Documents contained in List 1 of the Administrative Record are identified as "Pub. Doc. No. \_\_\_\_\_," and documents contained in List 2 of the Administrative Record are identified as "Conf. Doc. No. \_\_\_\_\_."

<sup>3</sup> USITC Pub. 2629 at note 3 (Pub. Doc. No. 240).

statute directs that I consider several factors, none of which are necessarily dispositive.<sup>4</sup> In

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<sup>4</sup> These are:

(I) if a subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the subsidy is an export subsidy inconsistent with the Agreement),

(II) any increase in production capacity or existing unused capacity in the exporting country likely to result in a significant increase in imports of the merchandise to the United States,

(III) any rapid increase in United States market penetration and the likelihood that the penetration will increase to an injurious level,

(IV) the probability that imports of the merchandise will enter the United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise,

(V) any substantial increase in inventories of the merchandise in the United States,

(VI) the presence of underutilized capacity for producing the merchandise in the exporting country,

(VII) any other demonstrable adverse trends that indicate probability that importation (or sale for importation) of the merchandise (whether or not it is actually being imported at the time) will be the cause of actual injury,

(VIII) the potential for product shifting if production facilities owned or controlled by the foreign manufacturers, which can be used to produce products subject to investigation(s) under section 1671 or 1673 of this title or to final orders under section 1671e or 1673e of this title, are also used to produce the merchandise under investigation,

(IX) in any investigation under this subtitle which involves imports of both raw agricultural product (within the meaning of paragraph (4)(E)(iv) and any product processed from such raw agricultural product, the likelihood there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 1671(b)(1) or 1673d(b)(1) of this title with respect to either the raw agricultural product or the processed agricultural product (but not both), and

(X) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product.

(continued...)

addition, the statute provides that an affirmative threat determination be made "on the basis of evidence that the threat of material injury is real and that actual injury is imminent."<sup>5</sup> I have carefully scrutinized each relevant statutory factor and discuss each below.

The volume and value of imports of the subject DRAMs increased dramatically throughout the period of investigation.<sup>6</sup> As would be expected, U.S. shipments of these imports also grew multi-fold, particularly in interim 1992 (January thru September) as compared to interim 1991.<sup>7</sup> Predictably, the subject imports accounted for an increasing share of domestic consumption, rising from a minuscule level early in the period to a very substantial share by period end.<sup>8</sup> In view of the nature of this industry, I find that the increase in the volume, value, and market share of the subject imports is significant, and likely to further increase to an even more significant level.

The Korean producers' production capacity increased substantially throughout the period of investigation.<sup>9</sup> So too did their production.<sup>10</sup> Similarly, capacity utilization increased, but far less significantly.<sup>11</sup> As such, the Korean producers reported quite modest excess capacity, particularly in light of the rate by which capacity itself grew.<sup>12</sup> In fact, unused capacity in 1991 was nearly three times larger than the subject producers' combined production for 1989 and 1990.<sup>13</sup> Further, Korean producers shipped immensely more

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<sup>4</sup>(...continued)

19 U.S.C. § 1677(7)(F)(i) (1994).

The Commission must further consider whether dumping findings or antidumping remedies in markets of foreign countries against the same class or kind of merchandise suggest a threat of material injury to the domestic industry. See 19 U.S.C. § 1677(7)(F)(iii).

<sup>5</sup> 19 U.S.C. § 1677(7)(F)(ii).

<sup>6</sup> Commission Supplemental Report ("CSR") at Table 50 (revised); Appendix 2 (which includes all CSR tables cited in these additional views). By virtue of the limited number of Korean producers of DRAMs subject to this remand investigation, specific data are confidential. Accordingly, in order to provide the general public with at least some sense of the nature of this industry and the adverse effect of subject imports, I discuss in these additional views only non-confidential "trends."

<sup>7</sup> CSR at Table 6 (revised).

<sup>8</sup> CSR at Table 55 (revised).

<sup>9</sup> CSR at Table 44A.

<sup>10</sup> CSR at Tables 44A and C-8A.

<sup>11</sup> CSR at Table 44A.

<sup>12</sup> Id.

<sup>13</sup> Id.

product to the home and other export markets combined, than to the United States.<sup>14</sup> Indeed, coupled with unused capacity, shipments which could otherwise be diverted from these markets totaled about one-sixth of total U.S. apparent consumption in 1991.<sup>15</sup>

Relatedly, in March 1993, the Council of the European Communities determined that dumped imports of DRAMs from Korea caused material injury to the EC DRAM industry, and imposed corresponding antidumping duties of 24.7 percent.<sup>16</sup> The Council subsequently accepted price undertakings offered by the various Korean producers subject to that investigation.<sup>17</sup> The antidumping determination in the European Community indicates that a significant market for Korean DRAMs is likely to be less available in the near future.

Again, although specific data are confidential, the subject imports were generally sold in the U.S. market at prices below those of the domestic like product.<sup>18</sup> Predictably, the average unit value of these imports was lower than for the domestic like product.<sup>19</sup> Thus, I find that subject Korean imports are entering the market at prices which depress or suppress domestic prices to a significant degree. Further, such price effects are likely to increase demand for additional imports which, as noted above, the subject producers are more than

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<sup>14</sup> Id.

<sup>15</sup> CSR at Tables 6, 44A, and C-8A (revised).

<sup>16</sup> Council Regulation (EEC) No. 611/93, 1993 O.J. (L 66) 1, 7. The Council noted that in establishing the level of duties imposed, it was

appropriate to ensure that prices of the Community industry can achieve a reasonable level and that any future price depression caused by dumped Korean imports can be prevented. In order to obtain this result, the export prices of the Korean producers should be at a level where dumping is eliminated and sales at prices below the Korean producers' costs of production are prevented.

Id. at 6.

<sup>17</sup> Id. at 7. See Commission Decision 93/157 (EEC), 93 O.J. (L 66) 37. The undertakings generally provide that respondents will, for a period of five years, not sell DRAMs in the European Community at a price which is less than the price established pursuant to a minimum price based on each company's lowest cost of production of DRAM devices within a given density, plus a minimum of 9.5 percent. Respondents' Post-hearing Brief (Conf. Doc. No. 9), Responses to Commission and Staff Questions at 12 and Exhibit 6. The undertakings also provide that respondents will sell only DRAMs for which a minimum price has been established and cost data has been submitted to the EC Commission.

<sup>18</sup> CSR at Tables at Tables 56 thru 61 and C-10 (revised).

<sup>19</sup> CSR at Tables C-1, C-2, E-3 and 50 (revised), and Commission's Staff Report in Final Investigation at Tables 19 and 20.

capable of supplying.

For the foregoing reasons, I find that in addition to being a cause of material injury to the domestic industry, dumped imports of DRAMs from Korea also threaten material injury to the domestic industry.



**ADDITIONAL VIEWS OF COMMISSIONER JANET A. NUZUM**

Investigation No. 731-TA-556 (Remand)  
Dynamic Random Access Memories of 1 Megabit and Above from Korea

I join the majority of my colleagues in this remand investigation in finding that an industry in the United States producing dynamic random access memories (DRAMs) is materially injured by reason of less than fair value (LTFV) imports of DRAMs of one megabit and above from the Republic of Korea (Korea). In many ways, however, I find that the record in this investigation supports even more strongly a finding of threat of material injury by reason of LTFV imports.<sup>1</sup> These additional views set forth my analysis with regard to threat.

Section 771(7)(F) of the Tariff Act of 1930 directs the Commission to determine whether a U.S. industry is threatened with material injury by reason of imports "on the basis of evidence that the threat of material injury is real and that actual injury is imminent. Such a determination may not be made on the basis of mere conjecture or supposition."<sup>2</sup> The Commission must consider eleven factors specifically set forth in the statute in a threat analysis.<sup>3</sup>

As discussed in the majority views for this remand investigation, underselling and price depression by LTFV imports during 1991 and into 1992 suppressed profitability and reduced capital for investment in the U.S. DRAM industry. By the end of the period examined, these adverse effects were serious enough to constitute material injury. If left unchecked, continued LTFV imports would bring even graver consequences to the U.S. DRAM industry.

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<sup>1</sup> In the original investigation, I made an alternative finding of threat of material injury.

<sup>2</sup> 19 U.S.C. § 1677(7)(F)(ii).

<sup>3</sup> 19 U.S.C. § 1677(7)(F)(i)(I)-(X). Factors (I), relating to subsidies, and (IX), relating to agricultural products, are not at issue in this investigation. With regard to factor (VIII), I have not identified any potential for product-shifting. In addition, the Commission is required to consider the effect of dumping in third-country markets. 19 U.S.C. § 1677(7)(F)(iii).

Without reinvestment, rationalization and increased dependence on off-shore production will be inevitable.

Specific data reported by Korean producers Hyundai and Goldstar on their operations producing the LTFV product are confidential, but can clearly be characterized as showing substantially expanded capacity to produce the subject DRAMs during 1989-92, with some moderation projected for 1993.<sup>4</sup> Reported capacity utilization for these Korean producers was relatively high by interim 1992 and projected to remain so in 1993.<sup>5</sup> Despite these levels of capacity utilization, Korean producers nevertheless had some flexibility to expand production of DRAMs. Other memory products are produced on the same equipment as that used in the production of DRAMs, and capacity can be shifted toward DRAMs if desired. In addition, all DRAM producers try to maximize production levels as early as possible for each product generation.<sup>6</sup> Certain press reports<sup>7</sup> also support the conclusion that Goldstar and Hyundai had significant incentives to operate at high levels of capacity in 1993 and beyond. Taken together, the increased capacity during the period of 1989-interim 1992 which resulted in increased exports to the U.S. market, evidence

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<sup>4</sup> Capacity to produce uncased DRAMs increased more than \*\*\*-fold from \*\*\* wafers in 1989 to \*\*\* wafers in 1991. Interim 1992 capacity represented another \*\*\* from interim 1991 levels. Capacity to produce cased DRAMs rose from \*\*\* units in 1989 to \*\*\* units in 1991. Interim 1992 capacity of \*\*\* units was again higher than interim 1991 capacity of \*\*\* units. Capacity for both uncased and cased DRAMs measured in terms of units was projected to be \*\*\* in 1993. CSR at Tables 42-A (revised) and 44-A (revised); appendix 2. Conf. Doc. No. 17 at I-18, n.48; I-23; and I-26, n.55.

Documents contained in List 1 of the Administrative Record are identified as "Pub. Doc. No. x," and documents contained in List 2 of the Administrative Record are identified as "Conf. Doc. No. x."

<sup>5</sup> Capacity utilization for uncased DRAMs fluctuated in the range of \*\*\* percent throughout the period. Capacity utilization for cased DRAMs increased from a relatively low level in 1989 to over \*\*\* percent in interim 1992. CSR at Tables 42-A (revised) and 44-A (revised); appendix 2.

<sup>6</sup> DRAM producers learn-by-doing; actual production experience allows them to reduce defects and otherwise improve yields. Producers try to benefit from these learning economies as soon as possible in each product generation in order to benefit from lower costs while prices remain relatively high. See Conf. Doc. No. 17 at I-132.

<sup>7</sup> See Pub. Doc. No. 239 (Transcript of Hearing) at 22-23 (Mr. Kaplan), 124-125, 128 (Mr. McDonald). See also Conf. Doc. No. 8A (Micron Pre-hearing Brief) at 57, 60; Conf. Doc. No. 11 (Micron Post-hearing Brief) at 11.

of some currently available capacity, and strong incentives to operate at full capacity, all establish a likelihood that future increased capacity and/or available capacity will result in increases in future LTFV exports to the United States.<sup>8</sup>

As already noted, LTFV imports from Korea increased rapidly during the period examined (January 1989–September 1992).<sup>9</sup> Given that the U.S. market for DRAMs was also expanding during this period, it is particularly significant that the LTFV imports also increased their U.S. market share. The subject imports accounted for insignificant market share in both 1989 and 1990, but expanded that share to over 5 percent in 1991 and to over 10 percent in interim (January–September) 1992.<sup>10</sup> Because nonsubject imports held relatively stable market share during the period, the surging volume of LTFV imports came at the direct cost of U.S. producers' market share. Overall from 1989 to interim 1992, U.S. producers' share went from almost one-half of the market to slightly more than one-quarter of the market.<sup>11</sup> At this rate, future LTFV market share is likely to continue to increase at the expense of domestic producers. Rapid increases in LTFV imports and the likelihood that LTFV market penetration in the future will be at injurious levels support an affirmative threat determination.<sup>12</sup>

In assessing the significance of the volume of imports in this remand investigation, I have taken note of respondents' arguments that the market

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<sup>8</sup> See 19 U.S.C. § 1677(7)(F)(i)(II) and (VI).

<sup>9</sup> Commission Supplemental Report, INV-T-071 (Sept. 16, 1996) ("CSR") at Tables 6 and 50 (revised); appendix 2 (which includes all tables from the CSR that are cited in this opinion).

<sup>10</sup> The subject imports held \*\*\* percent market share in 1989 and \*\*\* percent in 1990, but expanded to \*\*\* percent in 1991. Interim 1992 market share reached \*\*\* percent from \*\*\* percent in interim 1991. CSR at Table 55 (revised); appendix 2. My references to market share in this opinion are in terms of quantity measured in bits.

<sup>11</sup> U.S. producers' market eroded from \*\*\* percent in 1989 and \*\*\* percent in 1990 to \*\*\* percent in 1991. Interim 1992 share was \*\*\* percent, representing a further loss as compared with interim 1991 share of \*\*\* percent. CSR at Table 55 (revised); appendix 2.

<sup>12</sup> See 19 U.S.C. § 1677(7)(F)(i)(III).

share of LTFV imports may be overstated due to the underrepresentation of nonsubject imports.<sup>13</sup> I therefore paid close attention to the volume of LTFV imports relative to domestic production, a ratio which would not be affected by coverage of nonsubject imports. This ratio shows a large surge in the volume of LTFV imports and its trend further suggests that LTFV market penetration in the future will be at injurious levels.<sup>14</sup>

Also as discussed in the majority views, LTFV imports of DRAMs from Korea had a significant depressing effect on domestic producers' prices for the like product. This effect was felt particularly in 1991 and interim 1992, as the LTFV imports achieved significant U.S. market share. There is no evidence on the record that future LTFV imports will have any less significant an effect on U.S. prices than was evident during 1991 and interim 1992. In view of continued price-sensitivity of purchasers and the evident growing acceptance of LTFV DRAMs as a substitute for U.S. DRAMs, future LTFV imports are likely to continue to cause significant price depression.<sup>15</sup>

Inventories of LTFV DRAMs increased substantially during the period examined.<sup>16</sup> I find that these increases, as well as the level of inventories held by importers as of September 30, 1992 -- equivalent to about one month's worth of shipments -- support an affirmative threat determination.<sup>17</sup>

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<sup>13</sup> Respondents' Remand Brief at 4-6.

<sup>14</sup> In 1989, U.S. shipments of LTFV imports represented only \*\*\* percent of U.S. production, and in 1990 that ratio expanded to only \*\*\* percent. In 1991, however, U.S. shipments of LTFV imports jumped to \*\*\* percent of U.S. production. This ratio continued to surge in interim 1992, reaching \*\*\* percent of U.S. production from a level of \*\*\* percent in interim 1991. Calculated from CSR at Table 6 (revised) and Table E-3 (revised); appendix 2.

<sup>15</sup> See 19 U.S.C. § 1677(7)(F)(i)(IV).

<sup>16</sup> Importers' end-of-period inventories of LTFV Korean DRAMs and modules surged from \*\*\* in 1989 to \*\*\* in 1990 to \*\*\* in 1991. Interim 1992 ended with inventories at \*\*\*, up again substantially from \*\*\* in interim 1991. CSR at Table 41 (revised); appendix 2. (Because inventories include both individual DRAMs and modules, I present quantity in terms of bits. See also CSR at Table 40 (revised) for inventories measured in terms of units.)

<sup>17</sup> See 19 U.S.C. § 1677(7)(F)(i)(V).

Other demonstrable trends in support of a affirmative threat determination<sup>18</sup> include the relative importance of the U.S. market for Hyundai and Goldstar. Confidential data reveal that a significant, albeit minority, portion of DRAM production by these producers was exported to the United States during 1991 and interim 1992.<sup>19</sup> Then, in March 1993, not even two months before this Commission's determination in the original investigation, the Council of the European Communities imposed antidumping duties of 24.7 percent on imports of DRAMs from Korea.<sup>20</sup> The Council accepted price undertakings offered by Samsung, Goldstar, and Hyundai.<sup>21</sup> The antidumping determination in the European Communities suggests that the U.S. market was likely to become an even more significant market for Goldstar and Hyundai in 1993.

Given the rapid increases in LTFV imports into the United States (particularly concentrated at the end of the period examined), increased capacity in the foreign country by producers found to be selling at LTFV, and production economies that encourage production at near-capacity levels, there are strong indications in this record that LTFV DRAMs from Korea were likely to maintain or increase their already significant and injurious U.S. market share. The dumping finding in the EC only months before the Commission's original determination is evidence that Korean DRAMs would face increased barriers to EC markets, and that LTFV producers would likely shift towards the U.S. market. This would likely result in LTFV import penetration at even higher levels.

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<sup>18</sup> See 19 U.S.C. § 1677(7)(F)(i)(VII).

<sup>19</sup> Combined data for these producers show that their exports of the subject cased DRAMs to the United States represented close to \*\*\* percent of their combined subject DRAM production during 1991-92, and the figure for modules was higher yet -- close to \*\*\* percent. CSR at Table 44-A (revised) and C-8-A (revised); appendix 2.

<sup>20</sup> Council Regulation (EEC) No. 611/93, 1993 O.J. (L 66) 1, 7.

<sup>21</sup> Id. at 7. See Commission Decision 93/157 (EEC), 93 O.J. (L 66) 37. See also Conf. Doc. No. 216 (Respondents' Post-hearing Brief) at Responses to Commission and Staff Questions at 12 and Exhibit 6.

Finally, the financial condition of the U.S. industry in 1991 and interim 1992 showed domestic DRAM producers to be extremely vulnerable to the likely effects of future LTFV imports. The financial information shows net sales in interim 1992 of \$872 million as compared with \$915 million in interim 1991.<sup>22</sup> The U.S. industry reported operating losses of \$253 million in 1991, and \$130 million in interim 1992. The operating losses as a percentage of net sales were significant -- totaling 21.3 percent in 1991, and 15.0 percent in interim 1992.<sup>23</sup> The industry also showed a significant and increasing operating loss -- deteriorating from negative 9.8 percent in 1990 to negative 11.1 percent -- on barely increased assets.<sup>24</sup> Capital expenditures declined significantly, from \$534 million in 1990 to \$514 million in 1991, and declined from \$482 million in interim 1991 to \$272 million in interim 1992.<sup>25</sup> Research and development expenses also declined from 1990 to 1991, and fell from \$116 million in interim 1991 to \$82 million in interim 1992.<sup>26</sup>

DRAM production is capital intensive, and producers must have access to sufficient capital to be able continually to invest large sums in research and development of the next generation product. Weak financial operating results are a strong handicap for this industry, as they indicate that producers lack sufficient resources to fund necessary research and development internally and may have difficulty raising money in capital markets.<sup>27</sup> Although production and sales volumes of higher density DRAMs increased, the industry was not realizing significant increases in net sales and operating returns. As a

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<sup>22</sup> Pub. Doc. No. 240 at I-55, Table 33.

<sup>23</sup> Id.

<sup>24</sup> Id. at I-59, Table 37.

<sup>25</sup> Id. at I-60, Table 38.

<sup>26</sup> Id. at I-61, Table 39.

<sup>27</sup> Some producers reported to the Commission that they had slowed down or delayed planned research and development and capital expenditures intended for higher density DRAMs. Id. at I-13 - I-15 and Appendix G; Conf. Doc. No. 17 at I-24-I-26 and Appendix G. In addition, rapidly declining DRAM prices reportedly prevented Micron from raising capital through an equity offering in 1992. Pub. Doc. No. 43 (Transcript of Staff Conference) at 24 (Mr. Langrill), Pub. Doc. No. 239 (Transcript of the Hearing) at 38 (Mr. Langrill).

consequence, capital investment and research and development, which are vital in this industry, were suffering. The actual and potential negative effects on existing production and development efforts of the domestic industry, including efforts to develop future generation DRAMS, supports an affirmative threat determination.<sup>28</sup>

In sum, there is clear and convincing evidence on this record that LTFV imports of DRAMS from Korea are likely to continue at significant levels, and continue to adversely affect the domestic industry's prices, sales volumes and revenues, and consequently its ability to invest the sums necessary to remain viable. In addition to my conclusion of present material injury by reason of the LTFV imports, I also find that the domestic industry is threatened with material injury by the LTFV imports from Korea.

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<sup>28</sup> See 19 U.S.C. § 1677(7)(F)(i)(X).



## DISSENTING VIEWS OF COMMISSIONER PETER S. WATSON

In 1993, when this investigation was first before the Commission, I concluded that “the record does not contain substantial evidence that any threat of material injury is real or that actual injury is imminent.”<sup>1</sup> What has changed in the record on this remand? Quite a bit. Most of the imports whose effects we were looking at turned out to be fairly traded; and the margins of the remainder, already low, turned out to be lower still.<sup>2</sup>

This makes my decision easy. The law commands us to measure the injurious effect of the subject imports by measuring their volume, their effect on domestic prices and their impact on the domestic industry. The volume, price effect and impact of unfair imports on a domestic industry are necessarily cumulative --  $A+B+C$  is never less than  $A+B$  alone when  $C$  is not a negative number. It follows that the Commerce Department’s new conclusion that Samsung’s DRAMs were fairly traded requires no change in the negative determination I first made three years ago.

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<sup>1</sup> DRAMs of One Megabit and Above from the Republic of Korea, Inv. No. 731-TA-556 (Final), USITC Pub. 2629 (May 1993)(Pub. Doc. No. 240) at 54.

<sup>2</sup> Commission Supplemental Report, INV-T-071 (September 16, 1996) at Table 55 (revised). Appendix 2.



# **APPENDIX 1**

**Federal Register Notice re: Remand Investigation (61 Fed. Reg. 42265-66, Aug. 14, 1996)**



1 general rate of duty or preferential rate of duty in effect under NAFTA, the Caribbean Basin Economic Recovery Act, or the Andean Trade Preference Act, as the case may be, on imports of broom corn brooms other than whisk brooms, as follows—

40 percent in the first year of relief;  
32 percent in the second year of relief;  
24 percent in the third year of relief; and  
16 percent in the fourth year of relief.

Where a higher rate of duty would otherwise apply to imports from any country, in any year, that higher rate would take effect.

(2) Recommend that this import relief action not apply to imports produced in Israel or Canada.

They find that this remedy will address the serious injury that they have found to exist and will be the most effective in facilitating the efforts of the domestic industry to make a positive adjustment to import competition.

#### Investigation No. NAFTA-302-1

##### Determinations With Respect to Injury

On the basis of the information in the investigation—

Chairman Rohr and Commissioners Newquist, Crawford, Nuzum, and Bragg determine that, as a result of the reduction or elimination of a duty provided for under the NAFTA, broom corn brooms produced in Mexico are being imported into the United States in such increased quantities (in absolute terms) and under such conditions so that imports of the article, alone, constitute a substantial cause of serious injury to the domestic industry producing an article that is like, or directly competitive with, the imported article.

Commissioner Watson determines that broom corn brooms from Mexico are not, as a result of the reduction or elimination of a duty provided for under the NAFTA, being imported into the United States in such increased quantities (in absolute terms) and under such conditions so that imports of the article, alone, constitute a substantial cause of serious injury or threat of serious injury to the domestic industry producing an article that is like, or directly competitive with, the imported article.

##### Findings and Recommendations With Respect To Remedy

Chairman Rohr and Commissioners Newquist and Bragg find and recommend that, in order to remedy serious injury, it is necessary for the President, for a 3-year period, to increase the rate of duty on imports of broom corn brooms produced in Mexico receiving tariff preferences under NAFTA to the column 1 general rate of

duty currently imposed under the HTS on such brooms. This remedy recommendation is incorporated into Chairman Rohr's and Commissioner Newquist's various recommendations with regard to TA-201-65, discussed above. Commissioner Bragg excludes whisk brooms from this remedy recommendation.

Commissioner Crawford finds and recommends that, in order to remedy serious injury, it is necessary for the President, for a 2-year period, to increase the rate of duty on imports of broom corn brooms from Mexico receiving tariff preferences under NAFTA to the column 1 general rate of duty currently imposed under the HTS on such brooms.

Commissioner Nuzum finds and recommends that, in order to remedy serious injury, it is necessary for the President, for a 3-year period, to increase the rate of duty on imports of broom corn brooms, except whisk brooms, from Mexico receiving tariff preferences under NAFTA as follows—

(1) For the first 2 years, to the column 1 general rate of duty currently imposed under the HTS on such brooms; and

(2) For the third year, to a rate that is one-half the difference between the current column 1 general rate of duty and the rate of duty that is currently scheduled to be in effect at the end of the 3-year period.

##### Background

Following receipt of petitions filed on March 4, 1996, on behalf of the U.S. Cornbroom Task Force and its individual members, the Commission instituted Investigations Nos. TA-201-65 and NAFTA-302-1. Notice of the institution of the Commission's investigations and of public hearings to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC and by publishing the notice in the Federal Register of March 18, 1996 (61 FR 11061). The hearings (May 30, 1996, for the injury phase and July 11, 1996, for the remedy phase) were held in Washington, DC, and all persons who requested the opportunity were permitted to appear in person or by counsel.

The Commission transmitted its determinations in these investigations to the President on August 1, 1996. The views of the Commission are contained in USITC Publication 2984 (August 1996), entitled "Broom Corn Brooms: Investigations Nos. TA-201-65 and NAFTA-302-1."

Dated: Issued: August 7, 1996.

By order of the Commission.

Donna R. Koehnke,

Secretary.

[FR Doc. 96-20724 Filed 8-13-96; 8:45 am]

BILLING CODE 7020-02-P

#### [Investigation No. 731-TA-556 (Final) (Remand)]

#### DRAMS of One Megabit and Above From the Republic of Korea; Notice and Scheduling of Remand Proceedings

AGENCY: United States International Trade Commission.

ACTION: Notice.

**SUMMARY:** The U. S. International Trade Commission (the Commission) hereby gives notice of the Court-ordered remand of its final antidumping investigation No. 731-TA-556 (Final) for reconsideration in light of the Department of Commerce's revised final determination.

**EFFECTIVE DATE:** August 5, 1996.

**FOR FURTHER INFORMATION CONTACT:** Mary Messer, Office of Investigations, telephone 202-205-3193 or Robin L. Turner, Office of General Counsel, telephone 202-205-3103, U. S. International Trade Commission. Hearing-impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-205-1810.

#### SUPPLEMENTARY INFORMATION

##### Background

On July 5, 1996, the Court of International Trade issued a remand Order to the Commission in *Hyundai Electronics Industries v. U.S. International Trade Commission*, Ct. No. 93-06-00319, Slip. Op. 96-105. That case involved review of the Commission's May 1993 affirmative determination in DRAMs of One Megabit and Above from the Republic of Korea, Inv. No. 731-TA-556 (Final). The CIT ordered the Commission to reconsider its final determination in light of the Department of Commerce's revised final determination, which found Samsung's dumping margin to be *de minimis* and, thus, its imports excluded from the scope of the DRAM antidumping order.

##### Reopening Record

In order to assist it in making its determination on remand, the Commission is reopening the record on remand in this investigation to seek clarification regarding data in importers

questionnaires in the final investigation, and to permit parties to file briefs.

#### Participation in the Proceedings

Only those persons who were interested parties to the original administrative proceedings (i.e., persons listed on the Commission Secretary's service list) may participate in these remand proceedings.

#### Limited Disclosure of Business Proprietary Information (BPI) Under an Administrative Protective Order ("APO") and BPI Service List

Information obtained during the remand investigation will be released to parties under the administrative protective order ("APO") in effect in the original investigation. Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make business proprietary information gathered in the final investigation and this remand investigation available to additional authorized applicants not covered under the original APO, provided that application is made not later than seven (7) days after publication of the Commission's notice of reopening the record on remand in the Federal Register. Applications must be filed for persons on the Judicial Protective Order in the related CIT case, who are not under the original APO and wish to participate in the remand investigation. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO in this remand investigation.

#### Written Submissions

Briefs should be concise, limited to the issue of exclusion of Samsung's imports, and thoroughly referenced to information on the record in the original investigation or information obtained during the remand investigation. Written briefs shall be limited to thirty (30) pages, and must be filed no later than close of business on September 9, 1996. No further submissions will be permitted unless otherwise ordered by the Commission.

All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain business proprietary information (BPI) must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules. In accordance with sections 201.16(c) and 207.3 of the rules, each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will

not accept a document for filing without a certificate of service.

Authority: This action is taken under the authority of the Tariff Act of 1930, title VII.

Issued: August 7, 1996.

By order of the Commission.

Donna R. Koehnke,  
Secretary.

[FR Doc. 96-20723 Filed 8-13-96; 8:45 am]

BILLING CODE 7020-02-P

#### Sunshine Act Meeting

**AGENCY HOLDING THE MEETING:** United States International Trade Commission.

**TIME AND DATE:** August 21, 1996 at 10:00 a.m.

**PLACE:** Room 101, 500 E Street S.W., Washington, DC 20436.

**STATUS:** Open to the public.

#### MATTERS TO BE CONSIDERED:

1. Agenda for future meeting
2. Minutes
3. Ratification List
4. Inv. Nos. 731-TA-736-737 (Final) (Large Newspaper Printing Presses and Components Thereof Whether Assembled or Unassembled from Germany and Japan)—briefing and vote.
5. Outstanding action jackets:
  1. ID-96-014, Industry and Trade Summary: U.S. Radar and Certain Radio Apparatus Industry Restructures in Light of Reduced Demand and Sustained Foreign Competition.

In accordance with Commission policy, subject matter listed above, not disposed of at the scheduled meeting, may be carried over to the agenda of the following meeting.

By order of the Commission.

Issued: August 12, 1996.

Donna R. Koehnke,  
Secretary.

[FR Doc. 96-20876 Filed 8-12-96; 3:28 pm]

BILLING CODE 7020-02-P

#### DEPARTMENT OF JUSTICE

##### Notice of Lodging of Settlement Pursuant to the Clean Air Act

In accordance with Department policy, 28 CFR 50.7, notice is hereby given that on July 18, 1996, a proposed Consent Decree in *United States v. Georgia-Pacific Corporation*, (N.D.GA.) (Civil No. 1 96-CV-1818-FMH), was lodged with the U.S. District Court for the Northern District of Georgia, Atlanta Division. The United States filed its complaint in this action simultaneously with the consent decree, on behalf of the Environmental Protection Agency ("EPA") pursuant to Section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b).

The complaint seeks injunctive relief and civil penalties for violations of the Act and regulations promulgated thereunder at eighteen wood processing facilities located in Alabama, Arkansas, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Virginia.

The complaint alleged that Georgia-Pacific Corporation ("G-P") failed to obtain permits required by the Prevention of Significant Deterioration ("PSD") regulations prior to making major modifications at these facilities. As a result, G-P's facilities are emitting significant amounts of volatile organic compounds ("VOCs"). Alternatively, the complaint alleges that even if the modifications at G-P's facilities did not trigger PSD, G-P still had an obligation to obtain construction permits for the modifications. Finally, the complaint alleges that G-P violated provisions of state implementation plans by failing to report VOC emissions on various permit applications.

Under the terms of the settlement, G-P will apply for PSD or federally enforceable state minor source permits for modifications at the 18 facilities, install state-of-the-art pollution control equipment at 11 of those plants, and agree to strict production limits at 2 additional plants. The consent decree requires a 90% reduction of VOC emissions from G-P's plywood and OSB dryers. In addition, for the remaining plants where G-P made modifications to its plywood presses, the consent decree obligates G-P to seek determinations from the state in which the facility is located of Best Available Control Technology for control of emissions resulting from the plywood presses.

The Consent Decree also requires G-P to conduct comprehensive Clean Air Act audits of all 26 of its wood product facilities nationwide and to monitor compliance with emission limits on a daily basis. In addition, G-P will pay a civil penalty of \$6 million and perform Supplemental Environmental Projects that will cost \$4.25 million.

The Consent Decree provides that G-P's satisfaction of all of the requirements of the Decree will constitute full settlement of, and will resolve all civil and administrative liability of G-P to the United States for, PSD and minor source permitting violations covering all criteria pollutants for the modifications listed in Schedule C to the Consent Decree, and for any other violations alleged in the Environmental Protection Agency's August 5, 1994 and May 18, 1995 Notices of Violation, or in the United States' Complaint.

The Department of Justice will receive for a period of thirty (30) days from the date of this publication comments

## **APPENDIX 2**

Certain Tables from Commission Supplemental Report (CSR)



Table 6  
 Cased DRAMs and DRAM memory modules: Apparent U.S. consumption, 1989-91, January-September 1991, and January-September 1992<sup>1</sup>

Item	1989	1990	1991	Jan.-Sept.--	
				1991	1992
	Quantity (billion bits)				
U.S. Shipments of "domestic" cased DRAMs <sup>2</sup>	118,130	178,597	260,154	188,750	255,631
U.S. shipments of "imported" product:					
LTFV imports of <sup>3</sup> --					
Cased DRAMs	***	***	***	***	***
DRAM memory modules	***	***	***	***	***
Subtotal	***	***	***	***	***
Nonsubject imports:					
Samsung product (≥ 1 Meg): <sup>4</sup>					
Cased DRAMs	***	***	***	***	***
DRAM memory modules	***	***	***	***	***
Subtotal	***	***	***	***	***
Korean product<1 Meg:					
Cased DRAMs	***	***	***	***	***
DRAM memory modules	***	***	***	***	***
Subtotal	***	***	***	***	***
Nonsubject "3rd source" product:					
Cased DRAMs	80,115	121,609	207,578	146,518	287,208
DRAM memory modules	16,371	27,738	50,035	40,302	72,606
Subtotal	96,486	149,347	257,613	186,820	359,814
Total, all imports	147,592	252,123	444,623	310,952	629,315
Apparent consumption	265,722	430,720	704,777	499,702	884,946
	Value (1,000 dollars)				
U.S. Shipments of "domestic" cased DRAMs <sup>2</sup>	1,149,193	942,652	980,243	747,261	731,979
U.S. shipments of "imported" product:					
LTFV imports of <sup>3</sup> --					
Cased DRAMs	***	***	***	***	***
DRAM memory modules	***	***	***	***	***
Subtotal	***	***	***	***	***
Nonsubject imports:					
Samsung product (≥ 1 Meg): <sup>4</sup>					
Cased DRAMs	***	***	***	***	***
DRAM memory modules	***	***	***	***	***
Subtotal	***	***	***	***	***
Korean product<1 Meg:					
Cased DRAMs	***	***	***	***	***
DRAM memory modules	***	***	***	***	***
Subtotal	***	***	***	***	***

See footnotes at end of table.

Table 6--Continued

Cased DRAMs and DRAM memory modules: Apparent U.S. consumption, 1989-91, January-September 1991, and January-September 1992<sup>1</sup>

				Jan.-Sept.--	
Item	1989	1990	1991	1991	1992

<sup>1</sup> The data presented are from all known U.S. producers of uncased and cased DRAMs and account for virtually all known U.S. shipments of "domestic" products. The data presented are also from 26 U.S. importers of DRAMs and DRAM memory modules. Reported U.S. imports of DRAMs and DRAM memory modules from Korea are estimated to account for greater than 95 percent of total imports of these products from Korea in 1991 and reported U.S. imports of DRAMs and DRAM memory modules from all other countries are estimated to account for approximately 60 percent of total imports of these products from all other countries in the same period (see the section of this report entitled "U.S. Imports").

<sup>2</sup> To avoid double counting, data for U.S. producers' memory modules are not included.

<sup>3</sup> Includes cased DRAM Korean imports by \*\*\*.

<sup>4</sup> Data presented in 1991, and both Jan.-Sept. periods may be understated to the extent that some of the \*\*\* imports may have been of Samsung product.

Note.--Bit figures have been truncated rather than rounded; however bit totals were derived from the untruncated data. Because of rounding, bits may not add to the totals shown.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 40

Cased DRAMs: U.S. importers' end-of-period inventories of Korean product, by products and by sources, 1989-91, January-September 1991, and January-September 1992

\* \* \* \* \*

Table 41

Subject DRAMs  $\geq$  1 Meg and modules containing such DRAMs: End-of-period inventories held by U.S. importers of the subject product, by products and by sources, 1989-91, January-September 1991, and January-September 1992

\* \* \* \* \*

Table 42-A

Uncased DRAMs  $\geq$  1 Meg: Korean (excluding Samsung's) capacity, wafer starts, capacity utilization, production, end-of-period inventories, and shipments, 1989-91, January-September 1991, January-September 1992, and projected 1992-93

\* \* \* \* \*

Table 44-A

Cased DRAMs  $\geq$  1 Meg: Korean (excluding Samsung's) capacity, production, inventories, capacity utilization, and shipments, 1989-91, January-September 1991, January-September 1992, and projected 1992-93

\* \* \* \* \*

Table 50

Subject imports, by products, 1989-91, January-September 1991, and January-September 1992

\* \* \* \* \*

Table 55

All cased DRAMs and memory modules that contain all DRAMs: Shares of apparent U.S. consumption, 1989-91, January-September 1991, and January-September 1992<sup>1</sup>

Item	1989	1990	1991	Jan.-Sept.--	
				1991	1992
Share of the quantity of U.S. consumption on the basis of bits (percent)					
U.S. Shipments of "domestic" cased DRAMs <sup>2</sup> .....	44.5	41.5	36.9	37.8	28.9
U.S. shipments of "imported" product:					
LTFV imports of <sup>3</sup> --					
Cased DRAMs .....	***	***	***	***	***
DRAM memory modules .....	***	***	***	***	***
Subtotal .....	***	***	***	***	***
Nonsubject imports:					
Samsung product (≥ 1 Meg): <sup>4</sup>					
Cased DRAMs .....	***	***	***	***	***
DRAM memory modules .....	***	***	***	***	***
Subtotal .....	***	***	***	***	***
Korean product<1 Meg:					
Cased DRAMs .....	***	***	***	***	***
DRAM memory modules .....	***	5/	5/	***	5/
Subtotal .....	***	***	***	***	***
Nonsubject "3rd source" product:					
Cased DRAMs .....	30.1	28.2	29.5	29.3	32.5
DRAM memory modules .....	6.2	6.4	7.1	8.1	8.2
Subtotal .....	36.3	34.7	36.6	37.4	40.7
Total, all imports .....	55.5	58.5	63.1	62.2	71.1
Share of the value of U.S. consumption (percent)					
U.S. Shipments of "domestic" cased DRAMs <sup>2</sup> .....	33.9	35.2	29.0	29.8	23.4
U.S. shipments of "imported" product:					
LTFV imports of <sup>3</sup> --					
Cased DRAMs .....	5/	***	***	***	***
DRAM memory modules .....	***	***	***	***	***
Subtotal .....	5/	***	***	***	***
Nonsubject imports:					
Samsung product (≥ 1 Meg): <sup>4</sup>					
Cased DRAMs .....	***	***	***	***	***
DRAM memory modules .....	***	***	***	***	***
Subtotal .....	***	***	***	***	***
Korean product<1 Meg:					
Cased DRAMs .....	***	***	***	***	***
DRAM memory modules .....	***	5/	5/	***	5/
Subtotal .....	***	***	***	***	***

See footnotes at end of table.

Table 55--Continued

All cased DRAMs and memory modules that contain all DRAMs: Shares of apparent U.S. consumption, 1989-91, January-September 1991, and January-September 1992<sup>1</sup>

	Jan.-Sept.--				
Item	1989	1990	1991	1991	1992
	Share of the value of U.S. consumption (percent)				
U.S. shipments of "imported" product--Continued:					
Nonsubject imports--Continued:					
Nonsubject "3rd source" product:					
Cased DRAMs .....	34.8	29.9	26.8	26.4	28.3
DRAM memory modules .....	14.6	15.0	22.8	23.9	22.6
Subtotal .....	49.4	45.0	49.6	50.2	50.9
Total, all imports .....	66.1	64.8	71.0	70.2	76.6

<sup>1</sup> The data presented are from all known U.S. producers of uncased and cased DRAMs and are estimated to account for virtually all known U.S. shipments of "domestic" products. The data presented are also from 26 U.S. importers of DRAMs and DRAM memory modules. Reported U.S. imports of DRAMs and DRAM memory modules from Korea are estimated to account for greater than 95 percent of these imports from Korea in 1991 and reported U.S. imports of DRAMs and DRAM memory modules from all other countries are believed to account for approximately 60 percent of these imports from all other countries in the same period (see the section of this report entitled "U.S. Imports").

<sup>2</sup> To avoid double counting, data for U.S. producers' memory modules are not included.

<sup>3</sup> Includes cased DRAM Korean imports by \*\*\*.

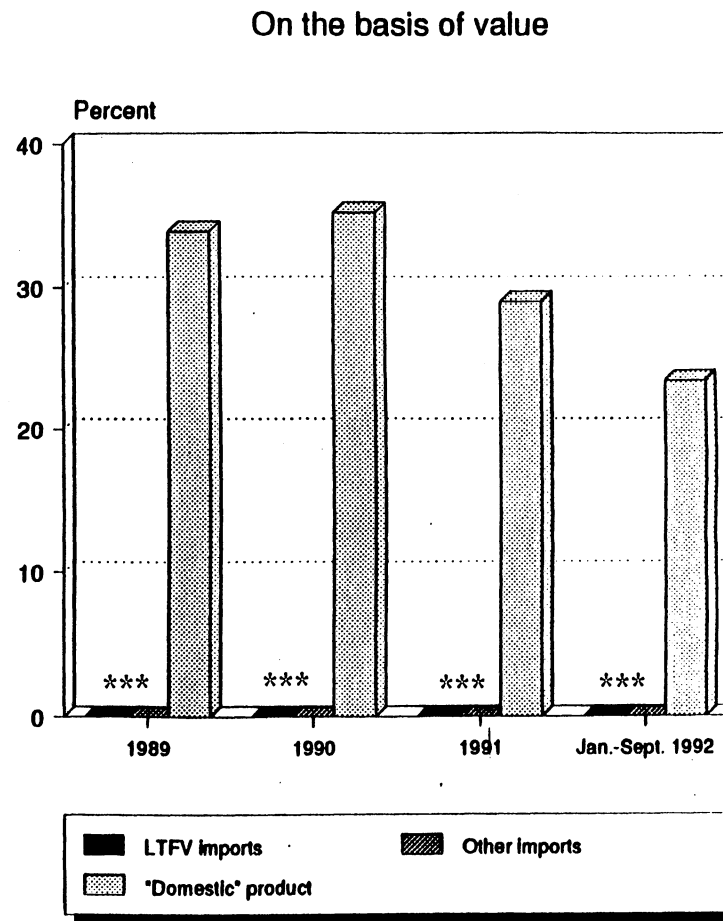
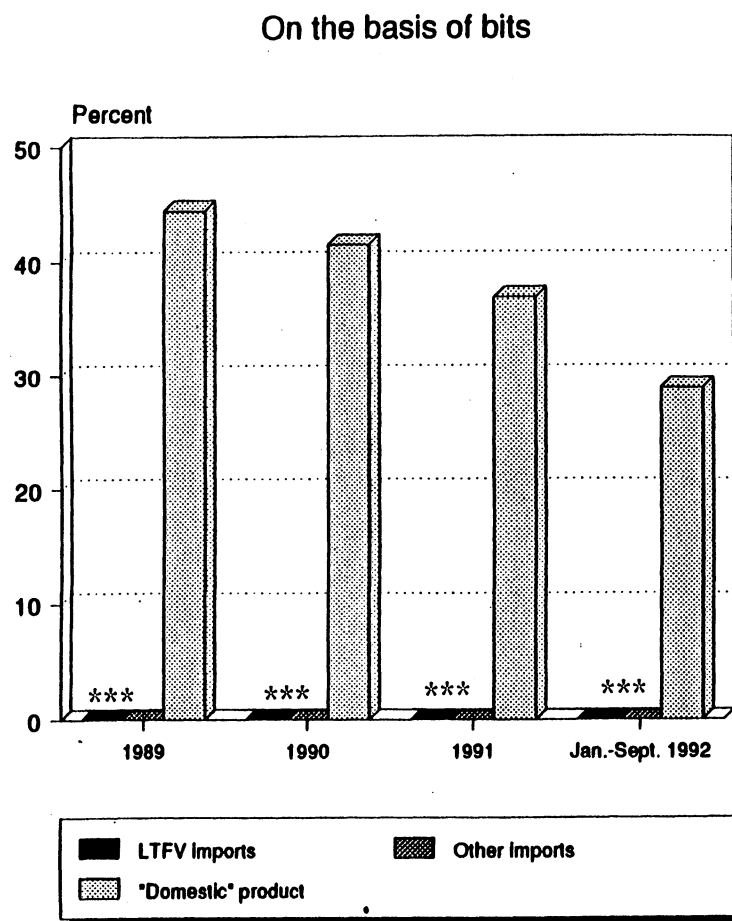
<sup>4</sup> Data presented in 1991, and both Jan.-Sept. periods may be understated to the extent that some of the \*\*\* imports may have been of Samsung product.

<sup>5</sup> \*\*\*.

Note.--Bit shares were derived from the untruncated data. Because of rounding, shares may not add to the totals shown.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Figure 1: All cased DRAMs and memory modules: Shares of apparent U.S. consumption, 1989-91 and Jan.-Sept. 1992



Source: Table 55.

Table 56

U.S. and Korean (excluding Samsung) DRAMs: Weighted-average net f.o.b. selling prices and quantities of U.S.-produced and Korean products (excluding Samsung) 1 and 2 sold to OEMs, by months, January 1989-September 1992

\* \* \* \* \*

Table 57

U.S. and Korean (excluding Samsung) DRAMs: Weighted-average net f.o.b. selling prices and quantities of U.S.-produced and Korean (excluding Samsung) products 3 and 4 sold to OEMs, by months, January 1990-September 1992

\* \* \* \* \*

Table 58

U.S. and Korean (excluding Samsung) DRAMs: Weighted-average net f.o.b. selling prices, final adjusted prices, and quantities of U.S.-produced and Korean products (excluding Samsung) 1 and 2 sold to franchise distributors, by months, January 1989-September 1992

\* \* \* \* \*

Table 59

U.S. and Korean (excluding Samsung) DRAMs: Weighted-average net f.o.b. selling prices, final adjusted prices, and quantities of U.S.-produced and Korean (excluding Samsung) products 3 and 4 sold to franchise distributors, by months, January 1990-September 1992

\* \* \* \* \*

Table 60

U.S. and Korean (excluding Samsung) DRAMs: Weighted-average net f.o.b. selling prices and quantities of U.S.-produced and Korean (excluding Samsung) products 1, 2, 3, and 4 sold to brokers/independent distributors, by months, January 1989-September 1992

\* \* \* \* \*

Table 61

U.S. and Korean (excluding Samsung) DRAMs: Margins of under/(over)selling for sales of products 1, 2, 3, and 4 to OEMs, franchise distributors, and brokers, by months, January 1989-September 1992

\* \* \* \* \*

The following tabulation is a summary of the margins of underselling and overselling between U.S. and Korean (excluding Samsung) prices for DRAMs (from table 61). There were a total of 109 comparisons between U.S. and Korean prices. The Korean product undersold the domestic product in 75 of these instances; in the remaining 34 instances, the Korean product was priced higher than the domestic product.

	<u>No. of instances</u>	<u>Range (percent)</u>	<u>Average (percent)</u>
<b>OEM market:</b>			
Underselling.....	52	0.5 to 14.3	5.8
Overselling.....	15	0.2 to 7.9	3.1
<b>Franchise distributor market:</b>			
Underselling.....	9	1.1 to 53.0	15.4
Overselling.....	17	0.7 to 26.5	6.8
<b>Broker market:</b>			
Underselling.....	14	0.6 to 27.2	10.6
Overselling.....	2	0.2 to 2.8	1.5

In the case of VRAMs, the exclusion of Samsung from the database results in no price comparisons between the domestic and imported products, as Samsung was the only Korean firm to report prices for sales of VRAMs. In the case of DRAM modules (i.e., product 6, see table C-10), the Korean product undersold the domestic product in 19 of 28 instances with margins ranging from 0.5 to 30.8 percent. In the remaining 9 instances, the Korean product was priced above the domestic product with margins ranging from 0.4 to 10.6 percent.

Table C-1

All DRAM memory modules: Summary data concerning the U.S. market, 1989-91, January-September 1991, and January-September 1992

\* \* \* \* \*

Table C-2

Modules containing DRAMs  $\geq$  1 Meg: Summary data concerning the U.S. market, 1989-91, January-September 1991, and January-September 1992

\* \* \* \* \*

Table C-8-A

Memory modules containing DRAMs  $\geq$  1 Meg: Korean (excluding Samsung's) production, inventories, capacity utilization, and shipments, 1989-91, January-September 1991, January-September 1992, and projected 1992-93

\* \* \* \* \*

Table C-10

U.S. and Korean (excluding Samsung) DRAMs: Weighted-average net f.o.b. selling prices, quantities, and margins of under/(over)selling of U.S.-produced and Korean (excluding Samsung) product 6 (DRAM modules) for sales to OEMs, franchise distributors, and brokers, by months, January 1989-September 1992

\* \* \* \* \*

Table E-3

Cased DRAMS: Summary data concerning the U.S. market, 1989-91, January-September 1991, and January-September 1992

(Quantity=billion bits, except where noted, value=1,000 dollars, unit values and unit labor costs are per million bits, period changes=percent, except where noted)

Item	Reported data					Period changes			
	1989	1990	1991	Jan.-Sept.- 1991	1992	1989-91	1989-90	1990-91	Jan.-Sept. 1991-92
U.S. consumption quantity:									
Amount .....	248,298	392,049	618,216	436,499	728,376	+149.0	+57.9	+57.7	+66.9
Producers' share: <sup>1</sup>									
U.S. dice cased in--									
United States .....	***	***	***	***	***	***	***	***	***
3rd sources .....	***	***	***	***	***	***	***	***	***
Subtotal .....	***	***	***	***	***	***	2/	***	***
3rd-source dice cased in									
United States .....	***	***	***	***	***	***	***	***	***
Total .....	***	***	***	***	***	***	***	***	***
Importers' share: <sup>1</sup>									
Korean LTFV dice cased in--									
Korea <sup>3</sup> .....	***	***	***	***	***	***	***	***	***
3rd sources .....	***	***	4/	***	5/	4/	***	4/	6/
Subtotal .....	***	***	***	***	***	***	***	***	***
Samsung dice≥1 Meg cased in--									
Korea <sup>7</sup> .....	***	***	***	***	***	***	***	***	***
3rd sources .....	***	***	***	***	***	***	***	6/	***
Subtotal .....	***	***	***	***	***	***	***	***	***
Korean dice<1 Meg cased in--									
Korea .....	***	***	***	***	***	***	***	***	***
3rd sources .....	5/	5/	5/	5/	5/	2/	2/	6/	2/
Subtotal .....	***	***	***	***	***	***	***	***	***
3rd-source dice cased in--									
Korea .....	***	***	5/	5/	5/	***	***	***	2/
3rd sources .....	***	***	***	***	***	***	***	***	***
Subtotal .....	***	***	***	***	***	***	***	***	***
Total .....	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount .....	2,892,008	2,223,663	2,451,510	1,802,268	2,151,591	-15.2	-23.1	+10.2	+19.4
Producers' share: <sup>1</sup>									
U.S. dice cased in--									
United States .....	***	***	***	***	***	***	***	***	***
3rd sources .....	***	***	***	***	***	***	***	***	***
Subtotal .....	***	***	***	***	***	***	***	***	***
3rd-source dice cased in									
United States .....	***	***	***	***	***	***	***	***	***
Total .....	***	***	***	***	***	***	***	***	***
Importers' share: <sup>1</sup>									
Korean LTFV dice cased in--									
Korea .....	***	***	***	***	***	***	***	***	***
3rd sources .....	***	***	5/	***	5/	6/	***	***	6/
Subtotal .....	***	***	***	***	***	***	***	***	***
Samsung dice≥1 Meg cased in--									
Korea .....	***	***	***	***	***	***	***	***	***
3rd sources .....	5/	***	***	***	***	***	***	6/	***
Subtotal .....	***	***	***	***	***	***	***	***	***
Korean dice<1 Meg cased in--									
Korea .....	***	***	***	***	***	***	***	***	***
3rd sources .....	5/	5/	5/	5/	5/	6/	2/	6/	2/
Subtotal .....	***	***	***	***	***	***	***	***	***
3rd-source dice cased in--									
Korea .....	***	***	5/	5/	5/	***	***	***	2/
3rd sources .....	***	***	***	***	***	***	***	***	***
Subtotal .....	***	***	***	***	***	***	***	***	***
Total .....	***	***	***	***	***	***	***	***	***

See footnotes at end of table.

Table E-3--Continued

Cased DRAMs: Summary data concerning the U.S. market, 1989-91, January-September 1991, and January-September 1992

(Quantity=billion bits, except where noted, value=1,000 dollars, unit values and unit labor costs are per million bits, period changes=percent, except where noted)

Item	Reported data					Period changes			
	1989	1990	1991	Jan.-Sept.- 1991	1992	1989-91	1989-90	1990-91	Jan.-Sept. 1991-92
U.S. importers' imports from--									
Korea (LTFV Korean dice): <sup>3</sup>									
U.S. shipments quantity .....	***	***	***	***	***	g/	g/	g/	***
U.S. shipments value .....	***	***	***	***	***	g/	***	***	***
Unit value .....	***	***	***	***	***	***	***	***	***
Ending inventory qty .....	***	***	***	***	***	g/	***	***	***
3rd sources (LTFV Korean dice):									
U.S. shipments quantity .....	***	***	4/	***	***	4/	9/	4/	9/
U.S. shipments value .....	***	***	***	***	***	9/	9/	***	9/
Unit value .....	9/	***	4/	9/	***	9/	9/	4/	9/
Ending inventory qty .....	***	***	***	***	***	***	***	***	9/
Korea (Samsung dice≥1 Meg): <sup>7</sup>									
U.S. shipments quantity .....	***	***	***	***	***	***	***	***	***
U.S. shipments value .....	***	***	***	***	***	***	***	***	***
Unit value .....	***	***	***	***	***	***	***	***	***
Ending inventory qty .....	***	***	***	***	***	***	***	***	***
3rd sources (Samsung dice≥1 Meg):									
U.S. shipments quantity .....	***	***	***	***	***	***	***	***	***
U.S. shipments value .....	***	***	***	***	***	***	***	***	***
Unit value .....	***	***	***	***	***	***	***	***	***
Ending inventory qty .....	***	***	***	***	***	***	***	***	***
Korea (Korean dice<1 Meg):									
U.S. shipments quantity .....	***	***	***	***	***	***	***	***	***
U.S. shipments value .....	***	***	***	***	***	***	***	***	***
Unit value .....	***	***	***	***	***	***	***	***	***
Ending inventory qty .....	***	***	***	***	***	***	***	***	***
3rd sources (Korean dice<1 Meg):									
U.S. shipments quantity .....	***	***	***	***	***	***	***	g/	***
U.S. shipments value .....	***	***	***	***	***	***	***	***	***
Unit value .....	***	***	***	***	***	***	***	***	***
Ending inventory qty .....	***	***	***	***	***	***	***	***	***
Korea (3rd-source dice):									
U.S. shipments quantity .....	***	***	***	***	***	***	***	***	***
U.S. shipments value .....	***	***	***	***	***	***	***	***	***
Unit value .....	***	***	***	***	***	***	***	***	***
Ending inventory qty .....	***	***	***	***	***	***	***	***	g/
3rd sources (3rd-source dice):									
U.S. shipments quantity .....	***	***	***	***	***	***	***	***	***
U.S. shipments value .....	***	***	***	***	***	***	***	***	***
Unit value .....	***	***	***	***	***	***	***	***	***
Ending inventory qty .....	***	***	***	***	***	***	***	***	***
3rd sources (U.S. dice):									
U.S. shipments quantity .....	***	***	***	***	***	***	***	***	***
U.S. shipments value .....	***	***	***	***	***	***	***	***	***
Unit value .....	***	***	***	***	***	***	***	***	***
Ending inventory qty .....	***	***	***	***	***	***	***	***	***
All sources:									
U.S. shipments quantity .....	***	***	***	***	***	***	***	***	***
U.S. shipments value .....	***	***	***	***	***	***	***	***	***
Unit value .....	***	***	***	***	***	***	***	***	***

See footnotes at end of table.

Table E-3--Continued

Cased DRAMs: Summary data concerning the U.S. market, 1989-91, January-September 1991, and January-September 1992

(Quantity=billion bits, except where noted, value=1,000 dollars, unit values and unit labor costs are per million bits, period changes=percent, except where noted)

Item	Reported data					Period changes			
	1989	1990	1991	Jan.-Sept. 1991	1992	1989-91	1989-90	1990-91	Jan.-Sept. 1991-92
U.S. producers <sup>1</sup> --									
Average capacity (1,000 units) .....	166,583	169,945	162,937	127,276	118,191	-2.2	+2.0	-4.1	-7.1
Production (1,000 units) .....	148,604	149,218	151,303	118,195	103,993	+1.8	+0.4	+1.4	-12.0
Capacity utilization <sup>1</sup> .....	89.2	87.8	92.9	92.9	88.0	+3.7	-1.4	+5.1	-4.9
Production quantity .....	54,613	101,926	167,504	124,159	170,312	+206.7	+86.6	+64.3	+37.2
U.S. shipments of U.S.-cased DRAMs, by dice-fabrication origin:									
Quantity:									
U.S. dice .....	***	***	***	***	***	***	***	***	***
3rd-source dice .....	***	***	***	***	***	***	***	***	***
Total .....	***	***	***	***	***	***	***	***	***
Value:									
U.S. dice .....	***	***	***	***	***	***	***	***	***
3rd-source dice .....	***	***	***	***	***	***	***	***	***
Total .....	***	***	***	***	***	***	***	***	***
Unit value:									
U.S. dice .....	***	***	***	***	***	***	***	***	***
3rd-source dice .....	***	***	***	***	***	***	***	***	***
Total .....	***	***	***	***	***	***	***	***	***
Export shipments:									
Quantity .....	***	***	***	***	***	***	***	***	***
Exports/shipments <sup>1</sup> .....	***	***	***	***	***	***	***	***	***
Value .....	***	***	***	***	***	***	***	***	***
Unit value .....	***	***	***	***	***	***	***	***	***
Ending inventory quantity .....	***	***	***	***	***	***	***	***	***
Inventory/shipments <sup>1</sup> .....	***	***	***	***	***	***	***	***	***
Production workers .....	1,727	1,636	1,676	1,520	1,389	-3.0	-5.3	+2.4	-8.6
Hours worked (1,000s) .....	3,671	3,522	3,485	3,006	2,702	-5.1	-4.1	-1.1	-10.1
Total comp. (\$1,000) .....	50,851	49,233	49,944	42,354	41,160	-1.8	-3.2	+1.4	-2.8
Hourly total compensation .....	\$13.85	\$13.98	\$14.33	\$14.09	\$15.23	+3.5	+0.9	+2.5	+8.1
Productivity (units/hour) .....	13.4	27.0	46.3	39.7	57.2	+246.6	+102.1	+71.4	+43.9
Unit labor costs .....	\$1.04	\$0.52	\$0.31	\$0.35	\$0.27	-70.1	-50.1	-40.2	-24.9

<sup>1</sup> 'Reported data' are in percent and 'period changes' are in percentage-point.<sup>2</sup> \*\*\*.<sup>3</sup> Includes Korean imports by \*\*\*.<sup>4</sup> \*\*\*.<sup>5</sup> \*\*\*.<sup>6</sup> \*\*\*.<sup>7</sup> May be understated (and unit values misstated) to the extent that some of the \*\*\* imports may have been Samsung product.<sup>8</sup> \*\*\*.<sup>9</sup> \*\*\*.

Note.--The term '3rd source' refers to countries other than Korea and the United States. Period changes are derived from the unrounded data. Because of rounding, bit figures and shares may not add to the totals shown. Unit values and other ratios are calculated using data of firms supplying both numerator and denominator information. Part-year inventory ratios are annualized.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Cased DRAMs and DRAM memory modules: U.S. shipments of LTFV imports, U.S. shipments of "domestic" product, and U.S. production, 1989-91, January-September 1991, and January-September 1992

	<u>Jan.-Sept.--</u>				
<u>Item</u>	1989	1990	1991	1991	1992
	<u>Quantity (billion bits)</u>				
U.S. shipments of LTFV imports <sup>1</sup> . . . . .	***	***	***	***	***
U.S. shipments of "domestic" cased DRAMs <sup>2</sup> . . . . .	118,130	178,597	260,154	188,750	255,631
U.S. production of "domestic" cased DRAMs <sup>2</sup> . . . . .	54,613	101,926	167,504	124,159	170,312
	<u>Ratios of U.S. shipments of LTFV imports to-- (percent)</u>				
U.S. shipments of "domestic" cased DRAMs . . . . .	***	***	***	***	***
U.S. production of "domestic" cased DRAMs . . . . .	***	***	***	***	***

<sup>1</sup> Includes both cased DRAMs ≥ 1 Meg and modules containing DRAMs ≥ 1 Meg.

<sup>2</sup> Includes all cased DRAMs; to avoid double counting, does not include DRAM memory modules.

Source: U.S. shipments of both LTFV imports and "domestic" product from table 6 (page I-38) of the revised tables to the staff report and U.S. production from table E-3 (page E-7) of the revised tables to the staff report.

