

**STATEMENT OF
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CHAIRMAN OF THE BOARD, CHIEF EXECUTIVE OFFICER AND PRESIDENT
OF
MICRON TECHNOLOGY, INC.
BEFORE THE
SUBCOMMITTEE ON INTERNATIONAL TRADE AND FINANCE
COMMITTEE ON BANKING, HOUSING AND URBAN AFFAIRS
OF THE
UNITED STATES SENATE**

March 29, 2006

Mr. Chairman, Senator Bayh, Members of the Subcommittee:

My name is Steve Appleton, and I am the Chairman of the Board, Chief Executive Officer and President of Micron Technology, Inc. ("Micron"). Thank you for inviting me here today to testify before this subcommittee regarding the 2006 reauthorization of the Export-Import Bank of the United States ("Ex-Im Bank"). I appreciate the important work of the Ex-Im Bank in encouraging exports from the United States, and the work of this Committee in authorizing and overseeing funding for the Bank. I welcome the opportunity to describe to the subcommittee Micron's experience with the Bank and to share some thoughts on how the Ex-Im Bank's Economic Impact Analysis process and other related procedures could be enhanced to guarantee greater fairness and transparency.

Let me start by giving you some background on Micron and the semiconductor industry. Micron is one of the world's largest and most innovative providers of advanced semiconductor solutions. Micron produces advanced DRAM, NAND Flash memory and imaging semiconductors that are used in today's cutting-edge, mobile, computing, server, automotive, networking security, industrial, consumer and medical applications. The company is based in Boise, Idaho and began operations in 1978. In the United States, Micron has major

manufacturing facilities in Boise, and Manassas, Virginia, and Micron also is a partner with Intel Corporation in a Joint Venture manufacturing facility in Lehi, Utah. Additionally, Micron has design centers in Texas, Minnesota, California and Idaho, and operations around the world, including fabrication facilities in Italy and Japan, a joint venture manufacturing facility in Singapore and a wholly-owned assembly and test facility in Singapore. Micron employs nearly 21,000 people worldwide, over half of those employees in the United States. Micron's revenues last fiscal year were \$4.88 billion and we invest a total of about \$1-1.5 billion annually in our worldwide operations and on research & development.

The semiconductor industry is extremely competitive. Only those companies able to aggressively control costs, increase productivity and continuously innovate are able to survive. In 1985, there were about 11 major U.S. based companies in the DRAM business--today, Micron is the only one still manufacturing DRAM. To compete, Micron has to produce faster and smaller devices that provide greater capability at the lowest possible price. At the same time, we have to be able to anticipate the development of a wide array of end use consumer products and electronic systems that might require our products and adapt accordingly.

The semiconductor industry is also capital intensive. Manufacturing equipment is highly specialized and has a life span of only about three years. Companies must continually re-invest to keep ahead of the innovation curve. This means making major investments in research and development as well. It costs around \$2.5 to \$3 billion to construct and equip a manufacturing facility from green field to full operations. And, the semiconductor industry spends an average of 40% of its revenues on new capital equipment and R&D each year.

Due to the capital intensive nature of the business, the semiconductor industry is also sensitive to the availability and cost of capital. When our semiconductor competitors have

special access to favorable financing through government subsidized programs, it creates enormous and artificial advantages for that competitor. For decades, Micron has spoken out against illegal subsidies from foreign governments to develop and protect a domestic semiconductor industry. In many instances, this practice has led to massive overcapacity. In the DRAM industry, Micron has seen time and again--first in Japan, then in Korea and then in Taiwan—government subsidized capital poured into expanding capacity in an effort to gain market share or given to keep companies from otherwise going bankrupt. For example, in 2001-2003, the Government of Korea provided domestic manufacturer Hynix Semiconductor with over \$16 billion in illegal subsidies. As a result of this, Micron filed and won anti-subsidy cases against Hynix in the US, Europe, and Japan.

Given this background on Micron and the semiconductor industry, you can appreciate my surprise when I discovered in August 2004 that the Ex-Im Bank of the United States was contemplating providing \$500 million in loan guarantees to a DRAM competitor in China, a company called Semiconductor Manufacturing International Corporation; also known as “SMIC.” SMIC is a relatively new, but rapidly growing, entrant into the pure-play semiconductor foundry business. A pure-play foundry is a manufacturing facility designed to produce a variety of semiconductor products, including memory like the DRAM and NAND Flash chips that Micron makes and sells, as well as logic products and other types of integrated circuits. At the time of the proposed financing, SMIC was one of the fastest growing semiconductor manufacturers in the world. Most of its revenue came from DRAM, either manufacturing and selling product under its own label or manufacturing product for other companies to sell. Both from a design and a production perspective, SMIC had made DRAM a central part of its business plans. Within three years, it had become the world’s third largest semiconductor foundry.

Even more perplexing to me was that SMIC could claim to need Ex-Im Bank financing in order to purchase manufacturing equipment. SMIC had recently completed the construction and ramp of three different semiconductor facilities in Shanghai and had done so with a mix of private equity, credit from Chinese banks, and vendor financing. Most of the equipment it purchased for these three factories was from U.S. based equipment suppliers. Moreover, in March 2004, only three months before applying for the Ex-Im Bank loan guarantee, SMIC had raised \$500 million on international capital markets through an initial public offering. Clearly, SMIC was a sophisticated company with access to international capital markets and a track record of raising money when needed. So, why did SMIC need to go to the Ex-Im Bank? The most likely answer was SMIC wanted to benefit from lower than market interest rates.

As you know, the role of the Ex-Im Bank is to provide financing to help promote the export of U.S. goods and services with the stated purpose of maintaining and creating American jobs. Importantly, Ex-Im Bank however, does not provide export financing for just any transaction, but may do so under two scenarios. The first is to match export financing from the Export Credit Agencies of other countries. The second is to fill in gaps in private sector financing or to address some other market failure--that is, *only* when an export would not go forward without the assistance of the Bank. Accordingly, the Ex-Im Bank should not operate as a private sector financial institution and should not supplant or compete with financing from the private sector.

Moreover, Ex-Im should not provide financing for transactions that would result in a net negative impact on the U.S. economy. Through its Economic Impact Analysis procedures, the Ex-Im Bank determines whether a transaction under consideration would adversely affect U.S. production or employment. For example, adverse effects would occur when the financing

supports the creation or expansion of capacity of a product that could then be exported to the United States and cause injury. In carrying out its Economic Impact Analysis, the Ex-Im Bank looks at the following factors:

- Whether the commodity produced with the equipment financed by the Ex-Im Bank will be in oversupply on world markets at the time the resulting commodity is first sold;
- Whether the resulting production capacity is expected to compete with United States production of the same, a similar, or a competing commodity; and
- Whether the Ex-Im Bank determines that the extension of such credit or guarantee will cause substantial injury to United States producers of the same, a similar or a competing commodity.

A Federal Register notice requesting public comment must be filed under the Ex-Im Bank's Economic Impact Analysis procedures. With respect to the proposed SMIC financing, a Federal Register notice was published in August 2004. Unfortunately, the notice itself provides very little information regarding the proposed financing, so it is difficult to provide meaningfully comments on a proposal. The SMIC related notice only indicated that the proposed financing was for \$500 million to a Chinese company to make 60,000 wafers a month of advanced semiconductors. Nonetheless, after doing some investigating of our own to flesh out more details, we filed comments objecting to the financing. We were able to assess the impact that the proposed financing guarantee would have on Micron's operations because DRAM was a central focus of SMIC's well-publicized business plan and a large proportion of its production. We provided the Ex-Im Bank detailed information on SMIC's competing DRAM production, the state of oversupply in the DRAM market, and SMIC's apparent access to private financial markets.

In December 2004, I came to Washington to meet directly with members of the Ex-Im Bank Board to make this case. During these meetings, I was informed that the terms of the proposed financing had fundamentally changed -- that the proposal was instead to provide SMIC with a \$1.2 billion loan guarantee, more than double the original proposal. Moreover, SMIC was reportedly guaranteeing that it would produce only small quantities of DRAM and that instead its real intention was to make logic devices which it claimed were not in oversupply in the global market. From my perspective, SMIC's guarantees were not reassuring. First, the same equipment used to produce logic semiconductors can be used to produce DRAM. Second, even if the equipment were dedicated to logic production, it still freed up SMIC's capital to invest its own money in DRAM production.

When I asked the Ex-Im Bank Board if Micron would have an opportunity to comment on the revised proposed financing, there was resistance. It was only after we persisted that the Board agreed to publish a new Federal Register notice. We asked to see the draft Economic Impact Analysis report, but that request was denied. Consequently, Micron hired a private firm, CapAnalysis, to conduct a comprehensive economic impact assessment. Based on a report by CapAnalysis, the economists concluded that: (1) the world market was in oversupply for both DRAM and logic chips; (2) SMIC was capable of accessing financing on its own without an Ex-Im Bank guarantee; and (3) the proposed financing would have a net negative impact on the U.S. economy and U.S. jobs.

Ultimately, the proposed financing never went to a vote of the Ex-Im Bank Board. As then Chairman and President Phillip Merrill noted, this was a large and complex transaction that implicated a number of requirements under the Ex-Im Charter including the economic impact test, the additionality standard, and reasonable assurance of repayment.

As a result of our experience with the Ex-Im Bank process, I believe there are a number of steps that could be implemented to improve the economic impact assessment procedure and help ensure that other Ex-Im Bank requirements are being met.

With respect to the economic impact procedures, I would make the following suggestions to improve the transparency of the process:

1. More detailed information should be provided in the Federal Register notice so as to enable potentially affected U.S. producers to comment meaningfully on the proposed transaction.
2. The comment period should be extended from 14 days to a minimum of 30 days (and, for large financings, such as the one involving SMIC, 45 days or more) to allow for a more thorough analysis by potentially affected U.S. producers and other interested members.
3. The period of time the Interagency Group has to review the proposed deal and the completed Economic Impact Analysis should also be lengthened. Based on our experience, members of the Interagency Group were frustrated that their questions and concerns were not being adequately addressed, and that they were consulted only at the last minute. Moreover, certain agencies on the Interagency Group, especially the Department of Commerce, should be consulted early in the application procedure because they often have industry expertise – for example, concerning the semiconductor industry -- that does not exist in-house at the Ex-Im Bank. This especially makes sense given that the Secretary of Commerce is an *ex officio* member of the Ex-Im Board.
4. The Ex-Im Bank should be required to issue another request for public comment if there are significant changes to the terms or the amount of the financing.

5. And finally, a public version of the final Economic Impact Analysis should be made available for inspection and comment before a Board vote on a particular financing proposal. Right now affected U.S. companies are never given the chance to see the final analysis, the comments of other parties or the input from the private experts retained by the Ex-Im Bank. This lack of transparency puts the potentially affected producer at a significant disadvantage in terms of transparency and due process. These due process procedures are only what are minimally required in other agency contexts such as the International Trade Commission or the Department of Commerce, as well as with the Regulatory Impact Analysis review procedures followed by OMB in the context of E.O. 12866.

I also believe that the Ex-Im Bank should implement targeted provisions to ensure that its mandate is being met. First, as I noted previously, pursuant to its rules, Ex-Im Bank can provide financing to match the competition from foreign Export Credit Agencies that provide financing or guarantees to their own exporters. During the SMIC application, we were told that SMIC had informed the Ex-Im Bank that if it did not get a loan guarantee from the U.S., it would get financing from JABIC, the Japanese Export-Import Bank and that the U.S. exporters would lose business. When we asked what proof was provided, we were told that the borrower was not required to provide documentation showing the availability of alternative financing -- instead, an applicant merely had to provide assurance that this was the case. In our experience, SMIC never received financing from JABIC despite its assurances to Ex-Im Bank. Applicants should be required to provide some proof of alternative financing from a foreign Export Credit Agency.

Likewise, if the Ex-Im Bank provides financing based on the “additionality” standard, then the Bank should be required to document the alleged market failure at issue. Specifically,

the Ex-Im Bank should establish guidelines for determining whether its financing is truly necessary. Among other things, they should request documentation from the foreign applicant detailing their record of raising capital from the private sector during the three year period prior to the date of any Ex-Im Bank financing application. This should include all loans, equity issuances and vendor financing. Documentation should also be provided to demonstrate recent, failed attempts to access financing from the public sector.

I believe that these changes would have been helpful in assessing the SMIC case and will be useful in future instances that may affect Micron. However, I am not in a position to say that the recommendations I have outlined should be applied in all cases. I would leave that to the discretion of the Committee and the Ex-Im Bank.

I applaud the Ex-Im Bank for its efforts supporting and promoting U.S. exports -- a laudable goal. Without question, the Ex-Im Bank should strive to help small exporters that really need assistance. As I described, the problems that we encountered in our dealings with the Ex-Im Bank could be improved significantly if additional procedures were implemented to ensure a more balanced and transparent process. Micron would be happy to work with you, Mr. Chairman, other members of the committee and appropriate officials at the Ex-Im Bank.

Again, thank you for the opportunity to testify and I would be happy to answer any questions.