UNITED STATES
INTERNATIONAL TRADE COMMISSION

In the Matter of:	)	
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DRAMS AND DRAM MODULES	)	Investigation No.:
FROM KOREA	)	701-TA-431 (Final)

Pages: 1 through 290

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DRAMS AND DRAM MODULES FROM KOREA	)	Investigation No.: 701-TA-431 (Final)

Tuesday,
June 23, 2003

Main Hearing Room
Room 101
500 E Street, S.W.
Washington, D.C.

The hearing commenced, pursuant to notice, at 9:31 a.m., before the Commissioners of the United States International Trade Commission, the Honorable Deanna Tanner Okun, Chairman, presiding.

APPEARANCES:

On behalf of the International Trade Commission:

Commissioners:

DEANNA TANNER OKUN, CHAIRMAN
JENNIFER A. HILLMAN, VICE CHAIRMAN
STEPHEN KOPLAN, COMMISSIONER

Staff:

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WILLIAM R. BISHOP, STAFF ASSISTANT
BONNIE NOREEN, SUPERVISORY INVESTIGATOR
MARY MESSER, INVESTIGATOR
MARY JANE ALVES, ATTORNEY
SCOTT BAKER, INDUSTRY ANALYST
JOHN GIAMALVA, ECONOMIST
JAMES STEWART, ACCOUNTANT

APPEARANCES: (Continued)

Congressional Appearances:

THE HONORABLE LARRY E. CRAIG
U.S. Senator
State of Idaho

THE HONORABLE RON WYDEN
U.S. Senator
State of Oregon

THE HONORABLE PETER A. DeFAZIO
U.S. Congressman, 4th District
State of Oregon

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In Opposition to the Imposition of Countervailing Duties:

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Senior Vice President, Sales
Hynix Semiconductor America

I N D E X

P R O C E E D I N G S

(9:31 a.m.)

CHAIRMAN OKUN: Good morning. On behalf of the United States International Trade Commission, I welcome you to this hearing on Investigation No. 701-TA-431 (Final) involving DRAMs and DRAM Modules from Korea. The purpose of this investigation is to determine whether an industry in the United States is materially injured or threatened with material injury by reason of subsidized imports of subject merchandise.

Schedules setting forth the presentation of this hearing and testimony of witnesses are available at the secretary's desk.

I understand the parties are aware of time allocations. Any questions regarding time allocations should be directed to the secretary.

The Notice of Investigation is available at the secretary's table, as well as the wall racks outside the secretary's office.

As all written material will be entered in full into the record, it need not be read to us at this time.

All witnesses must be sworn in by the secretary before presenting testimony.

Finally, if you will be submitting documents that contain information you wish classified as business confidential, your request should comply with Commission Rule 201.6.

Madam Secretary, are there any preliminary matters?

MS. ABBOTT: No, Madam Chairman.

CHAIRMAN OKUN: Very well. Will you please announce our first congressional witness?

MS. ABBOTT: The Honorable Ron Wyden, United States Senator, State of Oregon.

CHAIRMAN OKUN: Welcome.

MR. WYDEN: Thank you very much, Madam Chair. Is that microphone on?

CHAIRMAN OKUN: Yes, it is.

MR. WYDEN: Madam Chair, I'm Ron Wyden, United States Senator from the State of Oregon, and I very much appreciate the opportunity to come before you and your colleagues today to express my concerns about this inquiry and its potential impact on workers in my home state.

I respect and have complete confidence in the commission's ability and commitment to evaluate all of the facts in this matter, to understand the complexities of the global and domestic DRAM markets

and to reach an objective and independent decision. I also believe that all of you, some of whom are former staff of the United States Senate, understand and respect my duty to represent the interests of the people of the State of Oregon.

Unemployment in my home state rose in May to 8.2 percent. This again gives Oregon the unwelcome position as the state with the highest unemployment rate in the nation. We are in the third year of an economic meltdown and my home state of Oregon has become ground zero for economic hurt in America. The budget crisis in my state is the worst since the Great Depression; 12,400 jobs have been lost in the State of Oregon in the past year alone.

Economic recovery for my home state is my top priority in the United States Senate. Every job that can be retained and every new job that can be created take on greater significance against this bleak economic backdrop. Hynix has made a massive investment in a DRAM fabrication facility in Eugene. That facility represents an investment of hundreds of millions of dollars. It employs more than 1000 people, many in highly skilled, highly paid jobs and, as such, is one of the largest private sector employers in my home state. The jobs at this facility

offer a bright light amidst an economy that is filled with shadows. That is why the commission's determination in this case is of such special importance to me.

A number of you, I think, are familiar with my approach to trade issues over my more than 20 years in the House of Representatives. I have voted for every single market opening agreement during my two decades in the United States Congress. I make no bones about the fact that I believe in the principles of free trade, I think it's absolutely key to opening up the economic opportunities we want for the people of this country.

I chaired the House Export Task Force for many years and have served on the Senate Commerce Committee since I was elected to the Senate. I understand the importance of open and free trade for job creation and for the benefit of consumers. I also know that some companies believe they can grow their bottom line faster through litigation than competition and I will tell you I believe that is the case here.

Rather than acknowledge that low prices and oversupply have hurt them, Hynix's competitors would rather pursue a trade case in the vain hope of eliminating Hynix as a competitor. It's no secret

that the global semiconductor industry, and in particular the DRAM industry, has been in a slump for a number of years. This is the result of a dramatic decline in the demand for semiconductors and has adversely affected every manufacturer, some worse than others. This is a global problem.

This industry historically experiences boom and bust cycles in which the fortunes of all DRAM manufacturers rise and fall together. As your examination of the semiconductor industry will show, the current situation is no different except that it has lasted longer and has been more severe than those in the past.

The key question the International Trade Commission must answer is whether the DRAM industry in the United States has been materially injured or threatened with material injury by Hynix's exports to the United States. In fact, during the overall period you're investigating, Hynix's exports to our country actually fell. The major reason for this is that production from the Eugene plant, which is not a factor in the determination, was increased as a result of a 2001-2002 re-tooling so Hynix could better serve its U.S. customers from its U.S. facility.

It is true that during the re-tooling of the

Eugene plant exports temporarily went up to replace lost production from the Eugene facility, but they fell again when the plant was again reopened. Because the volume of imports is one of the key factors in your injury determination, I think the fact that exports fell during the period under investigation is especially telling.

The Eugene facility is an integral part of Hynix's global operations. Whatever determination the commission reaches is going to affect the Eugene plant and its 1000 workers. Those of you who helped write some of the key provisions of U.S. trade law know that the goal is to create fair competition for American workers and U.S. products. Trade law was never intended to serve as a curtain behind which less competitive companies could hide until the global market for semiconductors comes back around.

I believe the commission is going to reach a fair and just decision that fully considers the depressed state of the world's semiconductor market and the decline in Hynix's exports to the United States during the period that's in question. In your deliberation, I would also ask the commissioners to weigh the effect your decision will have on workers in my state.

Let me close simply by saying that I would not be making an appearance before the commission today unless I felt that this was a particularly key time for my state and for the workers in this particular facility. I have never seen this level of economic pain during my career in public service and I believe -- I know my colleague, Congressman DeFazio, is going to talk as well -- I believe that it is imperative that this decision be evaluated on the merits.

We have confidence in your ability to look at it in a fair and objective way and we are very hopeful that our views will be considered and those views will be factored into any judgments you make.

Thank you.

CHAIRMAN OKUN: Thank you very much, Senator Wyden.

Let me check with my colleagues and see if anyone has questions for you.

COMMISSIONER HILLMAN: Senator Wyden, first, thank you very much for appearing here and we very much appreciate it.

I guess I had a question in terms of this issue of your closing comment on weighing the effect on workers in Oregon. I have watched a lot of these

cases in which we've seen duties be placed on a product, the resulting effect of which is the foreign companies investing more and producing in the United States in order to get around the duties. I don't know whether you have any sense of what the situation would be.

Obviously, if there were duties placed on it, one of the things that Hynix could do is produce entirely in the United States so that their product is no longer considered an import, no longer subject to a duty. That's something that we've seen happen in many other products.

I'm just trying to sort out your comment on weighing the effect on workers in Oregon. Do you have a sense of how that weighing should occur? I mean, is it more likely that more production would be in the United States or less?

MR. WYDEN: I think that we have made recommendations that are going to result overall in the maximum number of jobs in the United States and in Oregon at this very key time.

Part of our concern is that Oregon and this plant in this community are especially vulnerable. Literally week after week after week we have seen plants in this community close. They cannot afford

another body blow. I mean, it is staggering the kind of economic hurt in this area and I think the recommendations that we're making today will result in more jobs both in the short term and in the long term and I would ask, and it's the point of my closing statement, that as you evaluate this case on the merits, which is your job and we respect you as you go about the business of tackling it, that you also have a full sense of just how devastating the economic loss is in this part of our country.

COMMISSIONER HILLMAN: I appreciate that.

COMMISSIONER KOPLAN: Thank you, Madam Chairman. I just have one brief comment.

The fact that we have empty chairs up here does not signify a lack of interest in your testimony this morning. We have two nominees pending in the Senate and one recused, so you've got 100 percent of us as it stands right now.

MR. WYDEN: I thank you and we'll do everything we can to expedite those decisions. We're asking for help here, so we want to make sure you have a full house.

CHAIRMAN OKUN: Thank you very much.

Thank you, Commissioner Koplan, Vice Chairman Hillman.

With no other questions, I want to thank you again, Senator Wyden, for your testimony.

MR. WYDEN: Thank you. I'll wait for my colleague and then I'll be excused because he and I have been a partnership for Oregon on all of these issues and we appreciate your letting both of us testify.

CHAIRMAN OKUN: Thank you.

MS. ABBOTT: The Honorable Peter A. DeFazio, United States Congressman, 4th District, State of Oregon.

CHAIRMAN OKUN: Welcome.

MR. DeFAZIO: Thank you, Madam Chair, Commissioners.

In just starting with a further response to Ms. Hillman's point, it's an excellent question and one which I've wrestled with because obviously I want to maximize the jobs in the United States, too, and that's consistently what I've tried to do in the positions I've taken on trade issues.

I think the key point here would be tariffs at the highest level that's being mentioned or contemplated, as I understand it, would be so punitive and disruptive at a time when, as you know, the entire industry is weak, that we've got to question whether

or not the company would continue and continue in this particular line of business. I think the long-term trend is for them, and they are planning another $100 million investment in the Eugene plant, to increase their productive capacity here, as they have over the term of this particular period in question. But I'm very concerned what a blow of that magnitude at this weak point in the market would mean and whether or not they would continue or have to seek protection under bankruptcy and what the implications of that might be.

We might also remember that it wasn't too long ago that Micron was attempting or involved in discussions to purchase the Eugene plant from Hynix, so there's a whole lot of imponderables out there, so that's the best I can do with that kind of a murky crystal ball, but I think that's something that does go to the heart of this issue.

And I'll try not to repeat some of the points, although I will emphasize a couple the senator made. I've submitted my statement in full for the record, but just to start again at the extraordinary level of concern, I can remember one day about a month ago where we lost -- we've already had a persistently high unemployment rate in my district, we lost 2500

jobs in one week. We lost a Sony manufacturing plant because of changes in the market, a CD plant; we had a wood products plant go down because, they said, mostly because of subsidized Canadian imports, a flood of Canadian imports that are coming into the U.S., and we temporarily laid off a large number of people at a motor coach manufacturer. And this is in a district that already has extraordinarily high unemployment. So this is key, whether it's short or long term, to have this plant as part of our base.

Obviously, the complexities are far beyond me and that's why we have you and your expertise before us, but as I look at the issue on which the factors you have to bring into account, it seems that there are some interesting questions which go to the level of harm, whether there was harm, in particular the fact that their exports, as the senator said, did over this time period, with the exception of when they were re-tooling the Eugene plant, actually went down. It raises a question about what harm it caused to U.S. competitors versus the harm that's been caused to everybody because of the extraordinary downturn in the market.

They did increase and invest in the U.S. plant during this time period to better serve

customers and to provide a new generation of chips, a very major investment.

Pretty much everybody, and particularly the U.S. manufacturers until recently, fairly recently, was doing really well and then everybody dropped off. So, I mean, again, to single out a particular harm to another company in the U.S. versus the overall harm to the industry and the squabbling over the shrinking pie is really, I think, an interesting question and a factual situation to be determined.

And then as I understand, again, not being an expert, but as I understand DRAMs, it's not something that is just sort of like a consumer commodity that you just dump on the market or you can produce huge numbers of in an untailored way, but they are much more responsive to specific applications and that in this case, it would be very hard to just sort of flood the market without having consumers on the other end of the equation, meeting their legitimate demands.

So, again, it sort of brings us back to the overall cycle and how much of this is about the cycle. I would posit that we probably wouldn't be sitting here today if everybody was doing better, whether Micron or others would be investing so much time and

energy and tremendous legal talent and expense in pursuing such a case if the markets were not so sickly, something beyond our capability of dealing with today.

I think another thing that's telling and, you know, I mean, often as a politician you stand or fall on what you say to people, whether it's in or out of context or you say it here or in Washington, I thought it was kind of interesting that in the June conference call regarding earnings that the Micron leadership attributed the softening of the semiconductor market and falling prices "principally to two factors: seasonal weakness in computer demand and relative leveling of memory content per system." No mention of Hynix or unfair foreign competition or the pending case, they don't seem to think it's a major factor there, but they come here and say this an extraordinary, major factor affecting our profits and our capability to continue in the business. So, again, just a little tiny piece of the puzzle.

So I would just hope that in framing this decision on this very complex matter and bringing in all the factors you have to bring in that, again, you go back to the point Ms. Hillman in weighing whether or not this would actually lead to -- and I'm not at

all capable of judging that, lead to more investigation and more production in the United States should substantial tariffs be levied or if you levy them over a certain point whether we lose this whole company and we lose those critical 1000-plus jobs in a part of the country and a part of my state and my district that is hurting extraordinarily already. So I leave this to your wisdom and I would be happy to respond to any questions.

CHAIRMAN OKUN: Thank you.

Senator Wyden?

MR. WYDEN: Madam Chair, I know this is unorthodox because you were gracious enough to give me an opportunity at the outset, but one other point with respect to Ms. Hillman's question.

It seems to me by any calculus if Hynix is going to have to pay higher tariffs on DRAMs at this point they are going to have fewer dollars to invest in Eugene, this hard hit community, and then your equation becomes high tariffs equals less investment in Eugene, which means fewer jobs and I think by any calculus, that's what we're concerned about right now. Right now, that just looks to me like the inevitable kind of scenario and that's what's going to harm our state and what the congressman and I are so concerned

about.

CHAIRMAN OKUN: Let me check with my colleagues.

Vice Chairman Hillman?

COMMISSIONER HILLMAN: I have no further questions.

Thank you. I very much appreciate your appearance.

CHAIRMAN OKUN: Commissioner Koplan? No.

Very well. Before you go, I would note that the commission received the June 23, 2003 letter from both of you as well as members of your delegation and it looks like the Washington delegation as well and that will be made part of the record.

And with no further questions, we thank you very much for your testimony today.

MR. DeFAZIO: Thank you, Madam Chair.

MR. WYDEN: Thank you all.

CHAIRMAN OKUN: Madam Secretary, I believe we will go to the opening statements at this point.

MS. ABBOTT: Opening remarks on behalf of the petitioner and domestic producers will be made by Gilbert B. Kaplan, Hale and Dorr.

CHAIRMAN OKUN: Welcome, Mr. Kaplan.

MR. KAPLAN: Thank you, Madam Chairman.

Thank you for the opportunity to appear here today. It is always a pleasure to be before the United States International Trade Commission.

A number of points stand out very clearly when looking at this case. First, the subsidies are very large, if not the largest ever, in a case of this sort. These are 45 percent subsidies with no facts available elements. They are being provided in a highly priced, competitive commodity industry with only four major competitors. They are being provided to an established producer which itself was the result of a merger between two major Korean producers and that producer has a large part of the DRAM market.

The subsidies are being provided at a time when demand is continuing to grow, but supply is growing at a much faster rate.

The size of these subsidies skews competition to an incredible degree. During the Commerce period of investigation from public data the subsidies to Hynix exceeded $2 billion. This amount, $2 billion, is over 48 percent of Micron's gross revenues during that period. We lost over a billion dollars during that period, but this subsidy is $700 million more than that loss. In other words, if Micron were given this subsidy by someone, we would be

running with an operating profit.

But the significance of these subsidies really goes beyond an 18-month profit or loss and the $2 billion is not a full measure of the subsidy. This $2 billion is essentially a snapshot of the loan and grant benefits during the period of investigation. That's the way Commerce captures the subsidy effect during the POI. But Hynix receives loans and grants whose benefits extend over time.

Hynix's total debt relief is $16 billion and that includes a package of $4 billion of loan rollovers, debt-equity swaps and other aid given in December 2002, after the filing of this case.

These are the subsidies that keep on giving. That $16 billion exceeds the total market cap of Micron and Infineon combined and based on public numbers is almost three times the entire value of DRAM sales in the United States during 2002. This competitor, Hynix, should not really be in this industry any more. It needed enormous subsidies just to stay in when no one else got any subsidies. At a minimum, it should not have grown or it should have contracted. That did not occur.

So how do you compete? How are we supposed to compete against subsidies at that level? At least

one answer is the following: You have to lower your prices through the floor to keep up with the subsidized prices of Hynix.

Hynix could not keep manufacturing and selling and they could not keep selling at the price levels they are at, which are obviously well below cost as you can see from the public financials, without these subsidies.

If we want to stay in business in this commodity industry, we have to meet or beat these subsidized prices to the full extent we can.

So what are the implications for the U.S. industry of this kind of subsidization?

We have spelled out the implications in our briefs, but to summarize, lowering Micron's prices to that extent has caused enormous losses and Micron has had the first layoffs it has ever had since the 1985 Japanese dumping phenomenon.

The downturn caused by these subsidies has been unique. Hynix itself admitted in its case brief to Commerce that this downturn was the deepest in the history of the DRAM industry.

But what has caused the downturn?

Hynix seems to ignore that obvious question. There are only four major producers. This is not a

situation like the 1985 Japanese dumping phenomenon where six major Japanese suppliers were battling to build market share against 11 U.S. suppliers and it was all at a time of a growing new industry. The downturn here, the different phenomenon here, is the billions of dollars of subsidies given by one government to one company in this four-member industry.

For all of these reasons, we respectfully request that you make an affirmative determination in this case.

Thank you.

CHAIRMAN OKUN: Thank you. Thank you, Mr. Kaplan.

I note the arrival of Senator Craig. We are prepared, Senator Craig, to take your statement now.

If I could just ask the secretary to put up the senator's nameplate?

MS. ABBOTT: The Honorable Larry E. Craig, United States Senator, State of Idaho.

CHAIRMAN OKUN: Welcome.

MR. CRAIG: Thank you very much, Madam Chairman. It's great to be before you again.

And to all of the commissioners, thank you for being here to listen to testimony this morning.

I say before you again, and it's great to see some faces that are familiar, but not for the reason I'm here. I am here this morning on a very critical matter, a matter that is of great importance to the State of Idaho and to the U.S. DRAM or memory chip industry. Idaho, as you know, is the proud headquarters of Micron Technology, the world's second largest DRAM producer. Micron has achieved this status by consistent focus on fundamentals of the semiconductor industry and its production, technology leadership, cost control and, I have watched them from their beginning, plain old hard work.

From modest beginnings, this company has grown and flourished in a very, very tough industry. Micron is the largest private employer in the State of Idaho. Let me repeat that: Micron is the largest private employer in the State of Idaho with about 9500 employees. Micron contributes significantly to the economic well being of all Idahoans by creating well paid, high technically valuable jobs and by generating significant tax revenue. And, of course, as you would all suspect, these revenues find their ways into our schools and into our emergency services and into a lot of other governmental entities.

Micron now also has several large

manufacturing locations overseas, but it has never sacrificed jobs or investment in Idaho in its effort to become a global force in the DRAM industry.

Times are very tough for Micron right now. You've just heard testimony to that fact. Micron is struggling under the weight of 11 straight quarters of losses. These losses are a source of deep concern in my state of Idaho, not only for the present condition of Micron, but also for the future viability of this company.

This spring, Micron was forced to institute a major layoff that affected 10 percent of Micron's workforce. This resulted in the loss of 1100 jobs in Idaho alone, a lot for a state the size of ours and, of course, significant layoffs right here in this area, in Virginia, and in the State of Utah.

The Idaho legislature with the tax losses in substantial part due to Micron's downturns struggled mightily for the longest session of the legislature in Idaho history how to adjust revenues because of the losses this industry has faced in part.

Layoffs have been extremely rare for Micron. In fact, Micron has not laid off since 1985, as you just heard, and that, of course, was at the height of the illegal Japanese DRAM dumping in this economy.

I cannot begin to tell you of the devastating impact these sorts of layoffs have in a state the size of Idaho, a state of 1.2 million people, from both the economic standpoint and from the standpoint of the morale and the optimism about our future and the economic stability of our state.

I have been following the DRAM industry for 20 years and the life literally of Micron during that period of time. In my view, the problem in the DRAM industry today can be linked directly to the massive subsidies that the Korean Government has been giving to one of its two DRAM producers, Hynix.

Over the past two years, government and bank bailouts to Hynix have amounted to $16 billion and have served to prop up a company that would otherwise have been out of business.

I am the supporter of letting markets work, but when a company is broke, it should either be restructured or liquidated. In the case of Hynix, however, the Korean Government has given Hynix five separate bailout packages which have preserved Hynix's position as the third largest producer of DRAMs in the world. Neither restructuring or liquidation has occurred. Quite the opposite. This wouldn't be so bad if they consumed, meaning Korea, a lot of the

DRAMs that they produce. They don't. Which means that Hynix exports over 90 percent of the DRAMs they make, many of which end up right here in U.S. markets. This has a very direct and very negative impact on Micron because the subsidies, as has just been explained, let Hynix undercut the world market dramatically.

Micron is the only U.S.-based DRAM producer left. How can we expect Micron to compete with $16 billion in government bailout? Last year, total global DRAM sales for all DRAMs produced was only $15 billion total sales. Hynix got a billion dollars more in total subsidies than total sales worldwide. Such action is indefensible and has caused direct and substantial injury to Micron.

Last week, the Department of Commerce found that Hynix received subsidies equalling 45 percent of their sales. This means that for every dollar that they had in sales they got a subsidy of nearly 50 cents. In other words, Hynix has been found guilty. Obviously you are to determine injury.

The magnitude of these subsidies is not news to me. I have been working on this issue for a long time with Ambassador Zoellick and with Secretary Evans to try to fix the problem. From the very day this

administration, the current administration, set foot in town, I began to talk to them about an overpowering problem that we had to deal with with the Koreans and Hynix or we could lose a major industry in this nation and in my state of Idaho. They both met with Korean officials on numerous occasions and warned them time and again about the harm the U.S. companies were experiencing under these huge subsidies. The U.S. Government also raised this at the WTO subsidies committee, the Korean Government apparently wasn't listening because Hynix received another $4 billion in bailouts after Micron filed this trade case.

I have a strong interest in U.S. trade policy. I have been, as you've mentioned, before you several times discussing it with you. I also have an ongoing interest in defending the integrity of U.S. trade relief laws. Idaho has unfortunately experienced firsthand the impact of unfair trade practices. Micron is important not only to the state of Idaho, but also to the economy and the national security of our country as our lone producer of DRAMs.

We cannot afford to lose important technology innovators and effective manufacturers and efficient manufacturers like Micron, especially when we could lose them based on unfair foreign subsidies.

We all value trade. We all value fair trade and open trade. But when a private company stumbles and falls because a foreign government is openly and directly subsidizing and largely ignoring international trade law, justice must be rendered.

The fate of a large and valuable employer in my state is in your hands. On behalf of the people of the state of Idaho and the employees of Micron, I want to thank you for the opportunity to be here today and for you giving me the time to listen.

Thank you so much.

CHAIRMAN OKUN: And thank you, Senator Craig.

Let me check with my colleagues to see if there are any questions of the Senator this morning.

(No response.)

CHAIRMAN OKUN: Thank you once again for your testimony and your full statement will be submitted to the record as well.

MR. CRAIG: Thank you.

CHAIRMAN OKUN: Thank you.

MS. ABBOTT: Opening remarks on behalf of the respondents will be made by Daniel L. Porter of Willkie Farr & Gallagher.

CHAIRMAN OKUN: Good morning, Mr. Porter.

MR. PORTER: Madam Chairman Okun, Vice Chairman Hillman, Commissioner Koplan, good morning. For the record, my name is Daniel Porter of the law firm of Willkie Farr & Gallagher. We are appearing today on behalf of Hynix Semiconductor.

In my brief few minutes, I want to talk about three distinct aspects of the DRAM market and how they relate to the analysis that you must do under the statute.

Distinct feature number one: the well-known business cycle. All the parties agree that the DRAM industry has endured a continuing history of boom/bust business cycles and so DRAM producers are subjected to wide swings between boom and bust years.

Now what does this mean for the commission's analysis?

It means that downturns are not necessarily a sign of material injury; rather, they are a normal feature of this industry. It also means that when examining evidence of injury, simple year over year changes are less meaningful. Rather, you need to step back and put the year-to-year fluctuations in the context of the overall business cycle.

In fact, the very best example of this is the last time that Micron was here in this room before

you in October 1999, during the Taiwan DRAMs case. At the hearing, Micron argued passionately that Micron would suffer all sorts of doom and gloom if the antidumping duties were not imposed on the Taiwanese suppliers. As evidence of Micron's injury, Mr. Sadler, who is here today, pointed to large losses suffered by Micron in its two previous fiscal years. In the end, the commission rendered a negative determination and so no antidumping duties were imposed on the Taiwanese.

Now, what then happened to Micron?

Did Micron suffer all the doom and gloom predicted at the ITC hearing?

No, Micron did not. For fiscal 2000, Micron ended up earning $2.4 billion of operating profit, for an operating profit rate of 39 percent. The boom part of the cycle had returned.

The second distinctive feature of the DRAM market I want to highlight is worldwide prices. DRAMs are a global commodity product and, in fact, all of the major DRAM customers insist that their DRAM suppliers offer a single worldwide price.

Now, what does this mean for this case?

Well, I believe that this fact makes your job a bit harder because when analyzing price effects

essentially you must assess the extent to which Hynix's shipments from Korea to the United States alone affect the worldwide price. Under the law, the focus in this case is on just Hynix U.S. imports of Korean fabricated DRAMs, not total Hynix production. And so because Micron charges its U.S. customers a worldwide price, you need to analyze whether the prices of the small volume of Hynix shipments to the United States are able to influence the worldwide price of DRAMs. We submit that any price effects from Hynix's shipments to the rest of the world and any price effects from Hynix's U.S. shipments of its U.S.-made DRAMs cannot be considered the adverse price effects from subject imports contemplated by the statute.

The final distinctive aspect of the DRAM market that I want to talk about is the fact that DRAM products are essentially interchangeable among different suppliers. This fact, interchangeability among suppliers, is not disputed by any of the parties and has been confirmed by the commission's staff.

Now, what does it mean for this case?

What it means is that there is an 800-pound gorilla in this room that Micron desperately wants you to ignore: non-subject imports.

The arguments in Micron's legal brief convey a world of just Hynix and Micron, but that picture does not adequately describe the real world DRAM market. In the real world DRAM market, Micron is not just competing against Hynix, but is also competing against non-subject imports from Infineon in Germany, non-subject imports from Samsung in Korea and non-subject imports from Nanya in Taiwan, each one a fierce competitor and each one having a sizeable presence in the U.S. market and a sizeable global presence. And for your analysis, the most important fact is that non-subject imports are substantially larger than subject imports by Hynix. We cannot emphasize this point enough.

Publicly available data indicate that non-subject imports are many multiples larger than subject imports from Hynix. Many multiples larger. And this huge difference is not just about volumes, but also growth. Again, publicly available data indicates that in contrast to Hynix's market share over the period which was stable to declining, non-subject imports dramatically increased their market share.

So the question becomes when you have a global commodity product that is interchangeable among

all the largest players, can Micron prove that all of their financial woes were caused by Hynix's small and declining subject imports alone?

I submit that the answer is unequivocally no. Boom/bust cycle, worldwide prices, much larger non-subject imports. I ask that you keep these critical facts in mind when you listen to today's presentations.

Thank you.

CHAIRMAN OKUN: Thank you, Mr. Porter.

MS. ABBOTT: The first panel in support of the imposition of countervailing duties. The witnesses have been sworn.

CHAIRMAN OKUN: We just need your name tag turned around there so we can see you, Mr. Appleton. Thank you very much. I appreciate that.

It looks like your panel is ready to proceed, Mr. Kaplan, Mr. Rosenthal.

MR. KAPLAN: Thank you very much. Hello again. I will introduce the panel but let me make a few remarks as I do that.

As I noted, the downturn caused by the subsidies has been unique, both in terms of its severity and its duration. Prices have dropped below the learning curve for a sustained period, over two

years so far, and Micron's losses have extended over three calendar years so far with no end in sight.

In terms of the real injury numbers here, I would direct you to confidential chart 3, which we have handed out, which is a cumulative chart. In its May 22nd case brief to the Department of Commerce, on page 99, Hynix says, "By October 2001, the DRAM industry had experienced price declines never seen before."

October 2001 was the date of the second multi-billion dollar bailout from the Government of Korea to Hynix and Hynix's statement is correct. This is an industry where you continually have to reinvest: reinvest in R&D and capital equipment to stay in the game from generation to generation. These billion dollar subsidies have skewed that competition immeasurably and it may take years for the effect on the competitive bounce to be rectified and it will require a CVD order to do it.

Steve Appleton, Chairman, CE&O and President of Micron Technology, will discuss the conditions at Micron.

Mike Sadler, our Vice President for Worldwide Sales, will discuss pricing and competition in this industry.

In considering pricing as we go through today's presentation, I would direct you to confidential charts 1 and 2.

Professor Jerry Hausman of MIT will also discuss the nature of the competition in this industry and pricing. Bonnie Byers will discuss threat. Mr. Rosenthal and the representatives from Infineon will also discuss how prices are set in this industry and the impact Hynix has had on pricing.

In considering this case, it is important to look at current injury and also at issues of threat. As I said, the Government of Korea gave a full, new bailout to Hynix in December 2002 amounting to another $4 billion in debt relief. The Government of Korea has clearly indicated they will continue to cover the losses of Hynix no matter how long they continue. And, as I also said, the subsidies in effect are being given over time because many of them constitute ongoing reductions in interest rates and ongoing grant benefits, so we will have to compete against these subsidies for years into the future.

Mr. Appleton?

MR. APPLETON: Thank you, Mr. Kaplan.

Good morning, Madam Chairman, members of the commission, commission staff and ladies and gentlemen.

I want to first take the opportunity to thank both the Commerce Department and the International Trade Commission for all of the time and effort required to evaluate this case. I realize it can sometimes be a difficult process with all of us trying to give more data and input than you want or need, but we do sincerely appreciate the work that you and your staff do.

For my testimony today, I considered describing the evolution of the industry over the last 20 years, the difficulties Micron encountered, the irrational capacity expansions that changed the faces in our industry and the many artificial market manipulations that have occurred. But I think I can make better use of your time today in this hearing by focusing specifically on the issue before us and that issue is injury: has the U.S. DRAM industry been injured and, if so, did the Korean Government subsidies cause it?

Let me begin with the question of has there been injury. Hynix, as was stated in the opening statement, will attempt to claim that the industry is simply experiencing a normal cycle and that whatever adverse effect we are encountering is normal. I can assure you from my experience of 20 years in the DRAM

industry there is nothing normal about what is currently happening.

Why is it that I say that?

At the preliminary hearing seven months ago, Micron spoke about the difficulty in being able to replace over 1000 positions in the company. We simply could not afford to. The situation has only deteriorated since then.

I realize companies have layoffs all the time, but that is not true for Micron. I personally have a very strong dislike for that approach. It was mentioned in 1985 we had that experience, I was not in leadership at the time, but it did occur. However, during my entire Micron career as an executive, which covers almost 15 years and several cycles, the company had never had a layoff. Unfortunately, that is one record I was sorry to break. We simply could not avoid it and, as already mentioned, a few months ago we had to lay off over 10 percent of our people.

I can assure you that was not normal for Micron. Last fall, I spoke about having a facility 30 minutes from this building in Manassas, that it was only 30 percent utilized. I'm sorry to say that since then we were forced to reduce it down to 5 percent. Again, to give you a frame of reference for normalcy,

this is the first time I have had to operate a fab at that level during my entire executive career at Micron.

Today you will hear a lot of discussion about financial numbers, but I want to make two points that should not get lost in the detail:

First, the health of almost every public company is ultimately measured by profits. In Micron's fiscal 2001, what was at that time, we reported a record net loss of $625 million. In fiscal 2002, we again set a new record loss of $907 million. So far in fiscal 2003, we have already lost over $1.1 billion, totalling over $2.5 billion in the last three years.

To help illustrate what a dramatic shift this is, even over a 10-year period, I would direct you to public chart number 6, and it looks like this, and it gives a 10-year history of Micron's profits. This data demonstrates even more why this cycle is very different.

As a result, we have had a very difficult time trying to raise money. In fact, we tried to borrow money to buy new equipment but we could not find any financial institution willing to loan us anywhere near what we needed. We were forced to raise

money through equity at the lowest stock price and under the worst terms that I have experienced since becoming CEO almost a decade ago. I don't think my shareholders believe this is normal.

The annual capital requirements in this industry are very, very high. Despite what Hynix may try to claim, Micron's ability to buy equipment continues to decline. Let's take a look at the factors that decide whether a company can buy equipment, but before we do, I need to explain an important factor regarding semiconductor equipment purchases. Once an order is placed, the equipment takes between nine and 12 months for delivery, after which a company actually pays for it. As a result, a company's reported expenditures are typically offset by one year. With that in mind, let's talk about obvious metric, cash flow from operations.

Our cash flow from operations in fiscal 2000 was $2 billion, a pretty good year, as already was mentioned. But that cash flow in fiscal 2001 decreased to $789 million. In fiscal 2002, it decreased to $578 million. And so far, through three quarters of 2003, it has decreased to $172 million. In each of those years, with the exception of 2000, our actual capital expenditures far exceeded the cash

flows needed to pay for the equipment. But if you consider the delayed cash flow effect I mentioned earlier and you combine that with our increasing debt, you can see that it is becoming increasingly difficult to find the cash moving forward in what is a very capital intensive business.

Another metric is our return on invested capital, often looked at by investors. In fiscal 2000, again, it was pretty good, it was 25 percent. In fiscal 2001, it had dropped to a negative 7 percent. In fiscal 2002, it had again dropped further to a negative 12 percent. And so far, in 2003, it is worsening and again now running negative 17 percent.

Also keep in mind that the equipment costs have been increasing as the technology gets more complex, so even if our capital expenditures stayed the same, which they are not, we would be falling behind.

Another example of why this is not a normal cycle, for more than a decade, Micron's overall compensation system has essentially remained unchanged. The way we paid our employees was primarily based on the profits of the company. That is now being challenged. In other words, all our

employees, from the production operation to the vice president, have experienced a significant decline in compensation for what is now the longest period in Micron's history. The program that served the company so well during normal cycles no longer works. There is no uncertainty here about injury.

I would like to change our direction and focus on what is causing this injury. Capital equipment is turned over very quickly in this industry. All of Hynix's current capacity was paid for by debt that will never be paid back. In other words, the money the Korean Government provided Hynix over the last three to five years is now in the form of production capacity, the same capacity that is currently supplying product into the marketplace. This equipment, as a result of the debt write-offs, now makes up little, if any, of Hynix's cost to produce a DRAM.

Most of us in the DRAM industry acknowledge that the lowest cost producer will ultimately offer their product at the most aggressive selling price. Even Hynix, in their pre-hearing brief, acknowledges this belief. But what they will not admit is that their subsidies have made them the lowest cost producer.

When we look at just their 2002 financial statements in the context of the Department of Commerce ruling for the covered period, the subsidies represented approximately 50 percent of Hynix's cost of goods sold. If any of the other major producers could instantly reduce their cost of goods sold by 50 percent from their current levels, they would immediately become the lowest cost producer. As a result, Hynix becomes the lowest cost producer.

This links directly to their behavior in the marketplace. As others will testify to later, Hynix is leading the charge on selling price declines. And why not, when there is always the guarantee of a bailout?

Even Mr. Tabrizi, who is here today, Hynix's Vice President of Marketing, said himself in an interview with the Electronic Engineering Times, "We won't be going bankrupt. The Korean Government won't let us fail."

And when one of the major producers or, in this case, one of the four remaining large producers, has that capability, it affects all of us, both in terms of selling prices and ultimately our profits and losses.

There is no uncertainty about what has

caused the injury. The reason the downturn is so extended and severe is because of the subsidies. It is because of the Korean Government's direct intent to protect and grow their world share of the DRAM market regardless of the cost and those costs have been huge. There is no DRAM company today that could even remotely borrow $16 billion during the last three years, even if they did intend to pay it back. The U.S. industry was and is still being injured and the Korean Government subsidies are the cause.

Thank you for your time today.

CHAIRMAN OKUN: Thank you.

MR. KAPLAN: Mr. Sadler?

MR. SADLER: Good morning, Madam Chairman, members of the commission and the commission staff. My name is Michael Sadler. I am Vice President of Worldwide Sales for Micron Technology. I oversee all of Micron's worldwide sales activities and have been employed by the company for over 11 years. I have more than 23 years of experience in the DRAM industry.

There should be no doubt that Micron and Hynix compete head to head for the same customers and over the same type of products. Micron and Hynix sell to the same major DRAM customers and most sales of domestic products and imports are to large,

multinational computer equipment manufacturers.

While Micron seeks to distinguish itself from competitors based on superior technology and service, the commodity nature of DRAMs compels all DRAM producers to compete primarily on price.

The realities of the DRAM market have been well documented. The vast majority Micron's competitors, including Hynix, manufacture DRAMs that are equivalent in specifications and performance to our own. The DRAM products sold by the U.S. domestic industry and imports by Hynix are interchangeable. Hynix neither competes in a different market niche from Micron nor focuses on specialty or legacy products that are not sold by Micron.

Hynix, like Micron, is a qualified supplier to large and small customers located throughout the United States. This includes major OEM customers. We compete constantly with Hynix's low pricing. There is no place to hide, even with our largest traditional customers.

Competition against subsidized imports from Hynix has forced Micron to cut prices in order to win orders and defend our business with U.S. customers. As Senator Craig stated earlier, we have reported financial losses for 10 consecutive quarters and have

even had to price our products below our cost of goods sold or face the loss of valuable business. Our ability to achieve a fair market price is completely undercut as Hynix continues to offer the lowest prices in the market.

As one of the four major DRAM producers in the world today, Hynix is able to command a presence at virtually every major DRAM customer. This presence enables it to set a price that adversely impacts its competitors, including Micron.

And I'm not the only person who has observed Hynix's low pricing tactics. For example, from a 2001 brokerage report issued by Credit Suisse First Boston, and I quote, "We have erased the 20 cent to 25 cent contract price premium for DRAM sales in second half '01 as we believe that Hynix will continue to sell aggressively into this market."

And last year, from J.P. Morgan, "We expect Hynix to continue to aggressively play on the DRAM market by selling at below market prices to maximize cash flow while reducing inventory via an expected increase in production output. As a result, we believe this news is negative for the DRAM market as well as for DRAM spot market prices."

Hynix's presence in the marketplace is being

used as leverage by our traditional PC customers to obtain lower prices. I know this because the VP of procurement at a major PC manufacturer, whom the commissioners would certainly recognize, acknowledged to me that he plans to keep Hynix in the supply base in order to take advantage of sweetheart pricing deals and use them as price leverage against the balance of his suppliers, including Micron.

The CEO of another of our customers, a major memory module manufacturer, confided to me that he does not rely on Hynix as a regular supplier for DRAM, but whenever they have an internal inventory accumulation, Hynix inevitably calls to offer him a deal that he cannot refuse. He takes deliver of this product and then resells it, including to our U.S. OEM customers.

Micron, Infineon, Samsung and Hynix are the world's major DRAM producers. We all compete for the same customers and sell essentially the same DRAM products. I know from my personal experience that we compete against Hynix at Dell, IBM, HP, Apple and all the other major customers. Our product lines are directly competitive. We sell 64 megabit, 128 megabit, 256 megabit, DDR and SDRAM components and use these chips to build 128 megabyte, 256 megabyte, 512

megabyte and 1 gigabyte modules. Hynix sells every one of those products to our major OEM customers.

I hear from my sales force that Hynix regularly offers prices that are very competitive and usually lower than ours. It is the subsidies that allows Hynix to disregard the cost and profit imperatives of the DRAM industry that unsubsidized competitors like Micron are compelled to follow.

While falling DRAM prices and unprecedented prices have forced Micron and other unsubsidized competitors to cut costs, Hynix's subsidies have enabled it to ignore these cost and profit imperatives.

MR. SADLER: For example, the next significant technology shift from DDR-1 to DDR-2 will take place in 2004 and will require substantial capital investment in the assembly, test and wafer fabrication areas. This move to DDR-2 is essential to MICRON's continued existence. Subsidies to Hynix and the resulting lower of DRAM prices have prevented Micron from being able to fund this DDR-2 initiative from operating cash flow rather Micron has been forced to find the money someplace else and this meant laying off employees, shuttering a production line and discontinuing several promising development programs

in other technology areas.

Without a CVD order the future will be even more grim. The continuing subsidization of Hynix eventually will preclude the domestic industry including Micron from continuing to invest in the newest technology in a manner that will ensure our ability to compete. Just last week Hynix announced that it the first DRAM maker to validate 512 megabyte DDR 400 programs on Intel motherboards. This suggests that they are positioned to be a leading supplier to OEMs supporting the latest and greatest computing technology.

My company is not subsidized. My instructions are to make profitable sales. This has been impossible over the last two and a half years but I know that if I cannot turn that around soon the consequences for our domestic industry will become even more devastating. I appreciate the opportunity to appear before you again and welcome any questions that you may have.

CHAIRMAN OKUN: Thank you.

MR. KAPLAN: Professor Hausman?

MR. HAUSMAN: Thank you very much.

CHAIRMAN OKUN: Mr. Hausman, if you could get your microphone there.

MR. HAUSMAN: I always forget. I'm sorry. Thank you very much. My name is Jerry Hausman. I am professor of economics at MIT. I have done academic research and consolidated in the semiconductor industry since the early 1980s. I'm pleased to be here today to discuss how imports of subsidized DRAM produced by Hynix Semiconductor have significantly depressed prices for DRAMs in the United States and worldwide. Hynix has significant ability to undersell its competitors in a row pricing overall as a result of more than $16 billion in debt relief provided to it by the Korean Government over the past two years.

The effect of these subsidies has allowed Hynix to price below cost for an extended period of time when it otherwise would have gone out of business or at a minimum would have been unable to expand its output as it did. The continued presence of Hynix in the marketplace and its ability to expand its production of DRAMs as a result of government subsidies has already harmed unsubsidized producers in the U.S. and elsewhere and threatens to cause further injury as Hynix continues to significantly expand production.

Over the past several years there has been significant rationalization and consolidation in the

DRAM industry such that the four largest DRAM producers, Samsung, Micron, Hynix and Infineon now account for 80 percent of global DRAM sales. Hynix is the third largest producer and represents 17 percent of global DRAM supply. As you know DRAM is a commodity product and sells primarily on the basis of price. This results in a high degree of competition among suppliers.

These competitive conditions require producers to constantly and aggressively reduce costs. Cost-cutting measures are largely affected in three ways; (1) through the introduction of new generations of higher-density DRAMs; (2) through the introduction of smaller ciculine widths which allow DRAM makers to manufacture smaller DRAM components thus allowing more DRAMs per wafer; and (3) by shifting the larger DRAM wafers which can yield 125 percent more die per wafer than the current size.

These technological innovations are not optional. A company must make extremely high levels of investment in both R&D and capital expenditures each year in order to remain competitive and survive in the industry. The SIA estimates that IC companies on average invest 37 percent of their revenues each year on R&D and capital expenditures upgrades. These

averages tended to be even high for DRAM companies.

Because of the rapid technology shifts in this industry the average useful life of semiconductor equipment is only about three years and perhaps in no other industry do you have the requirement of essentially replacing your entire factory every three to five years and the cost of remaining technologically competitive is both enormous and increasing. Only a few years ago the cost of a new DRAM Fab was about $1 billion but today costs between $2.5 and $3 billion. A single lithography machine used to process the 300 millimeter wafers can now cost up to $20 million and each FAB contains dozens of these machines.

These significant investment requirements mean that DRAM companies have to be able to earn sufficient profits during the up cycles to be able to make the required investments. When unfair trade practices are present a producer's ability to earn enough profit to fund new investment is circumvented. That restriction on investment is precisely what is happening here.

As I noted in the report I prepared which is contained in Exhibit 19 of Micron's prehearing brief DRAMs are a commodity product which trade primarily on

the basis of price. When this is the case a competitive advantage always goes to the producer who can achieve the lowest cost by introducing new efficiencies and by increasing yields or units of DRAMs per wafer. A low-cost producer has the ability to be more competitive in setting prices.

Hynix agrees and has elaborated on this concept in its brief on page 78 where Hynix states and I quote, "Low production cost suppliers will be willing to price lower than higher production cost suppliers during a downturn. This statement is correct. During a period of excess supply a low-cost producer has the ability incentive to undercut the prices of competitors in order to make the sale. In fact that is exactly what we've seen in this case.

The very large subsidy benefits that the Department of Commerce found were provided to Hynix were in excess of $2 billion during the 18 month period investigated. It must be remembered however that the subsidies actually received by Hynix in that period were significantly larger because it is Commerce's practice to spread the benefits from these subsidies over time to account for the longer lasting impact of the subsidies.

The actual bail outs provided to Hynix

during the same period were about $12 billion. These subsidies had the effect of substantially reducing Hynix's cost structure. As I note in my report a company like Hynix that has a subsidized cost structure has the ability to price lower than it otherwise would have been forced to if forced to cover all of its costs as in the case with unsubsidized producers because the subsidy allows Hynix to price without respect to cost.

Even if you consider the conservative $2 billion calculated by Commerce for the period 2001 and the first half of 2002 this subsidy covers 47 percent of Hynix's cost of goods sold of $4.35 billion for that same period. That's like having someone relieve you essentially of half your production costs and makes Hynix a low-cost producer in 2001 and 2002. Neither Micron nor any company can compete profitably with a company receiving a nearly 50 percent subsidy.

Economists have analyzed the ability of companies to "pricing without respect to cost" in the context of cost of service utility rate regulation. Economists concluded that regulated firms facing competition could price lower than otherwise because of the distortions created by the subsidies inherent in cost of service regulation. In fact telephone

regulation as done by the FCC and most state commissions largely change from cost of service regulation which allowed a regulated firm to cover its cost the price cap regulation in the late 1980s and '90s specifically to remove the distortion arising from "pricing without respect to cost."

Thus government subsidies have permitted Hynix to lower prices to economically irrational levels and to price without respect to cost and have undermined the equilibrium pricing that would have prevailed based on supply and demand conditions in the DRAM industry. Indeed my econometric estimates demonstrate that when Micron was negotiating to buy Hynix which would have ended the Korean Government subsidies in the irrational pricing DRAM prices were 33 percent higher during this period in early 2002.

Hynix would have a number of possible reasons for pricing at levels that did not maximize profits; (1) it may have been willing to lower prices in order to maintain market share when customers were beginning to show concerns about Hynix's long-term viability. In order to maintain these customers Hynix may have engaged in deeper price cuts than usual; (2) Hynix is under significant pressure to maintain employment even if that means selling output at prices

that are not as high as they could be. The Korean Government subsidies finances behavior.

In my report I have estimated the minimum change in prices that would result from the change in supply if the Korean Government subsidies had not permitted Hynix to remain in the market. In past DRAM investigations the Commission staff has estimated a supply elasticity within the range of 0.3 to 0.5 and a demand elasticity within the range of minus 0.3 to minus 0.7. My own econometric estimates confirm these elasticity ranges. Given Hynix's 17 percent global market share if Hynix had exited the DRAM industry the price impact of Hynix's access supply in the market would have a price effect of approximately 17 to 33 percent based on the Commission's prior elasticity estimates.

Hynix's price effect based on my econometric estimates would be about 21 percent. This assessment of the price impact only covers a likely change in prices from the removal of Hynix's access supply. It does not take into account the impact that would result from removing a competitor from the market who is able to price without regard to cost. Without this effect the baseline prices would be even higher than the result of removing or decreasing Hynix's

subsidized supply.

The injuries arise from Hynix's subsidized supply and whether Hynix's share has increased is not the important determinative of the injury. I repeat Hynix's share of imports is not the important determinative of the injury. It is the amount of Hynix's subsidized output that depresses DRAM prices. Hynix's pricing behavior in this regard has been recognized by industry analysts as discussed in Micron's brief.

Finally I want to mention my concern that subsidies to Hynix are likely to have a significant economic effect in the future. It is well-known that companies exit the DRAM business when they cannot maintain sufficient profitability to remain in the business and we have seen a number of companies representing a significant amount of capacity exit in each market downturn. This would have been Hynix's fate, too, had the Korean Government not stepped in to bail them out because international capital markets had closed to Hynix in 2001.

Instead the subsidies Hynix has received are allowing that company to position itself to remain a top competitor in the future. In fact Hynix is now making significant new investments to allow it to

shrink its minimum line width from 0.13 microns to 0.08 microns in 2005. This will lead to another significant increase in Hynix's bid output. Hynix also plans to ramp volume 300 millimeter DRAM production in 2004 which will more than double Hynix's output.

Absent Korean Government subsidies to Hynix I would not expect Hynix to be able to fund this new investment in 300 millimeter production along with the investment to also shrink line width of its DRAMs. The expected effect on Micron and Infineon which do not receive government subsidies for their investment will be to incur ongoing significant losses and threatens to delay or even stop new investment by Micron and Infineon. Thus in the future the continued Korean Government subsidies to Hynix will decrease the ability of Micron and Infineon to compete relative to Hynix, one of their primary competitors. Thank you.

CHAIRMAN OKUN: Thank you.

MR. KAPLAN: Thank you, Professor Hausman.

Ms. Byers will discuss threat.

MS. BYERS: Thank you and good morning, Madame Chairman and members of the Commission and Commission staff. My name is Bonnie Byers. I'm an economist at Hale and Door and I want to cover what we

believe are the key issues with respect to threat of injury. First the statute directs the Commission to examine the nature of the subsidies in question and whether imports are likely to increase as a result of those subsidies.

This threat factor is clearly established in this case. Why? First because the billions of dollars in subsidies that Commerce found were provided to Hynix are among the very sorts of subsidies that the statute points to as being the most likely to threaten future injury namely those contained in Article 6.1 of the WTO Subsidies Agreement. In fact Article 6.1 subsidies cover precisely the types of subsidies at issue in the Commerce case, very large subsidies exceeding five percent of sales, subsidies to cover operating losses and subsidies that provide debt forgiveness.

The Commission has considered Article 6.1 subsidies in the context of threat in two Sunset Reviews, Steel Rails from Canada and Certain Steel Products. We hope you will apply the same analysis here. In addition Hynix exports 93 percent of the DRAMs they produce making the subsidies at issue here essentially de facto export subsidies which are prohibited under Article 3.1 of the Subsidies

Agreement. In this investigation Commerce found that the Korean Government had identified the semiconductor industry in Korea as a strategic export-oriented industry targeted to receive substantial preferential benefits and in fact Commerce found export subsidies in their case.

As noted earlier these subsidies to Hynix have already allowed them to nearly double its production during the POI based on public data. Moreover, Hynix's forecast to double its bit production again by 2005 based on public projects. This doubling of Hynix's output will lead to increased exports to the United States, the single largest consumer of DRAMs accounting for 40 percent of global d consumption. Here I would refer you to Confidential Charts 4 and 5 which you have before you which are based on Hynix's own data reported in their questionnaire response.

Third, the subsidies actually received by Hynix have not fully been accounted for because of Commerce's practice of spreading the benefits of certain subsidies over time, in this case five years. Thus the actual benefit is significantly larger than the $2 billion countervailed during the Commerce POI and continue to benefit Hynix. In addition as Mr.

Kaplan pointed out Hynix received another $4 billion bail out in December of 2002 after this case was filed.

This new subsidy alone is massive amounting to one and a half times Hynix's total sales in 2002. This will enable Hynix to make all the necessary investments in R&D and capital expenditures that will fund their output expansion over the remainder of this year and well into next. The U.S. industry is also threatened with future injury because the price depression resulting from Hynix's subsidized supply has had a detrimental impact on our ability to develop new generations of DRAMs.

Micron cannot finance the expenditures to move to next generation product from cash flow as it has done in the past and is quickly burning through its cash and retained earnings. It was forced to go into the capital markets to borrow earlier this year on extremely unfavorable terms and most analysts predict that Micron will have to borrow again in the near future. In the meantime Micron has had to keep tight controls on both capital expenditures and R&D hampering Micron's efforts to move to newer generations. Hynix by contrast is having its investments and developing next generation products

paid for by the Korean Government.

An additional consideration for the Commission should be the provisional finding by the European Union just last week that subsidies to Hynix have injured EU producers. Last week they issued a draft definitive determination of subsidies equivalent to 34 percent of net sales and an affirmative injury finding. This is an unprecedented subsidy margin in the EU and the ITC should recognize that Hynix is only months away from being shut out of the EU market.

Absent a countervailing duty order in the United States this will divert substantial volumes to the U.S. market which I think are the exact figures are in the staff report. An action is also pending in Taiwan, further testament to the global proportions of the injury caused by the subsidies to Hynix. Other threat factors are also present in this case but the specific data is confidential and cannot be discussed here. I would direct you to pages 89 and 103 of our brief.

Finally I would just like to say a few words about the future of this industry. Hynix argues in its brief that the market is poised for a rebound and that there is a bright future for the domestic industry. Hynix's cheerful projections however are

contradicted by the terrible financial situation of the domestic industry and are simply not supported by any credible forecasts. First prices continue to fall faster than costs. Spot market prices of 256 meg DDR DRAM have fallen from 743 at the beginning of the year to 408 today, a decline of 45 percent in less than six months.

Likewise the spot market price for 128 meg DDR DRAM has fallen by 42 percent over that same period. While there might be some seasonal increases in demand associated with back to school PC sales this year no one in the industry is predicting a turnaround. In fact Samsung Electronics last week told Reuters that DRAM prices will not recover before the end of the year. In addition industry analysts continue to be bearish on both the outlook for the industry and on Micron.

While complimentary of Micron's cost-cutting measures most analysts express ongoing concern about Micron's financial position. One analyst noted on June 16th cash burn remains an issue for Micron as cash declined by $200 million in this quarter alone. Cash profits from sales were well below capital spending. Without significant pricing help this analyst said Micron will be unable to meet its $1

billion capital spending guidance for 2004 without yet another infusion of cash. This will become more difficult over time as debt now exceeds cash.

In another report on June 19th Freedman, Billings, Ramsey noted the ongoing risk of investing in Micron citing specifically the continuing government support of weaker industry players most notably Hynix that continue to pressure pricing. Last week S&P lowered its outlook for Micron from stable to negative citing poor prices and pressure on Micron's profitability and liquidity. This market is not in a turnaround and U.S. producers remain mired in losses. This record in our view more than merits a finding of present injury but if there is any question of that there should be none regarding the likelihood of future injury from Hynix's subsidies exports. Thank you.

CHAIRMAN OKUN: Thank you.

MR. ROSENTHAL: My name is Paul Rosenthal with the law firm of Collier Shannon Scott. I'm accompanied by my colleague, Kathleen Cannon. Madame Secretary, may I get a time check please?

SECRETARY ABBOTT: Nine minutes remaining. I'm sorry, 19 minutes remaining.

MR. ROSENTHAL: Thank you. I will keep our

introduction short given the limited time. I want to introduce Mr. Robert LeFort, the President of Infineon Technologies North America.

MR. LeFORT: Good morning, members of the Commission and Commission staff and ladies and gentlemen. My name is Robert LeFort, President of Infineon Technologies North America accompanying me today is Henry Becker, Managing Director of Infineon Technologies Richmond, Virginia. I want to talk today about the market for DRAMs in the United States.

When I have described the characteristics of the U.S. DRAM market to people here in Washington the observation I always hear is that it is complex here however in DRAMs like many industries that are basically commodities price is one of the most important factors in DRAM purchasing decisions. Whether you're talking about product forms, product types and densities, channels of distribution or end uses price is a critical parameter because that is something that can differentiate us from our rivals on any particular day or for any particular sale.

We all envy Intel who isn't in the DRAM business who can charge more for its processors because of its name. Neither we nor any of our rivals can do that because commodity DRAMs from different

manufacturers are highly substitutable with each other. Actually substitutability among DRAMs extends beyond the usual notion of each manufacturer's product being interchangeable with others within the same specifications or performance capabilities.

In certain contract sales to some key account customers there's often substitution across certain kinds of DRAMs of differing densities even DRAMs of different addressing modes and access speeds if it is planned that way at the design stage. Thus two 128 megabyte DRAMs from Hynix may be substituted for one 256 megabyte DRAM from Infineon for example assuming both are qualified with a particular customer.

I have been provided with a preliminary public report in this case and was encouraged to see the Commission appreciates these intertwinings. Due to these intertwining relationships among certain products subsidized imports from Hynix have been able to severely injure other participants in this market to a degree out of proportion to Hynix's U.S. market share. Artificially low prices that can be offered by someone who doesn't have to pay his own bills are capable of having a harmful impact well beyond actual sales volume or market share.

I'd like to give you some specific examples of how Hynix's irrational pricing can cause damage to other market participants far beyond its own sales volume. Because the DRAM market is basically a commodity market it's very competitive and we all sell to the same set of customers for most of our DRAM business. Certain contract customers demand and are granted most favored customer status. Simply put a supplier agrees that if it lowers DRAM prices for Customer A then Customer B, C and others with whom it has such agreements get that lowered price as well.

MFC agreements are used by personal computer brand name manufacturers which account for the largest single share of the DRAM market in the United States. This chart I have prepared shows how a low Hynix price for one DRAM product to one customer can trigger price reductions by other DRAM suppliers to other customers in the market. As you can see from the chart Supplier 1 bids a price say $10 per unit to Customer A but Hynix bids $8 per unit to Customer A as well. Supplier 1 needs to decide whether to lose revenue by meeting the price or lose an entire sale by refusing to meet Hynix's price.

Supplier 1 therefore has to lower its price not only to Customer A or lose its business but also

to Customer B with whom it has an MFC agreement. Supplier 2 who may not have bid on Customer A's job and may have no MFC agreement with B will also need to lower its prices to B anyway to meet the competition and save its share. Let's assume Supplier 2 does have an MFC agreement with Customer C. Supplier 2 must then lower its prices not only to Customer B but to Customer C as well. Supplier 3 is then forced to chase 2's price down and so on. You can easily see how quickly a single irrational price offering between Hynix and one customer can spread through the entire DRAM market.

Now let's talk about blending scaling. What we at Infineon call blended scaling is another means by which Hynix's volumes and low prices have a disproportionately negative impact on our sales and profits. As I described a few minutes ago certain major types of DRAM products particularly unbuffered modules and SO modules are substitutable vertically as well as horizontally. In other words two 128 megabyte DRAM modules can be substituted for one 256 megabyte module and so forth. That is the vertical effect in the left-hand column of the chart.

Certain contract buyers reference prices of certain DRAM products according to this times two

scale. The price of one 256 megabyte module will be referenced in terms of the price of two 128 megabyte modules and so on. Prices for certain commodity modules say 128 megabyte DIMMS may be used as reference prices for not only 256 megabyte DIMMS but blended into the specialty modules that are a variation of that platform SO DIMMS for example. This is the horizontal effect shown here.

What we have experienced is Hynix making an aggressive bid for 128 megabyte DIMMS. This one offer pulled down our price offers not only for the basic 128 megabyte DIMM but for both DIMM and SO DIMM modules of 128, 256 and 512 megabyte density as well. This blended scaling chart essentially shows how Hynix's low priced offering on one product can easily influence prices on multiple products to that same customer.

In conclusion I leave you with two points, (1) considerable substitutability exists among certain types of DRAMs and modules of different densities and end use specifications; (2) because of the magnifying effects of the MFC clause and blended scaling the irrational price offerings by Hynix on one proposal can quickly spread throughout this interwoven market lowering prices and profitability for all

participants.

These effects accurately describe what my company has gone through these past couple of years. Our questionnaire is proof of this and also of the effect that Korean Government subsidies have had on our own prices which have deteriorated much more than what can be attributed to normal market forces. The price deterioration has resulted in significant losses on an operating basis. The financial returns on sales of DRAMs also fail to come close to the level needed by Infineon to make the necessary investments to stay in the technology development race which is the only way to survive long term.

Specifically Infineon has been forced to postpone indefinitely the completion of a new facility that was to produce leading edge DRAM products utilizing the newest, largest, and therefore most cost-competitive wafer technology 300 millimeters diameter. Once completed we had projected that this project would mean an additional 1,100 jobs and $1 billion of investment at our site just 90 miles from here in Richmond, Virginia. Instead and despite steadily growing demand for DRAMs we had to mothball the whole project.

Today that facility is still only partially

completed while foreign producers close the lead Infineon once enjoyed on our 300 millimeter wafer path. We will be unable to ever complete this project if our prices and profits remain depressed due to subsidized imports in our market. That concludes my testimony. I'm happy to answer any questions you may have.

CHAIRMAN OKUN: Thank you.

MR. ROSENTHAL: Dr. Magrath?

DR. MAGRATH: Thank you. Good morning. I'm Patrick Magrath of Georgetown Economic Services, consultants to Infineon in this case. Accompanying me is Ms. Gina Beck also of GES.

Gina, we only have a few minutes so could you go right to the chart, Chart 1?

Later in this proceeding you will hear that Hynix is not the largest producer in Korea nor is it the largest import source for Korean product in the U.S. market and that it's market share is small. We do not agree that it is small in absolute terms and particularly within the context of market practices such as MFC, clauses, scaling and blending that Mr. LeFort just described. In Chart 1 you see that one Hynix bid on a limited volume causes dominoes to fall and create much wider impacts as the limited price

offering from Hynix and the low price ripples through the market. So one price can cause that.

In Chart 2 just this the Hynix bid over here for 120 megabyte DIMMS at $40 can cause this due to the scaling and blending agreements on multiple products produce some common platforms. These market practices as described by Mr. LeFort help explain how even limited volumes of low-priced Hynix imports can cause a much broader impact on the domestic industry.

The other point we would like the Commission to consider as it relates to this volume issue is that as in all cases before you actually the specific form injury takes is dependent on the particular reaction to the unfair competition by the domestic industry. In some industries U.S. companies under attack will respond to import competition by withdrawing from that portion of the market and seeking market niches.

In other industries domestic competitors will stand and fight. They will not cede market share and customer accounts to import competition even if they have to slash profits and prices to do so. The U.S. DRAM industry is an extreme example of this latter stand and fight strategy and the record on the trends in domestic prices and profitability fully support this view. The domestic industry has no

choice really due to the nature of DRAM production. The constant and very large capital expenditures and R&D required to stay competitive mean high fixed costs which in turn mean the maintenance of high-capacity utilization in order to spread those large fixed costs over the maximum number of chips produced hence the great economic pressure in this business to maintain production and maintain sales.

The U.S. industry may have succeeded in limiting Hynix's growth in the POI but it only did so at the terrible cost of slashing their own prices, huge declines in prices, and the resultant large financial losses. Without governments to subsidize Micron and Infineon this strategy is ultimately a losing one. Thank you.

MR. ROSENTHAL: I want to reserve the balance of our time for rebuttal please.

CHAIRMAN OKUN: Then that completes the testimony for this panel?

MR. KAPLAN: Yes, it does.

CHAIRMAN OKUN: Okay. Well, before we begin our questions this morning let me thank all the witnesses for being here. We very much appreciate your testimony and your willingness to answer questions and for all the information that you have

submitted and will continue to submit throughout this investigation. We will start our questioning this morning with Commissioner Koplan. I would remind witnesses if you can just restate your name and affiliation when you answer questions. It's easier for us and for our reporter.

Commissioner Koplan?

COMMISSIONER KOPLAN: Thank you, Madame Chairman. I, too, want to thank the panel for its testimony this morning. It's very helpful. I'd like to begin by getting into the role of non-subject imports of foreign dies during the period of examination particularly in light of what is headed "Alternate Table C-1" at page C-3 of the confidential staff report dated June 12th. I note that that table was termed alternate because it preceded by five days Commerce's final determination but anticipating what it might be the computations were made in these alternate tables.

Of course the final determination came out on the 17th and gave I think the parties a half day to comment on what Commerce did but these tables that are termed alternate I now consider final tables for purposes of this phase of the investigation. Anyway those tables reflected that non-subject imports

increased very substantially and I can't get into the numbers because that's business proprietary information but I'd like you all to couple your response to my question with your answers to the arguments that are set forth at pages 104 through 106 of Respondents prehearing brief at which they conclude on page 106 and this is not business proprietary that, "In light of the dominant presence of non-subject imports we submit that Micron is not able to demonstrate that the small volume of subject imports has had a significant adverse affect on the domestic industry."

I realize you all don't agree that these are small but I'm quoting and then they go on to say, "Are restated in terms of the statutory standard" and they cite a case that counsel well knows, Gerald Metals, "of the statutory standard given the dominant presence of non-subject imports of this commodity product Micron is not able to demonstrate why the non-subject imports do not have such a predominate effect in producing the harm to the domestic industry as to prevent the subject imports from being a material factor."

Now I'd like counsel to expand in the post-hearing on my question because counsel can take into

account the numbers that I'm referring to that I can't get into here but for purposes of the public proceeding I'd like to hear from both Mr. Appleton and Mr. LeFort as to their comments on the impact of how I should be weighing the non-subject imports presence of foreign dies in this market given what Commerce did on the 17th of June?

MR. APPLETON: Yes. If you don't mind, Mr. LeFort, I'll go first and follow-up?

It's obviously our position and it really I think is a lot less than the market share that Hynix currently has. When you look at the domino effect on pricing that occurs because of even frankly a few percentage points on the market can have an impact as to driving the price down that it doesn't take very much in order to have that happen and I think we really have to go to the motivation of what's going on in pricing as opposed to the supply that's becoming available in the marketplace from the current producers that are already in the marketplace.

It's the motivation as to at what price will we sell that product into the marketplace? It's really independent of the non-covered imports. It's really a very small percentage of what's being out there which in this case it could be in Hynix's case,

you know, we say they have 17 percent of the market. Even if it were less it would still have the same impact.

COMMISSIONER KOPLAN: Thank you.

Mr. LeFort?

MR. ROSENTHAL: Before I let Mr. LeFort answer I'd like to say a few words if I might. I'm Gerald Metals otherwise. A couple of key points here. As Mr. Appleton mentioned one of the reasons why we obviously disagree with the Hynix counsel's argumentation they didn't have a chance to see our presentation before they submitted their brief so I understand why they might not have gotten it immediately is the effect of pricing --

COMMISSIONER KOPLAN: I think I should have had him go first, Mr. Rosenthal, but go ahead and finish.

MR. ROSENTHAL: -- is this pernicious effect of a small volume of pricing as explained by Mr. LeFort and Dr. Magrath, that's number one. Number two, the statute doesn't talk in terms of import growth and we can't talk about what the trends are but we certainly disagree by the way with how the Respondents characterize the trends on volume. Our view is (a) the volume is significant no matter how

you analyze the trends; (b) as you heard from Dr. Hausman that volume however you measure it shouldn't be in the marketplace at all because Hynix should be out of business if market forces were allowed to work and if this cycle were to be like other cycles where the weakest competitors got out of the business and there was consolidation that was allowed to occur. All of the analysts who look at this have said exactly the same thing.

COMMISSIONER KOPLAN: Thank you.

Just one housekeeping chore before I turn to you, Mr. LeFort. Mr. Rosenthal reminded me of this.

Professor Hausman, could you submit your model and data that you used for estimating the elasticities referred to in your testimony for purposes of the post-hearing?

PROFESSOR HAUSMAN: Yes, I would be glad to.

COMMISSIONER KOPLAN: Thank you very much.

Go ahead, Mr. LeFort.

MR. LeFORT: Yes. I think in response to your question there are two basic areas to look at so one is in pure volume we say that in a near commodity market that we have that there's a substantial influence and that's had quite a bit of discussion but to really give you the extremes of the situation we

have on a specific from the testimony that I gave is we actually have some customers who will qualify Hynix and not even give them any business. So at zero percent market share they still influence the prices because there is still the threat that they will use that price if you don't meet it. So really at that point you can take it to the full extreme to talk about how they can influence the price even though the volume is irrelevant.

COMMISSIONER KOPLAN: Thank you. If I could stay with you a moment, Mr. LeFort. When you testified about the most favored customer clauses that lead to I think you used the term irrational pricing as you put it what is the strategic advantage of signing such contracts then?

MR. LeFORT: So first let me say just a slight correction to the question if I may.

COMMISSIONER KOPLAN: Sure.

MR. LeFORT: The irrational pricing comes first in terms of this chart but the advantages you have a market where as we say is a near commodity and you have a handful of major customers and these are now conditions for being competitive in that business and as Mr. Magrath said because of the high fixed cost in this industry you really need to be running at full

capacity so you really are left with one of two options. You either make a strategic decision that you will exit the business and not play by the rules in the market or you agree to play by the rules in the market and you expect that there are some fair economics at work and by being the best at what you do you can then be successful.

COMMISSIONER KOPLAN: Are these clauses common globally?

MR. LeFORT: Yes, they are.

CHAIRMAN OKUN: Okay. So they're not unique to this market?

MR. LeFORT: Correct.

COMMISSIONER KOPLAN: Thank you.

In the preliminary determination the Commission focused on bits for purposes of assessing the volume of imports because total bits are a uniform measure of the quantity of DRAM products. However we recognize that the use of bits is as a unit of measurement can present difficulties for our analysis as total bits are a function of chip density and product mix both of which have changed over the period of investigation so we do not necessarily view the increase the same as we would another type of product.

I'm asking the industry witnesses whether

you believe this is the proper approach for us to assess volume or whether you have any different suggestions, Mr. Appleton?

MR. APPLETON: Well, the bits is a measurement that we have used in the industry since the entire time that I've been in it for the last two decades and it really is the most reflective of the changes that go on in the industry. I don't think there's a better measurement that you can look to and the reason is that in general these bits are very common so to speak. They're the same kinds of bits even though its across density generations and wafer sizes and so forth so it's the best measurement.

COMMISSIONER KOPLAN: Thank you.

Mr. LeFort?

MR. LeFORT: We agree.

COMMISSIONER KOPLAN: Thank you. I appreciate your responses. I see my red light's about to go on so I'll wait until the next round. Thank you, Madame Chairman.

CHAIRMAN OKUN: Thank you. Again thank you to the witnesses. Commissioner Koplan led with some questions on none-subject imports and I think I'd like to just stay with that for a little longer if I could.

Mr. LeFort, you referenced that these most

favored customer clauses were common globally. Has the use of the most favored customer clauses and blending scaling changed during the period of investigation in any way?

MR. LeFORT: Yes. Because of the magnitude of the downturn the customers have had more if you will clout during the period of investigation. So they have become more aggressive at their expectations and demands of the supply base. So over the period of investigation we've gradually seen things become tougher and tougher.

CHAIRMAN OKUN: Okay. If I understand these and I'll probably have some more questions just about the specifics but these are used by the PC OEMs exclusively or are they used by other customers as well?

MR. LeFORT: I wouldn't say exclusively but I would say they're predominately used by the PC manufacturers because again that is where you have the highest concentration from a customer base.

CHAIRMAN OKUN: Okay. Just with respect to that I know that for both Micron and Infineon the responses in the briefs has been that the PC OEMs I think have been described as a substantial part of the market. I'm not sure if that's the exact word but I

just wondered for post-hearing is that something that can be broken down, counsel, in terms of end uses and in terms of where we go between PC OEMs versus other OEMs?

MR, APPLETON: Just to respond. I think I can give you a good idea right now.

CHAIRMAN OKUN: Okay.

MR. APPLETON: Of course we can follow-up but --

CHAIRMAN OKUN: Okay.

MR. APPLETON: -- in general when we say PC OEMs we talk about the industry as the computing industry and the computing industry is most of us think of a PC as a desktop PC but it includes notebooks like what Dr. Hausman has and it includes servers, the kinds of things that we mostly think of in computing. That typically consumes at least in the DRAM world somewhere around 85 percent of all the DRAM produced in the world goes into the computing industry and of course we can follow-up with detail and it can be broken out.

CHAIRMAN OKUN: Okay. That's very helpful though.

Mr. LeFort, would you agree with that figure?

MR. LeFORT: Yes.

CHAIRMAN OKUN: Okay.

All right. Then again I mean we are constrained because of so much of this record being business proprietary but I wondered if counsel or Mr. Hausman could comment on whether they would in looking at the lost sales, lost revenue, information that has been gathered by staff whether they think it's supportive of the view that these most favored customer clauses and blended scaling show an impact? Mr. Hausman, you have your --

MR. HAUSMAN: Yes. I'd like to make two points; (1) these type of contract provisions not only exist worldwide throughout the DRAM industry but they are a common feature of any commodity-like or very many, not any, but very many commodity-like inputs and the main reason they exist is if you're a customer and you're selling computers you're Dell or you're Gateway you are in a very highly competitive business.

You cannot be at a cost disadvantage compared to your competition because, you know, you've seen them advertise and it's $895 and whatever and so they're going to require these type of contracts from their input suppliers so they will not be at a cost disadvantage and I have seen this not only in the DRAM

business but many, many industries I have studied as an economist 30 years at MIT.

The other point I'd like to make though if I could is with respect to non-subject imports. That Samsung is the biggest importer in the United States in my view is neither here nor there. Rather than Samsung it could be Motorola located in Phoenix. The real question is what would happen if Hynix had either exited the market or not expanded their imports in the United States which they approximately doubled during the POI. That's the real question.

I heard Mr. Porter, their counsel, say at the beginning that Micron must prove all of its financial woes are due to Hynix and in my view as an economist that's just incorrect. The real question is again if Hynix had not doubled its imports, volume of imports, the bits to the United States or if it had disappeared altogether what would we see in terms of prices and profits for the domestic industry? According to my economic analysis both would be a good deal higher. So I believe that is the correct way to look at the effect of Hynix.

CHAIRMAN OKUN: I do have a number of questions with relation to the nature of the subsidy but in terms of lost sales, lost revenue, on this

record is there anything you can say in public session in terms of whether you believe that they are supportive of the description the industry is giving of the I guess disproportionate impact of small sales?

MR. HAUSMAN: Yes. That is what I tried to say in my statement that if you have "irrational pricing" it ratchets down the whole industry because of these most favored nation or most favored customer-type clauses because if they go to one of your big customers and offer a lower price Hynix you have to meet it because you have to maintain your capacity utilization. Once you meet it to that big customer then all your other big customers are going to rachet down the price to that same level. So, yes, I think it's very supportive and as I said that's how this industry and many industries work.

MR. KAPLAN: If I could just add one thing. We had a section in our questionnaire response I believe and then also in our brief describing some of the difficulties in developing detailed lost sale and lost revenue information. Now the problem is when you have a commodity market that moves very, very fast and a lot of sales every day this is very different from say offshore oil platforms which is the other extreme where there are two bidders and everybody knows what's

going on.

Here buyers are not necessarily going to tell Mike Sadler's salespeople who they lost to and exactly what but they know they lost and they know that there was a significant price impact. So it may be difficult to document every single lost sale and lost revenue but we have given some examples of particular OEMs where we know where the total available market called TAM has shifted from us to Hynix in our questionnaire response and I believe in our brief and also although it's a little different point I would direct your attention to Confidential Charts 1 and 2 which I think elucidate the pricing factors in this case.

CHAIRMAN OKUN: Okay.

MR. ROSENTHAL: One last point on that. You saw from the chart that you may or may not be able to identify the lost revenue from the first set of transactions. It's the ripple effect through the Fair Value Competitors 2 and 3 who you certainly won't be able to identify and pin on the original Hynix bid in the first one but you know that that pricing effect is happening for the other transactions as well. Unfortunately it's very difficult to pick up in a traditional ITC questionnaire and pin that as a lost

sale or lost revenue but there's unquestionably that price effect.

CHAIRMAN OKUN: Mr. Magrath, you had looked like you wanted to have the last word.

MR. MAGRATH: Yes. Paul covered the same point. In our testimony up there Competitor 2 in the MFC clauses Competitor 2 is not competing with -- he's never seen Hynix in this account but he has to drop his price because in the sale above the separate sale Competitor 1 had to meet the Hynix price and therefore was forced by these marketing agreements to offer OEM, too, a lower price. So Competitors 2 and Competitors 3 have to meet those prices by other fair value competitors but it all started with the ripple effects of the low Hynix price.

CHAIRMAN OKUN: Okay. I appreciate all those comments on that. The other question I had related to that and again some of it may need to be confidential but in their brief for a number of pages the Respondents look at the pricing data and also do their own analysis of non-subject prices in this market. I wonder if there's anything you can say in the public setting with regard to that and obviously I would look for further briefing on that in the post-hearing brief as well?

Mr. Kaplan?

MR. KAPLAN: I think there are a few things we can --

CHAIRMAN OKUN: If you can just pull your mike a little bit closer.

MR. KAPLAN: Sure. I think there are a couple of things we can say publicly. That document which I believe is Exhibit 20 or Exhibit 21 is extremely misleading is perhaps the kindest thing I can say about it. I think I can say publicly that when the Respondents are talking about overselling they use one denominator. When they're talking about underselling they use another denominator. They also have left out certain sales in their comparison. They simply are not taking account in the analysis.

They don't use the ITC method in terms of how you look at the average price during a month and there are a lot of other problems with that data in terms of what they classify as subject imports and what they classify as non-subject imports and we would be very happy to provide a full confidential analysis.

CHAIRMAN OKUN: Okay. My red light's come on but for purposes of completing, Mr. Rosenthal or Mr. Magrath, did you have anything?

MR. ROSENTHAL: We agree with what Mr.

Kaplan said and we'll comment in our post-hearing brief.

CHAIRMAN OKUN: Okay. Thank you very much.

Vice Chairman Hillman?

VICE CHAIRMAN HILLMAN: Well, thank you. I would join my colleagues in welcoming you here and thanking you for the tremendous amount of information that was provided in the pre-hearing briefs. It's extremely helpful to us. I guess if I can maybe just piggyback a little bit more on this non-subject issue just to make sure I understand a couple of things. One is if we look at the data sets in front of us one of the things that's striking at least to me is the degree to which Samsung increased its market share. I mean over ten percentage points in this market. If it's really Hynix that's, you know, the price leader in your view how is it that Samsung gained so much market share?

MR. APPLETON: If I could respond to part of that question then maybe others could comment on that. While it is true that Samsung has increased, you know, their imports I think there's something important here to note about Samsung which you will get from Samsung's own public data. That a significant percentage of their DRAM production is in areas that

none of us produce Hynix does not produce it, Micron does not produce it nor does Infineon.

In particular if you think of what they call RD RAM none of us produce that product and Samsung over the time period ended up being the only company that brought that to market. All of that data still is included in these bits as Commissioner Koplan pointed out the RAM DRAM is included in this bit calculation that goes on as we look at the import data. Another example would be graphics DRAM of which we don't produce and as a result I would just say for that particular piece of it we need to be somewhat careful as to the impact that that has on the total change that Samsung's had in their business.

VICE CHAIRMAN HILLMAN: Okay.

Mr. LeFort?

MR. LeFORT: Yes. Just obviously agree with what Mr. Appleton said. In addition to that let's not forget that during that period there was also still consolidation of other players who didn't get any subsidies and couldn't survive in the market so Samsung was able to pick up some of that and as we've always said that what Hynix has caused is not by them taking over the market but by them setting a price that everybody has to meet in order to increase your

market share. So you can still grow your market share but you're going to have to do it at the price that's set in the market by the lowest priced guy which in this case is Hynix because of the subsidies.

VICE CHAIRMAN HILLMAN: Okay.

Mr. Sadler, you wanted to add something?

MR. SADLER: I was just going to add something along the lines of what Mr. LeFort was stating in that taking market share or increasing market share there's really not much of a mystery to it. What's typically required is to meet the price that's being offered by the most aggressive participant in the marketplace. As I stated earlier and I'll state again Hynix is typically that aggressive player. So what the typical scenario is that Hynix will set the low price in the market and then it's up to the rest of the participants to either meet that price and gain or hold market share or not meet it and give up business.

VICE CHAIRMAN HILLMAN: Okay. I guess I mean a couple of things. Obviously it's hard for us when we're looking at again an increase in share of, you know, Samsung and Micron and Infineon and Nanya gaining share while the Japanese and Hynix are losing share, you know, and yet you're saying, you know, it'

Hynix that's driving the price. I just want to make sure I'm understanding. You're saying, okay, Hynix is offering this but at the end of the day they're not actually winning that sale because everybody else is agreeing to come down to it. That's what I'm hearing your testimony is that correct?

MR. SADLER: They are winning sales. They are not necessarily winning them at extremely large market shares but they are winning sales and whatever the market share is it's significant enough to enable them to hold a qualification position at each of these major customers and essentially drive the most aggressive market price.

VICE CHAIRMAN HILLMAN: Okay.

I guess, Mr. LeFort, I think it would be helpful at least to me in the post-hearing you can provide some specific examples and again I'm not looking for every sale I'm just looking for some examples that would help me understand how this most favored customer clause in contracts and I guess the same also to Micron have caused you to lower prices to particular purchasers. I'm just trying to make sure I understand kind of how it actually in fact worked in terms of your contract. So if you can submit some examples of particular instances of it I think that

would be very helpful.

Then on this FMS clauses you said earlier, Mr. Appleton, in response to Chairman Okun that about 85 percent of DRAMs are sold to the computing industry. Help me understand what portion of your contracts would have these FMC-type clauses. Do all of them to the computer industry have them or what portion of your contracts would typically have this type of a clause in it?

MR. SADLER: I think we can address that specifically in the post-hearing brief because it is confidential but there is some percentage of that or some piece of that 85 percent would be represented, covered, under these MFC or most favored customer agreements.

MR. APPLETON: Just one other comment I want to quickly get out if I can, Commissioner. On the issue about pricing and the knowledge of pricing because the question is proving particular examples of what the pricing is and how that impacted our sales. I think it's worth noting that however it happens whatever the lowest price being offered our industry you can get a daily published number of the selling price of a particular configuration of DRAM from the newspaper.

Because what happens is that these analysts and the people that track it call and talk to the customers and as a result they take that information they publish it and then that gives the entire industry the knowledge of what the lowest price is if you will at that time of which we're all driven to try to meet. So it's not even particular to a customer transaction it actually gets published quite often and we have to deal with that.

MR. KAPLAN: Could I respond to your --

VICE CHAIRMAN HILLMAN: Yes --

MR. KAPLAN: -- question briefly?

VICE CHAIRMAN HILLMAN: -- Mr. Kaplan.

MR. KAPLAN: Again I draw your attention to Confidential Charts 1 and 2 on the pricing issues which I think are very relevant here. I'd also say that some of the numbers regarding share and changes in share I'm sure that you've looked at it but the staff report is not exactly the same as some of the data in Respondents brief and I think that's very important to focus on the staff report.

I'd also say the real question here is should Hynix be there? Hynix has gotten as we've said $16 billion of subsidies over the last few years. They would not be in this market at all if it were not

for those subsidies and their continued existence is a cause of injury to us. I think we recognize of course that there are other players in the market but they are one of the four big players. They are one of the four factors in this market, a vast majority of every sale we try to make and that permits them to be a cause of injury.

You recently recognized in the Silicon Metal from Russia case that on all this subject import issue you don't have to conclude that Hynix in this example is the only cause of injury you have to conclude they are a cause of injury and I think we can reach that conclusion.

VICE CHAIRMAN HILLMAN: Your comment actually raises two questions one I hope a relatively quick one which is you all have cited different numbers for these global market share numbers. You've cited the Dios and Associates, I'm sorry if I'm not saying it right --

MR. KAPLAN; Yes, that's correct.

VICE CHAIRMAN HILLMAN: -- numbers as opposed to Hynix citing Dataquest and they're relatively different particularly on this issue o Hynix's market share. So sort of two questions here one is, you know, kind of what's the difference? Why

should I have more faith in one versus the other?

To Professor Hausman, I mean your model very much rests as I understand it on using the 17 percent market share figure for Hynix as an input to how you're looking at your model. If I look instead at the Dataquest numbers, you know, the market share for Hynix would be more like 12 percent as opposed to 17. So I'm trying to understand both why I should use one set of numbers over another and how different would the results be in a model i Hynix's market share were to be based on this Dataquest number which would put it down considerably from the number that I understand you had used in your model that came from this Dios figures.

MR. KAPLAN: Could I answer the first part - -

VICE CHAIRMAN HILLMAN: Sure.

Mr. KAPLAN: -- of your question? I think it's a very interesting answer. The Dios numbers are quantity, bits. The Dataquest numbers are value, prices. I think it's very interesting that the price share and the value is so much lower than the bid share. That's the difference between those two numbers. The 17 percent. the Dios number and the Dataquest number which is around 12 percent that's

based on value not bits.

VICE CHAIRMAN HILLMAN: Okay. But they're all working off the same database of numbers typically? I mean you're saying one is just using the value numbers as opposed to the bit numbers?

MR. KAPLAN: Sales numbers.

VICE CHAIRMAN HILLMAN: Okay.

MR. KAPLAN: The sales prices bring down the market share of Hynix as opposed to using the actual quantity which they're selling.

VICE CHAIRMAN HILLMAN: Okay. I'm just trying to make sure though that the input into both of those data sources are not looking at it's not an issue of who's reporting data to them is my point. I mean obviously we see a lot of data sets in which the value of the data really depends on whether you got data from everybody or whether you only got it from, you know, certain companies and not others. That's what I'm trying to make sure I understand.

MR. APPLETON: If I can there are several research groups that report on this industry. There's Dataquest, there's the Dios, there's Instat, there's a few others, Semico. Typically there's an organization that is called the World Physics Trade Organization --

VICE CHAIRMAN HILLMAN: Yes.

MR. APPLETON: -- and of course it's supported by the SIA usually they collect up their database from everybody that's participating in the market and then supply that to these groups but that's not to say they don't message it or change it somehow but in general there is only one single point of collection which is the WSTS.

VICE CHAIRMAN HILLMAN: Okay.

Since the red light is on I will come back to you, Professor Hausman in terms of whether it would have made a material difference if the market share number you had used had been smaller. Since the red light is on I will come back to that --

MR. HAUSMAN: Okay.

VICE CHAIRMAN HILLMAN: -- in the next round. Thank you.

CHAIRMAN OKUN: Unless his answer was going to be short like no.

MR. HAUSMAN: No. What I was going to say is the share, the value share, is less than the quantity share that means their average price is significantly lower.

VICE CHAIRMAN HILLMAN: That I understand. It was the implications for the model that --

COMMISSIONER KOPLAN: It's my light.

CHAIRMAN OKUN: Make sure Commissioner Koplan gets his full time.

COMMISSIONER KOPLAN: I appreciate that very brief response. I didn't know where you were going. Thank you.

This is for Mr. LeFort and Mr. Appleton. I'm trying to understand this. Given the power of most favored customer clauses agreements to transmit price signals globally do Hynix's sales or anyone else's sales need to actually enter the U.S. market to have a major effect on U.S. pricing and would the imposition of countervailing duties change this mechanism for Hynix's pricing?

MR. APPLETON: Okay. I'll start very quickly. I think it's important to note that first of all the activity in the U.S. in fact is very important and it's related to the customer leverage.

COMMISSIONER KOPLAN: I'm not saying that it isn't I'm just trying to understand because this is a global practice.

MR. APPLETON: Yes, if I can I think I'll get to the --

COMMISSIONER KOPLAN: Yes.

MR. APPLETON: -- I'll try to --

COMMISSIONER KOPLAN: Yes.

MR. APPLETON: -- get to it quickly. I think the criteria is that in order for us to do business with Dell in the U.S. or some other company that's in the U.S. that really essentially they do not want to change their behavior just because a company happens to have an order entered on this particular case as an example. But in other words it will impact the U.S. market because they're not going to make an exception just because now this customer says, well, I can supply it to you over in Asia or I can supply it to you in China or some other company.

At the end of the day there are several producers in this industry and we have equivalent products, commodity products, and as a result they're not going to want to change their behavior at all. So the fact that somehow that Hynix is then presented with the problem if there's an order in place and the impact it would have on the market it absolutely will have an impact on the market because the customer isn't going to change the way that they're doing business just because one of the suppliers happened to have an issue on how they import into the market.

COMMISSIONER KOPLAN: Thank you.

Mr. LeFort?

MR. LeFORT: Yes. So as you well know we

also are bringing the case forward in Europe as well as in Taiwan because we certainly are nervous that because of the global market that it's not enough to just do it in the U.S. but certainly we would not want to give the impression that either a decision should be made because there might be some convenient way around it so that we don't make the decision; and (2) that this decision would not have a dramatic impact. In fact to be very honest with you in the last two weeks since the Commerce Department has made their announcement we've already seen some stabilizing in prices in the market. So we see that just from the U.S. threat that has already brought a little bit more rationality to the market.

COMMISSIONER KOPLAN: Let me just stay with that if I could for a second. Ms. Byers indicated I think in her direct testimony that as far as the European case is concerned something occurred last week, a final draft determination. That I take it is something beyond the preliminary determination that occurred in April?

MS. BYERS: That's correct.

COMMISSIONER KOPLAN: It is correct.

MS. BYERS: Yes.

COMMISSIONER KOPLAN: So that's circulating

prior to a final determination coming out in August?

MS. BYERS: Their procedures over there are slightly different than they are here. Yes, they did issue last week a draft definitive determination in which they concluded that there was injury to the domestic industry in Europe and that there was a duty that was slightly higher than that in the prelim of about 34.7 percent.

COMMISSIONER KOPLAN: Is that a public document?

MS. BYERS: Yes, it is.

COMMISSIONER KOPLAN: Could it be submitted?

MS. BYERS: Yes.

COMMISSIONER KOPLAN: I'd be curious.

MS. BYERS: We're getting it now and we'll put it on the record.

COMMISSIONER KOPLAN: Thank you. If I could turn to another area. In the prehearing brief Petitioners took the position that Hynix Semiconductor Manufacturing America, HSMA, is a related party that should be excluded from the domestic industry. In making our finding in our preliminary determination not to exclude HSMA we took into account the fact that it has a wafer FAB facility in Eugene, Oregon and has had it since 1998, took into account the percent of

domestic production at that facility, its capacity, the amount processed, the value of its fixed assets, its investments in that facility which I consider to be substantial, its capital expenditures and its operating margins and ratio to net sales.

I can't get into the specific numbers here because that is business proprietary but I also note Respondents claim at page six of their brief that HSMA is reducing rather than expanding its DRAM capacity at its Korean facilities and has demonstrated its intent allegedly to dedicate more and more of its Oregon fabrication facility to the U.S. market. As of now I'm still inclined not to exclude them from the domestic industry but I consider it an open issue and I'd like to hear any further comment that either counsel or for that matter the industry witnesses might want to make on this issue for me now.

Mr. Appleton, did you want to comment?

MR. KAPLAN; If I could try to weave around the sides of the specific data a little bit.

COMMISSIONER KOPLAN: Yes.

MR. KAPLAN: I do think that some of the financial data was resubmitted late last week with respect to that plant which I think is important in terms of what the real picture there is but putting

that aside I think that just looking at the financial data in the two operations, Korea and the U.S., is a very interesting exercise and we'll try to describe it in more detail in our post-hearing brief.

I'd also comment very briefly if I could that the position you just described does seem to contradict in some ways the position that Senator Wyden and Representative Defasio took with respect to the impact of the possible order on the plant so I think that it's a very complicated question as Commissioner Hillman raised what the effect of that order would be on the U.S. operations o Hynix.

CHAIRMAN OKUN: Thank you for that.

Mr. Rosenthal, did you want to add anything to that?

MR. ROSENTHAL: This is a closed question. I'm tempted for the first time this morning to disagree with Mr. Kaplan and I honestly think that it should not make a difference in the outcome of the case and in fact when I heard Senator Wyden's presentation this morning not only did I have a different conclusion than he did with respect to the outcome of the case and how it might help his constituents in Oregon but he made a very strong, compelling argument for how the Hynix facility might

be seen as a U.S. producer. I think the ultimate question that you have to decide is forget the relationship of whether excluding the data is somehow going to skew the database and from where we sit today I would say probably not but we will expand that in our post-hearing brief.

COMMISSIONER KOPLAN: Thank you very much and I'll look forward to that.

Mr. Appleton, I wanted to come back to something you said way back in your direct testimony. You were talking about I guess it was in 2001 when you were negotiating to try and acquire Hynix and my question is had you been successful what would have been the fate of those subsidies?

MR. APPLETON: Well, first of all I think it's probably good to have it on the record that we were approached by Hynix.

COMMISSIONER KOPLAN: Okay.

MR. APPLETON: In fact I was visited in Boise, Idaho and asked to consider if we would acquire them and so of course, you know, as a businessperson I wanted to take a look and see what might occur then obviously the record, the public record, is that we negotiated to acquire the assets. I found it really interesting that during, and I don't want to go into

anything confidential about the negotiations, but first of all as part of the negotiations which was on the public record we were actually trying to get financing in order to improve the technology that was in the facilities that we would be acquiring and that was an incredible struggle to even get the Korean banks to consider on market terms to loan us money.

There's no question that the subsidies would have not been available to us. We could not even get normal market term financing at the end of the day out of the Korean bank so it absolutely would not have been available and in fact it was never a component of the transaction that we were negotiating for.

COMMISSIONER KOPLAN: Thank you. That was just open as far as I was concerned as a question and I'm going to close the loop on that with you. I appreciate that.

I see my red light's about to come on, Madame Chairman, so I'll save the rest of my questions for the next round. Thank you.

CHAIRMAN OKUN: Thank you.

My next question I'm going to direct at counsel with all apologies to the industry witnesses because I think it's going to be about the subsidy question and I think as a businessman I can understand

your testimony. If you have a competitor whose been found to have a countervailing subsidy what your testimony might be but the question I have is a legal one which is how do we take it into account?

Mr. Kaplan, in your brief you argue it and have said some things here today which would say to me that you want us to use it to look at the subsidy when we evaluate present material injury. Mr. Rosenthal, your brief I think focuses much more on the threat factor and the specific threat factor that goes to the nature of the subsidy. I wondered (1) if there's any disagreement among you with regard to present; and then (2) if you could, Mr. Kaplan, help me or point me to what you think the Commission could look to in support of your argument that the actual subsidy itself because I mean it's not even as I read your brief subsidies imports it's the subsidy itself that is given Hynix the ability to be the low-cost producer which is having these ripple effects in the U.S. market and therefore causing injury?

So if I could start with you, Mr. Kaplan, and then Mr. Rosenthal, if you could add on that as well.

MR. KAPLAN: Well, I think the two most important factors in terms of what you should look at

are really the volume and the pricing and those are both factors you have to look at in terms of your causation analysis and I think that the volume which does exist is a direct result of that subsidy. I don't see any really rational way to diaggregate looking at that volume of imports from the subsidies because without that volume there wouldn't be the injury and without that subsidy there wouldn't be the volume.

I think it follows very, very directly from the subsidized practices that are at issue in this case. I'd also say it follows directly that the pricing which again I'll direct you to those confidential charts the impact on the pricing is directly related to the subsidization and that's the way I think you should analyze that.

CHAIRMAN OKUN: Okay.

Mr. Rosenthal?

MR. ROSENTHAL: Ms. Cannon had something here.

CHAIRMAN OKUN: Okay.

MS. CANNON: Kathleen Cannon, Collier Shannon. We agree with Micron's position on this. We did not mean to suggest that we thought that the subsidy was only relevant in the threat context.

Obviously there's a specific statutory factor in the threat context that requires you to look at the nature of the subsidy and I think that's very relevant to your analysis here as Ms. Byers discussed in more detail in her testimony and as we explained in our brief.

But in the context of the injury analysis certainly the nature of the subsidy and the way it's affected the company is critical as Mr. Kaplan says because it is affecting the volume and the pricing of the company. I mean there's the statute that tells you in the injury context to look at the magnitude for example of margins and I think that you can take into account the magnitude of the subsidy here similarly because it is so massive that's certainly a present injury analysis if you will.

But I think the more important part is simply that you're looking at whether the subject imports which are unfairly traded, here the Hynix imports, are cause of the injury and when you take that into account you want to look at, you know, what's going on with those imports and why were they able to do what they were able to do? Why were they able to manifest the prices that you're seeing here? The subsidies is critical to consider the massive

nature of the subsidy and the ongoing nature of the subsidy when you're analyzing both present injury and threat of injury.

MR. ROSENTHAL: One last point here. One of the things that makes this case interesting, unusual if you will, is the massive amounts of the subsidies and the clear record that indicates but for these subsidies Hynix would be out of business. We would not have this company in business. Now how you analyze this looking at the statutory factors is fun actually because, you know, you talk about volume. You could make an argument that there's a total volume effect as Dr. Hausman says but for these subsidies there would be no volume from Hynix, but for these subsidies the prices would be much higher that Hynix is offering and the whole marketplace would be enjoying.

So you rarely get a case where the subsidies are this high and the very existence of the foreign producer is at stake. In the other steel cases between subsidies then maybe they would have survived, maybe they would have not invested, this one is a very black and white case. We're talking about a company that should not be here all things being equal if the marketplace were allowed to work and that's why it's

an interesting analysis from a strictly looking at the subsidies and looking at the nature of the subsidies.

CHAIRMAN OKUN: Okay.

I just have a couple of more questions on that one is then is your, Ms. Cannon, you talked about looking at the margin. I mean is that where you hang your hook or is it on the other economic factors again in the present injury context? Where do you get to look? Where do we get to look at this or evaluate it?

MS. CANNON: I think you have to look at both. I mean I think you do have to look at the massive nature of the subsidy. The magnitude of the subsidy is so large in this case quite high as compared to most of the subsidy cases you've seen very recent subsidies that have been poured in that are very disproportionate to the sales as you heard testimony earlier relating to the magnitude of the subsidies to the magnitude of the sales o Hynix and you have to take that into account.

But I think you also are within your discretion to take into account what was going on here, the debt forgiveness that was going on, the constant bail out that was going on, that kept the company alive that shouldn't have been alive. I don't think that there's anything that precludes you from

considering in terms of looking at the imports how this all came about. I think that is an important part of your analysis as well.

CHAIRMAN OKUN: Okay.

Because, Mr. Kaplan, it also struck me that there are really two things you were asking one was, you know, this but for the subsidy what would be going on in the market but that also part of your argument went to the worldwide -- if this is a global marketplace which Respondents will make this afternoon and a world price that your response as I saw it in the brief was to say, well, we agree and of course, Mr. Appleton, has to look forward could probably comment better on this, you know, what's happening in the marketplace you said, yes, we agree with that but it's because Hynix has these subsidies that it's therefore affecting the global price which is affecting the U.S. price. I think that that is actually, you know, something I'm also trying to figure out how does the statute get us to that if it does?

MR. KAPLAN: Well, I think there are a number of factors. I certainly agree with Ms. Cannon that the size of the subsidy is very important and the nature of it and that is a factor you can take into

account. On the specific question regarding the globalization and the like we do agree it's a global market. What you have here though is a U.S. market which we under the countervailing duty law obviously have to look at and decide is there injury as a result of these subsidies and these imports and the pricing and all the rest?

The U.S. market is still the largest market for DRAMs in the world and it's not independent of the global market. The fact that the subsidies and the continued existence of Hynix are bringing down the world market price does not mean they're not bringing down the U.S. price or they're not causing injury here. The entire world market price and the entire world market for DRAMs is impacted by these enormous subsidies which are larger than the total sales of DRAMs in the world basically.

What you have is a direct impact in the U.S. market which is the largest market but it doesn't stop at our borders. It goes to Europe where there's a case, it goes to Taiwan where there's may be a case in the future. They've said that they're going to do a case. So we have to first look at the impact in the U.S. The imports that are coming in in effect are causing that impact and then we have to consider that

this is part of a worldwide phenomenon but that is not I don't think a necessary part of your entire analysis. The important thing is what's going on in the United States and it's having a very significant impact on the United States.

CHAIRMAN OKUN: Okay. Well, I appreciate all these comments. I encourage you, when you making these arguments for post-hearing to address that. I mean, I have been trying to go back through Commission decisions to determine where I think we have evaluated that.

There is an old lumber decision where none of the current commissioners were on. That particular lumber case where it was talked about by at least some of the commissioners in the present injury context that the Canadian subsidy in that instance, but I wouild encourage you to, if there is anything else you can point us to as well.

And I see my red light is about to come on so I will turn to Vice Chairman Hillman.

VICE CHAIRMAN HILLMAN: Thank you. I guess I would second the Chairman's request because I have, you know, a lot of the same kind of questions. As I listened to Professor Hausman sort of stating that, you know, Hynix's U.S. market share is not what is

depressing prices. Rather it's Hynix's subsidized outputs. And I am trying to kind of square that. I understand the testimony. I am trying to square that again with the statutory, you know, requirements that injury be caused by the volume and price effects of imports into the U.S. I mean, that is what the statute says.

So I would share the Chairman's request that if there is a sort of precedent, if you want to help us try to understand how it is that we are fitting, you know, these arguments about the subsidies into, you know, a statutory requirement to look at the volume and price effects of, you know, imports into the U.S. market.

I mean, it goes both to the subsidy issue and generally to this trying to understand how we take into account -- you know, again, you spoke a lot about it, Mr. Kaplan, in your response to the Chairman this issue of, you know, assessing kind of the regional impact. I mean, the impact on the U.S. market of, you know, imports of Korean product into the U.S. market in the context of this global marketplace.

So, you know, both of those issues I am also looking for kind of precedent or other things that you would point us to in terms of how we should do this

kind of analysis on both of those fronts. More, you know, kind of anything you want to add to the post-hearing on that topic.

MR. KAPLAN: I would just quickly mention the ferrovanadium case which discusses the fact that there are world market prices for this, and that the impact in the United States is in some way part of the impact that's going on throughout the entire world as a result of the pricing that is going on there.

VICE CHAIRMAN HILLMAN: Okay. And then I guess if I can come back to some extent to this pricing issue.

Professor Hausman, at the end of my questioning I had asked, you know, whether it would make a material difference. If we were to decide, and I understand now the difference in the data, that we are looking at data that would have Hynix's market share more in the 12 percent range, you know, if we were to decide that would it materially affect your analysis?

MR. HAUSMAN: No, it wouldn't for the following reason. The smaller share, as yo heard, is a value share, and that is price times quantity. I was only looking at price. So if you actually refitted my model and looked at its affect on price

times quantity, the percentage change would actually be greater than I found for price alone.

VICE CHAIRMAN HILLMAN: Okay. No, that makes sense. Thank you.

Going again to this price issue, you have all comments on Hynix being the irrational pricer or, you know, the one that is driving down the prices. I guess I would ask counsel, since I think it involves confidential information, to comment on what the purchaser questionnaires say to us about who is the price leader in the U.S. market.

I would ask in your post-hearing brief to try to help me look at, you know, again, what does our purchaser questionnaires tell us about what they are saying on price leadership versus the testimony that we have heard today about Hynix.

And then if I could go also to trying to make sure I understanding the pricing data that we have in our record. We have priced, as I think you know, eight different products. If I look at them, the prices of all of them have clearly declined over the POI, but by varying amounts.

And then if I look within the data, you know, we price the products to PC OEMs, to other OEMs and to non-OEMs, and again I see big differences both

across the products in terms of what happened to them, and as between PC OEMs, other OEMs, and non-OEMs.

So I guess I need some help as to, you know, why do I -- what accounts for these differences that we see across these different products, and then across the different end users? Why do the prices move differently?

MR. KAPLAN: Let me make just one point if I could, trying again to weave around the sides of anything confidential.

VICE CHAIRMAN HILLMAN: Right.

MR. KAPLAN: Insofar as your referencing any of the sort of what we call pick and choose data, and looking at the respondents' brief in terms of, if you say, well, this product went down a certain amount and the like, we have gone back through all the products, and for some of the very largest products in terms of volume or bits that Micron sells over the period of investigation, there are very significant interesting things to look at, and we will address those in the post-hearing brief.

And it is very easy to pick out one little thing here and there and make a point, but we will look at products on a product-by-product basis as well as on aggregate trend.

VICE CHAIRMAN HILLMAN: Okay. And then again from the industry again, I am trying to understand. When I am looking at this why am I seeing, you know, the 64 megabit move differently than the 128 move different from the DDR?

I mean, it's partly, you know, I need a little bit of an education into the sort of pricing relationship between these and why they would move differently.

MR. SADLER: Sure, I can share -- this is Mike Sadler speaking -- I can share you my perspective on that. Not having seen the data that you have seen, but the pricing of a particular product is a function of time as well, and these products move into the mainstream, and they stay in the mainstream for a period of time, and then they move out of the mainstream.

And my perception is that as the product is in the mainstream, in other words, when it's at its highest volume point, the price will be -- should be relatively consistent from supplier to supplier in the same type of application. For example, a 256 megabit DOM being used on a 256 megabyte module in a PC main memory application, that is what I would define as the mainstream, and that's when the price -- the prices

should be relatively consistent from supplier to supplier.

As those products go out of the mainstream, they become legacy products, they could be some variation, some pretty significant variation in the pricing as they are used for other applications besides mainstream PC main memory applications.

VICE CHAIRMAN HILLMAN: Okay. Then how about the pricing variations across, again, PC OEMs versus other OEMs versus non-OEM purchasers?

MR. SADLER: There should not be a material difference. Again, if we are doing an apples to apples comparison, there should not be a material difference for high volume 256 megabit DOM with a PC OEM or a spot market customer or a speculator. They should be relatively consistent.

However, within a particular product type, for example a 256 megabit DOM, there may be varying package types, there may be varying performance characteristics of that particular device, there may be variances in the configuration of the device, especially if it's more applicable to a different type of application. That would result in a materially different price for that product.

VICE CHAIRMAN HILLMAN: Let me ask one

specific, I mean, some of these products that are priced are DDR product and others are not. Help me understand kind of what that difference means in terms of how the product would price and/or this issue of the time cycle of the product.

MR. SADLER: Sure. The pricing is clearly -- it is purely a function of the supply and the demand. And in the case of the DDR versus another type of product, for example, an SDRAM, the circuit design is completely different, and the ability to have one supplier to support DDR versus SDRAM depends entirely upon that supplier's ability to complete the circuit design and bring that product into production at any particular point in time.

VICE CHAIRMAN HILLMAN: But does it affect the timing of the sort of cycle, if you will, of when this is mainstream product as you describe it as opposed to how long it takes to move out of being a mainstream product?

I mean, you described that there is a time period at which, you know, the product is mainstream and is being sold, and then it becomes a legacy product. I am trying to understand how these features like DDR, et cetera, may change the length of time of when it's a mainstream product versus when it's a

legacy product.

MR. APPLETON: I think I can add some light to this because we are mixing terms here a little bit.

When we talk about a 164, 128, 256, 512 megabit, in general that's on a particular product platform that lasts for years and years. So when we say synchronous DRAM and when we say DDR, you're talking about an entire platform change for the industry as opposed to a density change of the products, so there are differences.

Whereas a mainstream device that Mike was referencing, like a 128 meg during the period of investigation, that will be mainstream for probably a couple of years. However, a platform device like a synchronous DRAM or a DDR will actually have a life cycle that is many, many years; you know, maybe five years, maybe six years, and the DDR that you're discussing is a platform that the market transitioned to or started transitioning to about a year ago.

And in the early stages of a platform transition the price is a lot less commodity nature because everybody's timing is not exact as they bring that product on, as they make the transition. But ultimately, when the platform transitions, then it becomes the commodity nature, and you will see

essentially what Mike was referencing, which is of real no significant differences in the pricing in the market.

VICE CHAIRMAN HILLMAN: Okay. And would you say -- I mean, you described in the brief a sort of normal price decline of 20 to 30 percent a year, and yet I am hearing about these changes in terms of, you know, again how fast there are changes in density, how fast there are in this smaller circuit width that Professor Hausman was describing, and in the larger weight. I mean, we are seeing all of these changes.

Has that changed the pace of the price decline?

MR. APPLETON: Well, the price decline, first of all to clarify, with respect to the initially the ability to reduce its costs over time, which in normal markets would correlate with price decline because you would have some margin that would be built in over time, the industry's ability to come down the learning curve, if you will, really hasn't changed in 20 years. It's still the 20 to 30 percent, and that historically has been the price decline with the exception of very, you know, artificial market dynamics that make it move more than that. And I think maybe that answers the question.

VICE CHAIRMAN HILLMAN: Thank you. Given that the red light is on, I will come back on the next round to get your response to these same questions on pricing. Thank you.

CHAIRMAN OKUN: Commissioner Koplan.

COMMISSIONER KOPLAN: Thank you, Madam Chairman.

Different issue. While I appreciate Mr. Kaplan's endorsement of the Commission's finding that assembly casing operations of certain domestic companies which did not fabricate the DRAMs at issue is significant enough to be considered domestic product regardless of the source of the input, I still recognize that there is some inconsistency to this position in our approach because we treated the domestically-produced DRAM that is cased abroad and then re-imported as an import of domestic product rather than its having been transformed into a third source product.

And I appreciate the discussion in the prehearing brief, but I note that in our preliminary determination the Commission indicated that we would revisit this in our final phase of this investigation, and I would like to know what else you might add to this, Mr. Kaplan, or Mr. Rosenthal, what your comments

might be on this issue.

MR. KAPLAN: I would actually ask Mr. Esch to address that if that is okay.

MR. ESCH: I think there is, you know, two different issues going on here as we set out in our brief. I think that the assembly operation is part of the domestic industry, and you have held that not in the preliminary here but in the prior case of DRAMs from Taiwan.

COMMISSIONER KOPLAN: That was in December of '99, that's right.

MR. ESCH: Correct. Right. So you know, it's a consistent position that you have held.

The supposed inconsistency that respondents see, you know, it's not an inconsistency between, you know, the Commerce determination of what is a product origin for the scope of the investigation. Of course, you have got to make a different determination on what the domestic like product is --

COMMISSIONER KOPLAN: Yes.

MR. ESCH: -- and domestic industry, and you don't have to coincide with the Commerce Department's determination of what is the scope of the industry -- scope of the subject merchandise. And so there is no reason you have to be aligned that way.

COMMISSIONER KOPLAN: I am asking the question, the flip side of what we did in the prelim, because, you know, assembly does involve a degree of technical sophistication and this industry involves some continuing R&D and capital expending to keep up with latest product process development, and it also involves a significant number of workers, and so that is why I am exploring, as I say, what I would call the flip side of what we did in our preliminary determination to resolve what is being viewed as an inconsistency in our approach.

If you could continue, I would appreciate it.

MR. ESCH: Well, I guess your question then is, for example, if the DRAMs fabed in the Hynix Eugene, Oregon fab are then shipped to Korea and assembled there, why aren't those considered Korean origin for purposes of the domestic industry?

COMMISSIONER KOPLAN: Yes, assuming that Hynix is still -- even though it's a related party, sure, that would be the question.

MR. ESCH: Well, I think you could consider those if you wanted to. The problem would be in terms of they wouldn't be considered subject merchandise, subject imports from the Commerce position because

they have made the determination that you have to determine the scope of the investigation based upon the fab origin of the die that go into the DRAM.

But you know, the inconsistency that they see is between, you know, that situation. And if you were to treat that as, you know, Korean made, I guess you can under the statute, but you know, that's the limitation you have. But I don't think it detracts from a determination that the U.S. industry must include the assembly operations, and that when they -- as was stated in the preliminary determination that one of the factors you look at is, you know, the percentage or a portion of components which may be U.S. source, never before have you done that on a transaction-by-transaction basis, or even on a company-by-company basis, and therefore you should do it consistently on an industry-wide basis.

COMMISSIONER KOPLAN: Thank you very much. I appreciate your response.

Turning to Micron, in your brief at page 25 you state, and I quote, "New DRAM generations were previously introduced approximately every three years, but the pace of movement to new chip densities and access speeds have accelerated in recent years."

When did Micro Technology last introduce a

new generation DRAM chip?

MR. APPLETON: Again, I think it's helpful to clarify two components of new technology.

COMMISSIONER KOPLAN: Thank you.

MR. APPLETON: One component of new technology is actually introduce a new device, a new computer chip itself. Another component of introducing new technology is the process that is going to be used to actually manufacture that computer chip, and even though we typically talk about them in singular form, they are really two different forms, and that is -- there is different answers for that, okay.

The acceleration on both of those has occurred. On the process technology, which means going to smaller line width in geometries, and the curve that we -- the learning curve that we have stayed on for a couple of decades, that used to occur -- a process technology used to last about three years, and today that process technology now transitions about every 18 months, sometimes it a little bit more, but it's now been halved.

The introduction of new generations of technology of these devices if you will the industry used to move in 4X quantities. The industry

transitioned, because of granularity issues among the computer users transitioned to moving in 2X. So where it used to from, for example, in the early times in the industry in 64 k, it would automatically make the jump to 256 k bits, and that now not the case. We go from 64 meg to 128 meg, so we do it what we call 2X instead of 4X.

Now, in Micron's case, we are constantly trying to bring forward both of those, so it's not a static process. It's really one of timing with respect to where you are in the market. We are always working on new processes, and we are always working new devices because at the end of the day the customer is going to determine what it is that they want to buy, and as a result it's a continuum for us to do that.

So you know, we talk about entering a new device, we continually try to develop new devices, and whether we are successful or not is really one of comparison to whether our competitors introduce those new devices as opposed to the time that we actually do it, because all of us are trying to do it on that cycle.

COMMISSIONER KOPLAN: Where are we right now in the cycle?

MR. APPLETON: With respect to which piece?

COMMISSIONER KOPLAN: Both pieces.

MR. APPLETON: Well, the cycle on the process technology right now is in a transition from what we call .13, which is thirteen-one-hundredths of one micron, down to .11 on the process side.

On the density transition currently the 256 meg is the mainstream, and over the next probably year to two years it will transition to become the 512.

COMMISSIONER KOPLAN: Thank you.

Mr. LeFort, is there anything you wanted to add to that?

MR. LeFORT: Well, what I would just say to that if you think of it in very simple terms the game is --

COMMISSIONER KOPLAN: I'm trying to.

MR. LeFORT: And you are doing quite well. I am quite impressed with your knowledge. If this thing doesn't work out, you can come into the DRAM business, no problem.

COMMISSIONER KOPLAN: No, we can't do that here.

(Laughter.)

MR. LeFORT: But what you are trying to do is to get the most amount of bits on the biggest wafer

to the smallest size. That's how you get the competitive advantage. The guy with the smallest chip on the biggest wafer. So everybody is investing incredible amounts to be able to get there.

And what we have had to do is delay those investments because normally the market adjustment is somewhat self-regulating, and there is a good business case to do that. But that is why we have had to delay our 300 millimeter investment, to bring us onto that next generation on that side.

On the geometries that Mr. Appleton was talking about, those investments are not quite the same magnitude, so we are able to still afford doing those in order to maintain our survivability, but that is the other element that you can do to try and get more for less, if you will.

COMMISSIONER KOPLAN: Let me just -- I think I can get this in. We have what I call often a Table II-3, and I can't get into the details of that here, but I can in general terms say that it appears that U.S. producers are ahead of the subject Korean producer in the 256 megabit market. And I am wondering doesn't this suggest that you are not losing market share at least due to inability to invest sufficiently in developing next generation DRAMs?

Mr. LeFORT: That is -- quite frankly, we have been able to maintain our investment at considerable other cost. We had to cut basically $2 billion on costs in other areas, because once you miss a cycle, the history has been you go out of business, so you need to maintain that investment going forward.

So we have been able to do that, that's correct, but we have not been able to get the return on that investment because of the depressed prices, and because with the blending and scaling that we talked about you don't have to have all of the products available in order to affect all of the prices on those products; that's number one.

And number two, with the subsidies Hynix has said they are not so far behind in being able to bring out these new products anyway, so they are still a very real threat in terms of going forward.

COMMISSIONER KOPLAN: Thank you. That's helpful.

Do you have anything to add to that, Mr. Appleton?

MR. APPLETON: Just very quickly.

The ability to invest is one of erosion over years, and if you look at our financial situation or you look at Infineon's financial situation, as a

result of the subsidies and the losses that we have been incurring we have been eroding our ability to invest in new technology, and it is absolutely true that we are not making the types of investment or as much in investment today in trying to advance that technology as we did historically.

And the problem is that it doesn't show up immediately within a year because these processes last years, or the devices last years, and it shows up through time, and it's continuing to get worse and worse for us.

COMMISSIONER KOPLAN: Thank you.

MR. BECKER: Henry Becker with Infineon Technology. Just one last quick comment to your question.

You identified an advantage on one side and a disadvantage on the other. An example of that would be completely flipped, and I think there was testimony earlier on Hynix's qualification on the Intel platform for the 512 double data A part which they are the only one at this point that has been qualified.

COMMISSIONER KOPLAN: Thank you. Thank you for indulging me, Madam Chairman. Thank you very much for your help.

CHAIRMAN OKUN: I'll try to make sure you

got all the time you needed.

Let's see, I wanted to note that there are a number of factors that the Commission is required to look at, and I think they have been briefed extensively by both sides, so there are a number of things that I think are important to us, and I'm not going to ask questions about just because I think there is a lot of information currently on the record.

But let me return to a couple of arguments from the respondents to get further information, and I will direct this to you, Mr. Kaplan.

One of the arguments made is that what is lacking here is a correlation between the imports, the subject imports and the condition of the industry. And if I understand the respondents' arguments, they would probably take your confidential Chart 1 and 2, plot on their market share of both subject and nonsubject along with industry condition, and say lines don't all go in the right direction for a finding of injury.

And I wondered if there is anything you can say in a public session on this correlation issue, and if you could use your microphone.

MR. KAPLAN: I think I can say two things publicly. First of all, I would say look at the staff

report in terms of the import share, not at the respondents' brief, and I think there are some real problems with the way the respondents have analyzed the whole issue of imports.

I think the imports are significant, and they have had a significant impact on the market. This is an industry where, as we said, there are four players, and they remain a very significant player throughout the period of investigation.

The third thing I would say is you take the various levels of losses and things like that and try to draw a line on that chart relating to when the subsidies clicked in, and when the pricing impact of those subsidies on the entire market occurred. You will see that there is a direct correlation between those subsidies in 2001, and a very significant impact on the market.

And I think it's interesting that the respondents have said that the deepest decline in the history of the DRAM industry was in October 2001. That was the time of the second major multi-billion dollar bail-out by the government of Korea.

So I think if we added that line on the chart, or in some way were able to put the effect of the subsidies on the chart, you would have a very

significant impact on prices and the expectations of buyers in this industry.

CHAIRMAN OKUN: Mr. Rosenthal, and I'll come back to you, Mr. Hausman.

MR. ROSENTHAL: A couple of points.

First, if you look at the data that Hynix used underlying their argument, you will see it's not based on ITC questionnaire responses, but on alternative data sources that don't match what you have got before you. An examination of the actual data from the Commission's prehearing report does present a different picture than the one presented by Hynix, and we will discuss that further in our post-hearing brief.

Second, when you look at whether there is a correlation between the domestic industry's financial condition and imports, it is critical to compare the pricing impact of the imports on the profits of the industry as it's primarily, as you heard today, through pricing, undercutting and depressing U.S. prices that the imports have depressed profitability.

A strong correlation exists between the import pricing behavior and the industry's profitability, the U.S. industry's profitability, and again we will go into that in our post-hearing brief.

I would just like to add one other thing. It has been mentioned before that Commissioner Hillman came back to it in her last round of questions, and that is looking at market shares versus the output that Dr. Hausman mentioned.

Again, I want to bring you back to what the statute says, and the statute talks in terms about whether the volumes are significant. It doesn't talk in terms of growing market shares or shrinking market shares. It says are the volumes significant.

And I submit to you that in this case, and I can't talk about what the numbers show, the volumes are significant in this industry, because once again you have to take into account not just the absolute level of volumes, but the nature of the industry you are dealing with.

And as Dr. Hausman's testimony shows, an additional supplier, that additional amount of volume makes a tremendous difference in this industry.

So the volume effect by itself is significant, the volumes are significant, and certainly the pricing is significant, and we do see and we will show a correlation between those figures and the condition of the industry.

CHAIRMAN OKUN: Okay, thank you for those

additional comments.

Is there someone else? Mr. Hausman, did you want to comment on that?

MR. HAUSMAN: No, he said both things I was going to say.

CHAIRMAN OKUN: Okay. Then let me turn to another point that respondents raise, and that is that, you know, again looking at the nature of this industry with the global market and a commodity product, and that therefore what companies have to say about their condition is more relevant than it might be in some other industries. And respondents have a lot of exhibits focused on what Mr. Appleton and others at Micron and Infineon have said.

But I will just take comments on DeFazio's because it's in front of me, and I don't have to look for it, and I will just ask you, Mr. Appleton or Mr. Sadler to comment.

They are talking about an earnings release conference call in June of last year, "Micron attributed the softening of the semiconductor market and falling prices `principally to two factors: seasonal weakness and computer demand, and relative leveling of memory content per system.'"

And I wondered if you could just comment on

that in terms of where subject imports fit in what you were talking about there or what -- it may not have been you, Mr. Appleton, but just generally your company.

MR. APPLETON: Can we just clarify real quickly whether that was the conference call we just had this June, or whether it was actually a year ago so I can get the --

CHAIRMAN OKUN: It conference call which --

MR. APPLETON: Well, I am trying to get the context.

CHAIRMAN OKUN: -- Congressman DeFazio's testimony, and it doesn't say, it says June of last year, so I can probably get a specific cite. And someone on the back row is -- oh, actually, it's respondents' counsel.

MR. PORTER: It's June of this year.

CHAIRMAN OKUN: Thank you. There you go.

MR. APPLETON: Okay, I just wanted to clarify that.

CHAIRMAN OKUN: No problem. '02 then.

MR. APPLETON: Actually of '03.

CHAIRMAN OKUN: '03, yes.

MR. APPLETON: June of '03.

We just had a conference call earnings

release about a week ago so that's why I wanted to clarify.

In fact, Congressman DeFazio's statement wasn't true that we didn't mention anything about Hynix, and I, of course, was on that call, Mr. Sadler was on that call, our chief financial officer was on that call, and if you really want to go listen to the actual conference call you can. It's recorded. And if you can't find it, we will give it to you.

CHAIRMAN OKUN: Why don't you give it to us so I can make sure I have it.

MR. APPLETON: Yes, we can provide that for you.

All three of us made reference to the difficulties in the market being created by Hynix supply in that conference call to be clear, and so I don't think that's quite a true statement.

Now, I think we need to consider that we have different audiences as we had these earnings conference calls. Obviously, as the CEO one of my responsibility is to try to maintain confidence in the company, and we also have a lot of employees who listen to that conference call around the world, and I, of course, want to try to maintain confidence of our employees in the company, and the moral. So there

are really different context at which we are trying to describe the scenario for the company.

None of that changes the facts of the financial situation of the company. The fact that our stock price is one-tenth of what it was in 2000, the fact that we have now accumulated more losses in the last three years than even imaginable in any prior period of Micron's history, none of that changes. Those still are the facts.

Obviously, I am going to try to put the best light I possibly can when talking to our investor base about the company. But also factually we raised the issue of the Hynix supply during that conference call as being a problem for us in this market.

CHAIRMAN OKUN: Okay, I appreciate.

Mr. Sadler, did you have something you wanted to add?

MR. SADLER: We happen to have a transcript of the call here, and I would just mention that I believe this was my statement in the call, and I will quote, "a general oversupply of DRAM attributed primarily to the Korean government subsidization program continues to plague the industry. Resulting economics puts an obviously challenges," et cetera, et cetera, et cetera.

So really the focus of our call or part of the focus of our call last week, which was actually exactly a week ago, was primarily on the oversupply attributed to the subsidization from Hynix.

CHAIRMAN OKUN: Okay. I appreciate those further comments, and if you could put that on the record, that would be helpful.

And Ms. Byers, let me just note I know that in your presentation you also referenced the analyst reports, and I know there are a lot of analysts reports on the record, but if those are not already on there, if you can also put those on.

And then just with respect to demand, I just wanted to make sure that I understood where we see demand, and whether you have disagreements with how the staff report characterizes demand in this industry.

And Mr. Appleton, we will start with you.

MR. APPLETON: I will just make a quick comment, and I think Mr. Sadler can follow up.

You know, spring usually grants eternal hope. And if you go back and look at the comments made by analysts or forecasters, or even actually Hynix, if you want to go back and look at what they said in the spring of 2001, the spring of 2002, and

the spring of 2003, we all hope that the industry will improve, but it just hasn't happened. And in fact I think when you look at the analyst comments that others have referenced they don't see anything that is going to change. There is no data point that shows that as long as we continue to have subsidized supply into the marketplace there is going to be any change in the marketplace.

So we all like to hope, but the fact of the matter is it just simply hasn't changed now for three years.

CHAIRMAN OKUN: Mr. Sadler.

MR. SADLER: Yes, I would just like to add that, you know, demand in our industry continues to grow. I think what we -- we have obviously plotted demand, annual demand growth rates in terms of the uniform measurement, with his bit demand, for the last -- well, every year since our industry has been in existence.

And I believe the range is somewhere at a low of about 50 percent annually and a high of something over 100 percent annually. There is no correlation at all with respect to increasing prices or even price stability to the high demand periods.

The fact of the matter is it's all about

supply. And in this case it's subsidized supply from Hynix that is contributing to the dismal state of our industry.

CHAIRMAN OKUN: Yes, Mr. Hausman. My red light is on but --

MR. HAUSMAN: Well, along those lines, when Senator Wyden was talking I actually computed how much demand has increased between first quarter of 2000 and second quarter of 2002, and it went up by more than 100 percent. So he was not quite correct when he said demand wasn't growing.

CHAIRMAN OKUN: Okay. I appreciate all those comments on demand. And if there is anything further with regard to how the staff report looks at it, I would appreciate that post-hearing as well.

Vice Chairman Hillman.

VICE CHAIRMAN HILLMAN: Thank you. I guess I will sort of take up exactly where you just left off on that because Hynix obviously argues in their brief that one of the contributing factors to the poor market conditions in 2001 and 2002 was a slowing of demand growth. I mean, they are not suggesting that it's not growing, it's just that it's growing at a lesser pace.

I mean, their numbers would have indicated

market growth of about 70 percent a year from '95 to 2000, but 60 percent in 2001, 41 percent in 2002, so they are showing this notion that the growth in demand is starting this kind of downward curve, and that that was one of the contributing factors to the poor market conditions in 2001 and 2002.

First of all, would you agree with that sense, and what is its significance?

MR. KAPLAN: Could I ask if Mr. Love could address that? We did a lot of work in terms of the analysis of demand and the relationship to pricing. I think it would be interesting to have him address that.

VICE CHAIRMAN HILLMAN: Mr. Love.

MR. LOVE: Yes, I would be happy to. Mark Love, Economic Consulting Services.

Consistent with our view that supply is the primary determinant of cycles that we have seen over the last 15 years, we took a close look at the demand -- relationship between demand changes and price changes. I think you might find it helpful to look at our Exhibit 6 in the brief where we provide a 15-year series of growth rates in the DRAM world market as well as price changes; the source, IC Insights, very well respected research firm.

Anyway, we took a close look at this because we wanted to get straight what we felt was a reasonable assessment of the impact of demand, and to our somewhat surprise we found that there was actually no correlation whatsoever over this whole period. In fact, there is an inverse correlation which is counter-intuitive.

I would point out the fact that during the highest growth periods in terms of demand for bits would be, for example, the period '96 through '98. During that period you saw some of the most steepest price declines throughout the whole period.

Similarly, if you look at say 1993, which was a recovery year to certain extent in terms of pricing, you saw prices go up about four percent, which is, as you know because of the learning curve, a little unusual, and that was one of the lowest demand growth periods.

So there is really no observable correlation between demand growth and price changes. We think it's all related to supply issues which we have been discussing at length here.

VICE CHAIRMAN HILLMAN: Okay, thank you. I appreciate that answer.

MR. LOVE: And I would add, I'm sorry to

interrupt, but I would add that demand continues to increase at rates we have seen for the last several years and at rates which we have seen at times in the past as well. And I think all the research reports will indicate that that is also the case.

VICE CHAIRMAN HILLMAN: Okay. No, I appreciate that answer.

Mr. LeFort, at the end of my last round of questioning I was talking a little bit about again trying to put what's happening in prices in some kind of context, and obviously one of the tricky things for us in a case involving a product like this where we normally look at price declines and try to figure out, you know, the degree to which they are caused by, you know, imports in the market, obviously here we have to overlay that with what is happening in the tradition DRAM cycle in terms of how much of the change in price is the normal cycle versus how much of it might be due to something else.

And so again, I was just trying to get your perspective on it, and part of what I'm trying to understand is again how to overlay the price declines that we have seen in terms of what is historically happened, what has normally happened, what is the normal cycle with some of the information that Mr.

Appleton was giving in response to Commissioner Koplan.

I mean, this issue that, you know, kind of the process changes, the changes in density, the changes in circuit -- you know, the circuit width, the changes in the wafer sizes have speeded up as I heard his testimony from in the order of three years to, you know, 18 months or a little longer, and overlay that with the notion that, you know, these -- you know, you are not going on a four factor anymore, the new device schedule is more on the two factor. And we would normally look at a cycle of three years. We would normally look at a 20 to 30 percent price decline as being sort of normally what we would expect in the market.

And yet I now have to factor in these issues of changes in process development time, changes in device time and overlay all of that with what is really driving the prices and the price declines at the pace we have seen.

So I wondered if you can help me from your perspective understand, again, how to put the price declines that we have clearly seen in the DRAM market over this period into this kind of context.

MR. LeFORT: Well, one of the things that we

should keep clear is there is cost reduction and then there is price reduction, all right. And so a lot of what you referenced and what Mr. Appleton referenced are all the things we do to get our costs down.

And when supply and demand are in reasonably balanced there, then you can say that by us putting down our costs helps to drive the prices down, and it is certainly in our interest to drive prices down with relative to cost so that we can get more demand and fuel the demand to keep growing. So that's more or less the normal situation when supply and demand is balanced.

But what happens normally in a downturn is supply and demand is self-regulating because the market forces work, and at some point in time the noncompetitive suppliers or those suppliers that have alternatives that want to go and invest their money elsewhere they leave the market, and that very quickly regulates the market into supply and demand, and that is why we are here today is that this market has been longer and more depressed than ever in the history of the DRAM business.

In fact, the good senator from Oregon actually highlighted that. He said this is the typical boom and bust cycle except this one is longer

and worse. We all agree with that. The difference is we say the reason it's longer and worse is because market forces have not been allowed to play, and a weak supplier in that supply and demand, Hynix, has been kept in the market through unfair subsidies.

So that's what is happening on the price drive is what's driving this is really the supply and demand side.

VICE CHAIRMAN HILLMAN: Okay, but would you say these changes and/or this going to two times has affected the speed at which your cost reductions come down?

MR. APPLETON: If I can address that since I made the comment. I probably should have clarified.

Every time we have to find something new in order to continue to generate these cost reductions, and in cumulation of all of these changes we have been able to simply stay on the same curve. So our ability to reduce cost 20 to 30 percent per year are really by doing these new things we are able to stay on that same curve. So the curve hasn't changed that much.

VICE CHAIRMAN HILLMAN: Okay. Okay, no, that's the answer I needed. I appreciate that.

Mr. LeFort, from your perspective would you agree with that, that the cost reduction curve at 20

to 30 percent a year has stayed on that curve, there hasn't been a significant change in it?

MR. LeFORT: The only thing I would say to that technology-wise that's true. But because of the severe pricing situation things such as overhead and new hiring and everything we can do. You know, Mr. Becker told me last night in a plea almost that he has one person in his factory doing administrative work for 1700 people. I mean, that's the type of severe situation we are in. So normally we would not be that lean, we would not be on that level. But relative to the normal technology-related cost reductions, i would say that's correct.

VICE CHAIRMAN HILLMAN: Okay. Then I guess if I could go to another issue. Hynix claims, I mean you mention this issue of supply, supply, so I am trying to make sure I have a good picture on that side of it. Hynix claims, in addition, that the poor 2001 conditions were caused in part by a draw down of large purchaser inventories that were accumulated in 2002. And again, I'm trying to understand two things.

One, are there any publicly available data that would help us understand whether there were significantly larger purchaser inventories? Is there anybody out there that tracks inventories held at the

purchaser level of these products?

And the secondly, just even if there is not data, I mean, what would be your sense? Were purchasers accumulating more than normal inventory in 2000 of DRAMs?

MR. SADLER: I think the -- first of all, with respect to is there third party data available that would measure inventory in the hands of purchasers, I don't believe there is; at least I am not aware of any.

I would add to that that the business model that we have in place to support the PC manufacturers today, which as Mr. Appleton mentioned, drive approximately 85 percent of the total demand, megabit demand for DRAM. The business model that we have in place doesn't require our customers to carry any inventory.

There is no reason whatsoever for them to carry any inventory risk. We store product or we stock product adjacent to their PC assembly facilities. And as they are going to build a PC, they pull the inventory out, and integrate it into a PC, and then send it to the customer. So there is no reason whatsoever regardless of the market environment for them to carry any inventory at all.

So my perception would be that whether it was going out of 2000 into 2001 or throughout 2001 and 2002, or even today, no reason whatsoever for any of the customers to carry to carry any inventory whatsoever and take any inventory risk.

VICE CHAIRMAN HILLMAN: Mr. LeFort, would you have any other comments on this issue, purchaser inventory?

MR. LeFORT: No, I think that's fair, that's a fair and accurate assessment.

VICE CHAIRMAN HILLMAN: Okay. Thank you very much.

CHAIRMAN OKUN: Commissioner Koplan.

COMMISSIONER KOPLAN: Thank you, Madam Chairman.

On page 32 of the Infineon brief, and continuing on, I guess, to page 35, you discuss that the subsidies involved in these investigations contribute strongly to a threat of material injury to the domestic industry because they are export oriented.

And you also by way of background, I'm just quoting, you say that "Commerce preliminarily found from 1976 through the period of investigation in this case the Korean government specifically identified the

semiconductor industry as a strategic export-oriented industry that would receive special treatment and subsidies in the form of carefully directed government funding and credit."

As I say, this goes on for several pages.

I am curious. Since they have been in effect since '76, why did you all choose not to oppose the lifting of the order in the Commission's recent sunset review of DRAMs from Korea?

MR. KAPLAN: Well, I think we looked at that situation at that time, and that was before these major subsidies had occurred. And we thought that there had been some changes at that time. Though there were export subsidies and the like, those would not necessarily have been looked at in any way in the lifting of the order as that was a dumping order and it wouldn't have affected those directly anyway.

We were certainly surprised when, I think, Hynix started getting billions and billions of dollars of subsidies, and that caused us, I think, to take a different look at this whole situation. But at the time of the sunset order none of those subsidies and none of that bail-out had even started.

COMMISSIONER KOPLAN: Okay, thank you for that. But Mr. Rosenthal, this was your brief.

MR. ROSENTHAL: We were not parties to the original investigation, and Infineon had not made, at least had not until the last few years made the investment in the U.S. facilities that has really caused them to take an active interest in this proceeding today.

MR. APPLETON: I think I can add on just a little bit more to that --

COMMISSIONER KOPLAN: Mr. Appleton.

MR. APPLETON: -- from Micron's perspective.

If you go back to the timing of when we chose not to oppose that, I believe it was in 2000, '99 through 2000, that in 1998, the IMF contribution, which is about $60 billion to the Korean government, there were -- specifically at that time we had an agreement that required the secretary of the treasury to certify that that money would not be directed to any particular industry, and obviously we were very concerned about the semiconductor industry in Korea and having somehow that money make its way back through there.

And in fact I think we were hopeful that reform would occur. The Korean government had committed to reform, and it wasn't, as Mr. Kaplan had mentioned, until later that it became apparent that

there wasn't going to be any form, and that the subsidies were going to continue.

But at the time we didn't oppose it we were still in that stage and that process where we had a commitment that there would be reform.

COMMISSIONER KOPLAN: Thank you. I appreciate that, and with that I have no further questions. I want to thank you all very much for your answers.

Madam Chairman.

CHAIRMAN OKUN: Thank you. Just two things to follow up.

One, in the -- for the information that you're going to put in the briefs regarding this correlation between imports and injury condition, if you will also in that context address the pendency of the investigation and how that relates to that time period that you are looking at, I would appreciate that. I know you have commented on it but I just want to make sure that I understand the argument.

And then secondly, with regard to the 1999 Taiwan semiconductor case, which has been argued extensively, I know, I believe, Mr. Rosenthal, it might have been in your brief where you had an extensive footnote addressing the distinctions. I

guess, to the extent I have heard respondents raise it again today, and I assume we will hear some more, if there is anything further you want to comment on, I would appreciate that.

Mr. Appleton, was there something you wanted to say in particular?

MR. APPLETON: Well, just quickly with respect to the Taiwanese case, because obviously we were here prior arguing the impact that they were having on the market. I think it is important to note that things have changed since then; that the Taiwanese industry itself has in fact consolidated. There is a number of competitors that have actually left that business.

UNC was making product, Winbond was making product, Accer was making product, et cetera, and such that the industry -- we did go through a consolidation, and the situation has changed from that point in time to where we sit today, which is really very different from the situation we're looking at in the Hynix situation.

CHAIRMAN OKUN: Okay. I appreciate those comments. And again, to the extent that -- oh, Mr, Kaplan?

MR. KAPLAN: I am not sure I understood your

first question. You meant the pendency of the antidumping case and how that impacted?

CHAIRMAN OKUN: The pendency in this case, the pendency of the preliminary determination, how it affected the interim data.

MR. KAPLAN: Oh, okay. I understand. Yes, we will address that. Thank you.

CHAIRMAN OKUN: Okay, I think, again, the briefs were very thorough. There was a lot of information there, and I appreciate that.

Let me turn to Vice Chairman Hillman.

VICE CHAIRMAN HILLMAN: Yes, I hope just a couple of quick follow ups.

One again goes back to this issue of trying to understand the pricing of these different products, and I guess as well as the response that I heard on this issue of how I should regard the nonsubject imports.

I mean, one of the responses was, well, Samsung, gee, they are mostly or heavily or RAM-bus so I should somehow discount that as not as directly competitive, or somehow take it into account differentially, which leads me to needing to understand just a little bit from your perspective the relative role in relationship between these specialty

DRAM products as opposed to I guess what I would call the regular DRAMs.

I mean, help me understand, you know, I guess the little bit that I understand is that with all of this new technology some of the regular DRAMs are now beginning to replace some of the market that had been filled by the more specialized SG-RAMs, V-RAMs, some of these other products.

I am trying to understand that as opposed to this notion that somehow Samsung is playing a different role in the market because it's heavily focused on RAM-bus products.

So again, I need a little bit of a better understanding of sort of what portion is specialty, how does specialty relate to regular DRAMS? Has it changed over the POI? And particularly, are the Koreans more focused, Hynix in particular, in specialty side or, I guess, the regular DRAM market?

MR. APPLETON: Well, first of all, I want to comment on the specialty DRAM side. I think I can probably let either Mr. LeFort or Mike Sadler answer the question as to the total product line and the impact that it has.

I didn't mean to imply that somehow Samsung wasn't making the products that we make, because they

do, and I didn't mean to imply that was the majority of their output. But when you look at the differences in market shares that have occurred, I think it is significant that a percentage of that, a reasonably large percentage of that is in the specialty area where we do not compete.

And that simply trying to say Samsung, Samsung, Samsung, look at their growth isn't really a fair comparison because they do make products that we don't participate in our industry.

VICE CHAIRMAN HILLMAN: Okay.

MR. SADLER: Using your terminology of the regular DRAMs, that would be more reflective of the DRAM parts that we use to address that 80 to 85 percent of the market that we call dependent upon the PC, the PC demand. The balance or the difference between 100 percent and that would be, again using your terminology, what you call specialty products; for example, lower density devices or devices with some type of specialized packaging, and special features, extremely low power or high performance.

VICE CHAIRMAN HILLMAN: Okay. And just so I understand it, has there been a change in the portion of the market that is filled by what I will call regular DRAMs as opposed to specialty? Has that

changed over the POI?

MR. SADLER: Not materially.

VICE CHAIRMAN HILLMAN: Okay.

MR. SADLER: During the POI, there was a subset of that PC demand that was being filled by what technically would be called a specialty product. It was a direct RV-RAM, a RAM-bus product, and that was I believe referred to earlier by Mr. Appleton. That market really is not in existence anymore, so it's back to the "regular" DRAMs filling all the PC demand.

VICE CHAIRMAN HILLMAN: And tell me about the competition between the two. I mean, if what you need, if what you think you need is one of these specialty products, can your need be met by a regular DRAM? Or if that's what you need, that's what you need, and you're not going to buy something else no matter what the price difference is?

MR. APPLETON: Yes, it can -- there are different platforms. When I talked about DDR and synchronous DRAM.

VICE CHAIRMAN HILLMAN: Yes.

MR. APPLETON: Well, a RAM-bus at one time there were projections that it would become the new platform for the industry. In fact, it did not become the new platform for the industry, but a percentage of

the market used it, and they are not compatible. There is no switching out of these products at all.

VICE CHAIRMAN HILLMAN: Okay. Mr. LeFort?

MR. LeFORT: Yes, just a couple of things on that.

So again it depends on -- Mr. Kaplan brought up a very good point which is if they are looking at dollars during the period of investigation, these specialty, because there is much less competition and much less supply and demand, on a dollar basis they managed to keep some very high prices in those areas.

So if you are looking at market share and dollars instead of bits, there would be a material impact. If you are looking at bits, there would not be a material impact versus the tradition.

VICE CHAIRMAN HILLMAN: Okay. Hold on just one second. Then is Hynix more -- I was trying to make sure I understood where Hynix is at on the --

MR. LeFORT: Hynix is more on the mainstream side.

VICE CHAIRMAN HILLMAN: Okay.

MR. LeFORT: I'm not sure that I should speak for them, but where we see them for sure is more on the mainstream.

The other thing to be clear is Samsung has a

much different position in the market than Hynix does. Really, Hynix's very existence has been, as Mr. Rosenthal said, been questioned. Well, that obviously causes concern at very large manufacturers. So while they are very capable of setting the price, once that is taken out of the equation they have a very weak position because their stability has been questioned. It's never quite clear if they are going to get the next funding from the Korean government.

So because of all of that a company like Samsung who has much stronger fundamentals could very well be picking up market share during the period, again all other things being equal.

VICE CHAIRMAN HILLMAN: Okay. Mr. Love, you had your hand up?

MR. LOVE: Yes, thank you.

With respect to the specialty products versus what the staff has called standard DRAMs, the importer questionnaire did in fact request data from each of the importers separating out their imports and supply of standard DRAMs versus RAM-bus versus all other specialty products that have been mentioned here, and by source of fabrication, I believe, so that you have that data to sort out who does what and how much.

And we would recommend that it would be useful for you to take a look at apparent domestic consumption with respect to the standard DRAMs, which I believe you could probably do, and you might find that somewhat helpful in coming to grips with the issue of Samsung and other nonsubject imports.

VICE CHAIRMAN HILLMAN: No, I appreciate that response. Thank you.

Mr. Appleton, just a quick coming back to you. You had stated in your original opening comments that Micron had been unable to borrow for its investment and that it had to issue equity at, you know, low stock prices -- I won't say low, but at stock prices that perhaps are not what you might have wished for.

I am wondering if in the post-hearing you can provide any details on this effort in terms of trying to obtain financing --

MR. APPLETON: Yes, sure.

VICE CHAIRMAN HILLMAN: -- so we have it on the record for us.

MR. APPLETON: You can say low, that's okay, it's low.

VICE CHAIRMAN HILLMAN: Okay.

MR. APPLETON: Yes, we can disclose

confidentially the companies that we approached in order to try to get financing that we weren't able to get done.

VICE CHAIRMAN HILLMAN: Okay. No, I would appreciate that in the post-hearing.

And I think with that I have no further questions, Madam Chairman, but I would thank you much all for your answers. Appreciate it.

CHAIRMAN OKUN: Commissioner Koplan.

COMMISSIONER KOPLAN: Thank you, Madam Chairman.

I just have a request for the purposes of the post-hearing. In light of the Commerce Department's June 17 de minimis finding with regard to Samsung, and counsel, you might have already intended to do this for the post-hearing, but I would appreciate it if you could provide me with an analysis of Gerald Metals in the context of the nonsubject imports. If you could brief that post-hearing, I would appreciate it.

MR. KAPLAN: Absolutely.

COMMISSIONER KOPLAN: Thank you, Mr. Kaplan.

Mr. Rosenthal?

MR. ROSENTHAL: Certainly.

COMMISSIONER KOPLAN: Thank you. And with

that I have nothing further. Thank you, Madam Chairman.

CHAIRMAN OKUN: I see no questions from my colleagues. Let me see if Commission staff has questions of this panel.

MS. ALVES: Yes. Good afternoon. Mary Jane Alves from the general counsel's office.

I have three brief questions, all of which can be addressed in the post-hearing brief. I am sensitive to the lateness of the hour.

The first question is regarding the Commission's examination of whether or not certain activities conducted in the United States constitute sufficient production-related activities. In your post-hearing briefs would you please focus in addition on how the Commission should measure value-added to the product in the United States?
Is this a function of over the lifetime of the product, for example, or is there some other measure that the Commission should be looking to in that context?

In Micron's prehearing brief, although there is no subsequent discussion of this issue, there appears to be a suggestion that the Commission should consider whether appropriate circumstances exist to

exclude Samsung as a related party.

In light of Commerce's de minimum final determination regarding imports from Samsung, is there any legal or factual basis for such an argument?

Finally, with respect to the prehearing brief filed by Infineon, there is some discussion with respect to the nature and effects that the subsidies factors in the threat context. The discussion here is premised on a discussion of the Department of Commerce's preliminary determination.

If you could elaborate in your post-hearing briefs on Commerce's final determination, and more specifically identify whether or not the Commerce Department in fact made a finding that any of the subsidies are the sort contemplated by Article 3 or Article 6.1 of the Subsidies and Countervailing Duty Measures Agreement.

I believe that those are all the questions from staff at this point.

CHAIRMAN OKUN: Thank you.

Do counsel for respondents have questions of this panel?

MR. PORTER: Yes, Madam Chairman, we have just one question. Actually it's a follow up on a question Commissioner Koplan had asked; if Professor

Hausman could share his specific model and the underlying data used in the model before the post-hearing brief, in fact, maybe by tomorrow or the next day, so there can be full discussion of his conclusions in the post-hearing brief.

Thank you.

MR. HAUSMAN: Certainly. I will do it tomorrow when I get back to Cambridge.

CHAIRMAN OKUN: Thank you, Mr. Hausman.

All right, with that this would be a good time for a lunch break. I will remind everyone that the room is not secure, so if you have confidential business information please take it with you.

We will recess for one hour and two minutes, resume at 2:00.

And again, I really want to thank all the witnesses for their testimony this morning, and for staying with us and responding to all our questions. I know it's been a long morning.

And with that, this hearing is recessed.

(Whereupon, at 12:58 p.m., the hearing in the above-entitled matter was recessed, to resume at 2:00 p.m. this same day, Tuesday, June 24, 2003.)

CHAIRMAN OKUN: This hearing of the U.S. International Trade Commission will please come back

to the order. Madame Secretary, I see that the second panel of witnesses is seated. Has everyone been sworn?

MS. ABBOTT: Yes, Madame Chairman.

CHAIRMAN OKUN: Thank you, Madame Secretary. Mr. Durling, you may begin your presentation.

MR. DURLING: Thank you. Members of the Commission, my name is James Durling with the law firm of Willkie Farr & Gallagher. And what we would like to do today is cover three broad topics. First, we'll discuss the broader forces that have been driving the DRAM market, including many of the factors ignored by Micron and Infineon. And for that part of the presentation, we will hear from Mr. Farhad Tabrizi from Hynix.

We will then turn to the specific pricing dynamics in the U.S. market, the role of global pricing, and how customers choose among suppliers, a topic of great interest to the Commission, as we heard this morning. For that topic, we will hear from Mr. Gary Swanson, also from Hynix. And then we will come back to what are the implications of these market realities for the ITC analysis, which I will present, focusing on injury causation and threat.

As you listen to our presentation, we would

like you to bear in mind a few key themes. The first is the context is critical. The role of Hynix in the U.S. market can only be understood in the context of the business cycle and, importantly, in the context of other DRAM suppliers. The second important theme, changes over time -- the key issue for the Commission is how has Hynix's role changed over the period. While others have spent more and gained market share, Hynix has been losing share.

The third important theme is that Micron is fundamentally wrong, both factually and as a matter of economics, to stress only supply. Demand in this market is critical, and we'll discuss that at some length.

Another major theme is the importance of subject imports and the effect of subject imports in this case. The statute focuses on subject imports. And as your questions this morning highlighted, that is our job here, to apply the statute.

Finally, in doing the analysis, it's critical to take into account the role of nonsubject imports. So with that, by way of an overall introduction for our panel, I'd like to turn the floor over to Mr. Tabrizi.

MR. TABRIZI: Good afternoon, Madame

Chairman, Madame Vice Chairman, Commissioner. My name is Farhad Tabrizi. I'm in charge of Hynix's worldwide marketing. I also have been in this business for 20 years. I started at American company, and then I went for a Japanese company, and the last 10 years I have been with Hynix.

I want to go ahead and start by presenting the market, the DRAM market. The key points that I think everybody agrees in the industry, that the DRAM market is cyclical. It goes up and it comes down. It has some upturns, and it has some down cycles. The DRAM market is also a global market, for both suppliers and users. Nobody wants to deal with DRAMs on a local basis. Pricing depends on demand/supply and does not depend primarily on the supply factors. DRAM is a commodity product. It's interchangeable from various -- the DRAMs are interchangeable and pure commodity. So everybody agrees to this point.

So about the cycle of DRAM. We borrowed this slide from Micron. They presented this in November of '02. They clearly show that since the beginning of the DRAM issue in '71, there have been a lot of cycles. But one key item that we should look at -- during the many cycles that they talked about, they didn't mention the demand side. What is new

about this cycle -- what is different about this cycle, Micron says it's customer demand. And I think we agree with them.

This shows the DRAM cycle. We had some good years in '95. The DRAM industry made $41 billion. We had some bad years, a lot of bad years. And they usually repeat around, you know, two to three years, four years apart. And the condition of the -- the degree of worsen cycles is in terms of 50 to 80 percent. So if you look at the degree, we had various cycles relative to the downturn. So the 2001, really it was a bad year, but relatively, you know, we had other bad years, too.

So let's talk about the DRAM market as a global market. In this presentation, I'm showing the DRAM market pricing in various regions, North America, Europe, and Asia; for various densities, 16 meg, 64 meg, 128 meg, and so forth. As you can see, there is not much price difference in any reason. Everything follows the same pattern. And also, when the new product comes into market, initially it's a very high price. And as the learning curves and cost comes down, the price goes down.

This is very specific to 128 meg, and it's very specific to the time we are reviewing right now.

The price was basically flat across the globe.

We borrowed another slide from Micron, and it shows also Micron is also globalizing. They are moving their market to outside U.S. In 1997, Micron sold 75 percent of their product in America. By 2002, that percentage dropped to 54 percent. They were very active in Asia, gaining market shares very aggressively, at 46 percent today.

So demand is also a very critical factor in this element. So we talk about -- this morning, Micron talked about -- sometimes they said -- Mr. Sadler said pricing is clearly a function of supply and demand. But then at some point they said it's only supply. So I'm a little bit confused. But I can assure you, in 20 years of my experience, it's supply and demand at given time. And it's the relative to the level of demand that causes the prices to go up and down.

Particularly in 2002, I heard bad things like the three-year economic meltdown, extraordinary downturn. 2001 was a bad year, really bad year in terms of technology. If you look at the technology, where the demand comes -- this morning Micron said 85 percent of the demand comes from the computing. Computing purchases dropped when? In 2001. This is

the total computing, the whole electronic. So that's the time that they didn't buy DRAMs anymore.

This is the rate of decline in the same area. In 2000, they had 20 percent growth. In 2001, somewhere around 30 percent growth -- I mean decline -- another 20, 22 percent decline the following year. So we had really a couple of bad years.

Again, one other example, 85 percent of the DRAM goes into the PCs and PC-related. Since the beginning of PC, we never had a year that was below zero growth. We always had a lot of double digit growths. 2001, the only year in history of PC market that it was a negative growth. And that is very much related to the DRAM revenue. DRAM revenues follow usually the PC growth.

Micron also, I think -- even though they don't want to admit here -- but they agree that demand matters. Even Mr. Appleton said, we have a fundamental shift, I think, in the demand profile. As you know historically, it was around 75 percent; now it's about 15 percent -- I mean 50 percent. This is a recent conference call.

So also the understanding of the demand at the time is very important. So during the 2001, we understand that demand was really bad. And this weak

demand had nothing to do with Hynix and Hynix's situation. Supply -- we didn't say it doesn't matter. It's a demand and supply balance. So supply is also an important factor.

If you look at the number that New Fab has come to the production, we had a lot of New Fabs in the '90s. But in the last three years, the number of New Fabs has been reduced quite a bit. I would like to share that, that Hynix did not contribute to any of this New Fab that has been built in the last two years. So Hynix did not add capacity.

Megabyte shipment -- look at the 1999. Hynix had 20 -- by the way, this is megabyte. It's not dollar. It's actual byte shipment. And the source of data is Gartner Dataquest. In 1999, we had 20 percent, Samsung had 18, Micron had 16, Infineon had 8, and Nanya had 1. And look at 2002. Samsung 28, Micron 21. Micron had a bad year in 2002 due to technical difficulties that they themselves admit to that. They make very wrong decision in terms of DDR transition. And Hynix is the only company among the big four that has lost market share from 20 to 14.7 percent. So I don't know who has got injured here, Hynix or the others.

Hynix's share of the 2000 really was not the

cause of problem. We have continuously lost market share. We have spent less money on capital expenditures than anybody else, comparing to our competitors. We converted three of our 18-inch Fab to non-DRAMs since the merger with LG. And our total capacity has been reduced since '99. We have not increased the total capacity. So we cannot be really blamed for the changes in the DRAM market.

In summary, I just want to emphasize that the cyclical market of the DRAM is very clear. There was a sharp demand in late 2000 -- October 2001, that Internet bubble burst. A lot of companies still were buying. I mean, this morning they said nobody had inventories. Cisco had worth of one-year inventory. Sun Microsystem had $1 billion inventory. We can provide that; it's official public information, so we can provide those. A lot of companies had a lot of inventory. PC companies maybe, you know, a smaller inventory, but bigger guys had a lot inventory.

So Hynix was not really -- cannot be blamed for price decline of the meltdown in 2001. Thank you.

MR. SWANSON: Good afternoon. My name is Gary Swanson. I'm senior vice president of sales at Hynix Semiconductor America. Hynix Semiconductor America is the U.S. headquarters and sales arm for all

of our DRAM manufacturing facilities, those in Korea and our state-of-the-art production facility in Eugene, Oregon.

I came here today to give you an insider's view on how DRAMs are bought and sold in the U.S. market. I have been selling DRAMs to U.S. customers for more than 17 years, first for Toshiba and then the last eight years with Hynix. At Hynix Semiconductor America we focus on our customers' worldwide requirements. We strategize and plan the total DRAM needs of our customers, no matter where they want us to ship. Thus my responsibility is not only for DRAMs consumed in the United States, but also for U.S. customers who want DRAMs for worldwide consumption.

U.S. customers account for about 35 to 40 percent of the worldwide consumption. But actual shipments to the U.S. are decreasing substantially. This just reflects the known fact that many of the computer companies have moved their production offshore.

Today I want to explain how prices are negotiated with the largest customers. You need to understand that sales to the largest customers, what we call strategic accounts, are pursuant to a long-term agreement. Essentially, under a long-term

agreement, the customer agrees to commit a certain share of their needs, and the supplier agrees to make capacity available for that need. Customer and supplier agree on their respective commitments, are subject to supplier's performance in the areas of technology, quality, responsiveness, and price.

Accordingly, the price negotiations for orders take place under the umbrella of a long-term agreement, which includes many factors. At the outset, I'd like to make it clear that price negotiations only happen after a supplier has obtained qualification status from the customer and has become a qualified supplier for each particular DRAM product. The actual negotiations between customer and supplier generally happens every two weeks.

However, the negotiations are not simply about who has the lowest price. Don't get me wrong. I'm not saying that price is not important. It's just that it is not the sole determining factor, as Micron and Infineon would have you believe. Based on my many years of experience, customers award business to their qualified DRAM suppliers based on a number of factors. Essentially, for all negotiations, the customer evaluates the supplier's technology, their quality record, their delivery performance, and price.

The supplier is competing in all of these areas to win the business. Suppliers are always trying to differentiate themselves by adding value in each of these areas. Similarly, on the supplier side, the supplier must take into account a host of factors during the negotiations, such as the extent of the relationship with a customer, whether a long-term agreement is in effect, the quantity being ordered, the particular type of DRAM products desired and capability to support it, the position of our competitors at the customer, the breadth of qualifications, and trends in the spot market.

I note that all of these factors are part of our deliberative process when negotiating with customers. And I cannot emphasize enough that the nonstop negotiation that we have with our DRAM customers is a very dynamic process. Please remember that DRAMs are a product for which we must constantly introduce new generations. I have to take into account the desire of the customer to have the latest generation and our company's ability to meet that customer's delivery schedule for many different products. And I can tell you there are times when production difficulties at our Fabs very much limits my ability to seek more business from certain

customers.

The key point is that all suppliers are going through the same process. I also want to talk about how specific prices are negotiated. Hynix does business with all the major computer companies and contract manufacturers, which are by far the largest U.S. customers of DRAMs. My experience is that these customers keep confidential the pricing quotes of individual suppliers, and therefore it is very difficult for any supplier to learn the precise pricing of their competitors.

Of course, I have heard that our price was not competitive, or that there were other prices that were lower than ours. Consequently, I do not know how Micron and Infineon can complain that they know that the Hynix price was always the lowest price. This is simply not true.

My final comment today is that I find this case a bit surreal. Micron and Infineon complain that they have been materially injured, but the real world marketplace indicates otherwise. Over the past three years, Micron and Infineon have been very aggressive and gained market share in the U.S. and globally, while Hynix has lost market share. They have capitalized very well on their relative strengths of

financial stability, technology, and low-cost manufacturing. They are well positioned again to achieve a high level of profitability, as the DRAM market is now gaining strength. Prices are rising, and some DRAM components and DRAM modules are now being allocated.

J.P. Morgan's latest global market technology letter, June 23, 2003, states, "We believe it is almost certain that PC and CPU shipments will deliver their best first half performance since 1999-2000." Furthermore, DRAM prices have stabilized earlier than usual this year. Micron and Infineon will now capitalize on their aggressive investments as two of the largest DRAM manufacturers in the world.

Thank you for your attention, and I would be happy to answer your questions after our presentation. Thank you.

MR. DURLING: We'd now like to come back and focus on what this means for the Commission in its analysis. We want to put these market realities into the ITC legal context and focus what do these dynamics tell you about the effect of subject imports on the U.S. industry. So first we will try to put the domestic industry performance in the context of these broader historical cycles.

Next we'll consider the specific roles of subject imports. We will do what the statute compels, which is focus on the volume and price effects of subject imports. And then finally we will explore whether declining imports from Hynix can be considered the source of any threat.

So let's start with the condition of the domestic industry, but put it in context. It doesn't make any sense to focus only on the down cycle. In fact, using the domestic industry's own definitions of success, we can see that the domestic industry is doing better now than in prior down cycles. And in particular, using their own definition, we will focus on capital expenditures, R&D spending, cash flow, and access to capital.

Let's compare the current downturn to the last downturn in 1999. As I said, it's misleading to focus on an overly narrow period of time. At the outset, I think the most important base level comparison if you want to focus on operating profits is to note that in the '96 to '98 period that the Commission last considered, that the domestic industry had operating losses, cumulative operating losses, of $2.2 billion. And in that case, the Commission correctly recognized that in a cyclical industry, yes,

they may be suffering operating losses, but that must be put in the context of the business cycle.

In this particular business cycle, the industry is actually doing better than it did in the '96 to '98 period. I'm not making up this standard. This is not Jim Durling's standard. This is not Hynix's standard. This is Micron's own standard for its financial success. And we can quote CEO Appleton, focusing on the cash balance, the ability to invest in technology, having a large enough market share to spread out the cost.

Indeed, a more precise definition can come from this slide, again from a Micron presentation, where I'd just like to highlight the key language, which is Micron has a proven ability to weather downturns, and that the financial position in the current cycle trough is stronger than any previous cycle. We would agree with that. Yes, they're losing money now. The industry is losing money now, but that's the nature of the cycles in the DRAM industry.

So let's look at some of the specific factors that Micron has identified as critical to industry success. Let's start with capital spending. And if we compare total capital spending over the '96 to '98 period, you can see a total of 2.6 billion,

whereas over the 2000-2002 period, total capital spending is higher both in absolute terms, $3.7 billion, and as a percentage of revenue.

This strong capital spending puts Micron at the top of the heap in terms of overall DRAM rivals. This public slide of capital spending highlights that Micron has been spending a lot more on capital expenditures than its rivals. In fact, look at who is spending the money. It is Samsung. It is Micron. It is Infineon. It is Nanya. Hynix's spending is actually moderate relative to others in the industry.

We see the same pattern if we look at R&D spending. Over the '96 to '98 period, Micron spent a total of $672 million in R&D spending. Yet over the 2000-2002 period, Micron more than doubled the absolute value of R&R spending, and again was spending a much higher percentage of its total revenue on R&D. This is a sign that the industry is indeed well positioned for the next stage in the cycle.

Indeed, Micron highlights the fact that they have emerged as one of the technology leaders. Who are the technology leaders, according to Micron? Micron, Elpidia, Samsung, and Infineon. Two of the domestic petitioners have been singled out as technology leaders, but who is missing from this

picture? Who has been left behind? It's Hynix.

With all of the spending on R&D, with this emergence as the technology leadership position, it shouldn't be surprising that Micron has been moving up the ranks in U.S. patent applications. Again, this is not a sign of a company that is being starved for the resources necessary to maintain its technology leadership.

Let's look at cash flow. Again, the market is in a down cycle. But the last time the market was in a down cycle total cash generated from operations was $1.8 billion. This time Micron has generated $3.4 billion in cash from operations, again earning a higher percentage of its revenue as cash from the operations.

All of that comes together, and in the balance sheet once again we see the same pattern, that compared to the last downturn Micron is actually quite well positioned. Again, we took a slide that Micron had presented to outside investors. And this is Micron's analysis of its 1998 balance sheet, focusing on certain key ratios that are a measure of the success of a company. And by every single one of these measures, Micron is stronger now than it was before.

So what I take away from this picture is that Micron, as the single largest member of the domestic industry -- they alone represent the vast majority of the domestic industry -- they have done an excellent job of positioning themselves through this downturn to be ready for the next upturn.

So let's turn now to the volume effect of subject imports, the statutory mandate that you have. Okay. First, I would like to highlight that Hynix has been losing share in the Americas. I mean, obviously we can't get into the BPI data here. So the closest proxy we could find was Dataquest information on the Americas market share, which is on a revenue basis. But the public data that I'm discussing with you today illustrates the basic trends that you will see in your proprietary data.

The key message is the same in the Dataquest data, and it's the same whether you look on a global or a U.S. basis. Hynix's share of the market has been falling, and the share of other suppliers has been growing. Depending on the data source, you may find slight differences in the magnitude of the increase. But the basic direction is going to be the same. Hynix is losing; others are gaining.

When you look at your proprietary data, it's

very important to remember that Eugene, Hynix's U.S.-based production facility, had to shut down during this period. So when we look at Hynix brand sales, that's including both domestic production in Eugene and the subject imports from Korea. And you need to take into account the shutdown at Eugene when you're looking at the specific trends during the period.

When Eugene shut down, it was necessary to modestly and temporarily increase imports from Korea. But even when you combine them all together, you will see a general downward trend in Hynix's share of the U.S. market. More importantly, this increase in imports during the period, this modest increase, had nothing to do with the alleged subsidy, and has since been reserved when Eugene came back on line.

Now this is really important because Hynix Eugene and Hynix Korea are interchangeable in the eyes of the customers. Customers don't distinguish the source of the Hynix chip when they're making their purchases. So how can it be that Hynix imports replacing Hynix's own sales in the U.S. -- how can that be a cause of injury to the U.S. industry? If a customer was buying from Hynix before, and Hynix simply substitutes some import for some domestic production, it's the same company, it's the same price

deal with the customer. How can that shift in import volume have any connection at all to the condition of the domestic industry? I don't think it can.

This highlights the trends of the Americas market share, and it highlights that during the period that Hynix was losing market share in the Americas, both Micron and Infineon on a combined basis were gaining share by a substantial amount.

Now this highlights the lack of any connection between the Hynix market share, which is the yellow line here, which is following a stable or downward trend, and the operating performance of the domestic industry. When you look at this graph and when you look at the fact that long before the problem, long before any of the alleged subsidies in this case, the domestic industry was in the down cycle, and they were losing money in the down cycle. The import level is remaining relatively constant or declining over the period, but the industry goes through its cycle. It has a boom, and it has a bust. But this doesn't have anything to do with the level of subject imports.

As the Commission itself recognized in its questions this morning, there is a very crucial issue in this case that cannot be overlooked, and that is

the role of nonsubject imports. It's legally wrong for Micron to try and pretend that these subject imports don't exist. And I look forward to seeing how they discuss Gerald Metals in their post-conference brief.

But more importantly for the Commission, it is factually wrong. In this case, nonsubject imports are substantial, and they are having a big effect. They have always been larger than the subject imports. They have been growing, not falling. Nonsubject imports often had the lowest price. And this is critically important. Nonsubject imports are more than just Samsung.

Even if you think that Samsung is a little bit different -- and if you think that Samsung is a little bit different, I urge you to read Micron's testimony in the preliminary phase of this case, where they went at great lengths to explain how Samsung is the same. Even if you think Samsung is a little bit different, there are many other sources of nonsubject imports in the market. Therefore, it makes no legal or factual sense to blame subject imports and ignore nonsubject imports.

Now Micron argues that the reason for the trends at the end of the period is that the petition

affected the import levels, and they try to dismiss the market share trend in 2003 as being driven entirely by the petition. But what you will see in the data -- and we will provide this in our post-conference brief -- is that in fact the subject import levels continued at comparable levels in the months following the petition.

So there was a drop in subject import market share, even after imports were continuing. Nonsubject imports were increasing more, and they were increasing market share. Relatively, nonsubject imports were coming into the U.S. market faster than the subject imports.

So in conclusion, I don't see how you can find adverse volume effects in this case. The subject import share has always been small and has been declining. In the U.S. market, other sources were much more important than Hynix's subject imports. And there is no correlation between the Hynix market share and the condition of the domestic industry. So it's not just the level of imports; it's the relative share of imports. And the decline has nothing to do with the filing of the petition. So the decline over the recent period should be taken into account by the Commission.

I think Micron understands -- Micron and Infineon both understand that they really don't have a volume case here. They just don't have a volume case, and that's why so much of their presentation is focused on the price effects and an effort to construct a theory of how a very small volume of imports can somehow still have a price effect. But let's look at what the record really shows.

Okay. First, given the small and declining market share, in our view, it's not surprising that Micron is focusing on the price effects. But the argument fails both legally and factually. Legally, Micron cannot rely on price effects outside of the U.S. market to justify its case. The price effects must be those associated with the subject imports. That's what the statute requires.

Factually, Micron ignores the role of nonsubject imports on pricing. They ignore the role of other suppliers adding substantial new capacity while Hynix did not. And they ignore the fact that if you look at the most recent period of time, there seems to be a recovery underway.

Let's start with a bit of an overview. And what we have plotted on this graph is the average price trend as reflected by ASPs, average selling

prices, both for the period of time the Commission considered in Taiwan DRAMs, which is the red line, and the period of time in this case, which is the blue line. And what this shows is that you see a similar pattern over time, which is prices are falling over the period because in both times you were experiencing the down cycle. You see in our case that prices -- average selling prices were going up in 2000 because that was the top part of the cycle, and they have been going down since.

But what you also see is the bottoming out of prices at the end of 2001 and the trending upward of prices since then. In fact, the upward trend in ASPs compared to the bottom of the cycle has actually been stronger in this case than in the prior case.

Analysts have noted that the market is beginning to recover. You heard this morning that no one is saying that the market is turning around, but that's simply not true. These are some selected quotes, and we will take up the Commission on its request to provide in our posthearing briefs more information by more analysts showing that there is an emerging consensus that things are beginning to change.

So here is one example of an analyst noting

that the traders are now optimistic about the pricing levels. Here is another quote highlighting that June marked the end of the motherboard inventory correction and was potentially a promising start to a seasonal build expected to extend into Q3. And most recently, in a report released just yesterday, J.P. Morgan predicted that it's almost certain that PC and CPU shipments will deliver the best first half performance since the 1999-2000 period. So it's simply not true to say that everyone in the industry thinks that things are bad and staying bad.

Now when you're looking at pricing trends, it's very important to look at how capacity levels have changed, and who has been adding capacity and who has not, because capacity in this industry translates into supply. Micron focuses on a very static view of the world. They focus on Hynix's global size, but they ignore two critical points of context. The first is what is Hynix's size relative to others; and second, how has that size been changing over time.

Hynix faces larger rivals. In particular, Samsung and Micron are both bigger than Hynix. And Hynix also faces faster growing rivals. Infineon and Nanya have both been accelerating their presence in the DRAM market. Hynix has not added significant new

capacity over the 2000-2002 period. But at the same time, others have been adding more capacity. And by various measures, Hynix's share of the new capacity is actually extremely low.

So what does this mean? In 2002, Hynix existed with its share of the market. And during 2002, it was a boom year. Since 2002, Hynix has been losing out relatively capacity and supply. And yet prices are going down when others are adding the capacity. Does it make sense to blame a declining share of Hynix's capacity on the price trends in the market? I don't think so.

So let's look at these different measures of capacity. In Mr. Tabrizi's presentation, he showed New Fabs. So you can see that Hynix was not the company adding New Fabs during this period of time. Let's look at changes in wafer starts over the period from 2000-2003. And this is using third-party data from Strategic Marketing Associates. It's a very wonderful data set called International Fabs on Disc that provides a wealth of data about who is adding capacity and who is not.

We went into this data set, and we said, okay, who is increasing wafer starts, and who is not. And what it shows is that Hynix Korea actually had a

net decrease in wafer starts during the period. Yet over the same period of time, who is growing? Taiwan is growing by a large amount. Korea Samsung is growing by a large amount. U.S. Infineon is growing by a large amount. Micron is growing by a large amount. Everyone else is adding new wafer starts. Hynix of the major suppliers is the odd man out.

We also see the same trend if we switch from wafer starts to total memory capacity. And the way this data set, IFOD, tracks this information is they measure electrical functions. So by measuring the total electrical functions being produced on a monthly basis, they can simultaneously capture how many wafers are being started, how large is the wafer, and what is the geometry of the individual chips. So it is being collapsed into one measure.

What does it show? Again, Hynix is a very small part of the total increase in capacity over this period. Taiwan, Korea Samsung, Micron, Infineon -- everyone else is adding much more capacity, much more memory capacity, than Hynix.

So what does this mean for the Commission? Others have dwarfed the change the Hynix's production capacity. Taiwan is eight times larger. Samsung capacity in Korea is five times larger. New Infineon

capacity, some of it in the U.S., some of it in the E.U., is five times larger. Indeed, new Micron capacity itself is three times larger. In fact, new capacity added by others, just the new capacity, is bigger than Hynix's total capacity at the beginning of this period.

How they can blame Hynix for the result of this is beyond me. Hynix -- yes, Hynix had die shrinks. Yes, Hynix increased its nominal production. But in this industry, with everything increasing on a bit basis all the time, it makes no sense to look at nominal production capacity. What matters is the relative share of the production capacity. And by that measure, by relative capacity, Hynix fell, and that's why its market share fell.

Now pricing also reflects product-specific factors. The Commission was getting at this with its questions this morning. I urge you to come back to our panel because they have a wealth of information about this. But let me just tell you one of the stories, one of the product-specific stories.

It is well known that DRAMs follow a learning curve, and so prices are going to decline as the costs go down. But when there are problems with product planning or with product mix, that situation

can limit the supply, affect the pricing, and affect the market shares. So let me tell you a story about DDRs. Here is the price trend from public data for DDR prices. This is for the 2002 to 2003 period, okay? And you see a decline and then an increase and then a decline. I think this is an example of the kind of different pattern that Commissioner Hillman was asking about this morning.

Okay. What was happening? There is a story. First, DDR prices rose initially in 2002 because as the demand for this emerging product was increasing, the supply was tight. Samsung and Nanya in the first half of 2002 were the only companies in the market for this product. Micron missed this window. They had production problems, production planning problems, and they have admitted as much.

Prices began to fall again when the other suppliers, including Micron, solved technical and product planning problems and began to supply the market. So there is nothing surprising that DDR prices began to fall at the end of the period. When new products are introduced and there is a mistiming of how much supply is available for a particular product, prices will go up or down depending on the supply/demand balance for a particular product.

As I said, Micron admits that it had a problem with DDR. When Micron was trying to explain to analysts and explain to the press what was going on with its loss of market share and its limited volume of DDR product in the market, they were quite open in admitting to the press and to the investing world that the problem is they were caught offguard. And as a result of being caught offguard, that affected them quite a bit. It affected both their volume, and it affected their performance during this period.

Now Micron's whole case really boils down to an argument about underselling. In fact, Micron and Infineon have both stressed underselling as the essence of their case. There are limits to what we can talk about here because it's BPI, but let me just highlight a few key points. The first is that even if you look at the most traditional Commission analysis, kind of broad aggregate level underselling, I think you'll find no consistent pattern of underselling.

But second, I think it's very important to disaggregate the data because if you do so and your data allows you to do this, you will see a pattern of who really is the lowest price supplier in the market.

You heard this morning testimony from the domestic industry that, well, we don't really know who

the lowest price supplier is. Guess what, commissioners? You do. You have better data on who is the lowest priced supplier in this market than anyone else because you have a wealth of confidential data. Don't obscure what that data tells you by doing kind of broad overall averages. Break it out by company. Look at who is the lowest priced supplier. And I think if you do, you will find the results are very interesting, and that Hynix is not the lowest price.

The other advantage of breaking out your data is it will allow you to look at the role of nonsubject imports as the statute and as the courts have asked you to do. It's critically important not to ignore the role of nonsubject import price effects in doing the underselling and the pricing analysis in this case. You have the data, and you can use it.

Hynix was not the price leader in this market. In fact, in the DRAM market, there is no clear price leader, that the lowest price varies depending on the supplier and the product in the particular point in time. There is no clear pattern here. And that's why, you know, at a broad level -- again, we can't get into the details. But at a broad level, the purchasers largely confirm the absence of

any clear price leader in this case.

And the alleged subsidy in this case did not change this market reality. The alleged subsidy did not somehow make Hynix the price leader, okay? First, you can look at your data and see that it's just not true. Second, the DRAM industry is not a cost plus pricing industry. So, yes, even if there were some effect on the fixed cost for Hynix, the alleged subsidies in this case had nothing to do with marginal costs. They had nothing to do with incentives to increase exports. And so they were much less likely to affect the net pricing, which is a critical point.

Micron and Infineon want to jump from the conclusion that the subsidies affected the pricing. They want to blame the subsidies as causing the price to collapse, but it's just not true. First, it's legally wrong because the statute requires a focus on the price effect of the subject imports, not the price effect of subsidies. In fact, the only mention of subsidies is in the context of threat. That's why the Infineon brief focused on threat, because that's where in the statute the issue of subsidies becomes relevant. Why? Because the statute says focus on subject imports.

For threat purposes, you don't have actual

imports yet. So it is possible that a subsidy might increase the ability and the incentive to export in the future. And so imports in the future might change. And that's the relevance of the subsidy, to understand whether there is an increased risk of imports increasing. But the statute always comes back to are there imports, and that is what the focus of the statute is about.

But it's also factually -- subsidies don't correlate with the timing of Hynix price changes. I can't do that in a public setting, but we can do that in the brief. Second, it's inconsistent with the fact that Hynix's rate of growth for capital expenditures, the growth in supply -- they were all well below the average for other companies in the DRAM industry. So the subsidy wasn't having any of the effects that Micron alleges that the subsidy was having.

So what are the implications of all of this? What are the price effects in this case? First, the mere fact that prices fell doesn't mean very much because in a down cycle and in an industry like this prices always fall. Second, the change during the period, what was different from 2000 was the collapse in the demand, not a surge in supply. But if you think there was some effect from an increase in supply

in the market, it wasn't by Hynix. Relatively, Hynix was losing share, not gaining share, and Hynix simply did not have the resources to expand as aggressively as others did.

So I think the specific pricing data shows that others had a much more significant effect on price than Hynix and that the alleged subsidies did not cause the prices to collapse.

Now Micron subsidy theory is really the centerpiece of their case, and that's why Micron is focusing on Hynix's global presence. And you heard a lot this morning about the fact that the mere existence of Hynix is somehow the cause of all of the problems. Again, this is legally flawed because the statute does not condemn the existence of companies. The statute only targets whether there are subject imports into the U.S. market that are a problem. There is no focus on global production by companies that happen to be your competitor. But also, factually, Micron is making a static argument that doesn't focus on the changes taking place over the period.

Let me just briefly discuss the legal flaws. I think, as the Commission is well aware, the statute consistently focuses on imports, the volume of

imports, the effect of imports on prices, the impact of imports on the domestic producers. It's not global production. It's imports.

In fact, even in the provision about other economic factors, they're only relevant only as they are relevant to the determination regarding whether there is material injury by reason of imports. So even the discretionary clause in the statute brings us back to imports. So it's with good reason, Commissioners, that you're having trouble fitting Micron's round theory into a square peg. It just doesn't work. There is no legal basis to consider anything other than the effects of the subject imports.

But Micron's theory is also factually flawed because it's a static argument focusing on Hynix's existence, ignoring the changes taking place over the period, the fact that Hynix existed in 2000, even when the domestic industry was having a boom year. So the problem can't be Hynix per se. If there is a problem at all, it has to be changes. But what changed over the period?

Well, demand changed sharply. Hynix lowered its relative capacity on a global basis, and Hynix lost market share in the U.S. So how can those

changes be the cause of the problem?

Now we've talked a bit about the nature of the subsidy. As I mentioned, these are not export subsidies. They are at most domestic subsidies. What really was going on is an allegation that the government of Korea pressured Korean banks to eliminate debt, either through debt for equity swap or forgiveness. This wasn't about someone writing a check for $16 billion or $4 billion or $2 billion, whatever the amount is, and it's not fair to say that but for this subsidy, Hynix would not have existed in the market, okay?

The subsidy did not increase Hynix subject imports, which have fallen over the period. And critically important, the assets aren't going to go away. The subsidy did not change the fact that there were assets. Even if there had been court receivership, the supervisor in the court receivership would have had every incentive to continue operating the assets. The assets have a value in operation. They have much more value in operation than they do in an idle state. So the assets would have been operating.

Indeed, they might well have been sold. Micron tried to buy the assets. Infineon tried to buy

the assets. Even the Chinese expressed interest in buying the assets. So these assets were not going to go away. The global supply was not going to go away. The subsidy also did not have any material effect on Hynix's capital expenditures during the period. Again, this is the other prong of Micron's subsidy theory, that somehow the subsidy made it possible for Hynix to continue its low level of capital spending. But this theory is just wrong.

First, the subsidies at issue here are mostly debt restructuring. The overwhelming percentage of the subsidy is just debt restructuring and debt forgiveness. Very little of the allegations involve new funds. In fact, Hynix could completely fund its capital expenditures entirely out of the case from its operations.

So whether it's Hynix operating the assets or a new owner operating the assets, they would have made the same business decision, which is fund the limited CAPEX out of the cash being generated from the business. So it makes no sense to say that but for the subsidy, Hynix would have gone out of business, or but for the subsidy Hynix could not have maintained any capital spending during this period.

Now here is the data, which shows the EBITA

being generated by Hynix's operation during the period, and the amount of CAPEX being spent on DRAM and non-DRAM spending. And it shows that the EBITA, the cash being generated from the operations, was consistently higher than the very low levels of CAPEX that Hynix was able to sustain in 2001 and 2002. This low CAPEX is why Hynix's share of total capacity was relatively -- Hynix's share of the growth in capacity was relatively low during the period. They simply did not have the funds to make the massive investments that other rivals were making.

Let me just turn briefly to threat. I think one of the changing conditions is Hynix as a weakened competitor in the DRAM market, okay? This is a key change over the period that Micron and Infineon want to ignore. Hynix had lower capital expenditures. And in fact, much of the new funding, the limited new funds that Hynix had available -- a lot of it had to go to servicing debt, not to capital expenditures for the future. Hynix had slower technology advance. In fact, Hynix is now behind others in die shrinks.

There is no evidence that Hynix is increasing exports. Hynix has been losing market share. Hynix has been converting older Fabs to non-DRAM products. And Hynix has now need to increase

exports from Korea because much of the U.S. market can be serviced by the facilities at Eugene. Remember, the U.S. market is both shipments to customers outside of the U.S. and shipments to customers inside the U.S. Four shipments inside the United States for the customers that want to consume product in the United States, Hynix can largely meet that need from its Eugene facility. And as you heard this morning, a lot of investment has gone into Eugene to enable Eugene to meet the vast majority of the needs.

So there is no need to increase exports. And there is no evidence that Hynix is any better positioned. In an industry where cash and technology are so critical and the key is where you are relative to your peers, Hynix is falling behind. They're falling behind on technology. They're falling behind on cash. In terms of technology, Hynix was the last of the big four DRAM companies to produce, mass produce, 256. Hynix is the last of the big four to mass produce 512. Hynix has much less production of the most advanced process technologies.

Look at this figure, which I think is quite illustrative, and it shows the percentage of total production that various major DRAM companies have at the finer geometries, okay? These finer geometries,

the .10, that means many more chips per individual wafer, right? You heard that this morning. So the people who are at the cutting edge of technology, the people who are using technology to maximize their capacity expansions, it's Samsung. It's Infineon. It's Micron. It's even Nanya, the upstart from Taiwan, that has been surging on the DRAM scene. It's not Hynix.

Same story if you look at cash on hand. Compared to Micron and Infineon and Samsung, Hynix has much less cash to pour into future investments. So from a threat perspective, Hynix simply does not have the resources to emerge as a threat to this industry over time.

Same story if you look at capital expenditures, where Hynix's spending has been a fraction of that of its major rivals.

So where does this leave us? You have heard a lot of information today. But here are what I think are the key facts that will ultimately drive your decision in this case. First, in terms of market share, both in the U.S. and on a global basis, in fact Hynix has fallen.

Second, nonsubject import market share has always been larger and has been growing over the same

period of time.

Third, Hynix's global capacity and global production are falling behind. So the statute requires you to focus on the U.S. But even if you step back and look at the world more broadly, Hynix is still falling behind.

Second -- or the next point is that the new capacity is largely coming from others who have had the resources to invest in more capital spending, more investments. U.S. subject imports can have little effect on global prices, and nonsubject imports are often the low price source in this market, and that falling exports from a weakened Hynix cannot possibly be a threat to the future health and success of the domestic industry as it moves into the upturn of the cycle and begins to reap the payoff from all of the investments that they have made during the down part of the cycle. Thank you.

MR. PORTER: That concludes our affirmative presentation. Thank you, Madame Chairman.

CHAIRMAN OKUN: And thank you. And before we begin our questioning this afternoon, I want to take this opportunity to thank the witnesses for being here today, for your testimony, and for the information that you have submitted thus far, and for

your continued cooperation in this investigation. We very much appreciate it. And I would I guess repeat the remarks I made this morning, which is I think that there was a lot of information provided in the briefs. There are a number of the factors where I feel like we have a lot of information on the record. So I may not ask questions about it, but we'll certainly be looking at the information that we have collected as well.

Let me just throw out a couple of housekeeping type of issues. Let me ask, Mr. Durling, in terms of -- I'm very familiar with your brief, and I just want to be sure in terms of -- there have been some questions raised in terms of the information you presented today. There were a couple of charts on new capacity and others where I'm trying to figure out -- is this new information, information otherwise -- I mean, the story is consistent with your brief, but I'm not sure all of the information that you provided today was in the brief. It may be, but I just want to make sure we have identified this.

MR. DURLING: No. We believe that substantially all of the information is in the brief. The information that may not be in the brief was responding to specific issues that were raised in the initial briefs by the other side. So we were simply

trying to focus the discussion. And our philosophy, Commissioner Okun, has always been to simply sort of -- the more, the better. The sooner we can get you the information so that you can begin to analyze it, the better. And if we have information that we can give you now, better to give it to you now so that you and everyone else has more time to analyze the information and to deal with it.

We provided in our brief everything that we had at the time that we were focusing on, and that has just been our approach.

CHAIRMAN OKUN: Okay. Well, certainly the Commission --

MR. DURLING: You have lots of information.

CHAIRMAN OKUN: -- has lots of information. We take a lot of information. I think it would just be helpful if you can identify with staff what information was new here so that we can be sure --

MR. DURLING: Sure. We would be happy to.

CHAIRMAN OKUN: -- that we understand what has been on the record, what is on the record so that the petitioners also have an opportunity to respond. I greatly appreciate that.

Then, Mr. Tabrizi, you had also mentioned publicly available data on inventories --

MR. TABRIZI: Yes.

CHAIRMAN OKUN: -- that you can submit for the record.

MR. TABRIZI: Yes. I can do a search and find out about those. But I am sure I can find it for you.

CHAIRMAN OKUN: Okay. Are those inventories on -- when you referenced it, I wasn't sure if you were talking about PC inventories or --

MR. TABRIZI: No, no. The actual -- you know, for example, at Cisco, they bought a lot of products because they felt that they were going to ramp up a lot of product, and at that time there was a shortage. So they were building inventory. When the whole, you know, Internet collapsed, they had like a worth of one year of supply. I mean, based on the old forecast, it could have been just maybe a three months of inventory. But when it collapsed, they had the worth of one year inventory.

I can go back and find out, and we can get testimony from them that they had a lot of inventory at the end of 2000.

MR. SWANSON: Also, a lot of times -- you know, I think Mike Sadler pointed out it's a lot of the PCs just pulled from a hub. But also, there are

some subcontractors that had substantial inventory as well and had to negotiate with their, you know, manufacturer, you know, how they were going to deal with that huge inventory that they had accumulated in 2000. And there are some where I think we can maybe find some information on that.

CHAIRMAN OKUN: Okay. I will take a look at that. And obviously, you know, part of this is making sure we're looking at -- that it's an inventory relevant to the subject parts we're looking at. So I will look forward to seeing that in your post-hearing brief.

Let me turn then if I could -- and either Mr. Swanson or Mr. Tabrizi -- and ask you about some of the things raised this morning with regard to pricing, and first in reference to the most-favored customer clauses. There were two charts, public charts, that I assume you have seen at this point, one on the most-favored customer clauses and one on blended scaling. Can you just if you would tell me are you familiar with these terms with your customers?

MR. SWANSON: Well, I've never heard of the blended scaling before, but definitely MFC has been around for at least eight to ten years. That's not an uncommon term. Blended scaling I think might be an

Infineon term for just how some prices get calculated at an OEM.

CHAIRMAN OKUN: Okay. And could you provide an estimate of how many of your contracts with PC OEMs where you would -- where most-favored customer clauses would be in effect?

MR. SWANSON: I'd say that the majority have a clause similar to that. Basically, most of the clauses state that for similar volumes that you would supply a similar price. So it's pretty consistent in the industry.

CHAIRMAN OKUN: Okay. And then if that's an accurate description of the industry, tell me if you could -- and Mr. Durling and Mr. Porter, you can comment as well. I mean, what the panel this morning was arguing is that if you look at Hynix's volume in the market, that the price effect, if you will, is magnified because of these MFCs, where you have -- I mean, I guess you can call it down a trickle-down. I'm not sure exactly of the right description, but that more goes on the market with a small player than in another industry that we may be looking at, which wouldn't have these similar type clauses.

MR. SWANSON: Well, the supply -- and I think Mr. Sadler brought it up. When you're in for

large volume purchases of the PC OEMs, everybody's price -- and I think he mentioned that was substantially the same. That's true. That's what happens.

There are occasions where some, you know, competitor may get very aggressive and get a price that has a ripple effect. I mean, we've seen that from Micron and from Infineon, where we've had to become -- you have to meet competition. So the only thing I would disagree is that it's not Hynix that was leading the charge all the time. It definitely was -- you know, that's a practice that has been there MSC, and basically everybody -- I mean, DRAMs, you really have to be competitive on price to be in the ballgame, and then other things differentiate your capabilities and market share. It's really the quality. It's the products you have. Those are the things that really differentiate yourself. Price is pretty much a given. And that's what you have to have that to compete. But you differentiate in the other factors.

CHAIRMAN OKUN: Okay. Mr. Porter?

MR. PORTER: I'll just add a quick, quick thought. I think Micron and Infineon are actually creating what we call a red herring. They're talking about the effect of a low price possibly being a

little bit magnified. And given that Hynix doesn't agree that these clauses exist, the real question is who has the low price. And as Mr. Durling said -- and we can't get into it too much because of confidentiality -- the lowest price is not Hynix. And you have the ability to do that analysis. And I submit when you do that analysis, you'll see that, and you'll see that others have been the lowest price, and they're the ones creating this magnifying effect that Micron and Infineon are talking about.

So there is not disagreement that there may be this effect of the price. The question is who has the lowest price.

CHAIRMAN OKUN: Mr. Tabrizi.

MR. TABRIZI: If I just may add to that point. Frankly, when '99 merger of LG and Hynix happened, our competitor felt that our financial situation is in a bad situation, so they really tried to push Hynix out of the market. And that's how they were really aggressive in their pricing. So we'd really like you to go and investigate the pricing. They were pricing Hynix out of the customer. They said Hynix cannot survive any longer. We have to push them out. So they were aggressive on pricing.

Yeah, of course, their chart is accurate.

If Hynix is always the lowest price, and that formula -- of course, that's the theory that everybody knows. But the issue is we were not the low cost. They really tried to push Hynix out of the business.

CHAIRMAN OKUN: Okay. Well, obviously we are constrained by what we can talk about in the public setting. The Petitioners, I think, referenced this morning -- I had asked them about the portions of your brief where you attempt to do a disaggregated analysis. They take issue with the information that you have there. So I assume we will see more of this in the post-hearing.

But help me if you will in terms of just what the statute tells us about underselling just generally. When we look at the staff report and what information we've collected -- does the disaggregated analysis change how we look at underselling? What does it do in terms of our analysis here in this case?

MR. DURLING: Maybe I'll kick that one off.

CHAIRMAN OKUN: It's always good to do with the tough question.

MR. DURLING: Yeah. The statute requires you to look at the underselling. And the Commission has adopted certain methods that it uses in various cases. But the traditional methods often reflect the

reality that you may have too much information to do anything other than kind of a simple average, okay? So in a traditional case, you'll do an average domestic price and an average import price because you often don't have any alternative.

If you have, you know, 10 or 20 or 30 different domestic producers and as many foreign producers, you really could not do anything more than that. Our basic point, and the way we think you should approach the pricing analysis in this case, is to -- since everyone agrees that there are a handful of major players, and since you have the data on that handful of players, kind of disaggregate and look at the analysis. It's the same basic approach. Look at the trends, look at the level of kind of underselling/overselling. But do it on a supplier by supplier basis. And when you look at it, look at who is the lowest, and then look at whether a change is taking place.

You know, again, we can't describe the details because of BPI. But if you see a pattern of an extended period of time where one company is at a higher price and another company is at a lower price, but there is no change; they're all just kind of trending along at the same price level -- to me, what

that is telling you is that each customer has found a niche, and those two prices are obviously not competing with each other in the same sense of sort of head to head competition because you would not expect to see those kind of sustained price differences.

If you see sustained price differences, that means that the price of the lower priced item is not having any effect on the price level of the other item. The statute does not require aggregate U.S. prices to determine underselling. It simply says examine underselling. And the Commission has adopted, if you will, an administrative practice because a lot of the cases, there are just too many suppliers.

But when you have an industry where Micron itself -- and I think Infineon said, we're just four players. The four players here you need to be concerned about, you have the data. And so you have this anomalous situation -- or theoretically. Again, I can't talk -- but anomalous situation where you could have Micron, Hynix, Infineon. In every case theoretically where Micron's are higher, then Hynix, then Infineon. When Infineon's the lowest price in every single case, theoretically, yet the weight average is such that Hynix is a bit lower. And I'm saying the statute doesn't require you do a weight

average.

Now you've done that for administrative convenience in the cases, but it's not required. And in particular in this case, we don't think you should do it.

CHAIRMAN OKUN: Mr. Tabrizi.

MR. TABRIZI: Yeah. We should not just look at the average pricing because right now, for example, DDR 256 meg, the 256 megahertz version selling for $3, the 333 megahertz version selling for $4, and the 400 megahertz version is selling at $5 or $5.10. So if our volume is more of 256, our ASP will be around $3 versus $5 or others. So there is a difference in ASP. You have to look at it case by case.

CHAIRMAN OKUN: Okay. Well, my red light has come on, so I'm sure I'll have an opportunity to come back some other questions. Vice Chairman Hillman.

VICE CHAIRMAN HILLMAN: Thank you. And I too would like to welcome this panel and would thank you for the wealth of information that was provided in the prehearing brief. It's extremely helpful to have it laid out so thoroughly. We appreciate it.

I guess if I can start, first of all, just to make sure I'm understanding your sense of the

proper way that we should be looking at this data because a lot of your argument -- and let me start with the arguments on demand. I mean, as I'm looking at these charts on derived demand as well as, you know, this issue on the growth of the rate of demand, as I understand the data that you have presented to us, it is all in value terms, not in quantity terms.

MR. TABRIZI: The only -- that one that shows the growth rate and the value, that's value. But this one which shows the PC, that's the growth rate.

VICE CHAIRMAN HILLMAN: This is in volume terms.

MR. TABRIZI: This is in volume terms, right. PC shipments -- shipment means unit. And DRAM revenue is in -- so the blue line is value. The red line is the unit.

VICE CHAIRMAN HILLMAN: Is units. Okay. Part of the reason I'm asking that -- I will be honest -- is it's not clear to me, again where you have this issue of, you know, you can use 200 and whatever bits --

MR. TABRIZI: Right.

VICE CHAIRMAN HILLMAN: -- to substitute for 256. You can use two 256s -- not always, and I'm not

suggesting always -- to substitute for a 512. I'm concerned about whether this issue of looking at it solely on a value basis is really appropriate because I will say if I look at our data -- and again, I regret that we can't go into the specific numbers -- there is no question on a volume basis that we have not seen a decline in demand. We have seen a fairly substantial increase in demand over the period.

Now maybe that's less of an increase then you might have said was normal at this point in the cycle. But in talking about it, Mr. Durling, you commented a number of times, the collapse in demand.

MR. DURLING: Right. And again, I'm looking at data that is showing fairly hefty increases on a volume basis in demand over the entire POI.

MR. DURLING: Right. A couple of comments, Commissioner Hillman. First, I think it's important when you're looking at demand variables to distinguish measures of kind of bit production, right? When you just look at the total bits being consumed, that's a measure of bit production. The demand figures that we were providing you were kind of the underlying demand figures. So in other words, okay, are people shipping more PCs or fewer PCs?

Okay. So even though you have fewer -- you

may have fewer PCs. You may have a nominal increase in the bit production that's reflecting the migration from, you know, 128 to 256. So you have more bits being produced, but the total number of chips being sold, the value of the chips being sold, that is what matters to the industry, and that is going down.

So if you have assumptions that sort of growth is going to go along at this pace, and then if it drops off relatively, that is going to have a big effect. The demand for the product has gone down.

VICE CHAIRMAN HILLMAN: What I'm hearing you tell me -- and again, this really is I think a fairly big difference. I mean, what we heard this morning very clearly is the domestic industry's view that we really should be looking at all of this data on a bit basis. I mean, every way we do every comparison should be on -- you know, the denominator should always be divided by the number of bits because that is the only way you can get around all of the various double and triple counting issues as well as trying to understand what is really going on given -- again, I'm not going to say the prices are always exactly double, but there is clearly an effect in terms of the amount of bits that are being sold.

MR. DURLING: Right.

VICE CHAIRMAN HILLMAN: And yet I'm hearing you saying no, no, no. I should be looking on it on the number of PCs, which, you know, some may contain again one 512 as opposed to two 256s as opposed to, you know, four 64s. I mean, it's not clear to me that --

MR. DURLING: No. Actually, I think the -- here is at least our view. We agree that it is appropriate to look at things like market share on a bit basis because it is the only way that you can get a uniform comparison of market share. So are subject imports going up or going down? Yes. That has to be done on a bit basis.

Our point is simply that when you're looking at the question of demand, when there is clear evidence that there was a sharp demand drop, if you look at the underlying components of the demand, and if you look at what all the analysts have commented, and if you look at Micron's own testimony, the mere fact that nominal bits have increased does not take away from the fact that there was a big change in 2001, which is demand in 2001 for DRAMs was weaker than it was in the prior periods. And the fact that nominal bit growth continued to go up doesn't take away from that basic fact.

So I guess all I'm saying is that the general statement you heard this morning that everything needs to be done on a bit basis needs some qualification because if you look at demand on a purely bit basis you'll draw the wrong inference. That's the only point that we're making.

VICE CHAIRMAN HILLMAN: Mr. Porter.

MR. PORTER: I'm sorry. Very quickly, Commissioner Hillman. Just to let you know, this idea that there was a collapse in demand is not Willkie Farr and Gallagher. It's not even Hynix. It's the industry analysts. But most importantly, it's Micron itself. And again, let's go back to two slides that we put up there. The first is this one, when Micron's own slide showed all the cycles going back in time. And underneath it, they put the reason for the downturn in the cycle.

The only one that said essentially collapse in demand was the one in 2001. That's that slide. Then this slide here, where Mr. Appleton himself says fundamental shift, I think, in the demand profile. That's Mr. Appleton talking about a collapse in demand.

So this idea that there has been a recent -- a new collapse in demand, it's not us. It's the

industry itself.

VICE CHAIRMAN HILLMAN: Mr. Tabrizi.

MR. TABRIZI: Commissioner -- Vice Chairman, let me explain. PC, as they said, it drives about 75 percent of the DRAM consumption. And the DRAM value inside each PC, the value is anywhere from 3 percent to 10 percent of the cost of PC. It depends on the situation, if you're in an oversupply situation or undersupply situation.

So when the DRAM -- when the PC growth drops like this, there are more DRAMs because DRAMs annually are growing by about 40 percent if there is no new capacity because by shrinking you get about 40 percent more output. So when the demand is below 40 percent, if you don't have any new capacity, you have oversupply.

But the electronic -- in terms of percentage, when the electronic volume comes down, as a percentage the DRAM percentage goes down, too. And also, there is not enough quantities of the PCs or computers. So as a result, we have to lower our prices in order -- in terms of megabyte per box to be able to fit in this lower cost PCs.

VICE CHAIRMAN HILLMAN: Okay.

MR. TABRIZI: It is a percentage of --

VICE CHAIRMAN HILLMAN: No. I appreciate that. I appreciate that. I guess, Mr. Durling, to sort of follow on on this issue of whether we really are looking at volume versus value. I mean, you noted on one of these slides that subject imports had been falling over the POI. And again, this is hard because of course all the raw numbers are confidential. But again, if I look on a quantity basis -- I'm trying to square the data that I'm looking at, other than for the interim period, with that statement that imports have been falling over the period.

MR. DURLING: I guess our point, Commissioner Hillman, is really simple, that in prior cases involving this industry, the Commission has always recognized that nominal growth in bits need to be put in the context of the fact that bits are always increasing. And all we're saying is that we agree with those conclusions from the prior cases and that we don't think Micron and Infineon in this case have presented any reason to depart from the prior recognition that you need to kind of step back from just nominal bit growth and sort of understand what that really means.

So, for example, if you have an increase in the number of bits being imported, that isn't a

particularly meaningful fact if the market share on a total bit basis had been going down because the bits are always increasing. Bit supply is always increasing. Bit demand is always increasing. Bit import is always increasing. On a bit basis, everything is always increasing. So the only way that you can put this in context is to look at it on a relative basis. And that has been the consistent analytic paradigm the Commission has used in the past, and we would support using that same paradigm again in this case.

VICE CHAIRMAN HILLMAN: Well, again here is one of the difficulties of having a lot of it confidential because I'll be honest. Even, you know, the charts that you showed in terms of market share trends -- again, I appreciate your effort to use public data to do it so that we can say it. Again, if I look at the confidential data, it would not necessarily show that same trend.

MR. DURLING: Right. But that's as we -- and again, as we discussed in our brief, because it is proprietary, there are specific proprietary factors that we think the Commission needs to take into account. And so our brief tries to account for them. We urge you to resolve those particular issues with

the staff. And I think when you look at all of the details, you'll see that on -- if you compare 2003 and 2000, the trend is pretty much as we have described it.

MR. PORTER: Commissioner, if I -- very quick.

VICE CHAIRMAN HILLMAN: Mr. Porter, very quick because the red light is on.

MR. PORTER: Commissioner Hillman, just because of the public hearing we had to use public data. And so in the public data is the data the way the industry thinks about it, which is on a brand basis, okay? And so it is a correct statement both in terms with respect to market share of how it should be looked at. With respect to Hynix's brand in the Americas or U.S. market, it has been falling over time. That is correct public data, confidential data.

Where you have your problem that you're looking at, because I know what you're looking at, and we noted it up on the screen -- there was a little shift in the way Hynix supplied the U.S. market. Because of the temporary shutdown of its U.S. manufacturing facility, it had to import more. So yes, you're seeing a little bit, you know, but it's really small, and that's the reason. But the way the

industry looks at it, as Mr. Durling commented, the way customers look at it, it's Hynix. And Hynix's share of the market has been decreasing. And that's both based on confidential data and the public data.

VICE CHAIRMAN HILLMAN: Okay. Thank you.

CHAIRMAN OKUN: Commissioner Koplan.

COMMISSIONER KOPLAN: Thank you, Madame Chairman. I too want to thank you all for your detailed presentation. I want to start by saying that I'm having the same struggle that Vice Chairman Hillman is having. I'm looking at table C-1, alternate, that went out to you all on June 12th. And I know it's BPI. But you have got this -- Mr. Durling and Mr. Porter. And I know you've been able to look at it, okay? And I'm hearing and I'm seeing your tables that are in front of me. But that's not this table, obviously. It can't be.

What I am seeing in table C-1, alternate, is that during the period examined -- I can't get into the numbers. During the period examined, Hynix's market share as a percent of U.S. consumption quantity -- I'm talking about the period 2000 through 2002. I'm taking out the interim period now. During the years 2000 through 2002, its market share as a percent of U.S. consumption quantity increased. Its market

share as a percent of U.S. consumption value increased. And U.S. shipments quantity and ending inventory quantity all increased.

I recognize the fact it decreased in the interim period. But from the standpoint of evaluating this from present injury test, how do I ignore these increases -- and I can't get into the numbers here. But this is not what -- the same thing. If I didn't have this and I was just following your charts, okay, I wouldn't be asking the question.

MR. DURLING: Sure.

COMMISSIONER KOPLAN: But I am having the same struggle that the vice chairman is having.

MR. DURLING: Okay. I think, Commissioner Koplan -- I think you should focus on two things. First, you need to look at the magnitude of the change taking place. And again, we can't get into the specific numbers, but the magnitude of the change --

COMMISSIONER KOPLAN: Let me just stop you for a second. You do concede that the things I've just said are true when you look at the charts.

MR. PORTER: Absolutely, Mr. Koplan, yes.

MR. DURLING: The chart is --

COMMISSIONER KOPLAN: Mr. Porter does.

MR. DURLING: Well, then I concede it, too,

because the chart is the chart. But first, the magnitude of the change is well within the range that the Commission has previously found to be not significant because of a variety of circumstances. But second and more importantly, it's the point about Eugene, that you have the authority, and you should take into account when you're looking at those numbers -- take into account the fact that Eugene was shut down. And it surely cannot have been then intent of the statute, either the letter or the spirit of the statute, to basically impose penalties when a U.S. operation has to shut down and a single company engages in some substitution for a limited period of time.

That's why from our perspective the interim data, at least on market share, is so critical because that's a benchmark of once Eugene is back up in operation what is in fact kind of a benchmark of what level of subject imports can you expect in the market. So our point is --

MR. PORTER: Commissioner Koplan, if I may suggest one thing, it would crystalize this point. In the chart that you have, if you go in to domestic U.S. producers' share --

COMMISSIONER KOPLAN: When you're talking

about the chart, you're talking about table C-1?

MR. PORTER: I'm talking about that chart, okay? If you look at the U.S. producers' share, take out Hynix. Add it to the Hynix share that you're talking about, and the trends that you see here will appear. Now you can't do it in that chart specifically, but the data behind that chart give you the ability to do that. The point is Hynix's U.S. production in the first year of the period was far -- trance was far larger than the increase that you're seeing on that chart.

MR. DURLING: And we promise to do all of this --

COMMISSIONER KOPLAN: The purpose of this chart -- well, I don't call it a chart. I call it a table. The purpose of this table was anticipating what was going to happen in the final determination with Samsung.

MR. PORTER: Yes, Commissioner Koplan.

COMMISSIONER KOPLAN: And that is reflected. That is why there is this alternate table C-1.

MR. PORTER: Yes, Commissioner Koplan. But the staff followed the Commission's preliminary ruling that Hynix's U.S. facility should be part of domestic production. So that's why we're saying the table is a

bit skewed from a brand standpoint, ignoring country of origin of the wafer, of the DRAM. And what I'm saying is if you look at it the way the industry does on a brand standpoint, just Hynix's production, the trends that we provided today will appear.

COMMISSIONER KOPLAN: Are you arguing that I should decide in the final determination that Hynix should be excluded as a related party from the domestic industry?

MR. PORTER: Honestly --

COMMISSIONER KOPLAN: I mean, are you suggesting that I should reverse myself on that?

MR. PORTER: No, Commissioner, I'm not. I'm just explaining -- I can see you're troubling -- you're seeing stuff here. You're not seeing it on your table. And I'm saying you would see it on your table if you made the two the same basis. Make both tables the basis of brand, and they will align. They will appear.

COMMISSIONER KOPLAN: I appreciate what you're saying, Mr. Porter. I think it would be very helpful if you could expand on those charts with a narrative in your posthearing submission because I understand what you're saying, but I'm not there at this point.

MR. PORTER: I understand. We'll do that. Thank you.

COMMISSIONER KOPLAN: Thank you very much.

COMMISSIONER KOPLAN: Let me pick up with regard to the related party issue. Let me ask these questions. Do officials at Hynix Semiconductor Manufacturing America, HSMA, do they make independent decisions regarding what to produce, production operation levels, capital expenditures, research and development, and capacity and process technology? Mr. Tabrizi?

MR. TABRIZI: Yes, sir. HSMA is our subsidiary, but all the decision, in terms of itself and where we upgrade, comes from headquarters, corporate.

COMMISSIONER KOPLAN: Comes from?

MR. TABRIZI: Corporate, which is Hynix Semiconductor, Inc.

COMMISSIONER KOPLAN: Comes from Korea?

MR. TABRIZI: Korea, yes.

COMMISSIONER KOPLAN: Okay. Is there any documentation that you can provide that would back that up? The kinds of things I'm interested in are, for example, annual business plans, statements or affidavits, or any documents created contemporaneous

with the events that you're talking about?

MR. TABRIZI: Definitely. We consider Eugene as our very strategic manufacturing location and we try to take care of it very much. So, we can provide a lot of documents that the Korea includes Eugene as part of their overall production. We can provide a lot of documents showing --

COMMISSIONER KOPLAN: I would appreciate that.

MR. TABRIZI: No problem.

COMMISSIONER KOPLAN: Coming back to a question I had this morning, in the preliminary determination, the Commission focused on bits for purposes of assessing the volume of imports, because total bits were a uniform measure of the quantity of DRAM products. You heard this morning, I asked the Petitioners whether they agreed with that or thought that there was a better way to assess volume, and they said that this was the best way. Do you agree with that?

MR. TABRIZI: Yes. We agree with the bits -- I mean, the bits are growing. The price is variable, because there are different technology. But, the total bits are fixed. So, I think bits is a good measurement.

COMMISSIONER KOPLAN: Thank you. In our preliminary determination in this investigation, the Commission noted that sales to major OEMs are usually on a contract basis, but that these contracts of multiple shipments generally do not specify price and quantity, but may specify the share of overall purchases awarded to a supplier. Within the contract period, price and quantity are determined for shorter intervals of one week to three months. To what extent are the prices ultimately paid under such contracts influenced by price changes in the spot market? Mr. Swanson?

MR. SWANSON: Certainly spot is one of the indicators that everybody looks at, because it's a public type of process where you can see what's happening out in the marketplace. So, that's not the only determinative, but that's probably the most public that people use.

COMMISSIONER KOPLAN: Thank you. On page 60 of your pre-hearing brief, you state that the DRAM market is the quintessential global market. If prices are set globally, as you contend, won't customers, who are increasingly moving offshore, simply purchase their DRAMs on the world market?

MR. SWANSON: What the large PC OEMs do is

that they basically negotiate -- the U.S. PC OEMs negotiate in the United States. And, basically, even the use of contractors, at some time, they might not even be the actual purchaser of the contractor even taken product from. But, more and more, as you mentioned, has moved offshore; but, they do -- one price is negotiated in the United States and they spread that pricing throughout their facilities, whether they're their own facility or the subcontractor that they're having build their product for them.

COMMISSIONER KOPLAN: Thank you, Mr. Swanson. Thank you, Madam Chairman.

CHAIRMAN OKUN: Let me ask, if I could, I guess, Mr. Durling or Mr. Porter -- this goes to the question of how we regard the subsidy for purposes of our determination, and I know that you answered this, in some detail, in your presentation. But, I guess the one thing that continues to strike me about this is, on the one hand, we talked about this global market and global pricing. And one of the arguments that you've made is with this global pricing, it's not about Hynix; it's about everybody else, right, and that's the condition of competition, I guess, in this industry.

And as I hear that, I keep thinking about, well -- I mean, that makes it almost too easy, because it's to say, well, on the one hand, it's global and it's global pricing and, therefore, we won't attribute anything that's going on globally to the U.S. market, because the statute tells us we've got to look at these subject imports. Is that really what are determination is about, when the statute really does ask us to look at other economic factors and what's going on? I mean, I don't think we have blinders on. I think it is subject imports. But, I have a hard time squaring when you're arguing global prices, global production, global players, where when it gets to how I make my determination, I can't take what the subsidy may or may not be doing in that context int account.

MR. DURLING: Commissioner Okun, our position is that the statute requires you to focus on subject imports. And when you're making that determination, of course, you step back and try to understand it, in a global context. But, in our view, the relative statutory inquiry is, what does the subsidy tell you about what's going to be happening with subject imports. So, in our view, it's with the purpose that the focus on the subsidy is in the threat

section. I mean, that's why we think the discussion of the relevance of the subsidies in the threat section.

I think it's important to understand that the U.S. statute is in the context of a broader overall framework, okay. And the U.S. countervailing duty statute was never intended to be a remedy for every type of problem. If there is a global production subsidy issue, there are other ways of dealing with that. The countervailing duty statute is designed to deal with problems that are caused by imports into the U.S. market. There are other remedies for this problem.

If Micron truly believes that there has been a subsidy that has distorted global production and that the adverse effects outside of the U.S. are the problem, they have a potential remedy in the WTO. The WTO and the SM agreements specifically contemplate those kind of cases.

Our point is simple, that if the effects are outside of the United States, there is another remedy. It's only when the effects are inside the U.S. and when they are created by the subject imports into the U.S. that the U.S. countervailing duty law is the right remedy. That's our basic position.

CHAIRMAN OKUN: And I understand that. I guess, when you're arguing about global prices and that these PC OEM buyers from Mr. Tabrizi, Mr. Swanson are global players and if you have this argument where these have these most favored customers, who are all playing in this same market, that the subsidized imports, if you will, are playing a role in those contracts.

MR. DURLING: But when you focus just narrowly on pricing, I think what's critical is the following. You've heard a lot of kind of interesting economic theories this morning about sort of cost and the effect on cost and the effect on pricing and all of that, that's all well and good. Under the statute, you are supposed to look at what happened in the marketplace; what were the prices.

You heard a lot this morning about, oh, with the subsidy, Hynix must be the lowest cost; they must be the most aggressive. Well, that's all speculation. You have the data to look at what actual prices occurred. And our point is that whatever happened outside the U.S., whatever the nature of the subsidy, at the end of the day, you come down to what is the product being shipped; what is the price being charged; and what is the effect of that. And our

basic point is that whatever happens with the subsidy, if there are other companies that are offering lower prices than Hynix, if there are other companies offering lower prices and winning market share with those lower prices, we don't see how Hynix can be blamed for those adverse price effects.

You heard a lot about pricing dynamics, but none of it is, oh, this is a special Hynix clause. If Hynix charges a low price, then we're going to have to match it.

These are generic clauses that apply the same dynamic to everyone. And so, if there are other people coming in with more aggressive prices than Hynix, they're the ones, who, at that particular point in time for that particular product, are driving the price. And it doesn't matter what happened, in terms of the subsidy. It doesn't matter what Commerce found. It's what prices actually occurred in the marketplace.

CHAIRMAN OKUN: Would, and this maybe better for Mr. Tickle, but, also, for you, Mr. Durling, Mr. Porter, which is one of -- would you agree with what the Petitioner said about loss sales, loss revenue being difficult to identify in this type of market, where you have -- Mr. Porter --

MR. PORTER: But that is our exact point, okay. If it is difficult to identify, how are they identifying Hynix as the reason for the low price? They can't have it both ways. They can't say, gosh, we couldn't come up with any loss revenue or loss sales, because we don't know, who is the low price. But, let me throw up a lot of fancy charts to show that if Hynix is the low price, this is what affect it has. Fine. We'll grant, if there's a low price that has an effect. We'll give them that. But, where is the evidence that Hynix is the low price? That's our exact point, Commissioner Okun.

CHAIRMAN OKUN: Okay. I hear your point. And, again, I guess back, then, to the pricing data. If the argument, I guess using the hypotheticals here, if it is a case of the stand and fight versus the watch the -- lose your volume, in this industry, capacity utilization, you've got -- that that's what this industry had to do and if that's what the pricing trends we can look for, when we look at the pricing data that we've collected.

MR. DURLING: But, here's the critical point. This is not the typical case where you have a big domestic industry, big subject imports, and small non-subject imports. The stand and fight theory

doesn't work in a case where you have so many non-subject imports.

Infineon produces in the U.S. and produces in Germany. Micron produces in the U.S. and produces offshore. If the lowest prices is a non-subject import price, that doesn't work with the stand and fight theory. If they're fighting with non-subject imports, you can't blame us.

And that's the essential insight of Gerald Metals. You cannot ignore the role of the non-subject imports. That's what the standing and fighting is about. It's Nanya, in Taiwan. It's Samsung from Korea. It's Infineon's offshore operations. It's Micron's offshore operations. How can we be blamed for those being the low price source in the market? I don't think we can, or at least we shouldn't.

CHAIRMAN OKUN: Okay. With regard to -- I mean, let's talk about Samsung in this non-subject market. In terms of looking at the record that we have on who is competing where and who is competing on what type of product, Mr. Tabrizi, could you, or Mr. Swanson, could you talk about that, in terms of how you see Samsung in the market with your --

MR. TABRIZI: Sure. This morning, I think my contractor differentiated Samsung by being a

specialty DRAM company. Samsung has almost 30 percent market share, both in terms of best and in the dollar similar to that. And the RAM bus portion is probably in the worldwide. You know, we are talking about 100 percent dealer market. Today, 80 percent is DDR in various modes and densities; about 17 percent is SDR, SD-RAM; and about two to three percent is RAM bus; so, 28 percent market share, three percent RAM bus. You cannot have all of your revenue from RAM bus and RAM bus is going down very quickly. So, there is almost, in terms of matching products, almost 80 percent of the product is overlapped. So, we are playing in the same market.

MR. DURLING: Just one other point to emphasize. It would be really interesting for you, Commissioner Okun, to contrast Micron's argument about Samsung today with the argument about Samsung in the preliminary phase of this case. And the only thing that's happened since then is that there is more overlap, not less.

MR. TABRIZI: With the RAM bus going away.

CHAIRMAN OKUN: Okay. I have one other question, but I think I'll come back to. Vice Chairman Hillman?

VICE CHAIRMAN HILLMAN: Thank you. I guess

I want to stay, too, on some of these pricing issues, if I could. And I am very aware of your Exhibit 20 and all of that data in there and I'll continue to study it and look at it.

But, I guess a couple of things. One, I'm trying to understand -- I mean, again, if I heard the testimony this morning, and I didn't hear really disagreement from Mr. Swanson that there is this kind of spillover effect from a low price being set in a product; then, because, of these clauses in the contracts, it ends up carrying over into other sales. I wasn't sure, Mr. Swanson, whether you were agreeing or disagreeing with this notion that there may be a spillover into other configurations of DRAMs, this blended scaling issue. I guess I'd be curious whether you think that does occur, whatever we might call it, that if a price gets set for a particular density or particular DDR, as opposed to a SD-RAM, does it have any price affect across the broader set of DRAMs?

MR. SWANSON: It can have some effect, at times; but, a lot of it, again, depends on the supply-demand. For instance, they use an example of an unbuffered DIMM and SODIMM. Laptops, right now, for instance use SODIMMs. So, the demand -- it turns out, the particular part that's used for that is a by 16

DRAM, which is different than it's being used in an unbuffered DIMM. So, what they were contrasting was, that the prices from an unbuffered DIMM to a SODIMM would be the same, even though a SODIMM, they claim, is a little bit higher value product.

It turns out, it's really market driven. That factor, when the market is really over supply, some of that has effect, like that they mentioned. But, it's really dependent -- you have to look at every period of time. There's time when it's not an effect. For instance, SODIMM's customers may be willing to pay quite a bit more, because the product is in short supply.

So, that's a generalization. Sometimes it's true, depending on the various market conditions; but, not always true. You really have to look at the period of time.

And, also, like on pricing, pricing unfortunately, in our business, everybody is -- even without blended scaling, people have to be competitive at a major PC OEM. If Infineon has a low price, our customer is going to drive everybody to try to get to that price. And sometimes, we choose to meet that price and sometimes, we choose not to.

VICE CHAIRMAN HILLMAN: Well, again, I'm

going back to trying to understand a little bit more on this pricing issues. Because, if there is this kind of effect on -- you know, that a price to one customer ends up getting translated into a price to the vast majority of the PC OEM market, I guess my question to you, Mr. Durling, is, obviously, this is an issue of degree. I mean, even if I look at the data in the exact way that you've suggested that we look at it, I think it's hard to say that there has been no effect from Hynix. So, then, it's a question of whether you rise to the level of a significant effect.

And you're asking me to look at the data in a very particular way that you've laid out in Exhibit 20. I understand that. But, it still begs the question of if even one -- hypothetically, even one really aberrationally low price can have this spillover effect across a broad range. How do I, then, conclude that Hynix, nonetheless, notwithstanding these percentage figures on this, has not had a significant price effect? You're asking me to come to that conclusion. I'm just saying, not so clear in this market whether that is the right conclusion to come to.

MR. TABRIZI: If I could make a comment on

that. Of course, pricing, everybody wants to get the most aggressive pricing as the customer and the customer tries to push us for the best price. Sometimes, we have to walk away from business, because we, basically, cannot meet their demand. In certain cases, we have evidence that customers said that Infineon is giving them a 12 percent discount on top of the MFC. We just walked away. We said, we can't do that.

So, there are other things, other than MFC, that they do. Most favorite pricing is something. They, also, do rebates and discounts on top of that.

What you have to do is kind of back out, say, we can't do it. We lose market share. And that's what has happened to Hynix. We have lost market share. Companies like Nanya and Infineon, from various small market shares, have gone with very low price and aggressively got market share at Dell or other customers. They were not there three or four years ago. They are one of the main suppliers over there.

So, market share, you have to look at market share. Who is gaining market share? The companies that are gaining market share, they are the price leaders.

MR. PORTER: Commissioner Hillman, what I would -- a couple of comments. First, don't forget, prices are renegotiated every couple of weeks. So, even if Hynix were a low price at a particular customer, at a particular point in time, the whole game starts two weeks later. So, the effect is limited by the frequency of the price negotiation and that's why when we say, in general -- again, I won't get too -- in general, Hynix wasn't always the lowest price.

That's significant, because if Hynix was always the lowest price, I think you would be correct in your looking at this. But because that's not the case, Hynix may be low price one week; two weeks later, it's someone else; two weeks later, it's someone else. After awhile, what happens -- really what translates -- that does translate into market share. If Hynix were always the lowest price, why isn't Hynix market share going up? And I think that's why the industry people keep coming back to market share. There is a relationship there.

VICE CHAIRMAN HILLMAN: Okay. Help me, Mr. Swanson, on the same issue that I raised a little bit this morning, which is, we priced eight different products. I think, at least the products that we

priced is not confidential information. And we see somewhat different trends or patterns, in terms of what happened to the prices, both across those products and then with respect to what the prices were to the PC OEMs versus the non-OEMs versus the other OEMs. If you can, help me understand a little bit why -- what accounts for those price differences, both between the products and across these different market segments.

MR. SWANSON: Well, I think that you hit it, market segment is the right answer there. Because, for instance, let's give an example of, the disk drive industry is using Legacy type product, which is 16 meg and 64 meg, for instance. If you look on a price per bit basis, it can be a lot different than what main memory would be on a price per bit. Again, I'm talking about looking at a 16 or 64 meg versus a 256. They're totally two different markets.

So, the pricing on a per bit basis is quite a bit different in the different market segments, Legacy versus mainstream. So, that accounts for a lot of the different changes between -- you know, PC OEMs is typically the same mainstream type of product, which, today, would be, for instance, a 256 meg DDR. There are products that a disk drive company is using,

is a 16 and 64 meg, which are not being utilized by the PC industry right now. So, there can be a big difference between the actual price per bit, in those two different market segments, because the products are different.

VICE CHAIRMAN HILLMAN: Okay. Let me just follow up a little bit and I'll come back to you, Mr. Tabrizi. I was trying to understand, because, obviously, one of the things that we have to try to sort through is, okay, why did the prices go down over the POI as much as they did. We're, obviously, very well aware that in the DRAM industry, price declines are the way of the world. I mean, they're always there.

But, we're trying to figure out, obviously -- Petitioners are arguing that the price declines in this time period were farther and faster than you would have expected from the regular cycle. And I was trying to understand a little bit more about whether the changes, in this issue of the speed at which there is a change in density, in micron width, in some of these circumference factors, or this issue of the change in, as Mr. Appleton put it, in the product, itself; in the platform is the term I think he used. It had gotten faster, as you've gone from a three year

typical cycle on the process side, down to more than 18 months. You're not doing these step ups in fours. You're doing some step ups in twos.

I'm just wondering, from your perspective, has that affected, again, this issue of what we should expect as a normal, as they're describing it, 20 to 30 percent price decline per year? That's still normal? Is it affected by these issues with respect to how fast the changes occur or how quickly new platforms come on? Go ahead, Mr. Tabrizi?

MR. TABRIZI: Basically, the price changes really depends on the level of demand to supply. I mean, if demand collapses too much, we see prices drop usually much bigger than normal. On an average, we can reduce the cost or price by about 40 percent per year. I mean, that's the shrink we do. But when the demand gets tight, then the prices go up. So --

VICE CHAIRMAN HILLMAN: You're saying 40 percent a year, you would regard as a normal, you're saying, cost decline. What's a normal price decline?

MR. TABRIZI: Normal price decline, again, depends on the demand and what level of demand versus supply there is. I mean, even in today's market, there are certain products that is on allocation. As I said, DDR-400 is selling over five dollars today and

DDR-266 is selling for three dollars. So, there's quite a bit delta among the different products. Even in an oversupply market, there are certain products in allocation and certain products under a shortage. The graphics products, 128 meg density, today is selling for six bucks; so, equivalent 256 is $12.

So, you can differentiate what type of product. One is made by 16 that goes into disk drives, sells for a dollar something, which the equivalent 256 megs would be something very expensive. So, again, it depends on your product, portfolio, and if that product is in oversupply or shortage, at the time.

VICE CHAIRMAN HILLMAN: Okay, thank you, very much. In the absence of the Chairman, I will call on Commissioner Koplan.

COMMISSIONER KOPLAN: Thank you. I was about to call on myself. Thank you.

Let me turn -- I just have a few questions left --, to the European Union matter. Doesn't the ongoing countervailing duty investigation in the European Union against DRAMs from Korea suggest that imports of subject DRAMs are likely to increase in the near future here, if the EU imposes duties of the magnitude I heard this morning on the subject

products?

I'm asking that, because I learned this morning, in listening to the testimony, that that has moved along to a point where there's a final draft that seems to follow what they had in their preliminary determination. And I understand that August 24th of this year is the date that this will come to conclusion. Obviously, I'm asking this question, because it bears on the issue of threat.

And I would ask, in your responding to me, what is the quantity and value of the exports that are covered by the EU investigation?

MR. DURLING: I don't have a number off the top of my head. We certainly could provide it in the post-hearing brief.

COMMISSIONER KOPLAN: Okay. I'd like to get as much details as I can. And, apparently, I am able to get the text of the draft final determination, but I would appreciate any details on that. I mean, I've heard you all talk about, this is a commodity product, totally interchangeable, substitutable. So, naturally, the question is, am I going to see a shift that's imminent, if this case goes affirmative in August, okay.

Staying with that same issue is the question

of what's going on in Taiwan, as well. And this morning -- I was going to ask you what's the likelihood. This morning what I heard was, this is probably going to happen, that DRAM produced in Taiwan will, also, be bringing a case shortly against Korean DRAMs in their market. And I might ask you, if you could tell me, similarly, what am I looking at there, in terms of quantity and value. What's the magnitude of that one? You have a preview of that, I imagine.

MR. DURLING: Commissioner Koplan, we'll be happy to kind of look at the specific numbers. Obviously, that's proprietary. We can get into that in the brief.

But, at least with respect to Taiwan, I just want to step back and remind you that what they're citing to are some press reports. I mean, this is a case that hasn't even been filed yet. And whether the case ever comes and if the case ever comes, what is the outcome, and if there's an outcome, in either the EU case or in the Taiwan case, whether that outcome is ever upheld as being a legitimate valid outcome. I mean, I think it's important to keep in mind that you have these decisions taking place and, yes, you need to know that they're going on and think about them. But --

COMMISSIONER KOPLAN: I'm faced with that same issue here. I always wonder whether our decisions are going to be upheld. But, we still make that decision.

MR. DURLING: No, I understand. But, I mean, as long as we're speculating about what decisions will be upheld, let's throw in the Commerce Department decision, because as the Commission has found in many of its cases, including cases in the DRAM industry and the semiconductor industry, a lot of times the Commerce Department decisions change fundamentally, when they're subjected to a somewhat higher standard of review. So, we just need to be careful what conclusions we draw from these decisions.

COMMISSIONER KOPLAN: I'll be very careful, Mr. Durling. But, I do look forward to getting that post-hearing.

Let me come back to something that Professor Hausman testified to this morning. And he was here until just recently. I see he's currently left. But, Mr. Kaplan is here, so I'm sure he can get in touch with him, because, I would like a response from his on this, as well.

If I understood his testimony correctly this morning, his price impact analysis assumed a complete

shutdown on Hynix. Now, the industry has been subject to earlier periods of consolidation and market exit. And I would be asking him, as well as yourselves, what was the result of those earlier periods of rounds of consolidation? Was production capacity industry-wide reduced? Were the DRAM production facilities, the capital equipment purchased by the remaining producers?

I noticed this is kind of triggered by page 69, your page entitled "asset continue regardless a subsidy," where you talk about, alternatively, Micron tried to buy, Infineon tried to buy, and the Chinese expressed interest. And so, I would like to hear your response to his analysis, based on a complete shutdown. And I would, also, like to hear from Mr. Hausman, post-hearing, whether I'm accurately characterizing his assumption.

MR. DURLING: First, just a couple of responses.

COMMISSIONER KOPLAN: Sure.

MR. DURLING: You are correctly describing his assumption. He is assuming that 17 percent of the global market supply disappears. And so, he is assuming a complete shutdown, which, for all the reasons we've explained, we think is very unrealistic

assumption, okay. But the other point --

COMMISSIONER KOPLAN: Didn't he say it was only 12 percent earlier?

MR. DURLING: No. His analysis was 17 percent.

COMMISSIONER KOPLAN: Seventeen percent.

MR. DURLING: Yes. His figure was based on 17 percent. But the other point that I urge the Commission and the Commission staff, keep on Mr. Hausman. He has a track record of giving us partial information, which we cannot then analyze, because his report came in, he promised us he was going to give us his data set, and he gave us kind of a narrative description without any of the programming language, without any of the data. And I wouldn't be focusing on it so much, except that every time we see Mr. Hausman, he plays this game of hiding his output.

So, I strongly urge that you give very specific instructions through the staff that Hausman should provide everything that we need and your staff needs, to replicate what he has done. No more simply summaries. We want to see the programming code, we want to see the economic models, all the math and all of the data. Because if we can't replicate the analysis, if you can't replicate the analysis, we

can't test it.

And, with all due respect, he's playing a game here, because we've made this request. The staff has already once told him, turn over everything, so that we can analyze it. And what has been turned over? At least what has been turned over to us is not capable of replication. And that is the basic standard that a respectable social scientist should be held to: can someone else replicate your analysis.

COMMISSIONER KOPLAN: Well, I believe I made the request of him this morning and he said he would do it. You asked him if you could get it earlier enough to analyze it and he said he would do that.

MR. DURLING: I'll believe it when I see it.

COMMISSIONER KOPLAN: If I could just finish that. This is a question that I've been asking now, generally, of any economic analysis that I receive, because it's helpful to us and our staff. So, I wasn't singling him out this morning. It's just information that I think is useful to us, in weighing the analysis. I thank you for your response.

MR. PORTER: Commissioner, I think your -- I'm sorry, Dan Porter. Quickly, I think your question is very good and I think what would be useful, we will try to do, is just do what you ask for every -- in

recent history, every fab where the order sort of decided to exit, what happened to the production facility, and I think the results will be very interesting.

COMMISSIONER KOPLAN: Thank you, Mr. Porter, and I want to thank you for your presentation this afternoon. It's extremely helpful. I have no further questions.

CHAIRMAN OKUN: I don't have any other questions. Let me turn to Vice Chairman Hillman.

VICE CHAIRMAN HILLMAN: I hope a couple of just factual questions. Micron claims that Hynix's un-cased DRAMS exported to Korea become interchangeable with the DRAMS that are fabbed in Korea and that only a small portion of that actually comes back into the U.S. market. Would you agree with that and, if so, where are most of the DRAM's made from Hynix's U.S. facility, fabbed in the U.S., cased in Korea, sold? Where are they sold?

MR. TABRIZI: They said this morning, USA market is about 40 percent of the total DRAM consumption, the decision-making here. But most of our major accounts here, they do their manufacturing outside here. So, the actual direct DRAM shipment to U.S. is probably around 15 percent of the worldwide

actual components coming here. Most of it comes back in a box or a machine or something. So, in terms of the answer to your question --

VICE CHAIRMAN HILLMAN: I think, you're, in essence, agreeing with the first part of it, which is that only a small portion of what is fabbed here, cased in Korea, actually comes back into the U.S. market.

MR. TABRIZI: No. Right now, 100 percent of everything is fabbed in USA that comes back to USA, because we need it for our customers in the USA. We don't ship it anywhere else, or a majority of it.

VICE CHAIRMAN HILLMAN: Okay. Then, again, I don't want to go into confidential information; but, Mr. Durling, if you could look at the numbers indicated in, I believe, it's Micron's brief, and just get back to us just on this issue of what portion of the U.S. production actually comes back --

MR. DURLING: Yes.

VICE CHAIRMAN HILLMAN: -- into the U.S. market.

MR. DURLING: Commission, we will do that. Just to note that we have kind of an unusual situation, where the plant was shut down for the good part of this period, and then he had ramp up time, to

get the full production. So, you really only have one period of full-year 2000, that you really can sort of test this about when things are fully operating for Hynix, where are things made and shipped. But, we'll do that for you.

VICE CHAIRMAN HILLMAN: Okay.

MR. TABRIZI: I really want to ask the Commission to consider this. For a period of one year, we shut down Eugene Powers, a very responsible company. We saw that there was an oversupply in the market. We saw that we needed to upgrade our fab. We said, this is the best thing for industry, take some capacity away, at the time, so we can upgrade. So, during that time, we still had contractual obligations to our major accounts. You know, when we sign an agreement with IBM, they say, you have to give us this percentage of our market shares; same with Dell; same with HP. So, when there was a shortage of product during that time when Eugene was not producing any parts, we had to import from USA.

And if you look at when the Eugene ramp up took place, the total imports when down. So, it really was subject of Hynix trying to help industry at the time that there was oversupply. We tried to take capacity away, help the situation. I mean, we acted

very responsibly during that meltdown.

VICE CHAIRMAN HILLMAN: Okay. But, you're saying now. And the other part of my question was, of the product that is fabbed in the U.S. and then shipped to Korea and cased, where is that being sold? I just want to make sure I'm understanding. You're saying, 100 percent of that comes back into the U.S. market?

MR. TABRIZI: It depends on which period you look at. When Eugene was shutdown, at that time, we didn't have enough product to bring to U.S. But right now, most of the product from Eugene comes back to USA.

VICE CHAIRMAN HILLMAN: Most of it comes back?

MR. TABRIZI: Right now, right now, yes.

VICE CHAIRMAN HILLMAN: Okay. That's interesting.

MR. TABRIZI: We can show that.

VICE CHAIRMAN HILLMAN: Okay. Second thing I wanted to touch on a little bit was this issue of the degree to which purchasers change suppliers. I mean, you commented extensively in your brief about the fact that purchasers very infrequently change their suppliers. And, yet, I have to say, as I

understand the way these contracts work, they tend to be a range; you know, that I will give you -- IBM will give whoever between such and such and such percent of my business. So, obviously, everybody is fighting over that marginal share or getting the high end of the percentage figure in the contract, rather than getting the low end.

First of all, I just want to make sure I understand, do you understand that that's how it operates? Would you agree with that or not?

MR. SWANSON: Typically, let's say, one PC OEM may have, let's say, four different agreements and maybe they're all 20 percent market share, for instance. And so, they operate under typically -- you know, as long as you meet the quality, the technology, and delivery, and you can product it, then you should receive your 20 percent. Now, that's typically how it occurs.

VICE CHAIRMAN HILLMAN: But, it wouldn't be a range of 20 to 25 percent, that you'll get somewhere between 20 and 25, and you're aspiring to 25, but you may only end up with 20?

MR. SWANSON: The agreements that we have right now, I believe most of them are pretty much fixed at one number, like a 20 percent. There may be

one or two that haven't been that way. But, typically, it's not a range; it's a set number.

VICE CHAIRMAN HILLMAN: Okay. Because, Mr. Durling, I'm trying to understand, when you say in your brief that people change suppliers infrequently, very infrequently, whether that applies to this notion of sort of changing relative shares of a particular product purchased from different producers. Now, would you agree that that is happening?

MR. DURLING: No. The point we're trying to make in the brief, Commissioner Hillman, is that suppliers change infrequently. Sometimes, it happens, but it is relatively infrequently. And we were, essentially, summarizing what we had gotten from, from the purchaser's questionnaires. Our argument was really just using their own words.

But, I think what's helpful is sort of at the end of all of that, you come back to kind of what was kind of the net change in market share on a brand basis. Because, as you've just heard, when customers make a decision to purchase, it's not a decision, we're going to buy Hynix chips from Korea or Micron chips from Italy or Infineon chips from Germany. What they're signing is a contract with the DRAM supplier and they may get chips fabbed in a variety of

different places, as long as those fabs have been qualified.

So, at the end of all of that, it's a very complex process for all of the companies. You may have a mixture of domestic supply, of import supply. But the net result of all of that is seen in the brand market share; at the end result of that, who is gaining and who is losing.

VICE CHAIRMAN HILLMAN: Mr. Tabrizi, you look like you wanted to comment.

MR. TABRIZI: Yes. I mean, the customers, I mean, that long-term agreement, that's their best intention to buy up to certain percentage. But, they, also, try to play with you. Sometimes, they let the newcomer, like Nanya -- Nanya was not a player, you know, two or three years ago. Now, they're becoming more of a player in the bigger accounts. So, it's not all 100 percent of the requirement is allocated. You know, they have room to maneuver. And that's what happens. They bring one guy in; they reduce one guy's percentage. But, it's certainly flat, in terms of who comes in.

VICE CHAIRMAN HILLMAN: Okay. Another question. I understand that Hynix moved its business headquarters from Korea to California in 2001?

MR. TABRIZI: Actually, I was in Korea living there and I -- you know, really difficult to commute between San Jose and California. So, me and my boss, which is head of sales and marketing, we moved our offices to San Jose. But, really, we, always -- you know, the majority of my staff is in Korea. I have an office in San Jose. When we said we moved our offices to San Jose, it was really a few individuals. And, you know, some people feel that we moved our headquarters to USA and, of course, USA is the most important region for us, in terms of the key customers we have, and it's nice to be close with them. But, really, the major operation, including our CEO, stays always in Korea.

VICE CHAIRMAN HILLMAN: Okay. And then, finally, just for the post-hearing brief, if you could, please, comment on Exhibit 20 of the Petitioners' brief. Again, it's all confidential information, so there's nothing more I can say on that, other than I would like your analysis and your comment on that particular exhibit.

MR. PORTER: We would be happy to do so, Commissioner.

VICE CHAIRMAN HILLMAN: Okay. And with that, I have no further questions. Madam Chairman,

thank you.

CHAIRMAN OKUN: Thank you. Commissioner Koplan?

COMMISSIONER KOPLAN: I have no further questions.

CHAIRMAN OKUN: Let me ask Commission staff if they have questions of this panel.

MS. ALVES: Good afternoon. Mary Jane Alves, the General Counsel's Office. I have one final question that I would like all counsel to respond to. Would you, please, discuss, with respect to alternate Table 3-2, whether appropriate circumstances exist to exclude any of these domestic producers from the domestic industry, as related parties.

MR. PORTER: We will do so, in our post-hearing brief.

MS. ALVES: Staff has no further questions.

CHAIRMAN OKUN: Thank you. Do counsel for Petitioners have questions for this panel?

MR. KAPLAN: No, Madam Chairman.

MR. ROSENTHAL: No.

CHAIRMAN OKUN: And no from Mr. Rosenthal. Okay, thank you, very much. If that's the case, then the domestic producers have a total of eleven-and-a-half minutes remaining, including five minutes for

closing. Respondents have a total of nine-and-a-half minutes, including five minutes for closing. So, if we're ready to turn to the closing statements and using your time, as you tell me, I'm going to thank this panel, very much, for their testimony, for their answers to our questions, and very much appreciate you being here. It's been a very helpful afternoon.

Let's take a moment to switch things around.

(Pause.)

CHAIRMAN OKUN: All right, Mr. Kaplan, Mr. Appleton, Mr. Rosenthal, we are ready to proceed.

MR. KAPLAN: Mr. Appleton?

MR. APPLETON: Thank you, Mr. Kaplan. I want to address just really primarily one issue and that has to do with capacity. Wafer starts are simply the wrong metric to use. The reason is that companies use different wafer sizes. Hynix, during the POI, actually used both six-inch and eight-inch wafers. Bits produced are really the only way to measure capacity. And, in fact, Hynix expanded their bits. In fact, they brought on a new eight-inch wafer fab in 2001. The fact is, Hynix has doubled their output from 2000 to 2002.

However, even if you wanted to consider wafer, let's look at that. Hynix brought on the new

wafer fab in 2001, as I mentioned, and I'm not talking about wafer capacity from Eugene.

If you look at Micron, on the other hand, Micron has not brought on any new fabs since 1989. All of Micron's capacity growth is the result of consolidation in the industry, capacity, which already existed.

Hynix claims that their capacity today is not the result of subsidies. But, I want you to keep in mind, when I spoke about the timing of these things earlier. Hynix's capacity today is the result of subsidies from prior years, which were equal to or greater than Micron and other's capital expenditures.

MR. KAPLAN: Thank you. I just have a few brief points and then a brief conclusion. In terms of the volume of imports and the volume effects, this is a volume case, as well as price. Professor Hausman talked about volume. I urge you to look at the staff report, page 4-9 alternate. That's where the real volume numbers are.

In terms of Eugene, I sympathize or whatever with Commissioner Hillman's questions and I'd ask you to look carefully at Hynix's producer and importer questionnaire responses. Professor Hausman, by the way, did not only look at the total elimination of the

Hynix capacity. Both his report and his testimony had two models, contrary to what Hynix said: one is, if you take all the capacity out; the other is, if you take just the new growth capacity out.

Finally, in terms of the pricing, the staff has considerable experience with this industry. They have presented the data in the most accurate and complete manner and we urge the Commission to rely on the staff report and not respond in a state of manipulations, in terms of looking at the pricing.

In terms of capacity, I'd, also, refer you, following up on Mr. Appleton's point, to confidential Exhibit 4. And, I'd, also, say that, in terms of demand, consumption, according to the Commission, in terms of bits, increased 144 percent from 1999 to 2001. That's page 2-4 of the preliminary report. And for the period after that, it's, also, covered in APO data, and I'd urge you to look at that.

So with that brief rebuttal, I would just turn to a brief conclusion and say that I think you've heard today what we can say publicly about the state of the U.S. industry, about the pricing in this industry, about the causes of the downturn, about the continuing growth of demand, about Hynix's cost, and about what the future holds, if these trends continue

unabated.

You've heard what Mr. Appleton has said about the issues facing Micron. You have heard what Mr. Sadler has said about how pricing works in this market. And you have heard from Professor Hausman about the impact of major subsidized supply on a four member commodity industry engaged in intense competition. You've heard what Ms. Byers has said about threat. There has been no turnaround in this industry, as Ms. Byers has demonstrated.

To me, it all adds up to something relatively simple. Injury is being caused here by subsidies that have lowered the effective cost of Hynix to an incredible degree, that have kept a supply and import levels of DRAMs from Hynix larger than they should have been, and that have allowed Hynix to price down to very low levels on an ongoing basis.

When there's a downturn in this industry, people leave the industry, or at least cut back. We saw that here with some suppliers leaving the U.S. industry. Hynix, rather than readjusting or cutting back or leaving the industry, has continued on a strong basis, and this is a cause of material injury to this industry. We strongly urge you to consider all of this data, to focus on the data in the staff

report, not the pick and choose data from Hynix's brief, and make an affirmative decision in this case. Thank you.

CHAIRMAN OKUN: Thank you.

MR. ROSENTHAL: I'd like to add my thanks for your attention this afternoon and this morning. It's a complex industry and this case, unfortunately, has been made a little bit more complex and necessary by the arguments by opposing counsel. I'm particularly troubled by how they decide to shift from one database to another, depending on the argument they're using, and, in some instances, totally ignoring the data in the record and the staff report and using, what I regard, as conjured up data. I'm, also, gratified that some of the Commissioners' questions today, particularly when it came to import growth and import penetration, essentially nailed Respondents' counsel on how they mischaracterized the record.

Those of you, who are movie buffs, may remember a popular movie from a few years ago, called the Sixth Sense. It starred a wonderful young child actor named Haley Joel Osment. He was a character in this movie, who could see ghost. His famous line in the movie was, "I see dead people." Well, no one

would mistake me for a cute little Haley Joel Osment, I'm sure; but when I look over at the other side of the room and I see the representatives of the Hynix Corporation, I see representatives of what should be a dead corporation. That company should be out of business, if the market were allowed to work. Hynix, at the very least, should not be in a position to install new capacity and install new technology.

Unfortunately, as you know, the Government of Korea has decided not to let the market players work. Indeed, as one Hynix official, one of the representatives here today earlier said, "we won't be going bankrupt. The Korean Government won't let us fail." That was said in December of 2001. Billions of dollars of subsidies later, the Korean Government has underscored its commitment to keeping Hynix in business, no matter what the consequences.

So when the Commission considers the important question of why is the bottom of the DRAM cycle different, longer, and much worse financially in this cycle than in previous cycles, there's only one word that will answer your question and that is Hynix. Contrary to what Hynix would have you believe, the company's market share, worldwide and in the U.S., is significant. And as Dr. Hausman testified, the mere

presence of the Hynix volume in the market has had a severe downward effect on price. If the marketplace were allowed to work, if Hynix had not been kept alive by artificial means, U.S. prices would be much higher and so would the profitability of the domestic industry.

The claim by Hynix's counsel, that the domestic industry is doing well, would be laughable, if the facts underlying that claim weren't so tragic. Massive layoffs, foregone investments, difficulty in securing capital for investment are clearly signs of an industry in difficult straights. Of course, because the subsidy is available to Hynix and the certain knowledge that the Korean Government would not allow it to fail, Hynix's pricing has not and is not constrained by the need to make a profit, to cover operating costs, to generate revenues for investment. Hynix can and does have the liberty, if you will, to price at what it needs to, to keep its factories full and its workers employed.

Hynix does not need to win every order it goes after. That's the fallacy that they would like you to accept. The availability of Hynix's low price offered in the marketplace, however, is disproportionate, even to a significant volume.

You've heard extensive testimony today from Mr. LeFort and others about the domino effect that Hynix's prices have on the DRAM marketplace. Interestingly enough, Hynix's witnesses agree with the domestic industry's characterization of how prices work in the marketplace. Mr. Porter, Hynix's counsel, of course, claims that Hynix is not the price leader or is not always the price leader.

But, that's not the point here and that's not what we have to prove or what the statute requires. There's no requirement that Hynix be the price leader, to demonstrate either price underselling and resultant price depression that the statute identifies. Look at your record. There is substantial evidence of underselling by Hynix. Whether or not there's another source of imports that might be a lower price in any given month does not erase the evidence of significant underselling by Hynix. And that's all you need, in this instance, when you couple that with the way price works in this particular market.

It does not take any sixth sense and divine Hynix's harm to the domestic industry. A Smith Barney report in December 2002, after another $4.1 billion bailout, noted, "the latest capital restructuring of

Hynix will probably allow the company to continue investing and competing in the industry and is definitely great news to the market, which has been seeking some form of consolidation and rationalization." By the way, one of the tag lines to the movie, the Sixth Sense, is, "there are ghosts walking among us looking for help. They have found it."

Hynix has certainly found plenty of help from the Korean Government. That help has resulted in import caused harm. Not just the subsidies, but subsidized imports have caused harm to the domestic DRAM industry. And, unfortunately, more harm is due to imports from Hynix and that is imminent, as that company's investments in later generation technology allows to continue its uneconomic marketplace behavior.

And by the way, talking about threat, just take a look at the resolution by the Korean parliament that was submitted to this Commission and elsewhere. The Korean parliament certainly believes that imposing countervailing duty, in their words, "would threaten the very survival of the company." Conversely, I would argue that failing to impose a countervailing duty would threaten survival of the domestic industry.

And you can be sure that when European and Taiwanese authorities reach their final conclusion, they will find that Hynix has hurt their domestic industry, as well, and will impose countervailing duties.

Now, the U.S. industry doesn't need any help of the sort received by Hynix from its government. What the domestic industry needs here and what the record of this proceeding compels is an affirmative determination. Thank you.

CHAIRMAN OKUN: Thank you. You may proceed, Mr. Durling.

MR. DURLING: Thank you, members of the Commission. Again, for the record, I'm James Durling with Wilkie Farr & Gallagher. We all agree that the determination needs to be based on the record the Commission has collected. But, there are two critical points.

First, you need to look at the record and all of the record and you need to measure it against the statute. Again, ultimately, the Commission's job is to apply a specific statute in this case and that statute requires a focus on subject imports. So, much of what you've heard today from Petitioners simply does not relate to that fundamental task of the Commission, which is, how do you relate subject

imports within the terms of the statute.

You've heard so much emphasis on the subsidy, because, I believe, the domestic industry recognizes that their traditional case here is not that strong and so they are trying to push the envelope. They're trying to find new theories for applying the trade remedy laws. But, whatever happens with the DOC finding, whatever happens with the results in future cases, the underlying Hynix assets are not going to go away. And their fundamental economic logic is that, but for the Korean Government action, these assets would disappear. But, that's not what happens to assets. The assets are acquired by other people.

If you look at what's happened in the U.S. industry, many of the assets that left one form of corporate ownership now belong to someone else. The reason Mr. Appleton can get up and say, oh, Micron, we didn't increase any capacity, well, excuse me, they've acquired many other operations. They acquired the operations of TI. They acquired the operations of Toshiba. Micron took under its corporate control substantially new assets during this period. The assets, in this industry, don't go away. And so, it's completely unrealistic to assume that, but for the

subsidy, Hynix would have somehow disappeared.

So, when we get beyond the domestic industry's effort to push the envelope and create new causes of action under the statute, what are we left with? We're left with volume effects. By Commission standards, the total level of Hynix subject import volume, in this case, has been modest and small and it has been declining, if you do what we think is appropriate, which is look at Hynix on a brand basis.

This isn't about cherry picking information and proposing alternative sources of data. Everyone is looking at the same data. This isn't cherry picking. Our arguments to the Commission are simply that the staff did a good first pass of the data, but there are aspects of the data that you need to look at more closely. So, we are simply doing our job, as practicing before the Commission, and we are helping you understand the data before you better. And all we are urging is that you look at the data in more detail. We're not cherry picking the data.

We're simply saying, there are aspects to the data that you need to look at and subject volume is a critical part of that. Because, if you do not take into account the effect of the Eugene shutdown, essentially, what you are saying is that a company

that makes the decision to come to the United States and invest and to create all of these assets and to create jobs in the United States, that when they need to have a temporary shutdown to invest more money in the U.S., to create more jobs in the U.S., that somehow, they're going to be punished, because during that narrow period of time, they may have had a small increase in imports.

First, I think it's ridiculous to think that the statute contemplates punishing a company and labeling them has having injurious levels of imports, in a situation like that, where the imports were not taking sales from any domestic companies. They were simply replacing existing Hynix contractual commitments. How can an increase of that sort be deemed the cause of any problems for the U.S. industry? I don't think that it can.

The other critical point about volume is that volume is a very good measure of sort of the end result of a very complex competitive dynamic, volume and market share, and what we see, in this case, is that Hynix's market share, measured on a brand basis. Hynix is a corporate entity. Its success in the U.S. market has been falling over time, not growing over time.

To hear the domestic industry tell it, you would think that Hynix was the dominant force that was just completely taking over the U.S. market. But the end result, as measured by market share, is that Hynix is getting less and less, not more and more. So, I think market share, the market share volume is a very good measure, kind of a pulling it together and what's the end result of all of these competitive dynamics.

If we turn to price, I think there are a few basic principles the Commission needs to keep in mind. The first, it is critical to look at the actual prices that your investigation has collected. Mr. Sadler made one of the more interesting comments today, when he, basically, admitted that he has no idea what the prices are in the marketplace. You do and you should look at those prices very carefully.

The second basic point is it is absolutely essential that you look at the price of all of the sources, not just Samsung, although I have to note with interest that the switch in the Samsung story in this overall investigation is quite remarkable. The company that was aggressively competing on a head-to-head basis with complete overlap, in the preliminary investigation, all of a sudden has transformed itself into a company that has nothing to do with competitive

dynamics in the DRAM market, which is a remarkable turnaround.

But, whatever you think about Samsung, don't forget about Infineon non-subject imports. Don't forget about Taiwanese non-subject imports. Don't forget about all the non-subject imports from all of the other sources. The reason Hynix is a very small part of the total market is not because of its U.S. production. Look at the total numbers. This is a market where most of the market is being supplied by non-subject imports -- some from Micron, some from Infineon, some from people all over the world. But, most of the market is being supplied by imports, but the market is not being supplied by imports from Hynix's Korean operation.

All of the pricing dynamics you've heard about today, and there was an amazing amount of consensus about the pricing dynamics and how they work, but the most important point, and this is the fundamental disagreement between our side and Petitioners' side, Petitioners' side wants you to believe that these dynamics only apply to Hynix, and they don't. They apply to everyone else in the market. They apply to that overwhelming volume of non-subject imports.

And so, yes, a single price might have some effect; but, that's true for everyone in the marketplace. So, yes, there may be instances where Hynix happened to be the lowest price at a given point time. For goodness sakes, in a market like this, with DRAM prices posted, as Petitioners' side said, on a daily basis, in public sources, where everyone else can track prices so closely, of course, you're going to have a substantial amount of convergence. And I think for a lot of the products, that's what your pricing data shows, a remarkable amount of convergence in the individual supplier prices. That's not surprising.

What's critical is that that dynamic is applying to everyone in the market. And so, if there are domino effects, they, also, apply for the much, much more substantial volume of non-subject imports.

When you come to underselling, again, we'll have to do this in the brief, because it's propriety, but if you look at it on a supplier basis and if you look at it over time, I think you will see that the price effects of Hynix subject imports are, at best, very, very attenuated.

Then, Commissioner Hillman, you asked a very good question, which was, okay, well, what do I do, if

I find a low price and then there are these spillover effects. It's a very complicated pricing dynamic, complicated products; but, again, the net result of all of this is, who is gaining and who is losing market share. So, I urge you to step back and if you look at who is gaining, it's the other suppliers.

So, let me just close, and I'll merge my rebuttal and my closing statement, and just make kind of a few concluding thoughts. What really happened in this case is that Micron, basically, was throwing the dice. They had a problem with Hynix and what was happening with Hynix, and that's fine. But, they knew that their case against Hynix was very weak. So, they brought this case and they included Hynix and Samsung. And if you go back and read what they told you in the preliminary phase of this case, it is quite clear that they view their case as being based on both of those companies, the volume of both companies, the price effects of both companies. That was the case they filed and brought to the Commission.

But, guess what? The roll of the dice didn't work, because Commerce didn't find any subsidies for Samsung. And so, the essence of their case, the volume part of their case, the aggressive price, the connection between aggressive pricing and

gaining market share, that part of their case disappeared when Commerce excluded Samsung from this investigation.

Now, Mr. Appleton probably --

CHAIRMAN OKUN: Mr. Durling, let me just check. Okay, you can go.

MR. DURLING: Okay, 30 seconds. Mr. Appleton likes to tell his colleagues in the industry that it's his job as CEO to use every tool available to him, to obtain an advantage for his company. That's fine. That's his right. He has that right under U.S. law. But the U.S. law, also, imposes standards for doing that. And just because it helps Micron, that is not a reason to make an affirmative determination in this case. Thank you.

CHAIRMAN OKUN: Thank you. Post-hearing briefs, statements responsive to questions, and requests of the Commission and corrections to the transcript must be filed by July 1, 2003; closing of the record and final release of data to the parties is July 16, 2003; and final comments are due July 18, 2003. There is no other business before the Commission. This hearing is adjourned.

(Whereupon, at 4:37 p.m., the hearing was concluded.)

CERTIFICATION OF TRANSCRIPTION

TITLE: DRAMS andd DRAM Modules from Korea

INVESTIGATION NO.: 701-TA-431

HEARING DATE: June 24, 2003

LOCATION: Washington, D.C.

NATURE OF HEARING: Hearing

I hereby certify that the foregoing/attached transcript is a true, correct and complete record of the above-referenced proceeding(s) of the U.S. International Trade Commission.

DATE: June 24, 2003

SIGNED: LaShonne Robinson
Signature of the Contractor or the Authorized Contractor's Representative
1220 L Street, N.W. - Suite 600
Washington, D.C. 20005

I hereby certify that I am not the Court Reporter and that I have proofread the above-referenced transcript of the proceeding(s) of the U.S. International Trade Commission, against the aforementioned Court Reporter's notes and recordings, for accuracy in transcription in the spelling, hyphenation, punctuation and speaker-identification, and did not make any changes of a substantive nature. The foregoing/attached transcript is a true, correct and complete transcription of the proceeding(s).

SIGNED: Carlos Gamez
Signature of Proofreader

I hereby certify that I reported the above-referenced proceeding(s) of the U.S. International Trade Commission and caused to be prepared from my tapes and notes of the proceedings a true, correct and complete verbatim recording of the proceeding(s).

SIGNED: Gabriel Rosenstein
Signature of Court Reporter