Episode 16

Japan-US Semiconductor Agreement

The year of 1996 became a difficult one for the Japanese semiconductor industry as well as for me. It turned from the boom in the previous year to the year of the great recession. Moreover, it was the final year of the Japan-US Semiconductor Agreement which had been concluded ten years before, and a negotiation for the termination was to be held between EIAJ (Electronic Industries Association of Japan) and SIA (Semiconductor Industry Association) of the US. Since I was the chairman of EIAJ's electronic device group, I became a member of the negotiation team on behalf of the device industry. It became really a busy year for me, with recession measures inside the company and the negotiations of the Japan-US Agreement outside the company.

Now, what impact did the "Japan-US Semiconductor Agreement" have on the semiconductor industry in Japan in these ten years, from 1986 to 1996?

(1) Market share of foreign-made semiconductors in Japan

In the decade during the agreement period, the share of foreign semiconductors in Japan dramatically improved. The share which was less than 10% in 1986 reached 10% in 1988. It exceeded 20% in 1992, and further in 2000, it exceeded 30%. From 2002 onwards, it became over 35% and is still increasing today.

The Government of Japan played the most crucial role for increasing the share of foreign semiconductor products in Japanese market. They fully utilized their administrative power to encourage semiconductor users in Japan to use foreign products more preferentially than Japanese products.

However it may not be said that all such changes in market share are due to Semiconductor Agreement only, but it is undeniable that the Agreement played a role of a flywheel to continuously drive it.

(2) Dumping prevention

The FMV (Fair Market Value) system of memory introduced as a part of the Agreement helped boost the rapid growth of Korean manufacturers. At this time in Korea, the launch of DRAM started with Samsung Electronics as the lead. Korean-made DRAM was accepted greatly in Japan as "foreign made" products. Furthermore, because it was not subject to FMV restrictions, price-setting was freely done and they expanded the sales in the world market.

As shown in Figure Fig. 16.1, the global market share of Japanese DRAM rapidly declined from about 75% to about 20% in 14 years from 1987 to 2001, while Korean DRAM increased sharply from about 5% to 40%. In this process, the shares of Japan and Korea reversed in 1998, and since then Korea became the DRAM kingdom.

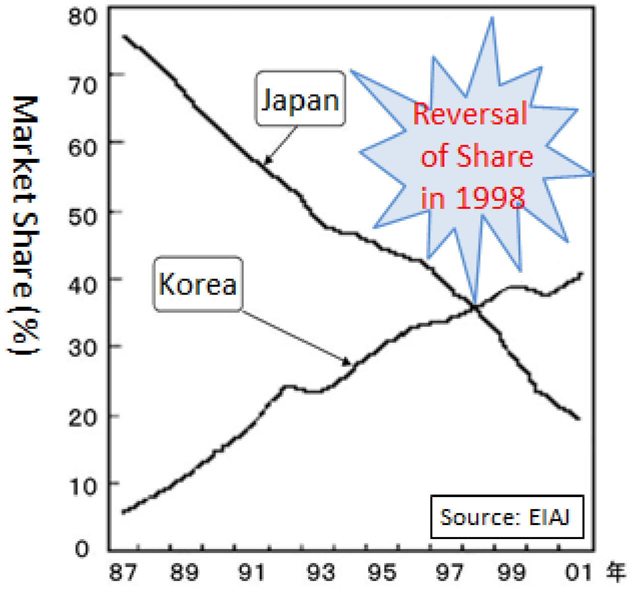

Fig. 16.1 Trend of the market share of DRAM

Of course, the reason of this reversal cannot be attributed only to the Semiconductor Agreement. Factors such as efforts and aggressiveness of Korean manufacturers, passivity of Japanese manufacturers, and conversion of market structure, from main frame to PC, must also be taken into consideration. But it is also a definite fact that the Agreement has played the role to trigger it.

(3) Recovery of US semiconductor

With the conclusion of the US-Japan Semiconductor Agreement in 1986, the government and the industry in the United States, made literally an integral collaboration to strengthen semiconductors. In the following year, SEMATECH was established as a semiconductor cooperative development organization, and the government provided support of 100 million dollars annually.

With these two events, namely Japan-US Semiconductor Agreement and the establishment of SEMATECH, as the trigger, the competitiveness of the US semiconductor was amazingly improved.

Eventually in 1993 the US reversed Japan in the market share and established the world’s top position.

With these backgrounds, the negotiation regarding the termination of the Semiconductor Agreement was started in February 1996.

It was an extraordinary way of negotiations between the two industries, SIA versus EIAJ, in parallel with the intergovernmental negotiations between Japan and the US.

This case was also a top concern of the governments of both Japan and the United States. Accordingly, the time limit had been set “at the end of July” by President Bill Clinton and Prime Minister Ryutaro Hashimoto in their prior meeting. As the working members of negotiations, it was the most prominent proposition to settle the issue within the deadline “at the end of July”.

On the US side, four negotiating members from SIA attended, with Pat Weber of Texas Instruments as the leader. From Japan, four members also attended with Chairman of EIAJ, Norio Ohga as the leader, who was Chairman of Sony. I also participated in the negotiation as a representative of device industry.
We had five meetings including the final negotiation, and I would like to describe the sequence of events in a style of my memo.

The first round of negotiation: February 23, in Hawaii.
It was the first gathering of EIAJ and SIA members, and the basic stance of each side was stated and confirmed.
It was mutually confirmed that the present agreement would be terminated at the end of July, and that the future framework of private sector cooperation would be established. Since it was the first meeting for both sides, the meeting started in a friendly atmosphere.

The second round: On April 26, in Hawaii.
Sharp conflict surfaced about the way of government involvement.
The US side insisted that minimal government involvement was necessary regarding to market share monitoring and dumping prevention.
On the other hand, the Japanese side claimed that government involvement was unnecessary in the new framework and that it should be left to the free market mechanism.
In the course of the meeting, the discussion got fierce and there was an awkward mood at one time with some sign that the negotiation itself might breakdown. However, it was agreed to continue the negotiation in a separate one to one meeting between two tops, Ohga and Weber.

The 3rd negotiation: On June 24, a telephone conference.
Major agenda was the explanation and Q & A of the position paper issued by EIAJ on May 31, and also on the position paper issued by SIA on 14th June.
While Japan proposed a multilateral framework centered on the “World Semiconductor Council” as a framework of private sector, the US side argued that the bilateral scheme between Japan and the United States should be maintained.
The negotiation ended with these opposite positions.
The next negotiation was set on July 20 in Vancouver, Canada.

The time limit of “the end of July” was approaching, and the negotiation was reaching the climax, but an unexpected major incident happened at this point. Just before the meeting, Ohga, the leader of the Japanese negotiation team, suddenly became ill and was hospitalized.
Ohga called me on the phone from the hospital and asked me to take his part, since he would not be able to attend the coming negotiation meetings. Although it was a surprise like a bolt from the blue for me, I made up my mind to take on this big role as the leader of Japanese team, since it was no longer a situation to turn it back.

Fourth negotiation: on July 20 in Vancouver.

Including myself, there were four members on the Japan side: Masanobu Ohyama of Toshiba (representing device industry), Takuji Niimura of Mitsubishi (representing user industry), and Toshio Ono of NEC (representing user industry).
Photo 16.1 below is a picture of the Japanese negotiation team attending this meeting.

Photo 16.1 Japanese negotiation team in Vancouver
From left, Ohyama (Toshiba), The author (Hitachi), Niimura (Mitsubishi), and Ono (NEC)

From the US side, attendees were Pat Weber of TI, the leader of US team, Wilf Corrigan of LSI Logic, Tommy George of Motorola, and Steve Appleton of Micron. They were all well-known debaters in the industry.

Meeting started at 9 am on time.
The debate gradually picked up momentum. In order to save time, the negotiation was proceeded with a working lunch during the daytime, and the discussions continued for as long as 10 hours until 7 o'clock in the evening. However, as we continued to discuss, new problems came up one after another, and the arguments of two sides were diverged rather than converged.
Let's organize the arguments of both sides at this point.

Claim of Japan side: With the ten-year semiconductor agreement, the market share of foreign products in Japan far exceeds the original target of 20%, and dumping has not occurred. The purpose of the agreement was fully achieved. From now on, the involvement of both governments is not necessary and we should leave the matter to the free market mechanism.
In addition, we propose the establishment of multilateral "World Semiconductor Council (WSC)" instead of the bilateral framework of Japan and the United States which has been the case so far.

Claim of US side: The Japanese market was opened by the Semiconductor Agreement and improvement of market share of foreign products was also achieved, but there is still a concern that this may go back to the past situation if there is no agreement.
Regarding dumping, it may relapse if the frame of the agreement does not exist. Therefore, we should leave the existing framework as much as possible including governmental involvement.
Since things cannot be decided in a multilateral framework, the new framework should be "Semiconductor Council (SC)" between the United States and Japan.

Fifth negotiation (final): July 29 to August 2, in Vancouver.
Final negotiation was held again in Vancouver from July 29, and many official and unofficial meetings were held in various ways from 29th to 31st.
All the staff of both US and Japan in charge of the negotiation shared the strong feeling that "we must finish by the time limit of July 31."
Meanwhile, the discussions between the two governments were also carried out in parallel, but it was decided to prioritize the consensus between the two industries. However, there was no good progress even on the 31^{st}, the last day. Time elapsed from the morning to the mid-day, and to the night. And the midnight of the time limit approached, and the sign of fatigue came apparent on the faces of the negotiation members from the both sides.
At that time, one wise person suggested "Let's stop the clock here", and both parties were encouraged by this idea and the further last-minute negotiation was continued after the mid-night.
In the dawn of August 1, the debate was mostly exhausted, and the top members of government and private sectors gathered together to organize the issues. The Japanese side was Tsukahara, the Minister of METI, Sakamoto, the Deputy Minister, and the author, the leader of Japanese delegation. The US side was Berchefsky, the representative of USTR (US Trade Representative), Shapiro, USTR Senior Officer, and Weber, SIA Chairman.

In the top talks, the issues were organized and the work was shifted to closing the detailed wordings.
It was the early morning of August 2 when we reached the final agreement. But it could not be the month of August for the negotiation members who had been targeting at the completion by the end of July. Again, by the idea of a wise person, it was expressed as "Vancouver negotiations settled on July 33".

Actually, there was a point to which we could not agree to the end of the negotiation. That is whether we would call the new framework "World Semiconductor Council (WSC)" which Japan claimed, or "Semiconductor Council (SC)" which the US claimed. Neither the US nor Japan could yield this point to the end. Fortunately, there was also a wise person in this case and an ingenious idea was made to save faces of both sides. That is, the new framework was to be expressed as "World Semiconductor Council" in Japanese, and in English as "Semiconductor Council". It can be said that it is an episode showing one nature of this difficult negotiation.

Well, the first meeting in the new framework was held in Hawaii in April 1997. At this point, the US side agreed to call it “World Semiconductor Council (WSC)” because the semiconductor industries of Europe and Korea also became official members of the Council.
Since then, the WSC has been held every year, changing the place, and it has provided a good opportunity for the top executives of the world’s semiconductor industry to gather together and to deepen mutual understanding and to tackle common issues of the semiconductor industry.

The Vancouver meeting in July 1996 was a difficult negotiation that I cannot forget in my long semiconductor life. But it can be said that it played a historical role of “the creation of WSC” contributing to the world semiconductor industry.

Note: The original version of this article was first published, in Japanese, on the Semiconductor Industry News (Sangyo Times Co., Ltd.) from July 12, 2006 to January 9, 2008.