DRAMs and DRAM Modules From Korea

Investigation No. 701-TA-431
(Section 129 Consistency Determination)
VIEWS OF THE COMMISSION

On October 14, 2005, the Commission received a written request from the United States Trade Representative (USTR) to issue a determination under section 129(a)(4) of the Uruguay Round Agreements Act (URAA) that would render the agency’s action in connection with the countervailing duty investigation concerning DRAMs and DRAM Modules from Korea not inconsistent with the findings of a World Trade Organization (WTO) dispute resolution panel. In response to USTR’s request, we hereby issue our determination and views.

On the basis of the record in the Commission’s original investigation, the report of the WTO Panel in United States – Countervailing Duty Investigation on Dynamic Random Access Memory Semiconductors (DRAMs) from Korea, and comments received in response to the Federal Register notice in this proceeding, we determine that an industry in the United States is materially injured by reason of imports of dynamic random access memory semiconductors (DRAMs) and DRAM modules that have been found to be subsidized by the Republic of Korea.

I. BACKGROUND

Original Investigation. The Commission instituted its countervailing duty investigation of DRAMs and DRAM modules from Korea effective November 1, 2002, following receipt of a petition filed by Micron Technology, Inc. (Micron). Micron is a domestic producer of DRAMs and DRAM modules. In August 2003, the Commission unanimously determined that an industry in the United States was materially injured by reason of subsidized imports of DRAMs and DRAM modules from Korea.

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4 At the time of the determination, there were four sitting Commissioners. Commissioners Koplan, Hillman, and Okun voted in the affirmative. Commissioner Miller did not participate. Original Determination, USITC Pub. 3616 at inside cover, 1.
The Department of Commerce subsequently issued a final countervailing duty order against these products.\(^5\)

_**WTO Proceedings.**_ The Republic of Korea subsequently initiated a dispute settlement proceeding at the WTO against the U.S. countervailing duty measure. Korea’s action challenged both the Department of Commerce’s subsidy determination and the Commission’s injury determination.\(^6\)

The WTO dispute resolution panel circulated its report on February 21, 2005. The panel evaluated six principal claims that Korea raised against the Commission’s injury determination. On five of these, it ruled entirely in the Commission’s favor, finding that these aspects of the Commission’s determination were not inconsistent with the asserted provisions of the WTO Agreement on Subsidies and Countervailing Measures (SCM Agreement).\(^7\) The sixth claim concerned whether the Commission properly complied with the requirement under Article 15.5 of the SCM Agreement that injury caused by other known factors not be attributed to the subject imports. The panel concluded that the Commission satisfactorily addressed the factors of non-subject imports;\(^8\) capacity increases by DRAM suppliers other than Hynix, the sole producer of subject merchandise;\(^9\) and the purported technological and production difficulties of Micron.\(^10\) It also concluded, however, that the Commission did not properly explain how it did not attribute to the subject imports any injury caused by declines in demand growth.\(^11\) In this one

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\(^6\) Korean producer Hynix Semiconductor Inc. (Hynix) and its affiliated U.S. importer also initiated separate judicial proceedings against the Commission at the U.S. Court of International Trade. This litigation, which is still pending before the CIT, is not pertinent to this section 129 proceeding and will not be discussed further.
\(^7\) The five issues on which the panel upheld the Commission on all grounds concerned: (1) the Commission’s evaluation of subject import volume; (2) its evaluation of subject import price effects; (3) its consideration of all factors relevant to the overall condition of the domestic industry; (4) its demonstration of the requisite causal link between the subject imports and material injury; and (5) its definition of the domestic industry.
\(^8\) WTO Panel Report, ¶¶ 7.356-.360.
\(^9\) WTO Panel Report, ¶¶ 7.361-.363.
\(^10\) WTO Panel Report, ¶¶ 7.369-.371.
respect, the panel concluded that the Commission’s determination was inconsistent with the SCM Agreement.

Neither the United States nor Korea appealed the aspects of the panel’s decisions that addressed the Commission injury determination to the WTO Appellate Body. Both countries did appeal other aspects of the panel’s decision, principally concerning Commerce’s subsidy determination. On June 27, 2005, the Appellate Body resolved the issues on appeal in favor of the United States.12

On July 20, 2005, the WTO Dispute Settlement Body (DSB) adopted the panel report as modified by the Appellate Body. The DSB’s action finalized the panel’s conclusions concerning the Commission’s determination. In other words, the DSB concluded that the Commission’s determination does not comply with Article 15.5 of the SCM Agreement only insofar as the Commission failed adequately to explain how it did not attribute to the subject imports any injury caused by changes in demand. The DSB concluded that the Commission’s determination is not WTO-inconsistent in any other respect. On August 3, 2005, the United States informed the DSB that it intended within a reasonable period of time to bring its measure into conformity with the DSB’s rulings and adopted recommendations.13

Section 129 proceedings. On August 26, 2005, USTR transmitted a request to the Commission pursuant to section 129(a)(1) of the URRA that the Commission issue an advisory report on whether Title VII of the Tariff Act of 1930, as amended,14 permitted it to take steps in connection with the DRAMs countervailing duty investigation that would render its action in the investigation not inconsistent with the findings of the WTO dispute settlement panel.15 On September 22, 2005, the Commission responded to

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13 See WTO Dispute Settlement Understanding (DSU), Article 21.3. On November 7, 2005, the United States and Korea informed the DSB of their mutual agreement that the reasonable period of time for implementation of the DSB’s recommendations would extend to March 8, 2006.

14 19 U.S.C. § 1671 et seq.

USTR in the affirmative.\textsuperscript{16} USTR then made a request, which the Commission received on October 14, 2005, that it issue a determination under section 129(a)(4) of the URAA that would render its action in the DRAMs investigation not inconsistent with the findings of the WTO dispute settlement panel.\textsuperscript{17}

The Commission then published a notice in the \textit{Federal Register} instituting this proceeding.\textsuperscript{18} The Commission stated it was not reopening the record of the proceeding for the submission of new factual information, but provided parties to the investigation with the opportunity to submit comments and rebuttal comments with respect to those issues within the scope of the proceeding.\textsuperscript{19}

\begin{itemize}
\item[\textsuperscript{16}] Letter from Chairman Stephen Koplan to USTR Rob Portman (Sept. 22, 2005).
\item[\textsuperscript{17}] Letter from USTR Rob Portman to Chairman Stephen Koplan (Oct. 7, 2005).
\item[\textsuperscript{18}] 70 Fed. Reg. 66848 (Nov. 3, 2005).
\item[\textsuperscript{19}] Id. at 66849.
\end{itemize}
20 On January 3, 2006, Micron submitted a letter to the Secretary objecting to certain aspects of the Hynix rebuttal comments. Micron contends that certain portions of the comments either exceed the scope of permissible comments that the Commission set forth in the November 3, 2005 Federal Register notice or violate the page limitations set forth in the notice. Hynix filed a response on January 5, 2006 in which it contends that its rebuttal submission was within the permissible scope and page limitations and requests that a portion of Micron’s November 3, 2006 letter be stricken.

We agree with Micron that section VI of the Hynix rebuttal comments raises issues beyond the permissible scope of comments. In the Federal Register notice, the Commission emphasized that:

this proceeding only involves issues related to the WTO dispute settlement findings and does not involve issues that were not in dispute in the WTO proceeding or on which the WTO dispute settlement panel found the United States in conformity with its obligations under the WTO. As discussed above, the only issue on which the WTO dispute settlement panel found the Commission’s injury determination inconsistent with the ASCM pertained to the question of whether the Commission attributed to the subject imports any injury that may have been caused by declines in demand. Any material in the parties’ submissions that contains new factual information or that addresses any issue beyond the scope of this proceeding will be disregarded. 70 Fed. Reg. at 66849.

The discussion in section VI of the Hynix rebuttal comments concerns a purported error the Commission made in categorizing pricing data pertaining to nonsubject imports that it used in its underselling analysis. See Hynix Rebuttal Comments at 15-19. However, the WTO panel found that the Commission’s underselling analysis – including its treatment of nonsubject imports – was not inconsistent with the SCM Agreement. WTO Panel Report, ¶¶ 7.267-.269, 7.358-.359. Hynix’s contention that its argument simply responds to an argument Micron made in its comments is spurious. Micron’s comments said nothing about the Commission’s pricing database, nor did Micron seek for the Commission to revisit its underselling analysis, as Hynix contends. Hynix’s pricing database argument does not fall within the scope of these proceedings. We have consequently disregarded it. Because the argument in section VI is beyond the scope of the proceedings, the supporting documentation Hynix has provided in Exhibits 3 and 4 of its rebuttal comments is also beyond the permissible scope. We have disregarded these materials as well.

Micron also objects to section IV of the Hynix rebuttal comments. This section of the comments describes a variance analysis that purports to measure the effects on the domestic industry of reductions in demand growth. Hynix’s argument concerning the variance analysis is pertinent to the scope of the proceedings, and we discuss it below. Micron’s alternative request to submit a surrebuttal to this argument is denied; we believe that, in light of the two rounds of briefing the parties filed, further rounds would not have been productive or useful. Because we do not perceive Micron’s January 3, 2005 letter to be a substantive submission, we also deny Hynix’s request to strike portions of the letter.

Micron objects to Exhibits 1 and 2 of the Hynix rebuttal comments as exceeding the permissible page length. We have considered these materials. Exhibit 1 consists of two pages of material and Exhibit 2 consists of one page of material. Because we are disregarding the five pages of section VI, the material we are considering from Hynix’s rebuttal comments consists of 18 pages, which is under the 20-page limit established in the Federal Register notice.
II. ANALYSIS

A. The Pertinent Discussion in the Original Determination

As previously discussed, the only respect in which the panel found the Commission’s original determination to be inconsistent with United States’ obligations under the SCM Agreement concerned the discussion of changes in demand. Consequently, this is the only aspect of the original determination we revisit in this consistency determination.

The pertinent discussion in the original determination read as follows:

The parties disagreed about the reason for these price declines. The record indicates that apparent consumption of DRAM products measured in billion of bits increased throughout the period of investigation, although it did not increase as much in the later portion as in the earlier portion of the period of investigation. This slowing in the growth of apparent domestic consumption in the latter portion of the period of investigation may be due in part to a decline in the quantity of personal computers sold; 2001 is reported to be the first year for which the number of personal computers sold declined rather than increased. Historically, there appears to be no clear correlation between growth of the DRAMs market and price movements. While slowing demand played some role, together with the operation of the DRAM business cycle and product life cycles, the unprecedented severity of the price declines that occurred from 2000 to 2001 and persisted through 2002 indicates that supplier competition was an important factor.

The panel perceived this passage as: (1) “the ITC clearly acknowledg[ing] the negative impact of slowing demand;” (2) the Commission further acknowledging that “slowing” demand “played ‘some role’ in the state of the domestic industry;” and (3) the Commission perceiving the effects of “slowing” demand to be distinct from the effects of the DRAMs business cycle on the domestic industry. The panel’s findings with respect to the second point appear predicated on a conclusion that Korea had made a prima facie showing that demand changes had played some role in price declines during the

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21 Commissioners Lane, Pearson, and Aranoff were not members of the Commission at the time of the original determination and did not participate in that determination. They have reviewed de novo the record from the original determination. For purposes of this section 129 proceeding, they have adopted all findings from the original determination that have not been elaborated upon in this consistency determination.

22 Original Determination, USITC Pub. 3616 at 24-25 (footnotes omitted).


Commission’s period of investigation and that “[t]he US does not rebut Korea’s arguments, or deny the existence of the record evidence relied upon by Korea.”\textsuperscript{26} The panel faulted the Commission for failing to elaborate further concerning the role that demand changes played in causation of injury, and failing to distinguish the injury caused by demand changes from the injury caused by the subsidized imports.\textsuperscript{27}

To correct the defects that the panel identified, we address three sets of issues below. First, we discuss the nature of U.S. demand for the domestic like product, which the Commission defined as all DRAM products,\textsuperscript{28} during the period of investigation. Second, we consider whether the record indicates that the observed demand trends were likely to have significant effects on prices charged for DRAM products in the United States. Third, we consider how any injurious effects that demand trends may have had on DRAM prices may be distinguished from those caused by the subject imports.

Significantly, the panel report did not fault the Commission for failing to perform a quantitative analysis of the various causes of injury. The Commission’s original determination did not purport to perform such an analysis. Nevertheless, the WTO panel concluded that the Commission determination was consistent with the non-attribution requirements set forth in Article 15.5 of the SCM Agreement with respect to three of the four factors other than subsidized imports that Korea alleged were alternative causes of injury. The panel emphasized that the SCM Agreement does not require an investigating authority such as the Commission to perform a quantitative analysis of the various causes of injury:

We note that the Appellate Body has clarified that the ITC was “free to choose the methodology it [would] use” to separate and distinguish the injurious effects of other factors from those of the alleged subsidized imports. We also note that Korea has acknowledged that the ITC was not required to quantify the injury caused by the other factors in order to separate and distinguish it from the injurious effects of the alleged subsidized imports.

\textsuperscript{26} WTO Panel Report, ¶ 7.367.
\textsuperscript{27} WTO Panel Report, ¶¶ 7.366, 7.368.
\textsuperscript{28} Original Determination, USITC Pub. 3616 at 5.
The US asserts that its analysis demonstrated that subsidized imports had their own injurious effects, independent from the injurious effects of other factors. Korea has not argued that such an approach would not comply with the requirements of Article 15.5.  

Consequently, Hynix’s contention that econometric modeling is “[t]he most logical and practical way” to conduct the non-attribution analysis cannot be reconciled with either the language in the WTO panel report or the panel’s action in sustaining on most grounds the Commission’s original non-attribution analysis, which was not based on econometric modeling. We therefore deny Hynix’s request that we reopen the record in this proceeding to permit it to submit new materials, including econometric modeling. In our view the extensive information the Commission collected and the parties submitted during the original investigation is sufficient to enable us to evaluate this issue.

B. U.S. Demand During the Original Period of Investigation

In the original investigation, the Commission used bits as the basic measure of DRAM quantity, because total bits are a uniform measure of DRAM products. In their submissions in this proceeding, the parties have continued to use bits as a measure of quantity. We consequently will continue to use bits as the basic measure of output.

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30 Hynix Comments at 14.
31 An underlying premise of Hynix’s request is that the Commission is required by the WTO Agreements and U.S. law to “isolate” the effect of subject imports from other factors. See Hynix Comments at 6-15. Hynix’s view of the requirements of the WTO Agreements cannot be reconciled with the DRAMs panel report, which accepted the U.S. position that the Commission has satisfied the requirements of SCM Agreement Article 15.5 when it explained – without quantification or “isolation” – how the subject imports had injurious effects distinct from those of other known factors. Likewise, our reviewing courts have expressly rejected the proposition that U.S. law requires the Commission to isolate any injury caused by other potential factors from the injury caused by the subject imports. Taiwan Semiconductor Industry Ass’n v. ITC, 266 F.3d 1339, 1345 (Fed. Cir. 2001), citing Uruguay Round Agreements Act Statement of Administrative Action (SAA), H.R. Doc. No. 103-316, vol. 1 at 852 (1994); Asociacion de Productores de Salmon y Trucha de Chile AG v. USITC, 180 F. Supp.2d 1360, 1374 (Ct. Int’l Trade 2002).
32 Original Determination, USITC Pub. 3616 at 20. The Commission acknowledged that there were some difficulties with the use of bits, as total bits are a function of chip density and product mix, each of which changes over time. Id.
33 E.g. Micron Rebuttal Comments at 8; Hynix Comments at 21-22; Hynix Rebuttal Comments at 11-12. Given Hynix’s recurrent use of bit-based quantity measurements in its submissions in both the original investigation and this proceeding, we give little credence to its argument, adopted for the first time in these proceedings, see Hynix Comments at 18, that units of DRAM products sold may be a more accurate measure of quantity.
The Commission collected data in its final phase investigation for the period January 1, 2000 through March 31, 2003. The data the Commission collected indicate that U.S. apparent consumption, as measured in gigabits, increased from 98.8 million in 2000 to 146.7 million in 2001 and to 186.9 million in 2002. Apparent consumption during first quarter (or “interim”) 2003 of 55.3 million gigabits was higher than that of interim 2002, which was 42.8 million gigabits.

The data the Commission collected for its final determination indicate that U.S. apparent consumption rose during each calendar year that the Commission collected data, and that the rate of increase was higher from 2000 to 2001 (48.6 percent), than from 2001 to 2002 (27.4 percent). Additionally, data the Commission collected for its preliminary determination indicates that U.S. apparent consumption increased by 67.2 percent from 1999 to 2000. In addition to the data the Commission collected concerning the period from 1999 through interim 2002, the record contains a longer series of apparent consumption data. This series, which measures worldwide DRAM bit volume and pricing since 1990, indicates that annual growth in worldwide consumption reached a low for the 1990-2002 period of 48 percent in 1993. Annual growth ranged between 73 and 77 percent between 1994 and 1996, reached a period high of 98 percent in 1997, and then declined to 88 percent in 1998, 77 percent in 1999, 73 percent in 2000, 60 percent in 2001, and 49 percent in 2002.

The worldwide data in the longer time series do not cover the same series of transactions as the data collected by the Commission, nor do they track particularly closely the Commission’s data relating

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34 For purposes of this opinion, a gigabit is one billion bits.
36 CR/PR, Table C-1. The annual increase in gigabits was also higher in 2001 (a 48.0 million increase over 2000) than it was in 2002 (a 40.1 million increase over 2001). Id.
37 DRAMs and DRAM Modules from Korea, Inv. No. 701-TA-431 (Preliminary), USITC Pub. 3569 at C-3 (Dec. 2002).
38 Hynix Prehearing Brief, ex. 17, figure 8-20 (McClean report). We have referenced the McClean report data rather than the data compiled by Hynix’s marketing staff cited on page 22 of Hynix’s comments because the McClean data was not prepared by a party to this proceeding. While Hynix states that its data are based on those compiled by an outside source, it did not provide the underlying source of the data. See Hynix Prehearing Brief at 62.
to U.S. apparent consumption during the period of investigation. Nevertheless, both Hynix and Micron have referred to worldwide consumption data as being probative of general trends in U.S. consumption, particularly prior to the period for which the Commission collected data. To the extent that the worldwide data are indicative of general U.S. trends, they suggest that the rate of growth in U.S. apparent consumption for DRAMs during the period of investigation was lower than that of the immediately preceding years. They do not establish, however, that the rate of growth in U.S. apparent consumption throughout the period of investigation, particularly in 2001, was at a historic low. In any event, the data collected by the Commission indicate that apparent consumption grew at a higher rate in 2001 than in 2002.

Nor do the materials cited by Hynix establish that 2001 was a year when the rate of growth of U.S. DRAM demand was at a historic low. Hynix points to information in the record indicating that 2001 was the first year since at least 1995 that consumption for personal computers (PCs) declined. We do not dispute this. Indeed, the Commission acknowledged in its original determination that declines in PC consumption could help explain the relatively less robust growth in DRAM demand, particularly during the latter portion of the period of investigation. We cannot accept the proposition advanced by Hynix, however, that PC consumption can be used as a surrogate for DRAM demand. Instead, following our usual practice, we have evaluated demand by referring to apparent U.S. consumption. There are several elementary reasons why apparent consumption provides a better measure of demand than does PC consumption. Apparent consumption reflects the quantity of DRAM bits actually shipped or captively consumed in a particular year. PC consumption does not. Indeed, while the largest end use of DRAMs is in computer equipment, computer equipment is not the sole use for DRAMs, and PCs are not the only

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39 See Hynix Comments at 21-22; Micron Comments at 18-19.
40 See Hynix Comments at 23.
41 Original Determination, USITC Pub. 3616 at 24.
type of computer equipment in which DRAMs are used.\textsuperscript{42} Moreover, memory requirements (i.e., the bits of DRAM used) per PC were not constant, but changed over time.\textsuperscript{43}

The record does not indicate that there is a direct relationship between changes in PC consumption and changes in DRAM consumption. The rate of growth of U.S. apparent DRAM consumption was higher in 2001, a year in which PC consumption declined, than it was during 2002, when PC consumption increased.\textsuperscript{44} The data in the record concerning worldwide DRAM consumption over a longer time series also indicates a lack of correlation between the rate of change of PC consumption and the rate of change of worldwide DRAM consumption. For example, the rate of annual growth in PC consumption between 1995 and 1997 varied by less than two percentage points.\textsuperscript{45} Over the same period the annual rate of increase of DRAM consumption worldwide varied by as much as 25 percentage points.\textsuperscript{46} Consequently, even if the growth in PC demand declined at an unprecedented level in 2001, it does not follow that DRAM demand declined similarly. Instead, the record indicates otherwise.

\textbf{C. Correlation between Demand Changes and Pricing Changes}

The WTO panel’s decision that the United States had not satisfied the non-attribution provision of the SCM Agreement was responsive to an argument by Korea that changes in the rate of U.S. demand, irrespective of changes in supply, would affect prices for DRAMs in the United States. It is important to emphasize that the panel characterized Korea’s argument as indicating that changes in demand \textit{alone} would affect pricing. The Commission had discussed the \textit{interaction} between supply and demand, and its effects on price, in its original determination. The Commission acknowledged that occasional imbalances between supply and demand were characteristic of the DRAMs business cycle, and that occasional

\begin{footnotesize}
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  \item \textsuperscript{42} CR at I-10, PR at I-8.
  \item \textsuperscript{43} CR at II-6, PR at II-4.
  \item \textsuperscript{44} Compare CR/PR, Table C-1 with Hynix Comments at 23.
  \item \textsuperscript{45} See Hynix Comments at 23.
  \item \textsuperscript{46} Hynix Prehearing Brief, ex. 17, figure 8-20.
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oversupply situations would lead to “bust” years in the industry.\textsuperscript{47} The WTO emphasized that its criticism of the Commission’s opinion was not related to any injury that may be attributed to the business cycle. It stated that “Korea’s argument is different, in that it addresses the injurious effects of a slowing of the growth in demand unrelated to the business cycle, i.e., caused by the decline in demand for products using DRAMs such as PCs.”\textsuperscript{48}

The took the position that Korea had submitted evidence purporting to prove this proposition, and that the United States had failed to rebut it.\textsuperscript{49} In light of the panel’s finding that the original Commission opinion failed meaningfully to address this issue, we review the material in the record concerning it. This includes the material which the panel said presented a “prima facie” showing in support of the proposition that declines in the rate of demand growth will independently cause price declines.

As stated above, the data the Commission gathered in its final phase investigation indicate that the growth of U.S. apparent consumption of DRAM products in 2001 was 21.2 percentage points higher than the growth of apparent consumption in DRAM products in 2002. Data the Commission collected for its preliminary phase investigation suggest that the growth of U.S. apparent consumption of DRAM products in 2000 was approximately 19 to 21 percentage points higher than the growth of apparent consumption of DRAM products in 2001.\textsuperscript{50} If the proposition that pricing is a function of changes in the rate of growth of demand were correct, one would expect to see relatively steady declines in prices throughout 2001 and 2002, since the rate of growth of U.S. apparent consumption declined by a roughly

\textsuperscript{47} Original Determination, USITC Pub. 3616 at 16.
\textsuperscript{48} WTO Report, ¶ 7.368.
\textsuperscript{49} WTO Panel Report, ¶ 7.367.
\textsuperscript{50} The rate of growth of apparent consumption the Commission calculated for 2000 in the preliminary determination was 21.2 percentage points higher than the rate of growth of apparent consumption that the Commission calculated for 2001 in the preliminary determination, Preliminary Determination, USITC Pub. 3569 at C-3. This rate of growth for 2000 was 18.6 percentage points higher than the rate of growth of apparent consumption that the Commission calculated for 2001 in the final determination. Compare id. with Original Determination, USITC Pub. 3616 at C-3.
equal amount during each year. This is not what occurred. Instead, the Commission found in its final determination that “[t]he parties agreed that the price decline in 2001 was the most severe in DRAMs history,” with price declines commonly exceeding 70 percent.\textsuperscript{51} By contrast, price declines did not occur in 2002 for all products and, when prices declined, the rate of decline was far more modest than it was during 2001.\textsuperscript{52} Thus, the annual pricing data collected by the Commission show no discernible correlation between price declines and changes in the rate of growth in U.S. consumption. The longer time series data in the record also show no discernible correlation between pricing changes and demand changes.\textsuperscript{53}

In our view, the materials that Korea submitted to the panel as “prima facie” evidence in support of the proposition that declines in the rate by which demand increased in 2001 were responsible for price declines observed in the U.S. market that year neither support that conclusion nor detract from the data in our record showing a lack of correlation between DRAM pricing and changes in the rate of growth of U.S. consumption. According to the panel report, this evidence appears in paragraphs 291-294 of Korea’s first written submission to the WTO panel.\textsuperscript{54} These portions of Korea’s written submission simply reference materials Hynix submitted to the Commission in the original investigation. These materials consist of various statements that DRAM producers with production operations in the United States made purportedly concerning the effect of demand on their operations.

One is a statement in Micron’s 2001 annual report stating that “[m]arket conditions were reminiscent of the mid-1980s, with supply outpacing customer requirements and demand wanin...
especially in the networking and communications markets."\textsuperscript{55} The most that this statement admits is that prices will fall when supply outpaces demand. However, as stated above, the proposition the WTO panel stated that the Commission inadequately addressed in its original determination was not how the interaction of supply and demand associated with the business cycle affected prices, but how changes in demand growth by themselves affected prices. Micron’s statement simply does not support the proposition that changes in DRAM demand growth, standing alone, caused changes in pricing in 2001 or any other period.

The second is a statement Micron made in a 2003 third quarter conference call to investors. In that conference call, Micron’s chief executive officer, Steven Appleton, stated that recent declines in the rate of growth of demand had resulted in a “fundamental shift I think in the demand profile.” However, in the same statement he said that pricing was “relatively flat” in spite of “lackluster” demand.\textsuperscript{56} Consequently, the statement does not support the proposition that prices will decline sharply when the rate of growth of demand declines. Instead, it indicates that pricing can remain stable even when demand is not growing at a robust rate.

The third statement originates from Infineon’s 2001 annual report, in which the company states that “[t]he industry experienced a period of substantially decreased demand and world-wide overcapacity during our 2001 financial year, resulting in substantial price and volume declines.”\textsuperscript{57} Although Hynix submitted only excerpts of this report in the record, rather than the entire report, it is clear from these excerpts that the report concerns Infineon’s operations worldwide. The experiences of one producer’s worldwide operations is of limited probative value to our inquiry, which concerns competitive conditions in the entire U.S. DRAM industry. Moreover, the Infineon statement, like those of Micron, indicates at

\textsuperscript{55} Hynix Prehearing Brief, ex. 8.
\textsuperscript{56} Micron Posthearing Brief, attachment 5 at 30.
\textsuperscript{57} Hynix Prehearing Brief at 111.
most that the interaction of supply and demand in 2001 contributed to price declines. It does not indicate that changes in the rate of DRAM demand growth standing alone can affect prices.

Consequently, the record does not indicate that there is any discernible correlation between changes in the rate of DRAM demand growth, standing alone, and changes in DRAM prices in the United States. The WTO panel did not purport to examine in detail the evidence that Hynix submitted to the Commission in ostensible support of that proposition. Such an examination indicates that the generalized statements on which Hynix relies do not in fact support the argument Korea raised to the WTO panel. Moreover, the data in the record rebut the notion that there is any discernible correlation between the rate of DRAM demand growth, standing alone, and changes in DRAM prices.

D. Effect of Demand Changes on Pricing

Because the record indicates that there is no discernible correlation between the rate of DRAM demand growth and changes in DRAM pricing, we conclude that there was no causal nexus between declines in the rate of DRAM demand growth during the period of investigation, standing alone, and the price depression we observed.58

58 Hynix’s rebuttal comments contain a variance analysis which purports to show that virtually all the decline in prices in 2001 was attributable to declines in demand growth. We find that several serious flaws in Hynix’s analysis render it devoid of probative value.

The principal flaw underlying Hynix’s analysis is that it purports to compare the U.S. DRAM industry’s actual output against a hypothetical output that Hynix contends U.S. DRAMs producers could have achieved had 2001 U.S. apparent consumption increased by 75 percent. We discern no basis for Hynix’s central assumption that 75 percent growth in demand would have been normal or anticipated for 2001. Hynix provides utterly no material from the record indicating that any domestic producer was anticipating a 75 percent growth in DRAM demand in 2001. Indeed, Hynix’s own comments hypothesized an annual growth rate of 67 percent, in contrast to the 75 percent figure Hynix created for use in its rebuttal comments. See Hynix Comments at 30. For a domestic producer to project a 75 percent growth rate in 2001 would have been highly surprising given that: (1) material collected for the Commission’s preliminary determination, discussed above, indicated that the DRAM demand increased by substantially less than 75 percent in 2000 and (2) historically, annual DRAM demand increases fluctuated considerably. See Hynix Prehearing Brief, ex. 17, figure 8-20. Hynix similarly fails to justify its assumption that under normal conditions, not only the U.S. industry’s domestic shipments, but also its export shipments, should have increased by 75 percent. Because Hynix’s calculations are premised on a purely conjectural assumption, the calculations themselves have no basis in fact.

There are also computational difficulties with Hynix’s analysis. Hynix contends that without demand reductions, U.S. producers’ total shipments in 2001 would have been 39,175,541 gigabits higher than they were. Hynix Rebuttal Comments, ex. 2. Aside from the fact that this calculation is based on the unfounded assumption that demand in 2001 should have increased by 75 percent, this figure assigns to demand declines reductions in
This conclusion is consistent with a statement in the original determination that “there appears to be no clear correlation between growth of the DRAMs market and price movements.” In light of this statement, we do not believe that in the original determination the Commission intended to suggest that changes in demand, standing alone, affected domestic prices during the period of investigation. The statement that the WTO panel perceived to be an admission by the Commission that “slowing demand” played some role in pricing declines was made in context of describing the interaction of demand and supply in the business cycle. In any event, we have found in this proceeding that changes in demand were not an independent cause of price declines outside the larger context of the business cycle. The WTO panel concluded that the Commission acted consistently with Article 15.5 of the SCM Agreement when it explained that “capacity increases, and the business cycle, could not account for totality of the injury suffered by the domestic industry, because that injury was caused primarily by price declines that were not caused by the business cycle.” Consequently, it is not necessary for us to elaborate on the Commission’s original findings concerning the effect of the business cycle in this section 129 determination.

We further conclude that, even if we assume arguendo that the decline in demand growth played a discernible role in the price declines, which it did not, the rate of growth of demand cannot explain the

58(...continued)
shipments that Hynix’s own calculations acknowledge were attributable to increases in market penetration of subject and nonsubject imports. Because the 39,175,541 gigabit figure does not accurately represent shipments lost because of changes in demand, the pricing calculations that Hynix purports to derive from this figure are similarly devoid of factual or logical basis.

59 Original Determination, USITC Pub. 3616 at 25. As we have explained, our finding is based on data concerning DRAM consumption, not DRAM supply. Compare WTO Panel Report, ¶ 7.367.

60 Indeed, while one portion of the WTO panel report cited the pertinent sentence from the original determination as an admission about “slowing demand,” another portion cited the same sentence as being a finding on the effects of the business cycle. See WTO Panel Report, ¶ 7.361. It is possible that the panel interpreted the section of this sentence stating that “[w]hile slowing demand played some role, together with the operation of the DRAMs business cycle and product life cycles” in causing price declines, Original Determination, USITC Pub. 3616 at 25, as a finding that “slowing demand” was an independent cause of the decline. We view it as merely a statement that changes in the growth of demand, in the context of the DRAMs business cycle, played some role in the price declines.

magnitude of the price declines. As discussed above, demand growth declined by very similar rates in both 2001 and 2002, yet prices declined much more sharply in 2001. The decline in demand growth in 2001 thus cannot explain the record price declines (commonly exceeding 70 percent) that year, which was also the year of the domestic industry’s worst operating performance and largest declines in such performance.62

In the original determination, the Commission identified the increasing incidence of underselling of the domestic like product from 2000 to 2002 as playing a significant role in the price declines observed during the period of investigation.63 We emphasize that during 2001, the year with the sharpest declines in prices, the frequency of underselling was higher than it was during 2000.64 Thus, even if it could be assumed that changes in demand played some role in the pricing declines during the period of investigation, the subject imports, through their underselling, played a distinct, and significant role in the price depression. We emphasize that the WTO panel sustained the Commission’s conclusion in the original investigation that the subject imports had significant price-depressing effects.65

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63 Original Determination, USITC Pub. 3616 at 25.
64 CR/PR, Table V-18. Data for the four particular pricing products that were available in the market for substantial periods of time in both 2000 and 2001 similarly show that the aggregated frequency of underselling for those products was higher in 2001 than in 2000. See id. (data for products 1, 2, 6, and 7).

Hynix’s theory that there is a stronger correlation between the rate of consumption growth and price declines than between underselling and price declines is premised on using PC consumption as a surrogate for consumption of DRAM products. See Hynix Comments at 32-34. We explained above why Hynix’s premise is invalid. Moreover, we are not finding, nor do we need to find, that the observed price depression was solely a function of the frequency of underselling. The DSB, by adopting the panel report, has already found that the Commission did not act inconsistently with the SCM Agreement by finding that the subject imports caused significant price depressing effects, because of inter alia, increased underselling frequency. WTO Panel Report, ¶¶ 7.270-.274. Consequently, Hynix’s argument that the increase in underselling frequency from 2000 to 2001 cannot be significant because it is not as large as the increase in underselling frequency from 2001 to 2002, see Hynix Comments at 33-34, addresses an issue on which the WTO panel ruled in favor of the United States.

65 WTO Panel Report, ¶¶ 7.270-.274. The WTO panel also rejected Korea’s argument that underselling by subject imports could not have been significant because of the larger volume of nonsubject imports. Id., ¶¶ 7.267-.269, ¶¶ 7.359-.360. Hynix’s argument that the increase in underselling frequency of subject imports from 2000 to 2001 cannot be significant because it was smaller than the increase in the frequency of underselling by nonsubject imports of this period, see Hynix Rebuttal Comments at 7-9, addresses an issue on which the WTO panel ruled in favor of the United States. Consequently, it is not necessary for us to consider this arguments in a proceeding limited to those issues on which the WTO panel ruled adversely to the United States.
III. CONCLUSION

In the section above, we have elaborated upon the analysis the Commission provided in the original determination concerning the effects of a decline in the rate of growth in demand during the period of investigation. In this elaboration, we have clarified the grounds of the Commission’s original determination to address the WTO panel’s concern that the Commission not attribute to the subject imports any effects that may have been caused by the decline in the rate of growth in demand.

Our clarification, however, does not require us to modify any of the ultimate conclusions on subject import volume, price effects of the subject imports, or impact of the subject imports on the domestic industry that the Commission made in the original opinion. Thus, aside from the elaboration and clarification this opinion provides of the findings made in the first five sentences of the last paragraph on page 24 of USITC Publication 3616, the remainder of the original determination – no aspects of which were found by the panel to be WTO-inconsistent – remains applicable. Accordingly, we continue to determine that, as of the time of the original determination, the domestic industry producing DRAMs and DRAM modules was materially injured by reason of subsidized imports from Korea.