

# Static Random Access Memory Semiconductors From Taiwan

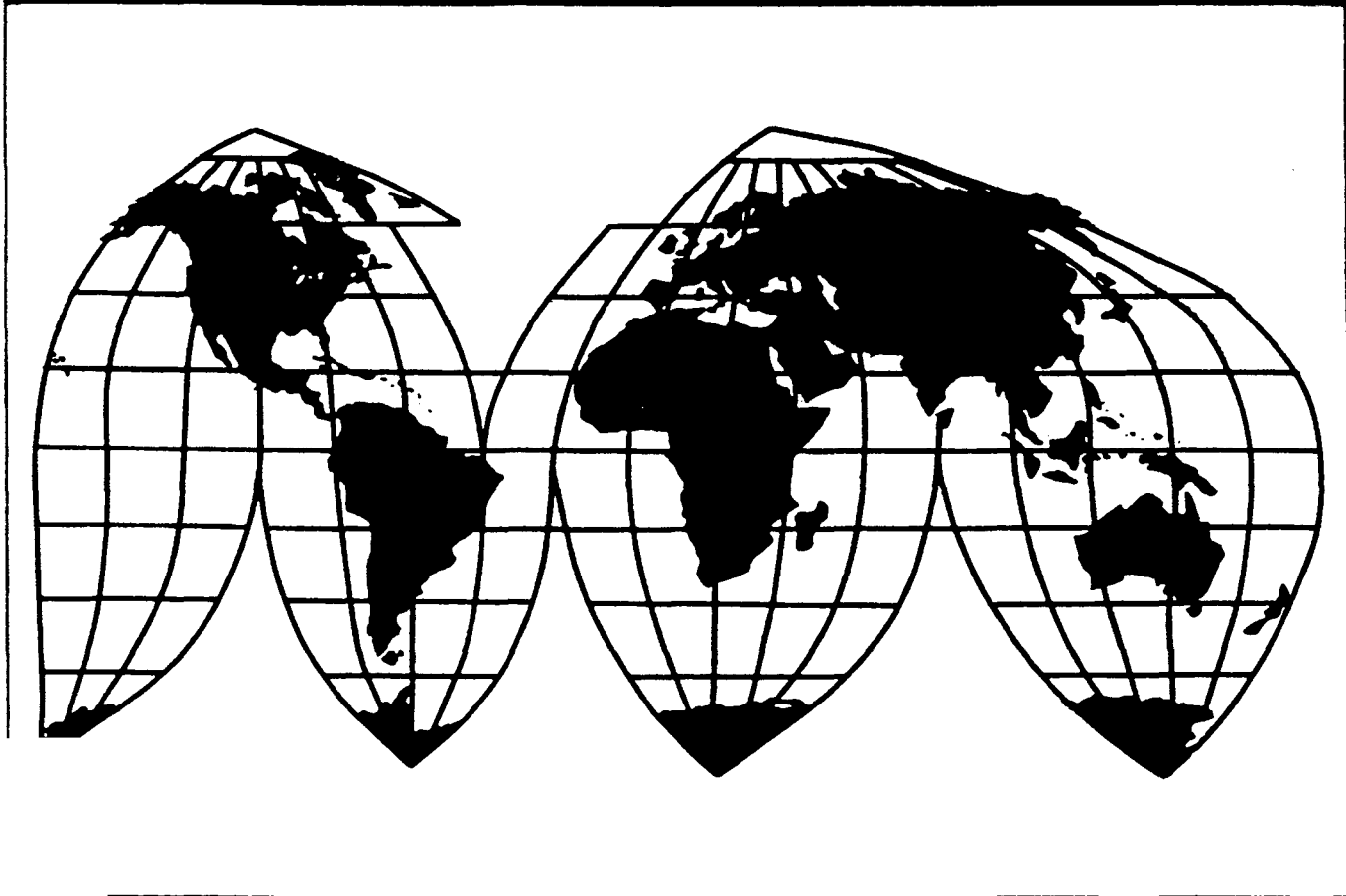
(Views on Remand)

Investigation No. 731-TA-762 (Remand)

Publication 3230

September 1999

**U.S. International Trade Commission**



Washington, DC 20436

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

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In April 1998, the U.S. International Trade Commission (Commission) determined that an industry in the United States was materially injured by reason of imports of static random access semiconductors from Taiwan. Static Random Access Semiconductors from the Republic of Korea and Taiwan, inv. Nos. 731-TA-761 and 762 (Final), USITC Pub. 3098 (May 1998). In the companion investigation, the Commission determined that the United States industry was not materially injured by reason of subject imports from the Republic of Korea. Respondents in the investigation as to Taiwan appealed the determination as to that country to the U.S. Court of International Trade (CIT). On June 30, 1999, the CIT (Judge Pogue) remanded the determination to the Commission. *Taiwan Semiconductor Industry Assoc. et al. v. United States et al.* Court No. 98-05-01460, Slip Op. (June 30, 1999). On August 30, 1999, the Commission provided further explanation in accordance with the CIT's remand order.



## COMMISSION'S DETERMINATION ON REMAND

### BACKGROUND

In April 1998, the Commission determined that an industry in the United States was materially injured by reason of imports of static random access memory semiconductors ("SRAMs") from Taiwan that had been found by the Department of Commerce to be sold at less than fair value ("LTFV"). That determination was appealed to the U.S. Court of International Trade ("Court"). On June 30, 1999, the Court remanded the determination to the Commission. *Taiwan Semiconductor Industry Assoc., et al. v. United States, et al.*, Court No. 98-05-01460, Slip Op. 99-57 (June 30, 1999) (Confidential Version). The Court held in particular that it could not "conclude that the Commission's determination that the increase in the volume of subject imports was significant is supported by substantial evidence absent an explanation of how they are significant in light of the dominant presence of non-subject imports." *Id.* at 18. The Court also held that "the Commission failed to explain how it ensured that it did not attribute the price depressing effects from other known factors to the subject imports." *Id.* at 26. On remand, the Commission<sup>1</sup> determines that the industry in the United States producing SRAMs is materially injured by reason of imports of SRAMs from Taiwan that the Department of Commerce has determined are sold at LTFV.

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<sup>1</sup> The views of Chairman Bragg comprised the Commission's determination in this investigation. The Commission, with Commissioner Crawford not participating, submits Chairman Bragg's remand views to the Court, as its "Views on Remand" providing further explanation of the Commission's original determination in response to the Court's decision. Vice Chairman Miller reaffirms her negative views in this investigation. Because Vice Chairman Miller's negative determination was unaffected by the Court's remand order, she did not take part in this remand proceeding.

## VIEWS OF THE COMMISSION

### A. Introduction

These views provide the further analysis of the facts in this investigation pursuant to the Court's remand.<sup>2</sup>

The decision of the Court remanding this investigation to the Commission expresses the Court's concern that it cannot adequately review the Commission's original determination in the absence of further explanation as to how the Commission evaluated the significance of LTFV imports in view of other factors adversely affecting the domestic industry. As the Court observes, the Commission in its original determination identified as conditions of competition a number of factors that affected the domestic industry in the course of the period of investigation ("POI"), including factors other than LTFV imports that had adverse affects.<sup>3</sup> The Court holds that the Commission need not, in order to assure that it is not attributing to LTFV imports the effects of other causes, isolate the effects of those imports from the effects of other causes.<sup>4</sup> In keeping with these holdings, this remand determination further explains why, in view of other factors affecting the domestic industry, the domestic industry was materially injured by reason of LTFV imports from Taiwan.

### B. Volume of Subject Imports

As noted in the Commission's original determination, section 771(7)(C)(i) provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is

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<sup>2</sup> The Commission's original views in this investigation are hereby readopted as further elaborated herein.

<sup>3</sup> *Static Random Access Memory Semiconductors from the Republic of Korea and Taiwan*, Invs. Nos. 731-TA-761 and 762 (Final), Final/Edited Version of Confidential Commission Opinions (hereafter "CD") at 21-24, and Public Version of the Commission Opinions (hereafter "PD") at 17-19.

<sup>4</sup> Slip Op. at 12 n.9.

significant.”<sup>5</sup> This provision permits the Commission to find volumes of subject imports significant in a number of alternative ways. The Commission may find those volumes significant in absolute terms, without regard to whether they have grown in comparison to either production or consumption. It may find the volumes significant in their increase, without comparing that growth to either production or consumption. The Commission may find either the volumes or their increase significant in comparison to production, without regard to consumption. Or it may find the volumes or their increase significant in comparison to consumption, without regard to production.

Accordingly, for example, the Federal Circuit has sustained a Commission affirmative determination when subject imports’ market share rose at the expense of non-subject imports’ share, while the domestic industry’s share remained stable.<sup>6</sup> A GATT panel decision, specifically favorably referenced in the Statement of Administrative Action to the Uruguay Round Agreements Act, has held an affirmative Commission determination consistent with the United States’s international obligations when, during a period of oversupply, subject imports rose by 50 percent in absolute terms but their market share fell dramatically in view of gains of market share by nonsubject imports and domestic production.<sup>7</sup>

Conversely, the Federal Circuit has upheld a negative Commission determination, notwithstanding that the volume and market share of subject imports increased, when the increase came during a period of

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<sup>5</sup> 19 U.S.C. § 1677(7)(C)(i), *quoted in* CD at 24 and PD at 19.

<sup>6</sup> *See Grupo Industrial Camesa v. United States*, 853 F.2d 1577 (Fed. Cir. 1996); *see also Grupo Industrial Camesa v. United States*, 18 CIT 461, 853 F. Supp. 440 (1994) (explaining facts more fully.) The Court in the current case suggests that the Federal Circuit in *Camesa* paraphrased the causation standard in a way consonant with the most recent interpretation from the Court of Appeals. Slip Op. at 8 n.6. The effects of imports found in the determination affirmed in *Camesa* must, then, meet the “more than minimal” standard.

<sup>7</sup> *See United States—Imposition of Antidumping Duties on Imports of Fresh and Chilled Atlantic Salmon from Norway*, BISD—S/—, GATT Doc. ADP87 (Panel Report 1994), *found in* 2 Handbook of WTO/GATT Dispute Settlement 779 (1998) (“*Norwegian Salmon*”). As the Court notes in its decision here, the Statement of Administrative Action to the Uruguay Round Agreements Act favorably cites the decision in *Norwegian Salmon* upholding the Commission’s determination. Slip Op. at 12 n.9.

undersupply.<sup>8</sup>

As these decisions indicate, which of the alternative indicia of volume significance the Commission chooses to rely upon is for the Commission to determine on the facts of each case. Of particular relevance to the current remand is the GATT panel decision in *Norwegian Salmon*, which the Court repeatedly observes was endorsed by the Statement of Administrative Action of the Uruguay Round Agreements Act as “illustrative of a proper causation analysis.”<sup>9</sup> The *Norwegian Salmon* panel holds that there is “not ... a requirement that imports from third countries not subject to investigation be considered as part of an examination of the significance of an increase in the volume of imports from a country whose imports [are] the subject of an anti-dumping duty investigation.”<sup>10</sup> The *Norwegian Salmon* panel, like the Commission in that case, did not compare the volume of LTFV imports to the volume of nonsubject imports in connection with analyzing the significance of volumes. Rather, it compared them as a secondary explanation of why the price effects of the dumped imports might be regarded as significant despite the fact -- not present in the current investigation -- that subject imports consistently oversold the domestic product while nonsubject imports were lower-priced.<sup>11</sup> The *Norwegian Salmon* panel did not indicate that that comparison was required.

Despite its recognition of the binding character of *Norwegian Salmon*, the Court here, despite affirming the Commission’s conclusion that the absolute increase in the volume of LTFV imports was significant, remands as insufficiently explained the additional finding that subject import volumes are significant relative to consumption.<sup>12</sup> The Court’s decision in this regard thus appears to interpret the original determination in this investigation as depending upon the latter finding as necessary to its

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<sup>8</sup> See *Angus Chemical Co. v. United States*, 140 F.3d 1478 (1998).

<sup>9</sup> Slip Op. at 12 n.9; see also Slip Op. at 15 n.10.

<sup>10</sup> *Norwegian Salmon*, at ¶ 506.

<sup>11</sup> *Norwegian Salmon*, at ¶¶ 524, 557.

<sup>12</sup> Slip Op. at 16-17.

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conclusion that the domestic industry was materially injured by reason of imports. However, the facts of this case, as will be further addressed in these views, support the conclusion that the absolute increase in subject imports would support an affirmative determination even if they had not grown relative to consumption. Moreover, the Court particularly calls for further explanation of the significance of the volume increase relative to consumption in view of what it calls “the dominant presence of non-subject imports.”<sup>13</sup> This characterization of the presence of nonsubject imports appears to underlie the Court’s interpretation of the Commission as having found “one main cause of injury to the domestic industry.”<sup>14</sup> On the facts in this case, however, nonsubject imports do not appear predominant in their effects on the domestic industry. Accordingly, in addition to addressing the specific issue on which the Court has ordered further explanation, these views will also further explain the original determination’s findings on these other matters.

On the facts presented in the present record, the dramatic increase in absolute volume would support an affirmative determination even if subject imports had shown no gain in market share. The focus of the original determination was on the rapid and substantial rise in LTFV imports from Taiwan in 1996-97, when the U.S. industry entered a period of “oversupply” caused by the industry’s overestimation of demand. As found in the original determination, the SRAM industry is heavily dependent on operating income to maintain its competitiveness.<sup>15</sup> As Taiwan imports increased, however, the U.S. industry suffered rapidly falling operating income<sup>16</sup> and the industry suffered greatly reduced capacity utilization and significantly increasing inventories.<sup>17</sup> As both Taiwan imports and U.S. production are concentrated in

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<sup>13</sup> Slip Op. at 18.

<sup>14</sup> Slip Op. at 15.

<sup>15</sup> CD at 36, PD at 28.

<sup>16</sup> CD at 37, PD at 29.

<sup>17</sup> Table III-3, Confidential Staff Report (“CR”) at III-14 and Public Staff Report (“PR”) at III-8 (capacity utilization for cased SRAMs fell from [[ ]] percent in 1995 to [[ ]] percent in 1996, rising only to [[ ]] percent in 1997); Table III-7, CR at III-19 and PR at III-13 (rising inventories.)

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the market for fast SRAMs,<sup>18</sup> the rapid increase in Taiwan imports represented a loss in sales opportunities for the U.S. industry at a time when it was most dependent on additional sales. The result was a significant loss in potential operating earnings and a significant addition to the burden of unused capacity and inventories.

Moreover, in this case, as all Commissioners found in the joint portion of the original determination, demand in this industry is derived, so that lowered prices could not significantly expand demand.<sup>19</sup> That the supply of LTFV imports during such a period increased substantially and at an accelerating rate suggests that they would further depress U.S. prices. The evidence on price effects of Taiwan imports, discussed further in the next section of these views, supports this conclusion.

The fact that nonsubject imports also rose and gained in market share does not detract from these conclusions. To the contrary, that nonsubject imports did so means that the increase in LTFV imports was even more likely to have a significant impact on the domestic industry. The amount by which Taiwan imports in 1997 exceeded those imports in 1995, [[        ]] billion bits, represents fully [[        ]] percent of total shipments by U.S. producers in 1997.<sup>20</sup> Because of the growth in U.S. inventories, that increased amount of Taiwan imports represents a lower percentage, [[        ]], as compared to total U.S. production.<sup>21</sup> Whichever measure is used, however, the growth in LTFV imports would be significant in relation to the domestic industry even if they had not increased in market share.

The growth in subject imports, however, also outstripped the growth in U.S. consumption in 1996-1997. The Court has observed that the percentage by which the growth in LTFV imports exceeded the growth in consumption is small.<sup>22</sup> That does not mean, however, that this relative growth is insignificant.

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<sup>18</sup> Table I-1, CR at I-10 and PR at I-9.

<sup>19</sup> CD at 22-23, PD at 18.

<sup>20</sup> Table IV-3, CR at IV-7 and PR at IV-6.

<sup>21</sup> Compare Table IV-3, CR at IV-7 and PR at IV-6, and Table III-4, CR at III-15 and PR at III-9.

<sup>22</sup> Slip Op. at 17.

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As Congress has stated, “For one industry, an apparently small volume of imports may have a significant impact on the market; for another, the same volume might not be significant.”<sup>23</sup> Congress particularly noted the likely significance of increasing import penetration for industries such as this one producing products that have relatively short market lives and associated high research and development costs.<sup>24</sup>

During the 1996-97 period of oversupply, dumped imports gained [[ ]] percent of market share, rising from an [[ ]] percent share in 1995 to an [[ ]] percent share in 1997.<sup>25</sup> This gain represents a 30 percent increase in market share. The Court cites the lesser share increase as measured from the beginning of the period investigated.<sup>26</sup> In this analysis, however, the fact that Taiwan market share fell in 1994-95, when domestic supply could not keep up with demand, is generally of less importance than the rapid rise in Taiwan market share in the more recent period when domestic supply exceeded demand.

Since the market share of all other imports considered as a whole also increased, the gains in the subject import share came at the cost of the U.S. industry market’s share.<sup>27</sup> From 1995 to 1997, the U.S. industry market share fell from [[ ]] percent of apparent domestic consumption to [[ ]] percent.<sup>28</sup> The [[ ]] percent increase by Taiwan imports thus represents almost half of this decline, a remarkable increase since the Taiwan share began from a smaller import penetration than did nonsubject imports.

Such a relative increase in the LTFV imports’ market share is particularly significant given the strong incentive for the domestic industry at the time to increase its sales. That LTFV imports would grow at an even faster rate relative to consumption suggests that they are having significant price effects. In addition, as the Commissioners as a whole also found, in this industry, competition is largely driven by the

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<sup>23</sup> S. Rep. 96-249, at 88 (1979).

<sup>24</sup> *Id.* at 89. See CD at 21-22, 36, and PD at 17-18, 28.

<sup>25</sup> Table IV-4, CR at IV-9 and PR at IV-8.

<sup>26</sup> Slip Op. at 17.

<sup>27</sup> Table IV-4, CR at IV-9 and PR at IV-8.

<sup>28</sup> *Id.*

ability of competitors to reduce cost.<sup>29</sup> A loss in market share takes on additional significance as a detriment to the industry's ability to reduce costs through economies of scale.<sup>30</sup> Moreover, as will be described further below, the displacement of U.S. production from the market for new products through underselling by Taiwan imports would have a magnified impact on the U.S. industry's earnings and investment.

The Court has also requested further explanation of the determination that subject import growth was significant in view of the fact that over the period of investigation non-subject imports showed even greater increases both in absolute volume and in market share.<sup>31</sup> A comparison, such as the Court's decision makes, between the relative increases of subject and nonsubject imports from the beginning to the end of the period of investigation, fails to account for the likely effects of subject imports. Competitive conditions changed markedly in the course of the investigative period, both because of the shift from an undersupply to an oversupply phase of the business cycle and because of the introduction of new products. Particularly in this investigation, the latter part of the investigative period is most probative for determining present material injury to the domestic industry.

As found in the original determination, it was significant not only that subject imports grew in terms of absolute volume and in market share but also that "the largest increases occurred from 1996 to 1997, suggesting an accelerating trend."<sup>32</sup> In contrast, the greatest increases both in market share and in absolute volume of nonsubject imports came from 1994 to 1995, when the domestic industry was in an undersupply situation.<sup>33</sup> The relative importance of imports from Taiwan -- never insignificant --

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<sup>29</sup> CD at 22 and PD at 17.

<sup>30</sup> CD at 36 and PD at 28.

<sup>31</sup> Slip Op. at 17.

<sup>32</sup> CD at 34 and PD at 26; *compare* CD at 25 and PD at 20 (notable that market share of Korean imports fell at accelerating rate at the end of the period of investigation.)

<sup>33</sup> See Table IV-4, CR at IV-9 and PR at IV-8. In contrast, the market share of Taiwan imports fell during the undersupply period. *Id.*



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increased at the end of the period, when the domestic industry was in its worst straits and increased imports would have their greatest impact.

Moreover, the size of the increase in nonsubject imports is not likely to obscure the effects of subject imports.<sup>34</sup> For example, more than half of the increase by quantity in nonsubject imports in 1996-1997 came in imports from countries whose imports are predominantly concentrated in slower access speeds.<sup>35</sup> In contrast, Taiwan imports, like domestic industry shipments, are heavily concentrated in higher access speeds.<sup>36</sup> Of nonsubject imports, only non-subject Korean imports are more concentrated in the market for fast SRAMs than in the market for slow SRAMs.<sup>37</sup> Although the record does not indicate exactly in which SRAM products nonsubject imports as a whole increased most, the market share of non-LTFV products from sources heavily concentrated in the slower range gained market share of [[ ]] percent from 1995 to 1997.<sup>38</sup> In contrast, the market share of non-subject Korean imports decreased slightly, by [[ ]] percent.<sup>39</sup>

In short, the record does not suggest that, in the part of the market in which the U.S. and Taiwan products compete, nonsubject imports had a greater effect than subject imports. Nonsubject imports appear

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<sup>34</sup> Subject and nonsubject imports may be compared to assure, as the Court suggests, that the Commission is not attributing the effects of subject imports to other causes. Slip Op. at 10-11, 12 n.9. That purpose is accomplished by assuring that the Commission has not “‘attributed to the [LTFV] imports effects *entirely* caused from other supplying countries.’” Slip Op. at 15 n.10, *quoting Norwegian Salmon* at ¶ 557 (emphasis supplied). The inquiry thus contemplated involves assuring that the Commission is not effectively ‘blaming’ LTFV imports for impacts that are entirely the effects of other imports. This inquiry seems clearly different from the one suggested at some points in the Court’s opinion -- that other causes may be so predominant that they render the otherwise significant impact of LTFV imports immaterial. See Slip Op. at 7-8, 15, *quoting Gerald Metals, Inc. v. United States*, 12 CIT \_\_, \_\_, 27 F. Supp. 2d 1351, 1355 (1998). Because this determination does not find nonsubject imports clearly predominant in their impact on the domestic industry, the tensions between these two statements of the relevance of other causes does not arise on the facts here.

<sup>35</sup> See Table IV-2, CR at IV-3 and PR at IV-2 (imports by quantity); and Table I-1, CR at I-10 and PR at I-9 (distribution by access speed and source).

<sup>36</sup> Table I-1, CR at I-10 and PR at I-9.

<sup>37</sup> *Id.*

<sup>38</sup> Table IV-4, CR at IV-9 and PR at IV-8. Over the same period, LTFV Korean imports, which, unlike nonsubject Korean imports were also concentrated in the low-speed range, fell in share by [[ ]] percent. *Id.*

<sup>39</sup> *Id.*

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to have had their greatest effects in portions of the market in which Taiwan imports compete very little and which represent a relatively low portion of shipments by the U.S. industry. Indeed, where price comparisons for comparable speed products are available, they show that Taiwan imports generally undersold nonsubject imports.<sup>40</sup> Taiwan imports thus tended to put downward price pressure on both the domestic industry and those nonsubject imports with which they competed.

On this record, it does not appear that non-LTFV imports were in their effects on the U.S. industry a “dominant presence” as compared to LTFV imports from Taiwan.<sup>41</sup> Notwithstanding that nonsubject imports also had negative effects on the domestic industry, the record in this case does not support the conclusion that those effects could be regarded as rendering the effects of subject imports insignificant.

**C. Price Effects of Subject Imports**

The Court affirms the Commission’s finding that there was significant price underselling by the Taiwan imports.<sup>42</sup> The Court, however, concluded that it could not affirm the Commission’s determination that LTFV imports had significant price depressing effects when it failed to explain how it ensured that it did not attribute to those imports effects from other known factors.<sup>43</sup> This remand determination will therefore make more explicit the interrelationship among the factors that the Commission and the Court have identified.

As has been discussed, subject imports grew at an increasing rate in 1996-1997, reaching their

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<sup>40</sup> See CD at 24 and PD at 19, and tables there cited; CD at 37 and PD at 28-29.

<sup>41</sup> This conclusion does not mean that nonsubject imports did not significantly affect the domestic industry. In doing so, however, they also affected the conditions of competition between subject imports and products of U.S. producers. For example, as the Commission’s staff report noted, “competition between nonsubject SRAMs and both subject and U.S.-produced SRAMs is limited in the [[

]].” CR at II-13 and PR at II-9. That nonsubject imports [[  
]] would set the stage for more intense  
competition between subject imports and domestic product in the part of the market [[ ]].

<sup>42</sup> Slip Op. at 20.

<sup>43</sup> Slip Op. at 26.

highest volume and market share during the period of oversupply.<sup>44</sup> Since lowered prices would not significantly increase demand, the significant and accelerating increase in Taiwan imports would tend to push prices down. As the Court discusses, the Commission found significant price effects although product categories in which Taiwan imports consistently undersold the U.S. product were smaller in volume than categories in which Taiwan imports undersold in only a minority of comparisons.<sup>45</sup> Further explanation of the weight that the original determination gave to these categories may help elucidate the interplay among factors identified by the Court, most particularly the learning curve.<sup>46</sup>

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<sup>44</sup> The Court notes a discrepancy between the volume data from Table IV-3 and Tables V-1 through V-6, respectively (CR at IV-7, and V-6 to V-16; and PR at IV-6, V-5 to V-13) the table setting out U.S. shipments and apparent consumption, and the tables setting out pricing comparisons. *Slip Op.* at 17. This discrepancy reflects not a calculation error on the part of Commission staff, but rather discrepancies in responses to different items in the Commission's questionnaires. The discrepancies do not appear to be of such a magnitude as to affect the analysis in this or the original opinion, nor does the Court suggest that they would.

<sup>45</sup> *Slip Op.* at 25.

<sup>46</sup> Although the Court expresses misgivings about the Commission's use of bits as a measure of the relative volume of products, it concludes not to overturn the agency's determination on that account. *Slip Op.* at 23-25. Despite the Court's thoughtful discussion, this opinion adheres to the use of bits rather than units to describe the relative volumes of different price-comparison products. Throughout the investigation, both petitioners and respondents urged the Commission, in calculating volumes, to rely on bits rather than units. *See* Micron Technology Inc. Petitioner's Post Conference Brief, at 19 n.48 (March 21, 1997); Testimony of Mr. House, Counsel for Respondent LG Semicon, February 18, 1998, at 138; Joint Prehearing Brief of Respondents Hyundai Electronics Industries Co., Ltd. and Hyundai Electronics America, Inc. ("Hyundai"), and LG Semicon Co., Ltd. and LG Semicon America Inc. ("LG Semicon") at 4-6 (responding to specific question from staff)(February 26, 1998); Final Comments of Hyundai and LG Semicon, at 2-6 (March 23, 1998). As the Commission stated in addressing the issue in its preliminary determination, "As the density of SRAMs increases on average from year to year, it is possible for the number of bits to climb for a given measure at the same time that the number of units falls....Because a given unit can represent a varying amount of memory, we believe using bits we are better able to compare across different product types and years." *Static Random Access Memory Semiconductors from the Republic of Korea and Taiwan*, Inv. Nos. 731-TA-761-762 (Preliminary), USITC Pub. No. 3036, at 16 n.94 (April 1997.) *See also* CD at 25 n.130 and PD at 19 n.130. In keeping with this observation, the learning curve, to which the Court's decision directs the Commission's attention, was described to the Commission, in terms not of price per unit but of price per bits. *See* hearing tr. at 37-38, 56-58 (Finan), *cited in* CD at 22 n.107 and PD at 17 n.107. Moreover, the record indicates that price competition is not only discrete as to particular product categories, as the Court's opinion appears to assume, but can also occur across product categories. *See* CD at 10 and PD at 8. The task of price analysis in this investigation is largely to trace the effects of growing volumes of LTFV imports on U.S. prices. To have used one

(continued...)

Concurrent with the period of oversupply was the growing importance of two new products that were introduced in the latter part of the investigative period. The Commission's original determination discussed the importance of new products to the industry.<sup>47</sup> As we there suggested, the health of the industry depends upon its success in new products, which tend over time to replace existing products. Prices for such new products tend to start high and decline.<sup>48</sup> The arrival of additional competitors as well as the achievement of efficiencies will tend to drive prices down to the point at which the products are sold on a commodity basis.<sup>49</sup> The latter factor is what has been referred to as the learning curve.<sup>50</sup> However, in the initial period of selling a more advanced version or new generation of a product, firms enjoy a price premium.<sup>51</sup> Such a premium would take on increased importance to the industry's operating income in a period in which oversupply is generally driving prices down.

It was in this context that the Commission's original opinion emphasized the apparent price suppressing effects of underselling in the two new products introduced to the market during the investigative period. Taiwan imports consistently undersold the U.S. product, generally by substantial margins. More specific analysis of the pricing, however, shows how critically Taiwan pricing disrupted ordinary industry patterns for these products. In the first nine months after the entry of Taiwan imports into the market for Product 1, the Taiwan price fell to about half of its original value, maintaining a margin generally about 40 percent below the U.S. price.<sup>52</sup> However, in the two months from December 1995 to February 1996, the fall

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<sup>46</sup> (...continued)

measure of volume to analyze volume increases and another to compare price comparison products would have distorted the causation analysis.

<sup>47</sup> CD at 21-22 and PD at 17-18.

<sup>48</sup> CD at 22 and PD at 17.

<sup>49</sup> *Id.*

<sup>50</sup> *Id.*

<sup>51</sup> *Id.*

<sup>52</sup> Table V-1, CR at V-6 to V-7 and PR at V-6.

became even more radical, as Taiwan imports fell to less than a third of their value in December.<sup>53</sup> Domestic prices fell precipitously. Yet they were not able to keep up with the further Taiwan price declines.<sup>54</sup>

Although domestic product prices fell below the Taiwan import price level of February 1996 in two monthly comparisons prior to May 1997, they did not decline to a level that low on a sustained basis until more than a year later.<sup>55</sup> By that time, however, the Taiwan price had long since halved again.<sup>56</sup> In short, at least as of early 1997, the Taiwan pricing of this new product effectively ignored the normal price premium and learning curve effects that normally predominate in pricing of new products.

The pattern is even more stark in the pricing of Product 2. The domestic industry introduced Product 2 in the second half of 1996 at a dramatically lower price than the price at which Product 1 was introduced.<sup>57</sup> As all Commissioners noted in the original determination, price reductions in one area of the market can affect other areas, even across product families.<sup>58</sup> This effect is evident in the introductory price of Product 2. Nevertheless, from the start, Taiwan pricing of Product 2 disregarded any effect of either a learning curve or a price premium; when Taiwan imports entered the U.S. market two months later, they did so at a price that was one-seventh the domestic product price.<sup>59</sup> The domestic product price fell by almost two-thirds in the next three months and declined further by the end of the period.<sup>60</sup> Nevertheless, Taiwan import prices for Product 2, which soon became the leading new product, were so low that, although they rose over the period, they continued by the end of the POI to be well below U.S. prices.<sup>61</sup>

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<sup>53</sup> *Id.*

<sup>54</sup> *Id.*

<sup>55</sup> Table V-1, CR at V-7 and PR at V-6.

<sup>56</sup> *Id.*

<sup>57</sup> Compare Table V-1 to Table V-2, CR at V-6 to V-8 and PR at V-5 to V-7.

<sup>58</sup> CD at 10 and PD at 8.

<sup>59</sup> Table V-2, CR at V-8 and PR at V-7.

<sup>60</sup> *Id.*

<sup>61</sup> *Id.*

Although the Commission did not adopt a fixed rate for the learning curve,<sup>62</sup> the evidence before the Commission indicated that this process is more gradual than the precipitous falls in new-product prices that occurred during the later part of the POI. The Taiwan importers' apparent decision effectively to price their products below any level suggested by the learning curve factor in 1996 and 1997 could not but undermine and distort established industry pricing patterns. The volume effect of that underselling can be observed by comparing the relative proportion of Taiwan imports to shipments by U.S. producers in the product categories in which underselling was consistent in 1996-1997, to that proportion in product categories where pricing was mixed. Taiwan sales of Products 1 and 2 combined exceeded U.S. industry shipments in both years, while Taiwan sales of the long-established Products 3 and 5 equaled in both years approximately one-third of the level of domestic industry shipments.<sup>63</sup> The evidence suggests that not only did Taiwan underselling drive down the prices of new products, they also drove out U.S. industry participation in the market for those new products.

It is apparent that price trends for the longer-established products, Products 3 and 5, were largely driven by the relationship of supply and demand over the POI, rather than simply as a function of a learning curve. During the undersupply period of 1994-95, prices for Product 3 remained steady, while prices for Product 5 rose.<sup>64</sup> Prices for these products fell substantially in 1996-97, as volumes increased. The question therefore is whether Taiwan imports had a significant effect on these price declines even though a consistent pattern of underselling by Taiwan imports in prior years for these products turned to mixed

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<sup>62</sup> As we noted in our original determination, testimony before the Commission suggested that the price per bit falls 38 percent every two years. CD at 22 n.107, PR at 17 n.107. The Commission did not, however, adopt any particular fixed rate as reflecting a standard learning curve that would be constant over time.

<sup>63</sup> Tables V-1, V-2, V-3, and V-5, CR at V-6 to V-10, and V-13 to V-14, and PR at V-5 to V-9, and V-11 to V-12.

<sup>64</sup> Table V-3, CR at V-9 to V-10, PR at V-8 to V-9; Table V-5, CR at V-13 to V-14, PR at V-11 to V-12. *See also* Figures V-3, V-4, CR at V-18, V-19, PR at V-13.

overselling and underselling in 1996-97.<sup>65</sup>

Both of these products were better established than the newly introduced Products 1 and 2 and thus would tend more by the end of the period to sell on a commodity basis. As the Commission has recently stated in another investigation, “in a commodity market characterized by intense priced-based competition, a mixed pattern of under- and overselling is to be expected; such a pattern, together with increasing volume of subject imports, indicates that subject imports played a substantial role in the price declines ...”<sup>66</sup> In this case, during 1996-97, Taiwan imports of Product 3 undersold the domestic product in between one-quarter and one-third of comparisons.<sup>67</sup> Subject imports of Product 3 increased significantly, rising at an accelerating rate from 1995 to 1997.<sup>68</sup> Thus, the evidence suggests that, while multiple factors including domestic producer competition contributed to the fall in Product 3 prices, Taiwan subject imports were themselves a significant factor in the downward price pressures.

In analyzing the effects of subject imports on domestic prices of Product 5, confirmed lost revenue findings are more probative than underselling. Although subject imports of Product 5 undersold the domestic product in over one-third of comparisons in 1996 and 1997, the volume of subject imports sold during those years was lower than the volume sold in 1994 and 1995.<sup>69</sup> However, a substantial number of lost revenue allegations for that product were confirmed.<sup>70</sup> The confirmed lost revenues of more than \$40 million being limited to the period of the fourth quarter of 1995 through 1997, they are equivalent to

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<sup>65</sup> *Id.*

<sup>66</sup> *Certain Stainless Steel Plate from Belgium, Canada, Italy, Korea, South Africa, and Taiwan*, Inv. Nos. 701- TA-376, 377, and 379 (Final) and Inv. Nos. 731-TA-788-793 (Final), USITC Pub. 3188, at 19 (May 1999).

<sup>67</sup> Table V-3, CR at V-9 to V-10, PR at V-8 to V-9; Table V-5, CR at V-13 to V-14, PR at V-11 to V-12.

<sup>68</sup> Table V-3, CR at V-9 to V-10, PR at V-8 to V-9.

<sup>69</sup> Table V-5, CR at V-14, PR at V-12.

<sup>70</sup> Table V-8, CR at V-24 to V-28, PR at V-15.

approximately one-seventh of the value of U.S. producer shipments of Product 5 in that period.<sup>71</sup> Thus, price competition from Taiwan imports had a direct and significant effect on price levels for Product 5. These transactions represent about one-fifth by volume of the U.S. industry's sales of Product 5 in that period and less than half by volume of Taiwan imports of the product.<sup>72</sup> It is apparent that both the pattern of under- and overselling and the trends of Taiwan shipments of this product would have changed substantially had the U.S. producers not significantly lowered their prices to avoid losing sales to low-priced Taiwan imports. The confirmed lost revenues for this product alone are equivalent to between 2 and 3 percent of the total value of U.S. shipments in 1996-97.<sup>73</sup>

In summary, although the price pressures by Taiwan imports manifested themselves in different ways in different product categories, Taiwan imports in 1996-97 had a significant impact on the prices of the domestic like product. Many of the reasons why this analysis does not attribute to LTFV imports the effects of non-LTFV imports are discussed in the previous section of this opinion and will not be here repeated. It should also be noted in particular that there is no possibility of false attribution of effects where allegations of losses due to Taiwan imports have been confirmed. Where domestic producers made allegations of sales or revenue lost due collectively to both Taiwan imports and nonsubject Korean products, those allegations were uniformly unconfirmed.<sup>74</sup> The significance of the effects of LTFV imports in contrast to those of nonsubject imports is also reflected in the fact that the only company that reported that its SRAMs were not interchangeable with Taiwan imports but were interchangeable with nonsubject imports is also the only company that did not report an operating loss in 1997.<sup>75</sup>

The Court also requests that the Commission address the influence of global oversupply on U.S.

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<sup>71</sup> See Table V-5, CR at V-13 to V-14, PR at V-11 to V-12 (quantities and prices of Product 5); Table V-8, CR at V-24 to V-28, PR at V-15 (lost revenue allegations and responses).

<sup>72</sup> *Id.*

<sup>73</sup> Compare CR at V-24 to V-28 and PR at V-15 with Table IV-3, CR at IV-7, PR IV-6.

<sup>74</sup> See Table V-8, CR at V-24 to V-28, PR at V-15.

<sup>75</sup> Compare CR at II-9, PR at II-6 and Table VI-3, CR at VI-7, PR at IV-2.



pricing.<sup>76</sup> In its original determination, the Commission as a whole made no finding with respect to the existence or extent of global oversupply. In ascribing to the Commission a finding concerning global conditions,<sup>77</sup> the Court somewhat misreads the original determination. Our discussion of oversupply was specific to the conditions in the U.S. market; U.S. producers misforecast the growth of demand in the U.S. market.<sup>78</sup> To make detailed findings concerning the level of relative supply and demand around the world exceeds the statutory mission of the Commission to investigate injury to the U.S. industry and indeed would exceed its investigative resources.

There is, of course, evidence that many of the same factors that have affected U.S. producers have also affected foreign producers. The general increase of imports to the United States despite excess capacity in the U.S. and falling prices suggests as much. Nevertheless, the record also suggests that global oversupply, whatever its extent may be, is not an undifferentiated factor whose influence on the United States market is independent of the particular importations that actually occur. Different sources of supply have reacted quite differently. Some have sold at less than fair value, others have not. Various foreign producers, even from within a particular country, have over the period of investigation increased their supplies to the United States at different relative rates. Prices are not cleared in this market on a world-wide basis, but rather are often negotiated with particular purchasers by companies whose products the purchasers have deemed qualified. Pricing levels of imports from different sources have differed even for comparable products.

More particularly, despite the ability of producers to a certain extent to shift production among

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<sup>76</sup> The previous section of this determination addresses, in conjunction with the Court's similar question concerning volume analysis, the Court's specific question concerning how the Commission could be assured that it was not attributing the price effects of nonsubject imports to subject imports.

<sup>77</sup> Slip Op. at 26 n.19.

<sup>78</sup> See CD at 23 and PD at 18; and CR at V-3 and PR at V-3. The SRAM industry there being discussed is the United States SRAM industry. A relatively small percentage of U.S. product is exported. CR at II-5 and PR at II-4; and Table III-5, CR at III-16, PR at III-11.

products, Taiwan imports and domestic industry shipments are more heavily concentrated in the U.S. market for fast SRAMs than any of the nonsubject imports. Consequently, both Taiwan and U.S. producers will be more subject to the perils of under- and overestimating demand in that market than their other competitors. This factor undoubtedly explains why Taiwan shipments lost market share during the undersupply period and why Taiwan shipments gained share at an accelerating rate at the end of the POI. It is also reasonable to conclude that the heavy concentration of Taiwan and domestic industry shipments in the same sector influenced the evident decision of Taiwan importers to price aggressively in the new product market in order to gain market share there.<sup>79</sup> Similarly, their mutual concentration in the same market segment would have influenced the evident decision of U.S. producers to lose revenue at the bottom of the business cycle rather than lose sales in the market for the largest-volume product in which they competed with Taiwan imports. Global oversupply is not a catch-all factor that can explain away either the particular behavior or the particular effects of Taiwan imports in the U.S. market for SRAMs.

#### **D. Impact of Subject Imports on the Domestic Industry**

Although the Court's remand decision specifically directed the Commission's attention to its findings on volume and price effects, it is also appropriate to elaborate on the Commission's original findings on the impact of subject imports in view of the fuller discussion on remand of volume and price effects.

The statute requires the Commission to consider the impact of LTFV imports on the domestic industry "within the context of the business cycle and conditions of competition that are distinctive of the

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<sup>79</sup> The radical pricing pattern for Taiwan imports, which gained them market share in new products as compared to other product categories, indeed appears to have been adopted independently of oversupply conditions. As found above, the most precipitous fall in Product 1 prices occurred at the start of 1996. As the Commission found in our joint views in the original determination, the conditions that created an oversupply became apparent in mid-1996. CD at 23 and PD at 18. Though Taiwan imports continued to follow this pricing pattern in new product categories into the oversupply period, to significant effect particularly for Product 2, such new-product pricing in disregard of learning curve effects cannot be considered to be simply a necessary consequence of global supply conditions.

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affected industry.”<sup>80</sup> In adding this provision, Congress specifically enjoined the Commission to consider imports’ impact on a domestic industry’s ability to invest during the bottom of business cycles.<sup>81</sup> This Congressional direction is particularly pertinent in this investigation, in which the record shows that subject imports surged during the 1996-1997 period of oversupply in the U.S. market. As found in the original determination, the ability of this industry to generate income is vital to its ability to make the ongoing investment necessary to remain competitive.<sup>82</sup> It is for that reason that the original determination focused on the contribution of Taiwan imports to the very low operating income in 1996 and the loss in operating income in 1997.<sup>83</sup>

Although the original determination, in analyzing price effects, noted the instances of lost sales and revenues,<sup>84</sup> it did not specifically note the relationship between those losses and industry operating income. That relationship provides perhaps the most direct possible evidence of the significant effects of subject imports. For the period 1996-1997, the industry’s net operating loss was about \$30 million.<sup>85</sup> In virtually the same period, confirmed revenue losses by U.S. producers to Taiwan imports alone amounted to more than \$40 million.<sup>86</sup>

These lost revenues almost entirely concerned one of the established products. As has been observed, the Taiwan underselling had its most direct influence on U.S. prices and volumes for new products. The relative inability of the U.S. industry to gain sales of new products, at expected premium prices, constitutes a substantial disruption of the industry’s ability to survive the business cycle. Such failures impair the U.S.

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<sup>80</sup> 19 U.S.C. § 1677(7)(B)(I).

<sup>81</sup> See Sen. Rep. 100-71, at 116 (1987).

<sup>82</sup> CD at 36 and PD at 28.

<sup>83</sup> CD at 37 and PD at 28-29.

<sup>84</sup> CD at 35 and PD at 27-28.

<sup>85</sup> Table VI-3, CR at VI-7, PR at VI-2.

<sup>86</sup> CR at V-21 and PR at V-14 to V-15. The quote dates for all confirmed lost revenue allegations are in 1996 or 1997 except for certain allegations by one U.S. producer who dated some quotes from the fourth quarter of 1995 to the first quarter of 1997. Table V-8, CR at V-24 to V-28, PR at V-15. All confirmed lost sales allegations were for quotes in [[ ]]. Table V-7, CR at V-22 to V-23, PR at V-15.

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industry's ability to afford further investment, since new products should make a disproportionate contribution to earnings. Moreover, such failures adversely affect expectations for returns from new products. Particularly since over time new products tend to supplant older products, such effects are both immediate and long-lasting.

Even apart from these more specific effects, the [[ ]] percent of market share that the domestic industry lost from 1996 to 1997 to subject imports cannot be deemed insignificant in its impact when compared to operating losses of [[ ]] percent in 1997.<sup>87</sup> The market share lost to subject imports clearly represents a substantial loss in the domestic industry's opportunity to generate income. Moreover, as observed in the original determination, falling market share affects an industry's ability to participate in economies of scale.

There can be little question that Taiwan imports significantly exacerbated the severity of the domestic industry's performance decline in 1996-97. At a point in the business cycle when the domestic industry was most in need of generating income through sales, Taiwan imports increased dramatically through vigorous price competition, significantly contributing to lowering price levels. Even where Taiwan imports did not increase, domestic producers were forced by the pricing of Taiwan imports to significantly lower prices to maintain sales. Both direct and indirect evidence demonstrate that these effects significantly exacerbated the decline in operating margins in 1996-97. Those impacts were both of serious immediate consequence, as reflected in the fall of the domestic industry's operating margins into the red, and likely to be significant for the long term, as reflected in falling capital expenditures and research and development for an industry heavily dependent on continuing investment.

Although other factors had negative effects on the domestic industry, and indeed interacted with the negative effects of subject imports, the impact of subject imports is not attributable to other causes. While

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<sup>87</sup> Table IV-4, CR at IV-9, PR at IV-8 (loss of market share) and Table VI-1, CR at VI-3, PR at VI-2 (operating losses).

the effects of Taiwan imports cannot be viewed in isolation, those effects were significant in themselves. As set forth both in these remand views and the Commission's original determination, the domestic industry producing SRAMs was materially injured by reason of subject imports from Taiwan.

**CERTIFICATE OF SERVICE**

I, Michael Diehl, hereby certify that on this 30th day of August 1999, true and correct copies of the **CONFIDENTIAL and NONCONFIDENTIAL COMMISSION'S DETERMINATION ON REMAND**, were served by certified mail, return-receipt requested, postage prepaid, upon the following:

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