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Sayın Yetkili,

Tayvan Ekonomi Bakanlığı Sınai Kalkınma ve Yatırım Merkezi tarafından her ay düzenli olarak yayınlanan "Taiwan Investment Panorama" isimli yayının Mart 2005 sayısı ilişikte ilginize sunulmuştur.

Saygılarımızla,



Chii-min HUANG
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Taiwan Investment Panorama

Industrial Development & Investment Center

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Machine-Tool Industry Works Magic With Outstanding Performance in 2004

Taiwan's machine-tool industry reaped outstanding results in 2004. Exports of domestically made machine tools amounted to US\$2.249 billion last year, up 34% from a year earlier, according to statistics released by the Taiwan Machine Tool Foundation (TMTF).

Of this, metal-cutting machine tools saw exports reach US\$1.674 billion, up 37% from 2003, and metal-forming machine tools came to US\$575 million, representing a year-on-year increase of 27%. In terms of specific product items, machining centers and lathes grew the most, each with a 43% annual growth rate.

In terms of the largest export outlets of the products, Hong Kong and mainland China together ranked first by absorbing US\$1.023 billion worth of domestically made machine tools last year, up 26% and accounting for 45.5% of total exports. The U.S. was in second place with US\$195 million, jumping 58% and commanding 8.7% of the total. Turkey ranked third with US\$126 million, up 59% and accounting for 5.7%.

TMTF's statistics also show Taiwan imported US\$1.978 billion worth of machine tools last year, shooting up a whopping 130% from the previous year. The foundation credits the huge growth in imports to the booming demand for foreign-made sophisticated machine tools by such hi-tech industries as optoelectronics and semiconductors and such conventional sectors as automobiles and metal products.

Imports of metal-cutting and metal-forming machine tools amounted to US\$1.87 billion and US\$181 million last year, up 142% and 26% year-on-year, respectively. Of the top import

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A note to our readers: Beginning Jan. 2005, the "Taiwan Industrial Panorama" is renamed the "Taiwan Investment Panorama" to better reflect the focus of its contents.

items, non-conventional machine tools, machining centers, and lathes grew 183%, 79%, and 61%, respectively.

Japan was the largest source of these imports, selling US\$1.043 billion worth of machine tools to Taiwan last year, up 97% and accounting for 52.8% of the total. Second place went to the U.S. with US\$680 million, representing an annual growth of 256% and commanding 34.4%. Germany was the third largest import source with US\$82.24 million, up 71% and accounting for 4.3% of the total.

A veteran domestic manufacturer anticipates that the global demand for machine tools will continue to rise in the first quarter of this year, and that domestic manufacturers will likely see a substantial growth in orders from the domestic market, mainland China, Southeast Asia, the U.S., and East European nations.

Some large manufacturers in the line boast they are putting their noses to the grindstone to cope with the influx of orders. At the end of January, most of the large-sized manufacturers, including Awea Mechanronic Corp., Victor Taichung Machinery Works Co., Goodway Machine Co., Chin Fong Machine Industrial Co., and Kao Fong Machinery Co., said they have received enough orders to keep production lines running till the end of June.

However, domestic manufacturers are encountering a decline in shipments to mainland China, which has cut imports since April last year when a government-imposed macroeconomic-control policy was implemented. Other disadvantages facing domestic manufacturers include continuing price increases for such raw materials as steel and cast iron, as well as an insufficient supply of key components and parts.

In the face of such disadvantageous operating factors, TMTF's Wang calls on domestic manufacturers to speed up their development of sophisticated products and elevate the added value of their products so that they can smoothly expand market share in emerging markets.

Exports of Taiwan-Made Machine Tools by Product in 2004

Unit: US\$1,000

Products	2003	2004	Change
EDMs	89,438	124,465	39%
Machining Centers	429,850	614,642	43%
Lathes	279,540	399,371	43%
Drilling, Boring, Milling Machines	224,993	288,376	28%
Grinding Machines	103,142	137,507	33%
Shaping, Sawing, Gearing Machines	98,537	110,374	12%
Presses & Shearing Machines	340,860	461,604	35%
Other Metal-Forming Machines	112,254	113,736	1%
Total	1,678,614	2,249,475	34%

Source: Directorate General of Customs, Ministry of Finance

(Excerpted from the Taiwan Economic News on Feb. 14, 2005)

Taiwan tire makers expand radial production

Eyeing the huge mainland China market, all of the top five rubber-tire makers in Taiwan are actively expanding their capacity for passenger car radial (PCR) tires.

The five are Nankang Rubber Tire Corp., Federal Corp., Cheng Shin Rubber Ind. Co. Ltd., Kenda Rubber Ind. Co., Ltd., and Hwa Fong Rubber Ind. Co., Ltd.

Cheng Shin was the first Taiwan tire maker to enter the mainland China market, and now has the largest capacity and most comprehensive product line there. The company now produces bicycle, powered two-wheeler (PTW), agricultural/industrial vehicle, PCR tires, and truck and bus radial (TBR) tires in China.

Industry sources said that Nankang and Federal originally focused on producing small-sized tires, including those for bicycles and PTWs, in their early years but later on expanded into passenger-car tires in line with the government's policy of developing automobile-related industries in Taiwan.

Compared with the two producers in northern Taiwan, central-Taiwan tire makers, including Cheng Shin, Kenda and Hwa Fong, are luckier because their businesses have been supported by the island's strong bicycle and PTW exports. Most local small-tire makers have set up overseas production facilities simultaneously with local

bicycle and motorcycle makers.

Cheng Shin has been expanding overseas and upgrading its product level to PCR models. This newcomer to the PCR tire business has surpassed Nankang and Federal to become the No. 1 PCR tire maker in Taiwan.

Nankang and Federal have overcome operating difficulties in the past years and are striving to upgrade their product quality and develop high-level flat tires for sport/racing cars.

Kenda's chairman and president, Yang Yin-ming, said that the competition in the small-tire sector has been intense, forcing makers to step up development and production of PCR, recreational vehicle (RV), and flat (for sport cars) tire products. Yang pointed out that Taiwan's tire makers are internationally famous for their high flexibility and are expected to show their strength in the PCR tire sector in the near future.

In China, Yang pointed out, an estimated 180 million tires of various kinds will to be produced in 2005. The annual volume is expected to grow to 258 million units in 2010, when annual automobile production volume there is expected to reach 10 million units. With the advantage of having a similar linguistic and cultural background, Yang said, Taiwan tire makers' operations in China will provide most of their momentums for future growth.

Daily PCR-tire Capacities of Taiwan Tire Makers

	Nankang	Federal	Cheng Shin	Kenda	Hwa Fong
Taiwan Plant	18,000	10,000	15,000	--	--
China Plant	5,000 (25,000)*	6,000	35,000	10,000 (20,000)	(20,000)
Other Plant	--	--	6,000 (20,000)	(8,000)	--
Total	23,000 (43,000)	16,000	56,000 (70,000)	10,000 (28,000)	(20,000)
Margin**	30.54%	26.72%	21.09%	19.22%	15.84%

* Figures in brackets are targeted capacity.

** Average of the first three quarters of 2004.

[Excerpted from the Taiwan Economic News on Feb. 2, 2005]

Acer introduces digital cameras to Taiwan market

Acer Inc., the No. 1 computer brand in Taiwan and No. 5 worldwide, recently introduced its first digital-camera models, the CR-6530C and CS-5330C, to the domestic market in cooperation with local distributors Shihlin Electric & Engineering Corp. and Onking Chainstore Co., Ltd.

Industry sources said that Acer's move is expected to reshuffle rankings in the local digital-camera market and lead to head-on competition with major local brands such as BenQ and Premier.

Acer's digital cameras are already on the market in some European nations and mainland China. In Taiwan, the company plans to launch four or five camera models in the first half of this year.

Currently, all of Acer's digital-camera models are supplied by Premier Image Technology Corp. However, Acer does not exclude the possibility of seeking another contract supplier after its sales volume increases.

According to Acer, the annual domestic sales volume of digital cameras is about one million units, 80% of which are supplied by major Japanese brands such as Sony, Canon, Olympus, Fuji Film, Nikon, and Casio.

With an established brand reputation in the information and electronic markets, Acer is confident of becoming a leading local brand for digital cameras in a short period. Its CR-6530C (with six-million pixels) retails at NT\$13,900 (US\$436), and its CS-5539C (five-million pixels) goes for NT\$12,900 (US\$405); both are equipped with a 2.5-inch LCD screen.

Industry sources said that Acer will have to rely heavily on its distribution partners to promote its digital-camera sales, as it is still a newcomer to the consumer-electronics market.

(Excerpted from the Taiwan Economic News on Feb. 15, 2005)

CCIP actively promoting Taiwan's first glass processing zone

The Changhua Coastal Industrial Park (CCIP), in central Taiwan is actively promoting its newly established special zone for glass processing, which is the first of its kind in Taiwan.

Some 12 manufacturers of glass and related products have already moved into the new special zone, including such leading glass makers as Fu-Hwa Glass Work, Taiwan Mirror Glass Enterprise Ltd. (TMG), and Taiwan Glass Industry Corp. Investment capital pumped into the zone so far totals NT\$5 billion (US\$147.1 million at US\$1 = NT\$34).

Taiwan Glass's plant in the CCIP produces mainly glass fiber cloth. The company has recently allocated NT\$2 billion (US\$58.8 million) to build a kiln in the zone to turn out sheet glass. The kiln is slated to go into operation in May of 2006, with a daily production capacity of 720 metric tons of sheet glass.

In addition to its existing plant in the park, TMG has rented a 5.7-hectare plot in the special zone set up a museum to display glass products. Total investment in the museum, which is scheduled to open at the end of this year, is estimated at around NT\$150 million (US\$4.4 million).

Fu-Hwa, a leading Taiwanese auto mirror maker, recently purchased a 1.83-hectare lot in the park for its projected new plant.

Chiu Ching-chih, director of the CCIP Service Center, disclosed that the Industrial Development Bureau (IDB) under the Ministry of Economic Affairs has agreed to subsidize CCIP with NT\$12 million (US\$352,941) for the pavement of sidewalks inside the special zone. In addition, the Union Chemical Laboratories (UCL) of the Industrial Technology Research Institute (ITRI) has received a budget of NT\$15 million (US\$441,177) from the government for upgrading glass manufacturing

technology, which can be transferred to manufacturers in the glass special zone.

There are some 2,400 glass processing firms in Taiwan, and more than 500 of them are located in central Taiwan, particularly in Changhua County, Taichung City, and Taichung County. Two glass furnaces operate in the Taichung Harbor processing zone, the two have a daily output of 1,100 metric tons of glass sheets, making this what is believed the world's most intensive manufacturing area for glass sheets.

(Excerpted from the Taiwan Economic News on Feb. 16, 2005)

UMC buys into auto-electronics biz by acquiring Becom Electronic

Silicon-foundry giant United Microelectronics Corp. (UMC) has acquired a 50% stake in Becom Electronic Inc. as part of its plan to develop the lucrative automobile-electronics business, which is projected to be worth US\$130 billion worldwide in 2007.

UMC vice chairman John Hsuan will likely be named Becom's chairman next month after a Becom shareholder conference. UMC acquired the dominant stake in the auto-electronics company through a recent issuance of NT\$300 million (US\$9.3 million at US\$1:NT\$32) Becom shares.

In addition to UMC, Action

Electronics Co., Ltd., Parawin Venture Capital Corp., and First Commercial Bank bought some of the Becom shares. The acquisition of Becom follows UMC purchase at US\$12 million worth of Action's overseas convertible bonds last year.

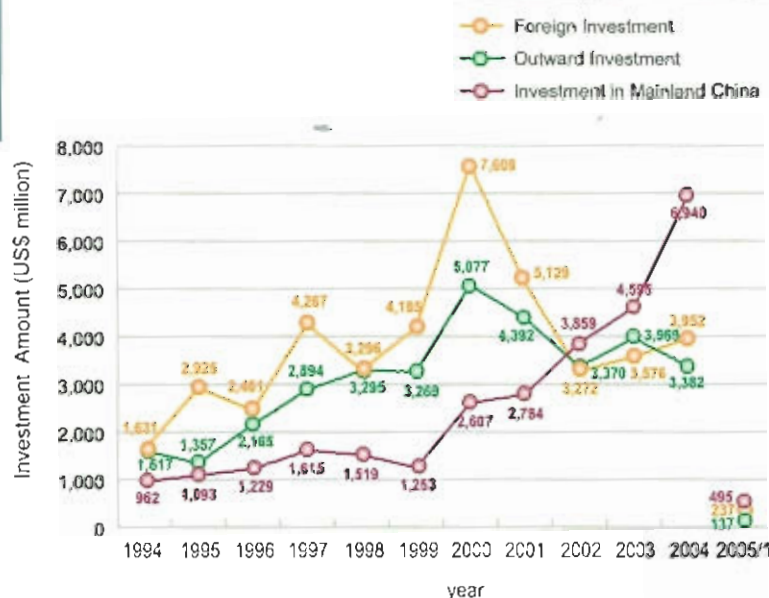
Founded in 1993, Becom has shifted its production emphasis to auto audio and video systems, from the original notebook computers and palm-sized computing devices. The company turned profitable last year.

Taiwan industry watchers pointed out that Becom with guidance from UMC, will move to achieve compliance with leading carmakers and tap orders from Ford, Mazda, GM (China), Kia, and Hyundai. They added that it is not easy for electronics manufacturers to cross into the automobile industry, because the barrier to entry is quite high due to the industry's long and complicated product verifications requirements.

UMC is not the only Taiwanese electronics manufacturer to diversify into the automobile industry. Hon Hai Precision Industry, the island's largest manufacturing conglomerate by sales revenue, has acquired 100% of Antec Electric System Co., Ltd., which specializes in auto electric products such as wire harnesses, battery cables, and high-tension cords.

(Excerpted from the Taiwan Economic News on Feb. 21, 2005)

STATISTICS NEWS



Unit: US\$ 1,000

Item	Year	Cases	Amount
Foreign Investment	1952-2005/1	17,164	60,632,275
Outward Investment	1952-2005/1	10,576	42,305,376
Mainland Investment	1991-2005/1	33,247	41,744,446

Source: Investment Commission, MDEA

Aegon to increase investment in Taiwan

Aegon Life Insurance (Taiwan) Inc., a subsidiary of the Holland-based Aegon Group, will increase its investment in Taiwan by NT\$3 billion (US\$96.46 million at US\$1:NT\$31.1) by the end of this year.

The announcement of the increase was released by James Liu, general manager of Aegon Taiwan. Since setting up its Taiwan unit in 1992, the Aegon Group has made a cumulative investment of NT\$5 billion (US\$160.77 million) in the island.

With mergers and acquisitions as a consistent corporate strategy, Aegon will continually seek appropriate banks and insurance brokerage houses to expand its marketing channels. In its investment in domestic banks, Aegon will follow the model of the PCA Group's acquisition of a stake in E. Sun Bank.

Aegon has accumulated rich experience in acquiring foreign insurance companies in Taiwan, including the Taiwan branches of the U.S.-based American Family Life Assurance Co. and TransAmerican Occidental Life insurance Co., and the Australia-based AXA Assurance Group.

Liu said his company targets merger partners that can provide distribution channels and help expand its client base.

With six subsidiaries worldwide, the Aegon Group saw its premium revenues reach 500 million euros in 2004. Last year, the group formed a joint-venture insurer in Spain with CAM Bank, which boasts five million clients.

After acquiring a 5% stake in E. Sun Bank last year, the Britain-based PCA Group secured close business links with the bank for the distributing of insurance policies. E. Sun has become PCA's largest distributor in the domestic banking sector.

Following the success of cooperation between the PCA Group and E. Sun Bank, Liu noted his parent company's group would invest in domestic financial institutions to expand distribution channels through non-insurance units so as to meet strict domestic regulations that prohibit insurers from making direct

investments in banking concerns.

Aegon Taiwan has set a goal of a 15% to 20% annual growth in premium revenue in the next few years. The company estimated its premium revenue would grow to NT\$15 billion (US\$482.31 million) this year, from last year's NT\$8.4 billion (US\$270.09 million).

The fourth-largest foreign insurer in Taiwan in terms of premium revenue last year, Aegon Taiwan will challenge the No. 3 position this year by enhancing sales through the banking sector and penetrating the retirement market. To that end, the company has set aside NT\$100 million (US\$3.21 million) for advertising this year to help enhance its corporate image and boost sales.

(Excerpted from the Taiwan Economic News on March 4, 2005)

China Steel to spend NT\$25 B. to trim emission of carbon dioxide

As the Kyoto Protocol was put into effect on Feb. 16, the China Steel Corp. (CSC), Taiwan's largest steelmaker, has decided to invest over NT\$25 billion (US\$793.65 million at US\$1:NT\$31.5) in environmental-protection and energy-saving operations.

Over the past few years the CSC has cut its emission of carbon dioxide by 432,000 metric tons per year. The company will continue to trim emissions of the air-polluting substance by annual 330,000 metric tons within the next five years.

The CSC said that Taiwan is not obliged to cut greenhouse gases, because it's not a member of the United Nations nor a signatory to the Kyoto Protocol. But with such emerging industrialized nations as South Korea and Singapore being obliged to abide by the protocol, Taiwan has to share the responsibility of reducing greenhouse gases which adversely affect the global climate.

Over the past several years, the CSC has worked hard to boost energy efficiency and promote energy

conservation in line with the resolution of the 1999 National Energy Conference.

For instance, the company invested NT\$5 billion (US\$158.73 million) in energy-saving and greenhouse gas-reduction measures last year. At present, the CSC has cut its emission of carbon dioxide to 2.18 metric tons per metric ton of crude steel produced, which meets the standard adopted by international-class steel firms.

(Excerpted from the Taiwan Economic News on Feb. 21, 2005)

Sumitomo to set up 2.5G in-house color-filter line at PVI's TFT-LCD panel plant

Taiwan Prime View International Co. Ltd. (PVI), a maker of small- and medium-sized thin film transistor-liquid crystal display (TFT-LCD) panels, has signed an agreement with the Sumitomo Group of Japan for the joint establishment of an in-house 2.5th-generation color-filter line at PVI's panel facility in the Hsinchu Science Park.

By controlling the supply of color filters, a key component for TFT-LCD panels, PVI claims, its shipment volume can grow by 30% this year.

PVI says that the new color-filter line will be the world's first in-house 2.5th-generation color filter line, and that Sumitomo's subsidiary in Taiwan will invest about NT\$1.5 billion (US\$47.92 million at US\$1: NT\$31.3) in it. The new color-filter line is scheduled to begin mass production in the fourth quarter of this year, with a monthly capacity of 50,000 color filters.

PVI vice chairman Liu Szu-cheng said that PVI was the largest customer of Sumitomo's color-filter products for a long time, but that it dropped to second place after the Japanese company went into cooperation with Samsung of South Korea to set up a fifth-generation color filter plant.

According to Liu, Sumitomo decided to invest in the in-house color filter line because PVI's parent, the YFY Group, has maintained long-term cooperation with Sumitomo and because PVI has a strong development potential.

Under the cooperation project, reported Liu, technology and equipment will be provided by

Sumitomo, land preparation and plant building will be handled by PVI, and capital will be contributed by Sumitomo's Taiwanese subsidiary.

Liu pointed out that PVI has to wait about three months to receive color filters ordered from Sumitomo. The new color-filter line is expected to cut the delivery period in half and reduce overall costs by 15%.

(Excerpted from the Taiwan Economic News on March 3, 2005)

Leading Taiwanese nylon makers expand output

The Zig Sheng Industrial Co. and Li Peng Enterprise Co., two leading manufacturers of nylon products in Taiwan, are actively expanding their operations to meet growing demand.

Last year Zig Sheng spent NT\$1.8 billion (US\$52.94 million) to expand its nylon fiber plant, which will generate 5,000 metric tons of nylon fiber per month upon completion by the end of this year. Li Peng recently installed second and third production lines for nylon products.

In addition, Li Peng is planning to invest NT\$750 million (US\$22.1 million) by the end of the year to set up a third nylon plant with an initial daily output of 300 metric tons. The capacity will be sharply expanded to 2,000 metric tons in the medium term, as the company will make the projected plant the largest of its kind in the world.

In the past two months both Zig Sheng and Li Peng enjoyed an unexpected growth in orders from downstream cloth makers. This is why the two nylon manufacturers have decided to expand their operations.

Kuo Shao-yi, chairman of Li Peng, noted that originally his firm's sole nylon fiber production line turned out only 200 metric tons per day, but last year three more production lines were installed, each with a daily output of 100 metric tons. The first new line became operational in mid-January and the second at the end of February. The third line is scheduled to begin operating in May.

With the three additional production lines, Li Peng is expected to see revenues for this year soar to NT\$15 billion (US\$441.18 million) up from last year's NT\$10 billion (US\$294.12 million). In

another expansion, the company will spend NT\$750 million (US\$22.1 million) to set up the world's largest nylon plant with a daily output of 2,000 metric tons.

(Excerpted from the Taiwan Economic News on Feb. 14, 2005)

Lite-On IT builds optical-disc drive R&D center in Hsinchu

The Lite-On IT Corp., Taiwan's largest optical-disc drive maker, recently kicked off construction of a new R&D center in Hsinchu, northern Taiwan. The facility is scheduled to become operational in June 2006.

Lite-On plans to spend NT\$1 billion (US\$31.65 million at US\$1: NT\$31.6) to build the center, which will employ 1,000 R&D personnel.

Lite-On chairman Raymond Soong said that the center would initially concentrate on the development of blue-ray digital versatile disc (DVD) drives. Construction, equipment installation, and pilot production will be completed in 16 months.

Currently, Lite-On employs 320 R&D personnel around the island, but has yet to set up its R&D headquarters here. The new center will integrate the firm's all R&D resources.

Industry sources said that developing blue-ray DVD drives requires a large R&D staff due to the higher technology threshold involved. Industry sources said that Lite-On's major local rival, Quanta Storage Inc., now has a 200-member R&D team. Another competitor, BenQ Corp., enjoys support from its partner, Philips of the Netherlands, in its disc-drive development.

(Excerpted from the Taiwan Economic News on Feb. 24, 2005)

Agilent Technologies mulls R&D center in Taiwan

Agilent Technologies Inc. of the U.S. is considering setting up an R&D center in Taiwan, following earlier ones in Shanghai and India.

Agilent currently focuses on delivering innovative technologies, solutions, and services to a wide range of customers in communications, electronics, life sciences, and chemical analysis.

The company has long expressed its willingness to expand its investment in Taiwan, but has been stalled by strict regulations concerning the hiring of foreign technology experts. Jack P. Trautman, president of the company's automated test group, was expected to come to Taiwan on March 1 to call on Economics Minister Ho Mei-yueh to seek a relaxation in the regulations.

To expand its deployment in the Asia-Pacific region, Agilent recently established a subsidiary in Shanghai and designated W.Y. Chan, former president of Agilent Taiwan, as CEO. Y.L. Shen takes over the position vacated by Chan.

Shen said Agilent expressed its willingness to expand investment in Taiwan three years ago to cash in on the booming development of the personal-computer industry. Strict regulations stymied that project.

Shen noted that his company still hopes to step up investment in Taiwan as the semiconductor manufacturing sector here has an advantage over other nations. Agilent has set up R&D centers in Shanghai and India to focus on semiconductor testing services, Shen said, and would like to establish the same kind of Taiwan to offer prompt testing services to domestic semiconductor firms.

In its deployment in the greater China market, Agilent concentrates on technical R&D, production, and sales in the communications and semiconductor sectors. Outside of Taiwan, the company has also extended operations to the major mainland Chinese cities of Beijing, Shanghai, Guangzhou, Shenzhen, Chengdu, Xi'an, and Shenyang.

(Excerpted from the Taiwan Economic News on Feb. 25, 2005)

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