COMPANY RESEARCH AND ANALYSIS REPORT

SAKATA INX CORPORATION

4633

Tokyo Stock Exchange First Section

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Summary

Earnings are expected to expand in the medium term due to global business deployment and sales promotion of environmentally friendly and high-function products

SAKATA INX CORPORATION <4633> (hereinafter also "the Company") is a major printing ink manufacturer - the third largest in the world. Since its founding in 1896, the Company has accumulated a versatile set of strengths for over 120 years, including its development capabilities for products that are environmentally friendly and high-function with high added value, an extensive lineup of those products, high market shares, and quality manufactured products that are considered reliable and of good quality. Moreover, it is applying and developing core technologies it has cultivated in the development and production of ink for its digital & specialty products business. We can expect earnings to expand in the medium term as it accelerates its global business deployment and increases sales of environmentally friendly and high-function, high-value-added products.

1. Global business deployment with printing ink business as the core business

The Company is deploying its businesses globally. In the printing ink business, which is the core business, it manufactures and sells ink for paper media (newspaper ink and offset ink) and packaging ink (flexo ink, gravure ink, and metal-deco ink). In the graphic arts materials business, it procures and sells plate making materials and related equipment. In the digital & specialty products business, it manufactures and sells products including inkjet ink, toner, pigment dispersions for color filters, and functional coating materials, etc. The Company also conducts other businesses (chemicals, display and color management businesses in the Japanese market), and is increasing sales of environmentally friendly and high-function, high-value-added products, with Asia and North America, where there remains considerable room for market expansion and development, serving as the primary sources of revenue.

2. In FY2018/12 2Q accumulated, volume increased but profits decreased due to the rise in raw material prices

In the FY2018/12 2Q accumulated (January to June) consolidated results announced on August 10, 2018, net sales increased 2.2% year on year (YoY) to ¥78,938mn, operating income decreased 41.2% to ¥2,680mn, ordinary income declined ¥40.2% to ¥3,540mn, and profit attributable to owners of parent fell 43.6% to ¥2,609mn. From the progress made in the strategic sales expansion, ink sales volume steadily increased in the printing ink business, and sales also grew strongly in the digital & specialty products business. However, due to the effects of the exchange rates and the prices of raw materials rose sharply more than anticipated, both sales and profits were below the forecasts. Although net sales increased, profits decreased significantly. However, after excluding the effect of exchange rates, net sales were basically at the forecast level.

3. Although profits will decline, FY2018/12 full year forecasts has been left unchanged because the effects of price revisions are expected in the second half

For the FY2018/12 full year consolidated forecasts, the Company has left its initial forecasts unchanged - net sales to increase 4.6% compared to FY2017/12 to ¥164,500mn, operating income to decrease 12.5% to ¥7,500mn, ordinary income to decline 15.6% to ¥9,500mn, and profit attributable to owners of parent to fall 21.3% to ¥6,600mn. Profits are forecasted to decline due to the rise in raw material prices, but sales volume is expected to steadily rise and net sales to increase. The rates of progress in 2Q accumulated toward the full fiscal year profit forecasts were at low levels. However, at the time the initial forecasts were formulated, the results were weighted on the second half, as the Company expected sales volume to increase in the second half from the progress made in expanding sales, increase in operating ratio and the effects of revision in sales prices. The Company is aiming to achieve the initial forecasts with the expected effects of the sales price revisions in the second half, and reduction in costs by using alternative materials, cost cutting and improvement in productivity.

4. The markets for environmentally friendly and high-function products are expanding, and there remains considerable room for further product development

The domestic printing ink market has a strong image of being mature due to decline in paper media such as newspapers and magazines. However, the newspaper ink market constitutes only about 10% of the total domestic printing ink market, meaning its impact is small. The packaging printing ink market that includes products such as gravure ink, which constitutes around 40% of the market, and also flexo ink, etc. is expanding. Against the backdrop of global environmental issues, the demands shifting towards environmentally friendly products is strengthening globally. There remains plenty of room in Asian and North American markets for environmentally friendly, high function and high-value-added inks to expand and develop, mainly in the packaging field.

5. The target in the medium-term business plan 2020 is ordinary income of ¥15bn in FY2020/12

In November 2017, the Company formulated its three-year medium-term business plan. It sets its basic policy the business theme of the “Creation of Visual Communication Technology.” The plan’s numerical targets for FY2020/12 are net sales of ¥195,000mn, operating income of ¥13,000mn, ordinary income of ¥15,000mn, profit attributable to owners of parent of ¥9,800mn, and ROE of 10% or more. The Company will continue to expand its printing ink business that is their core business and the digital & specialty products business, and will also create new businesses through applying technologies that it has cultivated in the core business. A total of ¥28,000mn is set as an investment framework to accelerate growth (¥18,000mn for capital investment and ¥10,000mn for strategic investment).

6. Strengthening measures for ESG and expects to increase earnings in the medium term

The Company is also strengthening measures for ESG (Environment, Society, Governance). The worldwide shift to environmentally friendly products is strengthening, and there remains plenty of room for market expansion and development globally. The Company has a track record of global business deployment ahead of its industry peers. Its strengths lie in its expertise in launching products tailored to local characteristics in each country, development capabilities and extensive lineup of environmentally friendly and high-function, high-value-added products, and high market shares for these products. We can expect earnings to expand in the medium term as it accelerates its global business deployment and increases sales of environmentally friendly and high-function, high-value-added products.

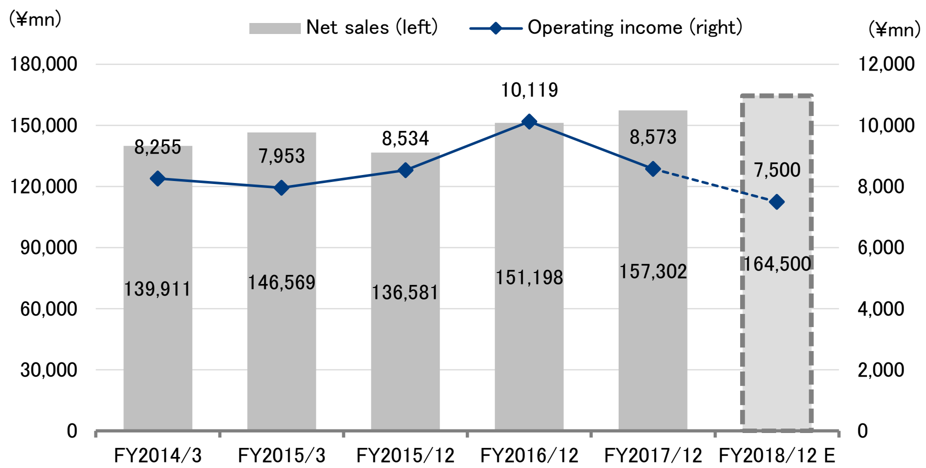
7. Targeting a consolidated dividend payout ratio in the range of about 20% to 30%

The Company aims for a consolidated dividend payout ratio in the range of around 20% to 30%. The forecast for FY2018/12 is the same as for FY2017/12, with an annual dividend per share of ¥30 (¥15 at the end of first half, ¥15 at the end of the period). Forecasted dividend payout ratio is 26.5%. The Company also offers a shareholder benefit program to shareholders who own one trading unit (100 shares) or more of shares as of December 31 every year.

Key Points

- The third largest printing ink manufacturer in the world
- Profits are forecast to decline in FY2018/12 due to the rise in raw material prices, but the effects of the price revisions are expected in the second half
- Plenty of room for the markets for environmentally friendly and high-function products, which are its strength, to expand and develop, so earnings are expected to increase in the medium term

Result trend



Note: FY2015/12 (9 months)
Source: Prepared by FISCO from the Company's financial results

Company profile

The third largest printing ink manufacturer in the world

1. Company profile

The Company has a history of more than 120 years since it was founded in 1896. It is the third largest printing ink manufacturer in the world. With the printing ink business as its core business, its strengths lie in the development capabilities, extensive lineup and high market share for environmentally friendly and high-function, high-value-added products that it has cultivated over its 120-year history and the reliability and quality of its products. Furthermore, toward realizing its business theme of "Creation of Visual Communication Technology," the Company is applying and developing basic technologies that have been cultivated in the development and production of inks for its digital & specialty products business, which the Company is aiming to bring up as a new business pillar.

At the end of FY2018/12 2Q accumulated, capital was ¥7,472mn, the total number of issued shares was 62,601,161 shares (of which 4,201,632 were treasury shares). The Company had 4,125 employees on a consolidated basis.

2. History

Founded in 1896 in Osaka City as a small business under the name of SAKATA INK SEIZOUSHO, the Company started manufacturing and selling newspaper ink. In 1911, it successfully industrialized the production of varnish for printing ink using linseed oil for the first time in Japan. In 1920, it was incorporated as a limited company. In 1961, the Company listed its shares on the Second Section of the Osaka Securities Exchange. In 1962, it was reassigned to the First Section of the Osaka Securities Exchange. In 1987, it changed its corporate name to SAKATA INX CORPORATION. In 1988, it listed its shares on the First Section of the Tokyo Stock Exchange, and in November 2016, it celebrated the 120th anniversary of its founding.

In 1960, the Company established its first overseas office in the Philippines (Manila), followed by a succession of major overseas offices and subsidiaries.

In December 2016, the Company was selected to be a constituent share of the JPX-Nikkei Mid and Small Cap Index, which is jointly calculated and distributed by Tokyo Stock Exchange, Inc. and Nikkei Inc. (calculation started from March 13, 2017). Also, in January 2017, the Company also received the certification as "a leading company in Osaka City for empowering women."

The Company received the TPM Advanced Special Award for its four main domestic plants (in Tokyo, Osaka, Shiga, and Hanyu) in December 2017. TPM (Total Productive Maintenance) is advocated by the Japan Institute of Plant Maintenance, and it has highly evaluated the Company for its construction of innovative production methods and its business deployment overseas. Also, its thesis on "Improving the equipment guarantee level" was awarded the second prize in the TPM Excellent Paper Awards, Production Category.

History

Year	Main Event
1896	Founded (under the name SAKATA INK SEIZOUSHO) as a private company in Osaka City, and started manufacture and sales of printing ink for newspapers
1906	Name changed to SAKATA SHOKAI
1911	Successfully industrialized the production of varnish for printing ink using linseed oil for the first time in Japan
1920	Changed to limited company
1947	Established SAKATA SANGYO, LIMITED by spinning off the industrial chemicals division into an independent company
1953	Upgraded Nagoya Office to Nagoya Branch
1959	Constructed and commenced operation of Itami Plant (now Osaka Plant) in Itami City, Hyogo Prefecture
1960	Opened an overseas office in the Philippines (Manila) (a succession of major overseas offices and subsidiaries were established thereafter)
1961	Listed on the Second Section of the Osaka Securities Exchange
1962	Reassigned to the First Section of the Osaka Securities Exchange
1969	Constructed and commenced operation of Noda Plant (now Tokyo Plant) in Noda City, Chiba Prefecture
1975	Established SAKATA KIKI SEIBI KOGYO CO., LTD. (now SAKATA INX ENG. CO., LTD.)
1982	Established SAKATA GENZOUSHO CO., LTD. (now SAKATA LABOSTATION CO., LTD.)
1987	Established SAKATA INX ESPANA, S.A. in Spain Corporate name changed to SAKATA INX CORP.
1988	INX INTERNATIONAL INC. (now THE INX GROUP LTD.) established in the U.S. A. as a holding company Acquired ACME PRINTING INK CO. in the U.S.A. Listed on the First Section of the Tokyo Stock Exchange
1989	Established PT. SAKATA INX INDONESIA as a joint venture in Indonesia that manufactures and sells printing ink Acquired MIDLAND COLOR CO. in the U.S.A. Acquired CHEMICAL PROCESS SUPPLY in the U.S.A.
1992	Consolidated ACME PRINTING INK CO. and MIDLAND COLOR CO. in the U.S.A. under the name of INX INTERNATIONAL INK CO. Established SAKATA INX INTERNATIONAL CORP. (now SIIX CORPORATION), and transferred businesses related to international trading of electronic components and other products to the Company Established THE INX GROUP (UK) LTD. that manufactures and sells printing ink (now INX INTERNATIONAL UK LTD.) in the U.K
1993	Established MEGA FIRST SAKATA INX (now SAKATA INX (MALAYSIA) SDN. BHD) in Malaysia
1994	Constructed and commenced operation of Hanyu Plant in Hanyu City, Saitama Prefecture Renamed Tokyo Branch to Tokyo Head Office, and instituted a dual Osaka and Tokyo Head Office system
1995	Established MONTARI SAKATA INX LTD. (now SAKATA INX (INDIA) PRIVATE LTD.) in India
1996	Acquired ISO9001 certification at Tokyo Plant (Osaka Plant and Hanyu Plant later acquired certification)
1997	Completed construction of the Technology Building at Osaka Plant
1999	Agreed to strategic alliance with TOYO INK MFG. CO., LTD. (now Toyo Ink SC Holdings Co., Ltd.)
2000	Established the 50-50 joint venture company LOGI CO-NET CORP. with TOYO INK MFG. CO., LTD. (now Toyo Ink SC Holdings Co., Ltd.) Agreed to a capital alliance with TOYO INK MFG. CO., LTD. (now Toyo Ink SC Holdings Co., Ltd.) Established the 50-50 joint venture company ga city Corp. with TOYO INK MFG. CO., LTD. (now Toyo Ink SC Holdings Co., Ltd.)
2001	Acquired ISO14001 certification at the three main plants (Tokyo, Osaka and Hanyu) Established SAKATA LABOSTATION CO., LTD. and transferred photography-related businesses to the company
2002	Established ETERNAL SAKATA INX CO., LTD. in Thailand Established SAKATA INX SHANGHAI CO., LTD. in China (Shanghai)
2003	Established SAKATA INX ENG. CO., LTD. and transferred color management businesses to the company Completed construction of the Technology and Laboratory Building at Osaka Plant Established SAKATA INX VIETNAM CO., LTD. in Vietnam.
2004	Established a holding company INX EUROPE LTD. in the U.K. Established INX INTERNATIONAL FRANCE SAS in France Established MAOMING SAKATA INX CO., LTD. in China (Guangdong Province) The three main plants (Tokyo, Osaka and Hanyu) earned the Award for TPM Excellence, Category 1, in the 2004 TPM Excellence Awards
2005	Established TRIANGLE DIGITAL INX CO. in the U.S.A. (Name changed to INX DIGITAL INTERNATIONAL CO. in 2009)
2008	Acquired MEGAINK DIGITAL A.S. in Czech (now INX DIGITAL CZECH, A.S.) Acquired ANTEPRIMA S.R.L. in Italy (now INX DIGITAL ITALY S.R.L.) Acquired OSHMS certification at Tokyo Plant (including Hanyu Plant)
2009	Acquired OSHMS certification at Osaka Plant
2010	The three main plants (Tokyo, Osaka and Hanyu) earned the Award for Excellence in Consistent TPM Commitment in the 2010 TPM Excellence Awards
2012	The three main plants (Tokyo, Osaka and Hanyu) earned the Award for TPM Achievement in the 2012 TPM Excellence Awards
2013	INX DIGITAL INTERNATIONAL CO. merged into INX INTERNATIONAL INK CO.
2014	Commenced operation at Shiga Plant in Maibara City, Shiga Prefecture
2015	Changed fiscal year-end from March to December Acquired ISO9001 and ISO14001 certification at Shiga Plant
2016	Celebrated the120th founding anniversary Acquired CREATIVE INDUSTRIA E COMERCIO. in Brazil as the first production base in South America Selected as a composition stock of the JPX-Nikkei Mid and Small Cap Index Acquired OSHMS certification at Shiga Plant
2017	Received the certification as a leading company in Osaka City for empowering women Further promotion of business and capital alliance with Toyo Ink SC Holdings Earned the TPM Advanced Special Award for its four main domestic plants (in Tokyo, Osaka, Shiga, and Hanyu)

Source: Prepared by FISCO from Company materials

3. Business description

The Company's core business is printing ink business, in which it manufactures and sells ink for paper media (newspaper ink and offset ink) and packaging ink (flexo ink, gravure ink, and metal-deco ink) for the Japanese, Asian, North American and European markets. In the graphic arts materials business, it procures and sells plate making materials and related equipment for the Japanese market. In the digital & specialty products business, it manufactures and sells products including inkjet ink, toner, pigment dispersions for color filters, and functional coating materials for the Japanese, Asian, North American, and European markets. The Group also conducts other businesses (chemicals, display and color management businesses in the Japanese market).

4. Global deployment in 18 countries and regions in Japan and overseas

As of the end of FY2018/12 2Q accumulated, the SAKATA INX Group consisted of SAKATA INX CORPORATION, 23 consolidated subsidiaries, 6 equity method affiliates, and 3 non-consolidated subsidiaries. SIIX Corporation <7613>, which undertakes international trading of electronic components and the Electronics Manufacturing Services (EMS) business, was spun-off from the Company and became an equity method affiliate.

In November 2016, the Company acquired Creative Industria e Comercio Ltda. (hereinafter, referred to as "Creative Ltd.") which is a Brazilian printing ink manufacture and sales company through its U.S. subsidiary. It will be a non-consolidated subsidiary for the time being, and it functions as its first production base in South America. The Company is deploying its businesses from manufacturing and sales bases including Creative Ltd. in 18 countries and regions in Japan and overseas.

5. Continuing business and capital alliance with Toyo Ink SC Holding

In 1999, the Company and Toyo Ink MFG. Co., (now, Toyo Ink SC Holdings <4634>) agreed to a business alliance for production, logistics, digital-related businesses, and international businesses. And then in 2000, they agreed to a capital alliance.

In February 2017, the Company announced that it would continue to promote the business alliance and maintain the capital alliance with Toyo Ink SC Holdings. In the business alliance, the two companies are pursuing further efficiency in the distribution field, aiming to complement each other in the production field, and promoting supplementary production at domestic and overseas bases for times of emergencies, based on BCP measures. In addition to increase the effectiveness of the business alliance and to build a long-term partnership, both companies have agreed to continue to hold around 80% of the ordinary shares that they had held in the other. With regards to the other 20%, they each implemented a share buy-back and acquired these shares as treasury stock. Even though they have reduced their cross-shareholding and mutual shareholding ratios, Toyo Ink SC Holdings continues to be the Company's leading shareholder, and they will continue their capital and business alliance.

6. Enhancing its corporate image by posting a corporate advertising design

The Company created a new corporate advertising design, and it was posted at the JR Tokaido Shinkansen Tokyo Station southbound transfer gate in June 2017, and also at the JR Tokaido Sanyo Shinkansen Shin-Osaka Station concourse in August 2017. The global map with dynamic coloring is shaped as a heart that gives a visual impression of a beating "heart." This impression is utilized in the catchphrase in the advertisement as "Beautiful colors that the world beats to." This design is expected to lead to enhancing the Company's corporate image.

Corporate advertising

Source: Reprinted from Company materials

Business overview

In the core printing ink business, its strength is environmentally friendly and high-function, high-value-added products

1. Global deployment focused on the printing ink business

In the printing ink business, the SAKATA INX Group manufactures and sells ink for paper media (newspaper ink used for printing newspapers, and offset ink used for a variety of commercial printing applications, such as books, magazines, catalogues, posters, brochures, vouchers, etc.), and packaging ink (flexo ink for printing on packaging, such as corrugated boards and paper containers; gravure ink for printing on packaging film for food, cosmetics and toiletries, daily goods, and other products; and metal-deco ink for printing on metal cans, such as beverage cans).

In the graphic arts materials business, the SAKATA INX Group procures and sells plate making materials and related equipment, mainly in the Japanese market. Products include computer-to-plate (CTP) setters, CTP plates, inkjet proofers, inkjet proof paper, editing software, color management systems and ink dispensers.

In the digital & specialty products business, the Company manufactures and sells digital printing materials (industrial inkjet ink used for large output items and textiles, and color toner and monochrome toner used for laser printers and multifunction printers), image display materials (pigment dispersions for color filters), and functional coating materials for the Japanese, Asian, North American and European markets.

In the other businesses, the SAKATA INX Group primarily conducts chemicals business (SAKATA SANGYO, LIMITED), a display service business (SAKATA LABOSTATION CO., LTD.) and a color management business (SAKATA INX ENG. CO., LTD.)

In the core printing ink business and the digital & specialty products business, the Company is aiming to increases sales by accelerating global business deployment, pursuing a strategy of providing products tailored to the local characteristics in each region, and realizing higher sales volume through expansion in sales of environmentally friendly and high-function, high-value-added products.

In its consolidated accounts, the SAKATA INX Group has adopted the following reportable segments: printing inks and graphic arts materials (Japan), printing inks (Asia), printing inks (North America), printing inks (Europe), digital & specialty products and other businesses.

Reportable segments and main products in the consolidated accounts

Reportable Segments	Main Products
Printing inks and graphic arts materials (Japan)	Newspaper ink, offset ink, flexo ink, gravure ink, printing equipment and materials
Printing inks (Asia)	Newspaper ink, offset ink, flexo ink, gravure ink, metal-deco ink
Printing inks (North America)	Offset ink, flexo ink, gravure ink, metal-deco ink
Printing inks (Europe)	Offset ink, flexo ink, gravure ink, metal-deco ink
Digital & Specialty products	Digital printing materials (ink jet ink, color toner, monochrome toner)
	Image display materials (pigment dispersions for color filters)
	Functional coating materials (various coating materials)
Other Businesses	Chemicals business (SAKATA SANGYO, LIMITED)
	Display service business (SAKATA LABOSTATION CO., LTD.)
	Color management business (SAKATA INX ENG. CO., LTD.)

Source: Prepared by FISCO from Company materials

2. The third largest printing ink manufacturer in the world

In terms of net sales rankings, SAKATA INX is a major printing ink manufacturer ranked third in the world (source: “The 2017 Top International Ink Companies Report” (August 1, 2018) by INK WORLD).

The global top 10 in ink sales (2017)

Rank	Company	Country	Net sales (US$mn)
1	DIC/Sun Chemical	Japan	4,600
2	Flint Group	Luxembourg	2,500
3	SAKATA INX CORPORATION	Japan	1,310
4	Toyo Ink SC Holdings Co., Ltd.	Japan	1,300
5	Siegwerk Group	Germany	1,080
6	Huber Group	Germany	990
7	T&K TOKA	Japan	432
8	Tokyo Printing Ink Mfg. Co., Ltd.	Japan	408
9	Fujifilm North America	U.S.	400
10	SICPA	Switzerland	375

Source: Prepared by FISCO from “The 2017 Top International Ink Companies Report” (August 1, 2018) by INK WORLD

3. Its strengths lie in its development capabilities and extensive lineup of environmentally friendly products, and the reliability and quality of its products

The Company's strengths lie in the development capabilities and extensive lineup of environmentally friendly products that it has amassed over a 120-year history since it was founded in 1896 and the reliability and quality of its products.

The Company has an extensive lineup of environmentally friendly and high-function, high-value-added products. They include ink certified with the Eco Mark (the environmental labelling system operated by the Japan Environment Association); vegetable oil ink, which replaces high-boiling-point petroleum solvent with various types of vegetables oils (including soybean oil) in accordance with the definition and standards established by the Japan Printing Ink Makers Association; non-VOC ink, which contains less than 1% of high-boiling-point petroleum solvent among its constituents; rice ink, which contains constituents derived from rice bran oil from among the plant-derived ingredients; non-toluene ink, which has an organic solvent toluene content of less than 0.3%; non-toluene, non-MEK ink, which in addition does not use MEK (methyl ethyl ketone); and water-based flexo ink which offers high performance while being water based.

In newspaper ink, the Company has acquired a strong reputation for its high-coloration ink called "NEWS WEBMASTER Ecopure" (Eco Mark certified) that it developed in pursuit of the highest quality of newspaper. This has been achieved by expanding color reproduction range, improving dot reproduction, and optimizing dot gain in the quest for natural colors and bright coloration. Moreover, it has earned considerable trust from newspaper companies for its technical capabilities and track record in creating high-quality color pages and in its color management system for controlling the color aspects of newspaper production systems, from upstream to downstream.

In offset ink, the Company has introduced environmentally friendly ink to the market as an industry pioneer, and in addition to providing ink and related products that meet a diverse range of customer needs, such as high-speed web-offset ink and sheet ink. It is also propelling the development of UV curable ink, Dream Cure series. It is compatible with the high sensitivity UV printers that have become popular in recent years.

In the packaging ink field, it boasts the leading market share domestically for water-based flexo ink used to print corrugated boards, which it developed early as a pioneer in the industry. In addition, it is providing a range of new technologies such as functional coating materials for the paper industry.

The Company provides environmentally friendly, high function, high quality ink - gravure ink for printing film packaging that is used for food packaging and others and flexo ink for printing paper packaging that is used for corrugated boards and paper containers.

In particular, Botanical Ink was launched at the end of 2016. This ink uses plant-derived ingredients and is becoming popular among major convenience stores including private brand products. Furthermore, the product lineup in the Botanical Ink series is expanding. EcoPlata, a water-based flexo ink for paper bags, and EcoPino, a water-based gravure ink for paper cartons, have been launched. Printed matters that use Botanical Ink can use the Company's registered trademark on their packages.

Botanical Ink mark

Source: Reprinted from Company materials

In addition, the Company has become an accredited partner for "Pantone LIVE™" provided by a U.S. company named Pantone LLC that makes accurate communication of PANTONE color samples possible in the entire packaging supply chain regardless of the printing method and substrate, which is common throughout the world. The Company's U.S. subsidiary has been an accredited partner, but now all the Group companies have become accredited partners.

4. High market shares of environmentally friendly and high-function, high-value-added that have plenty of room for expansion and development

Both domestically and overseas, the Company's mainstay products are its environmentally friendly and high-function, high-value-added products positioned above middle range, and it has high shares in each market. Against the backdrop of the global trend toward strengthening measures to address environment issues, there is still plenty of room for market expansion and development in the field of environmentally friendly and high-function, high-value-added products.

In the field of ink for paper media, the Company's ratios of environmentally friendly products for newspaper ink, and offset ink for magazines and brochures, and other paper media have reached 100%. Looking at its market share in the field of packaging ink, the Company boasts the leading share in Japan for flexo ink for printing on packaging, such as corrugated boards and paper containers, the second leading share in Japan for gravure ink for printing on film packaging, such as for food, daily goods and other items, and the globally leading share for metal-deco ink for printing on metal cans such as beverage cans.

5. Growth in Asia and North America as the primary sources of revenue

The FY2017/12 consolidated net sales were ¥157,302mn. The percentages of sales by segment (before consolidated adjustments) were as follows; printing inks and graphic arts materials (Japan) contributed 33.4%, printing inks (Asia) 18.4%, printing inks (North America) 26.4%, printing inks (Europe) 5.3%, digital & specialty products 6.9%, and other businesses 9.6%. The FY2017/12 operating income was ¥8,573mn. The percentages of operating income by segment (before consolidated adjustments) were as follows; printing inks and graphic arts materials (Japan) contributed 28.4%, printing inks (Asia) 29.5%, printing inks (North America) 23.0%, printing inks (Europe) 0.3%, digital & specialty products 14.3%, and other businesses 4.4%.

The Company is achieving growth by accelerating its global business deployment and increasing sales of environmentally friendly and high-function, high-value-added products, with Asia and North America, where there remains considerable room for market expansion and development, serving as the primary sources of revenue.

6. Risk factors

The risk factors that may affect earnings are changes in conditions in the raw material markets and the effects of exchange rates alongside the Company's global business deployment. In particular, as it is mainly dependent on petrochemical products for raw materials, should abnormal fluctuations occur in the price of crude oil or in exchange rates, there will be a time lag before sales prices are revised, so such fluctuations may affect its results.

In response to these risk factors, the Company is advancing measures to mitigate the impact of the rise in raw material prices through progressing optimization by revising sales prices, and also by reducing costs by shifting to products that use plant-derived ingredients and improving productivity.

Results trends

In FY2018/12 2Q accumulated, profits decreased although volume increased due to the rise in raw material prices

1. Overview of the FY2018/12 2Q accumulated consolidated results

In the FY2018/12 2Q accumulated consolidated results announced on August 10, 2018, net sales increased 2.2% YoY to ¥78,938mn, operating income decreased 41.2% to ¥2,680mn, ordinary income declined 40.2% to ¥3,540mn, and profit attributable to owners of parent declined 43.6% to ¥2,609mn.

The planned figures in the forecast announced on February 14, 2018 expected net sales of ¥80,400mn, operating income of ¥3,300mn, ordinary income of ¥4,300mn, and profit attributable to owners of parent of ¥3,000mn. When comparing against this forecast, each result was below its respective values; net sales were down by ¥1,462mn, operating income by ¥620mn, ordinary income by ¥760mn, and profit attributable to owners of parent by ¥391mn.

With the progress made in strategic sales expansion, ink sales volume in the printing ink business steadily increased by 5% (same in Japan, up 10% in Asia, up 6% in North America, and up 5% in Europe), while sales in the digital & specialty products business grew strongly. However, as the effects of the exchange rates and rapid rise in raw material prices (particularly titanium oxide) were beyond expectation, total sales and profits were below forecasts; net sales increased, but profits decreased significantly.

Gross profit declined 10.4% YoY, while the gross profit margin fell 2.9 percentage points to 21.1%. SG&A expenses decreased 0.3% and the SG&A expenses ratio fell 0.4 of a percentage point to 17.7%. In non-operating income, the Company recorded equity method investment income of ¥826mn (¥863mn in the same period in the previous fiscal year), and ¥212mn as a foreign exchange loss in non-operating expenses. In extraordinary income, gain on sales of securities of ¥1,117mn was recorded in the same period in the previous fiscal year was not recorded in the current fiscal year.

After excluding the effects of foreign currency translation, net sales increased 3.0%, operating income decreased 39.9%, ordinary income declined 39.3%, and profit attributable to owners of parent fell 42.6%. The average exchange rate during the period was ¥108.68 to US$1, so compared to the previous fiscal year's rate of ¥112.37 to US$1, the yen appreciated by ¥3.69 against the dollar. The effects of foreign currency translation reduced net sales by ¥669mn, operating income by ¥58mn, ordinary income by ¥53mn, and profit attributable to owners of parent by ¥48mn. After excluding the effects of foreign currency translation, net sales were about the same level as forecasted.

FY2018/12 2Q accumulated consolidated results

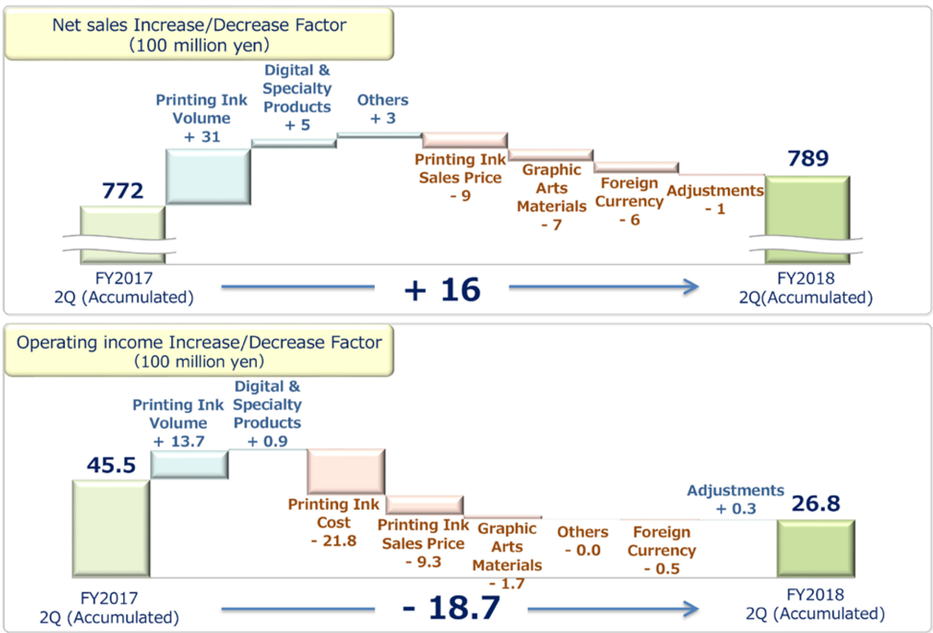
(¥mn)

	FY2017/12 2Q accumulated		FY2018/12 2Q accumulated					
	Amount	Percentage of sales	Amount	Percentage of sales	Increase/ decrease amount	Increase/ decrease rate	Foreign currency translation effect amount	After excluding foreign currency translation effects
Net sales	77,272		78,938		1,665	2.2%	-669	3.0%
Operating income	4,558	5.9%	2,680	3.4%	-1,878	-41.2%	-58	-39.9%
Ordinary income	5,923	7.7%	3,540	4.5%	-2,382	-40.2%	-53	-39.3%
Profit attributable to owners of parent	4,630	6.0%	2,609	3.3%	-2,020	-43.6%	-48	-42.6%

Source: Prepared by FISCO from the Company's results briefing materials

According to the analysis of the change factors through a comparison with the previous fiscal year, the factors behind net sales rose ¥1.6bn. The increase factors were ink volume of ¥3.1bn, digital & specialty products of ¥500mn, and others of ¥300mn. The decrease factors were decline in ink prices of ¥900mn, graphics arts materials of ¥700mn, foreign currency of ¥600mn, and adjustments of ¥100mn. The factors causing operating income to decrease ¥1.87bn were increase in ink costs of ¥2.18bn, the fall in ink unit prices of ¥930mn, graphics arts materials of ¥170mn, and foreign currency of ¥50mn, while ink volume of ¥1.37bn, digital & specialty products of ¥90mn, and adjustments of ¥30mn had a positive effect. Ink volume increased mainly in packaging-related.

Analysis of the increase/decrease factors for net sales and operating income



Source: Reprinted from the Company's results briefing materials

2. Trends by segment

Trends by segment (before consolidated adjustments and the exclusion of foreign currency, YoY) are as follows.

In printing inks and graphics arts materials (Japan), net sales decreased 3.2% YoY to ¥26,422mn and operating income declined 70.6% to ¥356mn. In packaging-related, sales trended stably for gravure ink for food and beverage use. However, demand for flexo ink was affected by the unseasonable weather. In addition, demand trended at low levels for newspaper ink, offset ink and graphics arts materials (plate making materials and plate making related equipment). As a whole, sales decreased. Profits declined significantly due to the rise in raw material prices and slow revisions to sales prices.

In printing inks (Asia), net sales increased 6.7% YoY to ¥15,499mn and operating income decreased 37.1% to ¥699mn. Sales increased along with the rise in sales volume from the progress made in strategic sales expansion, which absorbed the impact of foreign currency translation. Sales volume grew for packaging gravure ink in Indonesia, India and Vietnam, and for newspaper and offset ink in India and China. However, profits decreased greatly due to the rise in raw material prices and the time lag until the revisions to sales prices.

In printing inks (North America), net sales increased 1.9% YoY to ¥22,114mn and operating income decreased 38.1% to ¥625mn. Sales increased although offset ink was affected by the contraction of the printing market, flexo ink, gravure ink and metal-deco ink for packaging performed strongly and sales volume increased, which absorbed the impact of the foreign currency translation. Profits decreased although there were positive factors such as increase in sales volume and growth in sales of high-value-added products. Profit margin declined due to the rise in raw material prices and decline in ink prices, and also increase in freight cost and labor expenses due to sales expansion.

In printing inks (Europe), net sales increased 5.9% YoY to ¥4,656mn and the operating loss was ¥215mn (compared to operating income of ¥142mn in the same period in the previous fiscal year). Sales increased due to the rise in the sales volume of gravure ink, flexo ink and metal-deco ink, while in exchange rates, the strengthening of local currencies and the weakening of the yen also contributed. With the sales expansion strategy effects, sales trended upward from 2Q (April-June) mainly in packaging products. Although the increase in sales volume was a positive factor, a loss was recorded, mainly because profit margin declined from the rise in raw material prices and drop in ink prices, and increase in labor expenses due to sales expansion.

In digital & specialty products, net sales increased 11.4% YoY to ¥5,987mn and operating income rose 17.3% to ¥702mn. Both sales and profits increased due to the steady growth of inkjet ink, pigment dispersions for color filters, and toners. In other businesses, net sales increased 4.9% to ¥8,106mn and operating income decreased 5.4% to ¥176mn.

Net sales and operating income by segment in FY2018/12 2Q accumulated

(¥mn)

		FY2017/12 2Q accumulated Amount	FY2018/12 2Q accumulated		
			Amount	Increase/ decrease amount	Foreign currency translation effect amount
Net sales	Printing inks and graphic arts materials (Japan)	27,294	26,422	-871	-
	Printing inks (Asia)	14,525	15,499	973	-296
	Printing inks (North America)	21,697	22,114	416	-745
	Printing inks (Europe)	4,397	4,656	259	297
	Digital & specialty products	5,373	5,987	613	65
	Reportable segment total	73,288	74,680	1,391	-678
	Other businesses	7,727	8,106	379	-
	Adjustments	-3,743	-3,848	-105	9
	Total	77,272	78,938	1,665	-669
Operating income	Printing inks and graphic arts materials (Japan)	1,210	356	-854	-
	Printing inks (Asia)	1,111	699	-412	-29
	Printing inks (North America)	1,010	625	-385	-28
	Printing inks (Europe)	142	-215	-358	-10
	Digital & specialty products	598	702	103	12
	Reportable segment total	4,073	2,168	-1,905	-55
	Other businesses	186	176	-9	-
	Adjustments	298	335	36	-2
	Total	4,558	2,680	-1,878	-58

Source: Prepared by FISCO from the Company's results briefing materials

3. Financial position

At the end of FY2018/12 2Q compared to the end of FY2017/12, the total balance of long-term and short-term debt increased ¥700mn, the equity ratio fell 0.6 of a percentage point, and the book value per share (BPS) decreased ¥16.15, but there were no particular negative factors. The equity ratio declined mainly because accumulated other comprehensive income fell due to foreign currency translation adjustment. However, shareholders' equity increased and a level of 50% is maintained due to the accumulation of retained earnings. There seems to be no particular problems with the Company's financial soundness.

Key Performance Indicators

(¥mn, %)

Item	FY2015/3	FY2015/12 (9 months)	FY2016/12	FY2017/12	FY2018/12 2Q accumulated
Net sales	146,569	136,581	151,198	157,302	78,938
Cost of sales	112,581	103,826	113,773	120,371	62,293
Gross profit	33,988	32,754	37,425	36,931	16,645
Gross profit margin (%)	23.2	24.0	24.8	23.5	21.1
Selling, general and administrative expenses	26,034	24,219	27,305	28,358	13,964
Selling, general and administrative expenses ratio (%)	17.8	17.7	18.1	18.0	17.7
Operating income	7,953	8,534	10,119	8,573	2,680
Operating income margin (%)	5.4	6.2	6.7	5.5	3.4
Non-operating income	2,131	2,601	2,531	3,048	1,259
Non-operating expenses	712	1,067	782	371	399
Ordinary income	9,372	10,068	11,868	11,249	3,540
Ordinary income margin (%)	6.4	7.4	7.8	7.2	4.5
Extraordinary income	779	1,539	801	1,424	185
Extraordinary loss	1,128	2	386	317	56
Income before income taxes and non-controlling interest	9,023	11,604	12,283	12,356	3,669
Total income taxes	4,206	3,258	3,798	3,466	941
Profit attributable to owners of parent	4,338	7,745	7,837	8,383	2,609
Margin on profit attributable to owners of parent (%)	3.0	5.7	5.2	5.3	3.3
Comprehensive income	11,508	6,265	6,381	9,946	106
Total assets	129,912	136,564	138,012	145,489	145,382
Current assets	69,346	72,554	71,716	76,199	75,453
Noncurrent assets	60,565	64,010	66,295	69,290	69,929
Total liabilities	65,126	66,944	63,698	66,723	67,758
Current liabilities	43,753	46,574	45,304	47,968	49,746
Noncurrent liabilities	21,373	20,370	18,393	18,754	18,012
Total net assets	64,785	69,619	74,313	78,766	77,624
Shareholders' equity	58,756	65,230	71,555	74,737	76,321
Capital	7,472	7,472	7,472	7,472	7,472
Total number of issued shares at the end of period, excluding treasury shares	60,508,675	60,508,154	60,507,951	58,399,679	58,399,529
EPS (¥)	71.71	128.01	129.53	142.76	-
Net assets per share (¥)	1,034.84	1,107.63	1,179.38	1,295.39	1,279.24
Dividends per share (¥)	20.00	22.00	28.00	30.00	15.00
Equity ratio (%)	48.2	49.1	51.7	52.0	51.4
ROE (%)	7.5	11.9	11.3	11.4	-
Cash flows from operating activities	6,487	11,254	11,697	9,201	916
Cash flows from investing activities	-9,156	-3,214	-6,727	-2,737	-3,549
Cash flows from financing activities	2,745	-5,973	-3,552	-6,259	-411
Cash and cash equivalents at the end of period	5,923	7,888	9,297	9,351	6,065
Ratio of cash flow to interest-bearing debt (year)	3.7	1.8	1.5	1.8	-
Interest coverage ratio (times)	17.3	34.6	44.9	36.9	-

Source: Prepared by FISCO from Company materials

Outlook

Although profits will decline, FY2018/12 full year forecasts has been left unchanged because the effects of price revisions are expected in the second half

1. FY2018/12 outlook

The consolidated forecasts for the FY2018/12 remains unchanged from the initial forecasts, with net sales to increase 4.6% YoY to ¥164,500mn, operating income to decrease 12.5% to ¥7,500mn, ordinary income to decline 15.6% to ¥9,500mn, and profit attributable to owners of parent to fall 21.3% to ¥6,600mn.

Due to the rise in raw material prices, it is forecasted to decline in profits for the full fiscal year. However, sales are expected to rise due to steady increase in sales volume mainly in packaging-related. The exchange rate (period average) in the first half was ¥108.68 to US$1, while the estimated rate is ¥112 to US$1 for the second half and ¥110 to US$1 for the full fiscal year (the FY2017/12 full fiscal year actual rate was ¥112.19 to US$1).

The rates of progress in the first half toward achieving the full fiscal year forecasts were 48.0% of the net sales forecast, 35.7% of the operating income forecast, 37.3% of the ordinary income forecast, and 39.5% of the profit attributable to owners of parent forecast. The results were below the forecasts and the rates of progress for the full fiscal year forecasts were also at low levels. Earnings were weighted on the second half at the initial forecast as the Company expected sales volume to increase in the second half from the progress made in expanding sales, and operational ratio to rise and the effects of the revisions to sales prices. The initial forecast was net sales of ¥80,400mn in the first half and ¥84,100mn in the second half, and operating income of ¥3,300mn in the first half and ¥4,200mn in the second half.

The Company is aiming to achieve its initial forecasts in the second half despite the rise in raw material prices. It expects the effects from sales price revisions, while it will also reduce costs by alternative materials, curtail expenses, and improve productivity. For sales price revisions, the revision to the gravure ink sales price in Japan was announced on March 13, 2018, and it is expected to be reflected in prices from the 3Q (July-September) when user understanding has progressed. Prices will also be revised in Asia and North America.

Consolidated results trend

(¥mn, ¥)

Fiscal year	FY2014/3	FY2015/3	FY2015/12 (9 months)	FY2016/12	FY2017/12	FY2018/12 forecast
Net sales	139,911	146,569	136,581	151,198	157,302	164,500
Operating income	8,255	7,953	8,534	10,119	8,573	7,500
Ordinary income	9,443	9,372	10,068	11,868	11,249	9,500
Profit attributable to owners of parent	5,964	4,338	7,745	7,837	8,383	6,600
EPS	98.57	71.71	128.01	129.53	142.76	113.01
Dividend	18.00	20.00	22.00	28.00	30.00	30.00
BPS	877.85	1,034.84	1,107.63	1,179.38	1,295.39	-

Source: Prepared by FISCO from Company materials

2. Trends by segment

The full fiscal year forecasts for each segment (before consolidated adjustments and the exclusion of foreign currency, YoY) and the priority policies are as follows.

In printing inks and graphic arts materials (Japan), the Company forecasts net sales to increase 2.0% to ¥56,064mn, but operating income is expected to decrease 35.7% to ¥1,449mn. The Company will expand the sales of environmentally friendly products, including highly sensitive UV offset ink, the Botanical Ink series for film packaging, and EcoPlata for paper bags and EcoPino for paper cartons in the same series. Although profits is forecasted to fall substantially for the full fiscal year due to the rise in raw material prices, earnings are expected to improve in the second half due to the effects of the price revisions, and also from the reduction in costs by full operation with the additional equipment in Shiga Plant.

In printing inks (Asia), the Company forecasts net sales to increase 12.0% YoY to ¥33,869mn and operating income to rise 0.6% to ¥2,361mn. In the packaging field, the Company plans to expand sales of high-function environmentally friendly products to global customers. The Company forecasts slight increase in profits in the full fiscal year by increasing sales volume, improving productivity and reducing costs through TPM activities, which will absorb the rise in raw material prices and the increase in labor costs. The special factor in FY2017/12 of customers refraining from purchasing because of the introduction of goods and services tax (GST) in India is no longer seen, and the price increases of gravure ink in India, Indonesia and Vietnam are also expected to become widespread.

In printing inks (North America), the Company forecasts net sales to increase 3.3% to ¥44,986mn, but for operating income to decrease 8.0% to ¥1,684mn. For sales, the offset ink market will continue to contract, but in the packaging field, sales to new customers and customers increasing new lines in their facilities, which lagged behind the initial forecasts in FY2017/12 will be fully realized. In addition, the Company will pursue sales growth for products including high performance flexo ink for laminate, new gravure ink products, and UV and EB inks,etc. Profits are expected to improve in the second half as it improves productivity and reduces costs through TPM activities.

In printing inks (Europe), the Company forecasts net sales to increase 5.8% YoY to ¥9,283mn and an operating loss of ¥254mn (operating income of ¥25mn in FY2017/12). Net sales will increase due to higher sales volume, but forecasts lower profits due to strategic price setting in accordance with long-term contracts with major customers and rise in raw material prices. Toward improving earnings in the second half, the Company will develop and launch cost-competitive products and pursue sales growth for global customers.

For digital & specialty products, demand is expected to be strong and the Company forecasts net sales to increase 10.4% to ¥12,510mn and operating income to rise 14.9% to ¥1,310mn. As for inkjet ink, the Company will launch next-generation products in a timely manner, strengthen relationships with printer manufacturers, and bolster its global production and sales systems. The Company will launch high-quality pigment dispersions for color filters, and strengthen its relationships with resist manufacturers, while for functional coating materials, it will enter into the energy, optical and electronics-properties coating fields.

Net sales and operating income by segment

Net sales (¥mn)

	FY2014/3	FY2015/3	FY2015/12 (9 months)	FY2016/12	FY2017/12	FY2018/12
Printing inks and graphic arts materials (Japan)	60,124	57,304	42,727	55,114	54,985	56,064
Printing inks (Asia)	25,155	28,299	28,071	28,308	30,245	33,869
Printing inks (North America)	34,230	38,712	44,920	42,044	43,560	44,986
Printing inks (Europe)	7,571	8,637	9,031	7,817	8,777	9,283
Digital & specialty products	6,832	8,311	8,230	10,162	11,336	12,510
Reportable segment total	133,913	141,266	132,981	143,447	148,904	156,712
Other businesses	13,244	13,645	9,598	15,168	15,790	15,389
Adjustments	-7,247	-8,342	-5,999	-7,416	-7,392	-7,601
Amount posted on financial statements	139,911	146,569	136,581	151,198	157,302	164,500

Source: Prepared by FISCO from Company materials

Operating income (¥mn)

	FY2014/3	FY2015/3	FY2015/12 (9 months)	FY2016/12	FY2017/12	FY2018/12
Printing inks and graphic arts materials (Japan)	3,487	2,439	1,856	2,516	2,253	1,449
Printing inks (Asia)	2,337	2,239	2,875	3,170	2,347	2,361
Printing inks (North America)	1,442	1,525	2,344	2,218	1,830	1,684
Printing inks (Europe)	-118	0	126	218	25	-254
Digital & specialty products	449	961	432	925	1,140	1,310
Reportable segment total	7,599	7,166	7,636	9,049	7,596	6,550
Other businesses	303	299	295	419	350	319
Adjustments	352	486	602	650	626	631
Amount posted on financial statements	8,255	7,953	8,534	10,119	8,573	7,500

Source: Prepared by FISCO from Company materials

Medium and long-term growth strategy

Demand is globally shifting to environmentally friendly products

1. Market trends

The domestic printing ink market has a strong image of being mature due to the decline in paper media such as newspapers and magazines. However, the newspaper ink market constitutes only about 10% of the total domestic printing ink market, meaning its impact is small. The packaging printing inks market is expanding. This market includes gravure ink that constitutes around 40% of the market and flexo ink (packaging printing flexo ink, such as for corrugated boards and paper cartons; packaging printing gravure ink, including for foods, cosmetics, toiletries, and daily necessity items; and metal-deco ink for printing on beverage cans and other metal cans).

Against the backdrop of the global environmental problems, the trend of worldwide demand shifting to environmentally friendly products is strengthening. There remains plenty of room for the environmentally friendly and high-function, high-value-added ink markets to expand and develop in Asia and North America. In particular, market expansion is forecasted centered on the packaging field.

In the North American market, the printing ink market as a whole is expanding due to a continuing population increase and strong personal consumption. Moreover, environmentally friendliness and high functionality have been in demand in North America to the same extent as in Japan in the packaging film field for foods, cosmetics and toiletries, daily goods and other products, so there is still considerable room for the market to expand and to be developed.

In the context of increasing populations and economic growth in the Asian market, the printing ink market as a whole is expanding in emerging countries such as India, Indonesia and Vietnam. In India, the demand for newspapers has been increasing against the backdrop of improving income levels and rising literacy rates. In China, the need for environmentally friendly products is also rising following the implementation of environmental regulations.

Accelerating the development and launch of environmentally friendly products toward realizing high growth in the emerging-countries market

2. The target in the medium-term business plan is ordinary income of ¥15bn in FY2020/12

In November 2017, the Company announced its three-year medium-term business plan 2020 (2018 to 2020)~ Innovation for the Future.

Toward realizing the business theme of the “Creation of Visual Communication Technology,” and against the backdrop of the diversification of information media, the growing awareness in food safety and security, and the strengthening of environmental regulations, the plan sets out the Company’s basic policies of strengthening the corporate structure and the management foundation by responding flexibly to changes in the printing market, enhancing CSR activities, and promoting environmental management. The Company will work to expand the printing ink business which is its core business, and the digital & specialty products business, and to create new businesses through applying technologies it has cultivated in its core business.

The target figures for FY2020/12 are net sales of ¥195,000mn, operating income of ¥13,000mn, ordinary income of ¥15,000mn, profit attributable to owners of parent of ¥9,800mn, and ROE of 10% or more. The figures do not incorporate the new businesses. The assumed exchange rate is ¥112 to US$1.

In the Company’s growth strategy for the printing ink business, the core policies are to develop and launch environmentally friendly products in the existing printing market and to grow sales of products that improve productivity and products that are tailored to local characteristics. During the three-year period, the Company is aiming for growth of 10% in the developed countries market and 40% in the emerging-countries market. The strategic products for sales growth are environmentally friendly products (including water-based flexo ink and gravure ink, non-toluene and non-VOC ink and high-solid ink), products using plant-derived ingredients (such as botanical ink and rice ink), products that improve productivity (including highly sensitive UV ink and EB curing ink,etc.), and products tailored to local characteristics (such as gravure ink, and newspaper and offset ink,etc.).

The growth strategy for the digital & specialty products business is as follows: in the digital printing materials field, global deployment of industrial inkjet ink and enter markets yet to be entered (including building and wall-covering materials, home & textile, and apparel); for the image display materials field, develop pigment dispersions for color filters that match cutting-edge specifications and actively enter the Chinese market; and in the functional coating materials field, develop and launch new digital & specialty products.

Furthermore, to create new businesses, the Company is targeting fields other than the existing printing industry such as housing, architecture, living environment, energy, automotive and electronics,etc. It is working to develop and launch businesses for a range of products including gas-barrier coating agents for functional films, inorganic materials pigment dispersions in the display field, transparent insulator materials for optics used as touch-panel materials in the sensor field, inspection glass coating materials used as clinical testing materials in the medical field, and decoration molding coloring material dispersions used as new coloring agents.

3. Targets and priority measures by segment

Segment targets (before consolidated adjustments) are as follows: in printing inks and graphic arts materials (Japan), net sales of ¥59,900mn and operating income of ¥2,600mn; in printing inks (Asia), net sales of ¥46,600mn and operating income of ¥3,900mn; in printing inks (North America), net sales of ¥52,700mn and operating income of ¥2,500mn; in printing inks (Europe), net sales of ¥9,800mn and operating income of ¥500mn; in digital & specialty products, net sales of ¥17,400mn and operating income of ¥2,400mn; and in other businesses, net sales of ¥16,200mn and operating income of ¥400mn. The adjustments will have a negative effect on net sales of ¥7,600mn and a positive effect on operating income of ¥700mn.

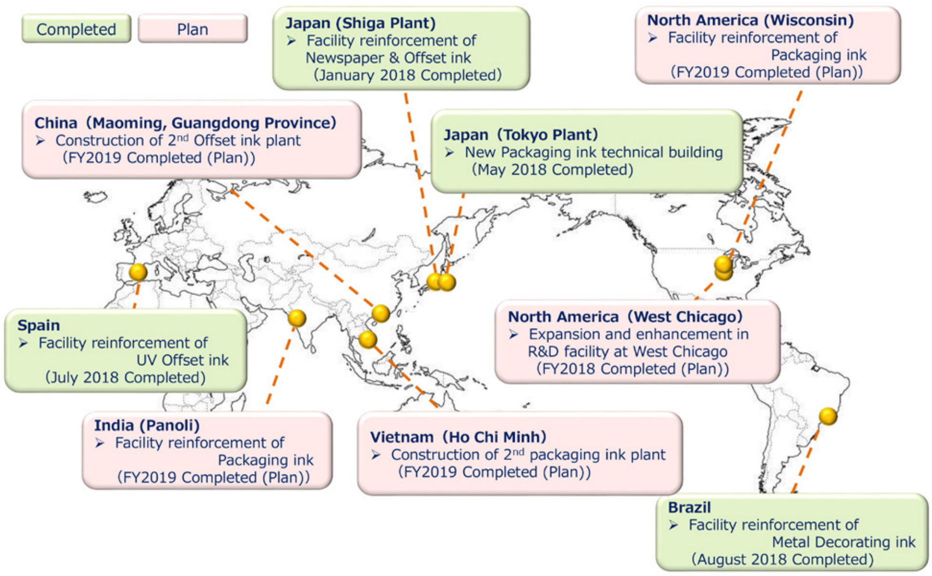
In terms of the priority measures, for printing inks and graphic arts materials (Japan), they include active development of environmentally friendly and energy saving products, and reducing costs through deepening TPM activities and optimizing logistics; for printing inks (Asia), advancing the development of products tailored to local characteristics and further expanding the packaging field, and actively developing environmentally friendly and energy saving products; for printing inks (North America), growing sales of flexo, gravure and meal-deco inks, bolstering packaging-related production facilities, and strengthening development through consolidating R&D bases; for printing inks (Europe), strengthening the production and sales structures by reconstrucing the bases, and enhancing brand power; and in the digital & specialty products business, developing differentiated products in a timely manner and strengthening strategic partnerships.

4. Strengthening production capacity by active capital investment

A total of ¥28,000mn is set as an investment framework to accelerate growth (¥18,000mn for capital investment and ¥10,000mn for strategic investment) and cumulative capital investment in the three-year is ¥18,000mn (printing ink business ¥8,000mn, digital & specialty products business ¥3,900mn, domestic plant reconstruction-related ¥1,600mn, and other regular investment ¥4,500mn). By region, it anticipates investing ¥8,500mn in Japan, ¥4,300mn in Asia, ¥4,700mn in North America, and ¥500mn in Europe. It assumes three-year cumulative depreciation expenses will be ¥14,100mn.

The details of the capital investment are shown in the following chart. In Japan, additional newspaper and offset ink facilities at the Shiga Plant were completed in January 2018, and the plant's full scale operations will contribute to improve earnings from the second half. At the Tokyo Plant, the new packaging ink technology building was completed in May 2018. In North America, the expansion and enhancement of the R&D facility in West Chicago is scheduled to be completed in 2018. Development will be strengthened through consolidating R&D bases for printing ink and inkjet ink. The expansion of the packaging ink facilities at the Wisconsin base is also scheduled to be completed in 2019. Moreover, the second offset ink plant in China, the second packaging ink plant in Vietnam, and the expansion of packaging ink facilities in India are each expected to be completed in 2019.

Content of capital investment



Source: Reprinted from the Company's results briefing materials

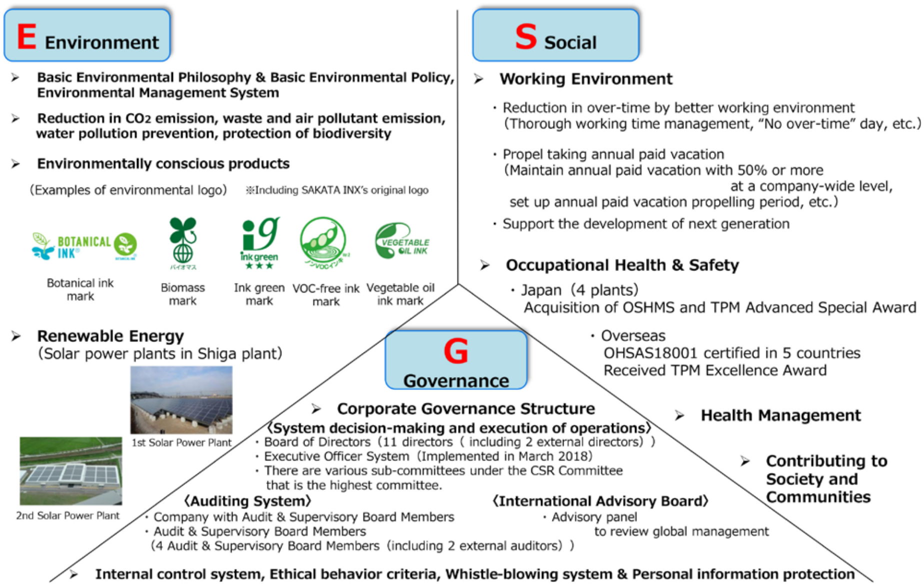
Strengthening measures for ESG and expects to increase earnings in the medium term

5. Environment, Society, Governance

The Company is strengthening measures for ESG (Environment, Society, Governance).

For environment, it is strengthening its environmental management system, expanding sales of environmentally friendly products which the Company has advantages, and introducing renewable energy (such as installing a solar power facility at the Shiga Plant). For society, it is improving working environments by reducing overtime, enhancing occupational health and safety to ensure the safety of employees, and working to contribute to society and local communities. In terms of enhancing occupational health and safety, it has acquired OSHMS certification at its four domestic plants (Tokyo, Osaka, Shiga and Hanyu), and OHSAS (Occupational Health and Safety Assessment Series) which is an international certification at its five overseas plants (U.S., France, India, Vietnam and Thailand). For governance, it has established a corporate governance structure (decision making and business execution systems, audit system and international advisory board), and is working to strengthen its functions.

Measures for ESG (Environment, Society, Governance)



Source: Reprinted from the Company's results briefing materials

The worldwide shift towards environmentally friendly products is strengthening, and there remains plenty of room for the markets to expand and develop globally. The Company has a track record of global business deployment ahead of its industry peers, and its strengths lie in its expertise in launching products tailored to local characteristics in each country, development and extensive lineup of environmentally friendly and high-function, high-value-added products, and high market shares for these products. We can expect earnings to expand in the medium term as it accelerates its global business deployment and increases sales of environmentally friendly and high-function, high-value-added products.

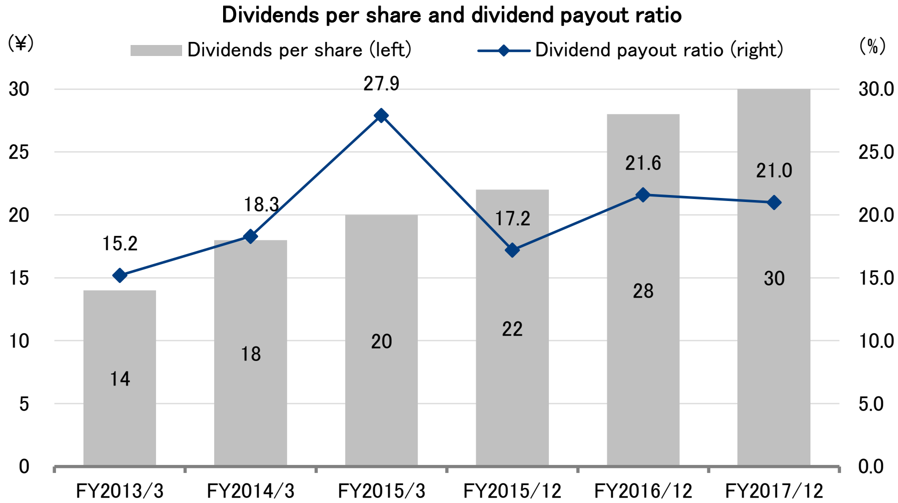
Shareholder return policy

Targeting a consolidated dividend payout ratio in the range of about 20% to 30%, and also implements a shareholder benefit program

1. Targeting a consolidated dividend payout ratio in the range of about 20% to 30%

With regards to distributing profits, the Company considers returning profits to shareholders, including dividends, to be an important management issue, in conjunction with working to strengthen its financial position and business infrastructure. The basic dividend policy is to steadily return profits to shareholders through dividend payments, while targeting a consolidated dividend payout ratio in the range of 20% to 30%.

Based on this basic policy, the dividend forecast for FY2018/12 is the same as FY2017/12 with an annual dividend of ¥30 per share (¥15 at the end of first half, ¥15 at the end of the fiscal year), for a dividend payout ratio of 26.5%.



Note: FY2015/12 is nine months.
Source: Prepared by FISCO from the Company's financial results

2. Conducts a shareholder benefits program every year at the end of December

The Company also offers a shareholder benefit program. A QUO card with ¥1,000 is awarded to shareholders who own one trading unit (100 shares) or more of shares as of December 31 every year.

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FISCO Ltd.