

Market Forecast Report
-Semiconductor and FPD Manufacturing Equipment-

[2009-2011 fiscal year]

Published in July 1st, 2009

SEAJ

Semiconductor Equipment Association of Japan

[Overview]

This report provides a forecast trend for Semiconductor and FPD manufacturing equipment. The fully-considered results made in the forecast report are by the Research and Statistics committee and the FPD Statistics sub-committee of the Semiconductor Equipment Association of Japan (hereinafter called SEAJ), and as the result of market trend research from both the Board of Directors and auditors (total 20 companies) by SEAJ consensus.

For Semiconductor manufacturing equipment, 2008 fiscal year sales were sharply down because of the investment –reduction by memory makers. Both Japanese Equipment and Japanese market drastically decreased for the first time since bursting of the dot.com bubble. From economic recession in the fall of 2008, 2009 sales will continuously drop by double-digit. In 2010, growth will turn positive growth but recovery will be gradual.

For FPD manufacturing equipment, during the first half of 2008, large-scale investment by overseas panel makers resumed aggressively. However, during the second half of 2008, investment was reduced rapidly with the economic downturn. Therefore, large negative growth is forecasted in 2009. Investment recovery is expected from the second half of 2010 with the expected recovery from the economy crisis to take a balance of supply and demand. It means to get the economy back on a path toward a full-scale recovery.

(1) Forecast period; the fiscal year of 2009 to 2011 for 3 years

(2) Forecast items: Japanese Equipment and Japanese Market for Semiconductor and FPD manufacturing equipment

(3) Forecast Background

(Semiconductor Industry)

The global economy is facing a severe recession against backdrop of both a financial crisis and the loss of consumer confidence. The International Monetary Fund (IMF) World Economic Outlook in April 2009 projects global activity to decline by 1.3 percent in 2009. This result would be far greater than anything experienced since World War II, though growth is projected to reemerge in 2010, but at 1.9 percent rate that would still be well below potential.

The market for electronics will experience negative growth because it is affected by the slowdown in the economy. Some products, such as mobile personal computers and LCD televisions, have potential for growth, while digital consumer appliances, such as mobile phones and digital cameras, will see expansion slow. Demand for electronics will recover in a medium- and long-term perspective, but growth rate for sales will grow at a sluggish pace.

According to WSTS, the worldwide semiconductor market will further decrease from the -2.8 percent declines in 2008 due to the economic crisis. From the spring 2009 Forecast, the global semiconductor market is expected to decline -21.6 percent on an annualized basis in 2009, which results in two consecutive years of negative growth. In 2010 with restored economic growth, semiconductor sales are expected to show 7.3 percent slow growth. In 2011, the economy will not yet recover to 2008 levels.

(FPD Industry)

LCD panels have been in oversupply due to the decline in demand in global market as a result of recession. In 2009, panel makers will raise operational rates in order to prepare for expansion in the spread of LCD televisions, the transition from analog to digital broadcasting, and the special procurement boom for rural consumption with household appliance subsidy program in China. From the second half of 2010, new investments are expected to have recovered.

(4) Summary

[Forecast of Japanese Equipment billings for Semiconductor and FPD Manufacturing Equipment]

In 2008, equipment sales decreased by 41.7 percent to 1,298.5 billion yen compared to the previous fiscal year because of semiconductor equipment market crash. In the 2009 forecast, both semiconductor and FPD equipment sales will continue to be down because of the global economic recession. Therefore, sales are estimated to decline by 48.6 percent to 667.6 billion yen. In 2010, however, the forecast shows equipment sales will be up 26.3 percent to 842.8 billion yen because of recovering from economic recession, and in 2011, sales will sharply increase by 48.3 percent to 1,250.2 billion yen.

[Forecast of Japanese Market billings for Semiconductor and FPD Manufacturing Equipment]

In 2008, equipment sales decreased rapidly by 47.0 percent to 643.3 billion yen compared to the previous fiscal year. In 2009, sales will down by 41.9 percent to 373.6 billion yen affected by the continuing economic downturn. In 2010, sales are forecasted to slowly increase by 17.5 percent to 439.1 billion yen, and in 2011, sales will increase by 20.9 percent to 530.8 billion yen.

[Forecast of Japanese Equipment billings for Semiconductor Manufacturing Equipment]

In 2008, semiconductor equipment sales dramatically decreased by 57.0 percent to 795.4 billion yen compared to the previous fiscal year. In 2009, sales will drop remarkably by 47.5 percent to 417.6 billion yen. In 2010, sales are forecasted to go up 30.0 percent to 542.8 billion yen because of the up turn in business following two years of stagnation. In 2011, the forecast shows spending growth up by 47.4 percent to 800.2 billion yen. The sales in 2011 will increase slightly and reach a little more than 2008 sales, but it will be at a level of just 40 percent of the 2007 peak period.

[Forecast of Japanese Market Billings for Semiconductor Manufacturing Equipment]

In 2008, sales declined by 47.9 percent to 556.7 billion yen compared to the previous fiscal year. In 2009, sales will sharply decrease by 50.5 percent to 275.6 billion yen, showing negative growth in two consecutive years. In 2010, sales are forecast to increase by 15.8 percent to 319.1 billion yen because of returning to positive growth in the semiconductor market. In 2011, the forecast shows an increase by 35.0 percent to 430.8 billion yen. The 2011 market size will be about 80 percent to 559.5 billion yen of the 2008 market size.

[Forecast of Japanese Equipment billings for FPD Manufacturing Equipment]

In 2008, FPD equipment sales increased significantly by 33.8 percent to 503.1 billion yen. In 2009 forecast, sale will be down by 50.3 percent to 250 billion yen because of the economic recession. In 2010, sale will increase by 20 percent to 300 billion yen inline with the economic recovery. In 2011, sales are estimated to increase dramatically by 50.0 percent to 450 billion yen due to the start of investments for new lines in Korea, China and Taiwan.

[Forecast of Japanese Market billings for FPD Manufacturing Equipment]

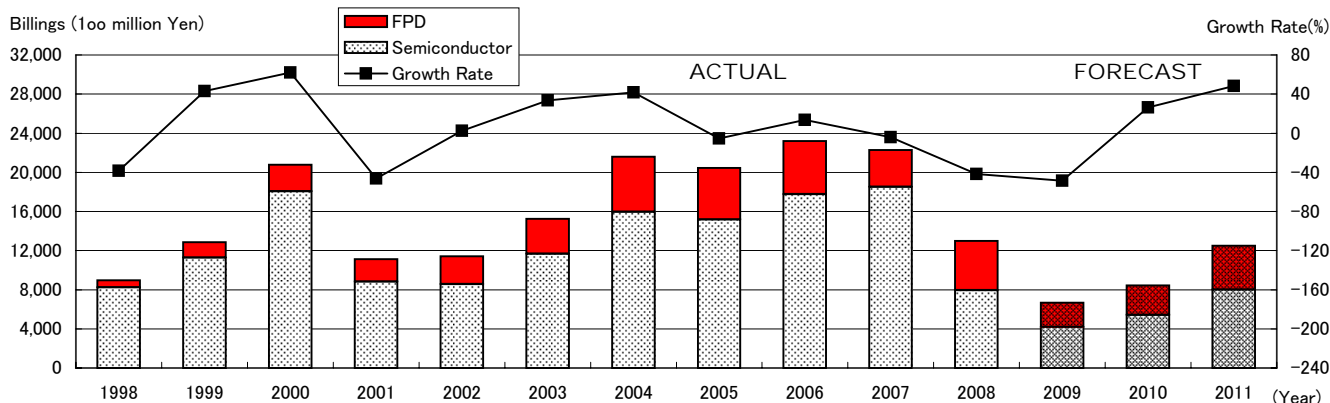
In the Japanese market, FPD equipment sales continued to experience stable investment prior to the global economic recession. In 2008, sales declined remarkably by 39.7 percent to 86.7 billion yen compared to the previous fiscal year. In 2009, sales will slowly increase by 13.1 percent to 98 billion yen with returning positive growth in the backlog of orders. In 2010, the forecast shows an increase of 22.4 percent to 120 billion yen because of the market recovery. In 2011, sales will be down by 16.7 percent to 100 billion yen related to the negative growth due to investment shifts from Japan to overseas.

July 2009 Demand Forecast for Semiconductor and FPD Manufacturing Equipment

1. Forecast for Semiconductor and FPD Manufacturing Equipment

<<Forecast for Japanese Equipment Billing>>

* "Japanese Equipment Billing" = Japanese manufacturers Domestic and Oversea Billing.

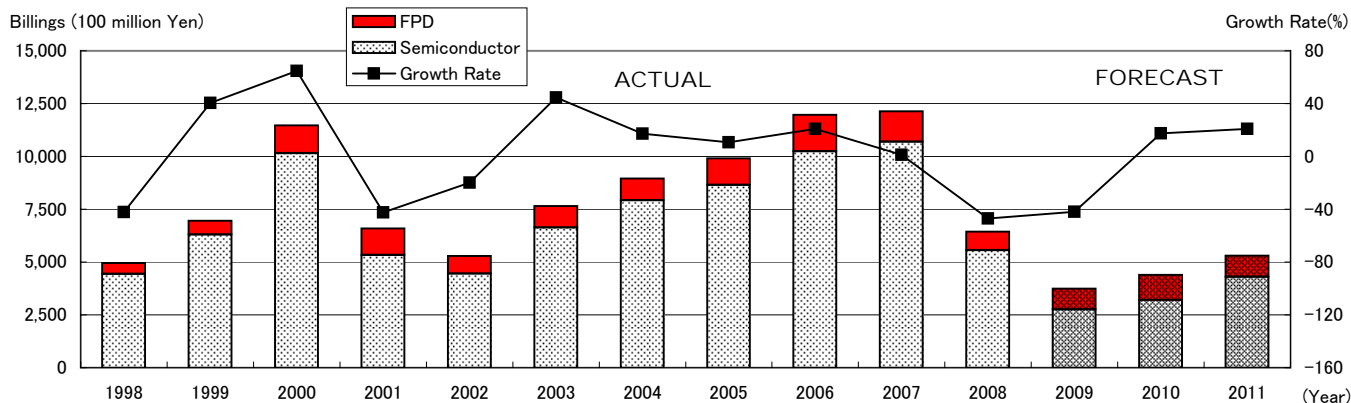


(CAGR: 2008 to 2011)

	ACTUAL											FORECAST				
fiscal Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	CAGR	
Semiconductor	8,233	11,302	18,045	8,834	8,575	11,671	15,981	15,169	17,778	18,510	7,954	4,176	5,428	8,002	-1.3%	
FPD	742	1,541	2,746	2,306	2,847	3,575	5,614	5,272	5,429	3,761	5,031	2,500	3,000	4,500		
Total (100 million yen)	8,975	12,843	20,791	11,140	11,422	15,246	21,596	20,441	23,206	22,271	12,985	6,676	8,428	12,502		
Growth Rate (%)	-38.5	43.1	61.9	-46.4	2.5	33.5	41.6	-5.3	13.5	-4.0	-41.7	-48.6	26.3	48.3		

<<Forecast for Japanese Market Billing>>

* "Japanese Market Billing" = Domestic Billing of Japanese and Foreign manufacturers.



(CAGR: 2008 to 2011)

	ACTUAL											FORECAST				
fiscal Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	CAGR	
Semiconductor	4,445	6,306	10,153	5,338	4,452	6,634	7,918	8,658	10,241	10,694	5,567	2,756	3,191	4,308	-6.2%	
FPD	503	652	1,309	1,260	833	1,010	1,042	1,253	1,732	1,437	867	980	1,200	1,000		
Total (100 million yen)	4,949	6,958	11,462	6,598	5,285	7,645	8,960	9,910	11,973	12,131	6,433	3,736	4,391	5,308		
Growth Rate (%)	-42.3	40.6	64.7	-42.4	-19.9	44.7	17.2	10.6	20.8	1.3	-47.0	-41.9	17.5	20.9		

* Publication, duplication or assistance of such activities of this report without permission by SEAJ is prohibited.

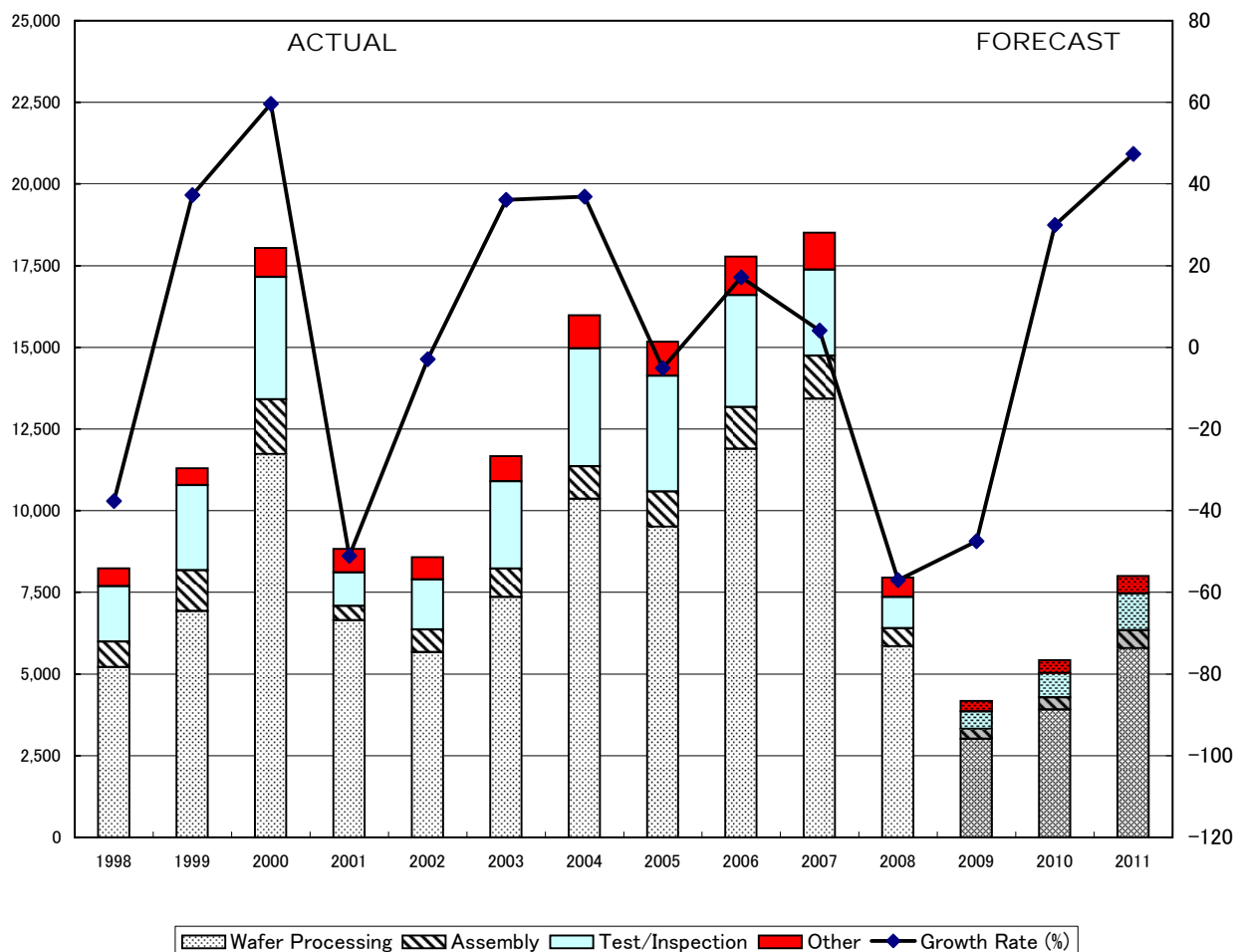
July 2009 Demand Forecast for Semiconductor Manufacturing Equipment

■ 2. Semiconductor Manufacturing Equipment [Forecast for Japanese Equipment Billing]

* "Japanese Equipment Billing" = Japanese manufacturers Domestic and Oversea Billing.

Billings(100 million Yen)

Growth Rate(%)



(CAGR: 2008 to 2011)

fiscal Year	ACTUAL											FORECAST				CAGR
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		
Wafer Processing	5,215	6,926	11,727	6,649	5,667	7,362	10,358	9,505	11,896	13,429	5,843	3,019	3,908	5,785		
Assembly	780	1,250	1,677	432	698	863	1,004	1,079	1,280	1,311	557	296	380	560		
Test/Inspection	1,692	2,609	3,750	1,033	1,533	2,675	3,610	3,542	3,424	2,636	958	543	733	1,120		
Other	547	517	891	721	677	772	1,009	1,043	1,178	1,135	596	317	407	536		
Total (100 million yen)	8,233	11,302	18,045	8,834	8,575	11,671	15,981	15,169	17,778	18,510	7,954	4,176	5,428	8,002		
Growth Rate (%)	-37.6	37.3	59.7	-51.0	-2.9	36.1	36.9	-5.1	17.2	4.1	-57.0	-47.5	30.0	47.4	0.2%	

* Publication, duplication or assistance of such activities of this report without permission by SEAJ is prohibited.

* Semiconductor Design, Mask/Reticle Mfg., Wafer Mfg. and Related Equipment are summarized into Other .

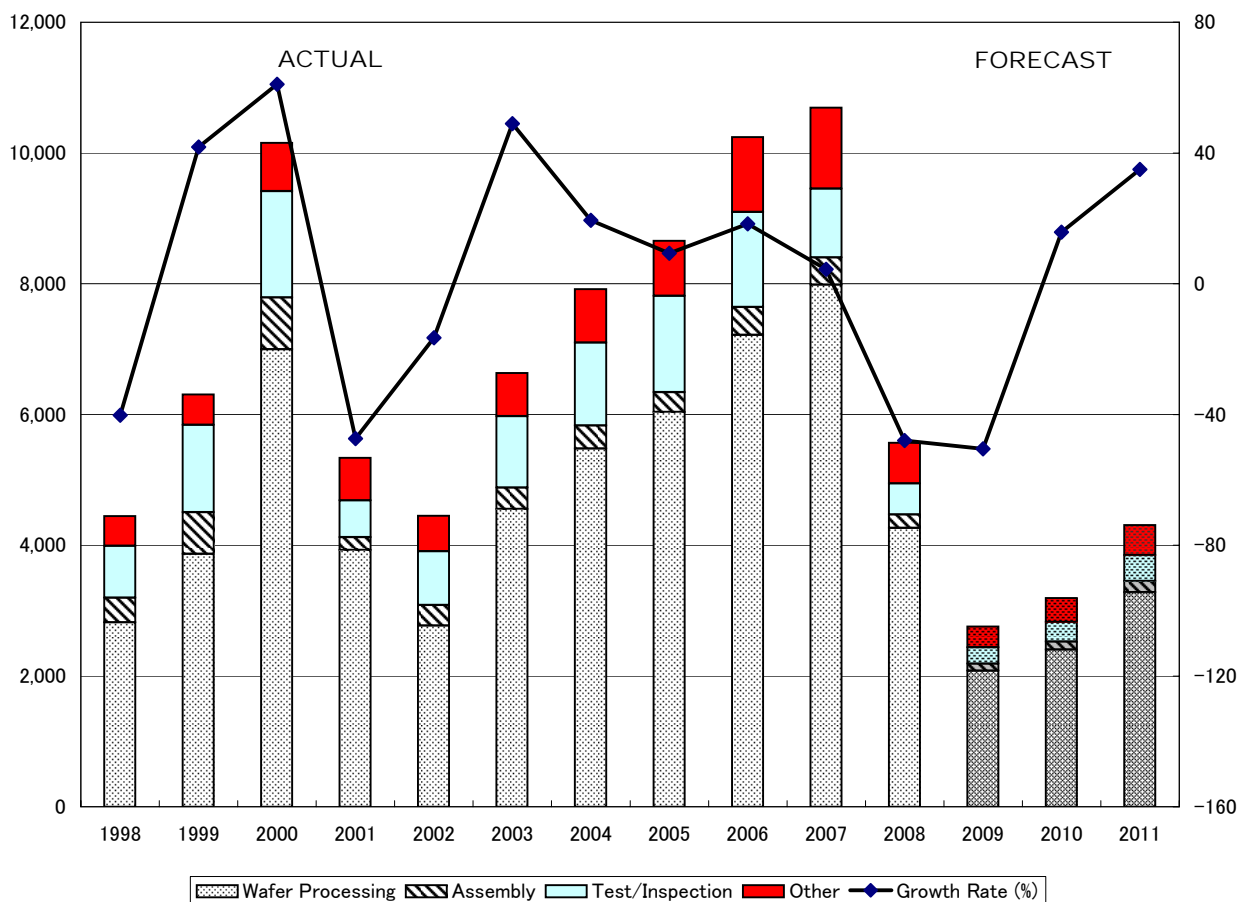
July 2009 Demand Forecast for Semiconductor Manufacturing Equipment

■ 3. Semiconductor Manufacturing Equipment [Forecast for Japanese Market Billing]

* "Japanese Market Billing" = Domestic Billing of Japanese and Foreign manufacturers.

Billings(100 million Yen)

Growth Rate(%)



(CAGR: 2008 to 2011)

fiscal Year	ACTUAL												FORECAST				CAGR
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011			
Wafer Processing	2,822	3,869	6,994	3,926	2,772	4,551	5,478	6,036	7,215	7,984	4,264	2,080	2,403	3,282			
Assembly	374	635	794	197	312	330	353	304	429	417	205	110	124	168			
Test/Inspection	796	1,339	1,625	564	825	1,094	1,270	1,476	1,451	1,052	475	248	300	396			
Other	453	464	739	651	543	659	817	842	1,146	1,240	623	317	364	461			
Total (100 million yen)	4,445	6,306	10,153	5,338	4,452	6,634	7,918	8,658	10,241	10,694	5,567	2,756	3,191	4,308			
Growth Rate (%)	-40.3	41.9	61.0	-47.4	-16.6	49.0	19.4	9.3	18.3	4.4	-47.9	-50.5	15.8	35.0	-8.2%		

* Publication, duplication or assistance of such activities of this report without permission by SEAJ is prohibited.

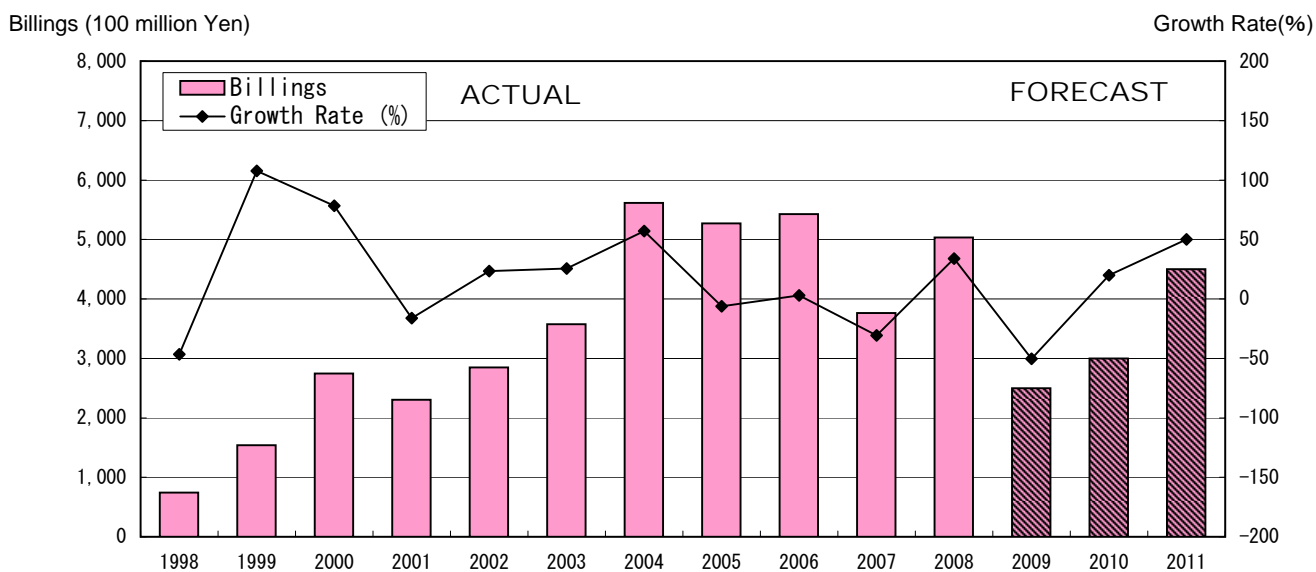
* Semiconductor Design, Mask/Reticle Mfg., Wafer Mfg. and Related Equipment are summarized into Other .

July 2009 Demand Forecast for FPD Manufacturing Equipment

■ 4. Forecast for FPD Manufacturing Equipment

<<Forecast for Japanese Equipment Billing>>

* "Japanese Equipment Billing" = Japanese manufacturers Domestic and Oversea Billing.

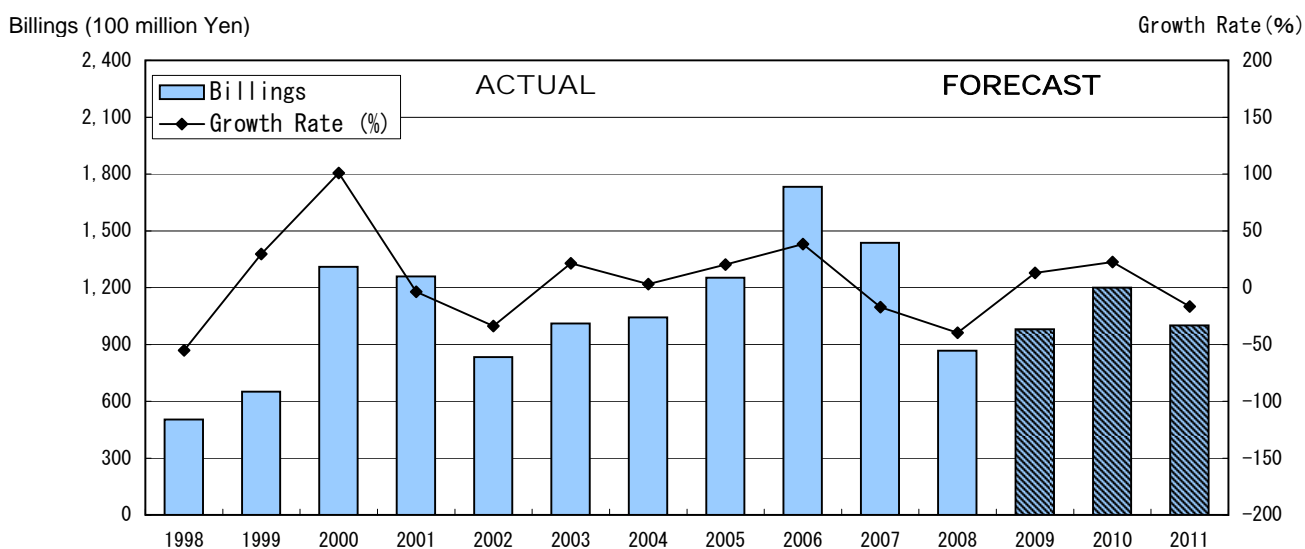


(CAGR: 2008 to 2011)

	ACTUAL											FORECAST			
fiscal Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	CAGR
Total	742	1,541	2,746	2,306	2,847	3,575	5,614	5,272	5,429	3,761	5,031	2,500	3,000	4,500	
Growth Rate (%)	-46.5	107.6	78.2	-16.0	23.5	25.6	57.1	-6.1	3.0	-30.7	33.8	-50.3	20.0	50.0	-3.7%

<<Forecast for Japanese Market Billing>>

* "Japanese Market Billing" = Domestic Billing of Japanese and Foreign manufacturers.



(CAGR: 2008 to 2011)

	ACTUAL											FORECAST			
fiscal Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	CAGR
Total	503	652	1,309	1,260	833	1,010	1,042	1,253	1,732	1,437	867	980	1,200	1,000	
Growth Rate (%)	-55.3	29.4	101.0	-3.8	-33.9	21.4	3.2	20.2	38.3	-17.1	-39.7	13.1	22.4	-16.7	4.9%

* Publication, duplication or assistance of such activities of this report without permission by SEAJ is prohibited.