

3101

## Toyobo Co., Ltd.

Chief Analyst Takeshi Fujita  
Senior Analyst Hidekazu Sakai

Long-term Rating	A-
Outlook*	Positive
Short-term Rating	J-1

(Long-term Rating refers to Long-term Issuer Rating in principle.)

## 1. Company Overview

Toyobo Co., Ltd. (the "Company") is a major fiber manufacturer with an outstandingly long history since the foundation in 1882. The Company initially started a spinning and textile business under a private company structure firstly of its kind, then expanded to deal with acrylic, polyester, nylon and other synthetic fibers. At present, its core business areas reside on films and functional polymers, industrial materials and healthcare and the Company is devoted to encompassing these specialty business segments.

The Company operates a pervasive business fields and retains a number of products having higher market shares, although the size is relatively small, and has diversified source of earnings. These points can be said to be the Company's strengths. Among the lineup of products, many of them are categorized to those with limited impact of demand volatility associated with economic fluctuation. Net sales by segment in the fiscal year ended March 31, 2016 (FY2015) were composed of 41% films and functional polymers, 20% industrial materials, 8% healthcare, 25% textile and trading, and 6% Others.

## 2. Business Environment and Risks

The conventional textile industry that centers on apparels underwent a deterioration in the business environment since around the 1970's and was exposed to competitions among foreign products which have competitive prices. This caused the respective domestic textile industries inevitable to implement structural reformations. In these circumstances, the Company consistently worked on closures, aggregations and abolishment of main fiber mills and withdrawals from

unprofitable products. In recent years, the structural reformation efforts are taking a pause and demand has shifted to high value-added products and thereby the Company manages to secure a certain level of earnings. However, possibilities for future growth are marginal in the fiber industry in general and the Company needs to strengthen ROA to deliver earnings growth. Since earlier times, the Company was committed to enhancing the industrial fiber and non-fiber businesses. As a result, currently the film and functional polymers, the industrial materials and the healthcare segments have become its core areas.

The film and functional polymer segment centers on industrial and packaging films. Sales of industrial films mainly for optical applications expanded keeping up the pace of the growing production of liquid crystal displays (LCDs) for television application. At the same time, cultivation and expansion of new applications including touch panels and electronic components were promoted. At present, sales of SRF (super retarder film) which is an ultra-double refractor polyester film having superior property of low moisture permeability are increasing. Currently, shipments of this product to polarizer manufacturers in South Korea and Taiwan are growing and more major manufactures are adopting it. Going ahead, switching from conventional films to SRFs can be expected and this product line is likely to drive to earnings growth in the near term. JCR will watch the developments.

Packaging films are primarily for processed food applications with relatively stable demand from the user industries and the sales of the Company remains brisk. The industry order is also stable and the spread between raw materials/ fuel prices and product prices is free of noticeable changes except for transient time lags. These factors make the earnings in this segment free of

volatility over time. On the other hand, appreciable demand growth pertaining to this segment in the domestic market is less likely and the Company plans to actively go into overseas markets going forward.

The industrial materials segment deals with super fibers represented by IZANAS and ZYLON as well as air bag fabrics. IZANAS is an ultra-high-strength polyethylene fiber having eight times strength against piano wires with applications for vessel ropes and protective gloves, among others. ZYLON is an organic fiber having world class strength, tensile modulus, heat resistance and flame resistance for firefighter uniforms and other applications. The two products are made up of the know-how of the Company and hence unique and unrivalled, securing a certain level of constant demand in the niche markets. Airbag fabrics are a potential growth area in the global market. On this viewpoint, the Company is working on building up overseas business bases, and as part of it, started investments in PHP Fibers GmbH, an original yarn manufacturer in Germany in 2014.

The healthcare segment is composed of the bioproducts (diagnostic enzyme, etc.), functional membrane (seawater desalination membranes, medical membranes, etc.), medical equipment, and contract manufacturing pharmaceuticals product lines. The diagnostic enzyme line mainly produces enzyme for blood sugar sensors for people with diabetes. This product is increasingly contributing to the overall earnings on the backdrop where diabetes patients are increasing worldwide. Seawater desalination membranes are the strategic target for sales expansion in the Middle-East and the Company has established a production hub in Saudi Arabia. In the medical equipment product line, "Nerbridge", a medical treatment device firstly released in Japan in kind of regeneration of damaged peripheral nerves, is growing in the number of medical institutions in use and applicable patient cases. The pace of the sales growth is, however, slower than initially planned and the Company is making efforts to enhance the organization structure through building additional outlets and taking other measures to gain customer awareness. The Company is also actively going into overseas markets and, as part of it, acquired Spinreact, a Spanish diagnostic reagent and equipment manufacturer and seller, in 2013. JCR will watch whether these activities will give rise to generate profits and the healthcare business will become a driving factor for growth over a medium- to long-term.

### 3. Financial Conditions

Operating income in recent years remains a low 20.0 billion yen, staying at an 80% level of the results of FY2007 and before during when sales of industrial films were brisk. Yet, the current earnings level can be said relatively stable in the midst of evolving business environments for the respective segments, on the back of the diversified source of earnings. Operating income for FY2016 is estimated to stay at a similar level of 23.0 billion yen recorded in the previous year. Although there are some negative factors like difficult market conditions on acrylic fibers and PPS fiber materials to be shipped to China, the Company is taking appropriate remedial measures, including realignment of production systems. Meanwhile, "COSMOSHINE SRF," a polyester film for LCD applications, is being well acknowledged for its superb functionality, increasing shipments to major polarizer manufacturers. The Company is thus reinforcing the production facilities, and the product is expected to drive earnings growth for the time being.

Financial structure is improving. Shareholders' equity is growing backed by consistent profit accumulations. Increasing interest-bearing debts amid active capital investments are well managed under appropriate control measures. Thanks to these initiatives, net debt equity ratio (equity content of the hybrid debts discounted) has been successfully maintained at as low as 1.0 times in recent years from 1.6 times posted as of fiscal 2008 year-end. The Company may go into further capital investments and M&As with the aim for enhancing the earnings base. Still, JCR considers that these expenditures will be made within the scope of the operating cash flows as the Company is likely to adhere to its discipline-oriented financing.

### 4. Conclusion and Rating Outlook

The strengths of the Company reside on the pervasive business areas and an array of competitive products it has established. This enables the overall earnings to remain secured in evolving business environment conditions respective business segments are facing. The Company consistently performs reviews on unprofitable businesses and withdrew from the tire cord business in 2013 and then from the polyester resin raw materials business in 2015. In 2016, the Company decided to suspend the fiber operations in Brazil in view of possible changes in the business environment. This decision has well mitigated the risk of earnings downturn.

Profitability has been improving as a result of continual cost-saving initiatives and efforts to equip additional values to its products. New product sales, which were somewhat stagnant previously, have advanced and are contributing to the earnings. The overall sales performance is predicted to remain robust in the near term on the back of positive effects of diversified source of earnings and a sign of positive outcome of the business growth measures taken. Upfront issue of the weakened financial structure is improving and the soundness of the cash flows is increasing. JCR therefore projects that the financial base of the Company will continue to become more robust. Based on these, the outlook of the rating is Positive.

A challenge of the Company for the near term is whether its initiatives towards growth will drive to an improved earnings stability and sustainable earnings growth. Precisely, the driving factors include sales expansion of COSMOSHINE SRF, Nerbridge and other new products and enhancement of presence in overseas markets in the areas of airbag fabrics and packaging films. JCR will watch the progress as to whether the earnings bases enhancement will be advanced. If the financial structure will be further improved through stringent observance of its financial disciplines, the credit quality of the Company will be higher evaluated. JCR will review all these factors and reflect them to the rating.

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## ● Consolidated Financial Summary

(Millions of yen)

	FY2011	FY2012	FY2013	FY2014	FY2015
Net sales	349,505	339,009	351,577	351,279	347,763
Operating income	18,305	17,081	21,006	20,580	23,123
Operating income ratio on sales (%)	5.24	5.04	5.97	5.86	6.65
Ordinary profit	15,730	15,522	18,426	16,257	20,393
Net income attributable to owners of parent	4,587	7,639	8,154	8,117	10,150
Return on total capital employed (%)	4.37	4.05	4.78	4.60	5.23
EBITDA	37,740	30,240	34,188	35,700	38,262
Interest coverage ratio	9.34	9.47	13.63	11.83	14.72
Interest-bearing debt	155,809	159,430	170,721	177,085	165,358
Net interest-bearing debt	146,201	132,830	151,391	156,535	145,100
Shareholders' equity	130,571	138,024	142,310	157,989	156,915
Shareholders' equity ratio (%)	29.82	30.85	31.19	33.92	35.29
Interest-bearing debt / EBITDA	4.13	5.27	4.99	4.96	4.32
Interest-bearing debt (net) / EBITDA	3.87	4.39	4.43	4.38	3.79
Debt/ equity ratio	1.19	1.16	1.20	1.12	1.05
Debt (net) / equity ratio	1.12	0.96	1.06	0.99	0.92

\* Figures for the most recent period could be indicators based on preliminary figures.

(Notes)

- 1 Return on total capital employed = (Operating income + Interest & dividend received) / ((Total assets + Discounted bills) in average of the beginning & end of the year) x 100
- 2 EBITDA = Operating income + Interest & dividend received + Depreciation + Amortization of goodwill
- 3 Interest coverage ratio = (Operating income + Interest & dividend received) / Interest & discount charge paid
- 4 Interest-bearing debt (net) / EBITDA = ((Interest-bearing debt – (cash + cash equivalents)) / EBITDA
- 5 Debt/ equity ratio = Interest-bearing debt / Shareholders' equity

## ● Ratings

(Millions of yen)

	Rating	Outlook*	Amount	Rate (%)	Issue Date	Maturity Date	Release
Bonds No.35	A-	-	10,000	0.69	2012.12.14	2017.12.14	2017.01.24
Bonds No.36	A-	-	10,000	0.277	2014.12.22	2019.12.20	2017.01.24
Bonds No.38	A-	-	5,000	0.16	2016.09.14	2021.09.14	2017.01.24
Bonds No.37	A-	-	5,000	0.448	2014.12.22	2021.12.22	2017.01.24
Bonds No.39	A-	-	10,000	0.31	2016.09.14	2023.09.14	2017.01.24
Subordinated loans	BBB	-	15,000	-	2014.03.24	2074.03.24	2017.01.24
Long-term issuer rating	A-	Positive	-	-	-	-	2017.01.24
Commercial papers	J-1	-	35,000	-	-	-	2017.01.24

## ● History of Long-term Issuer Rating (Long-term Issuer Rating or its equivalent)

Date	Rating	Outlook*	Company
1989.04.21	A		Toyo Boseki
1996.04.16	A-		Toyo Boseki
2007.01.26	A-	Stable	Toyo Boseki (Toyobo)
2017.01.24	A-	Positive	Toyobo

\*Outlook for long-term issuer rating, or direction in case of Credit Monitor

### Japan Credit Rating Agency, Ltd.

Jiji Press Building, 5-15-8 Ginza, Chuo-ku, Tokyo 104-0061, Japan  
Tel. +81 3 3544 7013, Fax. +81 3 3544 7026

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