



President
Katsumi Kitagawa

Toyo Ink SC Holdings, Co., Ltd. (4634)



Company Information

Market	TSE 1st Section
Industry	Chemical (Manufacturing)
President	Katsumi Kitagawa
HQ Address	2-2-1 Kyobashi, Chuo-ku, Tokyo
Year-end	End of December
Homepage	http://schd.toyoinkgroup.com/en/index.html

Stock Information

Share Price	Shares Outstanding		Market Cap.	ROE (Actual)	Trading Unit
¥2,537	60,621,744 shares		¥153,797 million	5.4%	100 shares
DPS (Est.)	Dividend Yield (Est.)	EPS (Est.)	PER (Est.)	BPS (Actual)	PBR (Actual)
¥90.00	3.5%	¥205.54	12.3 x	¥3,712.20	0.7 x

* Share price as of closing on the end of March 13. Number of shares outstanding, ROE and BPS are as of the end of the previous term.

Earnings Trends

Fiscal Year	Sales	Operating Profit	Current Profit	Net Profit	EPS	DPS
March 2010 (Act.)	226,074	13,339	13,604	6,556	21.77	10.00
March 2011 (Act.)	245,958	19,145	19,002	11,517	38.60	12.00
March 2012 (Act.)	245,337	13,648	13,445	7,238	24.26	12.00
March 2013 (Act.)	248,689	17,547	18,468	8,714	29.20	12.00
March 2014 (Act.)	279,557	19,728	20,553	12,260	41.09	13.00
March 2015 (Act.)	286,684	18,210	19,411	13,304	44.60	14.50
March 2016 (Act.)	283,208	18,470	18,697	12,190	40.87	15.50
March 2017 (Act.)	268,484	19,222	19,257	12,687	42.95	16.00
December 2017 (Act.)	240,344	16,823	17,528	10,424	35.71	16.00
December 2018 (Act.)	290,208	15,337	15,508	11,899	203.81	85.00
December 2019 (Est.)	300,000	17,500	18,000	12,000	205.54	90.00

* Estimates are those of the Company. Net income is net income attributable to the shareholders of the parent company.

* The values of December 2017 are for 9 months. A 1-for-5 reverse split was conducted on July 1, 2018.

This Bridge Report provides Toyo Ink SC Holdings, Co., Ltd.'s financial updates of the term ended December 2018, and more.

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Key Points

- The sales for the term ended Dec. 2018 were 290.2 billion yen, up 3.6% year on year. The “Colorants & Functional Materials Related Business,” “Polymers & Coatings Related Business,” and “Packaging Materials Related Business” were healthy. Overseas sales expanded mainly in Asia, and shipment volume increased. However, in the latter half of the year, the business was affected by the slowdown in the Chinese market and the smartphone market. Operating income was 15.3 billion yen, down 25.3% year on year. Although there were positive factors such as the increase in sales volume and the revision of prices, the skyrocketing material prices, including the prices of solvents due to the increase in naphtha price, and the decline in selling prices negatively affected the profit, resulting in decrease in profits.
- The sales for the term ending Dec. 2019 are expected to be 300 billion yen, up 3.4% year on year. The sales from the “Colorants & Functional Materials Related Business,” “Polymers & Coatings Related Business,” and “Packaging Materials Related Business” are expected to continue to grow. Operating income is expected to increase 14.1% year on year to 17.5 billion yen. Although there is a continuing impact of rising raw material prices, it will be offset by growing sales volume, widespread acceptance of revised prices and cost reduction, leading to increased profits. Profits are expected to increase in all segments. The dividend is to be 90.00 yen/share, up 5 yen/share from the previous term. The estimated payout ratio is 43.8%.
- According to the forecast of operating income fluctuation factors for the term ended Dec. 2018, the impact of soaring raw material prices was expected to be negative 2 billion yen. However, in reality, it was negative 5.5 billion yen, which became the largest factor of profit decline in the previous term. As efforts such as increasing sales volume and penetrating price revisions are steadily making progress, in the short term, we would like to watch how the company will absorb the soaring raw material prices which are expected to be negative 1.6 billion yen during this term. Meanwhile, in the medium term, how actively the company can promote various investments that were not implemented sufficiently in the previous fiscal year and how quickly it can launch products related to growth keywords such as IoT, 5G, and the environment are the points of focus.

1. Company Overview

Toyo Ink SC Holdings is Japan’s top manufacturer of printing inks. Using the processing technologies of pigments and resins that are the raw materials of inks, the Company manufactures various products such as LCD color filters and electromagnetic shielding films. The Toyo Ink Group is comprised of Toyo Ink SC Holdings, 66 consolidated subsidiaries in and outside Japan, and 9 equity method affiliate companies. They are operating business in 22 countries around the world (The end of December 2017). Under the long-term scheme “Scientific Innovation Chain 2027 (SIC 27),” whose concept is to contribute to the improvement of sustainability of ordinary citizens, life, and the global environment by innovatively thinking, scientifically executing, and connecting each activity by each and every employee, it is aiming for a transformation to have a corporate structure that enables sustainable growth

towards 2027.

1-1 Corporate History

The origin of Toyo Ink dates back to 1896, when founder Kamataro Kobayashi opened *Kobayashi's Ink Shop* as sole proprietorship in Nihonbashi, Tokyo. In 1907, it was reorganized and renamed as *Toyo Ink Manufacturing Co., Ltd.* During the Meiji period, many newspapers and magazines, including the Yomiuri Shimbun (founded in 1874) and the Asahi Shimbun (founded in 1879), were launched. The government also printed an increasing number of materials including textbooks to enhance educational levels under the policy of increasing wealth and military power. Under these circumstances, the demand for printing inks expanded rapidly.

Initially, inks in the Japanese market were mostly imported products; however, as the national policy favored high quality domestically produced inks, the Company, with its advanced technological skills, successfully expanded its business with clients such as the Printing Bureau of the Ministry of Finance and other government bodies, in addition to private printing companies. Exports also grew during the same time. The Company's rapid growth was also due in part to the early introduction of integrated manufacturing system from raw materials (pigments, resins) to finished products (printing inks). Another contributing factor may be that the Company, since its inception, had strong ties with Toppan Printing Co., Ltd., which, by then, was among Japan's largest printing companies. The Company survived the difficult times of the Great Kanto Earthquake and the World War II and experienced rapid growth again during the period of high economic growth after the war. The Company was listed on the Second Section of the Tokyo Stock Exchange in 1961 and moved to the First Section of the Tokyo Stock Exchange in 1967.

The Company is expanding its businesses from manufacturing of printing inks to other fields such as LCD film materials, using its wide range of technologies and know-how cultivated through manufacturing and processing of raw materials such as pigments and resins. In 2011, the Company adopted a holding company system for further expansion and growth of the Group, and changed its name to Toyo Ink SC Holdings, Co., Ltd.

1-2 Management Philosophy

The Toyo Ink Group's Corporate Philosophy was established in April 1993. It consists of three parts, namely, corporate philosophy, corporate policies, and guiding principles. The Philosophy embodies the original roots of the brand of the corporate group and serves as guidelines that each employee of the Group should always keep in mind and act on as a business professional. In April 2014, "improving shareholder satisfaction" was added to its guiding principles. With this revision, the Company is aiming to improve satisfaction of all stakeholders.

<Toyo Ink Management Philosophy>

Management philosophy	People-oriented management
Corporate policies	<p>We, the Toyo Ink Group, endeavor to be a company that contributes to the enrichment of life and culture throughout the world.</p> <ul style="list-style-type: none"> *Contribute to the affluence and culture of people worldwide. *Create lifestyle value for the new age. *Provide advanced technology and quality products and services.
Guiding principles	<ul style="list-style-type: none"> *Provide knowledge that enhances customer trust and satisfaction. *Respect the materialization of all employees' dreams. *Act as a responsible citizen in harmony with society and the environment *Respect shareholders' rights, improve shareholder value and enhance market valuation.

All employees must always carry this philosophy system printed on a credo card, read it out in the 5-minute meeting every week at each

division, and repeatedly confirm its meaning through discussion. This way, the employees are expected to have deeper understanding and implement the philosophy.

Furthermore, the “Toyo Ink Group Management Philosophy” is printed on the first page of every single issue of the Company's in-house magazine, which is published for the Group's unity and circulated to the entire Group including the overseas locations. Also, the above-mentioned credo has “Japanese/English” version as well as “Chinese/English” version to share and spread the management philosophy globally.

1-3 Market Environment

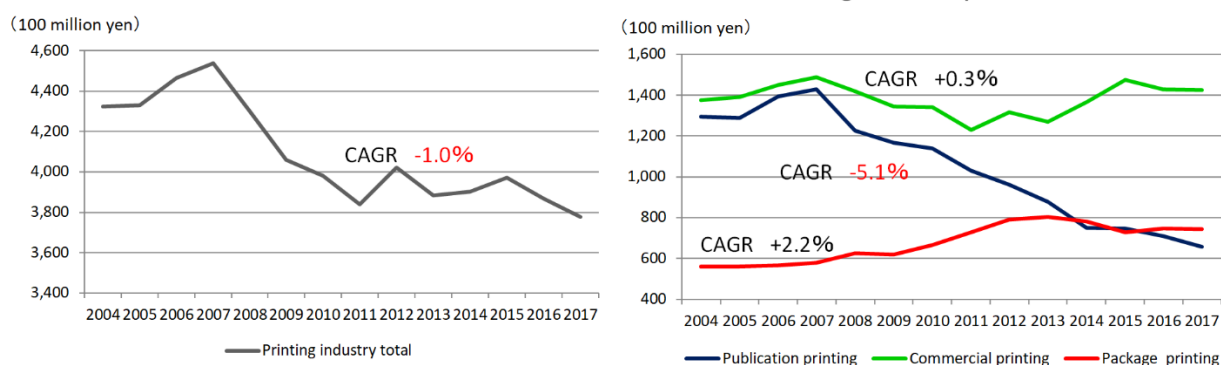
1-3-1 Overview

(Market trend)

The production value of the Japanese printing industry is declining especially in the realm of publication printing of newspapers and magazines as a result of increasing digitization and aliteracy.

In the realm of commercial printing, on the other hand, of posters, catalogues, fliers, POP, etc. demand is fairly steady. Furthermore, printing on food and pharmaceutical packages and plastic containers is steadily increasing at the compound annual growth rate (CAGR) of 2.42% from 2004 to 2017.

Transition of Production Value in the Printing Industry



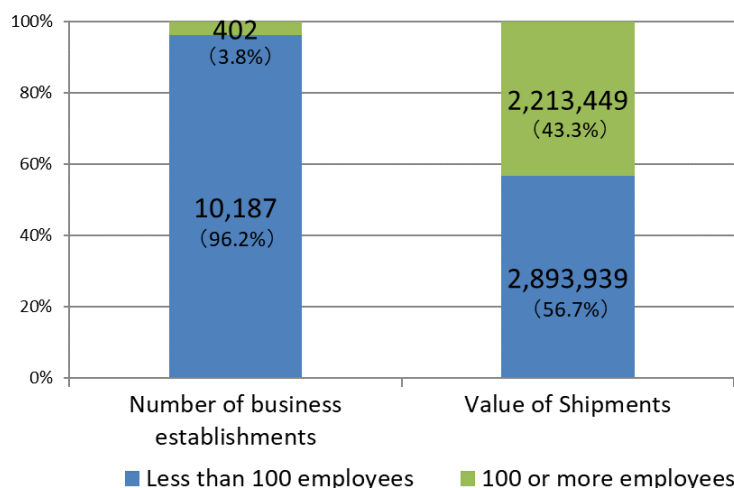
* Developed by Investment Bridge Co., Ltd. based on Current Survey of Production Annual Report "Paper, Printing, Plastic Products, Rubber Products" by Ministry of Economy, Trade and Industry (METI)
 * CAGR (Compound Annual Growth Rate)

Meanwhile, overseas, especially in newly emerging countries, both printing on papers (offset printing) and printing on film of food packages (gravure printing, flexographic printing) are expected to grow, and the Company is focusing on responding to the demand. As innovation of printing machine is progressing, quality of printing is enhancing. Overseas local inks, in many cases, cannot respond to such demand for high quality, which may lead to more demand of excellent Japanese ink.

(Printing houses and printing ink manufacturers)

According to the “Census of Manufactures 2017: Report by Industry” by METI, there were 10,589 business entities in the printing and related industries in 2016. 10,187 (96.2%) of them are small and medium-sized enterprises with fewer than 100 employees.

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* Developed by Investment Bridge Co., Ltd. based on the data from "Census of Manufacturers 2014: Report by Industry" by METI
 * The unit of the value of shipments is ¥million.

The Company's customers such as printing companies purchase printing inks and carry out printing. However, printing cannot be done simply by setting printing inks and papers and starting the machine. Printing companies are faced with needs such as "selection of the ink for the new types of paper," "producing special color" and "producing premium look," and challenges such as improving printing efficiency and taking environmental measures. The Company provides its customers with information on new products and various pieces of concerning these needs and challenges. Most of the 26,000 printing companies in Japan can hardly conduct business without such solutions. Therefore, printing ink manufacturers play a crucial role in the printing industry.

Thus, the Company's customers seek direct dealings with the Company. As a result, nearly 80% of the Company's domestic sales come from direct sales to its customers. These strong relationships with the customers are among the Company's major characteristics.

1-3-2 Other companies in the industry

There are six major listed companies including Toyo Ink in the ink industry in Japan.

While (4631) DIC is the number one company in the world, Toyo Ink is the top runner in Japanese printing ink industry, and ranks first or second in most product categories. Globally, the Company is ranked third (The second is a European firm). (4633) SAKATA INX is the second largest shareholder of the Company. The Company and SAKATA INX complement each other mainly in logistical aspects. The two companies concluded a capital and business alliance agreement in 2000.

		Sales	Sales growth rate	Operating income	Profit growth rate	Operating margin	Total market value	PER	PBR	ROE
4116	Dainichiseika Color & Chemicals Mfg. Co., Ltd.	170,000	1.5%	10,000	-23.5	5.9%	58,352	7.8	0.6	9.2
4631	DIC	850,000	5.5%	52,000	7.5%	6.1%	338,282	9.6	1.1	10.4
4633	SAKATA INX	173,600	7.1%	6,000	17.4%	3.5%	71,427	13.3	0.9	6.3
4634	Toyo Ink SCHLD	300,000	3.4%	17,500	14.1%	5.8%	157,798	12.7	0.1	5.4
4635	Tokyo Printing Ink Mfg. Co., Ltd.	45,000	0.3%	1,100	-24.9%	2.4%	7,133	7.7	0.3	5.1
4636	T&K TOKA	50,910	6.2%	1,740	-9.0%	3.4%	25,556	14.0	0.5	4.7

*Sales and operating income are based on forecasts of each company for this FY. ROE and PBR are based on actual results of the previous term end. Unit: Million Yen, Times. Total market value is as of closing on March 7, 2019.

1-4 Business Description

1-4-1 Concerning “printing inks”

Followings are the summary of printing inks, one of the major product categories of the Company, categorized by “raw materials” and “types and purposes of use.”

<Composing elements of printing inks>

Pigments (organic pigments, inorganic pigments, etc.)	Pigments are powders that are used to provide color and are insolvent to water and oil.
Varnish (synthetic resins, lipids, fluxing materials, etc.)	Varnish is a combination of lipids, natural resins, synthetic resins, etc. in a solvent. It diffuses pigments, transfers and fixes them to printing materials.
Additives (lubricant, hardening agent, etc.)	Additives used to adjust so-called printability such as drying performance and fluidity, as well as printing effect.

High-level diffusion technologies are required when various inks are produced by combining the above three raw materials. Since its foundation, the Company has also been expanding its business categories by exploring application of these raw materials in the process of manufacturing them.

<Types and intended use of major printing inks>

Types	Characteristics and Intended Use
Planographic inks	Typical printing ink on paper. They are used for printing magazines, posters, fliers, etc.
Gravure inks	Because of their capacity to express detailed gradation, it is suitable for printing photo images. Currently, they are mainly used for printing films such as food wrapping materials.
Screen inks	They are mainly used for printing on materials that are difficult to be printed with other methods, including industrial products such as meters and gauges of cars, circuit board formation, and CDs/DVDs.
Flexographic inks	They are used to print on the surface of cardboard boxes, films and clothes.
UV curing inks	Because they dry instantly without using a heat drier in the drying process, they are used for UV curing printing that does not directly generate CO ₂ . They are environmentally friendly inks that do not generate Volatile Organic Compounds (VOC).

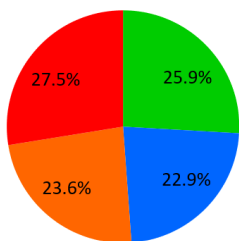
1-4-2 Business segments

The business activities of the Company are classified into four segments: the “Colorants & Functional Materials Related Business,” “Polymers & Coatings Related Business,” “Printing & Information Related Business”, and “Packaging Materials Related Business”. The “Printing & Information Related Business” mainly deals with planographic inks that are used for printing on papers (offset inks, etc.). The “Packaging Materials Related Business” deals with gravure inks and flexographic inks that are used for printing on films of food packages. The “Colorants & Functional Materials Related Business” deals with products related to pigments that are also the raw materials of printing inks as core materials. The “Polymers & Coatings Related Business” began with resins that are the main raw materials of inks and their design technologies.

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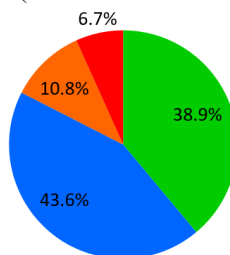


Sales composition ratio
(FY December 2018)



■ Colorants and Functional Materials ■ Polymers/Coatings
■ Packaging Materials ■ Printing/Information

Operating income composition ratio
(FY December 2018)



■ Colorants and Functional Materials ■ Polymers/Coatings
■ Packaging Materials ■ Printing/Information

* "Other" segment is excluded. The inter-segment elimination is not taken into consideration for both sales and operating income.

☆Colorants and Functional Materials Related Business

	FY Dec.18
Sales	74,660
Operating Income	5,390
Operating Margin	7.2%

*Unit: ¥mn

Sub segment	Major products
Chemicals	Pigments, high function pigments, CF (color filter) ,paste
Display materials	Resist inks for LCD color filter
Colorants	Colorants, functional colorants
Other Colorants/Functional Materials	Recording material coatings, developed products



Based on the organic pigments that are the main raw materials for printing inks, and by integrating their color material technologies, organic chemical synthetic technologies and high-level dispersion technologies, the Company offers materials that are used in various fields. Especially, it created higher functional LCD color filter materials using their nano-level dispersion technologies through integration of technologies that have been accumulated from their ink and painting materials production experiences. Furthermore, the Company's dispersion processing technologies are used not only for organic pigments but also for inorganic materials such as carbon nanotube (CNT), which leads to expansion of its business in the new energy field such as secondary battery materials. They constitute about 40% of the Company's operating income.

★Polymers & Coatings Related Business

	FY Dec.18
Sales	66,099
Operating Income	6,035
Operating Margin	9.1%

*Unit: ¥mn

Sub segment	Major products
Coating materials	Adhesive tapes, bonding tapes, marking films, electromagnetic shielding films
Adhesives	Adhesive compounds, adhesive bonds, laminating adhesives, hot-melt adhesives
Coatings, resins	Can coatings, resins, functional hard coatings
Other Polymers/Coatings	Medical products, natural materials, developed products



For this segment, the Company develops functional resins as the core materials with different functional features. Using unique technologies that have been developed for many years, the Company creates new functions to cultivate new demand and open new markets in electronics, energy, health care and other fields.

★Packaging Materials Related Business

	FY Dec.18
Sales	68,047
Operating Income	1,491
Operating Margin	2.2%

*Unit: ¥mn

Sub segment	Major products
Liquid inks	Gravure inks, flexographic inks, screen inks, gravure solvent
Gravure equipment, plate making	Gravure equipment/plate making



For this segment, the Company deals with printing inks and equipment used in packages such as gravure printing, flexographic graphic printing and screen-printing. In the field of food packaging, etc., the Company is dedicated to developing environmentally friendly products using water-based ink to assure their safety to the consumers.

★Printing & Information Related Business

	FY Dec.18
Sales	79,378
Operating Income	931
Operating Margin	1.2%

*Unit: ¥mn

Sub segment	Major products
Offset inks	Offset inks, newspaper inks, UV curable inks, metal inks, hard coat
Printing materials and equipment	Printing machinery & equipment, printing materials
Inkjet inks, others	Inkjet inks, other development products



This segment is the core segment of the Company since its establishment. For this segment, the Company deals mainly with printing inks used for printing on paper.

The Company offers not only printing inks but also sales of machinery/equipment, support for streamlining customers' printing process, and support and tools for color management and color universal design.

1-4-3 Overseas expansion

While the Company is improving profitability by offering high-value-added products in the Japanese market, where a rapid growth is not expected, it is aggressively expanding its business from both production and sales perspectives in the overseas market where future growth is expected.

Development of its overseas manufacturing structures was almost completed during the previous Midterm Business Plan, and the Company is carrying out both raw material procurement and production at local sites.

As of the end of Decembewr 2017, the Company has about 50 overseas consolidated subsidiaries and 50 production sites in a wide range of countries around the world.

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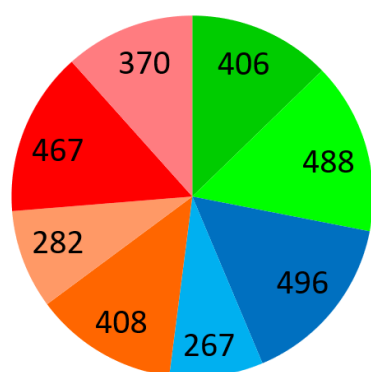


	Sales	YY change	Operating Income	YY change
Japan	1,817	+1.0%	96	-27.9%
Asia & Oceania	1,065	+10.6%	55	-11.2%
Europe	202	+1.1%	4	-60.5%
The Americas	143	+8.4%	-1	-
Adjustment	-324	-	-0	-
Consolidated total	2,902	+3.6%	153	-25.3%

*Unit: ¥100mn

<Segment trend by region: FY December 2018>

Domestic and Overseas Sales by Segment
(FY December 2018, Unit:100 million yen)



- Colorants and Functional Materials (Japan)
- Colorants and Functional Materials (Overseas)
- Polymers/Coatings (Japan)
- Polymers/Coatings (Overseas)
- Packaging Materials (Japan)
- Packaging Materials (Overseas)
- Printing/Information (Japan)
- Printing & Information (Overseas)

* Elimination among regions is not taken into consideration.

1-5 ROE Analysis

	FY Mar. 13	FY Mar. 14	FY Mar. 15	FY Mar. 16	FY Mar. 17	FY Dec. 17	FY Dec. 18
ROE (%)	5.8	7.3	6.9	5.9	6.0	4.8	5.4
Net income to net sales ratio (%)	3.50	4.39	4.64	4.30	4.93	4.34	4.10
Total asset turnover rate	0.85	0.88	0.82	0.78	0.74	0.65	0.77
Leverage	1.94	1.88	1.80	1.75	1.73	1.70	1.71

*The 12-months conversion value for the term ended December 2017 is 6.8%.

In general, it is desirable to boost profitability and efficiency to achieve an ROE of 8%, which is said to be the value that should be pursued by Japanese companies.

1-6 Characteristics and Strengths

1-6-1 Strong technological edge

As described above, the Company has been manufacturing in-house pigments and resins, which are the raw materials of printing inks. Its technological capacities form the basis of high quality printing ink production and lead to expansion of business areas and product range such as, LCD color filter materials, adhesive bonds and adhesive compounds.

1-6-2 Excellent problem solving skills

One of the reasons for the Company to be at the top of the Japanese printing inks industry is its excellent problem solving capability in all aspects of printing.

The Company not only produces and supplies printing inks but also studies elements related to “printing” as a whole including plate making and images. Such efforts enable the Company to make technological proposals, demonstrate advanced service skills, and obtain high customer satisfaction.

1-6-3 Environmental concerns

The Company is a forerunner in CO₂ emission reduction as well as production of eco-friendly inks such as non-VOC inks, water-base inks, and UV inks. In the newly developed countries, too, the environmental regulations are becoming tighter, and the needs for environmentally friendly products are increasing. The Company is also working on assuring safety such as chemical substances control and manufacturing a line of products that meet the Swiss Ordinance, ahead of other companies.

1-6-4 Uniqueness of management strategies

The Company considers M&A as one of the options for exploring new markets with its technological edge, if M&A is expected to bring synergy effects to the Company. However, it is not intending to implement M&A just to increase the size of businesses. It is also taking an initiative in the printing ink industry to establish “local production for local consumption” policy in the overseas market for enhancing efficiency (e.g. reduction in transport mileage) and social contribution (e.g. utilization of local products) purposes.

2. Fiscal Year December 2018 Earnings Results

2-1 Business results overview

	FY Dec. 17	Ratio to sales	FY Dec. 18	Ratio to sales	YoY change	Compared with the initial forecasts	Compared with revised forecasts
Sales	280,066	100.0%	290,208	100.0%	+3.6%	-3.3%	-3.3%
Operating Income	20,524	7.3%	15,337	5.3%	-25.3%	-28.7%	-17.1%
Ordinary Income	21,324	7.6%	15,508	5.3%	-27.3%	-29.5%	-16.2%
Net Income	14,762	5.3%	11,899	4.1%	-19.4%	-11.9%	-11.9%

* The results for FY 12/17 are actual and adjusted based on 12-months settlement from January to December.

* Units: ¥mn

Sales grew, but profit declined.

Sales were 290.2 billion yen, up 3.6% year on year. The “Colorants & Functional Materials Related Business,” “Polymers & Coatings Related Business,” and “Packaging Materials Related Business” were healthy. Overseas sales expanded mainly in Asia, and shipment volume increased. However, in the latter half of the year, the business was affected by the slowdown in the Chinese market and the smartphone market.

Operating income was 15.3 billion yen, down 25.3% year on year. Although there were positive factors such as the increase in sales volume (+1.7 billion yen) and the revision of prices (+1.2 billion yen), the skyrocketing material prices, including the prices of solvents due to the increase in naphtha price (-5.5 billion yen), and the decline in selling prices (-1.4 billion yen) negatively affected the profit.

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2-2 Trend by Segment

Sales	FY Dec. 17	FY Dec. 18	YoY change	Compared with the initial forecasts	Compared with revised forecasts
Colorant/Functional materials	719	747	+3.9%	-3.0%	-3.6%
Polymers/Coatings	616	661	+7.3%	-4.2%	-2.8%
Packaging	650	680	+4.6%	-2.9%	-2.9%
Printing/Information	809	794	-1.4%	-4.9%	-3.8%
Others	7	20	-	-	-
Adjustment	2,801	2902	+3.6%	-3.3%	-3.3%
Total					
Operating income	65	54	-17.3%	-21.7%	-11.5%
Colorant/Functional materials	69	60	-23.3%	-29.4%	-15.5%
Polymers/Coatings	24	15	-38.4%	-48.3%	-34.8%
Printing/Information	35	9	-64.8%	-69.0%	-50.0%
Others	11	15	-	-	-
Adjustment	205	153	-25.3%	-28.7%	-17.1%

*The results for FY 12/17 are actual and adjusted based on 12-months settlement from January to December. The YoY value may contain an error due to calculation in the unit of 100 million yen.

*Unit: ¥100mn

★Colorants and Functional Materials Related Business

Sales grew but profit declined. New adoption of display materials progressed in China, but media materials, which are one of the focuses of the company, did not reach the sales target.

(Chemicals)

Both sales and profit declined. Pigment materials remained weak due to the downturn in the printing field and rising raw materials prices. Some new high-dispersion pigments for inkjet and coating were successful. They are expected to generate profit in 2019 targeting the battery manufacturers in China.

(Display materials)

Both sales and profit grew. Sales progressed well, with new sales obtained from a Chinese panel manufacturer. For the sensor materials, a technical development system was established.

(Colorants)

Sales grew but profit declined. Profit decreased due to the impact of rising material prices. In the medical-related fields, the company focused on developing specific wavelength blocking materials, and the assessment of the material by customers began. The liquid colorants were recognized by large customers and will be adopted by them. Supply of functional colorants began in the field related to Carbon Nano-Tube (CNT).

★Polymers & Coatings Related Business

Sales grew but profit declined. Sales showed significant growth mainly for electronic products. Electronic and optical products, which are the company's key products, considerably exceeded the sales targets.

(Coating materials)

Both sales and profit grew. Sales of conductive adhesive films for smartphones and display applications grew for the domestic as well as overseas markets. Marking films performed well for large-scale properties in Japan.

(Adhesives)

Sales grew but profit declined. Adhesives for electronic products and laminate adhesives for lithium-ion batteries were strong, but the business was affected by soaring raw material prices.

(Coatings and resins)

Both sales and profit declined. Can coatings were healthy for environmentally friendly products in the U.S. market. In Japan, sales remained weak due to stagnant demand for canned coffee. Sales of high-value-added resins were strong in the first half but slowed in the second half.

★Packaging Materials Related Business

Sales grew but profit declined. Sales volume increased due to expansion of demand and sales expansion of packaging materials. Overseas liquid ink, which is a key product, did not achieve the target.

(Soft packaging materials)

Sales grew but profit declined. The demand for gravure inks remained healthy in Japan. The company promoted sales of environmentally friendly products such as biomass ink, but it was affected by soaring raw material prices. Overseas, sales of middle-grade inks continued to grow in Southeast Asia and China.

(Building materials)

Sales grew but profit declined. Sales promotion continued for topcoats for construction materials.

(Cardboard)

Both sales and profit declined. Although expansion of new sales channels and cost reduction progressed, the drop in sales volume due to reduction of color printing heavily affected the sales.

★Printing & Information Related Business

Both sales and profit declined. While demand continued to decrease, shipment volume of functional inks such as UV inks increased. It could not reach the target for functional inks, which are priority products.

(Offset inks)

Both sales and profit declined. In Japan, the company worked on consolidation of production bases and establishment of external alliances. Establishment of alliance for logistics is also under consideration. Despite sales expansion of new products, soaring raw material prices put pressure on profits.

Outside Japan, the market stagnated, and environmental regulations became tighter in China. Under these circumstances, the company promoted SCM optimization for expanding sales of Indian and Brazilian products and improving profits, but soaring raw material prices put pressure on the profit.

(Functional inks)

Sales grew but profit declined. For the functional ink group, the company expanded sales through cooperation with printing machine manufacturers. The company promoted sales of UV inks for paper containers in Japan, Central and South America and China. As for inkjet inks, it promoted sales expansion for commercial printing and development of inkjet inks for packaging. Soaring raw material prices gave a significant negative impact.

2-3 Financial Situation and Cash Flow

2-3-1 Main BS

	End of Dec. 2017	End of Dec. 2018		End of Dec. 2017	End of Dec. 2018
Current assets	196,491	205,966	Current liabilities	93,344	99,122
Cash and deposits	50,260	52,706	Trade payables	55,984	62,117
Trade receivables	94,594	95,553	Short-term loans	21,189	19,219
Inventories	47,550	49,503	Noncurrent liabilities	55,267	51,604
Noncurrent assets	183,190	168,569	Long-term loans	38,409	38,845
Property, plant and equipment	97,419	94,290	Total liabilities	148,612	150,726
Intangible assets	4,307	4,649	Net assets	231,070	223,809
Investments, others	81,463	69,629	Equity	198,310	205,319
Total Assets	379,682	374,536	Total liabilities, net assets	379,682	374,536

*Unit: ¥mn

Current assets grew 9.4 billion yen from the end of the previous term, due to the increase in cash and deposits, etc. Noncurrent assets dropped 14.6 billion yen from the end of the previous term, due to the decline in investment securities caused by the decrease in share prices, etc. Total assets decreased 5.1 billion yen to 374.5 billion yen from the end of the previous term. Total liabilities were 150.7 billion yen, up 2.1 billion yen from the end of the previous term, due to the increase in trade payables, etc. Net assets declined 7.2 billion yen to 223.8 billion yen from the end of the previous term, as retained earnings rose, but foreign currency translation adjustment turned negative due to the yen appreciation.

As a result, capital adequacy ratio decreased 1.1 points from 59.0% at the end of the previous term to 57.9%.

2-3-2 Cash Flow

	FY Dec. 17	FY Dec. 18	YY Change
Operating Cash Flow	18,724	19,275	+551
Investing Cash Flow	-5,912	-10,828	-4,916
Free Cash Flow	12,812	8,447	-4,365
Financing Cash Flow	-8,415	-5,774	+2,641
Cash and Equivalents at Term End	49,262	50,958	+1,696

*Unit: ¥mn

Because the results for FY 12/17 are based on a nine-month settlement, it is not possible to simply compare year on year. However, free CF continued to be positive and the cash position improved.

2-4 Topics

Strengthening environmental product line

Under the 10-year long-term scheme “Scientific Innovation Chain 2027 (SIC 27),” where the company aims to achieve sustainable growth toward 2027, it adopted the following concept as a goal for 2027: “a world where all living beings and the environment can coexist harmoniously and with vitality.” As a chemical manufacturer, it is working on “strengthening environmental products line” as a social contribution activity.

Based on the idea of contributing to the realization of a sustainable society through the development of technologies, products and services that can harmonize with the environment for the long term, in addition to low environmental loads, the company is promoting

the following specific initiatives.

Reduction of waste plastic	*Promoting mono-materials *Strengthening the bio-plastic product line *Strengthening the product line for paper container packaging
Improvement of recyclability	*Desorption system for inks
Reduction of food waste	*Freshness retention *Improving barrier capacity *Retort compatible
Reduction of CO ₂	*Biomass-derived products
Countermeasures against VOC	*Water-based *Solvent-less
Energy saving	*High-sensitivity UV curing *Electron beam curing

In addition, with regard to SDGs (sustainable development goals), the company will work on the 12 goals that are particularly relevant to its business activities in relation to the important issues of CSR



(Source: the company)

3. Fiscal Year December 2019 Earnings Forecast

3-1 Business forecasts

	FY Dec. 18	Ratio to sales	FY Dec. 19 Est.	Ratio to sales	YY change
Sales	290,208	100.0%	300,000	100.0%	+3.4%
Operating Income	15,337	5.3%	17,500	5.8%	+14.1%
Ordinary Income	15,508	5.3%	18,000	6.0%	+16.1%
Net Income	11,899	4.1%	12,000	4.0%	+0.8%

*Forecasts are the figures announced by the Company.

*Unit: ¥mn

Both sales and profit will grow.

Sales are expected to be 300 billion yen, up 3.4% year on year. The sales from the “Colorants & Functional Materials Related Business,” “Polymers & Coatings Related Business,” and “Packaging Materials Related Business” are expected to continue to grow.

Operating income is expected to increase 14.1% year on year to 17.5 billion yen. Although there is a continuing impact of rising raw material prices (1.6 billion yen), it will be offset by increasing sales volume (3.7 billion yen), widespread acceptance of revised prices (1.4 billion yen), and cost reduction (1.0 billion yen), and profits are expected to increase in all segments.

The dividend is to be 90.00 yen/share, up 5 yen/share from the previous term. The estimated payout ratio is 43.8%.

The exchange rates are assumed to be as follows: 1 US dollar = 110 yen (110.4 yen on average in the previous term), 1 euro = 130 yen (130.0 yen on average in the previous term), and 1 yuan = 17.0 yen (16.5 yen on average in the previous term).

Raw material prices are expected to be 45,000 yen/kl for naphtha (51,075 yen/kl on average in the previous term) and \$1,800/ton for rosin (\$ 1,838/ton on average in the previous term).

3-2 Trends by Segment

Sales	FY Dec. 18	FY Dec. 19 Est.	YY change
Colorant/Functional materials	747	780	+4.4%
Polymers/Coatings	661	700	+5.9%
Packaging	680	730	+7.4%
Printing/Information	794	785	-1.1%
Others/Adjustment	20	5	-
Total	2,902	3,000	+3.4%
Operating Income			
Colorant/Functional materials	54	60	+11.1%
Polymers/Coatings	60	70	+16.7%
Packaging	15	25	+66.7%
Printing/Information	9	16	+77.8%
Others/Adjustment	15	4	-
Total	153	175	+14.1%

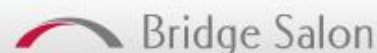
*From the term ending December 2018, the segment of coating materials is partially moved from the Printing & Information Related Business to Polymers & Coatings Related Business.

*Unit: ¥100mn

3-2-1 Key measures in each segment for the term ending December 2019

Colorant/Functional materials	<p>(Chemicals)</p> <ul style="list-style-type: none"> *To respond to rising raw material costs and reduced demand for offset printing To improve profitability through product consolidation and price optimization, develop differentiation strategies of products, and expand sales to growth market targets *To expand sales of functional dispersion materials centering on carbon dispersion materials for LiB <p>(Display materials)</p> <ul style="list-style-type: none"> *To expand market share of resist inks for LCDs and OLEDs through higher definition (high brightness, expanding color gamut) and stronger competitiveness *To expand sales of resist inks for image sensors (e.g. mobile and in-vehicle applications)
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BRIDGE REPORT



	<p>(Colorants)</p> <p>*To improve business profitability and expand the business in new markets and new fields</p> <p>To expand the share of existing markets, improve sales of high-performance products and expand overseas business through global cooperation and strengthened sales activities.</p>
Polymers/Coatings	<p>(Coating materials)</p> <p>*To expand sales activities for products targeting the electronics/ optical markets (anti-noise products/OLED peripheral materials, etc.)</p> <p>*Activities to propose our specifications for the 5G (high-speed communication) market</p> <p>(Adhesives)</p> <p>*Overseas SCM expansion for environmentally friendly adhesives compounds for polarization plates</p> <p>*To expand sales of adhesives and primers in the environmental energy field</p> <p>(Coating resins)</p> <p>*To expand sale of environmentally friendly coatings</p> <p>*To develop new resins for the electronics market</p> <p>*To develop energy-related resins</p>
Packaging	<p>(Soft packaging materials)</p> <p>*The domestic packaging market is forecasted to remain strong in 2019. The business is on an expansion trend as it has a new customer for flexographic inks for soft-packaging. To promote sales of biomass and water-based product line.</p> <p>*For overseas, to launch developed products that are tailored to the needs of each area. To promote sales of flexographic inks, mainly in Europe and Asia.</p> <p>(Building materials)</p> <p>*To promote sales of inks for films and topcoats to respond to renovation demand in Japan. To promote sales of exterior application inks and coating materials in the overseas markets.</p> <p>(Cardboard)</p> <p>*It is forecasted that the cardboard processing market is healthy. But the demand for multicolor printing will decrease. While promoting sales expansion in the undeveloped markets, it will launch biomass product line.</p>
Printing/Information	<p>(Offset inks)</p> <p>*The information printing market is expected to shrink both in Japan and overseas due to the impact of digitization. The company will aim to secure profits through improved sales efficiency, establishment of external alliance, promotion of global optimal SCM, and price revision.</p> <p>(Functional inks)</p> <p>*To expand the business in the packaging market centering on UV and IJ in order to respond to digitization and environmental responsiveness and improve profitability.</p> <p>To expand the sales of IJ product line to various digital printing markets.</p> <p>To expand UV product lineup for the paper container market.</p>

3-2-2 Mid-term target in each segment

Colorant/Functional materials	<p>1.To expand the fields of functional dispersion materials using surface treatment and dispersion processing technology. E.g. Electronics, mobility, medical, agriculture To work on carbon black insulation and ultra-smooth surface.</p> <p>2.To expand the sensor-related business. To grow the sensor-related business as a pillar of the display materials business following resist inks for LCD.</p> <p>3.To transform the profit structure of the pigment business and colorant business. To gain new revenue through supply chain optimization, development of new products, and field expansion. To enter the global market.</p>
Polymers/Coatings	<p>1.Strategic marketing of “Electronics” and “Packaging and industrial materials” Proposal activities with a focus on environment and CSR. To accelerate product development for the 5G, IoT, new mobility and EV markets. For the 5G-related field that is attracting attention, the company will develop and expand sales of materials for shielding electromagnetic waves for high frequency range.</p> <p>2.To expand medical science products. To construct a new pipeline of patches in two fields, namely, generic and a new route of administration. To expand sales of adhesives for medical use (including highly permeability types) and overseas development of them (mainly in the Chinese market). To develop materials (coating materials, processed products, etc.) for medical equipment and testing equipment.</p> <p>3.To expand global SCM. To construct a global quality assurance system. To expand production bases in North America, India, Turkey and Asia.</p>
Packaging	<p>1.To build a global SCM system for resins and inks To respond to increasing demand and BCP by establishing multiple resin production bases. New product development and control of investment cost through resin production process innovation.</p> <p>2.To accelerate development of environmental products. To develop eco-friendly inks for construction materials. To develop the EB (electron beam) curing product line for soft packaging.</p> <p>3.To respond to the movement of recycling plastic packaging.</p>
Printing/Information	<p>To expand the functional ink product lineup. *Inkjet inks: To propose functions and image quality. *Metal decorative inks: To propose environment and functions. Overseas market expansion through expansion of LED-UV inks and package proposal with interior coatings *UV inks: To expand the market by developing the lineup of biomass products.</p>

3-3 Investment for creating new businesses

There was a significant change in the external environment in the second half of the year, and the expansion of bases through capital investment in Turkey and Mexico was postponed. As for strategic investment, various strategic alliances and M&A projects were also postponed or canceled. As a result, as shown in the table below, the amount of investment in 2018 was far below the initial plan.

	2018		2019
	Initial Plan	Actual	Plan
Strategic investments (HR, technology, business)	50	2	60
Capital investment	160	98	220
Information investment	10	9	5
Total	220	109	285

*Unit: ¥100mn

In the current term, the company plans to develop laminate adhesives and healthcare related products in Japan, develop functional ink related products for the European market, build a new plant in Mexico for the Central and South American market, and relocate Jiangmen Plant in China.

With regard to strategic investment, it plans to consider making investments with a target of 13 billion yen by 2020, including the ones that were not implemented in the previous fiscal year.

It will actively promote investments in businesses, human resources, and technologies that will lead to the creation of new businesses.

4. Mid-Term Business Plan “SIC-I” in 2019

The company is planning to create the foundation for sustainable growth of the Toyo Ink Group during the Mid-Term Business Plan SIC-I. The company considers 2019, the second year, as a year to promote transformation of existing businesses and expansion of new business areas.

Annual policy	<p>*New business development and value provision that capture changes in market and customer needs.</p> <p>As a manufacturing company, the company will review the supply chain of domestic and overseas bases, *product composition, manufacturing methods and prescription from the ground up and lead the market with technological advantage.</p> <p>*It will renovate the business culture and personnel system to encourage the employees to challenge without fear for change and carry out operational reforms.</p>
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4-1 Reform of the existing businesses

Colorant/Functional materials	To expand the alliances of the pigment business. To expand the sales of the functional materials business such as LiB materials and color filter materials and strengthen the supply system.
Polymers/Coatings	To expand electronics and display related products. To expand global sales and improve supply systems for environmentally friendly products.
Packaging	To continuously introduce environmentally friendly products using raw materials derived from natural products. To expand sales of gravure inks in the overseas volume zones
Printing/Information	To accelerate business structure reform in Japan where the market is shrinking. To expand the business in emerging areas where demand is expected to expand.

4-2 Expansion of the new business areas

To create new businesses in new fields by utilizing the Group’s unique technologies including synthesis, dispersion, and film formation using materials such as pigments and resins.

(Examples of products)

Next-generation display materials, materials for image sensors, electromagnetic wave shields for high-speed communication, adhesive patches for medical use, IJ inks compatible with digital printing, flexographic inks for soft packaging, electron beam inks, etc.

While expanding the business fields in the growing markets such as IoT, mobility, energy and environment for the entire business segments, it will make a Group-wide effort to make a leap as a science company, including a review of production and management system using data science.

5. Conclusions

According to the forecast of operating income fluctuation factors in the beginning of the term ended December 2018, the impact of soaring raw material prices was expected to be negative 2 billion yen. However, in reality, it was negative 5.5 billion yen, which became the largest factor of profit decline in the previous term.

As efforts such as increasing sales volume and penetrating price revisions are steadily making progress, in the short term, we would like to watch how the company will absorb the soaring raw material prices which are expected to be negative 1.6 billion yen during this term. Meanwhile, in the medium term, how actively it can promote various investments that were not implemented sufficiently in the previous fiscal year and how quickly it can launch products related to growth keywords such as IoT, 5G, and the environment are the points of focus.

<Reference 1: Mid-Term Business Plan “SIC-I” (FY 2018 to FY 2020) >

Under the long-term 10-year vision “Scientific Innovation Chain 2027 (SIC 27)” to realize sustainable growth for 2027, the company will develop a three-stage medium-term management plan every 3 years, clarify the challenges and roles, and act steadily for the future. It launched the first stage “Medium-Term Management Plan SIC-I (FY2018 - 2020)” this fiscal year.

Basic policies

The theme is “Frequent challenges”

By positioning the next medium-term management plan SIC-I (FY2018 - FY2020) as a period for building a foundation for sustainable growth in the next 100-year range, we will take successive measures for innovative change.

- 1) Transformation of existing businesses and development of new businesses for growth
- 2) Promotion of manufacturing innovation to increase sustainability
- 3) Overhaul of management foundation

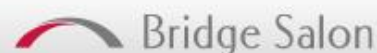
Numerical Goal

©Whole Company

	FY12/17 (12-month adjustment)	FY12/20 (Est.)	The year on year rates
Sales	2,801	3,500	+7.7%
Operating Income	205	280	+11.0%
ROE	6.8%	7.2%	+0.4p
Operating Margin	7.3%	8.0%	+0.7p
Overseas Sales Ratio	43.7%	50.0%	+6.3p

* Unit: 0.1 billion yen. The year on year rates are calculated by Investment Bridge based on the information provided by the company. The year on year rates of sales and operating income are average annual growth rates.

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◎Segments

	FY12/17 (12-month adjustment)	FY12/20 (Est.)	The year on year rates
Colorant/Functional materials			
Sales	719	930	+9.0%
Operating Income	65	82	+8.1%
Operating Margin	9.0%	8.8%	-0.2p
Polymers/Coatings			
Sales	616	840	+10.9%
Operating Income	69	96	+11.6%
Operating Margin	11.2%	11.4%	+0.2p
Packaging			
Sales	650	805	+7.4%
Operating Income	24	50	+31.0%
Operating Margin	3.7%	6.2%	+2.5p
Printing/Information			
Sales	809	925	+4.6%
Operating Income	35	48	+11.1%
Operating Margin	4.3%	5.2%	+0.9p

*Unit: 0.1 billion yen. The change is calculated by Investment Bridge based on the information provided by the company. The year on year rates of sales and operating income are average annual growth rates.

*From the term ending Dec. 2018, the segment of coating materials is partially moved from the Printing & Information Related Business to Polymers & Coatings Related Business.

(Major challenges by segment)

Colorant/Functional materials	<p>◆Development and expanded sales of products using unique pigments and nano-level dispersion technologies.</p> <p>*LiB-related materials: To try to expand LiB-related materials including carbon dispersion materials, benefiting from accelerating growth of the EV market.</p> <p>*Functional products: To develop products with optical and insulation functions that are new to the market, using its unique materials and nano-level dispersion technologies.</p> <p>◆Further expansion of color filter material and sensor materials</p> <p>*To make sure to capture demand for the expanding Chinese market and advance sales of color filter materials for panels.</p> <p>*To strengthen development for the arrival of trillion sensor era.</p>
Polymers/Coatings	<p>◆Creation of new markets by solution-proposing marketing based on manufacturing</p> <p>*Electronics: To utilize open innovation and accelerate the development of new materials centered on control of heat and electromagnetic waves.</p> <p>*Packaging and industrial materials: To develop safe and secure materials that contribute to environment and energy-saving.</p> <p>◆It will grow the Medical Science Business to be the next growth pillar.</p> <p>*To strengthen development of adhesive patches.</p> <p>*To increase sales of healthcare-related products such as cell culture coating agents and adhesives used for medical tapes.</p>

Packaging	<p>◆ Acceleration of product development in response to the changes of the market</p> <p>*To promote improvement of the evaluation technology environment from the customer's point of view and develop stand-by type new products</p> <p>*Inkjet inks: To accelerate product development in accordance with expansion of the market.</p> <p>*Metal inks: To accelerate overseas market expansion.</p>
Printing/Information	<p>◆ Strengthening environmentally-friendly products</p> <p>*Biomass inks: To increase lineups of biomass ink products lineups.</p> <p>*Water-based inks: To accelerate global business expansion by increasing functionality of packaging products.</p> <p>*UV inks: To promote global business expansion in the packaging field.</p> <p>◆ Construction of a production system to meet regional needs.</p> <p>*To strengthen the supply base and improve CS through the restructuring of the global production systems</p> <p>*To improve CS by strengthening the overseas technology center and technology services.</p> <p>*To strengthen the business foundation by promoting drastic structural reform in the domestic maturity businesses</p>

* From the term ending Dec. 2018, the segment of coating materials is partially moved from the Printing & Information Related Business to Polymers & Coatings Related Business.

◎Investment plans

The company will set up a strategic investment frame separately from the traditional capital investment frame to expand priority domains and create new businesses, and it will make aggressive investment to achieve the plan.

Facility investment frame	40 billion yen
Strategic investment frame	20 billion yen
SIC-I investment frame	60 billion yen

The strategic investment frame is an investment frame for transformation to expand priority domains and create new businesses, which will be described later. The company will take various actions, such as human resources and technology investment, to achieve the plan within this frame.

<Major measures>

1) Transformation of Existing Businesses and Development of New Businesses for Growth

【1-1 Transformation of Existing Businesses】

■ Global development

To raise the growth capacity in overseas markets, it will promote the integration of global bases that have been established so far and the expansion of product lineups and will develop diverse businesses.

For pigment dispersions for inkjet inks and inks, in addition to manufacturing environmentally friendly products in China (Zhuhai), it will increase items in Japan, the US and France.

For laminate adhesives, it will try to increase sales in the food packaging market in cooperation with global bases that operate liquid ink business.

The company aims for increased sales of 53 billion yen compared with the term ended Dec. 2017.

■ Expansion of new products

The company will promote the development of new materials with a focus on pigments and resins and create new values by combining synthesis, dispersion and film formation technologies, which are its core technologies, to enter new markets and new areas. Particularly, it will focus on electronics-related materials and medical/healthcare products in the Polymers & Coatings Related Business. It aims for increased sales of 16 billion yen compared with the term ended Dec. 2017.

【1-2 Development of New Businesses】

The company set 6 priority domains in the SIC-I. To achieve sustainable growth, it will challenge the development of new business models centered on solution proposals that go beyond merely providing products and will link them to the activities in the “SIC-II” and “SIC-III” phases.

Field	Domain
Life	Packaging Mobility Medical/healthcare
Communication	IoT
Sustainability	Natural materials Energy

It will focus on the following 4 businesses.

[Sensor-related business]

The domains are mobility, medical/healthcare and IoT.

The company will focus on rapidly increasing “sensors” in the fast growing IoT market. In addition to “manufacturing” centered on chemicals, it will also try to develop sensor-related businesses that incorporate new technologies and provide “information and systems.” (Major products/services)

The major products/services are image sensor materials and sensor devices. In the “SIC –II” and “SIC –III” phases, development of data business based on sensing data will also be considered.

[Waste-heat from living related business]

The domains are mobility, IoT and energy.

Focusing on “waste-heat from living” which is unused in the surroundings of the living, the company will develop technologies to efficiently recycle the heat and work on a business that provides recycling energy solutions.

(Major products/services)

Heat resistant adhesive film, super heat resistant insulation/heat conductive film, high heat management parts, etc.

[Healthcare related business]

The domain is medical/healthcare.

Based on the adhesive patch business platform, the company will steadily expand its pharmaceutical business base and strengthen development and sales of peripheral healthcare-related materials.

(Major products/services)

Tapes for blood glucose test strips, medical adhesives, biocompatible polymers, next-generation adhesive patches, etc.

[Natural materials related business]

The domain is natural materials.

The company aims to further develop businesses of new functional natural materials making full use of edible pigments and bamboo-related products business platforms and advance the expansion of biomass products to further contribute to the low-carbon society.

(Major products/services)

Edible pigment products, Kuma bamboo grass related products, biomass inks, functional food materials, etc.

2) Promotion of Manufacturing Innovation to Increase Sustainability

Until now, the company has been working on building a manufacturing network by proactively expanding overseas bases, building safe and secure manufacturing with consideration for the environment, and developing a global chemical substance management and trade management systems.

During the SIC-I phase, to contribute to the improvement of sustainability of ordinary citizens, life, and the global environment, it will tackle innovation in manufacturing for sustainable growth including the company itself and aim to achieve both contributing to sustainability and securing profitability.

(Example of actions)

- ☆ Building the global supply chain based on co-existence and co-prosperity with our partners
- ☆ Production process innovation integrated with digital technologies
- ☆ Promotion of manufacturing to live with the global environment (energy savings, reduction of CO2 emissions, etc.)

3) Overhaul of Management Foundation

It will drive forward global integration of business systems to reform existing business, create new businesses and reform manufacturing. It will also work on strengthening the management foundation including recruitment of personnel for reform and institutional reform (i.e. complete transition to defined contribution pension system, commencement of retirement age of 65). In addition, it will implement CSR activities integrated with management and contribute to the

improvement of the sustainability of ordinary citizens, life and the global environment.

It will strengthen the foundation to continuously create innovations.

(Example of actions)

- ☆ Promotion of ERP integration globally and promotion of greater business efficiency using AI
- ☆ Active recruitment of human resources necessary for innovative changes and the renovation of the personnel system to encourage innovations
- ☆ Promotion of active CSR activities to achieve important issues (materiality) of TIG

<Reference2: Regarding Corporate Governance>

◎ Organization type, and the composition of directors and auditors

Organization type	Company with audit and supervisory board
Directors	14 directors, including 4 external ones
Auditors	5 auditors, including 3 external ones

◎ Corporate Governance Report

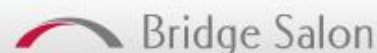
The latest update: December 26, 2018.

<Basic policy>

Our corporate group shifted to the holding company structure on April 1, 2011. Under the holding company structure, our company aims to improve the value of the entire corporate group by strengthening its strategic function, promoting speedy business administration, and achieve a good balance between the optimization of the entire group and the optimization of each business.

Our group's framework for business administration is constituted by the "ethos of the Toyo Ink Group," which is composed of management philosophy and ethos, which summarize the basic policies for group management, and the course of action, and the "CSR value system," which is composed of the CSR charter and course of action, which clearly describe the stance toward social responsibility.

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Our group aims to contribute to the improvement of sustainability of residents, life, and the earth environment and become “an enterprise that can create lifestyles and cultures that would spread around the world” as set in the management ethos, through science-based manufacturing, by putting the “ethos of the Toyo Ink Group” and the “CSR value system” into practice.

In order to create tangible and intangible values as an enterprise and fulfill social responsibility, it is indispensable to self-evaluate corporate activities from the viewpoint of stakeholders and carry out well-balanced business administration for economic, social, personnel, and environmental affairs.

To do so, our company will:

- *transfer the business execution function to each business company, and appropriately enforce the regulations for internal memos and affiliate management, which are adapted to each group company, in order to fortify corporate governance, develop its internal control system,

- *improve the instruction and monitoring functions by enhancing the legal functions and systems, such as general meetings of shareholders, the board of directors, the board of auditors, comptrollers, etc.,

- *improve the transparency of business administration by disclosing information swiftly, accurately, and broadly,

- *strengthen and enrich its compliance system,

- *promote environmental conservation on a global scale, and so on,

and foster good relationships with stakeholders, including shareholders, business partners, local communities, and employees, and enhance corporate governance.

<Reasons for Non-compliance with the Principles of the Corporate Governance Code (Excerpts)>

Our company implements all the principles of the corporate governance code.

<Disclosure Based on the Principles of the Corporate Governance Code (Excerpts)>

Principle	Disclosure contents
Principle 1-4.	<p>The economic rationality of strategically held shares is discussed annually at the board of directors' meeting. The company will examine the benefits and transaction status associated with the cross-holding as compared to the cost of capital for each individual stock, and if the cross-holding of the stock is determined not to be appropriate, the company will proceed with reduction based on the status of the issuing company and market trends. In the fiscal year under review, strategically held shares of all three companies were sold.</p> <p>The voting rights of strategically held shares are exercised appropriately for each bill, after considering qualitatively and comprehensively whether the bill would contribute to the mid/long-term improvement in the value of the share issuing company, whether the bill would contribute to the common interests of shareholders, including Toyo Ink SC Holdings, and the effects on the corporate group and business, etc.</p> <p>Furthermore, if there are special circumstances such as significant loss of corporate value or occurrence of a serious compliance violation at the issuing company, or if there is concern that our corporate value as a shareholder will be impaired, based on adequate amount of information collected through dialogue with the issuing company, etc., we will carefully determine the pros and cons of</p>

	exercising the voting rights of strategically held shares.
Principle 5-1.	<p>Toyo Ink SC Holdings considers shareholders and investors as important stakeholders, respects shareholders' rights, and strives to improve shareholder value, with the aim of "enhancing the satisfaction level of shareholders" as a course of action. Especially, the constructive dialogue with shareholders and investors is recognized as an important factor. The company appoints directors in charge of financial affairs, general affairs, and IR, realizes the information sharing among related sections through organic cooperation, promotes the dialogue with shareholders through the general affairs section and the dialogue with investors through the publicity section, and reports their opinions that are considered important to directors in charge, when necessary.</p> <p>As for the management of insider information, the company produced the regulations for the prevention of insider transactions, the regulations for protecting and managing information, etc. The management of insider information is included in the standards for business activities as a concrete course of action. A guidebook is distributed to all employees of the corporate group, and the employees are educated regularly to diffuse the rules for managing insider information.</p>

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