Note: This document has been translated from the Japanese original for reference purposes only. In the event of any discrepancy between this translated document and the Japanese original, the original shall prevail. The Company assumes no responsibility for this translation or for direct, indirect or any other forms of damages arising from the translation.

April 12, 2021

To all parties concerned:

Company	Fujitec Co., Ltd. (Stock Code 6406)
Representative	Takakazu Uchiyama President and CEO
Contact	Masashi Tsuchihata Senior Executive Operating Officer, General Manager of Finance HQ (TEL 072-622-8151)

Fujitec Co., Ltd. Announces the Release of a Sponsored Corporate Report

To facilitate communications with investors and foster a deeper understanding of the company, Fujitec Co., Ltd. today announced that the company has published a sponsored corporate report. The corporate report was prepared by Capital Goods & Research Co., Ltd. on behalf of Fujitec. Note that this report is not investment advice, but rather a succinct explanation of the company's business model, market trends, earnings trends, and long-term strategy for investors. For more, please see the attached document.

Attachment: Corporate report (sponsored report)
Prepared by: Capital Goods Research & Advisory Co., Ltd.
Publication date: April 12, 2021
.

Corporate Report

TSE First Section: Industrial Machinery
April 12 2021

Analysts

Shinji Kuroda

Hidehiko Hoshino, CMA

Capital Goods Research & Advisory

Fujitec (6406)

A Leading Dedicated Elevator Company Creating Strong Free Cash Flows, Providing Higher Levels of Disclosure, and Strengthening Shareholder Returns

★ Fujitec is a leading company dedicating in the manufacture of elevators and escalators. The company is in a similar position as Daikin Industries in the air conditioner market and competes with general electronics manufacturers in Japan. Fujitec has expanded aggressively and localized its businesses overseas ahead of other companies, introducing many world's first products and technologies. Although the company may be smaller in size and have less history than U.S.-based OTIS or Finland-based KONE, Fujitec continues to achieve stable profit growth by leveraging its ability to respond to customer needs.

★ CGRA estimates the global market value for elevators to be US$75 billion. We expect the market to grow at an annual rate of approximately 2% through the year 2030. Half of the elevator market consists of the new installation business that depend on construction investment and high market growth is expected in China, India, and the Mekong River basin. The maintenance, repair and modernization (renewal) market accounts for the remaining half of the market for elevators. Here, growth is expected to be a stable 3% or so per year, mainly in developed countries.

★ Approximately half of Fujitec sales come from its new installation business and the other half from its maintenance, repair, and modernization business. The company maintained an operating profit even during the Lehman Shock and the COVID-19 pandemic, recording a record high in net income for FY2020. The company continues to generate stable free cash flows. Fujitec issued an upward revision for its FY2021 earnings forecast during the Q3 financial results announcement. At the same time, the company announced an increase in dividends per share for the full year.

★ CGRA believes that the company has strong earnings stability over the medium- to long-term, due in part to the emergence of demand for modernization projects in China, the world's largest market. The company holds net cash of approximately 25% of market capitalization, enjoys a stable balance sheet, and demonstrates high free cash flow generation capacity. On December 4, 2020, the company announced Future Strategic Direction, which includes OPM and ROE of at least 10%, as well as a new commitment to a dividend payout ratio of 50% or more (FY2021 dividend forecast of ¥60 per share), measures for a stronger governance structure, and other policies. Fujitec has been proactive in disclosing various information in its earnings presentation materials, and is expected to disclose non-financial information such as ESG and various KPIs related to cash management.

(Fujitec Consolidated Financial Results and Stock Price Data: 100 million yen, yen, %)

Trading data		
Stock price (21/3/31)	2,358	Yen
52 week range	2,846～1,177	Yen
Market capitalization	2,011	100 mn
Total number of issued shares	85,300	1000 shares
Average trading value (20 days)	4.2	100 mn
Company forecast PER	20.6	times
PBR (end of 20/3)	1.1	times
Expected dividend per share	60.00	Yen
Expected dividend yield	2.5	%
ROIC (20/3)	11.0	%

Performance trends	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Net sales	1,771	1,674	1,688	1,708	1,812	1,690
Operating profit	144	127	107	103	134	133
Ordinary income	152	131	119	119	147	147
Profit attributable to owners of parent	88	86	89	92	99	93
EPS	109.4	106.4	109.8	114.1	122.5	114.7
ROE:	9.7	9.4	9.2	9.1	9.5	-
Dividend per share	30.00	30.00	35.00	45.00	50.00	60.00
Payout ratio	27.4	28.2	31.9	39.4	40.8	52.3
FCF	36	74	65	74	67	-
Net cash	348	405	454	485	528	-

This report's purpose is not to solicit, recommend, or offer advice regarding investment, but is prepared from our own perspective for the purpose of providing information about the company in question. In addition, although the contents of this report have been prepared based on publicly-available information, we do not guarantee their accuracy or completeness. Capital Goods Research & Advisory Co., Ltd. retains copyright to this report. Reproduction is prohibited without prior permission. The contents of this report are subject to change without notice. Neither CGRA nor this report are involved in the investor's investment determination. Any decisions related to investments are undertaken at your own discretion.

Contents

(1) Three Reasons for Looking Closer at Fujitec: P3-4

(2) Business Description and Business Model: P5-10

- Business lines: P5
- Business model: P6-7
- Three Fujitec characteristics: P8
- Highlights of major projects in Japan and overseas: P9
- History and Development Milestones: P10

(3) Elevator industry business environment and competitive analysis: P11-22

- History of the Elevator Industry: P11
- Elevator mechanisms: P12
- The latest Fujitec model: P13
- Market size and market share: P14
- What are the drivers of the elevator market?: P15
- The impact of COVID-19 on the market: P16
- Forecast of future demand: P17
- Domestic elevator market trends: P18
- Analysis of Domestic Competitors: P19
- CGRA's View on Japan Elevator Service: P20
- Analysis of overseas competitors: P21-23

(4) Strategic Direction, SWOT and Five Forces Analysis: P24-31

- Fujitec announced its strategic direction, including a new shareholder return policy: P24-27
- SWOT analysis: P28
- Five Forces Analysis: P29-30
- Risk Analysis: P31

(5) Performance Trends: P32-38

- Past Business Performance: P32
- Performance Trends for FY2020: P33
- Domestic Performance Trends: P34
- Performance Trends in East Asia: P35
- Performance Trends in South Asia: P36
- Performance Trends in North America and Europe: P37-38

(6) Financial and Non-Financial Analysis and Stock Price Valuation: P39-47

- Financial Analysis: P39-40
- Non-Financial Analysis: P41
- Governance structure: P42
- Active Information Disclosure: P43
- Shareholder Return Measures: P44-45
- Latest stock prices and stock price valuation: P46-47

(7) Visit to the Tokyo Showroom: P48

(8) Consolidated Balance Sheets and Statements of Cash Flows: P49-50

(1) Three Reasons for Looking Closer at Fujitec

Reason 1: Stable industry supported by an after-sales service business

The elevator market is expected to continue stable expansion in the future owing to ongoing urbanization, the growing middle class, aging population demographics, the rising demand for replacement (modernization = renewal), and the growing need for energy conservation. The maintenance, repair and modernization business, which is expected to generate stable sales, accounts for half of the elevator market. In China, the world's largest elevator market, demand for the replacement of elevators with 20-plus years in service is expected to emerge in the future.

An industry that has become an oligopoly in which approximately half of the market is supported by repairs and maintenance services

In this market environment, the elevator industry has become an oligopoly, with the top five companies accounting for 70% of the global market, while the Japanese domestic market has been whittled down to five companies. In Japan, the general contracting industry, which is Fujitec's main customer base, has seen improving profitability and additional value through ancillary equipment for buildings. At the same time, overseas competitors have enjoyed abundant volume in repair and maintenance work supporting high operating margins of between 12% and 14% and stable free cash flows. Therefore, one can conclude that the industry is less susceptible to economic fluctuations and is capable of generating stable cash flow.

Reason 2: Strong free cash flow generation capacity

That Fujitec maintained operating profits during the Lehman Shock and the recent COVID-19 pandemic indicates the company possesses strong resilience with respect to macroeconomic risks. This is mainly due to the fact that maintenance, repair and modernization services, expected to continue generating stable sales, accounts for approximately half of total sales. In addition to demand for high-value-added elevators in developed countries and the increase in demand for new elevators in emerging countries, particularly in Asia, we expect to see demand for the replacement of equipment with 20-plus years of service (modernization = renovation). CGRA believes that Fujitec can continue to post stable profits (average consolidated operating income of ¥10.8 billion over the past 10 years) and generate free cash flows (average of ¥6.8 billion over the past 10 years) simultaneously.

Fujitec maintained an operating profit, even during the Lehman Shock and the COVID-19 pandemic

In addition, during their Q3 earnings announcement, the company made an upward revision for FY2021 consolidated operating income from ¥10.7 billion to ¥13.3 billion. In both Q2 and Q3 of FY2020, the company made upward revisions, indicating the company's commitment to achieving its published financial plans.

Reason 3: Active information disclosure and stronger shareholder returns

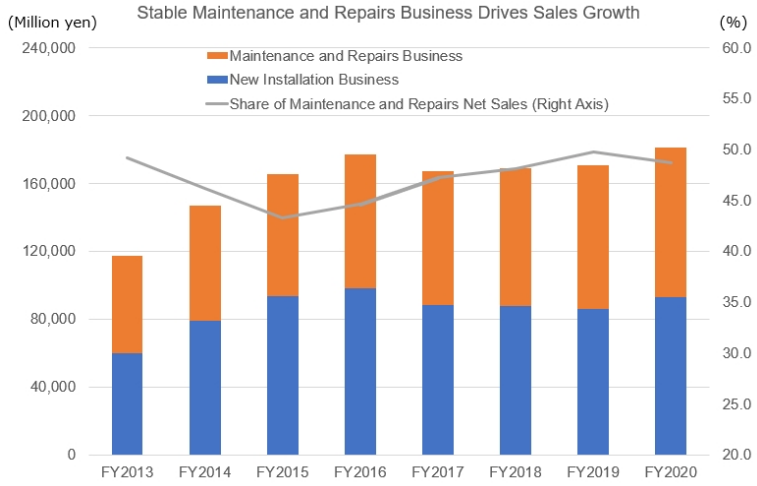
Fujitec demonstrates a high likelihood for achieving its published medium-term management plan targets and is raising shareholder returns actively. The company launched its *No Limits Push Forward Together* three-year medium-term management plan in April 2016. Under this plan, the Fujitec projected net sales of ¥170 billion, operating income of ¥10.3 billion, and operating profit margin (OPM) of 6% for FY2019. Under the company's next medium-term management plan (*Innovation, Quality & Speed*), launched in April 2019, Fujitec published FY2022 targets of ¥180 billion in net sales, ¥13.0 billion in operating income, and 7.2% in operating profit margin, with an additional new target of 8% in ROE. The company cleared all targets in just the first year of the plan.

Active information disclosure and stronger shareholder returns

The Future Strategic Direction announced in December 2020, clearly states the company's goal to secure business growth that exceeds market growth rates in each country, to achieve operating profit margin of at least 10% as quickly as possible, and to maintain an ROE of 10% or greater through improved profit margins. The company set an additional target of at least 50% in basic dividend payout ratio (five consecutive years of dividend increases through FY2021), as well as a commitment to retire treasury stock representing approximately 5% of outstanding shares. At the same time, the company announced its intention to strengthen governance through the establishment of a Nomination and Compensation Advisory Committee, termination of takeover defense measures, and other policies.

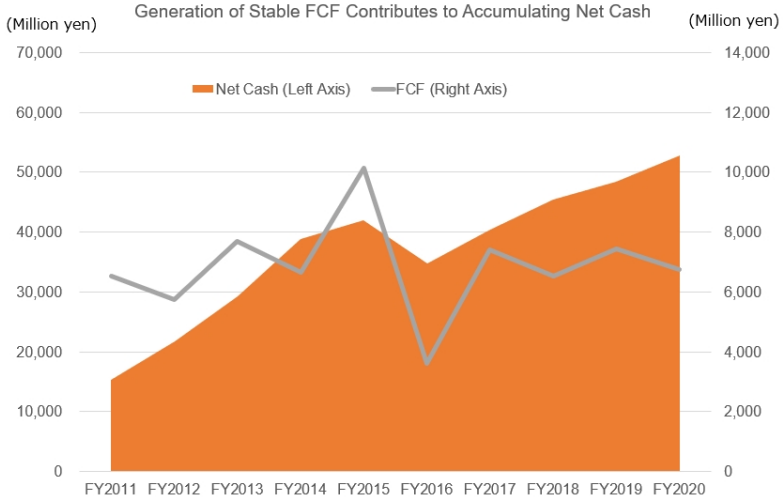
Against this backdrop, Fujitec has seen its ratio of foreign shareholders rise from 30% as of the end of FY2016 to 40% as of the end of FY2020, in addition to rising stock valuations.

Chart 1: Repairs and Maintenance Account for Approximately Half of Net Sales



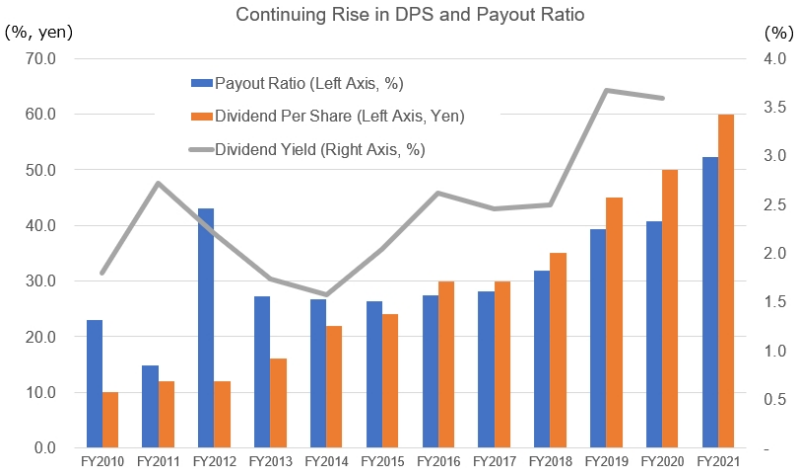
Record high net sales in FY2020, of which repairs and maintenance accounted for 48.7%

Chart 2: Capacity to Create Stable Free Cash Flows



Fujitec possesses an earnings structure capable of generating stable free cash flows, and the company is accumulating net cash

Chart 3: Stronger Shareholder Returns



The company continues to increase dividends on a stable basis and raise the payout ratio

Source: Compiled by CGRA from Fujitec company data

(2) Business Description and Business Model

Business description: A leading dedicated manufacturer of elevators and other spatial movement systems

Fujitec is a leading specialty manufacturer of elevators and escalators in Japan

Fujitec, founded originally as Fuji Transportation Industry Co., Ltd., is a major manufacturer of elevators, escalators, and other spatial movement systems. Former honorary chairman Shotaro Uchiyama (deceased July 23, 2003) founded the company, with his son, Takakazu Uchiyama, now serving as president. The senior Uchiyama established the company in the anticipation of post-war reconstruction.

Currently, the company operates 10 factories in 24 countries and regions around the world: two factories in Japan and eight overseas (U.S., India, Hong Kong, Taiwan, Korea, and three factories in China). In 1974, the company changed its name to Fujitec and listed it shares on the first section of the Tokyo Stock Exchange and on the Osaka Securities Exchange.

Domestic competitors Hitachi and Mitsubishi Electric began integrated elevator manufacturing in 1932 and 1935, respectively, while Toshiba entered the elevator market in 1958, nearly 10 years behind Fujitec.

Total FY2019 sales amounted ¥181.2 billion, representing the highest figure in four years. By region, Japan accounted for 40% of sales, with 35% from East Asia (including China), 15% in North and South America, and 10% in South Asia (including Singapore and India).

Aggressive expansion overseas to avoid competition with domestic competitors

Active expanding overseas ahead of other industry companies

To avoid competition with leading domestic manufacturers, Fujitec developed a unique strategy of aggressive overseas expansion. Beginning in Hong Kong in 1964, the company began establishing bases overseas, mainly in Asia. Expansion included South Korea in 1968, Singapore in 1972, the U.S. in 1977, Argentina and Malaysia in 1979, Taiwan in 1980, Saudi Arabia, Egypt, and the Philippines in 1981, and a first European foray into the UK in 1982. In the Chinese market, Fujitec established a joint venture company, Huasheng Fujitec Elevator, with Chinatex Corporation Ltd in 1995. The new Huasheng Fujitec factory in Langfang, Hebei Province, China, began operations in 1997. In 2001, Fujitec established Shanghai Huasheng Fujitec Escalator as a joint venture in Shanghai, an escalator factory launching operations in 2002. In 2003, Fujitec established the Shanghai Technologies Center, followed in 2006 with the Shanghai Sourcing Center.

Numerous world-first technologies and products

Releasing numerous world-first products that take advantage of the strengths of a dedicated manufacturer

As Fujitec expanded overseas, it also worked tirelessly on technological development, producing numerous unique world-first products and technologies. Specifically, in 1976, the company pioneered the world's first super high-speed direct current gearless elevator, which ran at a speed of 600 meters per minute. In 1978, Fujitec introduced the world's first microcomputer-controlled standard elevator. In 1988, the company successfully demonstrated an elevator group management system using fuzzy computer technology. This advancement was followed by AUVIS, a multi-AV elevator system in 1993. In 1995, Fujitec unveiled both the NEUROS elevator group management system, based on neurocomputer technology, and the world's first ropeless linear elevator. In 2001, the company succeeded in developing and commercializing the world's first double-deck elevator, the Flex-DD. In 2002, Fujitec introduced the new *TALON* elevator drive system.

The company developed other industry-first products and technologies, including a smoke-tight elevator landing door in 2002 and the DOOR-EDGE sensor, a laser detection device for cord-like objects, in 2009.

As the idea of hygiene in the elevator environment has come under scrutiny during the COVID-19 pandemic, Fujitec had already commercialized the world's first Plasmacluster ion generator for elevators, the Ionful, in 2003. Recently, the company has made efforts to improve the elevator environment ahead of other companies. These developments include the popular AirTap, a touchless button, as well as the installation of air conditioners as standard equipment in elevators.

・Business model

A dedicated manufacturer of elevators and escalators with an integrated manufacturing and sales system

Global expansion through an integrated manufacturing and sales system

Fujitec's global operations encompass development, design, production, sales, installation, maintenance, repair, and modernization (=renewal). The company has 34 subsidiaries and affiliates, of which 19 are consolidated subsidiaries. Overseas subsidiaries use a fiscal year running from January through December.

About half of the company's net sales are related to new installations of elevators and escalators for new building construction. The other half of the company's net sales comes from the maintenance and repair business performed after the delivery of new equipment, and the modernization (renewal) business for equipment that has been in service for more than 20 years.

Key points related to the six management capitals

Conducting efficient research and development

Fujitec conducts research and development (**intellectual capital**) in Japan and at its Shanghai Technologies Center to develop products that meet local needs. In 2020, the company began construction on a research tower in India. Research and development expenses for FY2019 were ¥2.2 billion, just 1.2% of net sales (average R&D expenses have been ¥2.3 billion per year on average for the past five years), the company conducts efficient research and development that delivers world-first technologies and products.

Expanding production capacity in India and Taiwan

Production (**manufacturing capital**) is conducted through two domestic factories (Hikone, Shiga Prefecture, and Toyooka, Hyogo Prefecture) and eight overseas factories (three in China, and one in Taiwan, Korea, Hong Kong, India, and the US, respectively). During FY2019, 39% of annual production was performed in Japan, with 39% of production in East Asia (China, Taiwan, Hong Kong, and Korea), 13% in North America, and 9% in South Asia (India, etc.). In Japan, the company has been expanding production capacity with the introduction of automation and labor-saving equipment. Fujitec is investing to expand capacity in India (building a 2,000-unit per-year production system) and Taiwan (building a 1,000-unit per-year production system). Capital investment for FY2019 amounted to ¥3.3 billion (2% of net sales), and depreciation was ¥3.1 billion.

Figure 4: Strengths Through an Integrated Manufacturing and Sales System



Source: Fujitec *Strategic Direction*

In terms of **human capital**, Fujitec employed a consolidated 10,292 employees as of FY2019. The number of employees increased by 32% over the past 10 years. To foster more skilled field engineers, the company opened Experience Centers in Singapore (June 2019), India (August 2019), and Tokyo (October 2020). The company is strengthening global human resource development to foster technical capabilities and improve installation and maintenance quality.

Strong financial base and large investment capacity

In terms of **financial capital**, the company had total assets of ¥193.6 billion (interest-bearing debt of ¥4.2 billion and net cash of ¥29.4 billion, excluding advances received) at the end of FY2019. Shareholders' equity amounted to ¥119.1 billion and a shareholders' equity ratio was 55.3%. CGRA believes that the company has sufficient capacity for capital expenditure, M&A, and R&D investment for growth. Output based on financial capital was ¥181.2 billion in net sales, ¥13.4 billion in operating income (operating profit margin of 7.4%, which was 93% of the record-high ¥14.4 billion recorded for FY2015). ROE amounted to 9.5%, and free cash flows amounted to ¥6.7 billion.

With respect to **social capital**, Fujitec has defined a mission statements reads, “Respecting people, technologies and products, we collaborate with people from nations around the world to develop beautiful and functional cities that meet the needs of a new age.” Under this mission, the company strives to create high-quality social infrastructure in pursuit of safety and security. The company uses the aforementioned Experience Center as a showroom to strengthen branding.

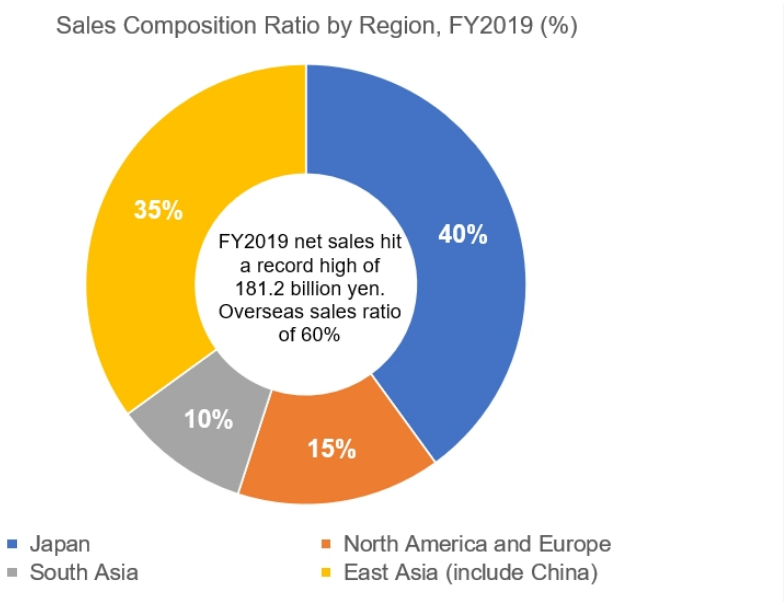
In terms of **natural capital**, the company uses materials that comply with various environmental regulations, conserves energy through the adoption of the latest technologies, and reduces its environmental impact through timely maintenance and upkeep, as well as through efficient logistics. Although the company has not set any greenhouse gas or other emissions reduction targets, it has stated its achievements in reducing its environmental impact and appears to be planning to announce various KPIs in the future.

Maintenance and repair business accounts for roughly half of the company's net sales

Aftermarket business accounts for half of net sales

The main Fujitec target markets are Japan, China and other Asian countries, and the U.S. The company's new installation business accounts for 51% of consolidated net sales, while the aftermarket business, including maintenance, repair, and modernization, accounts for 49% of net sales. The overseas sales ratio is 60%, and business in China business accounts for about 30% of consolidated net sales.

Figure 5: Overseas Sales Ratio Reaches 60%



Source: Compiled by CGRA from Fujitec company data

・Three Fujitec characteristics

CGRA considers the three characteristics (=strengths) that underpin the Fujitec business model to be: (1) an integrated manufacturing and sales structure as a dedicated manufacturer; (2) the ability to develop business closely linked to customers; and (3) the ability to commercialize products that answer customer needs.

(1) An integrated manufacturing and sales structure as a dedicated manufacturer

Fujitec is a dedicated manufacturer of elevators and escalators, boasting an integrated system that covers development, design, production, sales, installation, maintenance, repair, and modernization. The company also produces key components such as microcontrollers, motors, and inverters in-house.

Fujitec is in an industry position in elevators similar to Daikin Industries in air conditioners

Although the company is not as extensive as its European and U.S. competitors in terms of size and history, it has expanded its business around the world and has succeeded in developing many world-first and industry-first technologies and products based on customer needs. Accordingly, CGRA believes that the company is in a similar position to Daikin Industries, a dedicated manufacturer of air conditioners, albeit in a different industry.

(2) Ability to develop business closely linked to customers

The Fujitec business operations are deeply interconnected across each business to promptly reflect customer needs in product development. For example, the new XIOR standard elevator model, which the company began selling during in April 2020, during the COVID-19 pandemic, comes equipped standard with the latest touchless call button technology, called AirTap. A current capacity status display that shows how many people are riding in a particular elevator car also comes standard. The development of AirTap began in answer to customer needs for enhanced hygiene at hospitals, other medical facilities, and food processing plants. This feature is roughly two years ahead of the competition, and has garnered significant attention in the COVID-19 pandemic.

The company is known for its ability to develop products that reflect customer needs

The current “Capacity status display” was developed by female staff based on customer feedback indicating that women living alone felt uneasy about riding elevators alone at night. The company has showrooms in Tokyo and Osaka (i.e., creative studios) that house Safenet Centers which monitor customer elevator operations in real time, providing a complete support system in the event of an earthquake or other unforeseen event.

(3) Ability to commercialize products that answer customer needs

Fujitec has long demonstrated an excellent ability to quickly identify customer feedback, such as that mentioned above, and commercialize products ahead of other companies. Although the company spends about ¥2.5 billion a year on R&D, it has succeeded in commercializing many world- and industry-firsts. The company’s ability to commercialize research and development is similar to that of Keyence Corporation, which identifies various automation and labor-saving needs, commercializing research as quickly as possible.

Fujitec has product development capabilities similar to those of Keyence

We attribute this capability to the collaboration between sales and development, the high level of mass production technology at factories, and development systems that lead to the development of a wide variety of technologies for various types of elevators and escalators, including a super high-speed model reaching a speed of 1,000 meters per minute (developed at Wing Square, adjacent to the 170-meter-high research tower at the head office in Hikone, Shiga Prefecture). The company works in collaboration with its Shanghai Technologies Center in China, where a variety of new needs are emerging, and is proactive in open innovation with universities and other organizations.

・Track record in Japan and overseas

Highlights of major projects in Japan and overseas

Major domestic and overseas projects

Examples of recent major projects completed in Japan include Tokyo World Gate, Shibuya Miyashita Park, Shibuya Scramble Square, Shibuya Fukuras (Tokyu Plaza Shibuya), Shibuya Solasta, Shibuya Stream, Shibuya Solaris, Hyatt Regency Yokohama, Otemachi Place, Hotel the Mitsui Kyoto, Ueno Frontier Tower, JR Yokohama Tower, JP Tower Nagoya, and Crossgate Kanazawa. In addition, the company upgraded the GINZA PLACE elevators to the AirTap touchless button.

In the United States, examples of major projects include Madison Square Park Tower, 610 Lexington Avenue, Pyramid 57 and Sky, New Meadowlands in New Jersey, Soldier Field in Chicago, Paul Broun Stadium in Cincinnati, and Dayton Children's Hospital in Dayton. Major projects in other countries include Marina One in Singapore, Convention Centre in Malaysia, Miramar Entertainment Park, and the headquarters of Fubon Life Insurance (currently under construction in Taiwan), the Hana Financial Group, and Korea Design Center in Korea, Other examples include the Government Complex in Hong Kong and Dubai International Airport in the UAE.

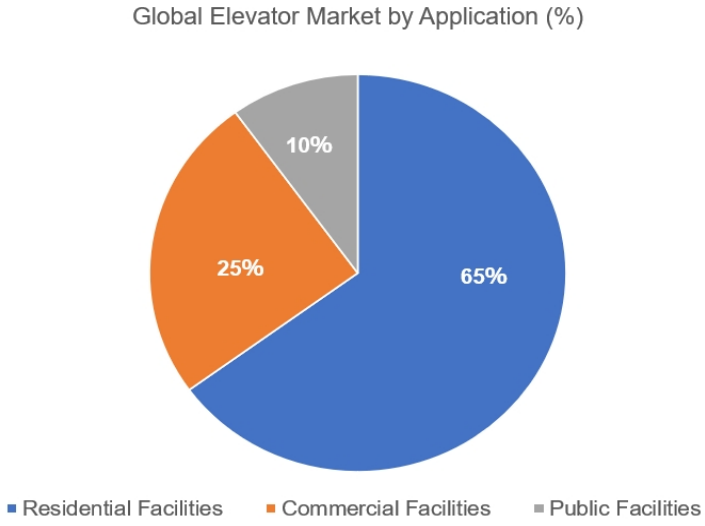
Major modernization projects include One Raffles Place in Singapore, Bank of America Plaza in Dallas, USA, Three Garden Road in Hong Kong, and the HSBC headquarters in the UK.

A full 65% of the global market for elevators is residential

The global market for elevators consists of 65% residential and 25% commercial

Just like the major air conditioner manufacturer Daikin Industries, the company is based in the Kansai region. When comparing residential use and non-residential use of elevators in commercial facilities, the ratio of residential use appears higher. The main customers for office buildings are construction companies and general contractors, and the main customers for new apartment building projects are construction companies. However, the main customers for after-sales services are management associations. The global market for elevators consists of 65% for residential, 25% commercial, and 10% public facilities.

Figure 6: Residential and Commercial Facilities Account for 65% and 25% of the Elevator Market, Respectively



Source: CGRA compiled from company materials

・History and development milestones

Fujitec history and development milestones

The predecessor of Fujitec was Fuji Transportation Machinery Co., Ltd., which was founded in 1948 by the late honorary chairman Shotaro Uchiyama in Nishi-ku, Osaka. Company name changed to Fujitec in 1974.

Production and Sales Bases: Aggressive expansion into overseas markets, especially in Asia

1964: Established Fujitec (HK) Co., Ltd.

1965: Production begins at the plant in Osaka.

1968: Established Fujitec Korea Co., Ltd.

1972: Established Fujitec Singapore Corpn. Ltd.

1974: Established Fujitec Venezuela C.A.

1977: Established Fujitec America Inc.

1979: Established Fujitec Argentina S.A. and Fujitec Malaysia Sdn. Bhd.

1980: Established Fujitec Taiwan Co., Ltd.

1981: Established Fujitec Saudi Arabia Co., Ltd., Fujitec Egypt Co., Ltd., Fujitec Inc. (Philippines)

1982: Built the world's largest elevator production plant in Lebanon, Ohio, USA., Established Fujitec UK Ltd.

1985: Established Fujitec Pacific, Inc.

1989: The Toyooka Plant of Fujitec Japan begins operations, established Fujitec Indonesia

1992: The Batam Plant in Indonesia begins operations, established Fujitec Canada, Inc.

1995: The Inchon Plant in Korea begins operations, established a joint venture Huasheng Fujitec Elevator Co., Ltd.

1997: Huasheng Fujitec Elevator's new plant begins operation in Langfang City, Heibei province

2000: The Shiga Plant of Fujitec Japan begins operations

2001: Established a joint venture Shanghai Huasheng Fujitec Escalator Co., Ltd. In Shanghai City, China

2002: The Shanghai Fujitec Escalator Plant begins operations, completion of Kasho Fujitec Plant No.2

2003: Established development base in Shanghai, China, Fujitec Shanghai Technologies Co., Ltd.

2004: Established Fujitec India Private Ltd. and Fujitec Vietnam

2005: Completed new building of Shanghai Technologies Co., Ltd., established Fujitec UAE Co., Ltd.

2006: Big Wing, which integrates production functions of the headquarters and R&D, is completed in Hakone, Shiga Prefecture

2006: Established Fujitec Shanghai Sourcing Center in Shanghai City, China

2010: The escalator development and manufacturing base "Big Step" and aftermarket base "Big Fit" completed

2011: The elevator plant in Chennai, India, begins operations

2012: Established Fujitec (Thailand) Co., Ltd.

2014: Established Fujitec Lanka Private Ltd.

2015: Established Fujitec Myanmar Co., Ltd.

2016: Completed the renovation of the Hsinchu plant in Taiwan.

2018: 70th anniversary of founding

(3) Elevator Industry Business Environment and Competitive Analysis

History of the elevator industry

OTIS, a spinoff of American conglomerate UTX, is the industry leader

In 1853, EG Otis was granted a patent for an elevator with an emergency fall arrest system and founded what is now OTIS. In 1862, Roebling began manufacturing wire ropes for elevators. The fragile hemp rope used at the time was replaced by the wire rope, which is still used today.

The power source of elevators also evolved from steam to electricity, using direct current electric motors. In 1889, OTIS delivered the first direct current electric motor-controlled elevator with a worm gear reducer (winding cylinder type) to the Demarest Building in New York. However, as these elevators used hoists, a taller building meant a longer rope and larger winding drum would be needed. The solution to this problem was the traction elevator, which balances the elevator basket's weight with a counterweight, allowing for the winding drum to hoist the elevator more efficiently.

Although traction elevators were developed in Europe, the European market was small at the time, so OTIS delivered the first gearless traction elevators to the Viva Building in New York and the Majestic Building in Chicago in 1903.

Japanese elevator manufacturers emerged around 1920

After 1948, the domestic elevator market entered a period of full-scale growth

The first elevator introduced in Japan was a hydraulic type for cargo handling, installed at the Jujo mill of Oji Paper in 1875. The first passenger elevator was delivered by OTIS to the Asakusa Junikai (Ryounkaku) building in Asakusa, Tokyo in 1890. Subsequently, the Bank of Japan's main branch and other institutions adopted OTIS products in succession. In 1915, Japan's first domestically produced elevator, the Tomatsu Elevator, was installed at the Ito Marubeni Kimono Store in Osaka. In 1919, Japan's first elevator company, Nippon Elevator Manufacturing, was established, and around 1920, Teikoku Elevator, Nihon Juki Manufacturing, and Naigai Elevator were established. The number of elevators in operation in Japan around 1926 was about 2,000, of which about 800 were manufactured by OTIS and roughly 1,000 by Nippon Elevator Manufacturing.

After the Great Kanto Earthquake in 1923, the market for high-performance, high-end elevators was dominated by foreign manufacturers, including OTIS. Westinghouse of the United States entered the Japanese market late after OTIS. However, beginning in the 1930s until World War II, the rise of domestic manufacturers in Japan was remarkable, partly due to the encouragement for using domestic products.

In 1941, corporate officers dispatched from the United States returned home, and OTIS began to downsize its operations. In 1951, the company was reorganized as Toyo OTIS. Westinghouse outsourced its sales to Mitsubishi Electric, and in 1935, Mitsubishi Electric leveraged its technical cooperation with Westinghouse to start integrated manufacturing and sales of elevators. Additionally, Nippon Elevator Manufacturing was acquired by Hitachi in 1936. A revival of the elevator market began in 1948 when the ban on elevator manufacturing for the private sector was lifted, the Ministry of Construction assumed jurisdiction, and the Tokyo Elevator and Escalator Safety Ordinance was enacted.

The year in which the ban on private-sector ban was lifted, 1948, was the same year in which Shotaro Uchiyama founded Fujitec predecessor, Fuji Transportation Machinery Co., Ltd. Toshiba formed a capital alliance with Toyo OTIS in 1958. Later, in 1966, the capital alliance was dissolved, and the company entered the elevator business in earnest by establishing an integrated production system at its Fuchu Plant.

・Elevator mechanisms

Product Description: Mainly rope type elevators with no machine room

Looking at new elevators in Japan in fiscal 2019 (24,435 total units, up 3% from the previous year), rope type elevators accounted for 79% of all units, hydraulic type elevators for 1%, and other small types (home elevators, etc.) for 20%. The rope type elevators can further be classified into ones with machine rooms, and machine-room-less types. Rope type elevators with machine rooms make up 6% of all units, and machine-room-less types make up 73%.

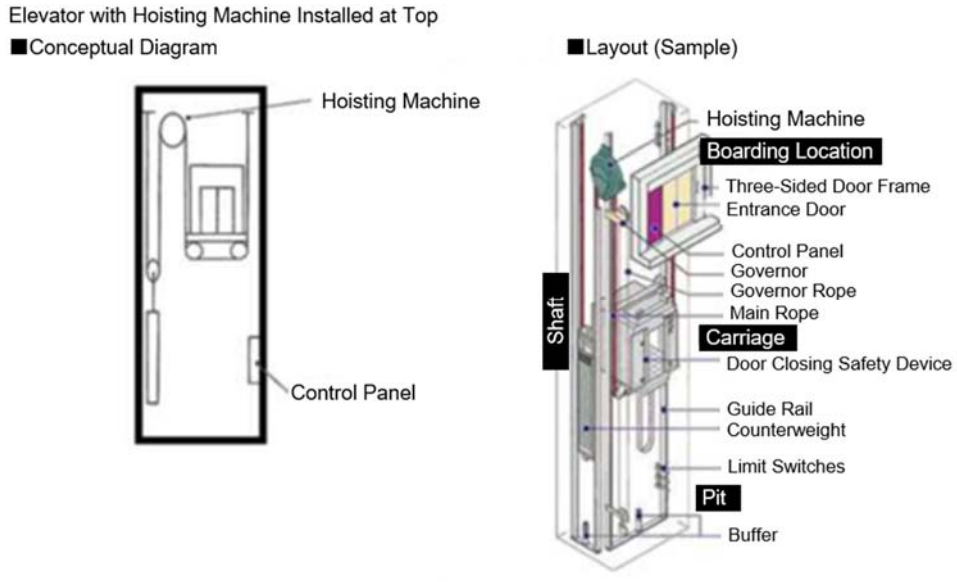
Elevators using a rope system with no machine room are commonplace today

There are two types of rope type elevators that have been implemented. In the past, elevators hoisted up by winding bodies, wound by a person at the top of the building. Since the 1900s however, the newer traction elevators became commonplace. These elevators use a counterweight to balance the elevator basket, and a winding drum at the top of the building controls the movement more efficiently.

Traction elevators used to have machine rooms in the upper level, where the hoisting machine, speed reduction gear, and control panels were located. However, in 1996, KONE was the first company to commercialize a machine-room-less elevator with the hoisting machine mounted on the elevator rail at the upper level of the elevator tracks where the elevator cage moves. In Japan, Toshiba Corporation was the first company to commercialize this type of elevator in technical cooperation with KONE, and the company was two years behind, (the same year of Mitsubishi Electric Corporation released its product), in commercializing a type in which the hoisting machine is installed at the bottom of the elevator tracks.

After Japan's Building Standards Law was significantly relaxed in 2000, machine-room-less elevators spread and became commonplace. Today the majority of elevators in buildings are machine-room-less types. The advantages of machine-room-less elevators include not requiring space protruding from the top of the building, which eliminates shading and north diagonal restrictions.

Figure: Structure of Machine-Room-Less Elevators



Source: Japan Elevator Association website

・The latest Fujitec model

Introduction of new XIOR elevator

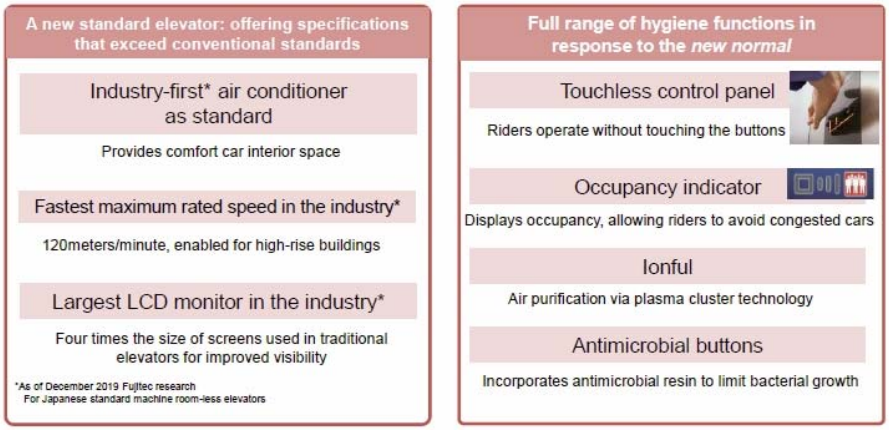
Fujitec introduces product lines that reflects its commitment as a dedicated manufacturer

The latest Fujitec standard machine room-less elevator is the XIOR. This new model features AirTap technology, with touchless call buttons that allow operation without physically touching parts of the elevator. Passengers indicate their destination by holding a hand over an infrared sensor. Antibacterial buttons are standard for the destination floor buttons, and the basic elevator specification uses Sharp Corporation's Plasmacluster ion generator IonFul, which has been proven to reduce COVID-19 viruses. The market response has been strong, partly due to a heightened awareness of public health triggered by COVID-19.

XIOR is also equipped with the industry's first air conditioning unit designed exclusively for elevators included as standard equipment. The series offers a lineup of maximum-rated speeds of 120 meters per minute, which is the fastest in the industry (45, 60, 90, 105, and 120 meters per minute). These speeds shorten wait time and improve transportation capacity of the elevators. A large 8.4-inch LCD monitor, the largest in the industry, is another standard feature of XIOR, as is the current capacity status display that displays the congestion status in the elevator car, indicated by one of five levels of congestion displayed in the elevator lobby.

Optional features include a regenerative system that returns regenerative energy generated by elevator operations to the power generation equipment for more effective use in the building. By replacing geared motors with gearless motors and with the adoption of the latest inverter controller, the new system provides savings of up to 45% in elevator power consumption.

Figure 7: XIOR Features



Source: Fujitec *Strategic Direction*

The world's fastest technology for high-speed elevators

The XIOR model mentioned above is a standard-type elevator. Fujitec also makes high-speed elevators for high-rise buildings, tailored to the customer's requests. Zhangjiakou in the Hebei Province is about two hours from Beijing by bullet train. Here, Fujitec has received an order and plans to install the world's longest elevator, a 638-meter lift that travels to the pinnacle of a mountain in about one minute and twenty seconds at a speed of 720 meters per minute (43 km/h). Fujitec plans to apply for certification with the Guinness World Records for this elevator. We conclude that the company's level of technology for high-rise, high-speed elevators is superior to that of its overseas competitors.

・Market size and market share

The Asia-Pacific region is the largest market for new elevator construction

CGRA estimates that the 2020 global elevator market was roughly US$75 billion in terms of value. Of this amount, the Asia-Pacific region, led by China, accounts for approximately 65%. North and South America account for about 18% and Europe and other regions account for about 17%. The global new installation market in terms of volume is estimated to be 1 million units. Of these, the Chinese market accounts for about 63%, EMEA accounts for 20%, Asia Pacific accounts for 13%, and North and South America account for 5%. By category, approximately 65% of the market is classified as residential use. Another 25% of the market consists of commercial facilities and 10% for public facilities.

The Chinese market accounts for about 30% of the global new installation market and about 60% in terms of volume

Estimates say that 18 million units are in current operation. Although the Chinese market accounts for 39% of the total, only 5% of the units have been in service for 20 years or more. Therefore, replacement demand is expected to emerge in the future. The EMEA market, mainly Europe, accounts for the second-highest share at 37%. North and South America account for 10% and the Asia-Pacific region for 14%.

The Japanese market is dominated by Hitachi, Mitsubishi Electric, Fujitec, and Toshiba. These four companies account for an estimated 90% of the Japanese domestic market. Fujitec's market share in Japan is estimated to be third-largest; however, on a consolidated basis, Fujitec is the fourth-largest of the four companies.

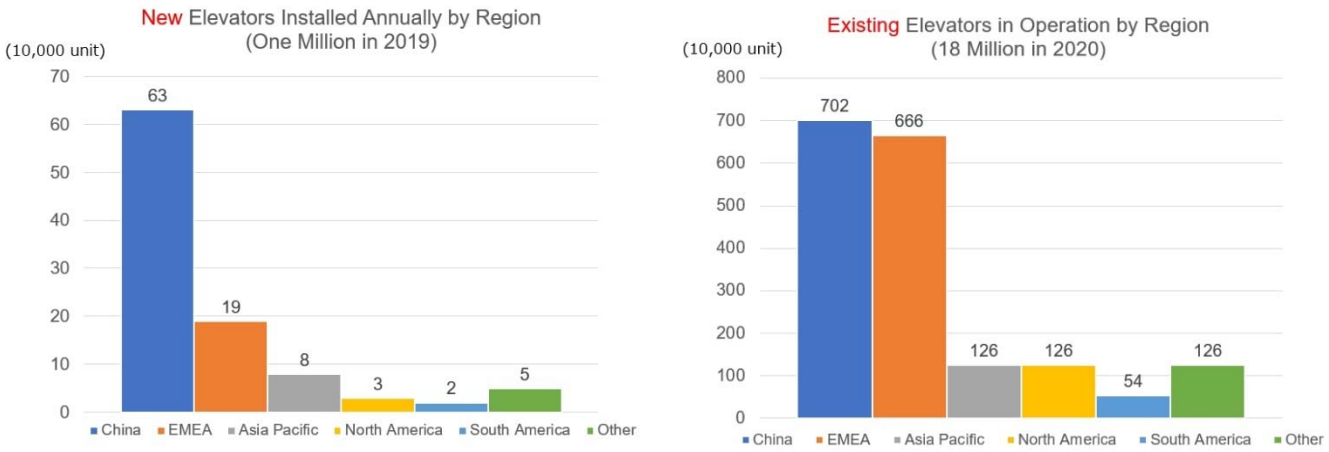
The top five companies account for about 70% of the global market in the industry

In terms of global market share, Otis (OTIS) of the U.S. is in first place, with an estimated share of 18% (sales of about US$12.8 billion). The second-largest company is Schindler of Switzerland, with an estimated share of 17% (CHF10.6 billion). In third place is Finland's KONE with an estimated 17% share (€9.9 billion) The top three companies have accelerated their growth through a series of ongoing mergers and acquisitions. In recent years, however, Schindler and KONE have been in hot pursuit of OTIS and that company's top global market share.

The world's largest company is OTIS in the U.S. Schindler is in second place and KONE in third place

In fourth place is Germany's ThyssenKrupp, which sold its elevator business in 2019. The company has an estimated 11% (€6.7 billion) of the global market. However, ThyssenKrupp appears to be losing market share. In fifth place at approximately 8% is Hitachi. Hitachi acquired 51.1% of the outstanding shares of Taiwan's Yungtay Engineering in October 2020 (sales of approximately ¥50 billion in 2019; operating income of approximately ¥3 billion). Mitsubishi Electric is estimated to be in sixth place, Toshiba in seventh, and Fujitec in eighth.

Figure 8: New Installation and Existing Elevator Market Volume by Region



Source: Compiled by CGRA based on data from each company

・Market drivers

What are the drivers of the global elevator market?

There are four key points to consider when looking at the elevator market in the medium to long term

Demand for elevators in developed countries is driven by the degree of elevator sophistication. Demand for elevators in emerging countries is driven by demand for new installations and upgrades

a. **Increasing urbanization**: Although the impact of COVID-19 is undeniably unpredictable, population growth in urban areas is expected to continue worldwide. Therefore, we can expect stable demand for new elevators.
b. **Increase in middle-income population**: The population of the middle-income class is expected to increase worldwide, and needs for safe, secure living spaces and infrastructure will continue to rise.
c. **Growing need for safe means of transportation due to an aging population demographic**: Just as an aging workforce and shortage of manpower will stimulate demand for industrial robots, an aging society worldwide will boost the need for safe means of transportation.
d. **Emergence of replacement demand**: Elevators are replaced after 20 to 30 years of service. In addition to the increase in demand for replacement in developed countries, demand for replacement can be expected to emerge in China and other countries.

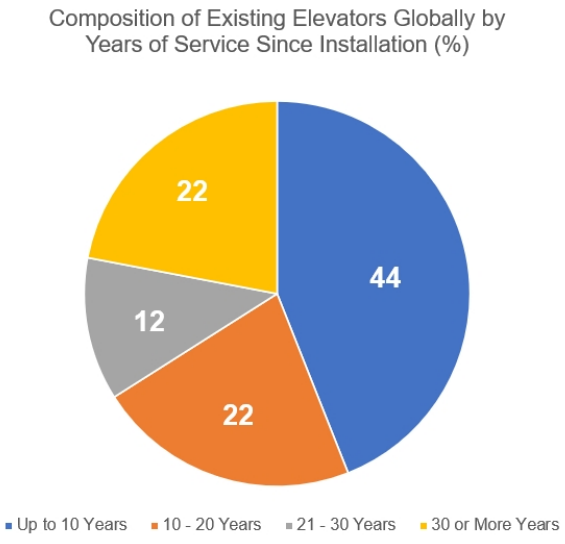
An increasing need for touchless operations and improved environments due to COVID-19

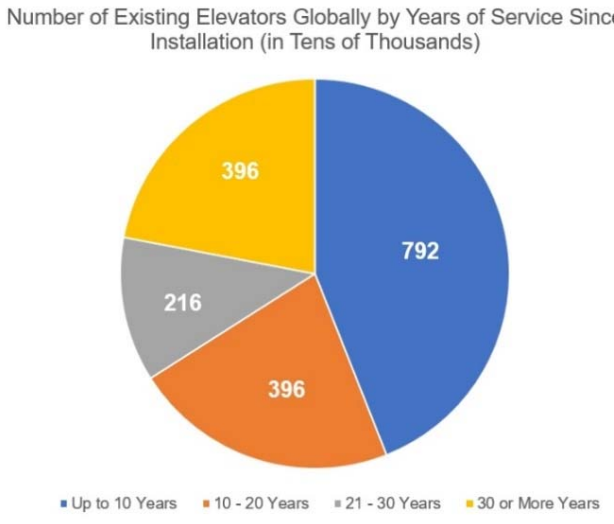
Although concerns have arisen regarding a stagnation in construction investment due to COVID-19, there are also certain needs expected to increase: acceleration of digital investment, contactless technology, and improvement of elevator space environments.

COVID-19 represents an opportunity for new value-added needs

a. **Increased investment in digitalization and modernization**: We can expect an increase in new-value-added features for elevators, including the use of IoT and digital technologies to manage elevator operations, visualization of elevator car congestion, methods to shorten waiting times, the adoption of touchless buttons, and sterilization of the elevator space environment.
b. **Increase in requirements for energy conservation, driven by stronger ESG**: Elevators account for about 3% of electricity consumption in office buildings (air conditioners account for about 30%). We can expect an energy savings effect of approximately 30% compared with 20 years ago, mainly due to the downsizing of motors and the adoption of LED lights in modern equipment.
c. **Needs for enhanced safety functions**: There is a growing need worldwide for sensors and other devices to prevent accidents by detecting the trapping of long, thin objects such as pet leashes and IV tubes when the doors close

Figure 9: Composition and Number of Existing Elevators by Years of Service Since Installation





Source: Compiled by CGRA from various company documents

・The impact of COVID-19 on the market

The elevator market is seeing signs of a stronger, yet gradual recovery

According to the Fujitec third quarter financial briefing materials published on February 9, 2021, the elevator market overall is seeing an upward trend, despite concerns of a delayed impact of COVID-19 on new installations and net sales.

The elevator market has begun to show signs of recovery lately

In almost every country, government agencies and large projects are driving new order activity; however, order activity for other types of projects remains sporadic. At the same time, the company is seeing a decrease in the number of postponements and closures of construction sites for both new installations and modernization projects related to ongoing construction. The company's maintenance business appears to continue to provide services as part of the social infrastructure (essential industry).

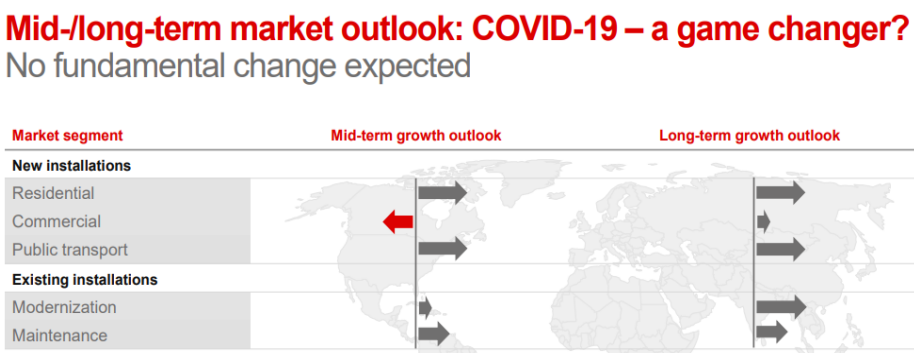
While the long-term direction will not change, the market is likely to show uneven performance for the time being

Schindler published its full-year results for fiscal 2020 on February 17, 2021. The company noted no trends in structural changes for long-term fundamentals in connection with COVID-19. Demand for new installations continues to experience steady growth for residential and public facilities. However, the commercial facilities market is expected to experience low growth. At the same time, modernization and maintenance business for existing elevators is expected to experience stable growth, particularly for modernizations.

Concerns are rising about the negative impact of COVID-19 on demand for retail and other commercial facilities

While demand in the retail and hotel industries is recovering gradually, the company expects to see ongoing price competition among manufacturers. Meanwhile, needs continue to strengthen for smart solutions, including contactless operations and remote control. With the shift of office work activities to work-from-home, the trend in office space reductions is likely to continue. In any event, urbanization and other megatrends, as well as public infrastructure investment, are expected to continue.

Figure 10: Schindler Market Forecasts in the Post-COVID-19 Era



Source: Schindler, results presentation 2020

・Forecast of future demand

The Global Elevator Market Outlook Through 2030

CGRA expects the market to grow at an annual rate of about 2%

The global elevator market in 2020 was an estimated US$75 billion (slightly lower than 2019). CGRA forecasts that the global elevator market through 2030 will grow at an annual rate of approximately 2%, despite the fact that global construction investment is likely to stagnate in the wake of COVID-19.

New construction projects, which account for about 50% of the market, are expected to grow by 2% per year (1% to 2% in advanced economies; 2% to 3% in emerging economies such as China, India, Myanmar and the Mekong River Basin). At the same time, the maintenance and modernization (renewal demand) market, which accounts for about 50% of the market, is expected to grow by 3% to 4% per year. Advanced economies such as Europe, the U.S., and Singapore are expected to grow by 2% to 3%, while China and other countries are expected to grow by 4% to 5%.

Although new installations are essentially dependent on construction investment, the market is expected to be stable in general. This is despite the risk of falling unit prices due to excessive competition stemming from expected medium- to long-term needs in elevator upgrades, as mentioned earlier. On the other hand, the service and maintenance market is expected to form in conjunction with new installations (estimated to contribute at an approximate 10% of new installation sales).

Demand for modernization and renovations in China is expected to emerge in the future

Modernization projects are expected to emerge in China in the future

More than 30% of the elevators in operation globally have been in service for more than 20 years (about 20% are more than 30 years old). Demand for modernization (renewal demand) is expected to continue to emerge mainly in Europe. This demand is also expected to emerge in North and South America, Japan, and the Asia-Pacific region, mainly in Singapore.

China accounts for about 30% of the estimated US$75 billion global elevator market. The service, maintenance, and modernization (renewal demand) market accounts for only about 5% of the enormous new installation market in the country. However, CGRA believes that the replacement demand (modernization) will increase dramatically beginning in 2030.

Figure 11: Global Elevator Demand Forecast

	Share of Sales		Share of Units	Market Growth Rate	Drivers	Driving Regions
New Installations	50%	Developed Countries	35%	1-2%	High-added value DX Urbanization	Developed countries
		Emerging Countries	65%	2-3%	Population growth Urbanization DX	China India Asia
Existing Installations Maintenance (Modernization)	50%	Developed Countries	65%	2-3%	Renewal periods Modernization	Europe and America Japan Singapore
		Emerging Countries	35%	4-5%	Renewal periods Modernization	China Asia

Source: CGRA forecast, compilation

・Domestic elevator market trends

Performance trends in the domestic elevator market and domestic business

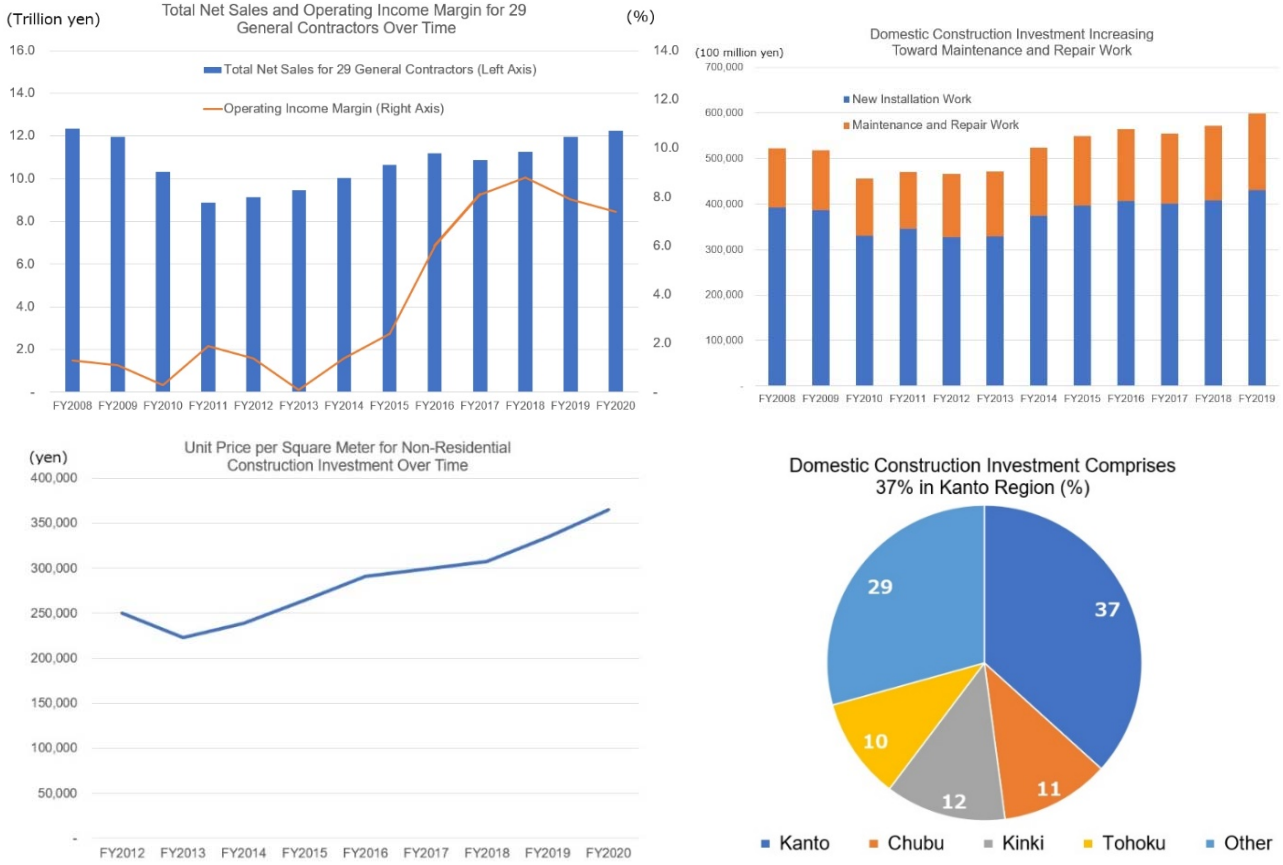
Looking at the performance trends for general contractors, which are the main domestic customers, we can see the following four points.

a. The total operating profit margin of the 29 listed general contractors improved from a low of 0.3% in FY2009, rising to 8.8% in FY2017. However, this has been on a downward trend since FY2018, though remaining at a high level. CGRA predicts that there is a risk that the downward trend will continue due to impact from COVID-19.
b. The amount of construction investment per unit area of non-residential buildings has risen from its bottom-out point of ¥220,000 per square meter in FY2012 to about ¥370,000 in FY2019.
c. The composition ratio of maintenance and repair work within construction work to completion increased from 23% in FY2004 to 30% in FY2012. In the Kanto region, which accounts for 37% of construction investment, there are concerns about a reactionary decline in new construction work related to the Tokyo Olympics; however, the actual amount of repair work is on the rise, and its composition ratio remains at the 28% level.
d. Overseas orders from major general contractors account for only 5% of total order value due to concerns about collection risks.

Therefore, in the domestic construction market, although there is concern of a reactionary decline in Tokyo Olympics-related business, public works and maintenance and repair investment as economic measures are expected to increase. In addition, the construction unit price per unit area has risen and the profitability of general contractors has also improved, so the elevator industry is expected to have a relatively strong market environment.

Looking ahead in the domestic market, in addition to the increase in modernization demand, it can be expected that added value for elevators will increase

Figure 12: Improving Direction in Revenue Environment for the Domestic Construction Industry



Source: CRGA, based on Construction Industry Handbook 2020

・Analysis of Domestic Competitors

General electronics manufacturers represent domestic competition

Fujitec's position in the industry domestically is similar to that of Daikin Industries, including the element of competing with general electronics manufacturers.

The company's three domestic competitors are Hitachi (Building Systems Business Unit, within Hitachi's Mobility business), Mitsubishi Electric (buildings and elevators businesses, within Mitsubishi Electric's heavy electric systems business), and Toshiba (Toshiba Elevator). In other words, all three companies are general electronics manufacturers, whereas Fujitec is an independent specialized elevator manufacturer based in the Kansai region.

Daikin Industries, a major air conditioner company, is an example of a machinery manufacturer in a similar position to Fujitec. Daikin Industries also has domestic competitors such as Sharp, Panasonic, and Fujitsu General, in addition to the aforementioned three general electronics manufacturers. Like Fujitec, Daikin Industries has grown to become the world's top air conditioner manufacturer by launching original product lines to the market, pursuing M&A aggressively, and strengthening its foundations in overseas markets.

Hitachi: Net sales in the Building Systems Business in FY2019 decreased 5% year-on-year to ¥591.5 billion, while operating income increased 7% year-on-year to ¥57.8 yen, and operating profit margin was 9.8%. About 53% of net sales were from China, with 43% from Japan and the remaining 4% from Asia and the Middle East.

The company focuses on remote maintenance business leveraging its Lumada platform, as well as new markets in Asia and the Middle East as a result of introducing models made in China and Thailand. At the close of FY2020, the company is expected to secure higher sales and profits, driven by strong Chinese business.

Mitsubishi Electric: Net sales of the heavy electric systems business in FY2019 were ¥1,307.4 billion. Of this, the composition ratio of the buildings and elevators businesses is estimated to be over 40%. Similarly, operating income accounts for more than 30% of their operating income of ¥82.3 billion in the heavy electric systems business, and the operating profit margin is estimated to be around 5%.

In the elevator and escalator business, domestic net sales account for approximately 55%, with the remaining 45% from overseas sales. The company proposes new value and labor/energy savings in building management through connected elevators. The Mitsubishi Electric policy is to focus on China, India, and the ASEAN region.

Toshiba: Net sales of the company's Buildings Solutions Business, which includes elevators and escalators, lighting, and air conditioners, increased 2% year-on-year to ¥570.1 billion, of which elevators and escalators are estimated to account for about 40%. Operating income in the Building Solutions Business increased significantly, up 72% year-on-year to ¥29.1 billion (operating profit margin of 5.1%), driven by the elevator, escalator, and lighting businesses.

Figure 13: Competitive Environment within the Industry Similar to Daikin Industries

	Business Type	Company Name	Business Type	Company Name
Domestic Competitors	**Specialized**	**Fujitec**	**Specialized**	**Daikin Industries, Ltd.**
	General electric	Hitachi, Ltd.	General electric	Hitachi, Ltd.
	General electric	Mitsubishi Electric Corporation	General electric	Mitsubishi Electric Corporation
	General electric	Toshiba	General electric	Toshiba
	Machinery	Sansei Technologies	Home appliances	Panasonic
			Home appliances	Sharp
			Specialized	Fujitsu General
Overseas Competitors	Specialized	OTIS (US)	Home appliances	Gree Electric (China)
	Specialized	KONE (Finland)	General electric	Samsung Electronics (ROK)
	Specialized	Schindler (Switzerland)	Specialized	Carrier (US)
	Machinery	SMEI (China)	Specialized	Trane Technologies (US)
	Specialized	CANNY (China)	Specialized	Johnson Control (US)

Source: CRGA

・CGRA's View on Japan Elevator Service

JES net sales nearly doubled in the past five years

Performance of Japan Elevator Service Holdings Co., Ltd. (JES), which specializes in elevator maintenance, shows rapid growth. Net sales in FY2019 increased 19% year-on-year to ¥21.3 billion (nearly doubling in the past five years), of which 70% was from maintenance and upkeep work, with the rest from renovations and other businesses. Operating income increased 34% to ¥2.7 billion (growing nearly 4.6x in the past five years), with operating profit margin of 12.7%. The number of units under contract in FY2019 was about 55,000, with unit price of approximately ¥390,000 (up 19% in the past five years). In the domestic elevator maintenance market, manufacturers hold 80% of market share versus 20% held by independent companies. Of the latter, JES has the largest single share, at 25% of the independent market.

JES holds the highest single share of the maintenance market, with a 25% share among independent maintenance firms

Since JES does not manufacture products, there is little factory fixed cost burden. JES has a business model that undertakes only maintenance businesses at low cost for existing elevator equipment delivered by other companies (JES estimates this is 20% to 50% cheaper). The number of units under maintenance contract was 5,000 in 2004, 20,000 in 2012, and reaching 40,000 in 2017, when the company became listed on the TSE Mothers market. In 2018, the company moved to the First Section of the Tokyo Stock Exchange. The company strengthened its M&A, and at the end of September 2020 it had reached 60,800 units under maintenance.

The maintenance market is divided into two segments: independents and manufacturers.

In the case of Fujitec, the ratio of maintenance contracts to new elevator projects is nearly 100%. In addition, according to Fujitec, it seems that there are very few cases where JES grabs maintenance contracts for delivered projects. Generally, in the case of low-rise condominiums and commercial buildings where elevator utilization rates are low, the condominium management association orders maintenance for elevators. There are instances where management associations with limited capital leeway will place orders with an independent maintenance company. However, it seems that many customers will return to Fujitec again, after positive evaluation of the company's technical superiority in other repair areas. Therefore, although independent companies including JES have room for growth in the maintenance market where management associations with limited monetary leeway make orders, CGRA believes maintenance companies under manufacturer companies will maintain high share in high-rise condominiums and large-scale commercial facilities going forward.

The maintenance market is divided into two segments: independents and manufacturers.

・Analysis of overseas competitors

Western firms are active in M&A

The major overseas competitors are the Otis Elevator Company (OTIS) in the United States (spun off from US-based United Technologies [UTX] in April 2020 and boasting the top market share worldwide), Schindler in Switzerland, and KONE Corporation in Finland. In addition, China local competitors include Shanghai Mechanical & Electrical Industry (SMEIC) and CANNY Elevator (CANNY).

Among overseas competition, notable strategy for expanding growth through corporate acquisition, especially in the Chinese market

The top three companies in Europe and the United States have achieved rapid growth due to their long history, abundant achievements, and aggressive M&A strategies centered on the Chinese market.

OTIS: As the firm with the longest history among these companies, OTIS maintains an industry-leading 2 million elevators and escalators worldwide. OTIS net sales in FY2020 decreased 3% year-on-year to US$12.8 billion (of which new projects decreased 5% to US$5.4 billion and services decreased 1% to US$7.4 billion; its service business comprises 58% of total net sales). Operating income fell 10% to 1.639 billion USD, with operating profit margin of 12.8%. Operating income for new projects fell 19% year-on-year to US$318 million, with operating profit margin of 5.9%. Operating income in the services business increased 1% year-on-year to US$1.611 million, with operating profit margin at an outstanding 21.8%. Due to its spinoff from UTX, shareholders' equity is negative, making ROE calculation impossible; however, ROIC is 55.6%. At the end of FY2020, net debt was US$4.2 billion and free cash flow was US$1.3 billion. For shareholder returns, the company promised a dividend payout of at least 40% and announced it would buy back company stock. It has approximately 69,000 employees, with net sales per employee of ¥1.941 billion (converted at ¥105 to the US dollar).

OTIS service business has an operating profit margin of approximately 22%

KONE: KONE handles the maintenance of more than 1.4 million elevators and escalators. Net sales in FY2020 decreased slightly year-on-year to €9.939 billion (of which new projects increased slightly to €5.34 billion and maintenance and modernization decreased 1% year-on-year to 4.599 billion euros; the maintenance business comprises 46% of total net sales). In addition, the net sales ratio in China is about 30%. Operating income increased 2% to €1.213 billion, with operating profit margin of 12.2%. ROE for the FY2020 was 29.7% and ROIC was 26.4%. Free cash flow was approximately €1.4 billion, and net cash at the end of December 2008 was €1.954 billion. Shareholders' equity ratio was 45.5%. Dividend payout ratio was 128% (dividends per share have grown to approximately 1.5 times over the past five years). The company has 61,380 employees, with net sales per employee of 2.024 billion yen (converted at ¥125 yen to the euro).

KONE proactive in providing shareholder return, with 128% dividend payout ratio in FY2019

Schindler: Net sales for FY2020 were CHF10.64 billion, down 6% year on year. The Chinese business secured double-digit sales growth, and EMEA, which accounts for 45% of net sales, also showed steady performance. However, net sales were impacted by a decline in sales in the US, which accounts for 27% of net sales, and other markets. Operating income fell 18% to CHF1.032 billion, with operating profit margin of 9.7%. ROE for the FY2020 period was 19.6%, and ROIC was 17.9%. Free cash flow was CHF974 million. Net cash at the end of December 2020 was CHF1.951 billion, with shareholders' equity ratio of 35.8%. Dividends per share were CHF4.0, with payout ratio of 59.5%. The company has 66,674 employees, with net sales per employee of ¥18.67 million (converted to ¥117 to the CHF).

Schindler also has a dividend payout ratio of approximately 60%

Figure 14: ROE Comparison vs. Overseas Competitors

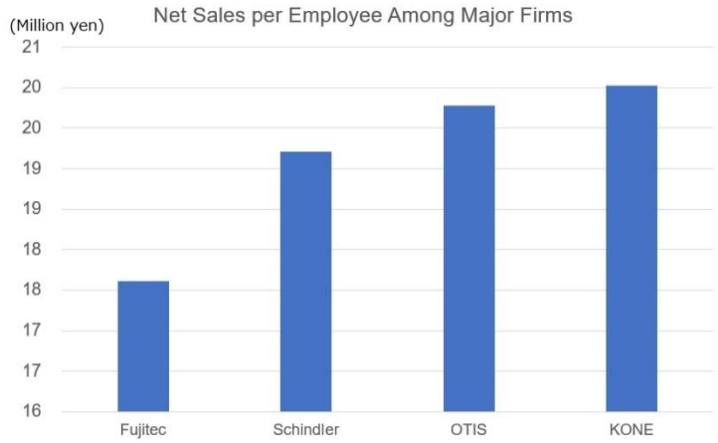
Comparison of PBR=ROE*PER (as of the end of March 2020)

	PBR	ROE:	PER
Fujitec	1.1	**9.5**	11.4
OTIS	-7.6	-	32.5
KONE	10.9	29.7	36.7
Schindler	6.6	19.6	35.5
Daikin	2.7	**12.0**	22.6
Carrier	5.2	31.7	16.8
Lennox	-614.0	-	29.6
Trane Technologies	5.5	13.3	41.2

Like Daikin Industries, Fujitec has a relatively low ROE versus overseas competitors

Source: CRGA, based on various materials, overseas competitor data is as of December 2020

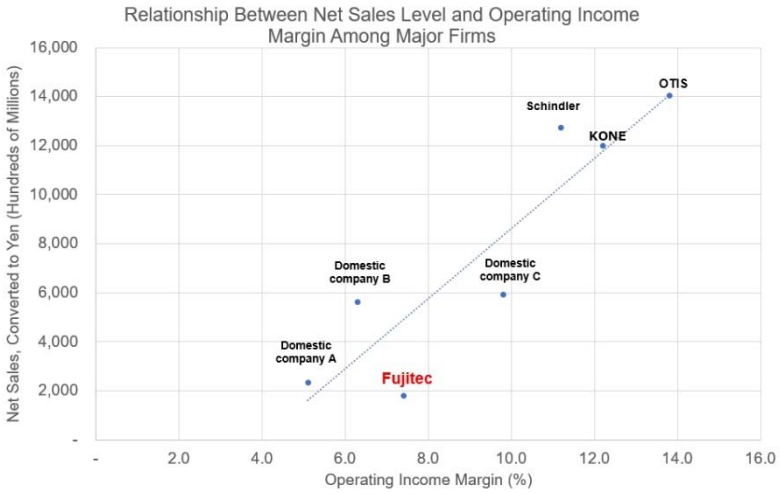
Figure 15: Low Fujitec Net Sales per Employee



Fujitec has relatively low net sales per employee versus overseas competitors

Source: Compiled by CGRA based on data from each company

Figure 16: Relationship Between Net Sales Level and Operating Profit Margin



Though Fujitec's net sales are on the small scale, it has a relatively high operating profit margin

Source: CRGA based on various materials

・Comparative analysis with competitors

In FY2019, Fujitec posted record sales of ¥181.2 billion (+6% YoY), a 30% year-on-year increase in operating income of ¥13.4 billion (record-high ¥14.4 billion posted in FY2015), and an operating profit margin of 7.4%. CGRA believes that the company's earnings stability is relatively high compared to its three domestic competitors. Further, the company's profitability is higher than that of Mitsubishi Electric and Toshiba. However, the company's sales per employee for FY2019 was only ¥17.61 million, which is relatively low compared to its overseas competitors.

Fujitec has growth potential, and its medium- to long-term growth potential is likely to be highly regarded

a. Effective corporate acquisition of maintenance business

OTIS and KONE net sales per contract in their respect service and maintenance businesses amounts to approximately ¥40 million (Japan Elevator receives approximately ¥39 million per contract). OTS and KONE service 2 million and 1.4 million elevators, respectively, which contributes to the difference in depth of sales and profits. In 2020, Fujitec acquired a maintenance company in the U.K. Acquiring a maintenance company in a region with low demand for new installations can be an effective strategy. Japan Elevator Service Holdings Co., Ltd. is aggressively pursuing mergers and acquisitions of maintenance and servicing companies in Japan.

b. Sales per employee is expected to rise

Fujitec's profitability is relatively high compared to its domestic competitors. Further, trends in advances received and allowance for doubtful accounts suggest that the company is operating in a manner that focuses on profits. However, compared to its overseas competitors, the company lacks a history and track record in the maintenance and repair business. In addition, the company is less profitable, relatively speaking. OTIS and KONE record 10% to 15% higher sales per employee than Fujitec (this difference is particularly pronounced in Asian markets). If the company were to achieve the same level of sales per employee as its overseas competitors, it could easily achieve OPM in the 10% range.

c. Characteristic of Japanese companies, ROE is relatively low compared to overseas competitors

Daikin Industries, which has a similar industry position as Fujitec, reports a lower ROE than its overseas competitors. One factor is that Japanese companies maintain a relatively high shareholders' equity compared to their overseas competitors (i.e., more risk-averse). For this reason, Fujitec ROE and ROIC are lower than those of its overseas competitors. This is not due to any specific reason, but rather a characteristic Japanese management style.

d. The company's medium- to long-term growth potential is likely to be highly regarded

PBR is calculated by ROE (multiples of net income to shareholders' equity) x PER (years of profit growth factored into stock price). OTIS had a PER of 32.5 times for the year ended December 2020, while KONE had a PER of 36.7 times. This suggests that the share prices of each company factors in long-term profit growth. Similarly, Daikin Industries had a PER of 22.6 years of profit growth factored into its share price. The Fujitec PER for FY2019 was 11.4 times. However, this figure may be reexamined in light of the company's stable profit growth, stronger shareholder returns, and more active information disclosure, including non-financial information.

(4) Strategic Direction, SWOT and Five Forces Analysis

Fujitec announced its strategic direction, including a new shareholder return policy

A new medium-term plan is likely to be announced when the post-COVID-19 environment becomes clearer

On April 17, 2019, Fujitec announced *Innovation, Quality & Speed*, the company's new three-year medium-term plan beginning April 2019. Under this plan, the company set targets for net sales of ¥180 billion, operating income of ¥13 billion (OPM 7.2%), and ROE of 8.0% or higher for FY2021 (assuming ¥105 to the USD).

As of the beginning of FY2019, Fujitec projected net sales of ¥171 billion and operating income of ¥10.4 billion yen. However, in Q2, the company made an upward revision of its forecasts, calling for net sales of ¥173 billion and operating income of ¥12 billion. As of Q3, the company made another upward revision of its forecasts, indicating net sales of ¥180 billion and operating income of ¥13.5 billion. In the first year of its medium-term plan, Fujitec had already cleared its targets for FY2021.

Given this performance, the company announced its *Strategic Direction* on December 4, 2020. However, due to the ongoing COVID-19 pandemic, the company did not publish a time frame or numerical targets. The company did, however, propose new measures for shareholder returns and a stronger governance structure.

Future vision: We strive for sustainable growth and value creation for all stakeholders, placing the highest priority on pursuing our management philosophy.

Medium- and long-term strategic priorities: (1) Deepen focus on After-market Business/expand business in growth markets,
(2) Increase profitability

Medium- and Long-Term Direction: (Six points described below)

Six points for medium- and long-term direction: A focus on expanding growth investments

a. Grow sales: Secure business growth that outpaces the market growth potential in each country
b. Operating profit margin: Quickly achieve 10% or more
c. ROE: Maintain 10% or more through increased profit margins
d. Expand growth investments: Create new growth through aggressive investments in priority areas
e. Strengthen shareholder returns: Maintain a basic dividend ratio of 50% or higher
f. Cancel treasury stock: Cancel approximately half, or roughly 5% of shares issued and outstanding

Figure 17: Policies Aimed at Enhancing Corporate Value over the Medium and Long Term

Financial Targets	• **Sales growth:** Outpace market growth in each country • **Operating profit margin:** Achieve 10% or higher in near term • **ROE:** Maintain 10% or higher through increased profit margins
Investment Strategies	• **Expand growth investments:** Create new growth through active new investments in priority areas ➢ Growth investments to strengthen New Installation and Aftermarket businesses: Improve development and field capabilities, expand production capacity ➢ Increase investment to improve profitability through cost efficiencies: Enhance installation capabilities, reduce production costs, expand IT use, cultivate human resources
Shareholder Returns	• **Strengthen shareholder returns:** ➢ Maintain a basic dividend payout ratio of 50% or higher ➢ Consider further returns to shareholders in the event of excess cash in the future ➢ Explore share buybacks based on market, business environment, and capital health considerations

Source: Fujitec *Strategic Direction*

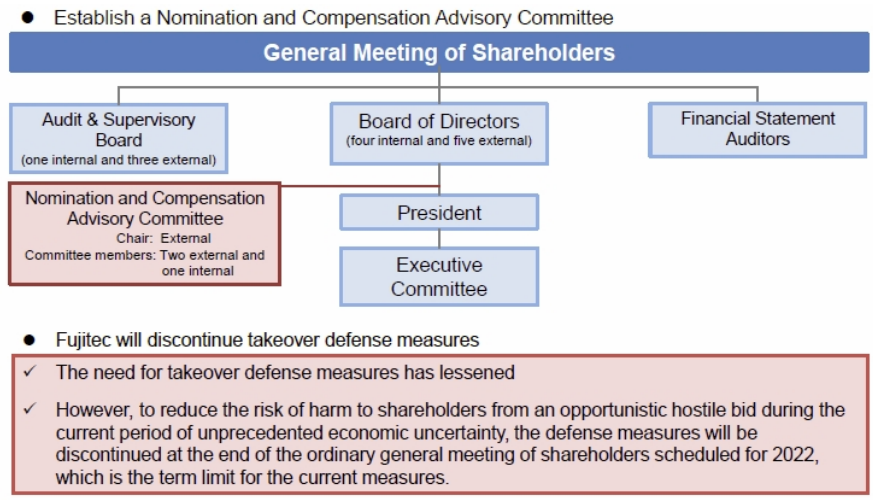
・Stronger governance structure

Strengthening Governance Structure

Fujitec announced the establishment of a Nomination and Compensation Advisory Committee, as well as the termination of takeover defense measures.

Due to the ongoing COVID-19 pandemic, the company has not yet disclosed the timeline and numerical targets for its medium-term management plan. Only qualitative targets have been disclosed to date. However, we expect the company to disclose quantitative numerical targets with timelines once the uncertainty of post-COVID-19 market and performance trends has been settled.

Figure 18: Strengthening Governance Structure



Source: Fujitec, *Strategic Direction*

<The Fujitec Vision>

The company's global mission statement reads, "Respecting people, technologies and products, we collaborate with people from nations around the world to develop beautiful and functional cities that meet the needs of a new age."

In addition, the company strives to create value for all stakeholders, placing the highest priority on pursuing our management philosophy and engaging in initiatives contributing to the SDGs for our sustainable growth.

Fujitec Values

Environment: Aim for sustainable development while striving for harmony between business and the environment

Society: Deliver high-quality products to the countries and peoples of the world

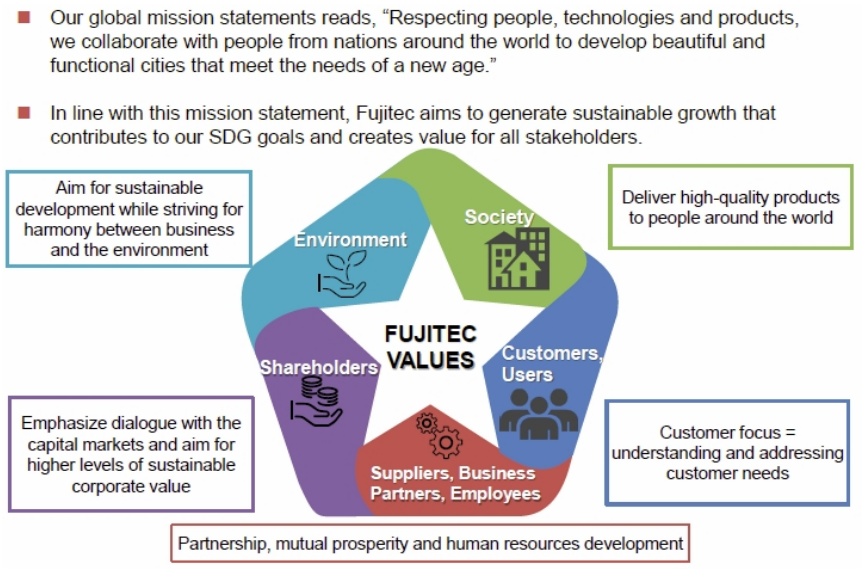
Customers and users: Customer focus = understanding and answering customer needs

Suppliers, business partners, and employees: Collaboration, coexistence, and human employee development

Shareholders: Emphasize dialogue with the capital markets and strive for higher levels of sustainable corporate value

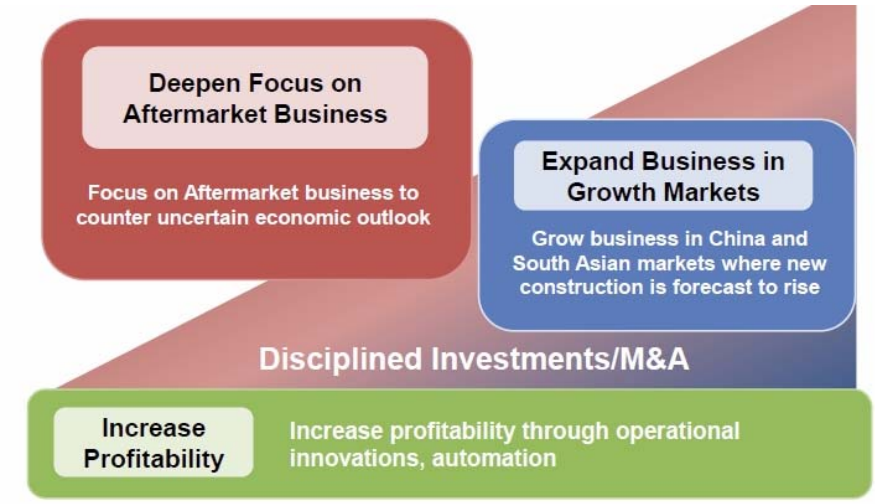
The Fujitec Vision and Priority Areas

Figure 19: The Fujitec Vision and Direction



Source: Fujitec, *Strategic Direction*

Figure 20: Priority Areas of the Fujitec Business



Source: Fujitec, *Strategic Direction*

<Business in Priority Areas>

The company intends to expand its business in the following three priority areas and move into a new growth phase by pursuing aggressive, yet disciplined, investment.

a. Focus on After-market Business
b. Expand business in growth markets + Engage in disciplined investments/M&A
c. Increase profitability

Focus on After-market Business

a. Expand Modernization business: Strengthen development, production, sales, and global collaboration
   Develop specialized equipment for modernization
   Launch modernization packaged products for all models
   Improve cost competitiveness through global production and procurement
b. Expand Maintenance business: Pursue smart maintenance and roll out global expansion
   Improve the functionality of our maintenance information management system connected to map data
   Improve maintenance efficiency through big data analysis and AI
   Achieve advanced automated diagnostics and next-generation remote maintenance through IoT

Expand Business in Growth Markets

a. China market: Sustainable growth through stronger sales structure and reduced costs
   Pursue cost reductions through model integration and production automation
   Expand new installation business and strengthen Aftermarket business through an improved sales system
   Expand production procurement system
b. South Asia market: Expand business in the growth markets of India and the Mekong region
   Expand sales of global standard models using India as a production and supply base
   Strengthen our business structure and network of locations, mainly through Singapore
   Launch strategic products specifically for the Indian market

Increase Profitability

a. Increase profit margin: Increase profit margins through design, procurement, and production innovations
   Leverage global supply chains
   Engage in design/production automation and labor savings through design simulation, 3D-CAD, etc.
   Pursue cost reductions through custom model design and production innovations
b. Installation cost reform: Achieve cost savings through labor-saving installations
   Develop specialized tools for installation and installation method innovations
   Conduct pre-assembly of installation equipment to improve on-site efficiency
   Develop expert human resources and strengthen cooperation with installation partner companies

・SWOT analysis

Demonstrating the strength of a dedicated manufacturer

Fujitec has room for improvement in sales price and sales scale

We conducted the following SWOT and Five Forces analysis, taking into account Fujitec's characteristics and external environment, as well as domestic and overseas competitors.

Strengths: In addition to an integrated manufacturing and sales structure, Fujitec responds to customer needs in detail. The company has a strong track record overseas and a high level of expertise and experience as a dedicated manufacturer, as well as extensive service and product development capabilities. In addition, the company has a relatively strong balance sheet, selective order acceptance, and risk management systems.

Weaknesses: Disadvantages of scale, ability to negotiate in overseas markets

Opportunities: Emergence of modernization demand (renovation demand), M&A strategy centered on maintenance and servicing, selective order acceptance and ability to increase product prices

Threats: Rise of emerging manufacturers in China and other emerging economies (although local manufacturers are low-quality and do not compete with the company in bidding), price declines in the maintenance and servicing business, intensifying price competition among global manufacturers

While Fujitec may be smaller in scale, the company has the potential to become highly profitable

Potential to become a highly profitable company

As a dedicated manufacturer similar to Daikin Industries, Fujitec demonstrates qualitative strengths that include the ability to respond to customers in detail, a strong track record of overseas expansion and localization in advance of domestic competitors, and technological prowess in providing many of the world's first products. Furthermore, the company's ratio of allowance for doubtful accounts and advances received to sales indicates that Fujitec practices selectivity in accepting orders and employs a strong management system.

In terms of weaknesses, one can say that the company is smaller than its competitors. Although the company has been producing microcontrollers and other key components such as motors and inverters in-house, it is not of a size capable of securing volume discounts on various steel products. Other than the risks discussed on the following pages, it does not appear that the company has been exposed to any new unique risks since FY2003.

While it may be difficult to differentiate products, the company may have opportunities in a differentiation strategy to provide attentive services, improved elevator car inside environments, etc. The company’s strong balance sheet may present opportunities to acquire maintenance and repair companies (in recent years, Japan Elevator Service Holdings has strengthened its presence in domestic corporate M&A). At the same time, CGRA believes that Fujitec has the potential to improve OPM further, depending on whether the company can improve to the level of its overseas competition in terms of 10% to 15% in net sales per employee.

In terms of threats, all companies in the industry are dealing with the threat of intensified price competition during the current COVID-19 pandemic. Safety is a top priority for elevators and the market is becoming increasingly oligopolistic. For this reason, CGRA believes that there is a limited threat to the emergence of new entrants to the market.

・Five Forces Analysis

Seemingly low price competition risk

Despite many comments from various companies viewing price competition as a risk, actual impact on business performance is minor

In the previous section, we performed a SWOT analysis of the company. Here, we will perform a Five Forces analysis. Although this is a similar analysis to SWOT, it offers a potential understanding of the company's position in the industry, such as the bargaining power of buyers and sellers.

Competition within industry: Western companies are implementing M&A-driven growth strategies, and Japanese companies are developing business centered on the Chinese and Asian markets; the top five companies account for 70% of the global elevator market. It is also a market where stability is prioritized over price. Overseas competitors have secured a stable operating profit margin of about 12% to 14% (operating profit margin in the service business is about 20%).

Threat of new entrants: In Japan, five major manufacturers - Mitsubishi Electric, Hitachi Building Systems, Toshiba Elevator, Nippon Otis Elevator, and Fujitec, as well as affiliated maintenance subsidiaries, account for more than 90% of the market. There are generally a large number of instances where a manufacturer supplying a new item will also enter into a maintenance contract for that item. However, JES, which mainly handles maintenance, is seeing continued growth in the number of its units under maintenance, with a focus on elevators for low-rise condominiums. The company leverages the strengths of its factory-less, low-cost fixed cost structure. There is no new manufacturer entry in advanced economies. Although local companies are emerging in China, there is a strong tendency for owners to prefer foreign-owned manufacturers' products in order to maintain building asset value.

Threat of alternatives: No elevator alternatives are evident.

Bargaining power of sellers: Fujitec manufactures microcomputers in-house and previously purchased inverters and motors externally (mainly from Fuji Electric); however, there is greater in-house production, leading to reduced procurement risk and risk of higher costs from suppliers. There has simultaneously been an impact on shrinking inventories and shortening delivery times.

Bargaining power of buyers: Domestic profitability of general contractors is improving, and the operating profit margin of the 29 publicly traded general contractors increased from 1.4% in FY2012 to 8.8% in FY2017, exceeding the operating profit margin domestic elevator companies. In addition, as seen in the rise in construction investment unit price per total floor area, there is a shift to high value-add for ancillary equipment, such as elevators. Specifically, these are found in the adoption of touchless buttons, needs for improving the in-elevator air environment, needs for energy savings, efficient operation systems, and more. However, margins for general contractors are hitting a peak phase, and it is conceivable that there will be greater downward price pressure going forward.

A strategy to expand scale and increase net sales per employee is required

Although Fujitec faces some scale-based disadvantages versus its overseas competitors, the impression is that they are able to hold their ground thanks to their attentive services and high technological capabilities, taking advantage of their particular characteristics as a dedicated manufacturer.

CGRA believes that because of the emergence of new needs in the COVID-19 pandemic and growing needs for energy conservation, as well as the company's unique industry-leading product supply that improves in-elevator environments and has other advancements, Fujitec will be able to continue to provide stable profits using its differentiation strategy. In addition, it will be necessary to expand scale through M&A and other methods, as well as to pursue differentiation and value-added strategies to raise net sales per employee.

Figure 21: SWOT and Five Forces Analysis of the Current State of Fujitec

SWOT Analysis

Strengths	Weaknesses
Commitment as specialized manufacturer	Relatively small scale
Strong capability to commercialize products	Sales/price negotiating capability overseas
Capability for local expansion in overseas markets	
Speedy business due to integrated manufacturing and sales systems	
Revenue-oriented selection ordering system	

Opportunities	Threats
Emerging renewal demand in China, etc.	Price wars among overseas competitors
M&A using strong B/S	Emerging new companies in China, etc.
Potential for price increases	Falling sales prices in Maintenance and Repairs Business

Five Forces Analysis

Intra-industry competition

All companies are targeting increased profitability, and there is movement toward oligopolies whereby it is unlikely to fall into a state of price competition;
concerns of price competitions are not borne out in performance figures

Threat of new entrants

Limited threat of new entrants due to marketing calling for safety first

Threat of alternatives

Though mobility technologies using vacuums may appear, there are doubts about their safety

Bargaining power of sellers

Fujitec already manufactures microcomputers, inverters, and motors in-house, mitigating procurement risks

Bargaining power of buyers

Profit environment for customers is turning positive, new value added is being demanded in the wake of COVID-19
However, a peak-out of profitability at general contractors presents concern

Potential future business strategies:

- As shown in Figure 15, profitability is relatively high, but sales scope needs to be expanded
- Corporate acquisition of maintenance businesses is effective
- Net sales per employee should be raised to comparable level vs. overseas competitors

Source: CRGA

・Risk Disclosure and Analysis

An impression of limited risks specific to Fujitec

In recent years, no new risks seen unique to Fujitec

The following 12 risks are specified in Fujitec's FY2019 securities report. Risk xii. (risk from COVID-19) has been newly added since the prior year.

Risk xi. (IT-related risks) and risk vii. (raw materials risks) were added in FY2015 and FY2004, respectively. The remaining risk items have not changed since FY2003.

i. Political and economic conditions: The company has 10 production bases and a large number of sales bases across 24 countries and regions worldwide, and is expanding globally. This has the effect of being impacted by risk of fluctuation in political/economic conditions in the local country and/or region in which it operates, as well as by public investment and construction investment that influence the investment of various buildings contextual to elevators and escalators.
ii. New product development: Development competition among major manufacturers is fierce; if the company cannot adapt to advanced technologies, they may be chased from the market.
iii. Price competition: In domestic and overseas markets, fierce competition continues with competitors, including leading companies operating on a global scale. The trend toward management superiority due to rising market share will continue, and price competition for products and services is intensifying.
iv. Manufacturer's responsibility: Unexpected product defects may lead to personal injury in some cases.
v. Joint venture: The company is developing a joint venture in China. Joint venture dissolution presents risk
vi. Potential risks in global business development
vii. Raw material prices: Rising prices of steel and wire rope are factors for increasing costs.
viii. Financing: Risk of significant rise in interest rates
ix. Foreign exchange market fluctuations: Rapid, dramatic foreign exchange fluctuations beyond expectations
x. Stock price fluctuations: Risk of decline in value of securities held
xi. IT-related risks: Unexpected unauthorized access, information leakage, etc.
xii. Risk from COVID-19

Despite concerns over intensifying price competition, impact appears limited

Concerns of delayed recovery of new domestic projects

Having observed various briefing materials from overseas companies, we noted some comments from each indicating concern over intensifying price competition. Fujitec's list of risks provided above suggests that price competition has not yet begun. Looking at OTIS and Schindler's analyses of changes in operating income in the October-December period of 2020, the impact of price declines is surprisingly small, whereas price increases are a factor pushing up profits at KONE. Therefore, CGRA does not believe that the impact on price competition will be so great as to be a concern.

At this point, the order environment for KONE and Schindler, which are highly dependent on overseas markets for profits, has begun to show improving trends after rebounding from low points. Taking into account the deterioration in profitability of general contractors in Japan and reactionary declines from the Tokyo Olympics, a delay in recovery of new orders in the domestic market is likely to be seen as a risk.

(5) Performance and Financial and Non-Financial Analysis

Consolidated orders received and net sales over time

Operating income level in recent years

Consolidated volume of orders received reached a record high of ¥191.3 billion in FY2015, up 7% from the previous year, and almost doubling in the past six years. Order balance reached a record high of ¥208.2 billion in FY2018, with order balance in FY2015 secured at 1.1 years' worth of annual sales. As a result, net sales in FY2019 reached a record high of ¥181.2 billion, up 6% from the previous year and setting a new record for the first time in four years. The BB ratio, which is obtained by dividing orders received by net sales, has been over 1.0 for 10 consecutive years from FY2009 to FY2019.

Operating income remains level in recent years

Net sales and net income both mark record highs in FY2019

As with orders received, consolidated operating income reached a record high of ¥14.4 billion (operating profit margin of 8.2%) in FY2015, a year-on-year increase of 7%, and growing 2.7 times (vs. ¥5.4 billion in operating income in FY2011) over the past four years. Since then, operating income has remained level; although sales in FY2019 reached record highs, fixed costs increased due to a primarily overseas-based increase in personnel and increases in variable costs, such as domestic logistics costs. As a result, operating income for FY2019 was only¥ 13.4 billion (operating profit margin of 7.4%).

Net income for FY2019 marks record high; factors include falling tax rates

Consolidated ordinary income secured a record high of 15.2 billion yen in FY2015, up 2% year-on-year, and consolidated profit attributable to owners of parent, like net sales, reached a record high for the second consecutive year in FY2019 of 9.9 billion yen, up 8% year-on-year. The primary causes for this are booking special gains and reduction in tax rates.

Improved profitability becoming apparent in overseas businesses

Consolidated volume of orders received reached a record high in FY2015, almost doubling in the past six years. In particular, in FY2012 and thereafter, new businesses in China grew rapidly and became a driving force for business performance. Regarding operating income, although level performance has continued after recording a peak in FY2015, CGRA believes that Fujitec's business performance is once again accelerating due to factors such as strategy changes in Chinese businesses, profitability improvement of the Indian business, impact from introducing new products in Japan (unit price increase impact), and growth of the company's Aftermarket business in Singapore and other areas.

Figure 22: Consolidated Orders Received, Net Sales, and Operating Income



Source: CGRA, based on company materials

・Performance Trends for FY2020

FY2020 earnings plan revised upward simultaneously with announcement of Q3 financial results

Issues remain with new orders, but business environment is improving

Consolidated orders received in the first three quarters of FY2020 (April-December), a period of concern over adverse effects from COVID-19, decreased 5% year-on-year to ¥128.6 billion (up 3% year-on-year to 55.8 billion yen domestically, down 11% year-on-year to ¥72.8 billion overseas). In the same period, net sales decreased by 8% to 124 billion yen, and the book-to-bill (BB) ratio was secured at 1.04.

The main reasons for this performance were the recovery and profitability improvement of the company's new installation business in China, the steady maintenance work in the Aftermarket business in Singapore and other locations, the trend toward recovery in the repair and modernization business as a whole, and the improvement of profitability of the Indian business.

Consolidated operating income for the first three quarters of FY2020 (Apr-Dec) increased 3% year-on-year to ¥10 billion (93% rate of progress vs. initial plan), and the operating profit margin was 8.1%. Ordinary income decreased 1% year-on-year to ¥10.9 billion (95% rate of progress), and profit attributable to owners of parent decreased 3% year-on-year to ¥7.1 billion.

As a result, the company revised its full-year earnings plan upward at the same time as the announcement of its Q3 financial results: net sales were revised from ¥165 billion to ¥169 billion, a 7% year-on-year decline; operating income was revised from ¥10.7 billion to ¥13.3 billion, a 1% year-on-year decline (operating profit margin of 7.9%); ordinary income was revised from ¥11.5 billion to ¥14.7 billion, flat year on year; net income was revised from ¥7.5 billion to ¥9.5 billion, a 6% decrease year on year.

High volatility in quarterly performance

Looking at business performance on a quarterly basis, orders received in Q3 of FY2020 (Oct-Dec) were only ¥41.8 billion, down 5% year-on-year, and net sales were only ¥47.6 billion, down 2% year on year. However, operating income increased 40% year-on-year to ¥5 billion. Still, as seen in Figure 23, it should be noted the Fujitec's quarterly results are more volatile than those of its overseas competitors.

Figure 23: Quarterly Net Sales, and Operating Income Over Time for Major Four Firms



Source: Compiled by CGRA based on data from each company

・Domestic Performance Trends

Domestic business accounts for 37% of consolidated operating income

In sales by region, domestic net sales in FY2019 increased 5% year-on-year to a record high of ¥72.5 billion (comprising 40% of total net sales).

Concerns of delayed recovery of new orders

On a location basis, domestic net sales in FY2019 also reached record highs for the fourth consecutive year, securing ¥74.8 billion, up 3% year-on-year. Operating income decreased 6% year-on-year to ¥4.9 billion, with operating profit margin remaining at 6.5% despite an increase in sales, due to factors such as an increase in new construction projects, labor costs, and variable costs such as logistics costs. Domestic consolidated operating income comprises 37% of total consolidated operating income.

The record for operating income was ¥5.7 billion, recorded in FY2017, with an operating profit margin of 8.5% at the time.

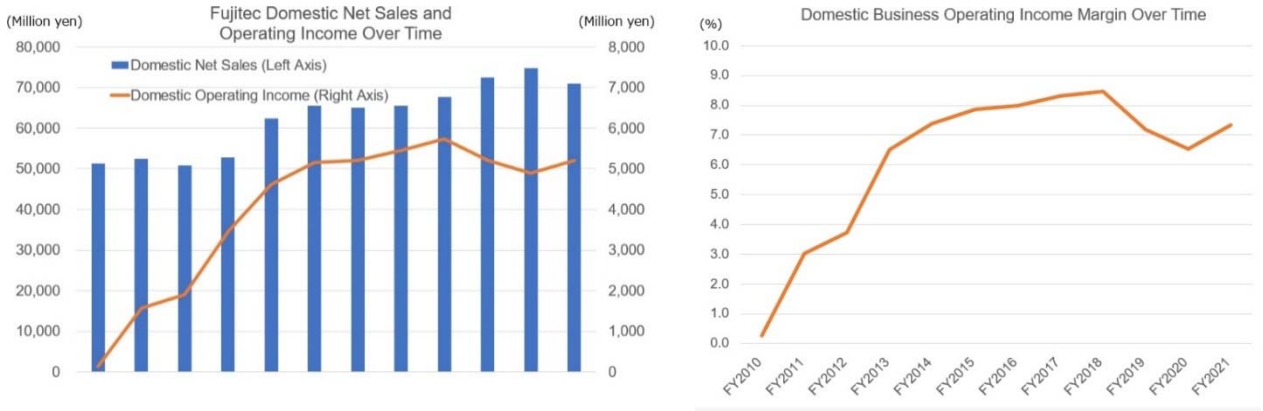
FY2020 earnings plan for domestic business revised slightly upward

Fujitec's performance plan for FY2020 was revised upward when the Q3 financial results were announced. The full-year domestic sales plan was increased by 1 billion yen from the initial plan of ¥70 billion to ¥71 billion, a 5% decrease year-on-year, whereas operating income was also increased by ¥200 million from ¥5 billion to ¥5.2 billion (operating profit margin of 7.3%), a 6% increase year-on-year.

In the COVID-19 pandemic, net sales have decreased due to postponements and suspensions of construction work; however, sales prices improved as a result of introducing the new XIOR product to market in April 2020 for new installations. Further, highly-profitable maintenance businesses within the Aftermarket business trended strongly. The resulting forecast is that, despite decreasing sales, profits will rise.

Impact of COVID-19 on the production side has not become particularly apparent. However, going forward, there are concerns that the recovery of new orders will be delayed due to the deterioration of profitability of general contractors and a reactionary decline in construction from the Tokyo Olympics.

Figure 24: Concerns in Domestic Business on Delay in New Order Recovery



Source: CGRA, based on company materials

・Performance Trends in East Asia

Business in East Asia accounts for 40% of consolidated operating income

Location-based net sales in East Asia, including in China, Hong Kong, Taiwan, and South Korea, reached a record high of ¥84.6 billion in FY2015, a period of strong business in China. After that, although net sales continued to decline until FY2018, net sales increased by 8% year-on-year to ¥74.7 billion in FY2019. In FY2019, operating income was ¥5.3 billion (comprising 40% of total operating income), up 134% year on year, with an operating profit margin of 7.1%. The record for operating income was ¥7.5 billion, recorded in FY2015. Though operating profit margin secured its highest post-Lehman shock levels in FY2009 at 10.5%, it has fallen to 3.2% in FY2017.

These regions are heavily dependent on the Chinese market. Profitability is improving

Though Fujitec generally operates a direct sales system, in China it uses a joint venture and distribution sales in keeping with the country's unique business customs. The reason for the decline in operating profit margin as described above is that in the Chinese market, a market with focus on new construction, impact became evident from agents focusing on low-cost volume zones, primarily in residential applications. In response, Fujitec has, in addition to raising product prices, implemented measures such as selection orders and incentive revision for distributors, and shifted its focus to profitability-oriented measures. As a result, both operating income and income margin are showing stronger improvement trends.

In 2030 and thereafter, renewal demand will appear in earnest in China

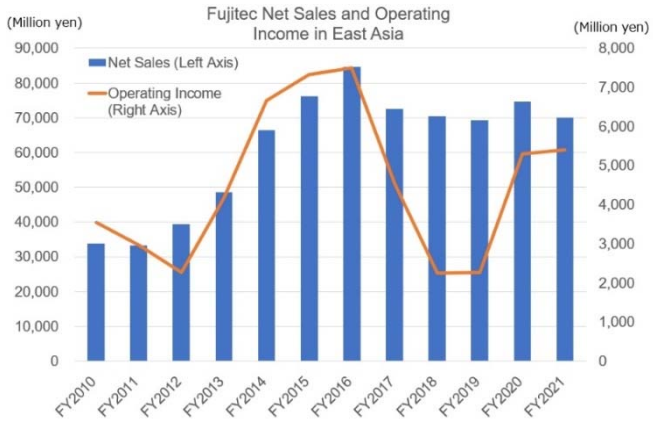
Fujitec established its first overseas entity in Hong Kong in 1964. In the Hong Kong market, the company has a high market share and high-volume stock unit delivery, so profitability is also high. In China, the world's largest elevator market, new projects account for 95% of the market. However, in 2030 and thereafter, demand for renewal (that is, modernization) is expected to become apparent, and it appears that safety-minded laws and regulations prioritizing manufacturer-led maintenance are being introduced over time.

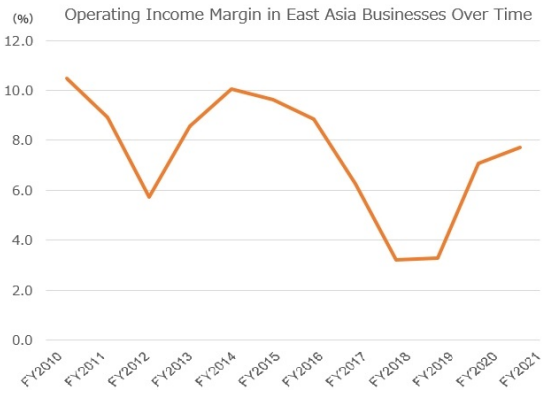
In 1964, Fujitec received an order for the project to build the Sun Hing Building, the largest and highest in Hong Kong with 28 floors.

FY2020 earnings plan for East Asia business revised significantly upward

Fujitec's performance plan for East Asia in FY2020 was revised upward. Here, net sales were increased by 6 billion yen from the initial plan of ¥64 billion to ¥70 billion, a 6% decrease year-on-year, whereas operating income was also increased by ¥1.8 billion from ¥3.6 billion to ¥5.4 billion (operating profit margin of 7.7%), a 2% increase year on year. While net sales are expected to decrease primarily due to fewer new installations in China and less overseas shipments from the company's Chinese plants, cost-cutting at these plants and booking sales of maintenance projects in Hong Kong is expected to boost profits.

Figure 25: Improving Profits in East Asia Businesses





Source: CGRA, based on company materials

・Performance Trends in South Asia

Business in South Asia accounts for 16% of consolidated operating income

By region, sales in South Asia, including Singapore, Malaysia, and India, reached a record high of ¥17.2 billion in FY2017, and after that, due to the slump in the mainstay Singapore market, sales in FY2019 were down 1% year-on-year to ¥16.4 billion. However, in FY2019, operating income was a record high of ¥2.1 billion (comprising 16% of total consolidated operating income), up 17% year-on-year, securing an operating profit margin of 13.0%. In addition to improving profitability of new installations in Singapore, a region with significant contribution to sales, improving profitability in the Indian business contributed significantly to the increase in profits. Note that the record for operating profit margin after the Lehman shock was 16.8%, recorded in FY3/11.

Regions with highest location-based operating margin for Fujitec

FY2020 net income in South Asia businesses expected to mark record high

Fujitec's overall performance plan in South Asia for FY2020 was revised upward. Here, net sales were decreased by ¥2 billion from the initial plan of ¥16 billion to ¥14 billion, a 15% decrease year-on-year. However, operating income was increased by ¥600 million from ¥1.7 billion to a record ¥2.3 billion (operating profit margin of 16.4%), an 8% increase year-on-year. Operating profit margin is generally expected to reach record highs.

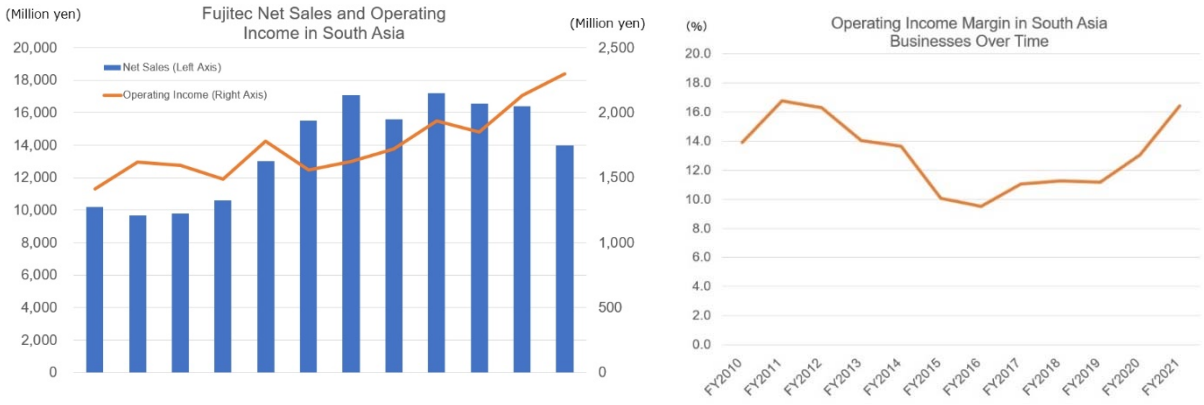
Though the demand environment itself in South Asia is to be unfavorable as shown in net sales figures, performance is to receive contributions from a number of improvement effects, such as growth in the Aftermarket business in the mainstay Singapore market, and further the streamlining of models at its first plant in India.

Fujitec holds the most market in Singapore

In 1966, Fujitec received an order for 300 units for the Singapore Housing & Development Board (HDB), making it the largest contract in the history of the industry. In 1972, it once again received the industry's largest order ever, for 2,000 elevators (¥10 billion) again for HDB. That same year, it established a local entity in Singapore. The company is leading in market share in Singapore and enjoys high profitability thanks to its abundant stock. In the future, it is expected to see more new projects in Indonesia, Sri Lanka, and India. Although the increase in new projects will negatively affect profitability, it is expected that renewal demand will become apparent in the long run. In addition, Vietnam, the Philippines, and Myanmar are strengthening and focusing on new markets for the future.

Fujitec leads Singapore in market share

Figure 26: Operating profit margin of 20% in Sight for South Asia Business



Source: CRGA, based on company materials

・Performance Trends in North America and Europe

Business in North America and Europe accounts for 7% of consolidated operating income

Relatively low profitability in Western businesses

By region, net sales in North America and Europe increased 6% year-on-year to a record high of ¥25.4 billion in FY2019 (of this region, the US market comprises more than half of net sales). Operating income was a record high of ¥1 billion (comprising 7% of total consolidated operating income), up 17% year on year, securing an operating income margin of 4.1%. Although small operating losses have been booked in the European region, in addition to the growth of new installation projects and modernization projects in the United States, new installations are increasing in Canada, and the United Kingdom region also secured an increase in net sales and double-digit operating income.

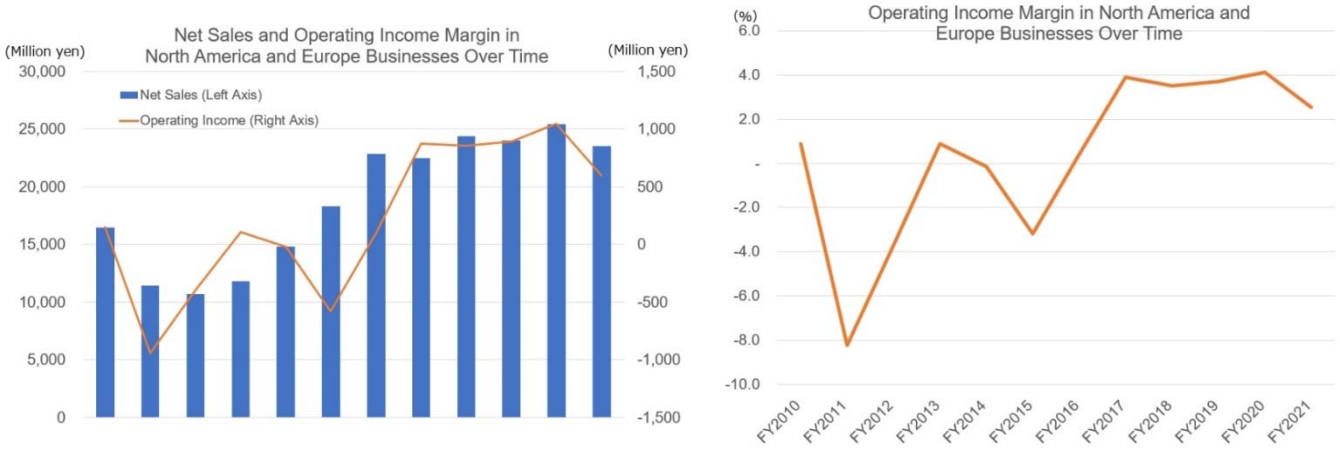
Fujitec's overall consolidated performance plan in North America and Europe for FY2020 was revised upward. However, here, net sales were decreased by ¥1.5 billion from the initial plan of ¥25 billion to ¥23.5 billion, an 8% decrease year on year. Still, the operating income plan for these regions remained unchanged, at ¥600 million (operating income margin of 2.6%) and a 43% decrease year-on-year as in the initial plan. Contributions came from not only an increase in new installation work in the UK but also in the Aftermarket business from an acquired UK subsidiary. However, performance was hindered by a decrease in new installation projects in the US due to lockdowns.

Market share increasing in the US, business opportunities available in the UK maintenance market

Fujitec established Fujitec America in New York in 1977, taking this step ahead of its domestic competitors. At that time, OTIS and Westinghouse Electric had established the top two positions in the US market, and customers were increasingly seeking a third elevator manufacturer. Under these circumstances, Fujitec was recognized for its new technologies such as microcomputer control, as well as its capability in handling business locally, plus local production. This led the company to win a number of orders in symbolic projects such as the World Financial Center in 1984. As Figure 29 shows, the company's US net sales have grown faster than other companies in recent years.

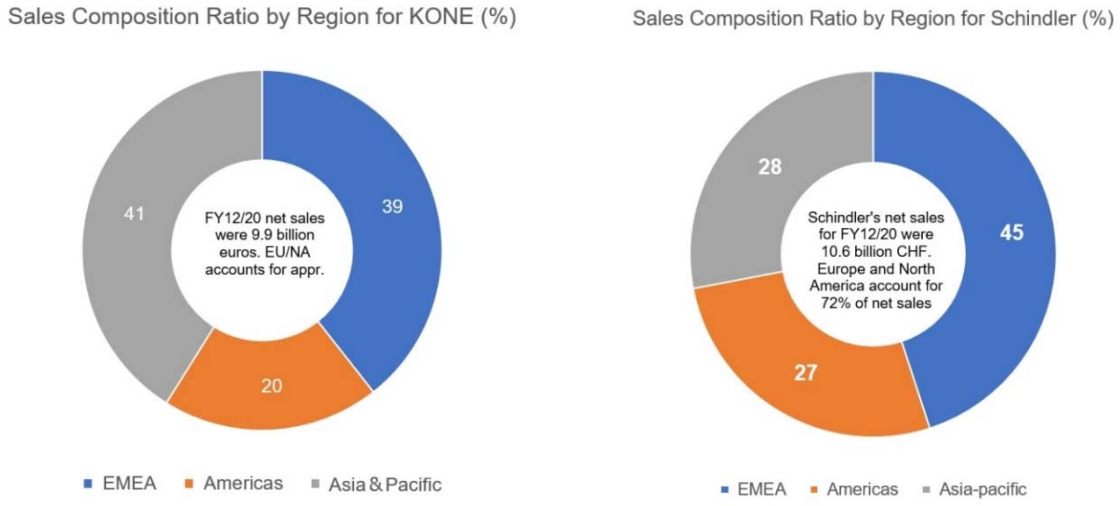
Europe has a limited number of high-rise buildings and a crowded field of not only major competitors but also small and medium-sized local firms, creating fierce competition. However, Fujitec has a track record in the UK of delivering 35 elevators to the HSBC building in 1999 in London, where new high-rise buildings are being built. For this reason, the company determined that there was significant leeway to enter the maintenance market, and on February 10, 2020, Fujitec acquired Amalgamated Lifts Limited, which sells, installs and maintains elevators and escalators in the United Kingdom.

Figure 27: Challenges in Profitability in North American and European Businesses



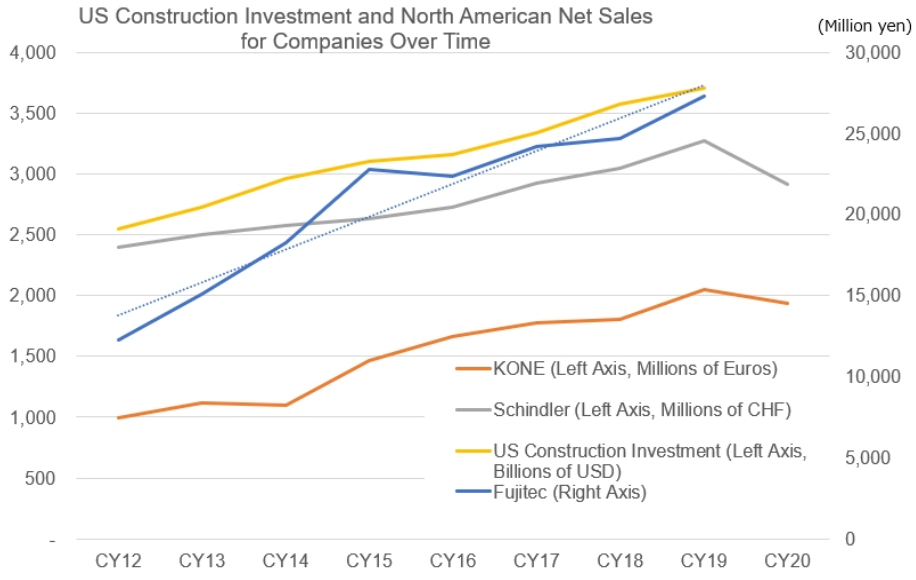
Source: CGRA, based on company materials

Figure 28: Sales Composition for KONE and Schindler in Europe



Source: CGRA, based on company materials

Figure 29: US Construction Investment and North American Net Sales of Major Companies Over Time



Source: CGRA, based on company materials Fujitec's fiscal year ends in March, where others close in December

(6) Financial and Non-Financial Analysis and Stock Price Valuation

Maintaining risk response capability and strong balance sheet

CCC relatively good at 82.5 days

The consolidated shareholders' equity ratio at the end of FY2019 was 55.2% (the average for the past 10 years was 55.5%), and the non-consolidated earned reserve reached ¥43.7 billion, showing an abundance of dividend resources secured versus the approximately ¥4.9 billion in total annual dividends (with a forecast dividend per share of ¥60 for FY2020).

The tangible asset turnover ratio (sales ÷ average tangible fixed assets over the past two years) is 5.5 (versus 3.6 five years prior), exceeding air conditioner firm Daikin Industries' ratio of 4.8 and showing that Fujitec has a capital-efficient business model.

On the other hand, looking at the working capital trend, the company's CCC (cash conversion cycle: inventory asset turnover days plus trade receivable turnover days minus purchase debt turnover days) is 82.5 days. This is also well below Daikin Industries' 131 days. Even if advances from customers are not excluded, the figure would still be 130 days.

Profit structure secured offering stable FCF generation

Average free cash flow (FCF) for the past 10 years was ¥6.8 billion, with net cash of ¥52.8 billion (¥29.4 billion excluding advances from customers) against interest-bearing debt of ¥4.2 billion at the end of FY2019. Net cash 10 years prior was ¥11.1 billion. At that time, the balance of interest-bearing debt was ¥10.2 billion, and while interest-bearing debt was being reduced, cash and deposits increased from ¥21.3 billion at the end of FY2009 to ¥57 billion at the end of FY2019.

At the end of FY2019, Fujitec held advances from customers worth 1.6 months of sales (¥23.4 billion, 12% of total assets). On the other hand, the provision for losses on construction contracts was ¥5.2 billion, which is about 39% of operating income but only 2.7% of total assets, and the ratio of provision for losses is declining versus both total assets and operating income. The supposition is that impact from selection orders and revision of sales systems in China are becoming apparent.

ROE remains level at just under 10%. Shareholders' equity appears excessive

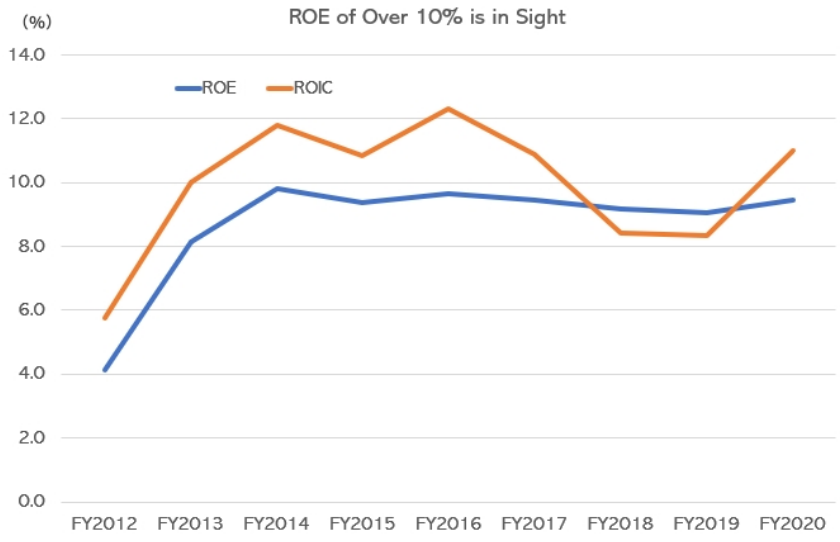
ROE plateaued just below 10%. Major cause: shareholders' equity

Fujitec's ROE at the end of FY2019 was 9.5%. This metric has been at a plateau just under 10% after hitting a high of 9.8% in FY2013. Breakdown of the 9.5% ROE with the DuPont model presents profit margin on net sales of 5.5% (vs. 5.2% in FY2013), total asset turnover ratio of 0.96 (vs. 1.06 in FY2013), and financial leverage of 1.8 (vs. 1.8 in FY2013). This offers an impression of excessive shareholders' equity. In actuality, Fujitec's shareholders' equity increased from ¥84.6 billion at the end of FY2013 to ¥107 billion at the end of FY2019, increasing by a factor of approximately 1.26.

However, Daikin Industries' ROE at the end of FY2019 was 12.0%. Its total asset turnover ratio was 1.0 with financial leverage of 1.9, but profit margin on net sales was secured at 6.7% (10.4% operating income margin), showing a gap between Daikin and Fujitec in ROE.

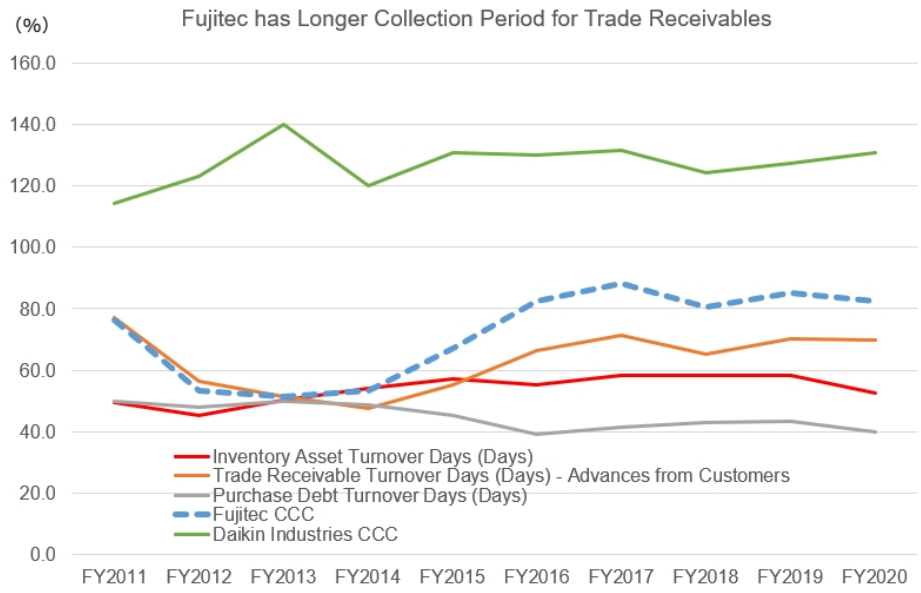
Therefore, CGRA believes that in addition to improving profitability in the statement of profit and loss through differentiation strategies and price increases, growth strategies utilizing the balance sheet would be effective in improving Fujitec's ROE.

Figure 30: ROIC Tends to Rise in Advance of ROE



DuPont Model: %	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Profit margin on net sales	5.2	5.1	5.0	5.1	5.2	5.4	5.5
Total asset turnover ratio (net sales ÷ total assets)	1.1	1.0	1.0	1.0	0.9	0.9	1.0
Financial leverage (total assets ÷ shareholders' equity)	1.8	1.9	1.9	1.9	1.8	1.8	1.8
ROE:	**9.8**	**9.4**	**9.7**	**9.4**	**9.2**	**9.1**	**9.5**
NOPAT	11,296	12,384	13,462	11,867	9,780	9,836	13,514
Invested capital	95,820	114,262	109,293	109,127	116,232	117,697	122,921
Return on invested capital (ROIC): %	**11.8**	**10.8**	**12.3**	**10.9**	**8.4**	**8.4**	**11.0**

Figure 31: CCC Trending Slightly Higher



Source: CGRA, based on company materials

・Non-financial analysis

Future issues

Stakeholders awaiting disclosure of non-financial information

In the presence of various risks, sustainable growth of a company requires improvement of corporate and social value by solving social issues. In recent years, there has been a greater shift from active to passive investment funding, and funding inflow continues into ESG funds.

Disclosure of non-financial information, such as regarding ESG and the SDGs, is becoming critical not only for long-term investors but for all stakeholders. Ryohei Yanagi, CFO of Eisai Co., Ltd., has said that any amount above a price-to-book ratio of 1 (which would be the dissolution value of a company) can be explained by non-financial data. Statements like these indicate that companies are also making proactive information disclosures, seeking to increase corporate value through reduced capital cost.

Going forward, companies will be asked to disclose non-financial KPI data

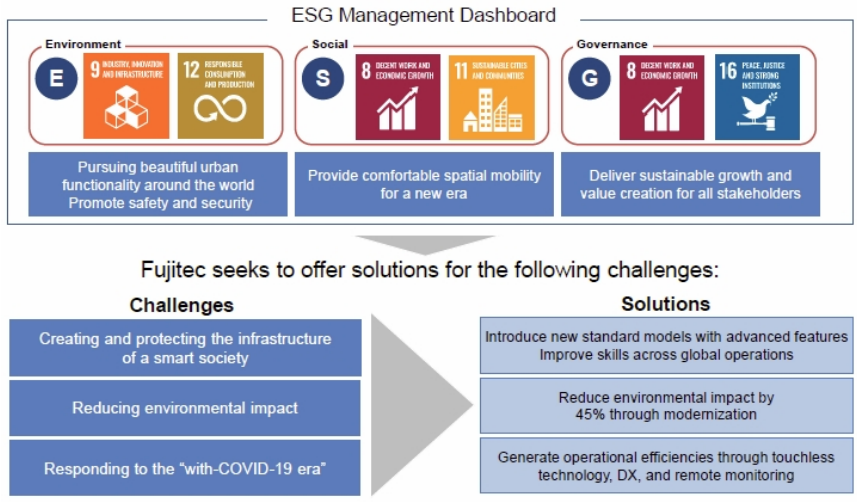
Going forward, companies will be asked to disclose non-financial KPI data

Despite a gap in scale and history, Fujitec's profit structure is similar to OTIS and KONE, its overseas competitors. Here, new projects plus stable maintenance businesses plus modernization businesses can be expected to contribute to profits and generate stable cash flow. Therefore, business sustainability is relatively high, and stock prices are highly likely to factor in long-term expectations of profit generation.

The company publishes its Fujitec Report alongside other reports on elements of CSR, such as social activities and target-vs.-actual figures for energy consumption and waste generation. In addition, five of the nine Fujitec directors are outside directors. The company is strengthening its governance system by establishing a Nomination and Compensation Advisory Committee. However, regarding the E and S in ESG, Fujitec's sustainability going forward has not yet been explained and remains an issue for the future. While the SDGs also comprise one pillar of corporate strategy, content is limited to qualitative detail only. There is likely a need to work toward disclosure and achievement of quantitative KPIs.

As a side note, Schindler practices sustainability-conscious management. The company actively utilizes renewable energies, manages greenhouse gases at the Scope 3 level (audited by Swiss Climate), reduces occupational accidents at plants, increases female employees, reduces CO_2 in its fleet of vehicles, and more. One-third of executive positions at OTIS are filled by women, and the company strengthened ESG disclosure on its carbon emissions, waste, and recycling rates.

Figure 32: Various Non-Financial Information-Related KPIs Expected to be Announced Going Forward



Source: Fujitec, Strategy Direction

・Corporate governance system

Measures announced toward further strength

Established a Nomination and Compensation Advisory Committee

Fujitec's policy is to strive to strengthen governance and build a more robust management foundation to prepare for any change in capital market needs and all management environment aspects.

At the same time that it published its Strategic Direction document, the company decided to establish the Nomination and Compensation Advisory Committee, which consists mainly of outside directors. In this way, the company plans to increase the objectivity and transparency of procedures for determining nominations and compensation of directors, as well as to further enhance the company's governance structure.

The Nomination and Compensation Advisory Committee was established in February 2021, composed of three or more members selected by resolution of the board of directors. A majority of the Committee members are to be independent outside directors, and the chairperson of the committee is selected from among the independent outside directors by mutual election of the Committee members who are independent outside directors.

Five outside directors

Fujitec has nine directors, five of whom are outside directors. All outside directors are also independent directors. The board of directors is chaired by President Uchiyama. As of 2018, the company had seven directors, of which three were outside directors (Terumichi Saeki, Nobuki Sugita, and Shigeru Yamazoe). However, since 2019, the company has had nine directors, of whom five are outside directors, showing an increase in number.

Outside director Terumichi Saeki is a former attorney and has served as chairman of the Osaka Bar Association. Nobuki Sugita has held important positions such as Professor at the Faculty of School of Economics at Nagoya University and Director of the Economic and Social Research Institute, part of the Cabinet Office of the Government of Japan. Shigeru Yamazoe has served as Senior Executive Vice President and Executive Officer of Marubeni Corporation and Outside Audit & Supervisory Board Member of Mizuho Capital Partners Co., Ltd. Kunio Endo has held important positions such as in finance and accounting at Honda Motor Co., Ltd., as well as serving as director and Audit & Supervisory Board Member. Keiko Yamahira has served as President of Sanyo Homes Corporation and Outside Director of Joshin Denki Co., Ltd.

To discontinue takeover defense measures

Further, Fujitec has determined to discontinue takeover defense measures. The takeover defense measures were resolved at the board of directors meeting held on May 11, 2007, and are effective until the ordinary general meeting of shareholders held in June 2022.

Figure 33: Skilled Materials for Directors

Name	Position	Independence (outside directors only)	Experience in corporate management and expertise (main points)					
			Corporate management		Expertise, etc.			
			Japan business	Global business	Economic policies	Finance/ accounting	Corporate legal affairs	IR
Takakazu Uchiyama	Representative Director, President and CEO		●	●				●
Takao Okada	Representative Director, Executive Vice President		●	●				
Yoshiichi Kato	Senior Executive Operating Officer			●		●		●
Takashi Asano	Senior Executive Operating Officer		●	●				
Terumichi Saeki	Director	●	●		●		●	
Nobuki Sugita	Director	●			●			
Shigeru Yamazoe	Director	●	●	●		●		
Kunio Endo	Director	●	●	●		●		
Keiko Yamahira	Director	●	●					●

Source: Fujitec Report 2020

・Active information disclosure

Stronger disclosure for content conscious of ESG and SDGs

Information disclosure is strengthening

In its Strategic Direction, Fujitec disclosed its target ROE and promised dividend payout ratio. For announcement of financial results as well, financial results briefings had previously been held only twice a year alongside briefing materials disclosure; however, as of 2020, quarterly financial results briefing materials have been created and disclosed on the company's website.

In 2019, the existing Annual Report was renamed to the Fujitec Report, and the number of pages has increased from 35 pages in 2019 to 49 pages in 2020. The president's message has been expanded, and in addition to explanations on ESG, SDGs, and human resource development measures, new messages have been added from outside directors.

Going forward, disclosure expected of KPIs related to non-financial information

Companies will be asked to disclose non-financial information to meet the needs of ESG investors

In this way, Fujitec is strengthening its stance toward information disclosure, but disclosure is limited to past performance values, and there is nearly no disclosure for non-financial information target KPIs to explain the sustainability of the company's business over the medium to long term. CGRA considers it insufficient for the attraction of investment funding from long-term investors or ESG investors. For engagement with these investors, in addition to further disclosure of non-financial information, we expect disclosure of KPIs, such as greenhouse gas (GHG) reduction targets over time.

We expect cost of capital to decrease in tandem with information disclosure

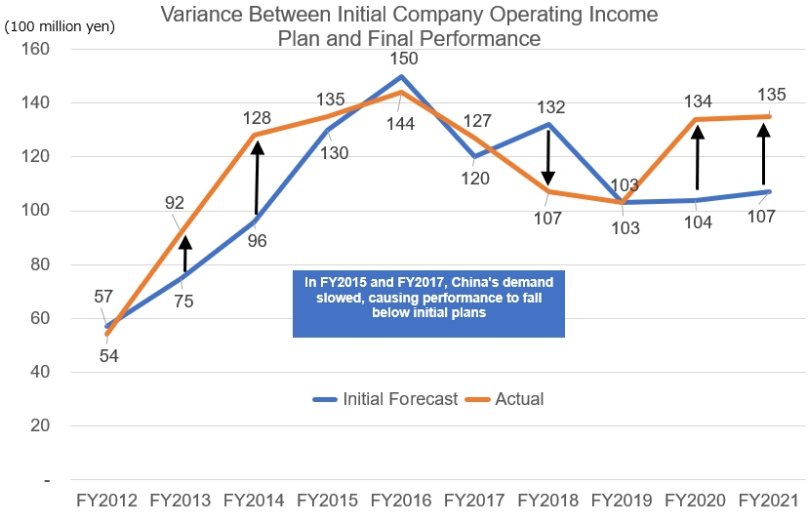
If non-financial information, such as for various KPIs, is actively disclosed, it is expected that the cost of capital will be reduced through a decrease in beta value. Coupled with the recovery of business performance as the company moves toward the post-COVID era, the theoretical stock price estimated from the ROIC model is expected to rise.

Despite influence from demand in China, strong probability of achieving initial forecasts

Performance guidance is generally conservative

In FY2015 and FY2017, demand in China slowed unexpectedly, and initial performance plans were revised downward. However, we can broadly observe that Fujitec tends to publish conservative performance guidance. In FY2019, the initial forecast was revised upward twice, and in FY2020, the initial plan was revised upward at the Q3 closing. In particular, performance plans tend to increase during periods of recovery in Chinese demand. In addition, looking back on the past three medium-term plans, there is a tendency to disclose conservative target values because the drafting timing coincides with deteriorating business performance. Here, target values have been cleared within the first year of the medium-term plans.

Figure 34: Fujitec Reliant on China, but Tends to Offer Conservative Performance Guidance



Source: CGRA, based on company materials

・Shareholder return measures

Fujitec recently announced a promised dividend payout ratio of 50% or more

Strengthening shareholder returns

In its Strategic Direction announced on December 4, 2020, Fujitec specified a new promised dividend payout ratio of at least 50%. Before, the company's policy was to pay dividends in consideration of internal reserves in order to stabilize corporate foundations over the long-term, while considering the enhancement of profit returns as the most important management issue. In its previous medium-term management plan, 40% to 50% had been the guideline for payout ratios, with the FY2019 ratio of 40%.

Therefore, when the company revised its earnings forecast upward for the current FY2020 fiscal year (forecast EPS of ¥92.62 revised to ¥114.69) on February 9, 2021, it also announced a dividend increase from the initially forecast dividend per share (DPS) of ¥50 (54% payout ratio) to ¥60 (52%).

Ongoing increases in dividends alongside rising payout ratio

Fujitec has been gradually increasing its dividends. Its DPS was ¥10 in FY2009, and then ¥12 in the FY2010 and FY2011 periods during a time of deteriorating business performance. Later, it would be a conservative ¥30 in the FY2015 and FY2016 periods, but following FY2016, the company increased dividends for four straight years, with dividends in FY2019 of ¥50 and a plan to increase these to ¥60 in FY2020.

Observing the dividend payout ratio, it is expected to gradually rise from a bottom-out point of 14.8% in FY2010, to 32% in FY2017, 41% in FY2019, and 52% in FY2020. Observing the dividend yield, the average dividend yield increased from 2.5% in the FY2015 - FY2017 periods to 3.6% in the FY2018 - FY2019 periods, providing attractive dividend yields.

Foreign ownership ratio exceeded 40%, but decreasing number of individual investors

Changing shareholder composition

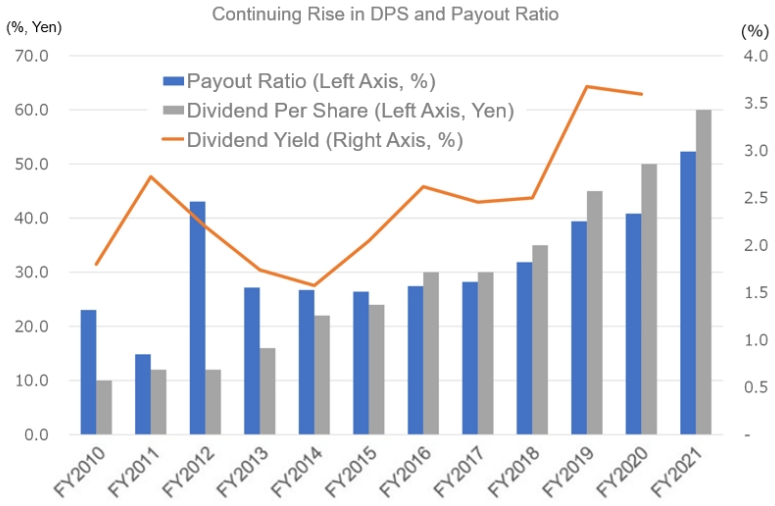
In the context of strengthening shareholder return measures as described above, the ratio of foreign stock ownership rose from 30% in FY2015 to exceed 40% in FY2019. In contrast, the shareholding ratio of individual investors decreased from 20% in FY2015 to 16% in FY2019, and the number of shareholders also decreased from 4,008 to 3,424.

Established a new shareholder benefit program for the Premium Benefit Club

For this reason, Fujitec established a new shareholder benefit program for its Premium Benefit Club on February 9, 2021 with an eye to strengthening returns to individual investors. Investors owning more than 200 shares of the company may exchange points according to the number of shares held for various preferred goods (e.g., home appliances, various food items).

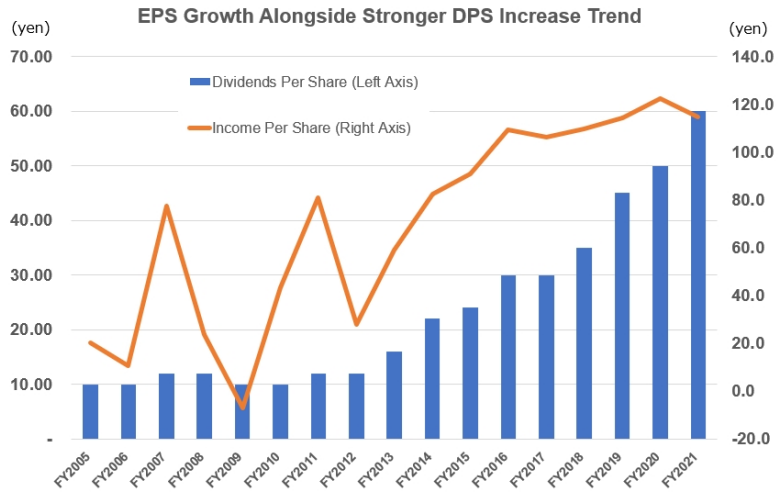
In the future, we hope additional points will be given according to how long the company's shares have been held, as well as IR briefings for individual investors.

Figure 35: Maintaining Continuous Dividend Increases



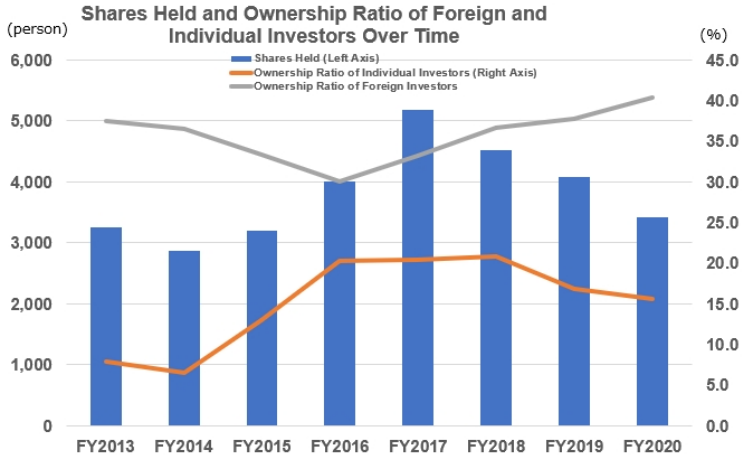
Four consecutive years of dividend increases through FY2020

Figure 36: Shareholder Returns Continue to Outpace Profit Growth



Dividend payout ratio also rising

Figure 37: Decrease in Individual Ownership, Increase in Foreign Investor Ownership



Increase in ratio of foreign investor ownership

Source: CGRA, based on company materials

・Latest stock prices and stock price valuation

Stock price valuation comparison vs. overseas competitors

Overseas competitors exceed Fujitec in stock valuation

Figure 14 shows the price-to-book ratio (PBR) of Fujitec's overseas competitors, as well as companies in the air conditioning industry, where the similarly-positioned Daikin Industries operates. Here, we check on PBR and its relationship with ROE and PER (price-to-earnings ratio) as of the end of March 2020 (for overseas companies, this is the end of December 2020).

At the time of the February 9, 2021 announcement of Q3 results for FY2020, the company revised its earnings plan for FY2020 upward. This and other factors strengthened the bullish trend for its stock price, hitting a post-listing record high of ¥2,836 on February 15, 2021. After that, the stock price faced downward pressure from profit taking, and has trended around ¥2,400 since. The stock price as of March 31 was ¥2,358, with the company's planned PER at 20.6. Dividend yield was 2.5%. PBR calculated from BPS as of the end of FY2019 was 1.79.

For overseas competitor KONE, the PER forecast for FY2021 is 34.5, with PBR of 11.4. US-based OTIS's forecast for PER is 26.3, with PBR of -9.9. Schindler's valuation shows PER of 34.8 and PBR of 6.9.

Daikin Industries' forecast PER exceeds overseas competition

Disclosure of non-financial information can be expected to unlock higher multiples

Daikin Industries has already revised its FY2020 earnings plan upward three times, with the initially-planned operating income of ¥150 billion (EPS of ¥341.78) revised to was ¥232 billion (EPS of ¥512.67) as of the announcement of Q3 results on February 9, 2021.

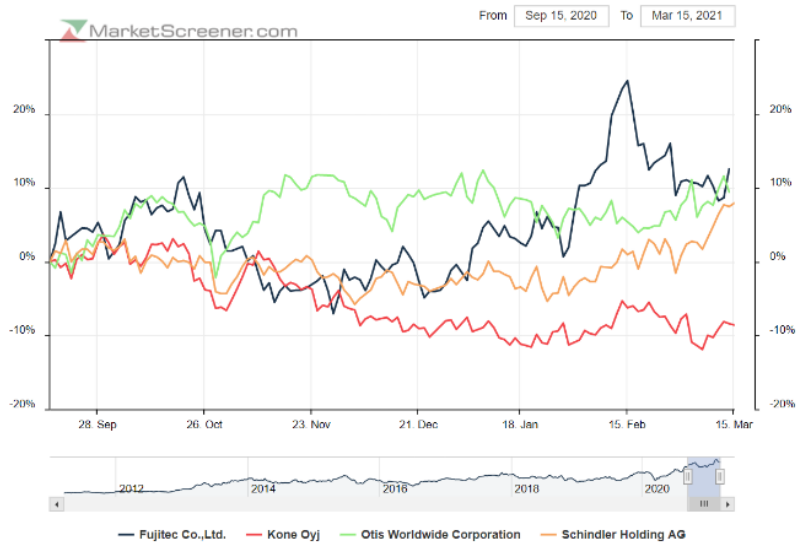
The company’s stock price reached a record high since listing of ¥24,440 on December 2, 2020, and has been trending around ¥22,000. The closing price as of March 31 was ¥22,320. The company's planned PER was 43.5. Dividend yield was 0.7%. PBR derived from BPS as of the end of FY2019 was valued at 4.6.

For Daikin Industries' US-based overseas competitor Carrier, forecast PER for FY2021 is 22.4 with PBR of 5.1. Lennox's PER is forecast to be 28.5 with PBR of -124. Trane's PER forecast is 31.3 with PBR trending at 6.6.

Daikin Industries' forecast PER exceeds overseas competition. Here, the impression is that its stock price reflects not only strong business performance, but also its high level of sustainability in the future due to factors such as the active disclosure of non-financial information and the holding of ESG briefings.

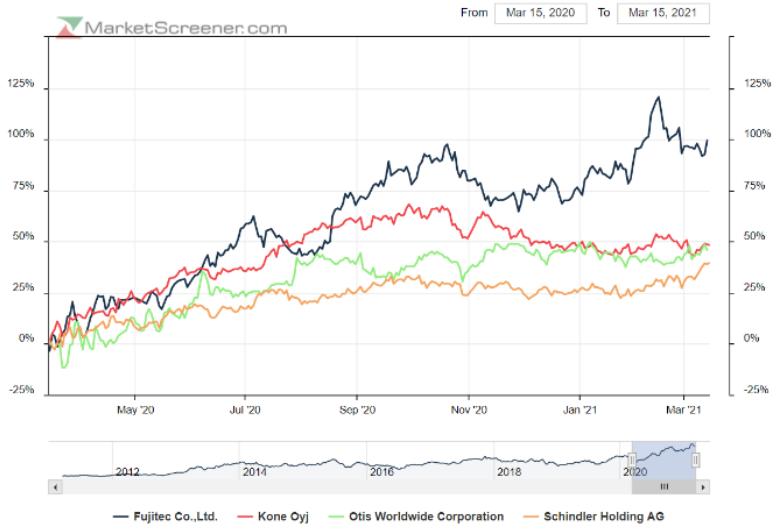
For Fujitec, while the company's stock price itself may have reached a post-listing high, its stock price valuation has remained relatively low compared to overseas competitors. Going forward, improvements in the company's valuation multiples can be expected from disclosure of non-financial information, such as regarding ESG and the SDGs, and of disseminating information to the stock market.

Figure 38: Six-Month Stock Price Figure



Fujitec stock prices over the short term face downward pressure from profit-taking sales

Figure 39: One-Year Stock Price Figure



Stock price outperforms overseas competition

Figure 40: Five-Year Stock Price Figure



Fujitec stock price marks post-listing high

Source: CGRA, based on MarketScreener

(7) Visit to the Tokyo Showroom

Exhibit of the new XIOR product

Ample facilities not only in elevator hardware but also software

Fujitec's Tokyo head office is located on the 9th floor of the NBF Platinum Tower, directly connected to Tokyo's Shirokane-takanawa Station on the Namboku Subway Line. The head office adjoins its showroom, called the Creative Studio. On Friday, March 5, 2021, CGRA analysts visited the showroom, where the visit began with an introductory video about the company and its specialty in spatial mobility systems.

Founded in 1948, the company has strengthened its overseas expansion since 1964. Leveraging high performance and integrated manufacturing and sales system, the company has now expanded to 24 countries and regions. At the company's Big Wing elevator hub in Shiga, comprising around 20,000 components, the company has a product development center, an experimental tower, and a factory. Big Step, located in Hyogo, is the company's hub for escalators. The company also provides aftermarket services in-house. The Big Fit facility for logistics and services operates 24 hours a day, 365 days a year. Big Fit features a training facility, and Fujitec also maintains training locations outside of Japan, cultivating its talent on a global scale.

At the showroom, Fujitec exhibits its new XIOR product, introduced to the market in April 2020. It also featured an exhibit and hands-on experience with three varieties of its AirTap touchless buttons, made standard as of December of last year. The company's elevators can support four languages to aid in emergency situations, with universal design factored into their arrival sounds. These features demonstrate the sense of the company's refinement as a specialized elevator manufacturer.

In addition, Fujitec has made air conditioners standard in its elevators, in advance of its competition. At the showroom, guests can experience actual operation and airflow. The company's exhibits offer a view at the features of their elevators. The elevator car interiors feature various images shown on the sides of the car, the control panels are scrollable touch panels, the elevator doors feature images shown via projection mapping, and the capacity status inside the elevator can be seen from the outside.

Fujitec's Safe Net Center conducts remote monitoring

Support system covers all potential issues

Adjoining the Creative Studio showroom is Fujitec's Safe Net Center, where the status of the company's elevators in operation can be monitored in real time. The Tokyo center covers the regions from Kanagawa to Hokkaido, while regions west of Kanagawa are covered by the Osaka center. A failover system is in place so that one center may take over for the other in the event of a disaster affecting a broad area, such as an earthquake or flooding, that disables one of the centers. Both centers have already established BCP systems in preparation for emergencies, and are fully equipped with support systems to handle all issues.

Both centers have a variety of functions, including: (1) customizing maintenance plans and providing failure prevention and optimal upkeep through accumulating and analyzing transport data from remote monitoring, (2) preventing failures and offering rapid upkeep through automatically diagnosing electromagnetic brakes and various switches and capturing early warnings, and (3) supporting early recovery in the event of earthquakes and other disasters. These centers also contribute to building the company's efficient service system (currently supported by a network of more than 160 locations in Japan). Similar remote monitoring systems appear to be provided overseas as well.

Visit to Tokyo Fit

On March 24, 2021, CGRA analysts visited Tokyo Fit in Ota Ward, Tokyo. Tokyo Fit is equipped with (1) a logistics base with intermediate processing functions, and (2) a human resources development facility for field engineers (with six functional elevators and three escalators on display). This was also the first facility to demonstrate the popular AirTap touchless button technology. Fujitec's policy is to reduce on-site burden and improve productivity by conducting not only depot functions but also distribution processing, such as exterior assembly, at logistics bases in Tokyo and Osaka.

(8) Consolidated Statements of Income, Balance Sheets, and Cash Flow Statements

・Figure 41: Consolidated Statements of Income

100 million yen, %		FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
	Net sales	**102,053**	**105,061**	**117,468**	**147,054**	**165,297**	**177,128**	**167,442**	**168,795**	**170,759**	**181,232**	**169,000**
	YoY	-3.8	2.9	11.8	25.2	12.4	7.2	-5.5	0.8	1.2	6.1	-6.7
	Cost of sales	81,694	84,017	90,982	114,244	129,547	137,879	130,578	133,361	134,792	141,009	-
	Cost rate	80.1	80.0	77.5	77.7	78.4	77.8	78.0	79.0	78.9	77.8	-
	Gross profit	20,359	21,044	26,486	32,810	35,750	39,249	36,864	35,434	35,967	40,223	-
	Gross profit margin	19.9	20.0	22.5	22.3	21.6	22.2	22.0	21.0	21.1	22.2	-
	SGA	15,138	15,681	17,314	19,939	22,262	24,800	24,177	24,769	25,654	26,848	-
	SGA ratio	14.8	14.9	14.7	13.6	13.5	14.0	14.4	14.7	15.0	14.8	-
	Operating profit	**5,221**	**5,363**	**9,172**	**12,871**	**13,488**	**14,449**	**12,687**	**10,665**	**10,313**	**13,375**	**13,300**
	YoY	-1.3	2.7	71.0	40.3	4.8	7.1	-12.2	-15.9	-3.3	29.7	-0.6
	Operating profit margin	5.1	5.1	7.8	8.8	8.2	8.2	7.6	6.3	6.0	7.4	7.9
	Ordinary income	**5,447**	**5,799**	**10,066**	**14,187**	**14,826**	**15,162**	**13,110**	**11,911**	**11,922**	**14,682**	**14,700**
	YoY	-10.0	6.5	73.6	40.9	4.5	2.3	-13.5	-9.1	0.1	23.2	0.1
	Income taxes	-3,647	2,508	2,973	4,343	4,318	4,244	3,134	2,487	2,540	2,987	-
	Profit attributable to owners of parent	**7,569**	**2,607**	**5,507**	**7,664**	**8,356**	**8,807**	**8,564**	**8,857**	**9,220**	**9,916**	**9,300**
	YoY	86.4	-65.6	111.2	39.2	9.0	5.4	-2.8	3.4	4.1	7.5	-6.2
Orders by region	Japan	49,753	49,316	56,619	66,087	71,937	71,580	67,179	70,648	77,846	74,634	-
	East Asia	38,060	43,641	54,414	75,698	82,534	88,475	74,298	79,755	69,597	77,173	-
	South Asia	8,823	10,001	11,126	15,716	16,606	16,843	18,837	16,142	16,889	16,134	-
	North America and Europe	0	0	0	0	0	0	0	0	0	28,053	-
	North America	13,253	10,173	11,680	18,881	18,338	24,208	24,334	25,186	25,919	0	-
	Europe	610	703	318	793	470	326	667	507	290	0	-
	Subtotal	110,499	113,834	134,157	177,175	189,885	201,432	185,315	192,238	190,541	195,994	-
	Adjustments	-4,940	-5,709	-6,247	-11,386	-11,062	-10,150	-10,349	-10,215	-11,534	-9,674	-
	Total	**105,559**	**108,125**	**127,910**	**165,789**	**178,823**	**191,282**	**174,966**	**182,023**	**179,007**	**186,320**	**-**
	book-to-bill (BB) ratio: times	1.03	1.03	1.09	1.13	1.08	1.08	1.04	1.08	1.05	1.03	-
Order backlog	Total	100,713	97,996	108,972	143,881	166,745	195,339	184,738	199,602	208,183	207,817	-
Net sales by location	Japan	52,430	50,816	52,865	62,408	65,514	65,001	65,572	67,646	72,485	74,751	71,000
	East Asia (include China)	33,241	39,445	48,692	66,363	76,240	84,606	72,594	70,442	69,308	74,748	70,000
	South Asia	9,669	9,794	10,590	13,024	15,499	17,075	15,586	17,191	16,572	16,379	14,000
	North America and Europe	0	0	0	0	0	0	0	0	0	25,445	23,500
	North America	10,814	10,123	11,431	14,165	17,735	22,360	22,092	23,871	23,721	0	-
	Europe	622	542	389	673	601	508	407	511	323	0	-
	Subtotal	106,776	110,720	123,967	156,633	175,589	189,550	176,251	179,661	182,409	191,323	178,500
	Adjustments	-4,723	-5,659	-6,499	-9,579	-10,292	-12,422	-8,809	-10,866	-11,650	-10,091	-9,500
	Total	**102,053**	**105,061**	**117,468**	**147,054**	**165,297**	**177,128**	**167,442**	**168,795**	**170,759**	**181,232**	**169,000**
Operating profit by location	Japan	1,578	1,897	3,447	4,605	5,149	5,199	5,445	5,728	5,206	4,891	5,200
	East Asia (include China)	2,968	2,263	4,178	6,670	7,328	7,500	4,540	2,257	2,269	5,297	5,400
	South Asia	1,620	1,595	1,486	1,779	1,558	1,626	1,720	1,936	1,851	2,135	2,300
	North America and Europe	0	0	0	0	0	0	0	0	0	1,047	600
	North America	-960	-387	118	-26	-582	137	930	920	936	0	0
	Europe	18	-7	-12	5	-1	-43	-54	-67	-43	0	0
	Subtotal	5,224	5,361	9,217	13,033	13,452	14,419	12,581	10,774	10,219	13,370	13,500
	Adjustments	-3	2	-45	-162	36	30	106	-109	94	5	-200
	Total	**5,221**	**5,363**	**9,172**	**12,871**	**13,488**	**14,449**	**12,687**	**10,665**	**10,313**	**13,375**	**13,300**
Operating profit margin by location	Japan	3.0	3.7	6.5	7.4	7.9	8.0	8.3	8.5	7.2	6.5	7.3
	East Asia (include China)	8.9	5.7	8.6	10.1	9.6	8.9	6.3	3.2	3.3	7.1	7.7
	South Asia	16.8	16.3	14.0	13.7	10.1	9.5	11.0	11.3	11.2	13.0	16.4
	North America and Europe	-	-	-	-	-	-	-	-	-	4.1	2.6
	North America	-8.9	-3.8	1.0	-0.2	-3.3	0.6	4.2	3.9	3.9	-	-
	Europe	2.9	-1.3	-3.1	0.7	-0.2	-8.5	-13.3	-13.1	-13.3	-	-
	Subtotal	4.9	4.8	7.4	8.3	7.7	7.6	7.1	6.0	5.6	7.0	7.6
	Adjustments	0.1	0.0	0.7	1.7	-0.3	-0.2	-1.2	1.0	-0.8	0.0	2.1
	Total	5.1	5.1	7.8	8.8	8.2	8.2	7.6	6.3	6.0	7.4	7.9
Net sales by region	Japan	52,430	50,816	49,805	58,338	61,508	60,381	62,797	64,935	69,050	72,519	-
	North America and Europe	10,814	10,123	12,265	15,062	18,272	22,767	22,370	24,178	24,713	27,260	-
	Europe	622	542	0	0	0	0	0	0	0	0	-
	South Asia	9,669	9,794	10,736	13,726	16,315	18,264	16,619	18,238	17,715	17,290	-
	East Asia (include China)	33,241	39,445	43,124	58,072	67,251	72,425	62,226	57,708	56,614	64,160	-
	Other	-4,723	-5,659	1,538	1,856	1,951	3,291	3,430	3,736	2,667	3	-
	Total	**102,053**	**105,061**	**117,468**	**147,054**	**165,297**	**177,128**	**167,442**	**168,795**	**170,759**	**181,232**	**-**
	Domestic ratio: %	51.4	48.4	42.4	39.7	37.2	34.1	37.5	38.5	40.4	40.0	-
	Overseas ratio: %	48.6	51.6	57.6	60.3	62.8	65.9	62.5	61.5	59.6	60.0	-
												-
	New installations ratio: %	-	-	50.8	53.8	56.7	55.4	52.8	51.9	50.2	51.3	-
	Aftermarket ratio: %	-	-	49.2	46.2	43.3	44.6	47.2	48.1	49.8	48.7	-

・Figure 42: Consolidated Balance Sheets and Statements of Cash Flows

Million yen		FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Current assets	Cash and deposits	21,359	25,150	31,446	41,212	51,674	43,698	45,749	49,856	52,244	57,024
	Notes and accounts receivable-trade	26,213	25,457	31,039	42,116	53,184	52,502	50,455	53,411	54,680	61,626
	Inventory adjustments	9,636	11,188	13,886	19,928	20,553	21,074	20,660	21,862	21,291	19,319
	Other	4,679	3,634	4,363	8,015	6,723	6,030	6,171	2,401	2,966	2,915
	Total current assets	**61,887**	**65,429**	**80,734**	**111,271**	**132,134**	**123,304**	**123,035**	**127,530**	**131,181**	**140,884**
Fixed assets	Property, plant and equipment	29,517	28,594	28,759	29,982	32,885	33,828	32,968	34,388	33,948	32,188
	Intangible assets	2,788	2,506	3,136	3,876	4,311	4,063	3,893	4,029	3,874	3,640
Investments and other assets	Investments securities	4,434	4,281	5,020	5,980	7,977	7,596	8,312	10,569	8,796	7,172
	Other	6,191	6,401	4,992	3,155	2,549	3,080	4,796	5,986	6,890	9,697
	Total fixed assets	**42,930**	**41,782**	**41,907**	**42,993**	**47,722**	**48,567**	**49,969**	**54,972**	**53,508**	**52,697**
Current liabilities	Notes and accounts payable-trade	10,567	11,567	13,403	17,019	15,247	14,415	15,148	16,150	16,010	14,938
	Electronically recorded obligations-operating	0	0	0	0	5,281	3,969	4,529	4,714	5,386	5,273
	Short-term debt	2,389	1,832	600	541	7,911	7,405	3,774	3,451	3,298	3,990
	Current portion of long-term debt	2,312	11	1,474	507	352	556	329	524	256	217
	Provision for losses on construction contracts	2,394	2,900	3,434	5,345	6,421	6,762	7,214	5,957	4,695	5,206
	Advances from customers	6,607	9,607	11,752	17,325	22,533	20,584	18,801	21,841	21,176	23,417
	Other	7,424	7,484	9,290	13,611	13,661	13,290	14,308	14,184	15,420	17,042
	Total current liabilities	**31,693**	**33,401**	**39,953**	**54,348**	**71,406**	**66,981**	**64,103**	**66,821**	**66,241**	**70,083**
Fixed liabilities	Long-term loans payable	1,287	1,500	67	1,271	1,379	926	1,177	435	221	0
	Retirement benefit obligations	0	0	0	4,789	1,103	2,996	3,204	3,145	3,781	4,076
	Provision for retirement benefits	4,375	4,122	4,037	0	0	0	0	0	0	0
	Other	300	274	313	354	1,347	562	676	279	523	707
	Total fixed liabilities	**5,962**	**5,896**	**4,417**	**6,414**	**3,829**	**4,484**	**5,057**	**3,859**	**4,525**	**4,783**
	Total liabilities	**37,656**	**39,298**	**44,371**	**60,762**	**75,235**	**71,465**	**69,160**	**70,680**	**70,766**	**74,866**
Shareholders' equity	Paid-in capital	12,533	12,533	12,533	12,533	12,533	12,533	12,533	12,533	12,533	12,533
	Additional paid-in capital	14,565	14,565	14,565	14,565	14,565	14,566	14,568	14,568	14,569	14,571
	Retained earnings	55,744	57,228	61,520	67,406	75,239	81,822	87,955	94,381	96,087	102,355
	Treasury stock	-128	-130	-134	-1,077	-7,825	-15,357	-15,199	-15,081	-10,630	-10,400
	Total Shareholders' equity	**82,715**	**84,197**	**88,485**	**93,427**	**94,512**	**93,564**	**99,857**	**106,401**	**112,559**	**119,059**
Other comprehensive income	Net unrealized gains on securities	404	455	1,021	1,538	2,435	1,972	2,478	3,215	2,200	1,194
	Foreign currency translation adjustments	-20,309	-21,514	-17,589	-9,863	-3,540	-5,364	-8,582	-8,308	-11,000	-11,935
	Remeasurements of defined benefit plans	0	0	0	-532	-86	-1,453	-1,276	-943	-951	-1,387
	Total	-19,904	-21,058	-16,568	-8,857	-1,191	-4,845	-7,293	-6,036	-9,752	-12,145
	Share option	0	0	0	36	56	61	61	61	40	40
	Non-controlling interests	4,350	4,777	6,355	8,895	11,243	11,626	11,222	11,396	11,075	11,760
	Total net assets	**67,161**	**67,916**	**78,272**	**93,501**	**104,620**	**100,406**	**103,847**	**111,822**	**113,922**	**118,714**
	Total assets	**104,817**	**107,214**	**122,643**	**154,263**	**179,855**	**171,871**	**173,007**	**182,502**	**184,688**	**193,580**
Cash flows from operating activities	Profit attributable to owners of parent	4,836	5,955	9,830	13,984	14,806	15,036	13,055	11,811	12,524	14,493
	Depreciation and amortization	2,253	2,204	2,083	2,237	2,373	2,748	2,751	2,915	3,055	3,131
	Increase (decrease) in notes and accounts receivable-trade	1,336	388	-3,355	-5,929	-7,102	-1,297	-701	-2,088	-3,540	-8,236
	Increase (decrease) in inventory adjustments	2,298	-1,693	-1,618	-3,403	1,136	-1,356	-962	-734	-699	1,190
	Increase (decrease) in notes and accounts payable-trade	-655	1,103	829	1,105	1,726	-1,325	2,575	691	1,793	-568
	Other	602	2,780	1,743	4,663	3,844	-760	1,121	2,399	-1,124	4,481
	Total	10,670	10,737	9,512	12,657	16,783	13,046	17,839	14,994	12,009	14,491
	Income taxes	-1,513	-1,052	-1,599	-3,363	-6,030	-4,114	-3,479	-3,124	-2,420	-3,413
	Cash flows from operating activities	**9,157**	**9,685**	**7,913**	**9,294**	**10,753**	**8,932**	**14,360**	**11,870**	**9,589**	**11,078**
Cash flows from investing activities	Payments into time deposits	-5,379	-6,437	-5,268	-10,902	-11,763	-15,203	-20,379	-16,872	-14,325	-16,040
	Withdrawal of time deposits	4,189	3,327	6,695	9,929	13,414	13,919	16,650	15,584	13,097	13,396
	Purchase of property, plant and equipment	-2,914	-1,338	-1,544	-2,007	-3,867	-4,210	-3,610	-2,973	-2,848	-2,562
	Other	1,475	496	-115	325	1,597	175	382	-1,084	1,916	865
	Cash flows from investing activities	**-2,629**	**-3,952**	**-232**	**-2,655**	**-619**	**-5,319**	**-6,957**	**-5,345**	**-2,160**	**-4,341**
Cash flows from financial activities	Increase (decrease) in short-term debt	-2,972	-556	-1,290	-189	7,079	-451	-3,631	-399	-75	726
	Long-term loans payable	0	216	0	1,722	523	340	708	0	227	0
	Repayments of long-term loans payable	-1,068	-2,311	-11	-1,568	-710	-532	-676	-505	-747	-253
	Purchase of treasury stock	0	0	-3	-1,012	-6,894	-7,666	0	0	0	0
	Dividends	-1,029	-1,122	-1,216	-1,776	-2,338	-2,265	-2,431	-2,432	-3,241	-3,647
	Other	-603	-406	-528	-1,000	-885	-958	-727	-522	-362	-626
	Cash flows from financial activities	**-5,672**	**-4,179**	**-3,048**	**-3,823**	**-3,225**	**-11,532**	**-6,757**	**-3,858**	**-4,198**	**-3,800**
	Translation adjustments	-449	-59	1,168	2,568	2,790	-865	-1,569	467	-1,371	-657
	Change	407	1,495	5,801	5,384	9,699	-8,784	-923	3,134	1,860	2,280
	Cash and cash equivalents at beginning of the period	7,839	8,223	9,718	15,519	20,903	30,602	21,833	20,910	24,043	25,902
	Adjustments	-20	0	0	0	0	15	0	0	0	0
	Cash and cash equivalents at end of the period	8,223	9,718	15,519	20,903	30,602	21,833	20,910	24,043	25,902	28,181
	Free cash flow (FCF)	**6,528**	**5,733**	**7,681**	**6,639**	**10,134**	**3,613**	**7,403**	**6,525**	**7,429**	**6,737**

Analysts Responsible for this Report

Shinji Kuroda, Partner and Senior Analyst

Kuroda joined Kankaku Research Institute (now Mizuho Securities) in April 1992, assigned to the Industrial Research Department. He then would join Jardine Fleming Securities (now JP Morgan Securities) in September 1999, then Goldman Sachs. Until January 2020, he worked for Credit Suisse Securities. He served as Vice President at Goldman Sachs, and Director at Credit Suisse Securities. In his career, he has been in charge of the machinery, shipbuilding, and heavy machinery sectors. He joined CGRA as a partner in June 2020. Member of the Machinery Industry Disclosure Committee, The Securities Analysts Association of Japan

Hidehiko Hoshino, CMA, Representative Director and Chief Advisor

Hoshino joined Shinko Securities (currently Mizuho Securities) in April 1987, assigned to the Corporate Research Department. He then would join Jardine Fleming Securities (now JP Morgan Securities) in 1997, joining Deutsche Securities in 2000 and UBS Securities in 2006, where he would serve until April 2016. As a sell-side analyst, he has been in charge of the machinery, shipbuilding, heavy machinery, and plant sectors for 28 years. Has served for more than 10 years as Vice Chairman of the Machinery Industry Disclosure Committee, The Securities Analysts Association of Japan. He served as Managing Director from 2003 to 2016. In June 2017, Hoshino established Capital Goods Research & Advisory Co., Ltd. (CGRA), and was appointed as Representative Director. Certified Analyst, The Securities Analysts Association of Japan

Capital Goods Research & Advisory Co., Ltd.

An advisory company specializing in the machinery sector. CGRA's main businesses are (1) support for creating integrated reports offering feedback to management while satisfying the needs of capital markets, (2) advisory services for medium-term plan creation and business strategy, as well as various IR & SR areas, (3) preparation of various materials and English translation, and (4) drafting corporate analysis sponsored reports useful for long-term investors and management.

This report's purpose is not to solicit, recommend, or offer advice regarding investment, but is prepared from our own perspective for the purpose of providing information about the company in question. In addition, although the contents of this report have been prepared based on publicly-available information, we do not guarantee their accuracy or completeness. Capital Goods Research & Advisory Co., Ltd. retains copyright to this report. Reproduction is prohibited without prior permission. The contents of this report are subject to change without notice. Neither CGRA nor this report are involved in the investor's investment determination. Any decisions related to investments are undertaken at your own discretion.